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THE CHICAGO WOMEN'S HEALTH RISK STUDY

Report to the National Institute of Justice

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THE CHICAGO WOMEN'S HEALTH RISK STUDY
RISK OF SERIOUS INJURY OR DEATH IN INTIMATE VIOLENCE
A COLLABORATIVE RESEARCH PROJECT
New Report, Revised May 30, 2000

Collaborators

Though most of the collaborators of the Chicago Women's Health Risk Project were silent partners in writing this report, they were equal partners in the project. They include Olga Becker, Nanette Benbow, Jacquelyn Campbell, Debra Clemmens, James Coldren, Alicia Contreras, Eugene Craig, Roy J. Dames, Alice J. Dan, Christine Devitt, Edmund R. Donoghue, Barbara Engel, Dickelle Fonda, Charmaine Hamer, Kris Hamilton, Eva Hernandez, Tracy Irwin, Mary V. Jensen, Holly Johnson, Teresa Johnson, Candice Kane, Debra Kirby, Katherine Klimisch, Christine Kosmos, Leslie Landis, Susan Lloyd, Gloria Lewis, Christine Martin, Rosa Martinez, Judith McFarlane, Sara Naureckas, Iliana Oliveros, Angela Moore Parmley, Stephanie Riger, Kim Riordan, Roxanne Roberts, Martine Sagan, Daniel Sheridan, Wendy Taylor, Richard Tolman, Gail Walker, Carole Warshaw and Steven Whitman.

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Sara Naureckas, MD, at Erie Family Health Center, contributed to the sections on children, medical help-seeking and pregnancy.
Dickelle Fonda, Chicago Women's Health Risk Study project counselor, wrote the section on interviewer debriefing and support.
Barbara Engel, Sara M. Naureckas and Kim A. Riordan contributed to the sections on collaboration, and Judith M. McFarlane and Gail Rayford Walker contributed to the sections on proxy field strategies.

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DEDICATION

This project is dedicated to the women and their families who allowed us into their lives and were willing to overcome fear and grief to share their stories with us.

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ABSTRACT

To help a broad array of practitioners identify women at greatest risk, the Chicago Women's Health Risk Study (CWHRS) explored factors indicating significant danger of death or life-threatening injury in intimate violence situations. A collaboration of Chicago medical, public health and criminal justice agencies, and domestic violence advocates, the CWHRS compared longitudinal interviews with physically abused women sampled at hospital and health centers with similar interviews of people who knew intimate partner homicide victims.

The project was based on analysis of lethal and non-lethal Chicago samples tracked through interviews over a profile year, plus a baseline comparison group of nonabused women. Retrospective profile years for the lethal sample, the 87 people killed by an intimate partner in 1995 or 1996 in Chicago, were obtained by interviews with a knowledgeable relative or friend, a proxy respondent. The 497 physically abused women were sampled from populations of hospital health clinic patients, interviewed about a retrospective profile year, and then tracked by prospective interviews over a year. The 208 comparison women, not physically abused in the past year, were sampled from the same settings.

This design permits analysis of the interactive effects of events, changing circumstances and interventions on a lethal or life-threatening outcome, including stalking, harassment and controlling behavior; attempts to leave the relationship; arrest and other interventions; and other circumstances such as pregnancy and gun availability. The CWHRS provides information that could be used for developing collaborative strategies to identify and intervene in potentially life-threatening intimate violence situations, and that can support informed decisions of field-level personnel such as beat officers and clinical staff.

The results of the CWHRS apply only to the populations in the neighborhoods sampled for the study. However, these populations include some women who are not represented in other research, such as women who are high-risk but who do not appear in the records of helping agencies. We hope that CWHRS results will provide a voice for these women to be heard by medical, police and other professionals.

THE PROBLEM

Despite the current proliferation of intimate violence studies, domestic violence advocates and policy makers in public health and criminal justice are often confused about the efficacy of practical interventions. Under what circumstances is a woman at risk if she terminates an abusive relationship? In what situations does arrest increase or decrease the risk of death? How do stalking and other harassment interact with events and changing circumstances, such as gun ownership, pregnancy or threats to children, to affect the risk of a lethal outcome?

Two methodological obstacles limit research answers to these practical questions. First, it requires a great deal of time, patience and resources to conduct a study that tracks abusive situations to a lethal or non-lethal outcome and that contains enough cases to analyze population groups at highest risk. This is because homicide is such a

rare event compared to abuse that may lead to homicide. Second, though early identification and effective intervention must be built on a foundation of multiple public health and public safety data sources (Flewelling, 1994; Rosenfeld & Decker, 1993; Hofford & Harrell, 1993:11), a controlled experiment or case-control study can analyze only a limited number of variables simultaneously.

Despite these methodological challenges, this kind of information is vitally important to health care providers, domestic violence advocates, and other helping professionals, so that they can alert women to warning signs for homicide in abusive relationships (Campbell, 1995, 1992; Geffner & Pagelow, 1990; Hart, 1988; Walker, 1983). However, a reliable and validated profile of high-risk factors for a lethal outcome in intimate violence has not been available to them. Geffner and Pagelow (1990; Jaffe and Geffner, 1998), Hart (1988), and Sonkin, *et al.* (1985: 80-83) were based on clinical experience. Straus (1991) was based on a sample survey. None of these was psychometrically tested. The reliability and the discriminant and construct validity of the Index of Spouse Abuse (Hudson and McIntosh, 1981) and the Abusive Behavior Inventory (Shepard & Campbell, 1992) have been evaluated, but the predictive value for serious injury has not been investigated. The reliability and content validity of Campbell's (1986) Danger Assessment have been measured, but before the CWHRS, it had not been validated by a longitudinal analysis of lethal and non-lethal cases.

Three things are necessary to develop such a profile. First, it must be based on information comparing cases that escalate to a fatal outcome to cases that do not (*lethal vs. non-lethal*). Previous studies and instruments differentiated between abused and non-abused women (for example, Leonard & Senchak, 1996), or men who physically attack their partners and men who do not (Saunders, 1995), but not necessarily between abused women at risk of a fatal outcome and other abused women.

Second, profiles should be based on *longitudinal* information (Morley & Mullender, 1994; Lloyd, *et al.*,1993). Effective interventions must take into account not just a single event or circumstance, but changing events over time. Intimate violence is seldom a single event, but rather a series of events that may increase or decrease in severity, a continuing relationship punctuated by verbal and physical abuse (Lloyd, *et al.*,1993; Giles-Sims, 1983; Goetting, 1989). Empirical evidence (Saltzman, *et al.*,1990; Johnson, 1995; Block, 1987b) indicates that previous events cumulate to determine the development of each succeeding event. Because escalation is not inevitable, however (Feld & Straus, 1988; Bowker, 1993, 1984; Johnson, 1995, 1998), we must compare cases in which women successfully stop the violence in abusive situation to cases with a fatal outcome.

Third, an effective profile must be based on *multi-disciplinary* information. Though intimate violence interventions exist in many settings - criminal justice (BJA, 1992), hospital (Warshaw, 1992; Sheridan & Taylor, 1993) or clinic - it is increasingly clear that the effect of an intervention in one setting may depend on coordination with interventions in another (BJA, 1992:3; Hawkins, 1993; Fagan, 1993). There are many reasons for this (United Way, 1992:87-91), but a significant obstacle to collaboration is limited information on interactive effects of the events, circumstances and interventions that together

produce the eventual outcome. Risk factors such as pregnancy, stalking, escalation of violence, terminating the relationship, weapon availability, his suicide threat or his controlling behavior, and interventions such as arrest, shelter or orders of protection, change over time and interact with each other. Roth (1994:6) puts it well:

> It is important for prevention purposes to view a violent event as the outcome of a long chain of preceding events, which might have been broken at any of several links, rather than as the product of a set of factors that can be ranked in order of importance.

The CWHRS responded to the increasing need for information to build public health and public safety strategies to identify and effectively intervene in potentially life-threatening intimate violence situations, and the need for information to support field-level staff (clinicians, beat officers, community health educators, and so on) in their decisions as they encounter intimate violence situations. It collected the information necessary to develop a reliable, validated profile of high-risk factors for a lethal outcome in intimate violence, based on analysis of multi-disciplinary, longitudinal information linking non-lethal and lethal cases of intimate violence.

GOALS and OBJECTIVES

The focus of the Chicago Women's Health Risk Study (CWHRS) was to examine risk factors that would place a physically abused woman or her partner in immediate danger of death or life-threatening injury. *Immediate* was defined as within a year. Serious injury was included, because the outcome of an injury of a given severity may be determined by many factors, such as how long it takes for the victim to receive medical care (Kington & Smith, 1997; Dove, *et al.*, 1980; Maull, 1987), and because the availability of medical care may be related to race or social status (Woolhandler, *et al.*, 1985). The CWHRS did not ignore other negative outcomes, such as suicide or attacks on children. However, the primary focus was to identify factors that are more likely to be present in abusive situations and relationships in which life-threatening injury or death will be an outcome in the next year, versus situations in which the woman and her partner escape uninjured, for whatever reason.

These factors may differ for women within different racial/ethnic groups (Hawkins, 1985; 1993). Studies repeatedly find that the risk of intimate homicide is high for African/American/Blacks, in Chicago (Zimring, *et al.*, 1983: 922-923; Block, 1985, 1987b, 1993) and nationally (Wilson & Daly, 1992; Kellermann & Mercy, 1992; Dobash, *et al.*, 1989). In addition, the characteristics of intimate homicide are not always the same for African/American/Black women, Latina/Hispanic women, or white non-Latina women (Block & Christakos, 1995). For example, the risk of being killed by an intimate partner in 1990 in Chicago was 5.7 per 100,000 for African/American/Blacks, 1.1 for Latino/Hispanics and 0.4 for whites or others.[1] Nevertheless, previous research paid little attention to identifying high-risk situations or effective interventions that may be specific to a particular racial/ethnic group.

Another goal of the CWHRS was that our sample of women would not exclude women who might be called unknown or "hidden" victims of intimate violence. These

were defined as women who were being physically abused, but the abuse was unknown to any helping agency. (The woman might have been in contact with a helping agency, but that agency did not recognize or respond to her abuse.) Because women who seek help or receive intervention may differ greatly from women who do not, the results of studies based only on agency populations may not be applicable to all abused women. Studies of opiate addicts, for example, another hidden group, have found marked differences between institutional and untreated community populations (for a review, see Watters and Biernacki, 1989:417). By definition, these women are extremely difficult to sample (Life Span, 1994). They may appear in official records only when they or their partner are in the morgue or emergency room. However, they may be one of the highest-risk groups for the death of either the man (Browne, 1986) or the woman. Langan (1986) found that National Crime Survey domestic violence victims who did not call the police were more likely to become repeat victims.

In addition, the CWHRS was primarily concerned with situations in which a woman was being physically abused by her intimate partner, whomever eventually dies. Specifically, though we recognize the existence of incidents in which a man is being physically abused by a woman intimate partner, previous abuse of the man partner was not the study's focus. Instead, our goal was to examine the risk of death or serious injury of either partner in situations in which the woman was being physically abused.

Previous research, mostly anecdotal, had indicated that an outcome of physical abuse against a woman can be the death of either partner (Browne, 1986; Dobash, *et al.*, 1992; Wilson & Daly, 1992), but little was known about risk patterns in these situations. Berk, *et al.*'s (1983) analysis, suggesting that the woman's use of a lethal weapon may be defensive, not "mutual violence," agrees with state-level correlational evidence (Browne & Williams, 1989) that availability of support services for abused women is negatively related to the risk of men being killed in domestic violence, and with Browne (1986), who compared battered women in prison for killing or attempting to kill the batterer to battered women who had not attempted to or killed the batterer, and found that the women who had killed or attempted to kill were less likely to have sought or received support.

Initial CWHRS goals and objectives, therefore, were the following 1) explore factors that indicate a high risk of serious injury or death of either partner within a year, in cases where a woman is being physically abused by her intimate partner; 2) determine whether or not patterns of high risk are different for abused women in different racial or ethnic groups (African/American/Black, Latina/Hispanic and white or other); 3) include in the sample "hidden women" who might be at high risk but their abuse is are not known to any helping agency; 4) sample at points of agency contact and focus data collection on information available to helping agencies, so that the results of the study would be useful for agencies making practical decisions; 5) determine whether the factors related to the death of the man partner differ from factors related to the death of the woman partner; 6) explore the interactive effects of clusters of risk factors on the risk of a lethal outcome, as they change over time; 7) take into account not only events and circumstances in the home or relationship, but also interventions attempted by the woman's support network,

medical, public health or helping agencies or criminal justice; and produce products aimed at practical use, such as a blueprint for educational material that is culturally sensitive to all of our communities.

Questions Explored

The Chicago Women's Health Risk Study (CWHRS) was based on a comparison of abused women with and without a lethal outcome, taking into account the interaction of numerous events, circumstances and intervention attempts occurring over a year. For example, the analysis addresses situations in which interventions were tried, but in which the woman was still seriously injured or killed.

It was not possible to determine the independent and interactive effects of all possible combinations of the many risk factors, strengths and protective factors, and interventions in a woman's life. Further, since much of the research relating to lethal outcome is anecdotal or circumstantial, and since there is very little multi-variate research available distinguishing cases of more and less serious abuse, we did not develop a specific hypothesis for every situational possibility. However, we expected, based on the available literature, that a number of risk factors, strengths and protective factors, and interventions would be related to the risk of a lethal outcome.

The project's analysis had two goals for these risk factors and interventions: first to determine the most important factors leading to a high risk of lethal outcome for each of three racial/ethnic groups (African/American/Black, Latina/Hispanic and white or other), and second to explore their relationship case-by-case in more qualitative analysis. The second goal was made possible by the collection of detailed information about a wide variety of variables over a two-year time span.

Risk Factors

The following section reviews the literature on risk factors, as it applies to the CWHRS perspective and focus. Much of the research on causes of intimate partner violence focuses on factors that might predict that a man will become violent or that a woman will become the target of violence in an intimate relationship. There were two important differences between this research tradition and the CWHRS approach. The primary difference was that factors predicting abuse may not predict life-threatening violence or death for a particular woman who is currently being abused by an intimate partner. The CWHRS focused specifically on factors that might be related to these extreme outcomes.

A second important difference was that the CWHRS considered the situation from the woman's perspective. Our key question was this: what can a woman in the tremendously difficult situation of intimate partner violence do to prevent death, and how can helping professionals assist her? Therefore, the CWHRS focused on the whole situation, changing over time, from the woman's perspective. One result of this focus, for example, was that the CWHRS gathered data on the abusing partner or partners only as they interacted with the woman. We were very interested in the women themselves, how they coped over the two-year period of the study, what resources they brought to bear, and

whether they managed to survive.

History of Violence

That violent behavior, whether within the intimate relationship or outside it, increases the risk of death due to violence is a basic tenet of intimate violence research. The majority of women who are victims of homicide or attempted homicide were violently attacked in the past by the partner who eventually killed them, with the percentage of prior violence ranging from 66% to 70% (Sharps, *et al.*, 1999; Morocco, *et al.*, 1998; Campbell, 1992). The Kellermann, *et al.* (1993:1087; Bailey, *et al.*, 1997) case control study found that a history of physical fights in the home is strongly associated with residential homicide. The *Violence against Women* survey found that frequent intimate assault was related to more serious attacks (Johnson, 1995). In Browne (1986), murdered male partners had more prior arrests than men who were batterers who were not murdered.

However, definitions of violence and escalation in these studies vary widely. Studies may define levels of violence by incident frequency, seriousness (injury), type and included aspects (during pregnancy, sexual violence, threats to children), or combinations of these. Measurements also vary (official records versus victim interviews).

Stalking and Other Harassment

Sheridan (1992) defines harassment as, "a persistent pattern of behavior by a male intimate partner that is intended to bother, annoy, trap, emotionally wear down, threaten, frighten, and/or terrify the woman in order to control her behavior," and includes stalking; pet killing; threats of sexual abuse; destruction of her property; frequent unwanted telephone calls; and threats of harm. Harassment may be a precursor of death of the woman (Campbell, 1992; Wilson & Daly, 1995) or of the man (Browne, 1986, 1987; Ewing, 1987; Gillespie, 1989). Moracco, *et al.* (1998) found that 23.4% of North Carolina men who killed their intimate partner had previously stalked her.

Controlling Behavior

Many studies find that his assertion of power and control over her is an important motive for violence (Dutton & Browning, 1987, 1988; Mason & Blankenship, 1987; Wilson & Daly, 1995; Dobash & Dobash, 1995). Homicide may be a consequence of using threat of homicide as a control mechanism (Wilson & Daly, 1995). In Canada (Johnson, 1995), "controlling and emotionally abusive behaviors were used with much greater frequency by men who inflicted serious violence on their wives."

Controlling behavior may underlie or interact with other risk factors, and mediate the effect of interventions. Fagan (1992: 192; citing Dunford, *et al.*,1990 and Ford, 1991), argues that formal interventions work best when they, "correct power imbalances within intimate relationships." The partner's controlling behavior may cause the woman to become isolated from sources of support and assistance (Johnson, 1998; Kelly, 1996: 79).

Type of Union

It is a common argument among anthropologists and social researchers (Ellis, 1989; Ellis & DeKeseredy, 1989; Baumgartner, 1993) that women in a commonlaw

relationship are more at risk of abuse and less able to escape an abusive situation than women in a relationship sanctioned by marriage. Marriage provides "sanctions and sanctuary" (Counts, *et al.*, 1992) -- guardians and support for the couple and surveillance and control for a potentially violent man. In addition, Ellis and DeKeseredy (1989) argue that lovers and ex-partners, as opposed to husbands, are less likely to be deterred from violence because they have a lower stake in conformity and are more likely to have a violent history. Research (NIJ, 1999; Wilson & Daly, 1995; Daly & Wilson, 1988; Silverman & Mukherjee, 1987) has found that a couple's legal status (married, separated, divorced, commonlaw, boyfriend/girlfriend) and whether they reside together are associated with the likelihood of death or serious injury in intimate violence.

However, the couple's ages (Wilson, *et al.*, 1995; Dumas & Perón, 1992) and the presence of children or stepchildren (Wilson, *et al.*, 1995; Daly *et al.*, 1993) may confound the apparent effect of type of union. In addition, the meaning of marriage for the couple and the effect of marriage on sanctions and sanctuary may not be the same for women in all cultural traditions. Therefore, the CWHRS was designed to examine the effect of type of union in conjunction with age, children and other factors, as well as to look at type of union in a cross-cultural perspective, for African/American/Black, Latina/ Hispanic, as well as white or other women.

Estrangement; Leaving the Relationship

Two fundamental misconceptions are inherent in the popular question, "Why don't women just leave?" First, leaving is not a single action but a cumulative process (Ferraro & Johnson, 1983; Landenburger, 1988, 1989; Walker, 1984; May, 1990), that may require a woman to leave an average of five times (Okun, 1986: 198), and take an average of eight years (Horton & Johnson, 1993). Second, if the woman leaves or threatens to leave, her risk of being killed may increase (Dawson & Gartner, 1998; Wilt, *et al.*, 1995; Wilson & Daly, 1993; Campbell, 1992; Wallace, 1986). In Canada (Johnson, 1995), abuse increased after separation in 36% of serious violence cases and 43% of less serious violence cases. The evolving process of termination is closely related to many other factors in the situation - harassment or stalking before and after the attempt, escalating violence, his attempt to maintain control, official interventions (arrest, orders of protection), formal or informal support availability - as well as to positive (successful escape from the problem) and negative (being pursued and killed) outcomes.

The Canadian *Violence against Women* survey (Johnson, 1992) and its U.S. replication (Tjaden, 1994) provide epidemiological data relating estrangement to increased violence, but there is "little quantitative information available" on estrangement and homicide (Wilson & Daly, 1993).

Age and Age Disparity

In the *Violence against Women* survey (Johnson, 1995), both victim's and partner's ages predict violent victimization by a current spouse, with the risk at age group 18 to 24 three times the next highest age group. In a review of research, Wilson and Daly (1992:200-201) confirm this. They find independent age effects for victim and offender, and an increase in violence with age disparity. The Canadian *Violence against Women* survey did not confirm the age disparity effect, however.

Children

The presence of children may have an effect on the likelihood of violence, on the severity of that violence, and on the likelihood that violence will continue. It may be more difficult for a woman to escape an abusive situation when she has had children with her intimate partner. Even though the relationship may have ended, she may still interact with her former partner because he is the father of her children. Visitation issues, child support and child custody disputes provide grounds for conflict, and may necessitate continuing contact with the former partner (Jaffe & Geffner, 1998: 371-408; Pearson, *et al.*, 1999). On the other hand, the presence of children may become part of the reason for a woman to leave the situation. Advocates often cite "fear for her children" as the "last straw" in motivating a woman to leave.

Data worldwide indicate that the presence of children who were not sired by the woman's current partner (his stepchildren) can precipitate intimate partner violence and homicide against the woman (Brewer, *et al.*, 1997; Daly, *et al.*, 1997; Daly & Wilson, 1996; Wilson, *et al.*, 1995; Daly, *et al.*, 1993; Wilson & Daly, 1992; Daly & Wilson, 1988). Stepchildren are over-represented among children killed by their "father," and are especially over-represented among children killed along with their mother (Daly, *et al.*, 1997; Wilson, *et al.*, 1995:281-282; Daly, *et al.*, 1993). The presence of children in the home is also related to homicide of the man (Brown, 1986).

In addition to the effect that the presence of children may have on the violence, a growing body of research shows that violence in the home may have an effect on children (Holden, *et al.*, 1998; Margolin, 1998; Margolin & John, 1997; Kolbo, *et al.*, 1996; Henning, *et al.*, 1996). Nationally, it is estimated that at least 4 million children a year are exposed to battering and domestic violence in their home. In a recent study of domestic violence screening in a pediatric emergency department (Duffy, 1999), more than half of battered mothers reported being concerned that their children were affected by having witnessed domestic violence. These children are at risk for being injured both as a co-victim with their parent and by child abuse (which is markedly increased in homes with domestic violence). In addition, there are many traumatic effects when one parent kills another (Hendriks, *et al.*, 1993). Campbell (1995) found that, in 57 intimate partner homicide cases, there were 12 children under age 15 who had witnessed the murder of their mother or found their mother's body.

Physical and Mental Health

Many studies find a strong relationship between a woman suffering intimate partner violence and her physical health (Sharps, *et al.*, 1999; Plichta, 1997). The cause-and-effect can run both ways. A physically abused woman often incurs a physical or mental health problem as a result of the abuse (McCauley, *et al.*, 1995; Zachariades, et al., 1990; Grisso, *et al.*, 1991). At the same time, a medical problem or condition such as pregnancy may make a woman more vulnerable to abuse (Stark & Flitcraft, 1996). The causal relationship between abuse and health is, therefore, complex, and can be untangled only through a longitudinal study.

There is an increasing body of research that links mental health problems, especially post-traumatic stress disorder (PTSD) and depression, to violent victimization

(Kilpatrick, *et al.*, 1998) and specifically, to intimate partner violence (Saunders, 1992, 1994; Graham-Berman & Levendosky, 1998; Campbell, *et al.*, 1995; Schole, *et al.*, 1998; Cascardi & O'Leary, 1992; Sato & Heiby, 1992). Thompson, *et al.*, (1999) found that "physical partner abuse, but not nonphysical partner abuse, was associated with an increased risk for PTSD."

Another complicating factor in the measurement of physical and mental outcomes of intimate partner violence is that the severity of any single incident does not necessarily indicate the overall severity of the violence being experienced by the woman. Most medical visits by abused women do not involve trauma resulting from the abuse (Scholle, *et al.*, 1998). That is one of the main reasons for universal screening in health care settings, as opposed to screening only women presenting with trauma (Stark & Flitcraft, 1991: 140).

Pregnancy

Trauma is the leading cause of maternal death in the Chicago area; the majority of these deaths are homicide (Fildes, *et al.*, 1992), but little is known about homicide risk during or shortly after pregnancy, except for the ground-breaking research of Judith McFarlane and her colleagues (Wiist & McFarlane, 1998a; McFarlane, *et al.*, 1992, 1996 1998; Parker, *et al.*, 1994; Helton, *et al.*, 1988). There is also evidence that pregnancy is related to abuse severity and thus to homicide risk. In Canada, 33% of severely abused women were battered during pregnancy, compared to 8% of less severely abused women; in 40% the abuse began during pregnancy (Johnson, 1995). Of pregnant women, adults are more severely abused than teens and white women are more at risk of homicide (McFarlane, *et al.*, 1992).

A number of studies access the presence of risk factors for domestic violence among pregnant women, such as a woman's alcohol use and her partner's drug use (Amaro, *et al.*, 1990), her age (Gelles, 1988), the partner's controlling behavior (Campbell, 1992), the weapon used (McFarlane, *et al.*, 1998), pregnancy intendedness (Gazmararian, *et al.*, 1995) and neighborhood characteristics (O'Campo, *et al.*, 1995). In addition, understanding the timing of abuse may be a key to prevention (Hillard, 1985; Helton, *et al.*, 1988; Gelles, 1988; McFarlane, 1989; Campbell, *et al.*, 1989). Does the violence precede the pregnancy, begin with the pregnancy, or begin after the baby is born?

Intervention at pregnancy, whether it originates in a health care setting; (Saltzman, 1990; Sharps, *et al.*, 1999; Sheridan, 1996) or in law enforcement (Campbell, 1992; Wiist & McFarlane, 1998b), has obvious importance not only for the woman but for her child (Bullock & McFarlane, 1989; Dietz, *et al.*, 1999; Newberger, *et al.*, 1992). But pregnant women may be less likely than other women to seek help in either setting. Since abused women are late in seeking prenatal care (Parker, *et al.*, 1994; Dietz, *et al.*, 1997), many "unknown" battered women may be pregnant.

Alcohol or Drug Abuse

There is ample evidence that intoxication is common in intimate partner homicide offenders, whichever partner is killed. About 40% of murder offenders report that they had been drinking at the time of the offense, and of these, 90% had a blood alcohol level

.05 or higher (Greenfield, 1998). Research is less clear about drug use and intimate partner homicide, but both drinking problems and illicit drug use by the victim or any member of the household were "highly predictive of fatal domestic violence" in a case control study of femicide in the home (Bailey, *et al.* 1997:781; Rivara, *et al.*, 1997).

Research also points to the victim's alcohol or drug use. For women victims, a New Mexico study of 134 femicide victims found that 54% (domestic violence) and 69% (other) had drugs or alcohol in their blood (Arbuckle, *et al.*, 1996). For men homicide victims, Browne (1986; 1987), Block and Christakos (1995), Smith, *et al.* (1998), and others have found an association between intimate homicide of a man and his alcohol use. Previous analysis of the Chicago Homicide Dataset has found that alcohol was more likely to be a factor when a woman killed her partner than when a man killed his partner.

There are many avenues connecting substance abuse and intimate partner violence, in addition to pharmacological effects such as disinhibition. First, substance abuse may be the subject of conflict (Kantor & Straus, 1989; Brewer, *et al.*, 1998:112; Miller, 1990). In an earlier Chicago homicide, for example, an addict killed his partner because she had "squandered" her check on baby food rather than giving it to him for drugs. Drinking or drug abuse may be means of exerting power and control. Second, the abuser may attempt to force the woman to assist in drug dealing, or to prostitute herself in order to pay for drugs, activities that would put her at greater risk of violent death (Grant & Campbell, 1998). Third, the abuser may force her to use alcohol or drugs. In Brookoff's (1997) Memphis study, about 42% of the victims had used alcohol or drugs on the day of the assault, and 15% had used cocaine. However, about half of those who had used cocaine said that their assailant had forced them to use it.

Underlying causes include an association between childhood abuse and alcoholism, which, coupled with the association of each of these with adult abuse victimization, produces a complex set of circumstances that may be difficult to unravel (Miller, 1999: 196-199; Windle, *et al.*, 1995; Grant & Campbell, 1998.) Other factors include social status (Fagan, 1993) and race/ethnicity (Kantor, 1997). Jasinski, *et al.* (1997) found that ethnicity and work-related stress have an interactive effect on battering. Lillie-Blanton, *et al.* (1991) found that African/American/Black women were more likely to be nondrinkers and less likely to be heavy drinkers, than white women.

There are numerous differences between patterns of alcohol and drug abuse in men and women (for a review, see Lex, 1991), and the relationship between a woman's abuse of alcohol or drugs and being battered by her partner is not clear. Although "wife's drunkenness" is an important factor distinguishing abused from nonabused women, this is true only for minor violence, not severe violence (Kantor & Straus, 1989). Similarly, Brewer, *et al.* (1998) found that women using crack, other cocaine or tranquilizers were more likely to be hit, slapped or shoved, but they did not measure more serious violence, and found that the woman's alcohol use was not related to the likelihood of abuse.

In analysis of the 1985 Family Violence Survey, Kantor and Straus (1989) found that the husband's drug use and his drunkenness were among the five most important variables that distinguished abused from nonabused women. In their study of pregnant

women, Amaro and colleagues (1990) found that women who were victims of violence were more likely than nonvictims to have a male partner who was a marijuana or cocaine user. However, alcohol use was not a factor. In a Memphis study, Brookoff (1997) reported that 92% of assailants had used drugs or alcohol during the day of the assault, and 45% had been intoxicated daily for the past month. Coleman and Straus (1983) found that rates of violence were almost fifteen times as high for husbands who were "often" versus "never" drunk in the last year.

The cultural context can be a contributing factor to the effect of a man's alcohol abuse on his violence against women (Fagan, 1993; Johnson, 1997). Drinking in certain social contexts, such as bars, pubs and other men-only environments, may support norms of violence against women (Schwartz & DeKeseredy, 1997).

Suicide Attempts or Threats

Partner's Suicide as a Risk Factor for Homicide. Research indicates that the woman and children are at risk of being killed when a man commits suicide (Spungen, 1998; Clark & Fawcett, 1992b; Crittenden & Crain, 1990; Block & Christokos, 1995; Rosenbaum, 1990; Block, 1987b; Daly & Wilson, 1988; Allen, 1983; West, 1966; Wolfgang, 1958). In Canada from 1974 to 1987, 31% of men who killed their wives and 19% of men who killed their commonlaw partner committed suicide (Johnson & Chisholm, 1989). In Albuquerque, New Mexico from 1978 to 1987, a third of the 36 murders of "couples" were homicide/suicides (Rosenbaum, 1990). In Chicago, Stack (1997) found that the chance of the offender committing suicide after homicide was increased 12.68 times after killing an ex-spouse or ex-lover, 10.28 times after killing a child, 8.00 times after killing a spouse, and 6.11 times after killing a girlfriend or boyfriend, compared to only 1.88 times after killing a friend. This has clear implications for intervention, as Palmer and Humphrey (1980:106) found:

> . . . the killing of someone in close relationship to the offender, often a wife, appeared to be part of the evolving process of suicide.

In recognition of this research, a question on suicide threats or attempts is part of the Campbell Danger Assessment. However, previous studies did not explore the "evolving process" of suicide and homicide, and suicide *threat* was not addressed as a risk factor for the partner's death. Such research is difficult, because homicide/suicides are even more rare than homicides. Of the 19,335 murders in Chicago from 1965 to 1990, there were only 268 homicide/suicides, 174 of them between intimate partners (Block, 1993).

Suicidal Feelings and the Risk of Homicide Victimization. Though research shows that women almost never commit suicide after killing an intimate partner, suicidal feelings may place her at risk of being killed herself; this has not been explored previously. There may be a correlation between a woman's suicide and being abused by her partner (Stark & Flitcraft, 1996:99-121; Thompson, *et al.*, 1999). The causal relationship may go in two directions. First, a woman who is depressed and suicidal may be at especially high risk for serious partner abuse. For example, she may be less able to withstand a partner's control mechanisms or harassment, and less able to avail herself of sources of help. Second, a woman who is being abused may become seriously depressed (Sato & Heiby,

1992) and see no alternative to suicide (Saunders, 1992:221). In a review of the literature, Stark and Flitcraft (1991:123-157) found that

> . . . attempted suicide -- and particularly multiple attempts -- is a significant sequella of abuse among women, affecting one abused woman in ten. Conversely, abuse may be the single most important precipitant for female suicide attempts yet identified.

Thompson, *et al.* (1999) also found that "intimate partner violence is a significant risk factor for suicidal behavior among women." The same study also found, however, that her suicide attempts were associated with partner violence only when the woman had PTSD symptoms.

Firearm Availability

Considerable research (Cook & Moore, 1994; DHHS, 1992: 190-193) suggests that the likelihood of death in an expressive assault is related to the availability of a weapon. If used, a firearm or knife is much more likely to result in death (Zimring, 1972). The case control studies of Kellermann, *et al.* (1993) and Bailey, *et al.* (1997) found gun ownership was strongly related to residential homicide, and to violent death of women in the home. Mercy and Saltzman (1989) have reported that violence between intimate partners is 12 times as likely to be fatal if a firearm is involved.

But the causal direction is not clear: Do violent households have firearms, or does the presence of a firearm in the home lead to more lethal violence?

Strengths and Protective Factors

It is important to realize that, contrary to popular belief, most abused women are not passive recipients of violence, but are "actively engaged in seeking the assistance of outsiders" to end the violence (Johnson, 1998:63-71). However, every woman is not able to stop the violence in an abusive situation. A woman's ability to do so may depend, in part, on the resources she has at her disposal, including both material resources and a network of social support and informal assistance (Bowker, 1994; Horton & Johnson, 1993). Holly Johnson (1998) found that an abused woman's isolation was a major factor in the cessation of violence against her. Further, Browne (1997) and Campbell, *et al.* (1994) point out that women who may not yet have succeeded in stopping the violence against her are still "actively engaged in surviving" (Johnson, 1998:63).

Social Support/ Helping Network

Though many researchers comment that informal intervention and social support are tremendously important to a woman's ability to deal with violence in her life, there has been little research that operationalizes and measures the effect of different kinds of social support, in relationship to other risk factors and formal interventions. One purpose of the CWHRS was to remedy this situation by collecting longitudinal data on multiple types of support and intervention, from the woman's perspective.

Like the availability of formal support agencies, the strength of the informal social support network has been found to be negatively related to woman-to-man intimate violence (Barnett, *et al.*, 1996). In a longitudinal study of women leaving a shelter, Alcorn (1984: v) found that "natural helping networks, service providers and enforced laws

[interactively support] battered women's attempts to prevent further incidents of violence." A helping network (Mitchell & Hurley, 1981) can provide both material support and an "external definition of the relationship" that may trigger an abused woman's "awareness of danger" (Ferraro & Johnson, 1983:333) and convey shame to a batterer (Fagan, 1993). As a result, perhaps, the availability of social support seems to be negatively related to self-blame in battered women (Barnett, *et al.*, 1996).

Income, Education, and Employment

In addition to social support resources, a woman's material resources may make a difference in her ability to stop the violence. For example, a personal income that she controls herself and an education that makes her marketable may give her more alternatives. Employment outside the home brings her into contact with the outside world and may provide easier access to helping agencies and friends (Johnson, 1998; Eckberg, 1995).

The correlation sometimes found between race or ethnicity and intimate partner violence may be due to unequal access to these resources across communities. In a study of people's ability to function with a chronic disease, for example, Kington and Smith (1997) demonstrated that poorer functioning for African/American/Blacks and Latino/Hispanics was completely explained by education, income and wealth.

In addition, low income and unemployment may be related to the likelihood that the woman's partner will be violent towards her. In a study focusing specifically on causes of violence in the African/American/Black community, Sampson (1987) found that income and employment were factors. In the Canadian Violence Against Women survey, men who were unemployed in the year prior to the survey assaulted their wives at twice the rate as employed men (Johnson, 1995).

Help-Seeking and Interventions

Profiles of high-risk situations will not prevent violent death, unless they lead to an effective intervention. However, intervention from a public health, public safety or helping agency may not be sufficient or even necessary for a woman to escape a dangerous situation (Dobash, *et al.*, 1985; Bowker, 1983). Formal interventions occur in a context of interventions initiated by the woman herself with the support of natural helping networks. An abused woman's ability to "mobilize social control" effectively (Johnson, 1998: 63-74) is an interactive process related to her resources as well as to the availability of services. Therefore, an assessment of the use and effect of interventions must begin by assessing the woman's avenues of support -- the resources she calls on, the situations under which she seeks help or does not seek help, the help she receives (from her perspective), and whether or not she considers that help to have been useful.

From the point of view of helping agencies and organizations, women who are being victimized by violence pose unique problems. Battered women are not only a "challenge to the medical model" (Warshaw, 1989; Life Span, 1994), but a challenge to traditional law enforcement (BJA, 1992: 2; Mederer & Gelles, 1989; Gondolf & McFerron, 1989).

Health Care

Partner violence is the leading cause of injury for which women seek medical attention. Women injured by their intimate partner's violent attack frequently seek help from hospital emergency departments (Sharps, *et al.*, 1999; Dearwater, *et al.*, 1998; Abbott, *et al.*, 1995; Goldberg & Tomlanovich, 1985) and from other sources of medical care (Plichta, 1992; Rath, *et al.*, 1989). For example, 17% of women visiting an emergency room for treatment came because of being injured by an intimate partner (Bureau of Justice Statistics, 1997). Stark (1984) estimates that if a woman presents for health care three times with injuries, she has an 80% likelihood of being a battered woman.

Langford (1996) found that almost three-fourths of victims of homicide by a family member had been seen in a health care setting before the murder. However, women who seek health care may not be identified as a victim of abuse (Dearwater, *et al.*, 1998). In response to this situation, many professional medical organizations, including the American College of Physicians, the American College of Obstetrics and Gynecology and the American Medical Association, advocate routine screening for domestic violence and work to educate health professionals to better identify women in battering relationships. In order to include all of these women in the CWHRS clinic/hospital sample, the sample design was based on routine screening of every woman coming to a medical facility, for any kind of treatment or care, not only treatment for violence.

Community Services

Like health care facilities, agencies offering community services often neglect, ignore, or minimize the problem of physical abuse (O'Leary & Cascardi, 1998). However, Fagan (1993) found that arrest and prosecution may be most effective (or effective only) in conjunction with a social support network, agency treatment programs or other informal social control mechanisms. A goal of the CWHRS, therefore, was to capture the profile-year use of services such as shelters, advocates, counseling, batterer treatment, treatment programs in prison or probation (Tolman & Bhosley, 1991; Dobash & Dobash, 1995; BJA, 1993: 15-16), alcohol or drug treatment, or suicide prevention.

Alcohol Treatment or Counseling

Holly Johnson (1997:18) found that, controlling for other factors, men who were regular heavy drinkers (five or more drinks at one time at least once per month) were more likely to continue to assault their wives. However, she argues that, even though many battered women have reported that the violence stopped following alcohol treatment for their partners, the situation is not clear. Because heavy drinking is often coupled with other factors that may be more important predictors of violence, it is difficult to say whether treatment for drinking alone will make a difference (Johnson, 1996:225).

Police Intervention

Women may be reluctant to notify the police, for many reasons. They may fear retaliation from their partner; they may fear that their children will be taken away; they may fear that the police might arrest them. In a Canadian random sample of women, almost half of women who suffered frequent injurious violence and feared for they lives said that they had never called the police for help (Johnson, 1996). Older women, who were less likely to seek help from informal sources, were more likely to call the police (Johnson, 1998: 195-196).

Once the police have been notified, they are not always helpful. Randomized field experiments (Sherman & Berk, 1984; Dunford, *et al.*, 1990; Sherman, 1992) have yielded complex and sometimes conflicting information on the effect of arrest on subsequent intimate violence (see Fagan, 1993a, 1996; McCord, 1992 for reviews). Other research (Berk, *et al.*, 1980-81; Buzawa, *et al.*, 1992; Buzawa & Buzawa, 1996a; Ferraro, 1989; Lavoie, *et al.*, 1989; Stith, 1990) has found that responding police officers may not make an arrest, even when the victim has been severely injured, may allow the man to be present and in control during the interview, and may carry stereotypical attitudes about battered women with them into the field.

Court Intervention; Orders of Protection

It is necessary to monitor and enforce both protection orders and offender release conditions to ensure victim safety (BJA, 1992:3; Ptacek, 1997; Caringella-MacDonald, 1997). However, previous research was lacking on the interaction of court interventions with other interventions and circumstances (Harrell & Smith, 1996; Buzawa & Buzawa, 1996b; Harrell, *et al.*, 1993; Ford, 1991). Dobash and Dobash (1995) concluded that court injunctions are useful under some circumstances (see Finn, 1991; Finn & Colson, 1990; Goolkasian, 1986; Grau, *et al.*, 1984), but found that their value would be enhanced by comparing injunctions to "doing nothing or arresting the man."

STUDY DESIGN AND METHODOLOGY

Sample surveys and experiments or case-control studies provide a vast amount of information about characteristics of abused versus nonabused women and about nonlethal escalation of abuse, but they do not link that information with a lethal outcome. It would take many years and tremendous resources to track a representative sample of abused women until the risk of a lethal outcome could be determined, especially a sample large enough to examine simultaneous effects of numerous risk factors and interventions. The CWHRS used a quasi-experimental design (Cook & Campbell, 1979) to link abused women to possible lethal outcomes, without the prohibitive expense of a massive long-term study. The goal was to yield a maximum amount of information in a reasonable time within a finite budget.

This design incorporated the following key aspects:

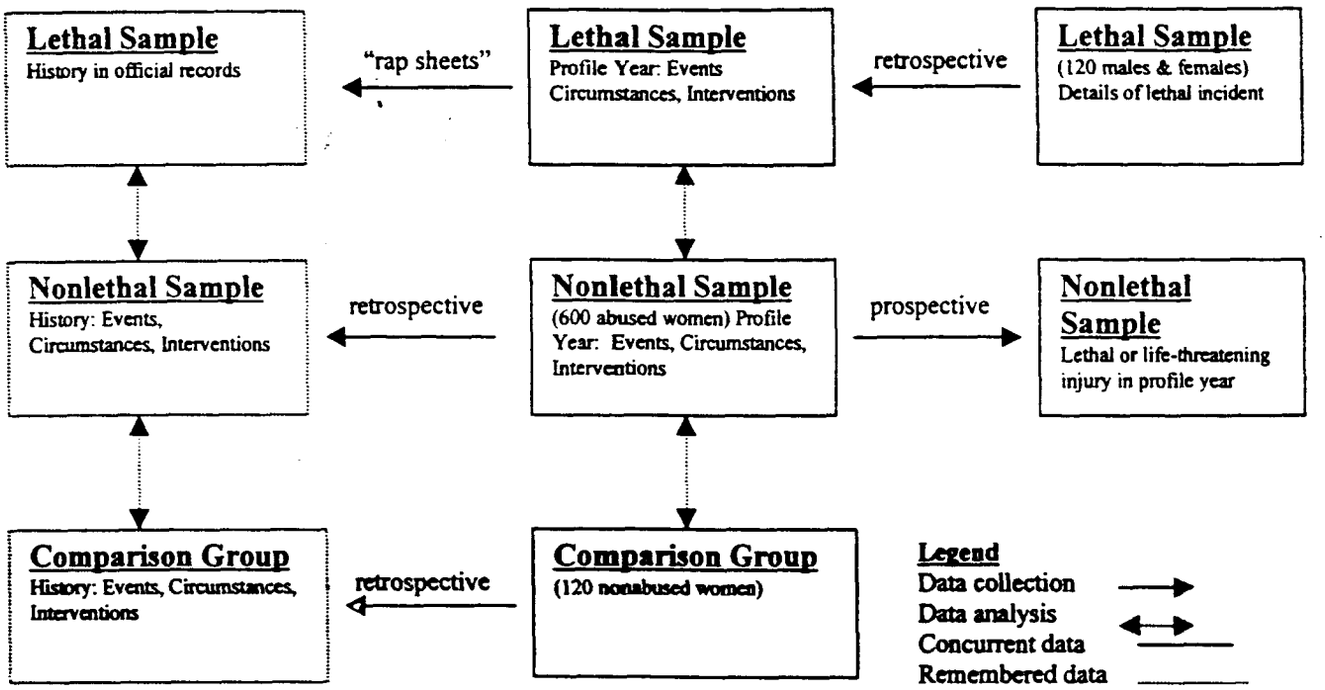
1. The purpose of the CWHRS was not to provide population-based estimates of domestic violence in Chicago. Rather, the goal was to sample high-risk women at a point of service.

There are many other studies measuring the risk of being abused in the general population (for example, the Canadian and United States Violence Against Women Surveys). There are also studies that follow abused women identified in shelter or other agency populations. These studies are relatively easy to do, because the agency records and agency setting provides access to women who are already identified as being abused. However, the results of these studies may not be generalizable to "hidden" women, women who may be at high risk but who are not known to helping agencies (Watters & Biernacki, 1989:417).

2. So that high-risk but understudied populations (expectant mothers, women with-

CWHRS will provide information available nowhere else.

Exhibit 1
CWHRS Study Design, as First Proposed



In addition, the CWHRS design included a control group of 208 nonabused women appearing in the same health care settings as the sampled abused women. While the focus of the study was to compare women at risk of a lethal outcome to other abused women, this non-abused comparison sample provided a context for the non-lethal abused sample. It connected our results to the many studies that compare abused women to women in general, and provided information for clinic or hospital practitioners to use when designing intervention strategies for abused women. (It was inexpensive to add this control group to the study, since the information was be gathered anyway to screen abused from nonabused women, and no follow-up interviews were necessary.)

out a regular source of health care and abused women where the abuse is unknown to helping agencies) would be included in the CWHRS, we chose sample screening sites in areas of the city with a high rate of intimate partner homicide, and designed instruments and procedures to minimize selection bias.

3. To produce valid results within racial/ethnic group (for African/American/Black women, Latina/Hispanic women, and white or other women), we had a large sample size and developed culturally sensitive instruments and methods.

4. Respondent safety and confidentiality were primary considerations throughout the study. Ethical and safety concerns took priority over achieving research goals.

These concerns can be summarized by the three ethical principles for human research, Beneficence, Respect and Justice, set forward in the Belmont Report (DHEW, 1978; Sieber, 1992:18). Beneficence means avoiding unnecessary harm while maximizing good outcomes for the research and for the participants. Respect means protecting autonomy with courtesy and respect. Justice means, among other things, that "those who bear the risks of the research should be those who benefit from it."

Project Methodology: Overview

The CWHRS design, shown graphically in Exhibit 1, had three major parts: 1) separate non-lethal and lethal samples, the former targeting seriously abused women within three racial/ethnic groups (African/American/Black, Latina/Hispanic and white or other), 2) both samples tracked for a year, and 3) similar data collected on each. The (initially) non-lethal sample, 497 women in abusive relationships, were interviewed about a retrospective calendar year and then tracked by a prospective series of interviews spanning a year from initial contact. The lethal sample, 87 women and men killed by intimate partners in Chicago in 1995 or 1996, were tracked by retrospective interviews with two knowledgeable proxies (friend, relative, neighbor) who can provide information on events occurring in the year before the homicide.

Thus, we gathered calendar information on the lethal sample for one year prior to the attack that resulted in death, and on the non-lethal sample for a year before and a year after the event that led to inclusion in the sample (presentation at hospital or clinic). When possible, we collected the same information and utilized the same instruments with both samples, locating each risk factor or intervention on a profile year calendar (Campbell, 1993), so that clusters of events, circumstances and interventions can be related temporally to each other and to the outcome.

This design assumed that the couples represented by the lethal and non-lethal abused samples were comparable and that the profile year information gathered retrospectively for the lethal cases could be compared to information gathered prospectively for the non-lethal abused cases. A study in which lethal and non-lethal abused samples were the same people, one that followed a random sample of abused women for years to determine the eventual outcome, would have necessitated a huge sample, presented correspondingly huge financial and respondent safety obstacles, and required many years for results to be available for practical application. This is because intimate partner homicide is such a rare event in Chicago. Until such a study is feasible, the results of the

The key analytical comparisons are shown in Exhibit 1, above, by vertical dashed arrows. The most important comparison was between the lethal and the non-lethal samples of abused women. The goal of the high-risk profile analysis was to determine the configuration of events, circumstances and interventions, occurring over a year, that distinguish these two groups. This analysis also included several sub-analyses, separate high-risk profiles for African/American/Black, Latina/Hispanic, and white or other women; and a separate profile for pregnant women. In addition, we conducted a comparison of intimate homicide in same-sex relationships versus heterosexual relationships, and a comparison of heterosexual intimate homicides in which the woman versus the man died. The focal question for each comparison was to determine whether or not the groups differed enough so that separate analyses should be conducted of the configuration of profile-year events, circumstances and interventions surrounding the homicides.

In total, the CWHRS samples (Exhibit 2) included 792 subjects (497 abused, 208 comparison and 87 murder victims). The initial interviews covered a retrospective year. Follow-up interviews, of the abused women only, covered a prospective year. To the extent possible, the same retrospective questions were asked of the proxy respondents. We interviewed as many as three proxy respondents per murder victim.

Major Tasks

In order to implement the Chicago Women's Health Risk Study design, a number of tasks were necessary. These are summarized in Exhibit 3.

Changes in Study Design, Compared with the Original Proposal

1. Inclusion of same-sex intimate partner relationships

The original CWHRS design sought to identify factors that place women abused by a male intimate partner (spouse, ex-spouse, commonlaw, boyfriend, ex-boyfriend) in danger of life-threatening injury or death. However, after much discussion, the collaborators in the Advisory Board decided to include same-sex relationships as well. Thus, the clinic and hospital sample became women who had been physically abused by an intimate partner, man or woman, in the past year. The lethal sample became any intimate partner death in 1995 or 1996, in which at least one of the partners was a woman.

2. Decision not to collect public record data (clinic/hospital sample)

In the original proposal, we responded to the NIJ review panel's concern about the unclear nature of the Chicago Police Department (CPD) collaboration, by deciding that the non-lethal data collection would be too demanding of CPD resources. The proposal called for the Authority, as the other criminal justice agency on the project team, to collect the criminal history and court record data. The continuing Chicago Homicide Project, and a collaborating agency, the Cook County Medical Examiner's Office, would be the source of proxy information.

This procedure was followed for the proxy study. However, the Advisory Board decided early in the study, with NIJ approval, not to collect official record data on the clinic and hospital women or on their abuser. The collaborators on the Advisory Board

felt strongly that it would be an undue invasion of the woman's privacy to collect the information that would have been necessary in order to track her in official records (SSN, date of birth). In addition, the collaborators were concerned that an investigation of the woman and the abuser in official records, no matter how circumspect, might provide the occasion for a safety risk for the woman. Finally, the collaborators working in the Latino/ Hispanic community were very worried that the inclusion of such questions in the questionnaire would frighten some women who were concerned about this information getting back to "the authorities." With this in mind, we eliminated many of these sensitive questions from the questionnaire.

Exhibit 2
OVERVIEW OF SAMPLE DEFINITIONS

Sample I: Abused and comparison women

Definition	497 women aged 18 or older who had been physically abused by a man or woman intimate partner within a year before an initial interview, plus 208 comparison women
Selection Process	In three medical sites located in areas of the city with high intimate partner homicide rates (Cook County Hospital, a Public Health clinic and a Family Health Center), over 2,600 women patients were randomly screened for abuse using a standard three-question Public Health screener. A detailed face-to-face interview was conducted with 705.
Interviews	Initial interviews, including a calendar history of every abuse incident in the past year (retrospective data). Two follow-up interviews over 12 months, repeating the initial interview questions (prospective data).

Sample II: Women and men killed by an intimate partner in Chicago

Definition	87 intimate partner homicides in Chicago in 1995 or 1996.
Selection Process	All intimate partner homicides known to the police, in which the victim was at least 18 years old and at least one of the partners was a woman.
Interviews	Proxy interviews with one to three people who knew about the relationship and who were reliable and credible.

Exhibit 3
THE EVOLVING CWHRS PROJECT

Phase	Major Tasks	Collaborators
I. Development (3 years, 1993-1996)	Assemble a culturally diverse initial group. Develop goals and methods. Write and refine proposal.	5 health & criminal justice researchers/practitioners; 3 expert consultants.
II. Initial implementation (9 months, 1996-1997)	Create comprehensive and sensitive English and Spanish instruments. Set standards for safety and confidentiality. Set standards for research. Identify sites and get institutional approval. Hire and train staff. Hire and train interviewers. Develop and carry out interviewer training.	Domestic violence activists and service providers; Research site representatives; Academics; Mayor's Office on Domestic Violence; Public Health Dept.; Cook County Hospital; Police department; community health center advisory group; medical examiner's office; staff counselor.
III. Data collection (2 years, 1997-1999)	Develop and refine site protocols. Maintain site safety standards. Maintain data confidentiality. Develop safety standards for follow-up and proxy interviews. Develop methods for proxy study. Hire and train proxy interviewers. Enter, code and clean data.	Collaborators listed above; Project staff; Interviewers; Research site staff; State's Attorney's Office.
IV. Analysis; dissemination (2 years, 1999-2001)	Analyze and report on data.	Collaborators listed above.

This meant that we could not collect official record data on the women or on their abuser. However, the collaborators strongly feel that this decision was an important part of the sensitive nature of the questionnaire, and that it was this sensitive questionnaire that enabled the CWHRS to reach a key goal - universal screening of all women, and reduction of bias that might exclude especially high-risk women from the study.

3. Change in respondent fees and their administration

Our original respondent fee schedule was $10 for the initial interview, $10 for the second interview and $15 for the third interview. However, because of our great difficulty

in finding women for their follow-up interview, we raised the respondent fee to $20 for both follow-up interviews. This did appear to help. (See Gondolf, 1998, for a discussion of the ethical issues surrounding respondent fees.)

The original project design called for a total of $20,200 to be given to women in increments of $10 or $15 as a token of our appreciation for their help with the project, plus money for bus fare. However, the Illinois state fiscal people could not figure out how we could legally deal with this money. It was obviously too much to handle through petty cash, and it is illegal for a state agency to use a checking account to deal with it.

Fortunately, the highly collaborative and cooperative nature of the project came to the rescue on this issue. Each of the four sites agreed to handle the incentive fees. The state sent them money as a vendor. They kept this money in an account, and provided $10 for the initial interview, and later $20 for the follow-up interview or $20 to each proxy respondent, to the interviewer or to the respondent directly. There was a system of receipts, each signed by the respondent, the interviewer and the site representative, for respondent fees paid from these accounts. In addition to the respondent fee itself, money from this fund was spent for related costs, including the respondent's transportation to the interview, money order fees when we mailed the fee to the respondent at a safe address, stamps for mailings to safe addresses and safe contact people, and long distance telephone calls to respondents who lived out-of-state. This whole process was audited (see the budget for the audit report).

4. Decision to double the comparison group

Early in data collection at the clinic and hospital sites, we realized that some women had been screened as non-abused (NAW), but told the interviewer about physical abuse in the past year. We reasoned that the short, rather impersonal three-question screener was not allowing some women the comfort they needed to divulge such sensitive information. We also reasoned that some of our high-priority women, those who are at high risk for serious or fatal abuse, yet are not known by any helping agency to be at risk, might very well be in this group. To increase the odds that we would not miss any of these women, we decided to double the number of complete interviews done with women who screened NAW. In the final analysis, there were 76 women who screened NAW but who interviewed AW. This included 51 women screened as NAW but said they had been abused over a year ago and 25 who answered no to all three screening questions. Some of these 76 women, it turned out, had been severely abused in the previous year.

The original study design called for 600 interviews of abused women and 100 interviews of non-abused women. The original plan was to interview every woman who screened abused, and to interview a random selection of non-abused women as time permitted, aiming for about one non-abused interview for every six interviews of an abused woman. Instead, we decided to interview at least two women screened as non-abused for every five screened as abused, or 500 interviews of abused women and 200 comparison interviews. In the end, we interviewed 453 women screened as AW and 237 women screened as NAW. [2]After the interview, the final sample contained 497 women interviewed as AW and 208 women interviewed as NAW.

5. Decision to interview more than one proxy respondent

The "soul" of this project is the comparison of situations of intimate violence that did and did not end in serious injury or death to one of the partners, in other words, the comparison of lethal to non-lethal. To the extent possible, the same interview instrument was used for both samples, with proxies (people who are knowledgeable about the situations of the women and men who died) being interviewed for the "lethal" sample.

The original proposal to NIJ included money for two proxy interviews, but the project as funded did not include money for the second proxy. However, the Advisory Board members strongly recommended to NIJ that the project receive a supplemental grant to cover a second proxy. This money was approved, and the proxy study methodology was changed to include a provision for two proxy interviews where possible.

The Advisory Board based this strong recommendation on a series of deliberations over several meetings. At one of these meetings, the board consulted with Prof. David C. Clark, who conducted a large-scale study of suicide victims in collaboration with the Cook County Medical Examiner's Office, using "psychological autopsy" methods (proxy respondents). Although the results of the three-year study were not yet available for general publication at the August 30, 1997 meeting, Dr. Clark stressed repeatedly the importance of multiple proxy interviews. In his research (Clark & Horton-Deutsch, 1992a; Clark & Fawcett, 1992b), he interviewed as many as seven proxies per subject, and found that different confidants of the suicide victim have different perspectives and contribute unique, valuable information for the study. In David Clark's experience, new information is often gained from the sixth or seventh interviewed person.

Based on Dr. Clark's advice, the board had two serious concerns about the validity of a single proxy interview. First, different proxies will be knowledgeable about different aspects of the victim's situation prior to the murder. We cannot expect a single proxy, even someone who is very close to the victim, to know as much as two or three proxies. Second, the Board was concerned about proxy bias. For example, if a man is murdered by his wife after years of his abuse, would a proxy interview with the man's best friend provide complete information about the abuse of his wife prior to the homicide? While the Board recognized that we could not expect a close confidant of a murdered person to be an entirely objective witness, it decided that interviewing at least two proxies would help to measure and control for proxy bias. Therefore, the Board decided that it would be a high priority to seek supplemental funding that would allow the study to include two proxies per subject.

6. Decision to interview women homicide offenders

Of the 87 homicide cases, there were 28 in which a woman killed a man intimate partner. For these cases, the Advisory Board decided to expand the study to include interviews of the women. We did this for two reasons. We were having a great deal of trouble finding and interviewing knowledgeable proxy respondents, and we reasoned that, if the surviving women offenders were willing to talk to us, they were certainly knowledgeable respondents. In addition, since we had already developed and thoroughly tested the detailed clinic/hospital questionnaires, we could make the questionnaires for the women offenders directly comparable to the questionnaires for the clinic/hospital

women. Thus, information from the woman offenders would be easy to compare to information from the abused women, which was one of the goals of the CWHRS.

However, we decided not to try to interview men offenders. First, we did not have the resources, because there were 57 men offenders compared to only 28 women offenders. Second, seeking permission from the Department of Corrections to interview the women in prison was difficult and time consuming by itself, and we did not have the time to seek permission for all of the incarcerated men. Third, there was no appropriate questionnaire that we could easily adapt for the men, as we had for the women. Fourth, we were concerned about the safety of our interviewers, particularly if they attempted to interview men offenders who were not in prison.

7. Additional consultants and staff

Because of the key importance of interviewer training, we found it necessary to hire a professional trainer to help us organize and lead the initial sessions. The staff and collaborators learned from this, and we were able to conduct the follow-up training and proxy interviewer training without hiring a trainer. This turned out to be an advantage. Because there was no intermediator in the follow-up and proxy interviewer training sessions, the interviewers had a much greater opportunity to interact with the project staff and collaborators. This increased their identification with the project, their feeling of being collaborators in the project, their knowledge of the project goals and the reasons for the methodology they would be using, and their trust of project administrators.

We hired one of the interviewers to become a staff "Follow-up Coordinator." This was a key decision, largely because of the talents and expertise of Teresa Johnson, the Follow-up Coordinator.

Because of the difficulty of the initial interviews and the length of time it took to do them, we lost some of our clinic/hospital interviewers. Others had to take additional jobs, which competed for their time. In response, we increased the per-interview payment to interviewers from $30 to $40. This payment did not include data entry, which the original proposal had specified. Instead, one of the interviewers, who was especially talented at database management, did almost all of the data entry. She was paid $10 per interview. At the point in the project where we had become inundated with data, we hired this person, Charmaine Hamer, to become the Data Coordinator. Working directly under the supervision of Christine Martin, she was responsible for cleaning the data and organizing the Microsoft ACCESS files to be downloaded into SPSS (Statistical Package for the Social Sciences).

Finally, we had not budgeted for translation. We had expected to be able to hire a project manager who knew Spanish. This was naive. We discovered that the task of translating is not a simple job. (See below for a detailed discussion.) Much of the translation was done by two of the collaborators, working closely with a focus group of neighborhood residents and staff from Erie Family Health Center. However, the production of the final Spanish versions of the six questionnaires and the consent forms required more. Two of the interviewers, Iliana Oliveros and Alicia Contreras did this work, charging very little. It was one of their many contributions to the CWHRS, and one of the many reasons why the interviewers in the CWHRS were truly collaborators.

8. Re-conception of the proxy study methods

After we had tried for several months to identify potential proxy respondents and contact them for an interview, and had failed to get even one interview, we became rather discouraged. At that point, we talked at length with Judith McFarlane, who was conducting a similar "proxy study" in Houston, as part of a ten-city project coordinated by Jacquelyn Campbell at Johns Hopkins. Judith had been able to contact and successfully interview proxy respondents in 100% of Houston cases. Therefore, we knew that these proxy interviews are possible to do. So that the Chicago project could be successful as well, we asked Judith to tell us her methods (see Appendix VI).

One major change strongly recommended by Judith was to have the same persons (the proxy interviewers) do both the field work and tracking to identify, as well as interview the appropriate proxy respondent(s). We also decided to greatly expand interviewer training and support for the proxy study. The proxy interviews proved to be so difficult and stressful that it was necessary for the psychological consultant to hold interviewer debriefing sessions (Appendix V) every week instead of every other week, and to continue the sessions after the interviews had been completed.

Assuring Subjects' Safety, Privacy and Confidentiality

Though issues of safety, privacy and confidentiality are basic to all research with human subjects (Sieber, 1992), they are especially important in a study of violence, because of the potential danger to the women who were interviewed, the research staff, and third parties (Gondolf, 1998; Monahan, *et al.*, 1993). The CWHRS was aware of and concerned about the potential for the project to elicit trauma and distress for both the women being interviewed and the interviewers, and about possibly jeopardizing the woman's safety should the abuser find out about her participation. We took this very seriously, and implemented extraordinary measures to protect subjects.

The Institutional Review Boards (IRBs) of three sites (Cook County Hospital, Chicago Department of Health and Erie Family Health Center) approved the project design and consent forms and monitored the project. After long deliberation, the collaborators decided that the consent form would tell women that there would be one exception to confidentiality -- everything she might tell us would be kept confidential, except for imminent danger to themselves or others. Gondolf (1998) also found that this exception is necessary in research with a population of batterers and the women they are abusing.

Safety

The organization plan of the study included a long set-up period (see Exhibit 3, above), during which the consultants and Advisory Board worked intensively to develop procedures to ensure respondent safety. Our guide to the best techniques for ensuring safety was the pioneering methodology of the *Violence Against Women* research (Johnson, 1993). Holly Johnson, who was instrumental in the development of safety procedures in that survey, contributed her advice to the development of the CWHRS design, and served as a consultant to the study. Respondent safety was a particular concern of all the collaborators on the project, but especially Jacquelyn Campbell, Barbara Engel, Eva Hernandez, Leslie Landis, Kim Riordan, Wendy Taylor, Richard

Tolman and Carole Warshaw.

At the meetings and frequent mail and phone communications among the collaborators, respondent safety was a primary concern. Local shelter workers and health workers joined the collaboration and the discussion. We also received feedback from the site Advisory Board of neighborhood residents. When new safety concerns arose during the course of the project, all the collaborators reached consensus on how to proceed.

Like Watts, *et al.*, (1998) and Gondolf, *et al.*, (1998), we found that including experienced advocates in the CWHRS decision-making process helped to translate our safety and confidentiality standards into rigorous polices and procedures. Advocates suggested, for example, that we change the study's name, to avoid the possibility that someone at a site might inadvertently refer to an interviewer as the person working on the "abuse" or "risk of death" study within the hearing of a potential abuser. This could have jeopardized the safety of both the women being interviewed and the interviewers. Also, direct reference to violence could have scared off potential interviewees, particularly high-risk but under-served women.

An overriding concern in the initial interviews was that the study would not jeopardize provision of care to the abused women. The normal procedures of the hospital or health centers continued throughout the project, providing regular agency support, referrals and emergency care. A CWHRS policy was that an initial interview was never conducted unless there was a support person or counselor available at the clinic or hospital in case of need.

The safety protocol in each site and department varied, but the following safe practice procedures were followed everywhere: women should not appear to be singled out for screening, the word "abuse" would never be used in a public setting, and the transition from screener to interviewer would be accomplished discretely. To avoid any situation in which an abuser might discover that his or her intimate partner was being interviewed about the abuse, we trained everyone associated with the project to refer to it as the "Women's Health Risk Project," and all project materials carried that title.

One of the key standards of the CWHRS specified that women would be interviewed in complete privacy in the initial interviews, including a room with a closed door. Meeting this standard proved to be a very difficult task in the large public inner-city hospital and public health clinics that we used as interview sites. It was accomplished only through repeated and lengthy meetings with site staff at each clinic. However, because everyone involved agreed that this standard was inviolate, we found a way to meet it in every case.

Each clinic developed a protocol for providing advice and support to the women. At every clinic, we offered respondents a "palm-card" with domestic violence referral information listed among other social service numbers. Based on the experience of the Violence Against Women Survey and the advice of Holly Johnson, the CWHRS instituted a toll-free telephone number for women to use if they had questions or needed assistance or referrals. Also, we developed a protocol for answering the 1-800 number, to use in case of an abuser calling to get information about the project.

Interviewers and staff did not try to be counselors. However, in the initial inter-

views, the follow-up interviews, the proxy respondent interviews, and in response to calls on the 800 number, the CWHRS provided information about counseling and other available resources (see Appendix VII). We offered women a card with the numbers of helpful agencies, for her to take if it was safe to do so. Professionals among the CWHRS collaborators provided additional contacts and advice for proxy respondents and their families. In addition, collaborators developed a set of procedures that would be followed in a situation in which the woman or someone else was in danger (see Monahan, *et al.*, 1993: 393-394; Gondolf, 1998; Cowles, 1988:168). Fortunately, such an emergency situation never arose.

The interview itself seemed to be a positive experience for many of the women sampled in the clinic/hospital study, as well as the proxy respondents. For example, several women who were not being abused at follow-up told the interviewer, when asked what had happened, that the initial interview had helped them to think through their situation and decide to change it. In the planning stages of the CWHRS, the collaborators had anticipated that this kind of thing might happen. We knew that it might affect the quality of the research findings, but we felt strongly that the woman's safety was more important. In the last analysis, we believe that the quality of the research was improved by our supportive methods, which led to the women's high degree of trust and their willingness to share their experiences.

CWHRS policy regarding child abuse and neglect issues was developed after long and difficult deliberation. If the questionnaires had included a direct question about child abuse, the informed consent would have to warn women who were about to be interviewed that the interviewer would be obligated to report any disclosed child maltreatment to authorities. A pediatrician and domestic violence activists among the collaborators pointed out that it is possible that a child would be removed from a mother who is not abusive or neglectful of her child if she discloses that she is living with an abusive partner. The possibility of catalyzing such a serious consequence propelled us to an uneasy consensus not to ask a direct question about child abuse. Instead, the questionnaire asked whether or not the partner "has been reported" for child abuse. Mandated reporting rules would not apply in such a case, since it has already been reported.

At the same time, however, we were concerned about the possible conflict between safety and confidentiality, not only for child abuse but also when the woman herself is in danger of immediate harm. Therefore, the consent form made two exceptions to confidentiality: if a woman told us that a child was being abused even though the question was not asked, or if the woman, a child or someone else were in immediate danger of serious injury or death. A case like this never arose, but the protocol was to call the counselor while the woman was still in the interview room, and ask the counselor to work with the woman on the issues she had raised. These procedures were similar to those followed by Gondolf (1998).

Adequate attention to interviewer selection, training and monitoring was a key factor in both respondent and interviewer safety (see Monahan, et al., 1993: 394; Gondolf, 1998). Following the Canadian example and the advice of consultants and

advisory board members, we carefully selected interviewers on the basis of sensitivity to battering issues, communication skills and ability to handle personal stress (Norris & Hatcher, 1995), and provided extensive interviewer training and support, including the services of a psychologist to counsel and advise the interviewers. Interviewers were trained to deal with emotional responses as they occurred, and to establish a sense of trust (Cowles, 1988).

In general, we found it vital to "take care of the collaborators," to address the personal repercussions of working on domestic violence. This was true for all of the collaborators, but especially true for those who interacted directly with the women. Listening to stories of violence can be disturbing and have negative consequences for mental health, attitudes toward abused women, quality of work, and longevity with the project. The CWHRS used many mechanisms to reduce these problems. The collaborators designed and implemented extensive and continuing trainings for interviewers, which resulted in a strengthened partnership, a tangible commitment to the study's mission, group team building, and skills for safety and stress reduction. We also added a project counselor to the staff, a therapist with expertise in domestic violence and work-related stress. In regular group meetings and private sessions on request, she created a safe space for them to explore their reaction to hearing painful stories, taught relaxation and self-care techniques, and helped them to bond as a group.

Follow-up Safety Issues. As Gondolf (1998) points out, the "aggressive tracking needed to obtain respectable response rates impinges on privacy and may be threatening to battered women." In the CWHRS follow-up interviews, one of the primary concerns with respondent safety was to give women as much control as possible over the time and location of the interview. The 800 number for subjects to contact us with their questions and provide options for when and where they might participate became very important in the follow-up interviews. We could not use any information to search for a woman beyond the contact information she had given us in the initial interview, usually a safe number where she could be contacted and the name and contact information of at least one friend or relative who would know where she was. In general, women contacted us for their interview, either by paging the interviewer or calling our 800 number, after receiving a letter sent to a safe address or seeing a sign at a clinic or shelter.

Our original goal was to conduct all of the follow-up interviews face-to-face. We arranged for follow-up interviews to be conducted in a safe room at each of the original clinic or hospital sites, with the woman meeting the interviewer at the site. Since many women did not want or were not able to travel to the original site, we planned for the possibility that a follow-up interview might be conducted elsewhere, for example, at a local McDonald's, a YWCA, or a church. However, we were concerned about the safety of the interviewer and the woman if we conducted interviews at the woman's home. To this end, we developed a safety protocol for conditions under which an interviewer could safely conduct a follow-up interview.

In the end, however, it often turned out to be impossible to conduct face-to-face follow-up interviews. Many women had moved, often out of state or even out of the country. For some of these women, this move had allowed them to escape from their

abuser. It was a tribute to their confidence in their interviewer and their belief in the CWHRS goals that these women gave us their new address and phone number, which allowed the interviewers to conduct the interview over the phone. In addition, even if the study would pay for their carfare, many women had such complicated lives that they would have been unable to travel to a face-to-face interview.

Therefore, many of the follow-up interviews were done over the phone. The protocol for safety in phone interviews was similar to that used by Gondolf (1998), and included asking if it was a safe time to speak, telling the woman what to do if they needed to hang up quickly (pretend that the phone call was a telephone solicitation and call back on the 800 number when it was safe). Like the Gondolf study, many women called us from or had us call them at a phone outside their home. In one case, however, this procedure did not work. In the middle of the interview, a woman mentioned that her intimate partner was present. She had been threatened only, the last threat had been at the beginning of the retrospective year, and she thought that it was a safe time and situation for her to speak on the phone with the interviewer. Thereafter, the interviewers were instructed to ask each women before the interview began whether or not she was alone, and if not, who was in the room.

Gondolf (1998) used a private locator to track some of the batterers and battered women in his sample. Although we used a locator to help us find potential proxy respondents, the collaborators decided that it would not be safe to ask the locator to help us find clinic/hospital women for a follow-up interview. In addition, we decided that using a locator would violate privacy, and go beyond the limited permission the woman had given us to find her. We did, however, ask the locator to find a contact person, in certain cases. At the initial interview, each woman was asked to give us contact information about one or more people who would know where she was. She signed a separate permission form for each individual. Interviewers would first call or write to the safe phone or safe address of the woman, but if she had no safe phone or address, or if she was no longer living at that address or the phone had been disconnected, the interviewer would call or write to her contact person. However, in some cases, we could not find the contact person. In these cases, we asked a locator to find a current address or phone for the contact person, and then the interviewer would make the contact, and ask the person to call us on the 800 number. This did lead to several follow-up interviews.

Closure. Like any longitudinal study, the CWHRS had a tremendous responsibility to the clinic/hospital women, who had been working with us over a period of time. We established a policy to give them information about the study, to offer them a palm card with resource contact numbers, to give them a copy of the study results if they wanted one, and tell them how they could get in touch with the study staff if needed, and to tell them how important their contribution was and to thank them sincerely.

We were especially concerned about closure with those clinic/hospital women who were still in an abusive relationship at the end of the study. Many of these women had worked with an interviewer for at least a year, who had been encouraging her to seek help, but had not been able to make that step. When the interviewer spoke to one of these women for the final time, she encouraged her to contact resources that the

interviewer could particularly recommend. The interviewer also told her that she could call the principal investigator at the Authority if she needed another contact, or if she had anything she needed to talk about.

The CWHRS developed the following procedure for distributing a summary of the results to a clinic/hospital woman when it might not be safe to mail it to her home:

-- tell the woman, if she said that she wanted a copy of the study, that we could mail a flyer to her address or to another safe address, simply stating that the "Women's Health Study" report was ready and providing a number to call to receive or arrange to pick up a copy.

-- put up signs on bulletin boards at each site, announcing that the report was available.

-- have copies of the report available in waiting rooms at the sites.

Proxy Study Safety Issues. Safety issues in the proxy study focused primarily on the safety of the interviewers, who were to conduct fieldwork in some of Chicago's high crime areas, in addition to conducting interviews about a very sensitive subject in proxy respondents' homes. These safety considerations were taken seriously from the start of the project, beginning with the hiring and training of the interviewers. Candidates were carefully screened for their experience in working in the field and being comfortable with eliciting information from strangers to get leads for proxy contacts. Of the eight women who completed the hiring and training process, four actually stayed with the project for the entire seven month data collection phase, and became quite adept and comfortable in their dual roles of proxy locators and interviewers.

During the 20-hour initial proxy interviewer training session, Rose Olivieri, a representative of the Chicago Police Department, gave an hour-long session on safety procedures in the field. As part of this training, the interviewers were given the names and phone numbers of all Chicago Police District Watch Commanders, and the interviewers were encouraged to contact the district before going in the field to announce their presence or to be warned about potentially dangerous situations.

Based on this training on common-sense safety rules and the safety plan developed by McFarlane and Wiist (1997) for outreach workers contacting pregnant abused women in the community, the interviewers developed safety procedures tailored for the CWHRS. They were encouraged to form partnerships to provide support for each other on field visits and in case development, and to conduct fieldwork during day time hours. Interviewers notified someone, either project staff, another interviewer, or a friend or family member, when they would be going into the field and when they came back. The principal investigator encouraged interviewers to call her at home at any time of the day if necessary.

The debriefing sessions held weekly with the interviewers became invaluable for airing their concerns and developing safety policies as new situations arose (see Appendix V). The interviewers found themselves in many unanticipated locations and situations when attempting to locate or interview proxy respondents. Some solutions that worked to overcome potential safety concerns were to conduct to proxy interviews over the phone or in neutral places such as the library or fast-food restaurants. In more than

one case, it even became necessary for a team of interviewers to visit a bar during weekend nights to attempt to talk to the owner and any patrons who might remember the homicide. The rapport that developed among the interviewers, their conviction in the importance of the study and their safety training gave them the confidence to persevere in the face of a difficult assignment. Following the safety procedures instituted in the study, there were no threats or breaches of personal safety for any team member during the seven months of data collection.

The hiring of a private investigator to find proxy respondents followed considerable discussion among the collaborators. Instead of hiring interviewers who would only do the actual interview, the CWHRS proxy interviewers did both the locating and the interviewing. However, at the very end of our data collection, there remained a considerable number of potential proxy respondents who could not be located. The collaborators had anticipated this, and in setting safety standards for the proxy study had decided that, if necessary, the study would employ a professional locator to find the location of potential proxy respondents, but not to actually contact them.

The CWHRS placed strong constraints on the locator's activity. The job description stated, and the locator was repeatedly instructed, that the job was limited to finding a working phone number, current address, or other way to contact the person in question. The locator was not to try to introduce the study or otherwise speak to the person about the study. In addition, the locator was required to pass a background check and to sign the standard CWHRS privacy certification (see below) promising not to disclose any study information.

One of the collaborators highly recommended a professional locator who had worked on several research studies, and who had a large network of information sources across the Chicago area. We paid this locator for each case in which the interviewer verified that the person located was indeed the person being sought, whether or not the interview actually took place. The locator was actually assigned at least twice as many cases as he ultimately got paid for, but succeeded in locating 18 potential proxy respondents who would not have been located without him. More might have been located if there had been more time.

Procedures to Preserve Confidentiality

The CWHRS design assured both privacy of the women and confidentiality of the data. Privacy refers to the woman's autonomy, the degree to which she can control the researcher's access to herself (Sieber, 1992:44). Confidentiality, as laid out in the informed consent agreement, states "what may be done with the private information that the subject conveys to the researcher" (Sieber, 1992:45).

Identifying information, whether in paper files or automated records, was stored separately from the data. Paper files were stored in a locked cabinet with control on access to the cabinet, and automated files were stored in a sub-directory to which only the Project Managers and Project Investigators had "read" access. In addition, the project did not collect any identifying information unless absolutely necessary. For example, the woman was not asked for the abuser's name, or for the name of any other household member. However, it was important to be able to identify that person in the follow-up

interviews. Therefore, the woman was asked to choose a made-up "Name" with which to refer to the abuser or to other people she may mention. At the follow-up, the interviewer asked the woman to provide follow-up information about Name.

This procedure proved to be a considerable problem in the follow-up interviews. Many of the women had more than one intimate partner, and often they had more than one abusing partner. As a result, we occasionally gathered follow-up information about the wrong person. When this was discovered, as the interview was being logged in and entered, we asked the interviewer to contact the woman to try to obtain information about the correct person. However, it was often very difficult to contact women who had no permanent address or contact information.

To keep track of the interview before data entry, cases were assigned a preliminary number, which was attached to the various parts of the interview (consent forms, screener, main questionnaire, calendar history, follow-up information form). This allowed the staff to monitor the interview instruments, some of which contain individual identifiers, and to assure that all of these documents traveled securely from the interview site to the locked project files. Interviewers were trained to keep the completed forms secure and confidential. The procedure was that the completed forms were never left in an "in box" but must be handed directly to a Project Manager, who checked it for completeness and filed it in a secure file cabinet. At data entry, a permanent identification number was assigned to the case, and thereafter used in place of any names as an identifier in the automated dataset.

The project had an elaborate set of security procedures for especially sensitive information, which includes information that links the woman's name and address to the identification number, and identifying information that must be collected in order to re-interview the 497 women in the clinic/hospital sample. Access to the sensitive data file was limited to the principal investigators, project manager and those interviewers who need to know. An automated data file containing sensitive information was stored in a protected, private file, to which only the principal investigators and project managers had access. A backup copy of the sensitive data file, written to disc, was stored in a separate place in the locked file cabinet.

Collaboration Methodology

The many agencies and individuals who collaborated to accomplish this complex project feel that the collaboration was successful because it evolved, developed a collaborative culture, had permeable role definitions, and agreed upon a few central research and practice standards (Block, *et al.*, 1999a 1999b). For a list of the collaborating agencies and individuals in the CWHRS, see Appendix I.

In many collaborations (for example, Galinsky, *et al.*, 1993), researchers focus on scientific methods and practitioners focus on the project's impact on clients and agency resources. In contrast, shared standards were a cornerstone of the CWHRS. Through long hours of intense deliberation, we developed a few inviolable principles for research and practice. Each collaboration member understood these standards, and carried them out in project decisions. Shared standards became the spine of the CWHRS and the

foundation of the trust necessary to accomplish our tasks.

To develop shared fundamental standards, we found that several things are necessary. First, the standards must be clear and limited to a small number. Every collaborator must understand, support, be able to explain to others, and put into practice each of the standards. This is impossible if the standards are numerous or vague. Second, the researchers must learn about practice issues and the practitioners must learn about research issues (Gondolf, *et al.*, 1998: 259; Kondrat & Juliá, 1997). The CWHRS did this in many ways. We provided opportunities for group members to "tour" the worlds of other group members, and shared copies of articles and publications relevant to the study with everyone involved in the project, and learned to respect differences in awareness, leadership, philosophical orientation and type of medicine practiced. Third, it is vital to allocate sufficient time to come to consensus about the standards. Though unanimity is not required for many project decisions, it is for these few principles.

Although the CWHRS model would not suit everyone, we found multiple benefits from our collaborative culture. Everyone who participated in the project benefitted, because each collaborator learned, taught and stretched. We first recognized and appreciated each other's strengths, and then over time we surprised ourselves by finding new talents and capabilities within ourselves.

The institutions that participated benefitted, because they increased their awareness of domestic violence in their setting, and understood their own response to identifying and assisting victims. Health clinic staff were trained in domestic violence issues and support. Most important, however, was that the project became a catalyst for institutional change in many of the participating agencies, bringing them closer to universal screening for domestic violence.

Respondents in the CWHRS benefitted, because they had the chance to talk about the violence in their lives with a respectful, non-judgmental listener and received a token but often helpful fee. For the abused women, the relationship with their interviewer lasted for a year or more, and many of them looked to her for information about community domestic violence resources. Many of the proxy respondents also developed a close relationship with their interviewer, and, though they were often reluctant at first, found the interview itself to be a positive experience. Both clinic and proxy respondents knew that they had contributed to efforts to decrease violence against women. Campbell (1992) has noted that the completion of the Danger Assessment instrument and history may increase safety by focusing women's attention on patterns of violence in the relationship. Johnson (1992) cites similar benefits of the Canadian survey. (The CWHRS comparison group controls for this "instrumentation effect".)

Finally, the research benefitted; the high quality of the data was a direct result of our collaborative efforts. The extensive collaboration on survey instruments, based on shared research and practice standards, produced questions that were relevant to the realities and risks in the lives of abused women and were written in culturally competent and non-judgmental language. If we had not worked intensely with each health center to create a safe and respectful interview climate, a key goal of the project - to include high-

risk but under served women in the sample – would not have been met.

The collaborative culture enabled us to work until we found ways to collect data safely and to retain women in the study over the twelve-month study period. Without the efforts of the whole team, we would not have found, hired, trained and supported the best possible interviewers. Data interpretation benefitted from the collaborators' experiences in understanding women's responses to abuse, and their suggestions for data analysis led to new information of critical importance to practitioners. Finally, due to the diversity of our collaboration, we anticipate being able to widely disseminate our results and to influence policy more effectively.

The collaborative culture in the CWHRS was slow to develop, led to long decision making processes and required compromise on all sides in order to reach consensus. Nevertheless, we firmly believe that our model of equal collaboration between "researchers" and "activists" is what produced reliable and valid information for service providers hoping to reduce the danger of death or life-threatening injury to women experiencing intimate violence. We would challenge others contemplating similar research to consider our less traditional model.

CLINIC AND HOSPITAL STUDY METHODS

The purpose of the CWHRS was *not* to provide population-based estimates of the prevalence of domestic violence in Chicago. Instead, we wanted to provide practical information to people working with women who are physically abused by an intimate partner. We wanted to be able to tell them what are the combinations of factors that might suggest that an abused woman is at high risk for serious injury or death.

The design for the clinic/hospital study involved detailed face-to-face interviews with women sampled at "point-of-service" as they came into a hospital or clinic for any kind of treatment, and two follow-up interviews over a one-year period with sampled women who had been physically abused in the last year in the initial interview. The CWHRS conducted domestic violence screening and detailed face-to-face interviews with women as they came into a hospital or health care clinic for any kind of treatment. We screened over 2,600 women and completed 707 initial interviews, 497 who interviewed as AW, 208 as NAW, and two who became ineligible after the interview.

To gather prospective data, women who reported being abused were re-interviewed twice during the twelve months after the initial interview. Interviews averaged 45 minutes and included developing a retrospective calendar of abuse incidents (Campbell, 1993) as well as information on power, control, harassment and stalking in the relationship; demographics; household composition; physical health; pregnancy; substance use; mental health (depression, anxiety and post-traumatic stress disorder); firearm availability; social support network; interventions and help-seeking.

Clinic and Hospital Sample

Our goal was not to obtain a representative sample of all women, but of abused women, some of whom may be at high risk of death. To provide the most useful information to practitioners, we sampled at a point of agency contact. Other goals were to

include "hidden" women (women at high risk who are not known to be at risk by any helping agency); to include enough cases to conduct separate profiles of the three racial/ethnic groups (African/American/Black, Latina/Hispanic and white or other); and to sample enough expectant mothers to be able to analyze risks inherent in that situation.

The CWHRS sampling task targeted women currently being physically abused by an intimate partner, which is a "hidden population." A hidden population exists when "no sampling frame exists and public acknowledgment of membership in the population is potentially threatening" (Heckathorn, 1997:174). Sample surveys are not efficient for hidden populations, since most are rare, and they do not produce reliable samples, since the social stigma (and, in the case of domestic violence, the potential of physical retribution) leads sampled individuals to refuse to participate or conceal information. Neither is a sampling strategy based on a some agency or institutional list (such as the clients of a shelter or other service) appropriate, since such samples could not be generalized to people who do not appear on any agency list (Watters & Biernacki, 1989: 417).

Heckathorn (1997) reviews three methods of sampling hidden populations, snowball sampling (Goodman, 1961), key informant sampling (Deaux & Callaghan, 1985), and targeted sampling (Watters & Biernacki, 1989). Chain referral methods such as snowball sampling might have jeopardized women's safety. The use of key informants, such as counselors, would have raised confidentiality issues and would not have captured women who did not visit counselors. Instead, the CWHRS employed a set of strategies similar to targeted sampling, though they were developed independently. First, using maps of the city, we identified areas in which the rate of intimate partner homicide was high, and chose clinics and hospitals in those areas. Second, in each clinic or hospital, we sampled women from the general population. Third, we made a considerable effort to develop sampling procedures in each department of each site that would not exclude women from participating.

The CWHRS sampling strategy targeted specific neighborhoods of the city where the lethal intimate violence rate was high. At health-care settings within these neighborhoods, we sampled women hospital trauma and walk-in clinic patients and clinic/health center patients who were aged 18 or older, as they came into the health care setting for service. The strategy called for screening all women, using a standard set of screening questions. Our target was to interview every woman who screened AW (physically abused by an intimate partner in the past year), and to interview two women screening NAW for each five women screening AW. Regardless of screening status, women who interviewed as AW became the abused sample, and women who interviewed as NAW became the comparison group. The final sample (Exhibit 4) was 497 women interviewed as AW (282 at health centers and 215 at the hospital) and 208 NAW comparison group women (108 clinic and 100 hospital).

Site Selection

There were four point-of-service sample sites, Chicago Women's Health Center, Roseland Health Center, Erie Family Health Center, and Cook County Hospital, which were chosen because they were in neighborhoods with a high risk for intimate partner homicide, relative to other Chicago neighborhoods, based on analysis of intimate partner

homicide risk rates by neighborhood, using the Chicago Homicide Dataset.

Exhibit 4
CLINIC/HOSPITAL SAMPLE SUMMARY

Initial Interview Status	Subjects			Interviews		
	Hospital	Health Center	Total	Initial*	Follow-up**	Total
AW	282	215	497	497	503	1,000
NAW	100	108	208	208	0***	208
Total	382	322	705	705	503***	1,208

*The "Initial" column does not include the two cases dropped from the study or the nine duplicate initial interviews. For detail, see "Initial Interview Methods" section, below.

**The "follow-up" column does not include the four duplicate follow-up interviews or the 22 third follow-up interviews. For detail, see "Initial Interview Methods" section, below.

***Though not included in this table, three additional follow-up interviews were done by mistake with women categorized as NAW at the initial interview, one of whom interviewed as AW in the follow-up.

The target neighborhoods chosen for the CWHRS were initially the near and far West Side and the West Town and Humboldt Park areas of Chicago. On the West Side, residents of the Austin and North Lawndale areas were 73% and 96% African/American/Black, respectively, in 1990, and 44% and 88% of households were below the 200% poverty level. West Town and Humboldt Park residents were 57% and 41% Latino/Hispanic, respectively, with 68% and 55% of households below the 200% poverty level. Annual intimate homicide rates per 100,000 population in 1990-1992 were 5.4 and 3.8 in North Lawndale and Austin, respectively, 4.1 in West Town and 1.0 in Humboldt Park.

After the study had begun, but before any interviewing had begun, we added a Chicago Department of Public Health clinic on Chicago's far south side. This was done to include women from another Chicago area with high domestic violence homicide rates. In addition, we added a downtown site, the Chicago Women's Health Clinic, in order to capture more white women and women with same-sex relationships, and we also worked closely with a downtown hospital with a more diverse patient population, in order to include the hospital as one of the sampling sites.

Since Chicago is a city of neighborhoods with high levels of racial segregation (Massey & Denton, 1987), any sample drawn within neighborhoods will tend to be racially stratified by neighborhoods. Therefore, the women sampled in each health care setting in the CWHRS tended to represent a particular racial/ethnic group. Knowing this, the collaborators made extensive efforts to include these two additional sites that would provide a more diverse sample. However, neither effort was successful. The Chicago Women's Health Clinic, possibly because its director changed three times over the course of data

collection, never became one of the key collaborating sites. Only 48 cases were screened and eight women interviewed. The downtown hospital also never became a participant in the study, although it had initially expressed a great deal of interest.

The staff of each of the other three study sites, and the separate clinics or practices within each site, became key collaborators in the project. They worked hand-in-hand with the interviewers and project staff to ensure that the sampling goals are being met and that safety and privacy are priority considerations. In all, site staff and project interviewers did screening interviews with over 2,600 women at point of service.

Screening Instrument

The screeners used in the CWHRS (see Appendix III) were based on the Intimate Violence Screening Tool developed by the Chicago Department of Health (Warshaw, 1992; Sheridan & Taylor, 1993; Moss & Taylor, 1991). The proposal for this project refers to this as the "standard Public Health Screener." However, this was naive. Even though the agencies and individuals who had developed this screener were members of the collaborative team that had planned and designed the study, when we actually began to work with the staff in the hospital and public health clinics we discovered that there was no "standard" screener.

Further, the screener that had been developed at the hospital and that we had thought the hospital was using turned out not to be acceptable to hospital staff. Therefore, CWHRS staff and collaborators worked with staff at each department at each site to develop a screener that would be acceptable to the department, would not interfere with the women's health care in any way, and meet CWHRS safety and research standards.

The format of the screener was slightly different at each site, but whatever the format, it included three questions: "Has your intimate partner ever hit, slapped, kicked or otherwise physically hurt or threatened you?", "Has your intimate partner ever forced you to engage in sexual activities that made you uncomfortable?", and "Are you afraid of your intimate partner?" The first two questions have two follow-up questions: "How long ago did the most recent incident occur?" and "The person who did this was your [list of relationships]." The woman was also asked her age and whether she would like to be referred to a counselor. A positive answer to any of the first three questions constituted an "AW" result on the screener, if the abuse was within the past year, the abuser was an intimate partner, and the woman was at least 18 years old.

Sample Screening Process

The highest-priority research standards in the CWHRS pertained to sample selection: use the same questions to screen all women, and minimize selection bias. Research had shown that staff in medical settings may be reluctant or unable to determine whether their patients are in an abusive relationship (Warshaw, 1989; Morrison, 1988; Sheridan & Taylor, 1993), and that a screening protocol increased identification from 5.6% to 30%(McLeer & Anwar, 1989). Therefore, CWHRS design called for screening all presenting women patients ("universal screening"). The screener, which determined both if a woman had a history of physical abuse by an intimate partner in the past year and if she wanted to participate in the study, was instituted into the standard intake procedure for all women receiving care in each hospital, clinic or health center. By

incorporating the screening as a normal step in the treatment process, the study assured that participants did not become a focus of attention for others receiving care in the hospital and clinic.

Because the inclusion of high-risk but under-served women was a priority, we were especially careful not to create any procedure that would exclude women from the sample. For example, when we realized that some women who interviewed as abused had been screened as non-abused, we doubled the comparison sample in order to include any of these women. We limited the length of the interview, for fear that anything over an hour would prevent some women from being interviewed. The actual initial interview lasted about 45 minutes. We also were concerned about the possibility of excluding women who might have children with them, and organized a provision for children in each site.

To assure anonymity and increase safety and security during the sample selection and interview process, we developed a set of procedures at each clinic and hospital site. All interviews were conducted in a private and secure room, behind closed doors. However, each sample site contained several different clinics or units (Exhibit 5), which required the development of different sample screening methods. For example, universal screening at Cook County Hospital's walk-in Ambulatory Screening Clinic (ASC) was a very different process with very different problems compared to universal screening at the hospital's Level I Trauma Unit. Even though collaboration team members representing each of the data-collection sites had worked for many months to plan the screening process (see Exhibit 3 above), we were dismayed to find when we went into the field that one of the basic foundations of the research design could not be carried out as planned.

Universal screening (asking every woman coming for treatment three short questions about abuse) was the official policy of the Department of Public Health, the hospital and the family health center, but had not been implemented in the specific clinics. Most were screening, but not at the level required to minimize selection bias, one of the research standards of the CWHRS. For example, a practitioner would screen only when he or she suspected abuse. Some clinics were not asking about abuse at all. As a result, in the first two months of field work we enrolled far fewer women than we had anticipated.

To address this problem, the collaborators worked intensively with clinical and administrative staff at each site to develop a protocol for enrolling women into the study that would be consistent with CWHRS standards: minimize selection bias and ask every woman the same screening questions. We knew that clinic staff would not begin to screen for abuse simply because a research study was being conducted, and we realized that they faced obstacles in assessing for abuse, such as lack of training, personal discomfort with the issue, and time and resource constraints (Warshaw, 1993). Since each clinical setting (even those within the same institution) represented a unique situation, we searched for a flexible way to maintain these standards. Simultaneously, collaborators who help positions at the site worked as liaisons to inform site staff of the importance of the CWHRS and educate staff on domestic violence and screening.

Exhibit 5
Women Screened and Interviewed in Each Site

Screening Site and Department		Screened*	Interviewed
Roseland Public Health Center	Adult Medicine	43	20 (47%)
	Pre-Natal	6	3 (50%)
	Mammography	11	2 (18%)
	Family Planning	13	7 (54%)
	WIC	155	64 (41%)
	STD/HIV	86	51 (59%)
	Other and missing	158	16 (10%)
Total Roseland Public Health Center		**472**	**163 (35%)**
Erie Family Health Center	Well Adult	161	33 (20%)
	Obstetrics/Gynecology	51	21 (41%)
	Humboldt Park Well Adult	227	57 (25%)
	STD/HIV	13	12 (92%)
	Welfare-to-work	36	23 (64%)
	Other and missing	31	7 (23%)
Total Erie Family Health Center		**519**	**153 (29%)**
Cook County Hospital	Ambulatory Screening Clinic	1,025	216 (21%)
	Obstetrics/Gynecology	300**	73 (24%)
	Trauma Department	200**	42 (21%)
	HCIP (referred)	52	52 (100%)
Total Cook County Hospital		**1,577****	**383 (24%)**
Chicago Women's Health Center (all departments)		**48**	**8 (17%)**
Overall Total		**2,616****	**707 (27%)**

*We know that four women were screened twice; they are counted only once in this table.

**Screener figures for CCH Obstetrics/Gynecology are an estimate. The screeners for non-interviewed women were accidentally destroyed before they were collected for data entry. Figures for CCH Trauma Department are preliminary, based on Trauma Department logs.

Most of the clinic sites were comfortable using the paper screener, but one was concerned that such a sheet might mistakenly end up in a patient's chart. After many meetings and protocol drafts, we finally developed a protocol in which medical residents carried a laminated card with the three questions and recorded the woman's abuse status on the morning log sheet. The attending physicians routinely reinforced this protocol among residents and nursing staff, and one of the surgeons from this setting later joined the project's collaborating team. At another site where the official policy was to screen but evidence suggested that screening seldom occurred, we decided not to challenge the stated policy but to hire staff to screen. For the women's safety, we worked with the site to integrate our staff into the standard intake procedure of the clinic.

By working with the staff of each care setting to figure out how to implement the CWHRS research and safety standards, the research project raised awareness of the problem of domestic violence and encouraged staff to screen for abuse at most of the study's sites.

Though results varied by site, at least one clinic is still screening all patients more than a year after CWHRS data collection ended. The process generated by the CWHRS thus produced far-reaching institutional change. It was our consensus on a few key standards that made this possible. With these shared standards, we could communicate the safety and research principles to site staff, respond respectfully to each site's needs and concerns, and find a way to implement the study.

Screening Results

The CWHRS definition of AW was that a woman must have experienced physical abuse from an intimate partner in the past year. Women who were age 18 or over and who had been in a relationship in the past year were eligible for the study. Women screened AW by answering yes to at least one of the three screening questions (physical abuse, sexual abuse, and "are you afraid?"). All sites using a paper screener included a question about the woman's age. After giving their consent to speak to an interviewer, women were given a pre-interview screener, which asked their age and whether they had been in an intimate relationship in the past year. (Because many of the women screened NAW were not given the pre-interview screener, we do not know if they would have been eligible.)[3] Screening results were available for 2,214 of the 2,616 women screened.[4] Of these, 528 (24%) screened AW (including four cases missing the date of abuse), 1,653 (75%) screened NAW (including 1,278 who reported no abuse and 375 women who had been abused over a year ago), and 33 were determined not to be eligible (under age 18 or no current relationship) (Exhibit 6).

Of the 2,198 eligible women (including the 17 interviewed women with missing screener information), 707 were interviewed (32%). The sample design called for interviewing every woman who screened AW, but only about two/fifths (40%) of the women who screened NAW. The great majority (86%) of the 524 women who screened AW were actually interviewed, and 31% of the 375 women who screened NAW but who had been abused over a year ago, but only 9% of the 1,278 women who screened NAW. The sites varied somewhat (Exhibit 7) in the percent of women screened as AW who were inter-

viewed, from 100% at several sites to 50% of the 14 women who screened AW at the Erie Welfare to Work program. Similarly, the sites differed in the percent of women screened as NAW who were interviewed, from only 6% at the Cook County Hospital ASC and Erie Humboldt Park, to 27% at Erie Obstetrics/Gynecology.

Exhibit 6
Status on the Screener

Screener Status	Frequency	Percent
AW	524	23.7%
NAW	1,278	57.7
NAW, abused over a year ago	375	16.9
AW: date missing	4	.2
AW: under age 18	3	.1
NAW: under age 18	15	.7
Abused over a year ago, under 18	1	.0
Not in current relationship*	14	.6
Valid cases	2,214	100.0%
Refused screener, woman interviewed	1	.0
Screener missing, woman interviewed	16	.6
Screener missing, woman not interviewed	385**	14.7
Total	2,616	

*Many women who screened NAW were not asked if they were in a current relationship.
**Includes estimated number screened in CCH Trauma plus estimated number of screeners accidentally destroyed in CCH Obstetrics.

Of the 73 women who screened AW but who were not interviewed, 44 (60%) did not sign the consent form, two did not have time, and 27 (37%) agreed to an interview but the interview never happened, usually because an interviewer was not available. Unsigned consent forms were scattered randomly across the screening sites and over the months during which screening took place.

The 44 women who did not sign the consent form included ten who had answered "yes" to all three questions. For most (80%), the abusing partner was her current intimate partner (the husband of 17, the boyfriend of 16 and the same-sex partner of two). For six women, the abuser was her ex-husband, and for three, the abuser was her ex-boyfriend.

Exhibit 7
Percent Interviewed by Screening Status and Site

Screening Site and Department		% Interviewed by Screening Status (N in parentheses)		
		AW*	AW Over a Year Ago	NAW
Roseland Public Health Center	Adult Medicine	100% (12)	(6 of 8)	9% (22)
	WIC	97% (35)	40% (25)	23% (88)
	STD/HIV	97% (37)	46% (13)	25% (36)
	Other	59% (17)	15% (34)	5% (126)
Total Roseland Public Health Center		**91% (109)**	**34% (80)**	**14% (272)**
Erie Family Health Center	Well Adult	86% (21)	19% (26)	9% (113)
	Obstetrics/Gynecology	73% (11)	(3 of 3)	27% (37)
	Humboldt Park	81% (52)	17% (35)	6% (138)
	STD/HIV	100% (10)	(2 of 2)	(0 of 1)
	Welfare-to-work	50% (14)	(0 of 2)	(4 of 8)
	Other	(6 of 8)	(1 of 4)	0% (17)
Total Erie Family Health Center		**79% (116)**	**24% (72)**	**10% (314)**
Cook County Hospital	Ambulatory Scr. Clinic	78% (166)	23% (184)	6% (657)
	HCIP (referred)	100% (47)	(2 of 2)	(0 of 0)
Total Cook County Hospital		**NA****	**NA****	**NA***
Chicago Women's Health Center (all departments)		**56% (9)**	**(0 of 8)**	**10% (30)**
Overall Total		**NA****	**NA****	**NA****

*Includes AW, date missing.

**Cannot calculate, because some screeners are missing.

The 1,159 women who screened NAW but were not interviewed were scattered randomly across sites and months. Of the 1,159, 997 (86%) did not sign the consent form (many were not asked for consent), three signed but refused the pre-screener, four

did not have time, two did not have a Spanish-speaking interviewer available, and 153 (13%) agreed to an interview but it never took place for other reasons.

Was There an Interview Selection Bias by Age or Language?

Woman's Age. The ages of the women screened ranged from 15 to 82, but the oldest woman interviewed was 67 years old. Of course, none of the 19 women under age 18 were interviewed, because they were not eligible. However, for eligible women, her age seems to have been related to whether or not she was interviewed. There were two ways in which a screened woman might not be interviewed. First, she could decline her consent to an interview.[5] Second, even if she gave her consent, she still might not be interviewed for many reasons -- there was no interviewer available, the interview could not be scheduled, she had to leave for another appointment, and so forth. Older women were more likely to drop out of the interview process at both of these stages.

For women who screened AW, only 68% of the 19 aged 51 to 60 and a third of the six aged 61 to 67 were interviewed, compared to over 80% of those in each younger age group (Exhibit 8). The 44 women not interviewed tended to be older than the 451 interviewed women. Their mean age was 35.4 and ranged to age 82, compared to 31.1 and age 64 for the interviewed women (t test = -2.305; p = .022), though age 31 was the median for both groups.

Of the women who screened NAW, the 1,159 women who were not interviewed were older on average than the 119 women who were interviewed, with a mean age of 36.5 (median 34) years, ranging to 82, for non-interviewed women, compared to 28.9 (median 27), ranging to 55, for interviewed women (t test = -5.594; sign <.001). In general, the older the age group, the less likely that a woman screened NAW would be interviewed. None of the 73 women aged 61 or older signed the consent form, and fewer than 2% of the 110 women aged 51 to 60 were interviewed.

However, women in age group 21 to 25 also had relatively lower interview rates than women who were somewhat younger (ages 18 to 20) or older (ages 26 to 30). For example, only 82% of the 88 women aged 21 to 25 who screened AW were interviewed, compared to 92% of slightly younger women aged 18 to 20 and 90% of slightly older women aged 26 to 30. The reasons for this are not clear, but may be related to the presence of children.

Of all the sample sites, more older women were sampled at Cook County Hospital (CCH), and especially the Ambulatory Screening Unit (ASC), with the result that the mean age of women screened was much older at CCH than the other sites (Exhibit 9). In addition, women who completed an interview at Cook County Hospital were, on average, much older than women interviewed at the other sites. Sixty-five percent of interviewed Cook County Hospital women were older than 30, and 28% were older than 40, but at Roseland, 26% were over 30 and 6% over 40, and at Erie, 37.5% were over 30 and 7% over 40. The most frequent age group for interviewed women was 18 to 20 at Roseland (36%), compared to only 10% at Cook County and 12% at Erie.

At Roseland Clinic, the mean age of women who were interviewed was *older*, not younger, than women who were not (25.2 versus 23.5 years). At Erie, the mean age of interviewed women was only slightly younger than that of non-interviewed women (28.95

versus 31.5). At CCH, however, the difference was greater (34.2 for interviewed woman versus 39.2 for non-interviewed women), and significant (t test = -2.598; p = .010).

Exhibit 8
Interview Selection Bias by Woman's Age (N = 2,198*)

Screening and Interview Status		Age at Screening*						
		18 - 20	21 - 25	26 - 30	31 - 40	41 - 50	51 - 60	61 - 82
AW**								
	Did not sign***	4.7%	9.1%	6.0%	5.5%	8.1%	21.1%	(3)
	Signed, no interview	3.5	9.1	3.6	3.7	4.1	10.5	(1)
	Interviewed	91.8	81.8	90.4	90.8	87.8	68.4	(2)
	Total	100.0% (85)	100.0% (88)	100.0% (83)	100.0% (163)	100.0% (74)	100.0% (19)	(6)
AW, over a year ago								
	Did not sign***	40.9%	47.7%	30.6%	45.3%	56.5%	77.1%	88.2%
	Signed, no interview	13.6	20.5	16.7	8.1	10.6	10.4	5.9
	Interviewed	45.5	31.8	52.8	46.5	32.9	12.5	5.9
	Total	100.0% (22)	100.0% (44)	100.0% (36)	100.0% (86)	100.0% (85)	100.0% (48)	100.0% (17)
NAW								
	Did not sign***	65.0%	62.1%	66.3%	78.8%	87.0%	90.9%	100.0%
	Signed, no interview	16.8	25.3	18.9	9.1	7.1	7.3	.0
	Interviewed	18.2	12.6	14.8	12.0	5.9	1.8	.0
	Total	100.0% (143)	100.0% (182)	100.0% (169)	100.0% (274)	100.0% (169)	100.0% (110)	100.0% (73)

*The 33 cases in which the woman screened "not eligible" are not included in this table. There were 205 cases in which age is missing (10 AW, 158 NAW and 37 NAW but abused over a year ago).

** Includes the four AW cases with the date missing.

***Many women who screened NAW were not asked to sign the consent form.

Woman's Language. Although the woman's age seems to be related to the likelihood that she was interviewed, her language made no difference. For example, 84% of

the 88 women who screened as AW and used a Spanish language screener completed an interview, almost equal to the 86% of the 436 women who screened as AW and used an English language screener. There was a slight difference for women who screened as AW but abused over a year ago, with 25% of the 61 who used a Spanish screener, compared to 33% of the 310 women who used an English screener, being interviewed. However, this difference was not statistically significant (Chi square p = .186).

Exhibit 9
Mean Age of Screened Women, by Screening Status and Sample Site

Sampling Site	Mean Age, by Screening Status			
	AW	AW Over a Year Ago	NAW	Total
Cook County Hospital	34.8	42.2	40.4	39.2
Roseland Public Health Clinic	21.1	31.6	28.6	27.9
Erie Family Health Center	29.4	35.7	30.1	30.7

Screening Status Versus Interview Status

Those women who completed an interview were categorized into AW and NAW, depending on the interview responses. Women who responded "yes" to any of the physical violence questions in Section J of the questionnaire (see Appendix II), even if their only "yes" was to the first question in that section, which is about a threat of physical harm, were categorized AW. Conversely, to be considered NAW a woman must have answered "no" to every item in Section J. Thus, women could screen AW and interview either AW or NAW; they could screen NAW and interview either AW or NAW.

Also, if the interview revealed that the woman was not eligible for the study (she had not had an intimate partner in the past year), she was dropped from the sample. Two of the 707 women who were interviewed were dropped from the study, one because she later told us that she had falsified the initial interview, the other because she told us in the initial interview that she had had no intimate partner in the past year (her partner had died over a year previously). Thus, the final sample included 705 women, 497 who interviewed as AW and 208 who interviewed as NAW.

Of the 453 women who screened AW and were interviewed, 405 (89%) interviewed AW, but 39 (9%) interviewed NAW and nine women (2%) interviewed NAW but said that they had been abused a year or more previously (Exhibit 10). Of the 119 women who screened NAW and were interviewed, 79% interviewed NAW, but 21% interviewed AW. This differed by site. At Roseland, only 6% of the 99 women who screened AW interviewed NAW. Similarly, at Cook County Hospital (CCH), 6% of the 258 women who screened AW interviewed NAW. However, at Erie 18% of the 91 women who screened AW interviewed as NAW. On the other hand, 24% of the 37 women at

Roseland who screened NAW and were interviewed, interviewed as AW, and 21% of the 47 women at CCH, but only 16% of the 32 women at Erie. Thus, at Erie Family Health Center, more screened women changed from AW to NAW, and fewer screened women changed from NAW to AW.

Exhibit 10
Screening Status versus Interview Status*

	Status After the Screener			
Status After the Interview	**AW**	**AW Over a Year Ago**	**NAW**	**Total***
AW	89.4%	43.6%	21.0%	69.8%
AW Over a Year Ago	2.0	1.7	.0	1.6
NAW	8.6	54.7	79.0	28.6
Total	100.0% (453)	100.0% (117)	100.0% (119)	100.0% (689*)

*This table does not include 16 women who interviewed AW, but whose screeners are missing.

Thus, after a 45-minute interview with one of the project's sensitive interviewers, 39 of the women who had screened as AW interviewed as NAW. (In addition, one woman who screened "AW but date of abuse missing" said in the interview that the abuse, by her current partner, had occurred many years ago.) What were the reasons for the difference between the screener and the interview for these 39 women? Two gave no further information. Two had not been abused by an intimate partner, but by someone else (e.g.: a father, brother or stranger). Four women said in the screener that they had experienced "uncomfortable sex," but denied in the interview that the sex was forced ("forced you into any sexual activity you did not want to do, by threatening you, holding you down, or hurting you in some way"), and did not mention any other physical attack. One woman had been abused "many years ago" by her current husband.

However, the great majority of the women (30 women, 77%) had screened as AW because they responded "yes" to the "afraid" question, and then the interview revealed that there had been no physical abuse in the past year. One woman's boyfriend was very abusive, but he had been incarcerated for the previous year. Many women told the interviewer they had been abused a number of years ago and were still feeling threatened by and were afraid of their partner or ex-partner. One woman had had no contact with the father of her children for a year, but knew that he was trying to take away the children. Other women said that their partner did not actually threaten to harm her, but she was afraid of him because of his look or attitude.

In these cases, the partner may have created an "atmosphere of coercion" by

previous violence, so that violence was no longer necessary to control the woman (Ellis & DeKeseredy, 1989: 75). Advocates often report such cases (Dobash & Dobash, 1979), and they seem similar to the cases described by Paige Smith and her colleagues, in which abused women say, "He has a look that goes right through me and terrifies me" (Smith, Earp & DeVellis, 1995a; Smith, Tessaro & Earp, 1995b; Smith, Smith & Earp, 1999). In retrospect, it would have been a good idea to have followed up on these women. Our criterion of "physically abused or threatened with violence in the past year" may have been too stringent in these cases. Perhaps we should have expanded our criteria to include women who either were being currently abused by an intimate partner, or who were afraid of a current intimate partner.

Of the 119 women who screened NAW and were interviewed, 25 (21%) revealed recent physical abuse to their interviewer. The physical abuse that these 25 women told us about in the interview but not in the screener was not necessarily trivial. Three of them had experienced at least one incident as severe as being beaten up, and six of them had experienced more than two incidents in the past year. Interviewer notes about some of these women mention that they did not think of themselves as being abused. One woman said that her partner was "very serious" and "pushed her" but never hit her. (Note that the CWHRS screener and questionnaires never use the word "abuse" but instead ask questions about behavior.) Thus, in going through the questions one by one with a sensitive interviewer, these women were able to talk about the violence. Many practitioners, including Jackie Campbell and Judith McFarlane, stress that it may be necessary to ask a woman repeatedly, over a long time period, if she is experiencing abuse, before she comes to feel that willing to tell you. These and other factors, in combination, produced the sampling patterns within the sites and departments shown in Exhibit 11.

Over all of the sites, the CWHRS sample contained 497 women interviewed as AW and 208 women interviewed as NAW (70.5% AW and 29.5% NAW), very close to our goal of 500 AW and 200 NAW. It is important to realize that these proportions are not indicative of the proportion of abused women overall or at a particular site, but reflect, rather, the sampling design of the CWHRS, and the degree to which screening staff members referred women screening NAW to the study. For example, the Hospital Care Intervention Project (HCIP) at Cook County Hospital counsels abused women when referred by other hospital departments, such as the Trauma Unit or the Ambulatory Screening Clinic (ASC). The only women from HCIP who interviewed as NAW were women in which the abuse occurred over a year ago.

Did the CWHRS Meet its Sample Goals?

Some of the differences in the women sampled at different sites were part of the sample design. The CWHRS reached its sampling goals of including high-risk but under served women, including pregnant women, and so on, but these goals were reached across the entire sample. The sites and individual departments within sites differ in their characteristics (Exhibit 12 and 13). Therefore, direct comparisons across sites are not appropriate, because there is a different mix of women within each particular site.

For example, to reach the sample goal of including pregnant women, we made a special effort to sample women in Erie departments serving pregnant women. As a

result, over a quarter (27%) of the interviewed women at Erie were pregnant at the interview (Exhibit 12). In addition, of the 29 Erie women who had been pregnant in the past year, 82% had had a live birth, compared to 77% of the 44 women at Roseland and 62% of the 53 women at CCH.

Exhibit 11
Interview Status by Sample Site

Sample Site	Site and Department (if 10 or more interviews)	AW	NAW	Total Interviewed*
Roseland Public Health Center		**66.9%**	**33.1%**	**163**
	Adult Medicine	70.0%	30.0%	20
	WIC	67.2%	32.8%	64
	STD/HIV	74.5%	25.5%	51
Erie Family Health Center		**66.4%**	**33.6%**	**152**
	Well Adult	63.6%	36.4%	33
	Obstetrics/Gynecology	33.3%	66.7%	21
	Humboldt Park	70.2%	29.8%	57
	HIV Program	91.7%	8.3%	12
	Welfare-to-work	77.3%	22.7%	22
Chicago Women's Health Center		**62.5%**	**37.5%**	**8**
Cook County Hospital		**73.8%**	**26.2%**	**382**
	Ambulatory Screening Clinic	66.7%	33.3%	216
	Obstetrics/Gynecology	75.0%	25.0%	72
	Trauma Department	85.4%	14.6%	41
	HCIP	92.5%	7.5%	53
Total		**70.5%**	**29.5%**	**705**

*Data in this table include all sites and each department within a site in which ten or more women were interviewed. "Total Interview" does not include two cases interviewed but dropped from the sample (one falsified interview and one not eligible because she had had no intimate partner in the past year).

Exhibit 12
Women Who Were Pregnant at Initial Interview, by Site

Pregnant?	Sample Site			
	Cook County Hospital	Roseland Public Health Clinic	Erie Family Health Center	Total*
Yes, now	2.7%	13.0%	26.7%	10.5%
Yes, in past year	14.2	27.3	19.3	18.3
No	83.2	59.6	54.0	71.1
Total	100.0% (374)	100.0% (161)	100.0% (150)	100.0% (693)

*Total includes the eight interviewed women from Chicago Women's Health Center. Twelve of the women refused this question or said they did not know.

Of course, by definition, it is difficult to know whether or not we have included in the sample women who are high risk, but who are not known to helping agencies. One indicator, for the 497 women who interviewed as AW, is whether or not the woman responded "yes" to any of four help-seeking questions: talking to someone, seeing an agency or counselor, getting medical help, or contacting the police. Overall, 89 of the 492 women who responded said that they had not sought any kind of help in the past year, and 26 of these women (3.5%) had experienced at least one severe incident (being beaten up, choked, permanently injured, or attacked or threatened with a weapon). In addition, of the 73 women who had experienced one or more severe incident and had tried only one type of help seeking, 49 had talked to someone but had not contacted an agency or counselor, sought medical help, or called the police in the past year. In total, then, at least 75 women (26 plus 49) in the CWHRS clinic/hospital sample, representing 15% of all 497 women, appear to have been "hidden women" who were high-risk but were not known to be at risk by any helping agency.

The kinds of help sought by the 497 women interviewed as AW varied by the sample site (Exhibit 13), with 24% of the women at Erie saying that they had not sought any help, compared to 18% at CCH and only 13% at Roseland. Among those women who had experienced at least one very severe incident, however, there was also a difference across sites. At Erie, six of the 34 women (18%) who had experienced at least one severe incident said that they had not sought any kind of help, compared to 12% of the 158 at CCH (10% of the 157) and only 9% of the 43 at Roseland.

Another sample goal of the CWHRS was to include enough women of color in the sample, so that it would be possible to build individual high-risk profiles for African/ American/Black women and for Latina/Hispanic women. This appears to have been accomplished for the sample as a whole, although not for the women sampled from each

site (Exhibit 14). Of the 159 women who told us that their racial/ethnic group was Latina or Hispanic, 105 were interviewed in Spanish.

Exhibit 13
Help-Seeking in the Past Year, by Site, 497 Women Interviewed as AW

Number of Types of Help-seeking in the Past Year	Sample Site			
	Cook County Hospital	Roseland Public Health Clinic	Erie Family Health Center	Total*
0 (no help seeking)	18.1%	13.3%	23.8%	18.3%
1 type of help seeking	32.7	45.7	36.6	36.4
2 types of help seeking	22.8	27.6	27.7	25.0
3 types of help seeking	18.1	6.7	8.9	13.8
4 types of help seeking	8.2	6.7	3.0	6.5
Total	100.0% (281)	100.0% (105)	100.0% (101)	100.0% (492)

*Total includes five women from the Chicago Women's Health Center. Five of the 497 women did not complete the calendar or the help-seeking section of the questionnaire.

In addition, there are a number of indicators that the CWHRS design was successful in its effort to include disadvantaged and impoverished women in the sample, women with few resources. Of the 704 women who were interviewed and responded, four were homeless and 56 were living in an institution, shelter, treatment center or group home at the time of the interview.[6] Of the 381 women interviewed at Cook County Hospital, 58 (15%) were homeless or living in an institution or group home. No Latina/Hispanic woman and none of the women interviewed at Erie or the Chicago Women's Health Center was homeless or living in a group home or institution. Only seven (4%) of the 159 Latina/Hispanic women lived alone. In comparison, 11% of the 466 African/American/Black women were homeless or living in a group home, and 7% were living alone. Of the 66 white or other women, seven (11%) were homeless or living in an institution or group home, and ten (15%) were living alone.

In addition, almost a third (31.5%) of the interviewed women had a household income less than $5,000 per year, and another 20% had a household income of $5,000 to $9,999. This is quite high, relative to the 1989 household income in Chicago as a whole.[7] Among CWHRS women, 34% of African/American/Black households, 21% of Latino/Hispanic households, and 32% of white or other households had a household income below $5,000, compared to 18%, 10% and 6%, respectively, for households in the 1990 Census of Chicago. Similarly, another 21% of CWHRS African/American/Black

households, 20% of Latino/Hispanic households, and 20% of white households had a household income between $5,000 and $9,999, compared to 13%, 9% and 8%, respectively, for Chicago as a whole.

Exhibit 14
How Would You Describe your Race or Ethnicity?

Racial/Ethnic Group	Sample Site				
	Cook County Hospital	Roseland Public Health Clinic	Erie Family Health Center	Chicago Women's Health Center	Total*
African/American/Black	80.7%	93.1%	8.6%	0.0%	66.9%
Latina/Hispanic	6.1	1.9	85.5	37.5	22.8
White	10.8	1.9	5.3	62.5	8.2
Asian/Pacific Islander	1.1	.0	.7	.0	.9
Native American	.5	.0	.0	.0	.3
Creole or Multi-racial	.8	2.5	.0	.0	1.0
Total	100.0% (378)	100.0% (160)	100.0% (152)	100.0% (8)	100.0% (698)

*Five women refused this question, and interviewers did not ask it of two women.

Almost half (47.9%) of the 701 women responding were unemployed. At Erie, 36% of the women said that they had no personal income that they controlled, compared to 18% at Roseland and 13% at Cook County. Erie women were much less likely to have at least a high school education. Sixty-five percent of the women interviewed at Erie had less than a high school degree, compared to 33% at Roseland and 43% at Cook County. The only women in the sample with no schooling were four women at Erie.

In addition to the race/ethnicity question, we asked the woman to tell us, "Where were you born?" Following feedback and advice from the Erie Advisory Group, we did not specifically ask women whether they were United States citizens, or if they were born outside of the United States. However, almost all of the women responded with a specific birthplace. Only about two-thirds (64%) were born in Illinois. Fully 13.5% were born in Central America, eight women (1.1%) in South America, and 10 women in Europe, Africa, Asia or the Middle East. Women interviewed at Erie were more likely to have moved to Chicago in the past year (4.6%) or to have lived here only one or two years (11.2%), compared to Roseland (1.2% and zero) or CCH (2.4% and 1.0%).

Other differences across sites reflect the demographics of the population of patients at the site. For example, 79% of the interviewed women at Roseland said they were single, compared to 55% at Cook County and only 30% at Erie. At Erie, 43% said they were married, compared to 7% at Roseland and 18% at Cook County. Fully 42% of the women at Erie gave their occupation as homemaker, compared to zero at Roseland and 1% at Cook County.

Questionnaire Design

The survey instruments, which included a screener and consent form for each site, the initial questionnaire for abused and comparison women, first and second follow-up questionnaires, screening questionnaires for potential proxy respondents, proxy questionnaires for people who knew a woman or man victim, questionnaires for women who had killed their partner, and Spanish versions of all of these, were developed over many months of intense work by members of the collaborating team. Advocates, activists, community members, academics and researchers all took an active role in finding, evaluating and devising scales for the various dimensions we hoped to capture, such as post traumatic stress disorder, physical and mental health, and social support.

Because we could not find an instrument that met our criteria for a brief measure capturing the degree of concrete and emotional assistance available to the woman from her social support network, a task force of collaborators including domestic violence advocates, public health professionals and academics, worked together to construct a new scale. Perhaps it was easier to think outside the lines since some of our group were not trained as researchers. When none of the existing instruments focused on what we believed the salient questions to be, we created our own tool. This kind of innovation is one of the exciting outcomes of collaboration. For those who were not researchers by training, it was empowering to demystify the process of research and to be part of creating a research tool.

Collaborators with backgrounds as support or health workers or as domestic violence activists wrote introductory scripts and constructed items and multiple response choices that reflected women's real experiences. Their expertise was vital to develop wording that would be universally understood and would build rapport with the women being interviewed. A particular concern was to eliminate any hint of judgmental language from the instruments. These efforts seem to have been successful. Interviewers told us that the survey questions reflected the women's concerns and life situations. They elicited a high degree of cooperation and quality data from a culturally diverse group of women. The project has begun to receive requests from agencies and researchers for these questionnaires, and we think that they may become a valuable resource.

Interviews averaged 45 minutes, and included a calendar assessment of abuse incidents; details of each incident; power, control, harassment and stalking; social support network; interventions and help-seeking; demographics; household composition; mental and physical health; pregnancy; and firearm availability. To test and verify the questionnaire and scales, and to further develop subject safety standards, the project began with a pilot study.

Some of the issues covered by the CWHRS related to highly sensitive topics, and women from different cultural backgrounds might have different perceptions of these sensitive issues. Therefore, the collaborators worked very hard to word questions and provide a context for those questions in a way that would encourage women to disclose personal and sensitive experiences (Johnson, 1996:41-44; Smith, 1987). In addition, following the advice of Cowles (1988), we tried to keep the questionnaire short enough so that the woman would not be fatigued, and built in flexibility in the timing so as to "permit a natural flow of talk."

Spanish Translation

The Spanish translation of the instruments was done by members of the Erie Site Advisory Board and two members of the collaborative team. Though the process was time-consuming, it produced translations that were correct and culturally sensitive to Latina/Hispanic women from different countries of origin. Because we held the Spanish focus groups at a point where the English questionnaires were still in a flexible draft form, we could change the English version where necessary. This improved not only the Spanish but also the English instruments.

Calendar History of Incidents and Events

For women who had answered "yes" to at least one type of physical abuse in the past year (Section J), the interviewer and the woman, working together, filled out a calendar with key events that had happened in her life in the past year, and each violent incident that had happened. The instrument was a set of blank calendars (Appendix II), printed with one or two months per 8½ by 11-inch page, that the interviewer laid out on the table in front of the woman. They first placed holidays and important life events, some of which the women had already told the interviewer about, such as having a baby, changing jobs or moving. Then, for each violent incident, she and the interviewer placed it on a calendar date, using a series of codes developed by Campbell and expanded for this study.

Going into the first interviews, we were not sure that this process would succeed, but discovered that it worked very well. Women usually remembered these incidents clearly and were able to place them on the calendar. When a woman could not place an incident on the exact date, we asked her to choose a date in the correct sequence with other important things happening in her life; for example, just after her son's birthday, on Mother's Day, or on payday. Some women described a series of violent incidents that had taken place over a period of time. For example, one woman was beaten up every day for a week. Others said that, over a six-week period, they were punched and kicked twice every weekend by a partner who came home drunk. In every case, however, the woman was able to specify a specific window of time when these "series" incidents happened.

In coding and cleaning the data from the twelve-month retrospective calendars and the two calendars in the follow-up period, we noticed that women tended to tell us about more incidents that had occurred in the more recent months and days before the interview than had occurred ten or eleven months ago. There was a small (-.044) but significant (Pearson r <.01) correlation between the number of days before the initial

interview when an incident had occurred, and the seriousness of that incident. For example, the 58 incidents involving weapon use or wounds from a weapon occurred 134 days before the initial interview, on average, compared to 158 days for the 116 incidents involving a weapon threat or very severe injury and 167 days for the 370 incidents involving beating up, choking, or serious injury. Thus, we suspect that women did forget to tell us about some incidents that had occurred many months previously, especially less serious incidents. However, this procedure still elicited numerous descriptions of incidents, many of them on the less serious end of the scale, that had happened months earlier.

Women indicated all violent incidents, regardless of who was the abuser. If more than one intimate partner was responsible for different incidents, the interviewer indicated this in the margins of the calendar. If someone who was not an intimate partner was responsible for an incident, that was also indicated (these violent incidents were coded as part of the "event calendar" information, not the "incident calendar" information).

Finally, for each violent incident, the woman and interviewer added codes on the appropriate calendar date describing a few key factors, including the presence or use of a firearm or handgun, whether or not anyone else was present (children, a friend of the woman, a friend of the partner, someone else), whether or not anyone else was injured, and any substance use of the woman and partner.

The proxy respondent questionnaire did not include the same type of calendar history as the clinic sample, since we doubted that proxy respondents would know about the woman's life to that level of detail. Instead, we asked for details about three incidents, in addition to the details of the final incident that resulted in death. At the end of Section J, after a series of questions about any violent incident of the man against the woman and again after a second series of questions about any violent incident of the woman against the man, we asked the following question:

> Now thinking overall about physical violence of (V) against (P) in the year before [his/her] death, were there any particular incidents you were aware of that stand out in your mind, because they were severe or happened frequently or for any other reasons? If so, could you briefly tell me what happened and when?

To provide a measure of the severity of violence in the past year for the lethal sample that would be comparable to the information provided by the women sampled in a clinic or hospital, we used all the available information for each homicide case to create a variable with three categories: no violence in the past year, less severe violence, and very severe, possibly life-threatening violence. To do this, we used all the information available in the case, including formal questions about physical violence (Section J, Questions J7-J11), responses to open-ended questions, any narrative provided by any of the people interviewed in the case, and any information in official records. For example, in one case where the proxy respondent did not know of any violent incident in the past year, the court file mentioned that the offender had admitted to his friend that he had held a knife to his wife's throat as she slept, because he was sure she was having an affair. Therefore, this case was coded "very severe violence" in the past year.

Measures and Scales Built into the Questionnaire

A goal of the CWHRS was to measure a tremendous variety of variables, covering conditions, circumstances and interventions changing over time in the past year that research has suggested may be related to high-risk intimate partner abuse situations. Another goal was to keep the interview short and as simple as possible, in order not to exclude any women from the sample. These goals were in conflict. The collaborators agonized over the questionnaire. Some "gold standard" instruments, for example those measuring mental health conditions or social support, were much too long for our purposes. We could not simultaneously include everything and also include the greatest possible detail about each variable. We had to choose. We chose to include as many variables as possible, but to limit some of them to short forms. In some cases, we developed new scales or new versions of old scales. In addition, the CWHRS expanded some instruments, such as the calendar history instrument developed by Jacqueline Campbell, which had never before been used to cover a twelve-month retrospective year.

Violent Incident Severity. Before deciding to use a modified version of the Campbell Severity Scale, the collaborators did a lengthy investigation of a number of options. In the original proposal, we planned to code the degree of injury in each incident, using a standard injury severity code, such as the Abbreviated Injury Scale (AMA Committee on Medical Aspects of Automotive Safety, 1971; Association for the Advancement of Automotive Medicine, 1990; Maull, 1987; Greenspan, *et al.*,1985; Dove, *et al.*, 1980). However, in order to maintain confidentiality, we decided not to share information with the clinic and hospital sites, and therefore not to seek access to the medical records that would have provided the information necessary to use the Abbreviated Injury Scale in each incident. We considered using two shorter scales, the Berk scale (Berk, *et al.*, 1983: 199; Campbell, 1986) or the Injury Assessment Index (IAI) (Dobash & Dobash, 1995), but rejected the Berk scale as lacking detail and the IAI as too loosely organized.

The collaborators then developed a draft injury assessment, which included a body map and a table scoring each of ten types of injury across over ten parts of the body. After many revisions and trials, this was eventually rejected for three reasons. First, we thought it was important to include certain types of injury that would not fit easily in any one category on the chart, such as having a miscarriage, being "beaten on all day," or being choked to unconsciousness. Second, the chart did not necessarily capture the degree of life-threatening injury in the incident, which was our main goal. Third, because the chart was extremely cumbersome and time-consuming, it would not have been possible to complete it for each of the incidents that might occur over a year's time.

We considered the possibility of collecting detailed information about only a small number of incidents (the most recent, the most serious, and the one that "sticks in the mind or bothered you the most"). After spending considerable time constructing such a questionnaire, we realized that it would not tell us about the changing events and circumstances in a woman's life over the entire year, which was one of the goals of the CWHRS. We decided that it was more important to collect limited injury information about every incident, than to collect detailed information about selected incidents. Therefore, we developed the system that was finally used in the study, based on the Campbell

scale, but modified and expanded.

The CWHRS questionnaire contained two measures of incident severity, the first an overall measure of violence in the previous year, and the second an incident-level measure of the severity of each violent event. We used a modified version of the CTS constructed for the Violence Against Women Survey by Statistics Canada (Section J) to categorize women into AW versus NAW groups. In these questions, the woman is asked whether "each thing has happened to you in an INTIMATE RELATIONSHIP . . . in the past year." Women who answered "no" to every question in Section J were categorized as NAW. In the calendar history, which only women categorized as AW completed, the CWHRS used a modified version of the Campbell Incident Severity Scale to code the severity of each individual incident that had occurred in the past year.

The Campbell seriousness codes became our index of incident severity. When the woman told her interviewer about a particular incident, it was recorded on the calendar date by a code designating the most serious thing that happened to the woman in that incident. The interviewer used the following scale, initially developed by Jacquelyn Campbell, to code the severity of each incident:

0 Threat to hit with a fist or anything else that can hurt you.

1 Slapping, pushing, throwing something that can hurt you, or
No injury; no lasting pain.

2 Punching, kicking, or
Bruises, cuts, or continuing pain.

3 "Beaten up," choked, or
Burns, broken bones, or severe contusions.

4 Threat to use a weapon, or
Head injury, loss of consciousness, permanent injury, or internal injury.

5 Use of a weapon, or
Wounds from a weapon.

Some examples of incidents reported by women in the CWHRS, for each of the Campbell codes are shown in Exhibit 15. There were two coding rules for the Incident Severity Scale. First, the highest applicable number applied. Second, a given severity level was coded if any of the things listed in the category had happened.

To be sure that the interviewers understood how to administer the calendar history and code the incidents, Jacquelyn Campbell was one of the teachers in the two-week interviewer training. The collaborators added to or modified some of the types of behavior or injury in these items, building on their experience with women in high-risk abuse situations. Within the necessary constraints on the length of the interview, we tried to include injury and behavior that they had found to be especially indicative of the descriptions of abuse by women who were in life-threatening situations, and also to include types of injury that could have resulted in death.

The general category, "beaten up," was included, because the counselors and advocates among the collaborators told us that many women would not want to provide a lengthy list of each specific injury she had sustained in an incident, but would just say that she had been beaten up, beaten all over, or beaten all day.

Exhibit 15
Examples of CWHRS Incidents, by Campbell Incident Severity Code

Code	Incident
0	-- Ex-boyfriend came over wanting to know why they couldn't get together. Threatened, scared her. -- Argument after he promised to buy Christmas gifts and didn't, followed with threats. -- Threatened with death over the phone if R left state with children. -- Severe threats all week because Name wanted to spend money on drugs. Forced ATM withdrawals.
1	-- Boyfriend dragged her down six flights of stairs. -- R admitted cheating. Name got mad, pushed, slapped, knocked down and dragged across floor. -- Jealous because R getting out of a car with a man. Slapped and pushed. -- Pushed and slapped for refusing to prostitute for drugs.
2	-- Hit and bitten on arm. Arm turned green. Had to get shots. -- Name pushed her into chair, bruised on arm. -- Saw R with someone else, got mad, hit her in the mouth with ring. -- Kicked me in the leg, bruised. -- Put me out of the house, smacked me, bruised face.
3	-- Husband beat her up, hit her with fist, kicked her, poured hot coffee on her -- R hit boyfriend and he beat her up, cut hand, kicked out TV. She was bruised, had a knot on head, scratches. -- Husband busted her lip and broke her finger on left hand. -- He hit her and tried to hang her (strangle her).
4	-- Choked, held in Nelson hold, passed out, bruised on neck. -- Choked me until I passed out. Had asthma attack, went to ER. -- Hit in eye by Name. Required reconstructive surgery. -- R wanted to leave relationship. Pulled around the room, choked, pulled knife on her. -- Name stomped R on head at least 100 times. Suffered brain damage.
5	-- Name ran R over with a car. Suffered broken bones. -- Fighting about another boy. Hit in knee with stick, choked, couldn't walk. -- Broke window, hit in head with object, unconscious till next day. -- Hit in head with gun. Knot on head, taken to hospital. -- Raped and shot in buttock, robbed, hospitalized for 10 days.

Similarly, many collaborators had found choking (code 3) and loss of consciousness (code 4) to indicate a particularly dangerous kind of violence. We included being "grabbed around the neck" as being choked. If the woman was choked to the point of losing consciousness, the incident was coded 4. In the development of the Spanish questionnaire, we found that the literal translation of "choked" implies actual death (ahorcar, literally "hanging"). We therefore changed the Spanish to "ha tratado de ahorcarla", and the corresponding English to "tried to choke you."

We defined weapon "use" to include any use of a weapon whether or not anyone was injured, for example, a gun was fired but missed or a knife was held to her neck. We defined "weapon" as any tool capable of committing physical harm. Arson was counted as a weapon (in one case, an abuser tried to murder a woman by burning her house down). A car was counted as a weapon, when Name deliberately tried to run over her. A gun used as a blunt object also constituted weapon use, as did any blunt instrument (for example, a telephone, a heavy ashtray, a grill, or a rock). Similarly, any sharp object, not just a knife, constituted a weapon (for example, a screwdriver or broken glass). Tools used to beat or strangle the woman, such as a belt or pantyhose, were weapons. We counted incidents in which Name deliberately tried to infect the woman with HIV as weapon use. Throwing scalding water or acid constituted weapon use, as did an attempt to drown the woman in the bathtub.

To count as a weapon threat (code 4), the women had to believe that the weapon would be used against her. She did not have to see the weapon. For example, we counted threats of weapon use over the phone as a "weapon threat" when the woman had reason to believe that the threat would be carried out.

Although the Campbell scale questions are similar to the modified CTS questions in Section J, they differ in one important way. The CTS items ask only about behavior, while each Campbell scale question combines behavior with injury. For example, if a woman was slapped or pushed but suffered a head injury (i.e.: she was pushed downstairs), the incident would be coded "4," not "1." Conversely, if the woman was not injured seriously but a weapon was used, the incident would be coded "5". This produced some anomalies, with some incidents coded "4" involving much more injury that some incidents coded "5" (see examples in Exhibit 15, above).

There is a rough correspondence between the items in the Campbell scale and items in Section J, the Statistics Canada modification of the CTS (see Appendix II). However, there are several differences. The "0" category, "threat to hit with a fist or anything else that can hurt you," was not in the original Campbell Incident Severity Scale, but was added to the scale in the CWHRS, because our definition of physical violence in the past year included this threat category (see Item J1, initial questionnaire). The "1" category of the Campbell scale corresponds to questions J3 and J4 of the modified CTS, and the "2" category corresponds to J5. The "3" category corresponds to J7 and J8, except when the choked woman loses consciousness.

There is no single Campbell code that directly corresponds to item J2 of the modified CTS (. . . thrown anything at you that could hurt you). If Name used a tool that could hurt her, we counted such incidents as "weapon use." For example, Name might

have thrown acid, or scalding water, or a rock. In a few cases where it was unclear whether or not the object thrown could have hurt her (for example, "threw a bottle at her"), we coded the incident "1" (slapping, pushing, throwing something that can hurt you). However, when it was not clear whether the object thrown was actually thrown at her, or when it probably could not have hurt her, we coded the incident "0" (threat to hit with a fist or anything else that can hurt you). For example, Name might have thrown a plate of food, or threatened to throw an ashtray.

The "4" and "5" categories correspond to J6, J9 and J10, except that the modified CTS questions differentiated between knives and guns, while the Campbell scale questions differentiated between weapon threat and weapon use. (A follow-up question in the calendar history specified whether the weapon in the incident was a gun, what type it was, and if it was fired.)

In addition to the Campbell Incident Severity Scale, we asked women to tell us about some other aspects of each incident. A "TD" was placed on the calendar date on each incident where she said "yes" when asked did Name "tie you up, handcuff you or restrain you?"

Forced sex, defined as "forced you into any sexual activity you did not want to do, by threatening you, holding you down, or hurting you in some way," was coded by placing an "S" on the calendar date when it had occurred (see Section J, Q11). A miscarriage "as a result of the incident" was coded by placing an "MC" on the calendar date of the incident. If the woman said that a weapon was used, we coded "HG" for handgun or "LG" for long gun on the calendar date, and circled that code if the gun had been fired. We asked who was present (children, bystanders, adult friend of R, or another adult) and if they had been injured. We also asked if R or Name had been drunk, high on marijuana, or using drugs during the incident. Thus, whether any of these things happened in an incident was recorded independently from the seriousness scale.

Most women who told us about forced sex in an incident also told us about the specific violence or threat of violence that had accompanied the forced sex. However, sometimes women told us about forced sex that had not happened together with any other violence (Exhibit 16). For example, one women experienced forced sex in which the partner had threatened to take her children away.

Though our definition of "forced sex" includes violence or the threat of violence (see question J11), the interviewers sometimes would note "forced sex" on the calendar without indicating the type of violence or violent threat. For a few women, one or more incident of forced sex, with no information about any violence or threat of violence, was the only incident in her calendar history. So that these women would not be missing from the aggregate variable, Most Severe, which represents the greatest degree of severity in any incident over each woman's calendar history, we included a category of "forced sex only," which applied only when there was no other violent incident mentioned in the entire calendar.

Danger Assessment. The Danger Assessment, an 18-item set of questions developed by Jacquelyn Campbell and designed to be used by a counselor or clinician to help an abused women think about the possible danger in her situation, was given to all

interviewed women, at both the initial and the follow-up interviews, and to the proxy respondents. It was the last set of questions in the questionnaire (see Appendix II, Section N), and was introduced to the woman or proxy respondent as "a standard set of questions that are meant to help women decide about their current situation."

Exhibit 16
Severity of Incidents Reported in the Retrospective Year, 493 Women*

Incident Severity	Was R Forced to Have Sex in This Incident?		Total
	No	Yes	
Forced sex only; no injury, weapon or threat		470	470
Threat to hit with fist or anything else that could hurt her	879	264	1,143
Slapping, pushing, throwing something; No injury, no lasting pain	1,576	143	1,719
Punching, kicking; Bruises, cuts, or continuing pain	996	62	1,058
"Beaten up" or choked; Burns, broken bones, or severe contusions	358	33	391
Threatened weapon use; Head injury, loss of consciousness, internal or permanent injury	107	5	112
Weapon use or wounds from a weapon	71	10	81
Total	3,987	987	4,974

*Five women did not complete a calendar history.

By giving the Danger Assessment (DA) to both the AW and comparison samples, it was possible to take any instrumentation effect into account. However, for women interviewed as NAW, we did not ask the first seven DA questions, which all related to physical violence. In retrospect, it would have been better to have asked the NAW women questions 3 through 7, because they refer to abuse that ever happened, not just to abuse that happened in the past year. Many of the women interviewed as NAW had been abused by an intimate partner in previous years (see Screening Results, page 34 above). Unfortunately, we realized this only when data collection was half complete and it was too late to change.

Type of Union. Women's lives are often complicated. A simple interview question may not capture this complexity. Therefore, the CWHRS questionnaire provides several

opportunities for a woman to tell us about her relationships and her abuser(s). First, she is asked her marital status, and then we define intimate partner and ask her questions about that person. If she has more than one intimate partner, we ask her to tell us about the one "you currently spend the most time with and feel closest to." Later in the questionnaire, after asking her a series of questions about any violence that may have happened at the hands of an intimate partner in the past year, we ask her to tell us about the person responsible for the most recent incidents. Finally, we asked whether that person had been responsible for all the incidents, and if not, we asked her to choose the abuser she wanted to talk about. For a maximum of three people, then, we asked each woman the following questions: whether the relationship was "current or former," "what is Name's relationship to you?", and the length of the relationship.

Research often uses marital status as an indicator of the type of relationship between individuals, with "ex" or "former" unions indicating an estranged relationship, and "co-habitation" indicating an intimate relationship in which the partners are not married. In the CWHRS, we found that these constructs did not accurately reflect women's lives and relationships. A woman's response to questions about her marital status does not necessarily describe her relationship with her closest intimate partner, and her relationship with her closest intimate partner does not necessarily describe her relationship with the intimate partner who is abusing her.

In general, research on intimate partner violence that assumes that "marital status" or "co-habitation" reflects the relationship with the abusing partner might well be misleading or incorrect. In addition, we found that it helped establish rapport when we asked women to tell us about the real circumstances of their lives, without forcing them into pre-determined categories. For example, a woman might tell us that her marital status is married, but then tell us that her closest intimate partner is not her husband, but a boyfriend, a same-sex partner, or a "current ex-boyfriend." An ex-boyfriend who is stalking the woman may not be the partner she "feels closest to."[8]

A standard "marital status" question (single, married, commonlaw marriage, separated, divorced, widowed and other) was included in the CWHRS questionnaire, so that the findings may be compared to other research. However, we interpret the women's answer to this question as an indicator of how she presents herself to the world, not as an accurate or complete description of her intimate partner circumstances.

Though we realize that "commonlaw marriage" is not a legal status in Illinois, we included it among the choices, in case there would be women who presented themselves to the world in this way. In fact, a substantial proportion (18%) of the 159 Latina/Hispanic women in the sample described themselves as being in a commonlaw marriage (unión libre), compared to only one of the 467 African/American/Black women and one of the 66 white or other women. Thus, of the 31 women who said that their marital status was commonlaw marriage, 29 were Latina/Hispanic.

Many women responded differently to the Marital Status item and to the immediately-following specific question about her intimate partner and her relationship with that person, which had the following lead-in language:

Now I need to ask you some questions about your husband, boyfriend or

girlfriend, sex partner or other intimate partner. By "intimate partner" we mean a person you are or were romantically or sexually involved with, either currently or in the past year. If you have or had more than one intimate partner, please tell me about the one you currently spend the most time with and feel closest to.

This language was developed over many trials and drafts, and with considerable input from the multi-cultural Erie Advisory Group.

Abusing Partner (Name, Name2, Name3). In Section J, we remind the woman of our definition of intimate partner, and ask her whether she has experienced any of eleven kinds of physical violence or violent threat by any intimate partner in the past year. If her answer is "yes" to any of the incident types, we ask her whether the person "who did this to you" is the same as the intimate partner she told us about earlier. If not, we ask who the responsible person was. Finally, we ask, "thinking about all of the incidents that occurred in the past year, was the person we have been talking about responsible for ALL of them?" If her answer is "no," we ask her about these additional intimate partners and ask her to choose one partner to discuss for the remainder of the interview. We say the following:

> For the next series of questions, we need to pick just one of them to talk about. Please choose the person responsible for the MOST SERIOUS of the incidents we have been talking about, or the INCIDENT(S) THAT BOTHERED YOU THE MOST. Which person is that?

For the sake of privacy, we asked the woman to tell us how we should refer to this person for the rest of the interview. The person was identified as "Name" in the questionnaire, but the interviewer substituted the woman's name choice whenever "Name" appeared.

Thus, for the 208 women who interviewed as NAW, "Name" is the partner she was "closest to" at the time of the initial interview. For the 497 women who interviewed as AW, "Name" is an intimate partner who was abusive in the past year, and who may not be the partner they were closest to. The follow-up interviews gathered information about Name over the one-year tracking period. During the first follow-up interview, the woman also had an opportunity to discuss additional intimate partners responsible for violence against her, and to choose one of these as "Name2." At the second follow-up interview, she was asked about Name and Name2 (if any). And given an opportunity to discuss a third abusive intimate partner, "Name3."

Relationship and Co-Residence. The CWHRS interview asked separate questions about the woman's relationship and her living arrangements with Name. In addition to the semi-open-ended question describing the relationship with Name, we asked an extensive series of questions (Section D) about the people living in the woman's household at the time of the initial interview. Of the 704 women who responded, 428 said they were not living with an intimate partner, and another eight women said that they were living with an intimate partner who was not Name (the abusive intimate partner). Thus, 436 (62%) were not living with their intimate partner (Name) at the time of the initial interview.

This, however, varied by the woman's relationship with Name (Exhibit 17). Of the

156 husbands, 124 (79%) were living in the same household with the woman, and of the 36 commonlaw husbands, 31 (86%) were living in the same household. However, only 10 of the 17 same-sex partners (59%) and 87 of the 339 boyfriends (26%) were living in the same household as the woman.

Exhibit 17
Relationship with Name and Living Arrangements at Initial Interview

Relationship with Intimate Partner (Name)	Does Intimate Partner (Name) Live in Same Household with the Woman?*			
	No	Yes	Not Name**	Total
Husband	32	124	0	156
Ex-husband	7	3	1	11
Commonlaw husband	5	31	0	36
Ex-commonlaw husband	10	2	1	13
Boyfriend	251	87	1	339
Ex-boyfriend	85	6	3	94
Same-sex partner	7	10	0	17
Ex-same-sex partner	1	1	0	2
Friend	11	1	1	13
Ex-friend	0	0	1	1
Fiancé	4	3	0	7
Ex-fiancé	1	0	0	1
Child's father	9	0	0	9
Sex partner, lover, associate	4	0	0	4
Missing	1	0	0	1
Total	**428**	**268**	**8**	**704**

*Name is the closest intimate partner, or the abusive intimate partner.

**The woman lives with an intimate partner who is not Name.

Women who described their relationship as "ex" or "former" were considerably less likely to live in the same household with that partner (27% of ex-husbands, 15% of ex-commonlaw husbands, 6% of ex-boyfriends and half of the former same-sex partners). In addition, very few (12%) of the 33 women who used a different category to

describe their relationship, such as friend, fiancé or child's father, lived in the same household as Name.

In addition to the household "inventory" questions, the CWHRS questionnaire included a series of detailed questions about the woman's living arrangements with Name in the past year. Of the 697 women who responded, 37% said they were "living with" Name at the time of the initial interview, and 27% had never lived in the same household as Name (Exhibit 18). Just as there were differences across racial/ethnic groups in women's marital status, there were also differences in women's living arrangements with their intimate partner. It was much less common to have never lived with the Name for Latina/Hispanic women (11%) compared to African/American/Black women (32%) or white or other women (20%).

Exhibit 18
Living Arrangements with Name in the Past Year, by Race/Ethnicity

Living Arrangements with Name in Past Year	Racial/Ethnic Group			
	African/ American/Black	Latina/ Hispanic	White or Other	Total
Lived with Name the entire year	20.5%	60.5%	48.4%	32.0%
Recently moved in with Name	4.5	6.4	3.1	4.7
Lived with Name earlier in the year, but now living apart	37.8	15.9	20.3	30.7
Lived with Name in prior years	3.9	6.4	7.8	5.0
Never lived with Name	33.3	10.8	20.3	27.5
Total	100.0% (463)	100.0% (157)	99.9% (64)	99.9% (697)

Thus, the CWHRS sample included many women who were experiencing violence at the hands of an intimate partner, but who were not "married to" and had never "co-resided with" that partner. These women would not have been included if the CWHRS sample had used marital status or co-residence as criteria for being in an intimate relationship. Since questions about intimate relationships are sensitive, and because there are cultural and racial/ethnic differences in how women may describe these relationships to a stranger such as an interviewer, we believe that it is very important to provide many opportunities for the woman to tell us about her relationship, and to avoid constraining language as much as possible. Otherwise, women in non-traditional intimate relationships will be systematically excluded.

Estrangement and Leaving the Situation. The CWHRS design placed attempts to leave and estrangement in a context of lethal as well as sublethal outcomes, anchored with other occurrences in time, as one aspect of a total configuration of numerous factors. The calendar history tracked estrangement or leaving the relationship, including separation, threats to leave and relationship termination during the profile year. In addition, women were asked detailed questions about whether they had left or tried to leave the abuser in the past year, the reasons they left or tried to leave, whether they returned, and their reasons for returning. The relevant dates for these events were entered into the calendar.

The questionnaire contains three major sources of information relevant to estrangement: whether the woman said her relationship with her partner was current or former, her description of the relationship, and her answer to a series of questions about whether she or her partner had "left, or attempted to leave" the relationship in the past year. In addition, in many semi-open-ended questions throughout the questionnaire and in the calendar history, women were given opportunities to tell us about leaving the relationship. These questions received meticulous attention from those collaborators who had experience working with women in domestic violence situations. We attempted to capture the complexity of each woman's situation, without constraining her response to an overly simplistic set of questions.

For example, a woman might tell us that the relationship is former, although Name may believe that it is current, and be using violence or harassment to force her to change her mind. Even though the relationship may have ended, the woman may still be in contact with Name. Especially when Name is "my child's father," there are many opportunities for continued contact in a relationship that has ended. A woman may have a new intimate partner while still being threatened or attacked by an ex-partner.

Only 17% of the 705 women interviewed in the CWHRS described the relationship with their intimate partner (Name) as an "ex" type of relationship, including 11 (2%) ex-husband, 13 (2%) ex-commonlaw husband, 94 (13%) ex-boyfriend, two (0.3%) ex-same-sex partner, and one each ex-friend and ex-fiancé (Exhibit 19). However, 242 women (34%) said that their relationship was former. Thus, it is important to look at the combination of both variables to get an accurate idea of the woman's view of her relationship.

Women were asked a series of questions about whether or not they had attempted to leave the relationship or stayed away in the past year. (There was no question about any "break-up" that may have happened more than a year ago.) We first asked, "In the past year, did you leave or stay away from Name or ask Name to leave or stay away from you?" If she said that she had, we asked when this had happened, so that the dates could be entered into the calendar history. We also asked a semi-open-ended question about her reasons for leaving or asking Name to leave, whether she had returned to the relationship, if so, when that had happened and her reasons for returning. Of the 699 women who responded, 291 (42%) had left in the past year (Exhibit 20).

This again demonstrates the necessity of asking women detailed questions about their relationship, and allowing a woman to give us responses in her own words. Of the 459 who said that their relationship was current, 197 (43%) had left or attempted to leave

the relationship in the past year, and 14 of the women who said that their relationship was former had not left. Twelve of these 14 women had left Name over a year before the initial interview, though Name was still threatening or attacking them. In the other two cases, Name had left them. For example, one man had gone to work in Mexico a month before the interview.

Exhibit 19
Woman's Relationship with her Intimate Partner (Name)

Relationship	Current Relationship?		
	Yes	No	Total
Husband	139	17	156
Ex-husband	0	11	11
Commonlaw husband	34	2	36
Ex-commonlaw husband	3	10	13
Boyfriend	255	84	339
Ex-boyfriend	4	90	94
Same-sex partner	13	4	17
Ex-same-sex partner	0	2	2
Friend	5	8	13
Ex-friend	0	1	1
Fiancé	6	1	7
Ex-fiancé	0	1	1
Child's father	2	7	9
Sex partner, lover, associate	0	4	4
Missing	2	0	2
Total	**463**	**242**	**705**

Length of Relationship. Each woman was asked for her best estimate of the length of her relationship with Name. When a woman said that the relationship had lasted over a year, she was asked, "how long ago did it start?" Women who said that their relationship had lasted less than a year were asked the specific date (month and year) that the relationship had started, so that this information could be added to the calendar history. Women in a relationship that had ended or begun in the past year were also asked to tell us the specific dates, so that we could add them to the calendar.

Exhibit 20
Leaving the Relationship in the Past Year

In the past year, did you leave or stay away from Name or ask Name to leave or stay away from you?	Current Relationship?		
	Yes	No	Total
Yes, left or stayed away	109	182	291
Yes, asked Name to leave or stay away	27	31	58
Asked, but Name refused	61	13	74
No	262	14	276
Total	459	240	699

Whether they interviewed as AW or NAW, many women were in the process of ending or beginning a relationship at the time of the interview, and it was not easy for them to us the exact date it had started and ended. Intimate relationships do not always have a definite beginning or ending date, but progress through "off and on" stages over a period of time. There may be several "break-ups" before the final end to the relationship. In retrospect, we realized that our questions about length of the relationship and leaving the relationship had been confusing. We should have more clearly defined what we meant by "ended" and "started." The concept of "ended" was particularly confusing for women who had left or tried to end the relationship, but the partner was still trying to convince her to continue the relationship.

For example, when a woman was in a former relationship that had lasted over a year, we asked "How long had you been in this relationship when it ended?" and then, "How long ago did it start?" However, the relationship may have started 20 years ago and ended five years ago, though the woman was still being stalked and attacked by the former partner. In this situation, the woman might say that the length of her relationship with Name had been 15 or 25 years, depending on her interpretation of the question. There were four interviews in which it could not be determined whether the woman meant to say "years since the beginning of the relationship to now" or the "length of the relationship from the beginning to its end."

The relationship between the woman and Name had often lasted a significant period of time, whether the woman and her partner were living together or not at the time of the initial interview (Exhibit 21). Fewer than a fifth of the relationships had lasted 12 months or less, and a third had lasted five or more years. We did not ask women to subtract time for any temporary breaks in the relationship that may have occurred in previous years. We did, however, ask about leaving or attempting to leave the relationship, and returning to the relationship, in the previous year (or since the last interview). This was not related to the length of the relationship (Exhibit 22).

Exhibit 21
Length of Relationship with Name or Closest Intimate Partner

Relationship Length	Living in the Same Household?		
	Yes	No	Total
One year or less	26.2%	8.4%	19.2%
13 months to two years	21.0	16.4	19.2
25 months to three years	13.1	13.5	13.2
37 months to five years	13.8	18.5	15.6
61 months to 15 years	20.1	29.5	23.8
181 months to 40 years	5.8	13.8	9.0
Total	100.0% 428	100.0% 275	100.0% 703

Exhibit 22
Length of Relationship and Leaving in the Past Year

In the past year, did you leave or stay away from Name or ask Name to leave or stay away from you?	Length of Relationship					
	One year or less	13 Months to 2 Years	25 Months to 3 Years	37 Months to 5 Years	61 Months to 15 Years	181 Months to 40 Years
Yes, left or stayed away	42.9%	39.0%	52.7%	40.4%	40.4%	36.5%
Yes, asked Name to leave or stay away	7.5	11.9	4.4	4.6	12.7	3.2
Asked, but Name refused	12.0	8.8	7.7	17.4	7.8	11.1
No, did not end or try to leave relationship	37.6	40.4	35.2	37.6	39.2	49.2
Total	100.0% (133)	100.0% (136)	100.0% (91)	100.0% (109)	100.5% (166)	100.0% (63)

Racial/Ethnic Group. An article by Jeff Mellow (1996), published just as the collaborators were developing the initial questionnaire, expressed the concern that many of us had about how to phrase our questions on race and ethnicity:

> The racial and ethnic identification of people has long been an integral part of criminal justice research and continues to this day to be a frequently used method for categorizing subjects. Unlike other social science variables, however, race and ethnicity are less rigorously measured. . . . The same stringent standards researchers apply to other variables need to be applied to the race variable. . . . A racial and ethnic classification system that pigeonholes entire segments of the population obfuscates true understanding.

Most of the collaborators agreed with Mellow that racial categorizations are "invalid." However, one of the goals of the project was to be sure that the sample included enough women of color so that we could examine whether or not high-risk factors for one group were different from high-risk factors for other groups. To do this, we had to have some measure of racial/ethnic group.

After many discussions, drafts, and feedback from the Erie Advisory Group, we finally decided to ask an open-ended question, "How would you describe your race or ethnicity?" The standard categories (see Exhibit 14, above) were included in the questionnaire, for the interviewer to check, but the interviewers were instructed not to read the categories to the woman being interviewed. Almost all of the 703 women who responded gave an answer that corresponded with a standard Census category, but some gave us more specific answers (African/American/White from Nigeria; Creole, Mulatto) and a few (0.7%) refused or gave us answers such as Me, Poor, American, or Passionate.

Physical Health. For reasons of confidentiality, the collaborators decided not to seek access to the medical records of CWHRS women. Therefore, we needed to add self-report items on mental and physical health to the questionnaires. Recent research by Ferraro and Farmer (1999:303) shows, however, that "self-reported morbidity is equal or superior to physician-evaluated morbidity in a prognostic sense." In fact, for African/American/Black respondents, Ferraro and Farmer (1999) found that physician-evaluated morbidity was not related to either self-assessed health or to mortality.

The CWHRS collaborators searched diligently and long for a "gold standard" pencil-and-paper inventory of physical and mental health status that would be brief enough to be included as one of the many indicators in our questionnaire, but failed to find one. In early drafts and tests of the questionnaire, we considered the Medical Outcomes Study (MOS) (Hays, *et al.*, 1995; Stewart, *et al.*, 1988), the items used in the Canadian Violence Against Women Survey (Canadian Centre for Justice Statistics, 1993), the items used in the National Violence Against Women Survey in the United States (Tjaden, 1996), and others (see McDowell & Newell, 1996). All of these were too long, detailed and time-consuming for our purposes.

In the end, the CWHRS developed a combination of general questions on physical and mental health from the MOS, and open-ended questions about the specific physical or mental condition(s) that "limits you" (see Section E of the Initial Questionnaire,

Appendix II). These questions begin with a five-point scale rating of "general health" followed by a comparison to "a year ago," and include a question about health care visits in the past year, an item rating the degree to which health problems had interfered with "normal social activities" in the past month, two questions rating bodily pain in the past month, and a series of six semi-structured questions about any physical or mental condition that may have limited R in the past month. There were probes for specific dates, so that any health changes could be noted in the calendar history.

Following the example of Kington, *et al.* (1997) and Hays, *et al.* (1995), we developed two scales based on answers to the MOS questions. The General Health Perceptions scale was based on four questions (E1, E2, E3 and E11 in the initial questionnaire), each in a five-point ordinal scale. The Health Functioning scale was based on questions about whether physioal or emotional health problems interfered with or limited R in her daily activity in the past year (E4, E7, E10, and E12). E4 and E7 were dichotomies (yes or no choices), and E10 and E12 were on a five-point ordinal scale. To create the Health Functioning scale, we recoded questions E10 (interference of physical or emotional problems) and E12 (interference of pain) into dichotomies as well, with all positive answers from "a little of the time" to "all of the time" counting as "yes" and other answers counting as "no." We then summed the "yes" responses across the four questions. This produced a scale ranging from 0 (not limited) to 4 (limited). To score a 3 or 4 on this scale, a woman had to respond that she was limited in both physical and mental health.

Pregnancy. Keeping in mind the methodological problems in measuring pregnancy and abuse (Ballard, *et al.*, 1998; Petersen, *et al.*, 1998), the CWHRS attempted to access the woman's pregnancy and pregnancy outcome(s) at every point during the calendar year. Within the "health" section of the questionnaire, we asked each woman whether she was pregnant now or in the past year, and then asked her for her due date if she was pregnant now and the date the pregnancy ended if she had been pregnant in the past year. For women who had been pregnant, we ask them "the outcome of that pregnancy," and read four choices: live birth, miscarriage, abortion and stillbirth. Of the 705 interviewed women, 127 women who told us that they had been pregnant in the past year, and only one of the 127 did not tell us about the outcome of the pregnancy (90 live births, 22 miscarriages and 14 abortions).

In addition, the "household" section of the questionnaire, an inventory of everyone living with the woman, asked her if there had been any change in the past year, such as "a new baby born," and if so, the date that happened. This date was added to the calendar. In the section about Name, the woman was asked whether or not she has had any children with Name, and where these children are living. One of the Danger Assessment questions asks the woman if Name had ever "beaten you while you are pregnant."

Drug and Alcohol Use. Instruments intended to assess the risk of lethal outcome in intimate partner violence often include alcohol use. Hart's (1988) list, based on clinical experience, includes drug or alcohol consumption, Straus's (1991) list, based on the 1985 National Family Violence Survey, includes whether the abuser drunk more than

three times a year or abused drugs in the past year, and the Danger Assessment (DA), a forced choice 15-item questionnaire designed to be completed by a professional working with battered women (Campbell, 1986, 1992), includes questions about the partner's drug use and whether he is drunk "almost every day."

The CWHRS initial questionnaire, in the section on physical and mental health, contained a series of six questions about the woman's alcohol and drug use, introduced by, "Have you ever had a problem with alcohol?" or "Have you ever had a problem with drugs? By drugs, I mean 'uppers' or amphetamines, speed, angel dust, cocaine, 'crack,' street drugs or mixtures." A "yes" response to this first question was followed by asking "Is this currently a problem for you?" and "Did you ever receive treatment for this problem?" The only questions about the intimate partner's use of alcohol or drugs were in the Danger Assessment section. We asked, "Does (name) use drugs? By drugs, I mean 'uppers' or amphetamines, speed, angel dust, cocaine, 'crack,' street drugs or mixtures," and "In your opinion, does (name) now have or ever had an alcohol problem?"

Because we were concerned about having enough detail about alcohol and drug use so that CWHRS results would be comparable to other research, and because the initial interview required less time than it had in the pilot study, we added more detailed questions to the first and second follow-up questionnaires (Appendix II). Instead of the six questions asked in the initial interview, we substituted a series of nine questions, a shortened form of the questions used by the National Alcohol and Family Violence Survey (Kaufman-Kantor, *et al.*, 1994). These consist of sets of questions on alcohol, marijuana and other drugs, beginning with, "During the last month, how often did you [drink alcohol/ use marijuana/ use drugs], on average." The alcohol question was followed by asking about the number of drinks the woman had on a typical day. A follow-up question specifying any special days when she drinks or uses drugs, for example weekends or paydays, was intended to capture information corresponding to the calendar history. Finally, we ask about treatment for an alcohol or drug problem "since the last interview."

A series of seven questions, similar to the questions asked about the woman, were asked about the alcohol or drug use of Name, Name2 and Name3 in the two follow-up interviews. (In the first follow-up, see items C12 to C18 about Name and items L21 to L27 about Name2). We continued to ask the two Danger Assessment questions about alcohol and drugs.

In addition to the questions in the questionnaire, we asked about alcohol or drug involvement in the calendar history. For each incident mentioned, we asked, "Were you or Name drunk during the incident?", "Were you or Name high on marijuana during the incident?" and "Were you or Name using other drugs, such as cocaine, crack, heroin or speed during the incident?" Finally, for women who interviewed as AW, in the help-seeking and intervention section (Section M of the initial questionnaire), there are also some questions about alcohol and drug abuse treatment or counseling, on the part of the woman and Name.

Mental Health: PTSD. The Women's Health Risk Study interview instrument used a 17-question tool (Section K in the initial interview; see Appendix II) to analyze post-

traumatic stress disorder (PTSD). This tool is called the PTSD Symptom Scale (PSS-I) Foa *et al.* (1993). The questions are based on 17 criteria used to define PTSD in the DSM III-R. These questions are divided into three criteria: four items relate to intrusive or re-experiencing symptoms, seven to avoidance symptoms, and six items to arousal symptoms. PTSD diagnosis requires the presence of six or more of these symptoms – at least one of the four intrusive or re-experiencing items, three of the seven avoidance items, and two of the six arousal items.

In a study done by Foa *et al.* (1993), the Cronbach's Alpha for the entire scale was 0.85. Alpha coefficients for the symptom cluster subscales were reexperiencing 0.69, avoidance 0.65, arousal 0.71. The test retest correlation for the entire scale was found to be $r(93) = 0.80$, $p<.001$. While for the subscales it was reexperiencing 0.66, avoidance 0.76, and arousal 0.77. Interrater reliability was found to have a Kappa coefficient for the diagnosis of PTSD of 0.91. Sensitivity was found to be 88% while specificity was 96%. Overall, the PSS-I correctly identified PTSD status of 94% of the subjects.

There are two important considerations in measuring PTSD. First, PTSD is properly a clinical assessment, should be administered by a psychologist, and no series of questions in a questionnaire can provide a definitive measure. This constraint applies to the tool used in the CWHRS questionnaires, as it does to any other questionnaire assessment of PTSD. None of them is a substitute for a clinician's detailed interview.

The second consideration is that PTSD is not defined merely by a group of symptoms, but rather by the relation of these symptoms to a specific traumatic event or group of events (Davidson & Foa, 1991). Further, the diagnostic criteria for PTSD were developed for people who had experienced a single traumatic event, and may not apply so closely to the continuing aspects of intimate partner violence (Herman, 1992118-122). Therefore, the PTSD section of the questionnaire immediately follows Sections H and J, in which women are asked about incidents of harassment and physical attack in the previous year. For the women who answered "yes" to any item in H or J, we introduce the PTSD questions by saying,

> Many women find that these kinds of incidents are stressful. Thinking about the incidents that we just talked about, please tell me if you have been bothered by any of the following DURING THE PAST MONTH.

For the women who answered "no" to every H and J question and who therefore interviewed as NAW, it was difficult to decide how to gather comparable information on PTSD. After considering many alternative solutions, the collaborators decided to use the following introduction to the PTSD section for the NAW women,

> Below is a list of problems or complaints that people sometimes have in response to stressful life experiences, such as car accidents, death or serious illness in the family, or loss of a job. Thinking about a stressful event that may have happened to you, please tell me if you have been bothered by any of the following DURING THE PAST MONTH.

In the CWHRS, of the 690 women who responded, the Cronbach's Alpha (standardized item alpha) was .7908 for the re-experiencing items, .8311 for the arousal items, and .8318 for the avoidance items. For the entire 17 items, Cronbach's standardized item

Alpha was .9184. This is somewhat higher than the alpha obtained by Foa, *et al.* (1993), which was .85 for the entire scale. Reliability of the total scale was high across racial/ ethnic groups. It was .9213 for African/American/Black women, .9038 for Latina/Hispanic women, and .9138 for white or other women.

Of the 690 women, 53% had a PTSD diagnosis, and 13% answered "yes" on 16 or 17 of the PTSD items. The 153 Latina/Hispanic women were more likely (65%) to have a PTSD diagnosis than African/American/Black women (50%) or white or other women (58%).

Mental Health: Depression and Suicidal Feelings. As an indicator of depression, we used four items from the MOS asking the woman to tell us about how she felt "during the past month" (Section E , questions 21, 22, 23 and 24). Each item required a rating on a five-point Likert scale from "none of the time" to "all of the time." They included feeling "downhearted and blue," "so down in the dumps that nothing could cheer you up," being "a happy person," and feeling "calm and peaceful." One of the 705 women interviewed in the clinic/hospital sample had to leave before reaching that section, and did not answer any of the four questions. The other 704 women answered all four questions.

The Cronbach's Alpha for the Depressed Feelings scale, a summary variable created from these four items, which totals whether the woman answered "most of the time" or "all of the time" to the two negative questions, and whether the woman answered "none of the time" or "a little of the time" to the two positive questions, was -.6817. Of the 704 women who answered, 303 (43%) had zero "depressed" responses to these four items, while 68 women (10%) had four "depressed" responses.

A second indicator of depression was taken from women's answers to a question about their health "during the past month," in which they were asked, "have you been limited in the amount or kind of activity you can do at home, at work or at school because of an emotional condition, such as depression, nervousness or panic attacks?" Of the 262 women (37%) who said "yes," 194 (74%) mentioned "depression" in response to the follow-up question, "What is the main emotional condition that limits you?" Whether or not the woman mentioned depression was correlated moderately with each of the four items capturing depressed feelings, specifically (.415 with "feeling blue," .377 with"feeling down," -.387 with "being happy," and -.341 with "feeling calm"), and .434 with the summary Depressed Feelings scale. These correlations and the Cronbach Alpha results were similar within each of the three racial/ethnic groups.

There were 32 women who scored "0" on the Depressed Feelings scale, but who mentioned depression as an emotional condition that bothered them. Most of these women scored "0" because they said that they were depressed only "some" of the time and happy "most" of the time. However, many of them also said that they were "bothered by an emotional condition," which they identified as depression, "all" or "most" of the time. Therefore, we created a second summary indicator of depressed feelings, which includes whether or not the woman told us that she was bothered by depression. The Depressed Feelings II scale ranges from zero to five. A woman scored five if she answered "all" or "most" of the time to both negative questions, "none" or "a little" of the time to both positive questions, and mentioned depression as an emotional condition.

A third indicator of depression was one of the Danger Assessment questions (N14), "Have you ever threatened or tried to commit suicide?" A positive answer to this question is correlated moderately with whether the woman mentioned "depression" as a emotional condition bothering her in the past month (.309) and with the Depressed Feelings scale (.300). It is correlated somewhat less with feeling blue (.297), feeling down in the dumps (.294), being happy (-.281) and feeling calm (-.219).

There were 41 women who said that they had "ever" threatened or tried to commit suicide, but who scored zero on the Depressed Feelings II scale. There could be several reasons for this. First, N14 asks whether the woman had "ever" threatened or attempted suicide, and the Depressed Feelings questions refer to how she had been feeling in the last month. Second, since the Depressed Feelings questions come at the beginning of the questionnaire and the suicide question comes at the end of the questionnaire, it is possible that women felt more comfortable with their interviewer and more able to answer such a sensitive question by the end of the interview period. Since we do not know which was the case, we analyzed the suicide question separately from the Depressed Feelings scales.

Partner's Physical and Mental Health. Other than alcohol or drug use and treatment, there is little in the CWHRS questionnaires about the abusive partner(s)'s physical health. There is one question about suicide, "Has (name) ever threatened or tried to commit suicide?" in the Danger Assessment.

Occupation and Income. The primary intention of the questions on occupation and income in the CWHRS was to find out about the resources a woman might have that would help her deal with abusive situations. Socioeconomic categorization was only a secondary goal. Thus, the collaborators phrased the occupation question (Section B, initial questionnaire) to tap the degree to which the woman had contacts outside of the home on a regular basis. The income questions were placed at the end of the other social support network questions (Section F, initial questionnaire). We were most interested in knowing whether or not the woman had a source of funds that she herself controlled. Therefore, we used the following introduction:

> One important source of support, for many women, is the amount of money they have that is under their own name, or that they can control. This might include income from a job outside the home or from working at home, help from family, assistance from AFDC or Disability, or any other kind of income. Do you have money or income of your own that you control?

This wording produced very few refusals; 695 of the 705 women responded to the question about their personal income. In addition, it produced three separate measures -- whether the woman has any personal source of income (an indicator of her resources), the amount of her personal income, and her household income (for comparison with other populations).

Immigrant Status and Public Aid. The academic researchers among the collaborators thought it was important to include specific questions about immigrant status (for example, "are you a U.S. citizen?" and "do you have a green card?") and whether or not the woman was receiving public assistance. Although we developed and tested sets of

questions covering both kinds of information, in the end we decided to remove these questions from the questionnaires. The advocates and community workers among the collaborators made a strong case against it. They pointed out that immigration status is an extremely sensitive issue among immigrant populations, and public assistance is an extremely sensitive issue among public aid recipients. If we included either sort of question, they reasoned, we would not receive candid answers. In addition, such questions might make the woman suspicious of us, so that she would either end the interview or become reticent about what she would tell us in answer to later questions.

We decided, therefore, that the possible advantages of including such questions would be more than overshadowed by the possible disadvantages. We think that this decision, in combination with many other ways in which we strove to make the questionnaire and the interview process culturally sensitive, was in part responsible for the high degree of cooperation we received from the women we interviewed. Only five of the 705 women failed to complete the interview, usually because of time constraints involving their children or their doctor's appointment, and most questionnaire items had very few missing responses.

Although the questionnaire contains no direct question about immigrant status or public assistance, there were a number of opportunities for women to mention these issues. While these questions do not allow us to categorize all of the women according to their immigrant or public aid status, they do tap information that was more central to the purpose of the CWHRS -- they let us know if either of these issues was a factor in the abusive relationship, or a deterrent in the woman's help-seeking activities. In Section F of the initial questionnaire, we asked whether, "I hesitate to tell anyone about my problems because I am worried that the authorities, like DCFS or immigration, may find out," and in the open-ended responses to why she "decided not to contact" an agency, doctor or the police, women could cite "fear of immigration authorities." The questionnaire also contains many related questions, such as birthplace, whether the interview was in Spanish or English, "How long have you been living in Chicago or the Chicago area?", whether the woman agrees that, "It is difficult for me to ask for help because people don't always speak my language," and whether the woman mentions a "language barrier" as a reason that she decided not to seek help.

Resources and Social Support Network. The collaborators critically assessed a number of measures of Helping Network based on the Arizona Social Support Interview Schedule (ASSIS), including the Multidimensional Scale of Perceived Social support (MSPSS) (Zimet, *et al.*, 1988). We decided that these measures were too long and cumbersome to be used as one component of a long interview. (Again, in order to meet our goal that high-risk but under served women would not be excluded from the study, it was important to keep any obstacles of participation to a minimum. One such obstacle is the length of the interview.) In addition to the length of the ASSIS, however, the collaborators questioned its relevance to this population. In response to these problems, several collaborators worked together to develop a Social Support Network scale, consisting of 12 items (Exhibit 23). The Social Support Network scale had a reliability coefficient Alpha= .8359, which is consistently high for women in all three racial/ethnic groups,

.8087 for African/American/Black women, .8474 for Latina/Hispanic women, and .8568 for white or other women.

Exhibit 23
Percent Agreeing or Disagreeing to Social Support Network Questions

Social Support Network Item, by Type	Agree	Disagree
Acceptance and support		
F1. Someone I'm close to makes me feel confident in myself.	75.6%	24.4%
F2. There is someone I can talk to openly about anything.	75.0%	25.0%
F4. There is someone I can talk to about any problems in my relationship.	69.5%	30.5%
F5. Someone I care about stands by me through good times and bad times.	77.7%	22.3%
F7. Someone I know supports my decisions no matter what they are.	61.7%	37.9%
Tangible help in emergencies		
F6. I have someone to stay with in an emergency.	75.9%	24.1%
F8. Someone I know will help me if I am in danger.	85.6%	14.4%
F12. I have someone who will be there for me in times of trouble.	83.3%	16.7%
F13. I have someone to borrow money from in an emergency.	68.3%	31.7%
Access to and knowledge of resources		
F3. It is difficult for me to ask for help because people don't always speak my language. ("native" language)	9.7%	90.3%
F10. I would know where to tell a friend to get help if they were harmed or beaten by their partner.	70.5%	28.7%
F11. I hesitate to tell anyone about my problems because I am worried that the authorities, like DCFS or Immigration, may find out.	21.1%	78.4%

Of the 705 women, 687 (97%) answered all 12 SSN items, 13 women (2%) answered all but one item, three women answered seven, eight or ten items, and two did not answer any of the 12 SSN items. The mean number of answers in the "support" direction was 9.13 of the twelve items, the median was 10.0 and the mode was 12.0. Using factor analysis, we developed three sub-scales from the twelve support network items: access to and knowledge of resources (items 3, 10 and 11 in Exhibit 23, above), tangible help in emergencies (items 6, 8, 12 and 13), and acceptance and support (items 1, 2, 4, 5 and 7).

Of the 703 women who responded to any SSN question, 700 (99%) responded to all five "Acceptance and Support" questions, and three responded to four.[9] Similarly, 696 responded to all four "Emergency Help" questions, and six responded to three. One answered only one question, and was dropped from the Emergency Help subscale. Of the 703, 698 responded to all three "Access to Resources" questions, and two women responded to two of the three. One woman refused all three questions, and was dropped from the Access to Resources subscale.

In the pilot study, we had found that some women interpreted item F3 to mean that the people they might ask for help could not understand "where I am coming from." A follow-up probe was added to the questionnaire to distinguish between this kind of communication difficulty and language barriers. The Social Support Network scale uses the language barrier definition of this question.

There are slight differences in the score on the Social Support Network scale across racial/ethnic groups, with African/American/Black women scoring somewhat higher than others on average (Exhibit 24). Of the 465 African/American/Black women who responded, 310 (67%) said that they had at least ten areas of support, compared to 62 of the 159 (39%) Latina/Hispanic women and 32 of the 66 (48%) white or other women.

There was a large and significant (t test $p < .0001$) difference between the mean SSN scores of women who said they had (9.49) or did not have (5.53) a safe place to go, and this difference applied to women of each racial/ethnic group. On the other hand, the relationship between the woman's score on the Social Support Network scale and other indicators of her resources was not always simple (Exhibit 25).

Many of these other indicators of her resources are related to the SSN score only for a particular group of women. Whether the woman interviewed in Spanish or English seemed to be related to SSN score for the entire group of CWHRS women. However, since only two women who were not Latina/Hispanic were interviewed in Spanish, the appropriate comparison is for Latina/Hispanic women only. The mean SSN score was significantly (t test $p = .010$) related to the interview language for the Latina/Hispanic women.

In the same way, almost all of the African/American/Black and white or other women had lived in Chicago for many years, so the question only applied to the Latina/ Hispanic women. The same is true for the women who were homeless or living in a group home, except that this question applied only to African/American/Black women, for whom the difference between the average SSN score for women who were homeless or

in a group home versus women who were not was significant at the .0001 level.

Exhibit 24
Social Support Network Score and Racial/Ethnic Group

Support Network Score ("supportive" answers to 12 items)	Racial/Ethnic Group			
	African/ American/Black	Latina/ Hispanic	White or Other	Total*
No "supportive" answer	.0%	4.4%	.0%	1.0%
One item	.4	3.8	1.5	1.3
Two items	1.3	3.1	4.5	2.0
Three items	1.9	5.7	9.1	3.4
Four items	2.4	3.8	3.0	2.8
Five items	3.7	5.0	1.5	3.7
Six items	3.9	7.5	4.5	4.7
Seven items	4.5	9.4	7.6	6.0
Eight items	6.0	11.3	7.6	7.5
Nine items	9.2	6.9	12.1	8.8
Ten items	14.8	13.2	9.1	13.9
Eleven items	21.1	11.9	16.7	18.9
Twelve items	30.8	13.8	22.7	25.9
Total	100.0% (465)	100.0% (159)	100.0% (66)	100.0% (703)
Mean SSN score**	9.72	7.61	8.55	9.13

*Total includes 13 women who were multi-racial, or who refused to tell us her racial/ethnic group.
**T test p < .0001 for African/American/Black versus Latina/Hispanic women, and t test p = .061 for white or other women versus Latina/Hispanic women.

The specific categories of "employment" are differently related to the SSN score for the three racial/ethnic groups. Latina/Hispanic women who said their occupation was "homemaker" had a much lower SSN score than any other group, though the difference was not significant (6.46 versus 8.33 for all others combined; t test p = .002). African/ American/Black women who were unemployed had a lower average SSN score than women who had a job (t test p = .0001), or women who were students (t test p = .0001).

Exhibit 25
Mean Social Support Network Score, by Woman's Other Resources

Selected Resources	Racial/Ethnic Group			
	African/ American/Black	Latina/ Hispanic	White or Other	Total
Interview Language				
Spanish	*	7.10	*	7.00
English	9.72	8.61	8.75	9.52
Years Lived in Chicago				
Many years, or all her life	9.78	8.06	8.98	9.40
three to four years	*	5.61	*	6.33
less than three years	*	6.87	*	6.59
Woman's Employment				
Full or part time job	10.27	8.09	9.24	9.77
Homemaker	*	6.46	*	6.88
Student	10.49	8.93	*	9.97
Unemployed	9.22	8.37	8.23	9.01
Divorce acceptable in my family?				
Yes	9.69	8.07	8.56	9.27
No	9.81	6.79	8.76	8.72
Has a safe place to go?				
Yes	9.80	8.25	9.06	9.49
No	6.64	4.15	4.36	5.33
Homeless or in a group home?				
Yes	8.30	*	*	8.38
No	9.90	7.61	8.49	9.20
Any personal income she controls?				
Yes	9.71	7.94	9.11	9.34
No	9.76	7.07	5.90	8.36

*Mean not calculated, because there were fewer than ten cases in this category.

Latina/Hispanic women who said that divorce was acceptable in her family had a higher average SSN score than women who said it was unacceptable (t test p = .033), but for African/American/Black women and for white or other women, there was a slight and non-significant tendency in the opposite direction. For the entire sample, there was a significant relationship between whether the woman had a personal income that she controlled herself and her mean SSN score (t test p = .001). However, the relationship was nonexistent for African/American/Black women, small and nonsignificant for Latina/ Hispanic women, and strong and significant (t test p = .004) for white or other women.

Stalking and Other Harassment. The CWHRS uses the HARASS (Harassment in Abusive Relationships: A Self-Report Scale) instrument, developed by Daniel Sheridan, and tested and refined for this study by Daniel Sheridan, Richard Tolman, and other collaborators. The 19 HARASS items have a reliability coefficient of Alpha= .855. The mean HARASS score for the total sample was 4.23 of the 19 questions (Exhibit 26). The CWHRS African/American/Black women had a significantly (t test p <.0001) higher average score on HARASS (4.59), compared to the average score for the Latina/ Hispanic women (3.29). The average score for the white or other women (3.92) was also lower than for the African/American/Black women 4.59, but the difference was not statistically significant. The HARASS scale provides a reliable measure of harassment and stalking for each of the three racial/ethnic groups. The Alpha reliability coefficient for HARASS was .8704 for African/American/Black women, .8752 for Latina/Hispanic women, and .8769 for white or other women.

With 19 items, it is possible that HARASS actually contains several sub-scales. To check for this, we ran a factor analysis (principal component analysis), which found five components of the 19 HARASS items. These components are shown in Exhibit 26, with the "factor loadings" of each item within the given component. The higher the factor loading, the more strongly the item was linked to the other items in the component. We gave names to each component, reflecting what the combination of items seemed to measure. Some of these sets of items do seem to have a logical consistency, such as the nine items in the component we have called "Violent Stalking." However, the Alpha coefficient of the nine "Violent Stalking" items was only .8401, which is not an improvement on the Alpha of the total HARASS scale. Also, the Alpha coefficient of the "Violent Threats" component was only .4573. Therefore, we decided that the total HARASS scale would be a better measure to use, rather than any separate component of it.

Controlling Behavior. The five-item "Power and Control" scale from the *Violence Against Women* survey was administered in the initial and follow-up clinic/hospital interviews and the proxy interviews (Exhibit 27). Tested in a nationwide survey in Canada, it is similar to the Controlling Behaviors Index and the Tolman indices, with the advantage of being shorter. The reliability coefficient Alpha is .8164. Almost all of the 705 women interviewed answered all five questions, except that the question about "shared family income" was not applicable to 66 women (9.4%) who did not share a household income with an intimate partner. This was significantly (Chi square p = .013) more likely to be true for African/American/Black women (11.6%) than for Latina/Hispanic women (3.8%) or for white or other women (7.7%).

Exhibit 26
Components of HARASS

Components: HARASS Items		Factor Loading*
I. Violent Stalking		
	H6. Scared you with a weapon.	.639
	H12. Followed you.	.699
	H13. Sat in a car or stood outside your home.	.640
	H14. Destroyed something that belongs to you or that you like very much.	.692
	H15. Frightened or threatened your family.	.576
	H19. Threatened to kill you if you leave (don't come back).	.687
	H20. Showed up without warning.	.612
	H21. Made you feel like he(she) can again force you into sex.	.566
	H22. Frightened or threatened your friends.	.617
II. Violent Threats		
	H8. Threatened to kill him(her)self if you leave (don't come back).	.263
	H16. Threatened to harm the kids if you leave (don't come back).	.593
	H17. Threatened to take the kids if you leave (don't come back).	.646
III. Harassment		
	H9. Called you on the phone and hung up.	.224
	H10. Left threatening messages on the phone.	.487
	H18. Left notes on your car.	.605
IV. Cruel Punishment		
	H7. Threatened to harm your pet.	.504
	H11. Tried to get you fired from your job.	.257
V. Manipulation		
	H23. Agreed to pay certain bills, then didn't pay them.	.637
	H24. Reported you to the authorities for taking drugs when you don't.	.457

*See text for explanation.

Exhibit 27
Percent Answering "Yes" to Power and Control Scale Questions

Power and Control Item: "In the past year, an intimate partner . . .	Number (Total)*	Percent
. . . . was jealous and didn't want you to talk to other men (women).	487 (701)	69.5%
. . . . tried to limit your contact with family or friends.	337 (701)	48.1%
. . . . insisted on knowing who you are with and where you are at all times.	462 (700)	66.0%
. . . called you names to put you down or make you feel bad.	397 (701)	56.6%
. . . prevented you from knowing about or having access to family income, even if you asked.	245 (634)*	38.6%

*There were three to five missing responses to these items, and one woman told us that it was true, but "not in the past year." In addition, 66 women (9.4%) said that the final question was not applicable to them, because they had no shared income.

The CWHRS women were fairly equally distributed across the six Power and Control categories, from 17% who had no "yes" response, to 25% who answered "yes" to all five items. There was no relationship between the woman's racial/ethnic group and her score on the Power and Control scale (Exhibit 28). However, there was a difference for one of the individual questions. African/American/Black women were significantly more likely to say that their partner was jealous, with 75% of them answering "yes" to that question, compared to 59% of Latina/Hispanic women ($t = -3.974$; $p < .0001$) and 54 of white or other women ($t = -3.668$; $p < .0001$).

There was a relationship between HARASS and the Power and Control scale (Exhibit 29). The mean HARASS score for women who scored "zero" on the Power and Control scale was only 0.55, compared to 8.16 for women who answered "yes" to all five questions. The correlation between the two is .721 ($p < .0001$). The four individual Power and Control items are also significantly correlated with the total HARASS score. The correlation with the "jealous" item was .761; it was .810 with the "limit control" item; it was .777 with the "knowing where you are" item; it was .758 with the "called you names" item; and it was .683 with the "family income" item. Even though the woman's score on HARASS and her score on the Power and Control scale were strongly correlated with each other (Pearson $r = .721$, $p < .01$), they were not always correlated in the same way

with the other key variables measured in the CWHRS (Exhibit 30).

Exhibit 28
Name's Controlling Behavior is Not Related to Racial/Ethnic Group

Power and Control Scale ("yes" answers to 5 items)	Racial/Ethnic Group			
	African/ American/Black	Latina/ Hispanic	White or Other	Total
No "yes" answers	14.4%	19.5%	27.7%	16.8%
One item	13.3	17.6	15.4	14.5
Two items	13.0	11.9	9.2	11.8
Three items	15.3	16.4	10.8	15.1
Four items	18.1	13.2	15.4	16.7
Five items	26.9	21.4	21.5	25.1
Total	100.0% (465)	100.0% (159)	100.0% (65)	100.0% (698)

Exhibit 29
Relationship between HARASS and Controlling Behavior

Score on Power and Control Scale	Mean Score on HARASS	Number
Zero	.55	120
One	1.40	100
Two	2.46	83
Three	3.54	106
Four	6.25	117
Five	8.16	175
Total	**4.20**	**701**

Exhibit 30
Correlations of Power/Control Scale and HARASS with Other Factors

Variable	Power/Control Score	HARASS Score
Depressed Feelings II	-.356**	.319**
PTSD diagnosis	.448**	.420**
Suicide attempt or threat	-.052	-.031
General health	-.147**	.123**
Pregnant now or in past year	-.064	-.068
Had a problem with alcohol	.246**	.252**
Had a problem with drugs	.323**	.308**
Household income: amount	-.114**	-.053
Had some personal income	-.054	.003
Personal income: amount	-.118**	-.031
Unemployed at initial interview	.220**	.170**
Homemaker at initial interview	-.067	-.096*
Had a high school education	-.119**	-.134**
Lived in Chicago less than 3 years	.045	-.008
Had a safe place	-.103*	-.046
Homeless or in a group home	.210**	.169**
Total Social Support Network Scale	-.269**	-.182**
Subscale: Access to resources	-.114**	-.092*
Subscale: Help in emergencies	-.245**	-.187**
Subscale: acceptance and support	-.245**	-.144**
Her age, in six categories	.050	.000
Length of relationship, six categories	.041	.052
Name uses drugs?	.361**	.384**
Name has an alcohol problem	.351**	.332**
Name has threatened or tried suicide	.263**	.370**
Did she leave or try to leave last year?	.293**	.340**
Her children, total	.139**	.114**
Her children under age 18	-.032	.015
Has a child who is Name's stepchild	-.038	.014
There is a loaded gun in the house	.058	.149**

**p < .01; * p < .05

Women with a higher household income or a higher personal income tended to have a lower score on the Power and Control scale, but there was no association with the HARASS score. In addition, women who said they had a safe place where they could go tended to have a lower Power and Control score, but there was no correlation with the HARASS score. The Power and Control score and the HARASS score were related in the same way to most other factors, however.

In addition to the Power and Control scale, two of the Danger Assessment (DA) questions, asked at the very end of the interview, were related to the partner's controlling behavior. These questions were, "Is your partner violently and constantly jealous of you?" and "Does your partner control most of your daily activities?" Unfortunately, these two questions were asked only of women who had interviewed as AW. For these women, however, there was a close association between the answers to these questions and answers to the Power and Control and HARASS questions.

There was a strong, though not perfect, association between women answering "yes" to the Power and Control jealousy question and answering "yes" to the DA jealousy question (Gamma = .870; $p < .0001$). Of the 411 women who answered "yes" to the Power and Control question, 96% also answered "yes" to the DA question, and of the 77 women who answered "no" to the Power and Control scale question, 86% answered "no" to the DA question. In addition, women who answered "yes" to the DA jealousy question were much more likely to score 5 out of 5 on the Power and Control scale (46% versus 17%), and the mean score on the HARASS scale was 7.18, compared to 3.11 for women who answered "no" (t test $p < .0001$).

In the same way, women who answered "yes" to the DA question, "Does your partner control most of your daily activities?" had higher mean scores on HARASS (7.06) compared to women who answered "no" (3.29), and the difference was significant (t test $p < .0001$). Of the 300 women who said "yes," 51% scored 5 out of 5 on the Power and Control scale, compared to 8% of the 190 women who said "no."

Intervention and Help-Seeking. Women who interviewed as AW were asked about help-seeking and intervention in the past year. The advocates, counselors and helping professionals among the collaborators were extremely active in developing and editing these questions. The main concerns were that the questions be sensitive to women in many different situations and from many different backgrounds, that the questions allow her to tell about complex experiences, and that the questions "permit" a woman to say that she had not sought help, and to tell us why, without implying that she was at fault. The following lead-in language to this section was important in establishing this rapport:

> When incidents like these happen, sometimes women get help or advice from a friend, sometimes they call an agency or counselor, and sometimes they contact a medical center or the police. On the other hand, sometimes they decide it is best not to contact anyone. I am going to describe some of these possibilities, and I would like you to tell me if you ever did any of these things in the past year.

Because of time constraints, we did not ask about help-seeking activity after each specific incident. Instead, we followed the calendar history with a series of questions

about things that happened "ever" in the past year. We did not, for example, ask whether the police had been notified after each incident, but asked only, "Did you contact the police after any of these incidents in the past year?"

There are several differences between help-seeking information in the CWHRS and many other studies of arrest, medical care, counseling, or other intervention. First, the CWHRS was not designed to be a controlled experiment, such as Sherman's (1992) research on the effect of arrest. Instead, it was designed to provide information about the woman's experience with help-seeking, and to provide information about cases in which the woman did not seek help or in which the woman sought help but did not receive it.

For example, we can compare cases in which the police were called to cases in which the police were *never* notified (whether by the woman or by someone else). Such cases are not typically included in domestic violence arrest experiments. Second, the proxy respondent interviews provide comparable information about the woman's experience with help-seeking in the past year, in cases in which one of the partners was killed by the other.

Third, the CWHRS was designed to include many kinds of help-seeking, both formal and informal, and to provide opportunities for the woman to tell us about other kinds of interventions she might have tried, whether listed on the questionnaire or not. Fourth, the CWHRS was designed to let a woman tell us about her reasons for seeking help or not seeking help after a particular incident, and about the results of the intervention, from her perspective. Finally, the CWHRS was designed to place help-seeking in a multivariate context with other events and circumstances of a woman's life.

The questionnaire included questions about four general areas of help-seeking and intervention. First, we asked if she had ever "talked things over with someone you know" in the past year; if not, "what were your reasons," and if so, "who did you talk with?" and "was it ever helpful?" This was followed by a set of questions about helping agencies: "Sometimes women contact an agency or counselor when an incident like this happens. Did you contact an agency or counselor in the past year?" These had the same follow-up questions about reasons for not contacting a counselor, or the helpfulness of the counselor, and also included specific questions about the type of counseling or treatment that she or her abusive partner had received.

Third, the questionnaire includes two sets of medical help-seeking questions: "Did you contact or visit a doctor or a medical center after any of these (this) incident(s) in the past year?" followed by her reasons for contacting them or not. If the woman said that she had contacted them at least sometimes, we asked, "When you got medical help, did someone ever ask you about the beating?" and if so, "Did you tell them about what happened?" Again, we asked the woman to tell us her reasons for telling or not telling. If she did tell them, we asked what they did and whether or not it was ever helpful.

Fourth, each woman was asked whether she or anyone else contacted the police in any incident. The lead-in question was, "Sometimes women contact the police when something like this happens. Did you contact the police after any of these incidents in the past year?" The possible responses were "yes," "no" and "sometimes" (when the women had called the police after some incidents but not others). All except one of the 493

women who completed the calendar history answered this question. Four women said that someone else had contacted the police for her. If the police were called, we asked what they did and whether it was helpful. If the woman said that she had not contacted the police in the past year, we asked, "When you decided not to contact the police, what were your reasons?"

We ended the help-seeking questions by asking each woman about anything else she may have done in the past year, and whether it was helpful:

> Sometimes women do something else to try to help themselves after something like this happens. Did you do something that we have not mentioned so far after any of the incidents in the past year?

The woman was also asked whether she went to court for "something related to these incidents," and if so, what was the outcome of the case. Outcomes included an order of protection.

Finally, we included a number of general questions about help-seeking and intervention at the end of this section. We asked each woman if there was "someplace you can go where you feel safe" and if so, where that place was. We asked a series of questions about whether she had gone to court in the past year "for something related to these incidents," and the kind of court outcome including an Order of Protection. We asked a series of questions about the type of counseling or treatment that Name might have received. We asked whether there was "anything you needed from the police, agencies, or medical providers that you did not get." The last question was, "From your experience, what advice would you give another women living in a similar situation?"

Initial Interview Methods

The initial interviews took place in a private and secure room, with a closed door, at the hospital, clinic or health center. After giving informed written consent (Appendix III), each woman was asked to complete the initial questionnaire (Appendix II) in a face-to-face interview conducted in a secure and private setting. Each woman received a $10 incentive fee at the initial interview and $20 for each follow-up interview, plus transportation expenses if needed. We told women that they would receive the incentive fee even if they felt that, for some reason, they could not complete the interview.

Each interviewed woman signed two consent forms (see Appendix III), both of which stressed the confidentiality of the study. The first form was completed at the point at which the woman had been screened at intake, and was then being asked if she would like to talk to an interviewer about the possibility of being part of a study. The second form was completed at the beginning of the interview. In addition, the woman was repeatedly reminded at several points throughout the interview of the confidentiality of the findings. Although we never asked about child abuse in the interview, we reminded the woman that if she did spontaneously mention that a child is being abused, we would need to tell the hospital/clinic staff. But we did say that we could refer her to a counselor if she wanted to talk about that issue.

As a safety issue, we reminded her that the medical staff would never find out about what she told us, unless she told them herself. So, in case a woman might have

thought that she had told someone at the hospital or clinic about the abuse by telling us, we pointed out to her that her assumption was not true.

During the process of coding the initial interview and tracking women for the follow-up interview, we discovered that we had done nine duplicate initial interviews. Most of these were done at the Cook County Hospital walk-in clinic, when women who needed the $10 respondent fee put themselves in a position to be re-screened and re-interviewed. Three of these women, interviewed twice each in December, 1997, have not been found again for a follow-up. An additional "duplicate" initial interview, done five months afterwards, was used as a first follow-up. In two duplicate interviews, both conducted some months after the initial interview, the woman told the interviewer about physical abuse that she had not mentioned in the earlier interview. We decided to change each of these women from the comparison to the abused sample, to treat the later interview as the initial interview, and to conduct further follow-up interviews.

In several cases, the additional calendar information obtained in a "duplicate" interview conducted several months after the initial interview provided more precise calendar information. In addition to the nine cases with duplicate initial interviews, there were four cases in which we conducted duplicate follow-up interviews, and three cases in which we did a follow-up on a comparison-group woman.

We interviewed 707 women, but later dropped two of the women from the sample, one because she later told us that she had falsified the initial interview and the other because she told us in the initial interview that she had had no intimate partner in the past year (her partner had died over a year previously). Thus, the final sample included 705 women, 497 who interviewed as AW and 208 who interviewed as NAW. Four women did not complete the initial interview, usually because they ran out of time. Two of the four were in the AW group, and neither got to the point in the interview where we asked for follow-up information. Therefore, we were not able to find either woman for a follow-up. In addition, three women with complete initial interviews did not consent to a follow-up, and one consented but gave no follow-up information. Thus, we could not follow six of the 705 women, because they did not consent or gave no information (Exhibit 31).

Three AW interviews were classified as "unreliable" based on the judgement of the interviewer. One was terminated by the interviewer, because the woman seemed to be unable to comprehend the questions. Another woman completed the interview, but appeared to the interviewer to be "completely unstable mentally" and gave unreliable and inconsistent answers to many questions (for example, saying that one of her children was 200 years old). The third woman had recently suffered a mental breakdown, and the interviewer suspected that she was not being abused but was abusing herself. We included these three cases in the sample, because mental illness was, after all, one of the risk factors we were looking at, but coded some questions as unreliable. However, one of these women gave us no contact information for a follow-up, and we were not able to find the other two women.

Exhibit 31
Initial Interview Status and Follow-up Interview Status

Follow-up Interview Status		Initial Interview Status			
		AW	AW, Responses Unreliable	AW, Incomplete Interview	Total
	Partial year (349 days or less)	62	0	0	62
	Complete year (at least 350 days)	261	0	0	261
Follow-up (total)		**323**	**0**	**0**	**323**
No follow-up		**161**	**2**	**0**	**163**
Other					
	Did not consent to a follow-up	3	0	0	3
	Gave no follow-up information	0	1	2	3
	Deceased before first follow-up	2*	0	0	2*
	Incarcerated	3	0	0	3
Overall Total		**492**	**3**	**2**	**497**

*Two women died before the first follow-up interview, and three died afterwards.

Clinic Interviewers

Interviewer Selection

It turned out to be a great advantage that the CWHRS was not an academic research project, and did not recruit interviewers from among graduate students at a university. Instead, the collaborators distributed job notices through public health, domestic violence advocacy, and other professional networks. Working with the consulting psychologist, we developed a set of criteria for hiring, and materials for interviewing and choosing among potential candidates (see Appendix IV) that emphasized two sets of skills, training and experience. We wanted to find women who not only had interviewing skills and understood the nature of research, but who were also empathetic and able to listen to difficult stories without judging the women who told them. We were extremely fortunate in being able to recruit a group of professional women with those skills and more. These interviewers became some of the key project collaborators, and the success of the project is due in large part to their commitment and expertise.

Interviewer Training

The interviewer training covered a two-week period and included training on the background and intention of each question, appropriate coding for each question, how to handle queries about the intention of the survey and each question, how to rephrase questions without changing the meaning or leading the respondent, how to detect and handle a situation in which the woman being interviewed was experiencing distress, how to make referrals to outside agencies, awareness and sensitivity training on the issue of violence against women, and discussion about personal stress management techniques. Interviewers also had several days of mock interviews with various scenarios to build up their confidence before they began.

The consulting psychologist provided support to the interviewers, took part in training sessions, and conducted regular debriefing sessions with the interviewers during which they could discuss stress management techniques and anything else that was troubling them as a result of their work on the study. (See Appendix V for a full description of the debriefing program in the CWHRS.)

A key part of interviewer training was training on domestic violence issues, conducted by collaborators. In addition, a section on interviewer safety issues was conducted by collaborators from the Chicago Police Department, and a section on support materials for the clinic/hospital women was included.

Interviewer Support

One of the highest priority considerations of the project was respondent safety, which is closely linked to the support and training of the project staff, especially the interviewers. Based on the experience of the Violence Against Women survey in Canada, Holly Johnson strongly advised us to have a Consulting Psychologist as part of the project, both to ensure respondent safety and to support the staff as they conduct these stressful interviews. The project was extremely fortunate in hiring psychologist Dickelle Fonda, who is skilled and knowledgeable in two vital realms - issues of violence against women, and techniques of stress management.

The Consulting Psychologist's job can be divided into three parts: 1) general project counseling, including project support and emergency counseling as needed during the interviewing phase; 2) interviewer selection and training; and 3) holding bi-weekly debriefing sessions with interviewers and other project staff. Beginning in February, 1997, the psychologist held group sessions with staff to train them in team building and stress management techniques, and advised the project about selection criteria for interviewers. In addition, the interviewers met as a group every other week, in a "debriefing" support session led by the psychologist. This system served to solve problems before they became emergencies, keep the project running smoothly, and provide a less stressful working environment for the staff (thus reducing the chance of turnover and increasing productivity and dedication to the project goals). For details of the Consulting Psychologist's role in the CWHRS, see Appendix V.

Follow-up Tracking Methods

At the end of the initial interview, we asked each abused woman for her consent to "talk to you again and see how things are going." If she consented (all but three of the

497 women did), we asked her to provide several names and contacts where she might be reached for the follow-up interviews (see Rumptz, *et al.*, 1991 and the final pages of the initial interview, Appendix II).

Though our original goal was to conduct all of the follow-up interviews face-to-face, it often turned out to be impossible (see the follow-up safety section, above). Following the advice of Stouthamer-Loeber, *et al.* (1992:73) and others that it is important to make participation in the study as easy as possible for woman, we decided to conduct follow-up interviews by phone when necessary. We estimate that 79% of the 323 first follow-up interviews and 91% of the 180 second follow-up interviews were conducted over the phone.

Follow-up Retention

Rumptz, *et al.* (1991) and Johnson (1992) found follow-up tracking and interviewing to be extremely labor-intensive. It is very important, however, because the *unknown cases* of intimate violence may represent one of the highest-risk groups for the death of either the woman or man intimate partner (Browne, 1986). As Dobash and Dobash (1995) point out, loss of subjects over time is a problem with all longitudinal studies and a particular problem in intimate violence studies. We cannot assume that attrition is random; it would be more reasonable to assume that the women most difficult to track would also be the most threatened (by stalking, for example) and possibly the most in danger. However, with proper attention to detail and "vigorous tracking methods" (Stouthamer-Loeber, *et al.*, 1992), the retention rate in longitudinal studies can reach 90 to 96% (Schoua-Glusberg & Hunt, 1992), and 94% to 95% in Michigan studies of battered women following their stay at a shelter (Sullivan, *et al.*, 1996; Rumptz, *et al.*, 1991).

The rates achieved in the Michigan studies were based on data from a shelter population, and there are fundamental differences between tracking a shelter population and tracking a community sample of abused women (Gondolf, 1998). Because women leaving a shelter have sought services, and are more likely to be in a protective environment, there is much less risk and greater perceived benefit for them to participate in a study. The CWHRS women were sampled as they entered a clinic or hospital. For them, as for the partners of batterer program participants interviewed by Gondolf, is was reasonable to fear that participation in the study might expose them to risk. Despite this, Gondolf achieved a retention rate of almost 70% with the men over 15 months, by using very aggressive tracking techniques including the services of a professional locator.

The Michigan study tracked participants through "family, friends or organizational contacts" (Sullivan, *et al.*, 1996:269; Rumptz, 1991). For safety reasons, the CWHRS did not visit neighbors or schools, contact places of employment, or call or visit community service organizations, and did not hire a professional locator to do these things. CWHRS policy required that we did not go beyond what the woman had told us in her initial interview would be safe. That is, we tried to find and contact her "safe contact" person or people, and we tried to contact the woman herself, if she had told us that it would be safe to do so and had given us permission to do so.

The CWHRS retention rate was 66.5%. We completed at least one follow-up

interview for 323 of the 486 women who gave consent and follow-up information and who were not incarcerated or dead (Exhibit 31, above). In addition to the six women who either did not give consent to be followed up, or did not give us any information for finding them, we found that three women were incarcerated when we tried to contact them for follow-up. Unfortunately, the study budget did not allow for the resources necessary to interview them in prison. Our investigation also found that at least five of the 497 women died in the follow-up year, two of them before their first follow-up interview and three afterwards. One of the five women died of an HIV-related illness, having become infected by her abuser. The Department of Public Health obtained death certificates for the other four women. One woman died of an aneurism, which was possibly related to a blow to the head. The other three were killed violently, but there is no evidence that the abuser was involved. A woman who worked as a prostitute was strangled on the street, one was shot on the street, and the third was killed by someone who hunted her down to kill her.

The study's retention for a complete year, defined as 350 days or more after the initial interview, was 261 women, which is 81% of the 323 women who had at least one follow-up interview and 54% of the 486 women who consented and were not deceased or in prison. An additional 62 women were followed for periods ranging from 90 to 349 days. In sum, 66.5% of the women were interviewed again at least once, and 53.7% of the women were followed for at least a year (350 days or more).

Length of the Follow-up Period

Even though our target was to re-interview women for the first time between the fifth and seventh month, and for the second time between the eleventh and the thirteenth month, the follow-up period for some women was very long (Exhibit 32). Thirteen women, 4% of those who had at least one follow-up interview, were followed for 20 months (600 days) or more. The first follow-up period varied from only three months (90 days) to more than two years (90 to 826 days).

Theoretically, the varying follow-up time period does not pose problem for analysis, because we gathered complete calendar information on each woman from the time of the follow-up interview back to the time of the previous interview, whenever it was. Therefore, the mathematics of calculating "survival periods" from the initial interview to the next incident would not be affected. However, this assumes that the completeness of the calendar did not vary by the length of the retrospective period. There was some indication, in the calendar for the initial interview, that women were more likely to remember incidents that had occurred in the far past if the incident was more serious.

Only 30% of the 323 first follow-ups had been completed by the end of the sixth month after the initial interview (210 days), and 95 first follow-up interviews were not completed until after 12 months (365 days). In addition to these 94, nine women had their first follow-up interview between 351 and 364 days after the initial interview. For these 104 women (32%), no second follow-up interview was necessary.[10]

We only needed to conduct a second follow-up interview with the remaining 219 women, but we found that three of the 219 had died since the first follow-up interview. We completed a second interview with 171 of the remaining 216 women (79%), as well as nine second follow-up interviews with women who "did not need" one, for a total 180

completed second follow-up interviews.

Exhibit 32
Follow-up Period in Days

Follow-up Period	Frequency	Percent
No follow-up	163	33.5%
90 days	1	.2
120 to 199 days	19	3.9
200 to 249 days	15	3.1
250 to 299 days	11	2.3
300 to 349 days	16	3.3
350 to 364 days	17	3.5
365 to 399 days	46	9.5
400 to 499 days	129	26.5
500 to 599 days	56	11.5
600 to 699 days	12	2.5
700 to 850 days	1	.2
Total	486	100.0%
no consent or no information	6	
died before first follow-up	2	
incarcerated	3	
Total	497	

However, some of these second follow-up interviews were completed less than 350 days after the initial interview, with the earliest only 266 days (nine months). In total, 27 of the 180 second follow-ups were completed less than 350 days after the initial interview, and twelve more were completed between 351 and 364 days after the initial interview. For 15 of the 27 and two of the twelve, we were able to conduct a third follow-up interview at a later date, bringing the total follow-up period to at least a year.[11] For analysis, information from the third follow-up calendar was combined with information from the second follow-up calendar.

Two reasons for the long time period before the first follow-up were safety and consent constraints and the nature of the population. Many of the women in our sample moved frequently or had no permanent address. Often, a woman's safe contact friend or relative did not know where she was and might see her only infrequently. When the woman would drop by for a visit, her relative would tell her that we would like to talk to her. Then the woman might call us that day or in a few weeks or months. For example, the woman whose follow-up period was the longest, 826 days from the initial interview to the first follow-up, had given her mother as her safe contact person, but her mother had moved out of the city. After a long search, we were able to contact her mother, who gave our letter to her daughter, who called our 800 number.

Even when a woman would contact us, it was sometimes difficult to arrange an interview, even over the phone. Often a woman would call the 800 number, but have no safe number where an interviewer could call her back. When these women called from Cook County Hospital, we would encourage them to go to the HCIP there, a safe place where the interview could be conducted. However, a number of women called, spoke to us and scheduled an interview, and then we never were able to contact them again. The 57 women who had been homeless or living in a group home or institution at the initial interview were particularly difficult to find for a follow-up interview. One was incarcerated, and 52% of the other 56 women were re-interviewed, compared to 68% of the other women (Chi square p = .013). In all of these situations, the follow-up interview was likely to occur many months after the initial interview. However, no matter when the follow-up was done, the calendar information was collected for the entire time period from the date of the initial interview to the date of the follow-up.

We interviewed 17 women (5% of the 323) earlier than the fifth month after the initial interview (149 days or less). We decided to interview a woman early when we had reason to believe that we would not be able to find her again. For example, the earliest interview was done at 90 days. This was a homeless woman who had been interviewed at the walk-in clinic and happened to see her interviewer at the Trauma Unit three months later. The interviewer's decision to do an early follow-up was good, because we were never able to contact the woman again. Of the 17 who completed an early first follow-up, seven were never found for a second follow-up.

Was there Retention Bias in the Follow-up?

Did the 163 women who were not found and interviewed in at least one follow-up interview differ significantly from the 323 women who were found? Women in the two groups did not differ in any of the basic sample categories - their racial/ethnic group, the site of the initial interview, whether the abusive relationship was heterosexual or not, or in whether she had been pregnant at the initial interview. There were somewhat more initial interviews conducted in Spanish (17.6%) among the 323 successful follow-ups, compared to the 163 women who were not found for a follow-up (11.0%), but this difference did not reach statistical significance (Chi square p = .057). Similarly, retention was higher for Latina/Hispanic women (71%) compared to others (64% for African/American/Black women, and 61% for white or other women), but this difference was not statistically significant.

The two groups were also similar to each other in other characteristics. The mean score on HARASS was 5.63 for the re-interviewed cases and 5.48 for the other cases. The mean score on the Power and Control scale was 3.44 for the re-interviewed cases and 3.51 for the other cases. The mean score on the Social Support Network scale was 8.68 for the re-interviewed cases and 8.82 for the other cases. None of these differences were statistically significant.

The mean age of women followed-up was 30.71, and the mean age of the women not found was 30.61. There may have been a slight difference in the woman's employment status, with 32% of the 323 women followed-up having a full or part time job, compared to 24% of the 163 other women, but this difference was not significant (Chi square p = .091). Household income was almost the same for the two groups, with 52% of the interviewed women having a household income less than $10,000 per year, compared to 45% of the other women (Chi square p = .237). There was no significant difference (Chi square p = .288) in the educational levels of the two groups, with 47% of the interviewed women having less than a high school degree, compared to 52% of the other women.

There was a significant difference, however, in our ability to re-interview women who had been homeless or living in an institution or group home at the initial interview. One of these 57 women was incarcerated and could not be re-interviewed, and 29 of the remaining 56 women (52%) completed a follow-up interview, compared to 68% of the 430 other women (Chi square p = .013). In addition, though only 31 women had lived in Chicago for less than three years, they had a lower retention rate (48%) compared to other women (67%). The retention rate for women who said that they had no personal income that they themselves controlled was 56%, compared to 67% for other women.

The recency of the last incident before the initial interview was not related to whether or not the woman would do a follow-up interview. The average number of days before the interview when the last had occurred was 97.6 for the 322 women who completed a follow-up interview, and 83.6 days for the 171 women who did not, but the difference was not statistically significant (t test p = .147). (These 171 women include women who did not consent, who died, or who were not re-interviewed for any reason.) Though the mean number of incidents in the past year was higher for women with a follow-up interview (10.73) compared to women without a follow-up interview (8.86), again, the difference was not statistically significant (t test p =.336).

There was very little difference in the follow-up retention rates of women who had experienced more or less severe incidents in the past year. Combining the three most severe categories (beating up, choking, weapon threat, severe injury, or weapon use), 61% of the 238 women who had experienced at least one of these in the past year were followed-up, compared to 69% of the 255 women who had experienced less severe violence, but the difference was not statistically significant (Chi square p = .074). The retention rates were very similar for women who had experienced different kinds of incidents (Exhibit 33). The lowest retention rate was for the 113 women who had experienced being beaten up, choked, burned, or serious injury in the past year, 47 of whom were not followed-up. One of the 47 was incarcerated, one had died before the first

follow-up, and one refused consent.

Exhibit 33
Retention Status, by Most Severe Incident in the Past Year, Initial Interview*

Most Severe Incident in Previous Year	Percent Follow-up	Total Cases**
Forced sex - no injury, weapon or threat	(6)	7
Threat to hit with a fist or anything that can hurt her	70.0%	20
Slapping, pushing, throwing - no injury or lasting pain	67.3%	113
Punching, kicking - bruises, cuts, continuing pain	69.6%	115
"Beaten up," choked - burns, broken bones, or severe contusions	58.4%	113
Threat to use weapon - head injury, internal injury, permanent injury, loss of consciousness	60.9%	64
Use of a weapon - wounds from a weapon	67.2%	61
Total	65.3%	493

*This table includes the 11 women who did not consent, who were incarcerated, or who died before the first follow-up interview.

**This excludes the four women who did not complete a calendar history at the initial interview.

Of the six women who did not consent to a follow-up or who did not give us any follow-up information, for three the most serious incident had been slapping or pushing, one had experienced at least one beating/choking/burning incident, and two had not completed a calendar history in the first interview. The two women who died before their first follow-up interview and the three women who could not do a follow-up because they were incarcerated had all been seriously abused in the year before the initial interview.

HOMICIDE STUDY METHODS

One of the many methodological obstacles to comparing lethal and non-lethal cases is that it is impossible to interview people who are dead. Proxy interviews are an attempt to overcome this obstacle. The CWHRS study design called for identifying and interviewing one to three individuals who were familiar with the events, circumstances and interventions that occurred in the year prior to the victim's death. Each of these "proxy respondents" completed, as far as possible, the same questionnaire as the women sampled in the clinic/hospital settings.

The homicide sample in the CWHRS included all Chicago homicide victims known to the police who were killed in 1995 or 1996 by an intimate partner and in which at least one partner was a woman aged 18 or older.[12] We included cases where a man was the victim, as well as cases where a woman was killed. Intimate relationships included

spouse or ex-spouse, commonlaw or ex-commonlaw, boyfriend or girlfriend, ex-boyfriend or ex-girlfriend, and woman same-sex partner or former same-sex partner.

Homicide Sample

Homicide incidents were obtained from the Chicago Homicide Dataset (CHD). Collected with the close cooperation of the Chicago Police Department since 1968 and containing detailed information on every homicide recorded by the police (more than 22,000 homicides), the CHD is the largest, most detailed dataset on violence available in the United States (Block & Block, 1993; Block & Christakos, 1995).[13] Every intimate homicide that occurred in Chicago in 1995 or 1996 and involved a woman over age 17 was included, regardless of whether further investigation determined the homicide to be justified. We decided not to include one case in which the victim died in 1995 or 1996, after having been in a coma for a decade, because the violent lethal incident had not occurred in a sample year.

The lethal sample contained 87 cases, including 57 woman victim-man offender cases, 28 woman offender-man victim cases, and two cases in which both victim and offender were women. However, CWHRS investigation added two cases and deleted two cases to the homicides in the Chicago Homicide Dataset that seemed to meet the above criteria. A review of all homicides that occurred in Chicago in 1995 and 1996 determined that two additional cases fit the intimate partner criterion, one woman victim case and one woman offender case. Police had coded the victim and offender in each of the two cases as "friends," but the narrative stated that the couple had been dating or involved in a sexual relationship. In addition, interviews determined that two of the cases did not involve intimate partners after all. These two cases were dropped from the study.

In the first dropped case, we interviewed the woman offender, who told us that the man she killed had never been her intimate partner, just an acquaintance. In the second dropped case, family members told us that the woman offender had not been the girlfriend of the man victim, but was the girlfriend of the victim's brother, who also lived in the house. Although determinations of relationship between homicide victims and offenders by police are generally very accurate for intimate partner cases, the police files used in this study reflect initial police investigation information that may not have been complete at the time it was recorded.

Data Collection and Field Strategies

The original design recognized some potential problems in finding and contacting proxies and obtaining interviews. The Kellermann research team identified a proxy respondent in 405 of 420 homicides (96.4%). In the 15 cases not identified, there was no knowledgeable person, or the only person was the suspect. Of those identified, 93%, 98% and 99% were interviewed in each county (Kellermann, *et al.*, 1993: 1086). Rose (1981:27), however, was able to contact only 74% to 58% of homicide victims' next-of-kin and interview only 58% to 24% of those contacted in three cities. In a later study, Rose was able to interview 43% of the victims' next-of-kin.[14] An important difference between the Kellermann and Rose proxy studies was that the former interviewed proxies within

three weeks following the incident, while the lag in the latter was as much as three years. Rose cautions that the lag made a difference in response rates. However, a shorter lag has other disadvantages. An interview while a case is still being adjudicated might interfere with the prosecution or defense. In addition, someone involved in the court case might be subject to bias.

The Kellermann proxies were not limited to next-of-kin as in the Rose studies, but involved numerous attempts to contact a hierarchy of knowledgeable people.[15] Rose also found that matching the proxy race with the interviewer race seemed to matter. Finally, while the Kellermann study's questionnaire was short and non-invasive, Rose's interview schedule included 178 detailed questions, many of them open-ended, about "life history."

Sources of Potential Proxy Information

The CWHRS was privileged to have a diverse and active advisory board of collaborating people who opened avenues to sources of case information not routinely available to social research projects. For example, the study had access to every homicide case that occurred during the study period through the Chicago Homicide Dataset project. In addition, the Chief Medical Examiner, an advisory board member, made his office's files available to staff, although they are not generally open to the public. While court files are public information, the Clerk's Office was extremely cooperative in pulling the 59 court case files in our sample and providing office space for our staff. Even the Chicago Public Library assisted us in looking for newspaper articles from the newspapers without on-line access.

The CWHRS was also fortunate to have a good working relationship with the Illinois Department of Corrections (IDOC). We were allowed to interview the 10 women who had been sentenced to prison for killing their intimate partner. Seven interviews were conducted at two prison sites. One inmate, with the help of her counselor, completed and mailed back the questionnaire, and two interviews were conducted in the homes of women who had just been released onto Mandatory Supervised Release.

Three months after data collection began, we sought the assistance of the Illinois State Police, through a liaison staff member working at the Authority on another project. Names of potential proxies were submitted to ISP's Resource Support Center. The liaison staff member forwarded relevant information to the interviewers. Any confidential information was deleted before dissemination.

Another potential source of knowledgeable proxies was newspaper articles of the incident. These were relatively uncommon, and tended to occur for the more complex and "newsworthy" cases, such as homicides with more than one victim.

Analysis of Official Data Sources to Provide Proxy Leads

Initial narrative information in the police and medical examiner files information provided many directions for locating proxies. In the initial stages of proxy data collection, it was important to ascertain the outcome of the case, in order to take advantage of any information available from the courts and the Department of Corrections, in those cases where someone was arrested (Exhibit 34). We had the fewest potential sources of official data for the 28 cases that did not reach the court system.

Exhibit 34
Police Clearance, by Type of Case

Type of Clearance	Woman Victim	Woman Offender	Women Victim and Offender	Total
Arrest	42	15	2	59
Offender's suicide	9	1	0	10
Other offender death*	2	0	0	2
ASA rejected charges	2	12	0	14
Other exceptional clearance**	2	0	0	2
Total	57	28	2	87

Source: Chicago Homicide Dataset

*One of these offenders died while in police custody in the squad car, and the other forced his way into an apartment after the murder, took hostages, and was killed by police.

**In one of these cases, the investigation linked the offender to the murder only after he committed suicide months later. In the other case, the offender fled to Mexico and could not be extradited.

Three types of cases did not reach the court system: cases where the offender died, cases where the Assistant State's Attorney's (ASA) office did not pursue charges, and cases that were cleared exceptionally by CPD. Twelve offenders died at the scene or shortly thereafter, ten by suicide and two otherwise. Three additional offenders (not shown in Exhibit 34, above), committed suicide weeks or months after the homicide.[16] The ASA rejected charges for 14 people who killed their intimate partner, either because they had determined that the death involved self-defense or mutual aggression, or because they could not refute the offender's statement about what had happened in the homicide. Two cases were exceptionally cleared. In one of these, the offender fled the country, and in the other the offender had died before police investigation linked him to the case.[17]

Three of the 59 court cases had still not been adjudicated when data collection ended on May 30, 1999 (Exhibit 35). In one of the three, two confidants of the woman victim said that they wanted to be a part of the study, and gave us complete interviews. In the other two cases, the potential proxy respondents did not want to talk to us while the case was pending. Therefore, we did not further pursue either case.

Of the 59 arrested offenders, 48 were sentenced to prison, 37 men and 11 women. Six of the 37 men and three of the 11 women had already served their sentence and had been released by the time that data collection began. This became important information for interviewer safety regarding the men offenders, and was an opportunity to locate and interview the women offenders. All three released women were still under the supervision of the Department of Corrections (on Mandatory Supervised Release) when

data collection began, and one of the 11 women had died in prison. We obtained permission to interview the ten surviving women still in prison or on Mandatory Supervised Release at the time of data collection.

Exhibit 35
Court Outcome of Arrests, by Type of Case

Outcome of Case in the Criminal Court	Woman Victim	Woman Offender	Women Victim & Off.	Total
Found guilty: Sentenced to prison	37	10	1	48
Found guilty: Sentenced to probation	0	1	0	1
Found not guilty or no probable cause	1	4	0	5
Skipped bail and never found	1	0	0	1
Still in court as of May 30, 1999	2	0	1	3
Died before final court disposition	1	0	0	1
Total Cases	42	15	2	59

Source: Cook County Circuit Clerk: "allc" criminal case index

Case File Information

In the CWHRS proxy study, a case file for each homicide was built from our four primary sources - police summary files, medical examiner files, court case files and newspaper articles about the homicide. The following is a list of the types of potential proxy information gathered from each source:

1. Chicago Police Department Murder Analysis Reports:
   - Age, race, gender, relationship of victim and offender
   - Date and time of injury
   - Address of occurrence

   Summary of the incident, including circumstances, weapon, and the manner in which the case was cleared (by arrest of offender, death of offender, refusal of the State's Attorney to prosecute).
2. Medical Examiner Files:
   - Victim's and offender's name
   - Victim's and offender's last known address
   - Any identifying ID numbers (Driver's License number, State ID numbers)
   - Names and addresses of relatives identifying the body
   - Funeral home name and address
   - Cause of death

   Any other available information, such as police incident numbers, criminal history

record numbers, toxicology results on the victim

3. Cook County Criminal Court Records:
   - Criminal court record number
   - Charges filed
   - Names of witnesses
   - Presentence investigation reports and victim impact statements, if any

   Sentencing information, including any appeals filed

4. Newspaper articles-
   - *Chicago Tribune* Archive on-line search for victim and offender names, which led to articles about the incident in 15 cases
   - *Chicago Sun-Times* and *Chicago Defender* microfiche searches, which led to articles on six more cases

Field Work Strategies

While the study had access to many types of information on each homicide case, much of it was already out of date by the time the proxy study was fielded. Using homicides that had occurred three to four years previously had advantages and disadvantages for field work. Because most cases had been adjudicated, potential proxy respondents who might have been involved in the court case were free to talk to us without jeopardizing the case in any way. On the other hand, almost all of the addresses and phone numbers recorded at the time of the homicide had become outdated. This meant that the primary task of the proxy portion of the study was the fieldwork required to ascertain the identity and current whereabouts of potential proxies.

Three primary strategies were used to develop proxy contacts:

- phone calls, using numbers listed in the case file, current telephone books, Haynes Criss-cross directory at the Harold Washington Public Library, the Internet directories;
- letters introducing the study and inviting participation to potential proxies; and
- field visits to the homicide site, to neighbors of the couple, to funeral homes for information on who arranged for the funeral, to other potential proxies' home.

Phone calls alone were sufficient to identify and contact a knowledgeable proxy respondent in 19 of the 74 completed cases (26%). Using the Haynes Criss-cross directory for neighbors' and other tenants' phone numbers yielded positive results in several cases. It also aided in locating maintenance personnel. A combination of phone calls and field visits were necessary in 55 cases (74%). Proxy information in the case files was exhausted without leads in four of the 87 cases (5%). In three cases, the family refused to participate. In the remaining cases, there was either no survivor who knew about the relationship or we ran out of time.

At the end of the study, a professional locator was hired at $100 per verified proxy contact, for the last cases where all other leads had been exhausted. These most difficult cases proved to be the women originally charged by the State's Attorney's Office. This locator was successful in locating potential proxy respondents in seven cases, although some of those people declined to participate in the study.

Setting Priorities Among Potential Proxy Respondents

Our goal was to find people who might be knowledgeable and credible proxy respondents about the relationship between the victim and the offender in the year prior to the incident that led to the death. Commonly, a person mentioned in official sources was disqualified as a proxy respondent, because they were strangers to the victim and the offender, though they might have been an eyewitness to the homicide.

Not every potential proxy respondent knows about the same aspects of the relationship, or has the same perspective. We learned that adult children and sisters of the woman are more knowledgeable informants than parents. The legal guardian of dependent children is almost always knowledgeable about the relationship, as are some co-workers and supervisors, especially if the victim had worked for one company for an appreciable time. Other good proxy respondents are neighbors and close friends.

In some cases we identified an ideal proxy respondent who would have been able to tell us about certain of the more sensitive questions, such as the women's support network, but the person refused to cooperate or said that they could not face the interview just yet. In cases that had been opened at the beginning of proxy data collection, the interviewers were able to work with the potential proxy respondent over a period of months. Often, after a considerable period of contemplation, the proxy respondent felt strong enough and trusted the interviewer enough to feel able to complete the interview. In other cases, this never happened, sometimes because there was not enough time left before the end of data collection for this trust to develop. In those situations, we were forced to interview someone else who might not be as close to the victim.

The collaborators had some concern about the danger of interviewing a proxy who had been a confident of only one of the intimate partners, and who might have limited or biased information about the relationship. We discovered that it was best to use information from many sources, not all of whom provided a complete interview. For example, a buddy of the man offender might be the best source of information about his friend's drinking or drug abuse, but not much more. His mother might provide the most accurate information on his education, employment, and mental and physical health. However, the next door neighbor might be the best person to complete an entire interview about the couple's relationship in the year before the death. The goal was to use all of the available information to answer as many questions as possible.

Frequently, we found a potential proxy respondent who knew a great deal about the victim or the partner but little or nothing about the relationship. We considered this partial success. One proxy respondent with all the needed information may not be possible in every case; however two or three proxy respondents, each with a different set of facts, can result in a complete interview with no missing data. For example, sometimes we located a potential proxy respondent who had socialized with the victim and knew the victim's alcohol and illicit drug use well but knew nothing of the relationship with the offender. We recorded the needed information, knowing additional proxies would be needed to gather the rest of the data. In general, we actively searched for additional proxy respondents who would be able to "fill in the blanks" in the questionnaire.

In addition to conducting formal interviews, the interviewers also recorded separately any facts that they might discover in the process of their field work search for

proxy respondents. For example, the building manager of the apartment building where the final incident occurred might know who was living in the household, or whether the victim and offender were living together. In some cases, an interviewer might begin a conversation with someone during field work, and in the middle of the conversation realize that this person is knowledgeable and credible and would make a good proxy respondent. In such situations, the interviewer would obtain informed consent and begin the formal interview, if possible.

At the beginning of the project, some potential proxy respondents were lost when interviewers scheduled an appointment at some later date. The interviewers discovered that it was a good idea to be prepared to give an interview whenever the opportunity presented itself. Our philosophy was that it was better to interview extra people, even though some of the information might be redundant, than to risk losing a potentially good proxy respondent. Interviewers kept detailed records and field notes about the degree of knowledge and credibility of each person in respect to each question, in addition to the repeated questions contained in the questionnaire itself (Appendix II).

Thus, in most cases, the proxy study interviewers did not start out with a list of potential proxy respondents. Instead, they needed to conduct field work in order to develop this list. The interviewers recorded, on project field work forms (see Appendix VI), their field work contacts and investigations, the list of potential proxy respondents and their decisions about the best people to interview.

Support of the Proxy Respondents

One of the biggest obstacles to obtaining interviews once a proxy was located was the amount of grief still being suffered by the families involved, even several years after the homicide. The interviewers encountered much initial resistance to talking about the incident, for fear of the pain it might cause. In several instances, siblings would actively shield the mother from contact with the interviewer. CWHRS staff developed a list of grief support resources by geographic area as a resource for families still needing such support.

One of the great successes of the project was that the interview process itself ended up being very therapeutic for many of the proxy respondents. This, in turn, encouraged the interviewers to be persistent in their proxy respondent contact efforts, even in the face of initial rejection or repeated interview rescheduling.

Organizing and Interviewing Skills

The most successful interviewers developed an organized system for keeping track of attempts being made to locate proxy respondents. At any given time, interviewers were working on ten to twenty cases. Therefore, meticulous note-taking and record-keeping was indispensable for successful case completion, including notes of follow-up dates, who was spoken to, what was said, usefulness of phone numbers, when to call (AM or PM), call back request dates, and a log of all phone, field and mail attempts. In addition, it was very helpful to organize fieldwork geographically, so that several sites to could visited or revisited during one fieldwork trip. Planning fieldwork around the time children come home from school was a successful strategy for several reasons: the neighborhoods are safer at that time, other adults are more likely to be

home, and the children themselves were often good sources of information about adults' whereabouts.

In conducting the actual interviews, several skills were essential for developing rapport with the proxy respondent and eliciting information on a painful topic. It was crucial that the interviewer be relaxed and empathetic, and avoid appearing too "official." Memorizing the questionnaire allowed the interviewers to begin interviewing a potential proxy respondent whenever the opportunity arose (on the doorstep, in several cases).

Dealing with potential respondents who refused to participate was also a major element of the interview process. Most potential respondents needed time to decide whether to participate or not, given the amount of grief about the incident most still felt. It was helpful to contact them again after some time had lapsed, appealing for cooperation from several different angles. Successfully dealing with unresponsive proxy respondents was a continuing topic in the weekly debriefing sessions (Appendix V), and was instrumental in increasing the case completion rate.

Proxy Respondent Interviewers

Hiring and Training

We decided to hire and train interviewers who were experienced in working out in the field, such as public health nurses, to do both the identification and the locating of potential proxies and the subsequent interviews. This approach turned out to be very successful. The four interviewers who completed the study were comfortable in the field, became adept at following all kinds of leads in finding people, and had the all-important quality of being able to present the goals of the study to the proxies in such a way as to elicit almost 100% cooperation once proxies were located.

A second key decision concerning training the proxy interviewers was the assumption that some attrition in interviewer staff would occur over the course of the study. Therefore, eight women were trained. Another key decision was to require the completion of the entire training session as a condition for being hired.

The 20-hour training session for the proxy interviewers (see Appendix VI), was similar to the training that had been conducted for the clinic interviewers. It focused on all aspects of the proxy interview process: conducting fieldwork, conducting the actual proxy interviews, and documenting all case activity. The Advisory Board was asked to lend its expertise, and conducted sessions in awareness of general domestic violence issues, cultural sensitivity, safety in the field, and developing fieldwork strategies. Judith McFarlane "attended" the training via speaker-phone, in order to tell the interviewers about the successful Houston experience, and to let them know the field strategies that had worked in Houston.

Interviewer Support

One of the most important considerations of the proxy portion of the CWHRS was interviewer safety in the field. We had some general idea of the geographic location of the homicide incidents (see maps, Appendix VIII), but the search for knowledgeable proxy respondents led the interviewers across the Chicago Metropolitan area and

beyond.

Team building among the interviewers was an important step in creating support for each other during fieldwork, in addition to contact with Authority project staff. To that end, we held weekly three-hour debriefing meetings during the entire seven months of proxy data collection (Appendix V). Each debriefing session began with 60 to 90-minutes of practical and administrative team work discussion, such as reviewing each case, sharing successful field strategies, brainstorming dead-end cases, and raising any other issues related to the proxy interviews. Judith McFarlane, again, generously offered her help and support, attending two debriefing sessions via speaker phone.

The second part of these weekly meetings consisted of group team building and stress management exercises led by Dickelle Fonda, the counseling psychologist. These weekly meetings were instrumental in keeping up interviewer morale, particularly when it took several weeks for the first proxy respondents to be located and interviewed.

Payment Plan

One issue that was never quite resolved during the course of data collection was how the interviewers should be paid. Before the proxy interviewers were hired, three of the veteran clinic/hospital interviewers worked out a payment plan with the principal investigator that everyone thought was fair. Payment would be "piece rate," a fixed amount for each interview completed and a fixed amount for the concomitant fieldwork involved in the case. An interviewer could earn $140 or $180 per case, depending on the number of interviews, regardless of how much field work was necessary. We developed standards (Appendix VI) for what constituted a completed interview (worth $40), and what constituted a completed case (worth $100 for the fieldwork).

For safety reasons, the interviewers could decide to pair up into teams, to support each other during fieldwork. Payment then was made to the team for $150 for fieldwork and $40 per interview ($75 and $20 per team member). In practice, such teamwork was impractical, since the interviewers and the cases assigned were geographically dispersed, and much of the fieldwork could be accomplished over the phone. In the end, the team payment option was dropped, and each interviewer was paid $150 for fieldwork and $40 for each completed interview.

Homicide Case Completion

The lethal sample contained 87 homicides, including 57 women victim cases, 28 women offender cases and two same-sex cases. In eleven of the 87 homicides, we have only official record data. We obtained at least one proxy respondent interview or an interview with the woman offender on 76 (87%). (Though we actually completed 78 cases of the original 89, two of these were found to be ineligible, because the victim and offender had not been intimate partners.) These 76 cases included 49 of the 57 women victim cases (86%), 26 of the 28 women offender cases (93%), and one of the two same-sex cases (Exhibit 36). We did as many as three interviews per case, for a total of 85 interviews of proxy respondents and 15 interviews of the woman offender. In ten cases we did an interview with the woman offender plus one or two proxy respondents, and in five cases we did only an interview with the woman offender.

Exhibit 36
Completed Proxy Cases, by Interviews Conducted

Interviews Conducted in the Case	Woman Victim	Woman Offender	Women Victim and Offender	Total Cases
One Proxy Respondent Only	37	11	1	49
Two Proxy Respondents Only	12	0	0	12
Woman Offender plus One Proxy	NA	9	0	9
Woman Offender plus Two Proxies	NA	1	0	1
Woman Offender Only	NA	5	0	5
Total Cases	49	26	1	76

We attempted to interview all of the women offenders who were still living and where the case had been adjudicated. Of the 30, one committed suicide at the scene, one died in prison, and one case was still being adjudicated, leaving 27 women to be interviewed. We succeeded in interviewing nine of the 11 women who had been sentenced to prison, the one woman sentenced to probation, two of the four women found not guilty, and three of the 12 women in which the ASA rejected prosecution, a total of 15 interviews of the 27 women (56%). In addition, we completed one or two proxy interviews for ten of the 15. For all but three of the other 15 women offender cases, we completed the case with one or more proxy interviews but not an interview of the offender. This interview rate was somewhat higher than Hattendorf, *et al.* (1999), who attempted to interview all 29 women who "admitted to killing abusive partners" in Illinois in 1996, but who found that none of the five women who were not incarcerated agreed to participate.

We obtained permission from the Illinois Department of Corrections (DOC) to interview the eight women offenders who were still in prison when data collection began. All of the women consented to be interviewed. Five were interviewed in prison, and two had been released by the time the request had traveled through DOC, but were found and consented to an interview. We were unable to locate one woman until after the prison interviews had been done, because she was incarcerated under another last name. She consented, and we mailed a questionnaire to her in prison. She completed it and sent it back to us. In total then, we obtained interviews from all of the eight women intimate homicide offenders who were or had been in prison.

Cases took an average of two months to complete from the date the case was assigned to the date of the interview, not counting the time it took for the interviewer to edit her field notes and turn in the case. There was wide variation in this completion time, depending on the mobility of the proxy respondents, and whether, once contacted, they needed time to decide to participate. Forty-one percent of the 76 cases were completed in less than a month, but some took as long as seven months. It took an average of

seven attempted contacts before an interview was actually conducted.

Combining Rules for Cases with Information from Multiple Sources

It took as many as three interviews, in combination, to compile the information necessary for a complete case (see Exhibit 36, above). Our goal was to have reliable and credible information for each question in the questionnaire, for each of the 87 homicide cases. For some cases and for some questions, we had more than one source of information - interviews with one or two proxy respondents, interview with a woman homicide offender, and official record data from several sources. Therefore, one of the first tasks of data analysis was to combine all of this information into a "master file" for each case. If a question had multiple responses, we had to decide what response to code in the master case file.

Anticipating that we might receive contradictory information from two or more proxy respondents, we developed a set of rules to use on a question-by-question basis. The rules combined degree of credibility with degree of knowledge. For example, someone who knew about a specific question because of direct observation would have a higher degree of knowledge than someone who knew because they had talked to someone else who had been there. However, these rules were seldom necessary in practice. Responses were much more likely to be complementary than contradictory. In most cases, responses dovetailed - that is, blanks on one questionnaire were filled by information on another.

In some cases, the proxy respondent was not as knowledgeable or credible about the fatal incident as the official record data. For example, one victim was killed by strangling then mutilated with a knife. The proxy respondent, who found the body, told us about the knife wounds but did not know the cause of death. Another proxy respondent had never seen the body and apparently was not told how her daughter died.

A proxy respondent's credibility and degree of knowledge depends upon the specific question. For example, a drinking buddy of the man victim might not know about prior violence, but might be a reliable source of information about his drinking pattern. Though a proxy respondent's perception of the final event might not be credible (several denied that the murder had happened), yet the person could be a knowledgeable and credible source of information on the health and mental condition of each partner, their children and living arrangements, whether they were estranged, and harassment and violence in the previous year. Also, a proxy respondent sometimes denied harassment or violence when asked directly, but told the interviewer details of harassment or violence when responding to open-ended questions. In coding, we used all responses, from the entire interview.

In the present analysis, we have included only the woman's responses, in the ten cases where the woman offender was interviewed as well as one or two proxy respondents. We did this for two reasons. First, we reasoned that, because she was there, she had a high degree of knowledge. Second, her responses are directly comparable to the questions asked the women in the clinic sample. (We did not interview proxy respondents for the women in the clinic/hospital sample.) The exception was for the few questions about any of her violence toward her man partner. These questions had not

been included on her questionnaire, because they were not asked of the clinic sample (see Appendix II). We recorded the proxy respondent's answers to those questions (using a separate code so they could be excluded from future analysis if desired).

Homicide Cases with no Interview Data

In eleven of the 87 intimate partner homicides, we were unable to obtain at least one interview with a proxy respondent or with the woman offender, although we still were able to gather information from various official and public sources for these eleven cases. In this section, we outline the reasons for not being able to complete these eleven cases, and conduct a comparison with the cases for which we were able to obtain at least one interview.

We decided not to pursue two of the eleven because of safety considerations. In one of these cases, the victim was a gang member and there was some concern that our interview process would generate retaliation against the family. In the other case, the only way to reach a potential proxy respondent involved wandering around a very dangerous high-rise building without knowing the specific apartment number or floor.

In one case, we determined through investigation that there was no one who could be a knowledgeable and credible proxy respondent for the woman offender, who had died in prison. Our investigation could not find any surviving person who knew about the relationship, either on the offender's side or the victim's side.

In three cases, interviewers were able to contact one or more potential proxy respondent, but the person declined to participate. In one of the three, the potential proxy respondent did not want to talk about the incident because it would be too traumatic to re-experience. In the other two, the potential proxy respondents did not want to be interviewed because they believed that the person charged was not guilty and that the relationship had not been violent. If more time had been available, we might have been able to obtain an interview in these cases.

At the end of data collection on May 30, 1999, three cases were still in the criminal courts, and in two of these, one case with a woman victim and offender and one case with a woman victim and man offender, potential proxy respondents declined to talk to interviewers (see Exhibit 35 above).

In the remaining three cases, the interviewers were not able to identify or locate any potential proxy respondent, even with the help of a professional locator on one of the cases. Being unable to uncover a promising lead within the time constraint was the problem in these cases. The interviewer spent a month or less attempting to make contacts in two cases, and used only the initial phone numbers and did no field work or extra investigation in the other.

The problems faced in these eleven cases were also present in most of the completed cases, but were overcome. Frequently, none of the potential phone numbers or addresses in official records produced a lead. The phone number had been disconnected, no one ever answered, or the person who answered said that no one lived there by the name in question and that they didn't know anyone by that name. When the interviewers went to the address, it was a vacant lot or building, or the occupant had no knowledge of the people in question. Interviewers attempted to obtain leads by

questioning neighbors living in the immediate area of the potential addresses, but were not always able to uncover any positive lead to an interview.

A comparison of the known characteristics of the eleven cases without at least one interview and the 76 cases for which we obtained an interview shows no systematic bias. This comparison is based on information obtained from police and other official sources, for both groups.

Victims in nine of the 11 non-interviewed cases (82%) were women, including one killed by a same-sex partner, compared to 49 of the 76 (65%) interviewed cases. This happened because we interviewed woman offenders but not the man offenders.

The mean ages of victims and offenders did not differ significantly in the two groups. The victims' mean age was 34.6 in the non-interviewed and 34.4 in the interviewed cases, and the offenders' mean age was 35.1 and 34.7, respectively. Seven of the 11 victims (64%) in the non-interviewed cases were African/American/Black, three white (27%), and one Latina/Hispanic, about the same as the interviewed 76 cases, which were 80% African/American/Black, 9% white, and 10% Latina/Hispanic. Thus, our interview rates seems to have been somewhat lower for cases with white victims. This may reflect our lack of non-Latina white interviewers, as Harold Rose had warned.

Relationship was not different in the two groups. Of the ten heterosexual cases without an interview, in three the victim-offender relationship was husband/wife or commonlaw, and in seven the relationship was boyfriend/girlfriend, including two former relationships. Of the 75 heterosexual with an interview, 27 (35%) were husband/wife or commonlaw, 46 (61%) were boyfriend/girlfriend, and two (3%) were ex-boyfriend/girlfriend.

There was no association between the type of police clearance of the case and whether or not we were able to obtain at least one interview with a proxy respondent or woman offender (Exhibit 37). We completed an interview in 88% of the 59 cases in which the offender was arrested, 80% of the 10 cases in which the offender committed suicide, both of the two cases of other offender death, and 86% of the cases in which the ASA rejected charges.

Exhibit 37
Interview Completion by Police Clearance

Police Clearance	At Least One Interview		
	Yes	No	Total
Arrest	52	7	59
Offender's suicide	8	2	10
Other offender death	2	0	2
ASA rejected charges	12	2	14
Exceptional clearance	2	0	2
Total	76	11	87

On the other hand, we were slightly less likely to obtain at least one interview in the 25 homicides in which the victim had been killed with a handgun (80%) versus the 38 homicides with a knife or sharp instrument (87%) or the other 24 homicides (96%) (Exhibit 38).Of the 20 cases in which a man killed a woman with a handgun, only 15 (75%) were completed, compared to 33 of the other 37 man-offender homicides (89%). There were only five cases in which a woman killed her man partner with a handgun, but all five were completed, compared to 22 (88%) of the 25 cases in which she did not use a handgun. Therefore, our sample of completed cases contains somewhat fewer handgun murders than the total sample.

Exhibit 38
Interview Completion by Murder Weapon (87 Cases)

Murder Weapon	At Least One Interview		
	Yes	No	Total
Handgun	20	5	25
Rifle or Shotgun	3	0	3
Knife or sharp instrument	33	5	38
Club or blunt instrument	5	1	6
Car	1	0	1
Smothered	2	0	2
Strangled	10	0	10
Beaten to death	2	0	2
Total	76	11	87

Source: Chicago Police Department, Murder Analysis Reports.

Characteristics of Proxy Respondents

All together, we interviewed 85 proxy respondents in the 76 cases, with 50 of them (56%) the only person interviewed in the case. Of the 85 proxy respondents, 69 (81%) were a confidant of the victim, and in 42 of the 50 cases with only one proxy respondent (84%), that person was a confident of the victim. This happened because the available contact information contained more data for people on the victim's side. Medical Examiner's Office files contained information on the victim's relatives (the person who claimed the body), and the most useful court document, the Victim Impact Statement, also focused on the victim's family.

In the one same-sex case with an interview, the single proxy respondent was a confident of the victim. Exhibit 39 details the relationship of the proxy respondent to the intimate partners in each of the other 70 cases in which a proxy respondent was interviewed. (This excludes five cases in which only the woman offender was interviewed and the one same-sex case.)

Exhibit 39
Proxy Respondents in Heterosexual Cases

Type of Interview(s) in the Case	Woman Victim		Woman Offender		Proxy Respondents	Total Cases*
	Confidant of Victim	Confidant of Offender	Confidant of Victim	Confidant of Offender		
One proxy interviewed	32	5	9	2	49	49
Two proxies interviewed	19	5	0	0	24	12
Proxy in a case where offender also interviewed	NA	NA	6	3	9	9
Woman offender plus two proxies interviewed	NA	NA	2	0	2	1
Total proxy respondents	51	10	17	5	84	70

*In the single completed same-sex case, there was one proxy respondent, a confidant of the victim. In addition to the 68 cases with at least one proxy respondent, in five of the completed cases the only interview was with the woman offender.

There were 61 proxy respondents interviewed in the 49 woman-victim cases, of whom 51 (84%) were confidants of the victim, compared to 17 (77%) of the 22 proxy respondents in the 26 woman-offender cases. Of the 37 women-victim cases with only one proxy respondent, that person was a confidant of the victim in 32 (86%), and of the 11 women offender cases with only one proxy respondent, that person was a confidant of the man victim in nine (82%). In two of these nine cases, we could not find the woman nor her confidant; we located the woman in one case, but she denied that she was the person we were looking for; and in the other case, we did not locate the woman and the family members refused. In the one completed same-sex case, the proxy respondent was the sister of the victim and was very knowledgeable about the relationship.

The most common proxy respondent in both women-victim and women-offender

cases was the victim's sister (22%), followed by the victim's mother (21%), all other relatives of the victim (22%), the victim's neighbors (7%), other friends or confidants (10%), the offender's mother (7%), the offender's sister (5%), and other offender confidants (5%). Women proxy respondents were more common than men.

Although we had expected that relatives, friends or other confidants of the victim would tend to tell us positive things about the victim and negative things about the offender, and that confidants of the offender would do the opposite, that was not always the case. For example, a relative living in the same house (often the mother, but in one case a brother) often had considerable information about the relationship and about both intimate partners.

Quality of Proxy Respondent Information

Given that obtaining intimate partner homicide data via proxy methodology has been rarely used, it was important to assess the reliability and validity of the information collected. A full-blown investigation into this issue was beyond the scope of this report. However, it was possible to assess the reliability of the proxy respondents' responses to two types of information: readily observable variables (such as age, race, type of union, alcohol or drug use, facts about the lethal incident, etc.) that could be verified independently by official sources, such as police or medical examiner records); and less observable characteristics and behaviors, such as any PTSD, fear of her partner, and so on.

Proxy respondents were in agreement with independent sources for almost all demographic characteristics. The most notable differences were whether the couple involved in the lethal incident were actually intimate partners (in two cases, it was determined that they were not intimate, although they had been initially identified as such by police), and the age of the intimate partners. Also, we found considerable agreement across proxy respondents and between the reports from a proxy respondent and the woman herself.

Missing and Incomplete Data in Proxy Respondent Information

How knowledgeable are proxy respondents? In 15 of the 76 interviewed cases, we interviewed the woman offender, either by herself or in addition to a proxy respondent. Therefore, a comparison of missing data in the responses of the proxy respondents in the other 61 interviewed cases to the responses of the women themselves in these 15 interviews provides some indication of the degree to which a proxy respondent was likely to know about the questions in the interview. Since all of the 15 interviews with the woman offender were in heterosexual cases, for consistent comparison, this analysis compares them to the 60 completed heterosexual cases.

Demographics. All of the interviewed women offenders were able to provide the man partner's age. In all of the 60 other completed cases, proxy respondents were able to provide the ages of both partners. All of the interviewed women offenders and all but one of the proxy respondents provided the marital status at the time of death, and all of them answered the question about length of relationship. All of the women responded about her educational level, but in eight cases (13%), proxy respondents did not know about the woman's education. All of the women responded about her employment, but this information was missing in two of the 60 other completed cases. All the women told

us their birthplace, but in three of the other completed cases, the proxy respondent did not know.

Children. All of the women answered the question about children, and one of the 60 proxy respondents did not know. Of the 42 cases where the proxy respondent knew there were children, four were missing information about where the children had been living before the death.

Estrangement or Separation. There was no missing data to the question asking whether the victim and partner were living together in the month prior to the fatal incident. There was no missing data on whether the victim and offender had been current or former intimate partners at the time of death.

Firearms. Two of the women offenders (13%) did not know whether or not the victim had a firearm in his home. Only 10% of the proxy respondents in the other 60 cases did not know whether or not the victim had a firearm in his or her home. Of the 15 woman-offender cases, proxy respondents in one case did not know whether the man victim had a gun in his home, and of the 49 woman-victim cases, four did not know whether the woman victim had a gun in her home.

Woman's Physical Health. Like the 15 women offenders who were interviewed, all of the 60 proxy respondents in the other heterosexual completed cases were able to answer a question about the woman's general health, and her health at the time of the death compared to a year before the death. No proxy respondent case was missing information about whether she had been limited due to a physical condition, what that condition was, and how long she had it. However, in three of the 60 cases, the proxy respondents did not know how often she had seen a medical practitioner in the year before the death.

Woman's Substance Use. All of the 15 interviewed woman offenders answered the questions about their substance use. In only one of the 60 completed heterosexual cases, the proxy respondent did not know whether the woman had ever had an alcohol problem, in five cases they did not know if she had ever had a drug problem. One of the 24 who answered "yes" did not know if alcohol was a problem for her in the month before the death, and all of the 24 proxy respondents who answered "yes" knew if drugs had been a problem in the month before.

Woman's Mental Health. Only one proxy respondent case was missing information about whether the woman had been limited due to an emotional condition, what that condition was, and "how long have you had it?" Each of the interviewed women offenders answered each of the 17 PTSD questions. Of the 60 other completed heterosexual cases, the proxy respondents were unable to answer three or more of the 17 questions in ten cases (17%).

Support Network. The 15 interviewed women offenders responded to all of the questions about their support network. In two of the 60 completed heterosexual cases, the proxy respondent could not provide information about any of these 12 questions, and in one case the proxy respondent provided information about only four of the 12. In two cases, the proxy respondent did not know how long the woman had been living in Chicago, and in two cases the proxy respondent did not know whether or not the woman

had any money that she controlled.

Power, Control and Stalking. The 15 interviewed women offenders responded to all five of the Power and Control questions, and to all 20 of the HARASS questions. In the other 60 completed heterosexual cases, the proxy respondents were unable to answer at least two of the Power and Control questions in eight cases (13%). In six cases (10%), the proxy respondents were unable to answer at least ten of the HARASS questions, and in another seven cases they were unable to answer from five to nine of the questions.

Violence in the Past Year. The proxy respondent questionnaires did not include the same type of calendar history as the clinic/hospital sample questionnaires. It did not seem likely that proxy respondents would know, or could accurately recall in detail, each violent incident that may have occurred in the year prior to the death. Instead, violence and the severity of violence in the past year was assessed by the eleven questions in the J section of the questionnaire (see Appendix II), as well as other summary questions that also appeared in the clinic/hospital questionnaire. However, some proxy respondents were not able to provide even this simpler information (Exhibit 40).

Exhibit 40
Percent Missing or Don't Know in Questions about Violence
60 Heterosexual Cases with a Proxy Respondent Interview

Question	% Missing
Threatened to hit her with a fist or anything else that could hurt her?	10.0%
Threw anything at her that could hurt her?	20.0%
Pushed, grabbed or shoved her?	10.0%
Slapped her?	10.0%
Kicked, bit, or hit her with a fist?	11.6%
Hit her with an object that could hurt her?	21.6%
Beat her up, for example, hit her repeatedly?	11.6%
Choked her?	30.0%
Threatened to or used a knife on her?	30.0%
Threatened to or used a gun on her?	20.0%
Forced her into any sexual activity she did not want to do?	41.6%
Forced her to do things she thought were wrong or illegal?	28.3%
Was she afraid of him in the year before the death?	16.6%
Did she ever think her life was in danger in the year before the death?	15.0%

The fifteen women offenders who were interviewed were able to answer all of the questions about his physical abuse in the past year. In the 60 other completed heterosexual cases, the ability of the proxy respondent to answer depended on the question. At least 90% of the proxy respondents were able to tell us whether the woman's intimate partner had hit her with a fist, pushed her or slapped her, and at least 80% were able to tell us whether the partner had thrown anything at her that could hurt her, beaten her up, or threatened or used a gun on her, or whether she was afraid of him or thought her life was in danger. However, fewer than 80% were able to tell us if the partner had hit her with an object that could hurt her, choked her, threatened or used a knife on her, forced her into sexual activity, or forced her to do something illegal or wrong.

Help-Seeking and Interventions. All of the 15 women offenders were able to answer the question about whether they had "talked things over" with someone in the past year, compared to 54 of the 60 proxy respondents (90%). Of the 36 who responded that she had talked things over, all knew with whom and 12 (33%) did not know if it had been helpful. Similarly, while all of the women offenders were able to say whether they had contacted an agency or counselor in the past year (all but one said no), 13 of the 60 proxy respondents (22%) did not know. (Only six of the 47 responding said that the woman had contacted a counselor or agency.)

All of the 15 women offenders who were interviewed responded to the question about seeking medical care after an incident in the past year, with ten of them saying that they had not. In contrast, this information was missing in 13 of the 60 other completed cases (22%). The responses of the two groups were similar. Of the 46 proxy respondents who said that they could answer, 36 (78%) said that the woman had not contacted a medical provider, compared to 67% of the interviewed women offenders.

All of the 15 women answered the question about calling the police, with nine of them saying that they had. Of the other 60 completed cases, 13 proxy respondents could not answer that question (22%). Of the 47 who answered, 23 (49%) said that the woman had contacted the police. All of the interviewed women offenders answered the question about whether they had gone to court in the previous year (only one said yes), compared to 53 of the 60 other cases (88%). Of the eight cases in which the proxy respondents knew that the woman had gone to court, six knew that she had received an order of protection.

ANALYSIS METHODS

The foundation of data analysis in the CWHRS was to answer practical questions. Specifically, we followed two tenets of the American Statistical Associations "Ethical Guidelines for Statistical Practice" (ASA, 1998:5):

> II.A.3. Strive for valid practical significance, not just statistical significance.
>
> II.A.4. Recognize that automated statistical computation alone does not constitute adequate statistical analysis; it is also necessary to understand the theory, the data, and the methods used in each statistical study.

Data Management

The CWHRS was an incredibly complex project, requiring equally complex data management procedures. In this section, we document these procedures. Scale development is discussed above, in the Questionnaire section.

Management of Name, Name2 and Name3 Information

Considering the number of abusive partners identified and the various locations in which Name could be found in the initial questionnaire, there was considerable opportunity for typos or coding errors. Therefore, we manually reviewed the questionnaires to ensure that the recorded characteristics (age, race, length of relationship, etc.) were linked to the true Name. Of the 497 women interviewed as AW, 79% identified only one intimate partner, the person she "feels closest to." However, 107 women identified more than one person in the interview. These cases were reviewed manually to verify the identity of Name.

The person identified as Name in the initial interview was to be tracked to the first and second follow-up interviews. In the first follow-up, the interviewer requested information "about the person we talked about at our last interview." However, some women did not remember the code name that she had given to Name in the initial interview, and discussed a person other than Name. For example, she might discuss a non-abusive intimate partner, or an abusive intimate partner who was identified in the initial interview but was not chosen as Name, or someone she had not previously identified. Where possible, the interviewer had consulted the initial questionnaire before the follow-up interview, knew who Name was, and was able to remind the woman. However, that was not always possible. CWHRS women were often difficult to locate for a follow-up interview. Because the interviewer had no way of knowing which of the 497 women would reply to a telephone call or letter or when, the interviewer might not have the case file available when the woman replied. As a result, there were several interviews in which the person discussed as "Name" in the follow-up was not Name. If contact information was available, the interviewer was asked to request the follow-up information on Name from the woman. Where further contact was not possible, the Name follow-up information was coded "missing."

In the first follow-up interview, if the person identified was not Name but was actually another abuser, this second intimate partner was coded as Name2. Name2 was also identified at Question J13 in the follow-up. The follow-up interviews were also manually reviewed to verify follow-up information on true Name and Name2. The same procedure was followed in the second follow-up to verify and tie the appropriate individual characteristics to Name and Name2.

Management of Incident-Level Data

Before the data were analyzed and the research questions answered, some manipulation of the data was necessary. Three questionnaires were used to collect data from the clinic/hospital sample, one for the initial interview and two more for the subsequent follow-up interviews. The initial interview was designed to collect retrospective information. Questions were asked about abuse that had happened in the past year, twelve months before the date of the interview. The follow-up interviews were

designed to collect prospective information from only the 497 women who were abused at the initial interview. Questions in the first follow-up asked about abuse since the initial interview and questions in the second follow-up asked about abuse since the first follow-up. Data from each of the three questionnaires were first entered in Microsoft Access, checked for typographical errors and then transferred to SPSS for further cleaning and coding.

In the initial and two follow-up interviews, a calendar history was used to capture a detailed history of abuse incidents and the events surrounding the incidents. The calendar used during the initial interview covers a retrospective year in the life of the abused woman (one year before the interview date). The calendar from the first follow-up covered the period from the initial interview to the date of the first follow-up and the calendar from the second follow-up covered the period from the first follow-up to the second follow-up. Thus, the CWHRS interviews collected data at two levels, individual level and incident level.

Individual versus Incident Level Data. Each of the three questionnaires used to collect information from the clinic/hospital sample contained 13 sections and a calendar. The section that asked about the woman's pattern of incidents over the time period of the interview corresponds with the incident calendar, but the information from this section of the questionnaire was individual-level. The information collected was summary data, such as "did a miscarriage ever occur as the result of an incident in the past year?" or "was anyone ever present during an incident?"

The calendar, on the other hand, was incident-level. The calendar recorded detailed information about each incident that an abused woman experienced during the time period covered by the interview. If, for example, the woman said she had a miscarriage or someone else was present during the incident, the interviewer circled yes to the two questions on the questionnaire, but also indicated on the calendar, at the date of the incident, exactly who was present during that specific incident and whether the woman had a miscarriage as a result of the incident.

The individual-level data files have one record of information for each woman. The incident-level data files have one record of information for each incident that each woman experienced. Because of the different levels of data, the total number of records is not the same for the individual-level data and the incident-level data. If a woman told us about more than one violent incident, the incident-level dataset contains multiple records for her. Exhibit 41 illustrates the difference between the number of records in the individual-level data files and the number of records in the incident-level data files.

The incident data are in a separate data file with one record for each incident. The 493 responding women reported 4,974 incidents of abuse in the initial interview, an average 10.1 per woman. Of the 323 women interviewed in the first follow-up, 161 reported 1,172 (7.3 on average), over a follow-up time span ranging from three to 23 months. Of the 177 women interviewed in the second follow-up, 64 reported 347 incidents in total (5.4 on average), over a time span ranging from two weeks to 15 months.

Exhibit 41
Incident-level and Individual-level Data Records, AW Women Only

	Women	Incidents	Ratio of Incidents to Women
Initial Interview	493	4,974	10.09: 1
First follow-up*	323 (161 abused)	1,172	7.28 : 1
Second follow-up	177 (64 abused)	347	5.42 : 1

*At the first follow-up interview, two women told us about violent incidents in Section J, but did not complete a calendar, and one gave unreliable responses. They are not included in the "161 abused" here.

Aggregating Incident-Level Data for Each Woman. Detailed incident data are necessary in order to understand the history of violence for women who have very different life experiences, and to compare them to women who died or who killed their partner. However, before a comparison can be made, the data captured at the incident level must be summarized for each woman. This is accomplished by aggregating the incident-level data to the individual level. Such aggregate information allows us to create key variables for analysis of risk factors, such as the number of severe incidents that occurred in the past year, the most serious incident that occurred, whether any incident in the past year involved drug use, or how long before the interview the most recent incident had taken place.

Aggregating incident-level data compiles all incident information in the calendar history into an individual-level variable for each woman. For example, a woman could provide information about three incidents, where a child was present during all three and an adult was present during one of the three incidents. To determine at the individual level, who was present during any incident in the past year, two variables would be created. One variable would capture the number of incidents in which a child was present, which in this case would be 3. The other variable would capture the number of incidents in which an adult was present, which in this case would be 1. By creating these summary variables, incident-level information is converted to individual-level.

Aggregate data are necessary for some kinds of analysis, but other kinds of analysis require the detail of incident-level data. For example, if we want to know whether or not the abuser's use of alcohol or drugs is a high-risk factor for serious injury or death, it is important to distinguish between the abuser's general pattern of substance use and whether or not the abuser is drunk or high in the particular incident. These are related, of course. However, an aggregate analysis of the number of drug-related incidents over the past year will not tell you whether drug use in a particular incident is related to injury severity in that incident. To reap the benefits of both individual-level analysis and incident-level analysis, the CWHRS was organized so that it would support either.

Variable Follow-up Period. The CWHRS design called for collecting data covering at least a year after the initial interview. The original goal was to re-interview women for

the first follow-up between the fifth and seventh month after the initial interview and for the second follow-up between the fifth and seventh month after the first follow-up. This would have placed the second follow-up around one year after the initial interview. However, the actual time periods varied from three to twenty months for the period between the initial interview and the first follow-up and two weeks to twelve months for the period from the first to the second follow-up.

A few women were not found for their first follow-up interview until after twelve or more months. These women did not need a second follow-up, since the first follow-up captured a year after the initial interview. In addition, some women were contacted for a first follow-up interview almost a year after the initial interview. If the total number of days between the initial and first follow-up interviews was less than 365, we tried to contact women for a second follow-up. Therefore, some of the women were interviewed for a second follow-up only a few weeks after their first follow-up. Regardless of when the first or second follow-up was completed, however, the calendar history covered all of the months between the initial interview and the last follow-up.

Because of the calendar, we can calculate a length of time, in days, between the initial and follow-up interviews for each respondent. Also, because the dates of each incident are recorded, we can determine the exact time period from incident to incident and from each interview to each incident. Therefore, having varying follow-up periods does not pose a problem for analysis.

Prospective Account of Abuse and Events. Although it has not yet been done as of this report, it will be necessary to combine the calendar events and incidents from the first and second follow-up interviews into a single data spanning spans the calendar from the date of the initial interview to the date of the final interview. This will involve cleaning the data to make sure that there are no overlapping incidents, incidents recorded in both the first and the second follow-up interview.

Incident Date

In the calendar history, most of the time, the women remembered the exact date when an incidents occurred, or could estimate the date. However, there were some cases where the abuse was frequent and routine. In these cases, the woman provided a span of time during which the same thing had happened regularly. For example, a woman may say that an abuser beat her up every weekend during June and July. We created variables to handle data entry in such situations, covering the span of time from the first occurrence to the last occurrence. These span variables include the beginning date (year, month, day) and the ending date (year, month and day) of each span of incidents.

Statistical Analysis

Because of the size and complexity of the CWHRS data, the primary goal of the analysis covered in this report was to thoroughly document the methods, data definitions, and basic data inter-relationships, so that this initial report would serve as a foundation for more detailed explanatory analyses. In addition, the focus of this report was trained on the original, primary question of the research - the development of sets of risk factors

for serious injury or death in intimate violence situations.

Therefore, the analysis in the report traveled systematically and exhaustively through each variable and each major question. Almost all of the data were presented as frequencies or simple cross-tabulations, with descriptive statistics, usually Chi square and Gamma. When scale development and reliability were issues, Alpha was used, and factor analysis was occasionally used as part of the scale development process. Relationships between variables were usually presented as two- or three-variable tables with summary descriptive statistics, but when appropriate to the type of data, we used correlations or partial correlations. We also used multiple regression, but only as an exploratory tool to summarize the relative importance of all of the risk factors, protective factors and interventions at each point of the "abuse process."

CLINIC AND HOSPITAL FINDINGS

The remainder of this report presents the findings of the Chicago Women's Health Risk Study, first the findings from the 705 clinic/hospital women, then the findings from the 87 homicide cases, in comparison to the clinic/hospital women. Finally, a "Conclusions" section attempts to assemble the most important points from the entire report, and to discuss their implications.

Lengthy as this report is, it only begins to examine the depth of information available in the CWHRS data. Our primary goal in this report was to document the methods of the study, and to systematically review the data, point by point, so that the report could become a solid foundation for more thorough examination of causal relationships in data. The report is intended to be a "desk reference" for the research and practice communities, and for CWHRS collaborators, as they conduct further analyses and write more detailed but focused reports for a variety of professional and lay audiences.

The "Clinic and Hospital Findings" begin with three sections that are largely descriptive. Since clinic/hospital women sampled in the CWHRS were not randomly selected from the population as a whole, but rather, were selected from sites purposely chosen because they served areas with high intimate partner homicide rates, many characteristics of the 705 women clinic/hospital women were different from characteristics of the "average" Chicago women. The purpose of the "Sample Characteristics" section is to describe the CWHRS women, so that the reader will be able to understand them better, and have a context for the events in their lives.

The following section, "Differences between Women who Interviewed AW versus NAW," looks systematically at each of the risk factors and protective factors. Although the sample design (see "Clinic and Hospital Sample" section, above), dictated that about 70% of the CWHRS women would interview as AW, women in some kinds of situations were more likely than others to interview as AW. This analysis had two goals. First, we wanted to determine whether a woman with a given characteristic was significantly more or less likely to have interviewed as AW. Second, we wanted to give practitioners who work with women in settings similar to that of the CWHRS a picture of the women they encounter on a daily basis.

The section on "Characteristics of Violence in the Past Year" is still mainly descriptive, but instead of describing the woman and the relationship, it describes the close to 5,000 incidents of intimate partner violence that happened to these women in the year before the initial interview. Each of the 87 homicides was also an individual incident in the women's lives. This section lays a foundation for the comparison of the 87 lethal incidents to the 4,974 non-lethal incidents.

It is only with the next section, however, "Correlates of Severity and Number of Incidents in the Past Year," that we begin to address the issues that were the central focus of the CWHRS – of women being violently abused by an intimate partner, what situations indicate a high risk of severe injury or death? With this section, we begin to look specifically at women who experienced physical violence or threat. Again, going systematically through each risk and protective factor, we ask what was different between situations in which the abused woman had experienced at least one severe incident and situations in which she had not, and what was different when women had experienced many incidents in the past year versus one or two. Bringing all of the risk and protective factors together in an exploratory multi-variate analysis, we ask what combinations of factors seem to be more important for distinguishing those abused women who had experienced the most severe violence.

The next section introduces the analysis of help-seeking activities and interventions. It describes the ways in which CWHRS women tried to deal with the violent incidents, and examines the relationship between the severity of the violence in the past year and types of help-seeking activities and interventions.

The final section of Clinic and Hospital Findings, "Risk Factors for Future Abuse," comes even closer to the central focus of the CWHRS by introducing analysis of the follow-up data. This section looks at whether the violence continued in the follow-up period, and if the violence continued, how severe the incidents were. A key necessity for severe injury or death is the continuation of intimate partner violence against the woman. If there is never another violent incident, there can never be an incident severe enough to cause death. This section also goes systematically through each risk and protective factor, looking at their relationship to continuing severe violence, and concludes with an exploratory multi-variate analysis. However, it adds a new group of risk factors - the characteristics of the incidents that happened to the woman in the past year.

Sample Characteristics

The original design of the CWHRS called for a non-lethal sample that included women from all socioeconomic levels, with enough women of color so that it would be possible to determine whether high-risk factors for a lethal or life-threatening outcome were different for abused women who were African/American/Black, Latina/Hispanic or white or other. Unfortunately, though we were successful in establishing partnerships with health centers serving large proportions of disadvantaged women, we were unable to retain research partners from health centers that served mostly upper and middle class women. These centers were recruited in the same ways and times as those who

participated (see Carey, *et al.*, 1996, for a discussion of recruitment methods), and it is not clear to us why they decided not to take part. Because there are very few middle class and very few "white or other" women in the sample (see Exhibit 14, above), the CWHRS cannot claim that its results are applicable to those groups.

On the other hand, we seem to have met our sample design goals of including pregnant women and "hidden" women who may be high risk but their risk is unknown to helping agencies. Of the 702 women who answered, 10% were pregnant at the initial interview, 18% had been pregnant in the past year, and nine women (1.3%) said they did not know whether they were pregnant or not. The proportions of women who were pregnant or had been pregnant did not differ significantly among the AW versus the NAW women. Nor did the proportions of women who were African/American/Black, Latina/ Hispanic or white or other.

Of the 705 women interviewed, the CWHRS design called for 70% to interview as AW and 30% to interview as NAW. Therefore, we tried to interview every woman who screened AW, but only about 20% of the women who screened as NAW (see Exhibit 7, above). Because of this, the sample characteristics of the 705 women may be affected by any tendency of women who interviewed as AW to differ from women who interviewed as NAW. The numbers and percents shown in the following tables are the original data, not weighted to reflect the AW-versus-NAW proportions of women. In most cases, because the AW and NAW women did not differ significantly, this makes no difference. Situations in which the two groups did differ are pointed out in the narrative below, and discussed in more detail in the next section, "Differences Between Women Who Interviewed AW Versus NAW."

Place of Birth and Language

Another indicator of the diversity of the population of women sampled in the CWHRS is the proportion who were born outside the United States (Exhibit 42). Of the 701 women who responded to this question, 113 (16%) were born in other countries, including 85 women (12%) born in Mexico. Smaller numbers were born in Nigeria, India, Pakistan, Germany, Austria, Poland, Colombia, Ecuador, Peru, Venezuela, Panama, Honduras, El Salvador, the Dominican Republic, Jamaica, Jordan and Taiwan. Most of the United States are represented in the CWHRS sample, with 32 women (5%) born in Mississippi, 11 in Arkansas, nine in New York, nine in Missouri, seven in Tennessee, and the rest scattered around the country.

Of the 700 women who responded, 90% had been living in Chicago for many years or all her life, 3% for three or four years, and 6% for two years or less. However, only 74% of the 159 Latina/Hispanic women had lived in Chicago for many years, while 11% had lived there for three or four years, and 14% for less than that. African/American/ Black women were the most likely to have lived in Chicago for many years (98%), and the least likely to have lived there for three or four years (0.2%) or less (1.9%). White or other women were between the two other groups, with 86% having lived in Chicago for many years, 5% for three or four years and 9% for less time. This did not differ significantly between the AW group and the comparison group.

Exhibit 42
Place of Birth*

Place of Birth	African/ American/Black	Latina/ Hispanic	White or Other	Total**
Illinois	81.3%	23.4%	43.9%	64.1%
U.S. Other Midwest	13.5	.0	4.5	3.7
U.S. South	.6	3.8	9.1	9.7
U.S. West	.6	.0	7.6	1.3
U.S. East	3.2	.0	15.2	2.3
U.S. Puerto Rico	.0	10.1	.0	2.4
U.S., place not given	.4	.6	.0	.4
South America	.0	5.1	.0	1.1
Central America	.2	57.0	6.1	13.6
Europe	.0	.0	6.1	.6
Middle East	.0	.0	1.5	.1
Africa	.0	.0	.0	.1
Asia	.0	.0	6.1	.6
Total	100.0% (466)	100.0% (158)	100.0% (66)	100.0% (701)

*The percent born in the U.S. did not differ significantly between the AW and the NAW groups.
**Total includes 11 women who were multi-racial or did not respond to the race question.

Of the 705 interviews, 111 (16%) were conducted in Spanish. None of the 467 interviews with an African/American/Black woman, 109 (69%) of the 159 interviews with a Latina/Hispanic woman, and two (3%) of the 66 interviews with a white or other woman were conducted in Spanish.

For the Latina/Hispanic women, there was a significant difference (Chi square = .011; Gamma = .417, p = .014) in the percent who interviewed in Spanish between the women who interviewed as AW versus NAW (75% and 56%, respectively). Of the 109 women who interviewed in Spanish, 79 (72%) interviewed as AW, compared to 26 of the 50 (52%) of the women who interviewed in English. It is possible that the Latina/Hispanic women who were interviewed in Spanish felt more comfortable about revealing abuse, even though each woman chose the language of the interview. Also, the nuances of the language in the Spanish version may have communicated more clearly about these sensitive issues. However, as we have seen above ("Was There an Interview Selection Bias by Age or Language?"), there was no bias in whether we interviewed a woman or

not, based on the language she used in the screener.

Employment, Education and Income

In general, the socioeconomic status of the women interviewed in the CWHRS reflected the populations of the relatively disadvantaged neighborhoods served by the participating clinics and hospital. Of the 701 women who told us their primary occupation at the initial interview, 48% said they were unemployed, 10% were students, 10% were homemakers, and 33% had a full-time or part-time job. (This question allowed the woman to provide more than one answer. The "primary" occupation given here is the one she mentioned first.) Many of the women who said they were employed were also students. In all, 13% were students at the time of the initial interview, with 54% of those attending school full time. For African/American/Black women only, there was a significant difference (Chi square = .006; Gamma = .283, p = .006) in the percent unemployed between the women who interviewed as AW (59%) and the comparison women (44%).

Four of the 703 women responding when asked the highest grade or year of school completed had never had any formal education at all (two AW and two NAW women); 7% had never attended high school; 37% had some high school education but had not graduated; 25% had graduated from high school or had a GED certificate; 26% had some college, community college or a vocational school education; and less than 4% (25 women) had graduated from a four-year college. For African/American/Black women only, there was a significant difference (Chi square = .039; Gamma = .103, p = .036) in the percent with a high school degree between the women who interviewed as AW (54%) and the comparison women (65%).

Of the 695 women who responded when asked if they had in the last year any "money or income that you control," 19% said "no." There was no significant difference between the AW women and the comparison women. Of those who answered "yes," 41% said that their yearly personal income in the past year was less than $5,000, 21% from $5,000 to $9,999, 12% from $20,000 to 29,999 and 6% received $30,000 or more.

Of the 588 women who responded to the question about their total household income in the past year, 31% said that it was less than $5000, 20% from $5,000 to $9,999, 23% from $10,000 to $19,999, 10% from $20,000 to $29,999, 6% from $30,000 to $39,999 and 10% said that it was over $40,000. There were no significant differences between the AW and the comparison groups. This represents a much lower household income for CWHRS women, compared to households in Chicago as a whole. This is true for each racial/ethnic group, and especially for the white or other women in the CWHRS (Exhibit 43).

While a few women in the CWHRS had a household income of $40,000 or more (11% of responding African/American/Black women, 3% of Latina/Hispanic women and 13% of white or other women), the numbers were much smaller than would be expected if the CWHRS had been a random sample of Chicago households. Conversely, the proportion of women with a very low household income was much higher in the CWHRS than in Chicago as a whole.

Exhibit 43
Household Income of Chicago Sampled Women, 1990
Compared to 1989 Chicago Household Income*

Household Income	African/American/ Black		Latina/Hispanic		White or Other	
	CWHRS	Chicago	CWHRS	Chicago	CWHRS	Chicago
Less than $5,000	34.2%	18.5%	21.0%	9.9%	32.1%	5.6%
$5,000 to $9,999	20.7	13.4	20.0	8.5	19.6	8.5
$10,000 to $19,999	20.4	9.3	35.0	9.8	23.2	8.4
$20,000 to $29,999	7.1	18.0	17.0	22.1	10.7	17.3
$30,000 to $39,999	6.7	13.9	4.0	18.2	1.8	15.9
$40,000 and over	10.9	27.0	3.0	31.4	12.5	44.4
Total (Households)	100.0% (421)	100.0% (358,164)	100.0% (100)	100.0% (155,842)	100.0% (56)	100.0% (440,139)

Source of Chicago data: *Demographic Characteristics of Chicago's Population*. Chicago Department of Planning and Development, March, 1994. The City of Chicago, in pending litigation, is challenging these figures. For the CWHRS data, there are no significant differences between the AW and the comparison groups.

Age and Racial/ Ethnic Group

In the CWHRS sample, the woman's age was related to her racial/ethnic group (Exhibit 44). Latina/Hispanic women were the youngest on average, African/American/ Black women a little older, and white or other women older still. For the 692 women who responded to our request to describe their race or ethnic group and who did not say that they were inter-racial, 70% of the white or other women were over age 30, and 42% were over age 40, compared to 51% and 17% of the African/American/Black women, and only 38% and 9% of the Latina/Hispanic women. For African/American/Black women only, there was a significant difference (Chi square = .003; Gamma = .182, p = .017) in the age distribution between the AW and the comparison groups, with the AW women tending to be younger (mean age = 30.2) than the NAW women (mean age = 33.3).

The women sampled in the CWHRS were, on average, younger than women in the Chicago population (Exhibit 45). Though the age categories are not exactly the same, it is clear that many more of the CWHRS women were aged 18 to 20, and many fewer were aged 49 or over. This is not surprising, since one of the sampling goals was to include pregnant women.

Exhibit 44
Age and Race/Ethnicity of 705 Sampled Women

Age Group	African/ American/Black*	Latina/ Hispanic	White or Other	Total*
18 to 20	18.8%	13.8%	7.6%	16.5%
21 to 25	14.3	24.5	9.1	16.0
26 to 30	15.4	23.9	13.6	17.6
31 to 40	34.5	28.9	27.3	32.1
41 to 50	14.1	8.2	33.3	14.8
51 to 67	2.8	.6	9.1	3.1
Total (N)	100.0% (467)	100.0% (159)	100.0% (66)	100.0% (705)
Mean age	31.07	29.08	36.91	31.26
Median age	31	29	38	30
Age range	18-62	18-56	18-64	18-67

*AW women tended to be slightly younger than NAW women.

**Total includes 13 women who were multi-racial, or their race/ethnicity was missing.

Exhibit 45
Age and Race/Ethnicity of Chicago Women, 1990 Census

Age Group	African/ American/Black	Latina/ Hispanic	White or Other	Total
18 to 20	7.7%	9.9%	5.1%	6.9%
21 to 24	9.6	13.2	9.7	10.2
25 to 29	13.3	17.0	15.3	14.8
30 to 39	25.4	27.6	24.3	25.3
40 to 49	17.9	16.1	16.5	17.0
50 to 69	26.0	16.2	29.1	25.8
Total (N)	100.0% (380,675)	100.0% (155,842)	100.0% (440,139)	100.0% (976,656)

Source: *Demographic Characteristics of Chicago's Population.* Chicago Department of Planning and Development, March, 1994. The City of Chicago, in pending litigation, is challenging these figures.

Type of Union, Relationship, and Co-Habitation

When women were asked to tell us their marital status, 148 (21%) of the 700 who responded said that they were married, another 32 (5%) were in a commonlaw marriage, two said they were engaged, 14 (2%) were widowed, 55 (8%) were separated, 62 (9%) were divorced, and 387 (55%) were single. By comparison, women in the general Chicago population in 1990, who did not have "commonlaw marriage" as a choice, were more likely to say they were married (36%), less likely to be single (36%), widowed (13%) or separated (5%), and about equally likely to be divorced (10%).

The racial/ethnic groups differed significantly (Chi square < .0001) in how she described her marital status to us. Latina/Hispanic women were much more likely to say they were married (43%), compared to African/American/Black women (12%) or white or other women (37%). Only one African/American/Black woman and one white woman described her marital status as commonlaw marriage, compared to 30 (19%) Latina/ Hispanic women. For white or other women only, there was a significant difference (Chi square = .013; Gamma = .582, p = .014) in the percent who said they were married, 26% of the 43 who interviewed as AW and 57% of the 23 who interviewed as NAW.

In contrast, the 467 African/American/Black women were much more likely to say they were single (68%) than the 159 Latina/Hispanic women (29%) or the 66 white or other women (25%), and the white or other women were much more likely to be divorced (23%) than the African/American/Black women (9%) or the Latina/Hispanic women (3%). For Latina/Hispanic women, the 105 who interviewed as AW were significantly (Chi square = .047; Gamma = .341, p = .055) less likely to say they were single (24%) than the 54 women who interviewed as NAW (39%).

We asked women to describe their relationship with Name (Exhibit 19, above). (Remember that, for women who interviewed as NAW, "Name" refers to the closest intimate partner, and for women who interviewed as AW, "Name" refers to the chosen abusive partner.) Most of the CWHRS women described their relationship with Name as boyfriend (48%) or husband (22%). However, like the woman's description of her marital status, the description of her relationship tended to differ for the three racial/ethnic groups (Exhibit 46). African/American/Black women were more likely than others to describe their relationship as boyfriend or ex-boyfriend, while husband or commonlaw husband was more likely for Latina/Hispanic women.

For all of the CWHRS women except for the Latina/Hispanic women, there was a significant difference between those who interviewed as AW and those who interviewed as NAW in whether their relationship with Name or their current partner was "current husband." Of the 340 responding African/American/Black women who interviewed as AW, 30 (9%) were in a current husband relationship, compared to 21 (17%) of the 126 women who interviewed as NAW (Chi square p = .016; Gamma = .348, p = .033). Of the 42 responding white or other women who interviewed as AW, 11 (26%) were in a current husband relationship, compared to 14 (61%) of the 23 women who interviewed as NAW (Chi square p = .006; Gamma = .629, p = .006).

Exhibit 46
Relationship with Name by Racial/Ethnic Group*

Relationship with Name	African/ American/Black	Latina/ Hispanic	White or Other	Total
Husband (current)	10.5%	42.1%	33.8%	19.8%
Ex- or former husband	3.4	3.8	7.7	4.0
Commonlaw husband (current)	.9	17.6	3.1	4.8
Ex-commonlaw husband	.6	6.9	1.5	2.1
Boyfriend (current)	42.7	21.4	24.6	36.3
Ex- or former boyfriend	33.3	5.7	20.0	25.3
Same-sex partner (current)	2.4	.6	1.5	1.8
Ex- or former same-sex partner	.9	.6	1.5	.9
Friend (current)	.9	.0	1.5	.7
Ex- or former friend	1.1	.6	1.5	1.3
Fiancé (current)	.9	.0	.0	.9
Ex- or former fiancé	.2	.0	.0	.1
Child's father	1.7	.6	.0	1.3
Sex partner, lover or associate	.4	.0	3.1	.6
Total	99.9% (466)	99.9% (159)	99.8% (65)	99.9% (703)

*African/American/Black women and white or other women who interviewed as AW were significantly less likely to be in a current husband relationship than women who interviewed as NAW.

Women who interviewed as AW were asked to list the partner or partners who "hurt or beat you in the past year." Usually, this person was the person she had said she "currently spend[s] the most time with and feel[s] closest to," but not always. At the initial interview, women mentioned up to three abusive partners in the past year. For 395 of the 497 women (79%), she mentioned one abusive partner and that person was the closest intimate partner. For 69 women (14%), she mentioned one person and that person was not the closest intimate partner. Thirty-three women mentioned two or three abusing intimate partners. For five of these 33 women, the closest intimate partner was not one of the two or three abusive partners. Of the remaining 28 women with two or three abusing intimate partners, one of which was the closest intimate partner, 18 chose the closest intimate partner as Name and ten chose another of the abusers as Name.

Thus, for the great majority (83%) of the 497 women, Name was the same person

as her closest intimate partner. In all but two of the 84 cases in which Name was someone else, the relationship was former (a current same-sex partner and a boyfriend), compared to 31% of the other 413 cases. In most of the 84, Name was an ex- or former boyfriend (68%), compared to 24% of the others. In 15% Name was an ex- or former husband or commonlaw husband, compared to 5% of the others. In one of the 84 cases, Name was a former same-sex partner, in five cases Name was her child's father, and in the remaining six cases Name was a former or ex-friend, fiancé or sex partner.

About a third (32%) of the 697 responding CWHRS women had lived with Name for the entire year prior to the interview, another third (31%) had lived together at some time during the year but were now living apart, and over a fourth (28%) had never lived together. The Latina/Hispanic women who interviewed AW versus NAW were the same in this regard. For the African/American/Black women, there was a significant difference (Chi square p = .013; Gamma = .293, p = .021) in the percent who had lived together the entire year between the AW women (18%) and the NAW women (28%). This was also true for the white or other women, with 33% of the 42 who interviewed as AW and 77% of the 22 who interviewed as NAW having lived with Name for the entire year (Chi square p = .001; Gamma = .744, p < .0001).

For all CWHRS women, there was a significant difference (Chi square p < .0001; Gamma .332, p < .001) in the percent of AW women (23%) versus NAW women (38%) who had never lived with Name at any time. There was also a difference by racial/ethnic group in the percent who had never lived with Name (see Exhibit 18, above). The majority (60%) of the 192 women who had never lived together with Name had been in the relationship for at least a year, and a considerable proportion (26%) for three or more years.

Same-sex Relationship

The CWHRS interviewed 19 women who said that they were in a same-sex relationship, and all but one interviewed as AW. This high percentage is probably due to women not mentioning a same-sex relationship to the interviewer, until they had already divulged information about partner abuse. Several of the women who were being abused by a same-sex partner also had a man intimate partner. When asked for information about their intimate partner, they told us about the man. It was not until we got to the abuse sections of the interview that the woman told the interviewer about her abusive same-sex partner. Thus, some of the 705 women may have been in a non-abusive same-sex relationship, but did not tell the interviewer about it.

In addition, some women who had told us about an abusive man partner at the initial interview told us later, after developing more rapport with the interviewer, that the man abusive partner was actually a woman. There could be additional cases like this in the sample, where the woman never felt she could reveal this information to us.

Of the 19 relationships, 13 were current and six ex- or former. Six (32%) had been in the relationship for one year or less, and nine (47%) for over one to two years, but two women had been in the relationship with Name for more than five years. The six ex- or former relationships were considerably shorter than the 13 current relationships. Nine of the 19 (47%) were living in the same household with Name at the initial interview, four for

the entire year and five more recently.

The 19 women were similar to the rest of the CWHRS women in most ways. The mean age was the same (31) for both groups. Nine (47%) had graduated from high school, compared to 55% of the other women. All of them had lived in Chicago for many years or their whole life, compared to 91% of the other women. None was born outside the United States, compared to 17% of the others, and only one (5%) of the interviews was in Spanish, compared to 16% of the interviews with other women. Only one woman was a homemaker (5%), compared to 10% of the others, but about the same percents had a full or part-time job (37% and 33%, respectively). The household income was under $10,000 for ten of the 19 (53%), compared to 51% of the others, and 14 (74%) had a personal income less than $10,000, compared to 82% of the others. Almost the same percent had children (73% and 77%, respectively), and three of the 19 women (16%) had four or more children, compared to 19% of the other women.

Age Disparity between the Woman and Name

The great majority of women interviewed in the CWHRS were either the same age as Name (closest intimate partner), or within four years of Name's age, regardless of her racial/ethnic group (Exhibit 47). Though the age difference was usually small, in a few cases it was substantial. One woman interviewed as AW was 17 years older than Name, and one woman interviewed as NAW was 20 years older than her closest intimate partner, while one Name was 42 years older than the woman. There was no significant relationship between age disparity and interviewing as AW or NAW.

Exhibit 47
Age Disparity between the Woman and Name (Closest Partner), by Racial/Ethnic Group*

Age Disparity	Racial/Ethnic Group			
	African/ American/Black	Latina/ Hispanic	White or Other	Total
Same age within 5 years	56.4%	63.1%	52.3%	57.5%
Woman is 5 to 9 years older	6.1	5.1	6.2	5.9
Woman is 10 to 20 years older	2.0	2.5	6.2	2.4
Name is 5 to 9 years older	20.2	20.4	21.5	20.4
Name is 10 to 20 years older	12.8	7.6	12.3	11.6
Name is 21 to 42 years older	2.6	1.3	1.5	2.2
Total	100.1% (461)	100.0% (157)	100.0% (65)	100.0% (696)

*There are no significant differences between the AW and comparison groups.

The woman's relationship with Name was not related to whether or not she and Name were close to the same age. Of the 139 women who said that Name was her current husband, 80 (58%) were the same age or close to the same age as Name, compared to 62% of the 34 who said that Name was her current commonlaw husband, and 59% of the 251 who said that Name was her boyfriend. Of the 28 women who said that Name was her ex- or former husband, 18 (64%) were close to the same age, but only five (36%) of the 14 women where Name was her ex- or former commonlaw husband and 98 (56%) of the 176 women where Name was her ex- or former boyfriend. Thirty 30 (58%) of the 52 women who said that their relationship with Name was something else (same-sex, fiancé, friend, etc.) were close to the same age.

Pregnancy and Children

Of the 702 women who responded, 73 (10%) were pregnant at the initial interview, 128 (18%) had been pregnant in the past year, 492 (70%) were not pregnant, and nine (1.3%) did not know if they were pregnant or not. Of the responding 127 women who had been pregnant in the past year, 91 (72%) had given birth, 22 (17%) had a miscarriage, and 14 (11%) had an abortion.

The 701 CWHRS women who responded had up to ten children by birth. The average number was 2.04, with .61 for women aged 18 to 20, 1.44 for women aged 21 to 25, 2.24 for women aged 26 to 30, 2.72 for women aged 31 to 40, 2.49 for women aged 41 to 50, and 2.64 for women aged 51 to 67 (Exhibit 48). Counting adopted and foster children as well, the average number of children was almost the same, 2.05 overall.

Exhibit 48
The Mean Number of Birth Children is Not Related to Racial/Ethnic Group*

	Woman's Age at Initial Interview					
Racial/Ethnic Group	18- 20	21- 25	26- 30	31 - 40	41-50	51 +
African/American/Black	.58	1.45	2.39	2.73	2.42	2.77
Latina/Hispanic	.73	1.38	2.29	2.91	4.46	**
White or other	**	1.67	1.33	2.18	1.14	2.17
Total	.61	1.44	2.24	2.72	2.49	2.64

*Deceased children not included.
**Too few cases to calculate.

Controlling for her age, women of different racial/ethnic groups did not differ significantly in the number of children by birth. For women aged 21 to 25, there was a significant difference (t test p = .015) in the average number of children for the women who interviewed as AW (1.63) versus the comparison women (.97). This was also true for

women aged 26 to 30 (t test p = .001), where the average number of children was 2.56 for AW women and 1.58 for NAW women, and for women aged 31 to 40 (t test p = .045), where the average number of children was 2.87 for AW women and 2.25 for NAW women. There was no significant difference for women aged 18 to 20, women aged 41 to 50, or women aged 50 and over.

How many children did the CWHRS women have? This seems to be a simple and straightforward question, but it is not. Do we mean only young children, or do we want to know how many children all together? Are we interested only in children who live in the same household as the woman? What about children who are living in the same household, but who are not the woman's children? Like marital status and estrangement, it is important to specify exactly what is being measured. For example, counting only the 643 women who had a home (they were not homeless or living in a group home) and who responded, 415 (65%) lived in a household with at least one child under 18 (Exhibit 49), but it should not be assumed that all of these children were hers.

Exhibit 49
Children Aged 17 and Under Living in the Woman's Household*

Woman's Children	Other Children					
	None	One	Two	Three	Four or More	Total
None	228	31	23	9	12	303
One	82	22	15	7	6	132
Two	85	10	3	3	1	102
Three	38	14	4	0	1	57
Four or more	41	4	1	1	2	49
Total	474	81	46	20	22	643

*This table includes only women who are not homeless or living in a group home.

For 75 of the 415 women (18%), none of the children living with her was her own child. Many of the youngest women were living with their parents, and these children were her brothers, sisters, nephews or nieces. Older women were more likely to have grandchildren living with them. In addition, 94 women (23%) lived in a household that included both their own child or children and at least one other child under age 18. These women were typically in the "middle" age categories, and they and their children were living with a sister or another relative who also had children. Only 246 women (59%) were living in a household with children in which the only children under age 18 were their own.

In addition to children aged 17 and younger, 47 (7%) of the 643 women who were not homeless or in a group home had children older than age 17 who were living with

them. There were 62 older children in all. Most adult children were aged 18 to 20 (33 children) or 21 to 25 (20 children), but seven were aged 26 or older. The oldest child living with his or her mother was age 37.

Other women, especially those who were homeless or living in a group home, had children aged 17 or younger who were not living with them. Of the 60 women who were not living in their home, 38 (63%) had children living away, as did 111 (17%) of the 642 other women. At least five women, however, managed to keep their family together, even when she was on the street or living at a treatment center or shelter.

Therefore, the average number of children, seen in Exhibit 49, above, may be an over-simplistic measure. Having children may be a risk factor or may provide a protective effect for the woman, but to measure these effects we have to take into account where the children are living, the age of the children, and whether the father was Name or someone else. These things are related to the woman's age (Exhibit 50).

Exhibit 50
Number of Women's Children*

Number of Children**	Woman's Age at Initial Interview					
	18 to 20	21 to 25	26 to 30	31 to 40	41 to 50	51+
Age 17 or Younger:						
None	62	33	22	43	55	21
One	39	31	22	37	23	0
Two	13	25	36	51	11	0
Three	2	12	20	44	8	0
Four or more	0	11	26	47	6	1
Age 18 or older:						
None	116	112	126	160	31	1
One	0	0	0	43	29	5
Two	0	0	0	12	15	7
Three	0	0	0	3	15	4
Four or more	0	0	0	4	13	5
Total	116	112	126	222	103	22

*Four responses are missing.
**Includes children by birth, adopted or foster.

The proportion of women who have had no children was, of course, higher for younger women. About half (53%) of the 115 women aged 18 to 20 did not have any

children, but only 4.5% of the 22 women aged 51 or older. However, the children that older women had were likely to be older themselves. These patterns may seem obvious in retrospect, but a "simple" analysis that ignored them might render the conclusions invalid.

The definition of "stepchild" can be equally complex. In the CWHRS, Name is defined as a stepparent to one of the woman's children when 1) the woman had children who are living in her household, and 2) at least one of these children was fathered by a partner who is not Name. It does not matter, to this definition, whether or not Name is living in the household, or whether or not Name is married to the woman. The analysis in this report includes the 17 cases where Name was the father of at least one child and the stepfather to at least one other child in the "stepparent" category.

Of the 638 responding women who were not homeless or living in a group home, 185 (29%) had at least one child living at home who was a stepchild to Name, but this differed for women in different racial/ethnic groups (Exhibit 51). Of the 414 African/ American/Black women who responded, 138 (33%) had at least one child who was a stepchild to Name, as did 36 of the 155 (23%) Latina/Hispanic women. It was much less common for Name to be a stepparent to the child of a white or other women, largely because they were much less likely to be the mother of a child living in her home. For over half (52%) of the Latina/Hispanic women, Name was the father of all her children at home, twice the percent of the rest of the CWHRS women. Latina/Hispanic women were also much less likely to have no children living with them, compared to the other women.

Exhibit 51
Women Whose Intimate Partner Was the Stepfather of Her Child*

Is Name the Stepparent of One or More of the Woman's Children Living in Her Household?	Racial/Ethnic Group			
	African/ American/ Black	Latina/ Hispanic	White or Other	Total**
Yes: all kids stepchildren to Name	30.9%	20.0%	8.9%	26.3%
Yes: some are stepchildren to Name	2.4	3.2	.0	2.7
Her children at home are all Name's	17.4	51.6	25.0	26.5
She has no children living with her	49.3	25.2	66.1	44.5
Total	100.0% (414)	100.1% (155)	99.9% (56)	100.0% (638)

*Table includes only women who were not homeless or living in a group home or institution at the initial interview.

**Total includes 13 women who were multi-racial or missing racial/ethnic information. Six other women are missing information about their children.

To examine the effect of having a "stepchild" as a risk factor, we must take into account these large differences across racial/ethnic groups. In addition, having a child who was a stepchild to Name varied by the woman's age. Women were most likely to have a child who was a stepchild to Name at age group 31 to 40 (41%), followed by age group 26 to 30 (32%), age group 41 to 50 (28%), age group 51 to 67 (25%), age group 21 to 25 (24%), and age group 18 to 20 (12%).

Women whose children had all been fathered by Name were much more likely to say that they were married (41%), compared to women with a child who was a stepchild to Name (16%). For the 185 women who had a child who was a stepchild to Name, most said that Name was her boyfriend (45%) or ex-boyfriend (22%). Only 14% said that Name was her husband, 4% said that he was her ex-husband, and another 5% her commonlaw or ex-commonlaw husband. Five women said that Name was her current or former same-sex partner.

Mental Health

Depression. Latina/Hispanic women were much more likely to tell us they were depressed than African/American/Black or white or other women (Exhibit 52). Of the 158 Latina/Hispanic women interviewed, 46% mentioned depression as a current emotional condition, compared to 22% of the 466 African/American/Black women and 28% of the 65 white or other women (Chi square <.001).

Exhibit 52
Responses to Depression Indicators by Racial/Ethnic Group

Measure of Depression	Racial/Ethnic Group			
	African/ American/ Black	Latina/ Hispanic	White or Other	Total
Mean score on Depressed Feelings scale (maximum=4)	1.08	1.86	1.38	1.29
Mean score on Depressed Feelings II scale (maximum=5)	1.30	2.32	1.71	1.57
Percent "bothered in the past month" by depression	22.3%	46.2%	33.8%	28.9%
Percent saying they "ever" had threatened or attempted suicide	25.2%	32.3%	33.8%	27.6%

Only 26% of the Latina/Hispanic women told us about zero feelings of depression, compared to 48% of the African/American/Black women and 45% of the white or other women (Chi square < .001). The 109 Latina/Hispanic who interviewed in Spanish were

significantly (Chi square p = .002; Gamma = .519, p = .005) less likely to score zero on the Depressed Feelings II scale compared to the 50 who interviewed in English (17% and 40%, respectively). Both Latina/Hispanic women and white or other women were somewhat more likely to tell us that they had threatened to or tried to commit suicide than African/American/Black women (32%, 34% and 25%, respectively), but the difference was not statistically significant.

Research has found a link between depression and substance abuse problems in women (for a review, see Morell, 1997: 231). In the CWHRS, there were significant correlations between score on the Depressed Feelings II scale and whether the woman said that she had "ever had" an alcohol problem (Pearson r = .142, p<.01), whether she had "ever had" a drug problem (Pearson r = .1501, p <.01), whether alcohol was "currently" a problem for her (Pearson r = .151, p <.01), and whether drugs were "currently" a problem for her (Pearson r = .174, p<.01). These correlations were significant for each racial/ ethnic group, but especially high for the white or other women.

Only 29% of the 138 women who said that they had "ever" had a problem with alcohol scored zero on the Depressed Feelings II scale, compared to 41% of the 566 women who said that they had not, but the difference was only 21% versus 32% for women who said that they had a "current" problem with alcohol. Similarly, 30% of the 182 women who said that they had ever had a problem with drugs scored zero, compared to 42% of the women who said they had not. However, unlike alcohol, there was a strong difference for the 56 women who said that they had a "current" problem with drugs (16% versus 36%).

PTSD. The prevalence of women in the CWHRS clinic and hospital sample who met the diagnostic criteria for a PTSD diagnosis (in the DSM-III-R, see discussion under "Questionnaire" above) was much higher than that found in the National Women's Study (Kilpatrick, *et al.*, 1998), or in other studies of United States women. In the National Women's Study, 4.6% of United States adult women had enough symptoms in the previous six months to meet the diagnostic criteria for PTSD, and 5.1% met PTSD criteria in the twelve-month follow-up. Other national studies show a prevalence of about 7% in the general population (Kilpatrick, *et al*, 1998:161). However, 63% of the CWHRS women who interviewed as AW and to 28% of those interviewed as NAW met the criteria for a PTSD diagnosis. The difference between the AW and NAW women is statistically significant (Chi square p <.0001; Gamma= .620). It is unclear why CWHRS women had such a high prevalence of PTSD. It may be that the women sampled by the CWHRS were not only more disadvantaged than the "average" Chicago woman, but also were more likely to have had one or more traumatic experience, even those women who interviewed as NAW.

The prevalence of a PTSD diagnosis for those CWHRS women who had interviewed as NAW was comparable to the prevalence for women in the nationwide study who had experienced at least three violent assaults in their life. The National Women's Study PTSD prevalence ranged from 28.5% for women who had suffered three assaults in their lifetime, 10.7% for women with two prior assaults, 8.9% for women with one prior assault, and 3.6% for women with no prior assault.

Firearms in the Home

Of the 639 women who responded and who were not homeless or living in a group home or treatment center, 51 (8%) reported that they had at least one firearm in their home, and two women said that they didn't know. In addition, two of the homeless women said that Name kept a handgun. Of the 51 who said "yes," 43 reported at least one handgun (one women did not know and seven reported a long gun). Twenty-two of the 43 women reported that a handgun was kept loaded at home. Only ten of the 51 women who had a gun in the household had acquired the gun herself. In 15 cases, it was the woman's partner, and in 21 cases it was a parent or grandparent.

There was no significant relationship between the women who interviewed as AW and the comparison group in whether there was a firearm in the woman's home. However, it was very infrequent for the Latina/Hispanic women. Only three of the 105 women who interviewed as AW said that there was a firearm in her home, and none of the 54 who interviewed as NAW. Overall, less than 2% of the interviewed Latina/Hispanic women said that there was a firearm of any kind in her home, compared to 10% of the African/American/Black women and 12% of the white or other women. Therefore, the overall proportion of CWHRS women who have a firearm in the home is less than it would have been without the Latina/Hispanic women in the sample.

Because some of the unique characteristics of the CWHRS sample have been found in other studies to be related to a low level of firearm ownership, it might be expected that the CWHRS women would be unlikely to have a firearm in the home. For example, national surveys have found that low-income urban women with children in the home are less likely to have a handgun in the household (Powell, *et al.*, 1998; Smith, 1999). Therefore, Exhibit 53 tries to take some of these factors into account, comparing the percent who have a handgun in the home in specific groups of CWHRS women to the percent in the NORC survey of the same specific groups. In every case, the CWHRS women still were less likely to have a handgun in the household. However, because of the nature of the CWHRS sample, this is only suggestive, not definitive.

Of the 639 CWHRS women who responded and were living in a home, 43 said there was a handgun in the home. This handgun ownership rate (6.7%) is much lower than found in other studies of inner-city firearm ownership, such as the estimate of 19.9% in the National Opinion Research Center's General Social Survey (Smith, 1999), or state-level data (Trent, 1998), even when we compared women with similar characteristics. However, direct comparison is impossible, because the women in the CWHRS were not a population-based sample of all Chicago women, but chosen from areas and sites with a high rate of intimate partner homicide. On average, the CWHRS women are, as we have just seen, much more likely to be disadvantaged than the average Chicago woman. They tend to have fewer resources, such as income and education.

Thus, the level of handgun ownership among the Chicago women seeking health services in the sampled neighborhoods seems to be low, compared to other women across the country. We do not know if this represents a decline in handgun ownership in the neighborhoods, or whether the level of handgun ownership in these neighborhoods has always been low. Although some have argued that women are increasingly obtaining

a handgun for protection against an abusive intimate partner (see Silver & Kates, 1979), analysis of national trends (Sheley, *et al.*, 1994) did not find any recent increase.

Exhibit 53
Percent Handgun in Household: CWHRS Data Compared to a National Sample

Sample Characteristic (total responding who were not homeless or living in a group home)	CWHRS Clinic/ Hospital Sample		NORC National Sample
	Number	Percent	
All women with a home (N=639)	43	6.7%	19.9%
Married (N=142)	9	6.3%	29.3%
Divorced (N=48)	3	6.3%	18.5%
Less than high school education (N=289)	12	4.2%	13.5%
High school education (N=327)	29	8.9%	24.9%
College education (N=21)	2	9.5%	25.3%
Household income under $10,000 (N=264)*	8	3.0%	8.6%
Household income $10,000-$19,999 (N=127)*	12	9.4%	12.6%
Age under 30 years (N=311)	21	6.8%	18.1%
Age 30-39 (N=201)	14	7.0%	21.6%
Age 40-49 (N=101)	5	5.0%	18.4%
No children in home (N=220)	19	8.6%	24.9%
1 child in home (N=107)	5	4.7%	24.1%
2 children in home (N=130)	10	7.7%	20.3%
3 children in home (N=75)	0	.0%	17.4%
4 or more children in home (N=106)	8	7.5%	14.5%

*108 women did not know their household income.

Summary: Clinic/Hospital Sample Characteristics

The characteristics of the 705 women interviewed in the CWHRS reflect the design and sample goals of the study. The CWHRS design called for about 70% of the women to interview as AW, and about 30% as NAW. Therefore, although we tried to interview every woman who screened AW, we did not try to interview every woman who screened NAW. In describing the sample characteristics of the 705 interviewed women, this section has detailed those situations where a tendency of women who interviewed as AW to differ from women who interviewed as NAW may have made a significant difference in the characteristics of the total clinic/hospital sample.

The primary goal for the non-lethal sample was that it would be comparable to the lethal sample – women who become either the victim or the offender in an intimate partner homicide. We attempted to meet this goal by interviewing women in health settings in Chicago neighborhoods where the intimate partner homicide rates were the highest. Since women who become a homicide victim or offender may not have contacted a shelter or other helping agency, we tried to make sure that the CWHRS sample would not exclude "hidden" women who might be at high risk but who were not known to be at risk by any helping agency. In addition, we tried to include enough women of color and enough expectant mothers so that we would be able to look at any risk patterns that might be unique to one of these groups.

As a result of these sampling goals, the 705 women interviewed in the CWHRS were in some respects different from the "average" Chicago woman. About two-thirds of the CWHRS women were African/American/Black. Almost a fourth were Latina/Hispanic, and 16% of the 705 interviews and 69% of the interviews of Latina/Hispanic women were in Spanish (75% of the interviews of Latina/Hispanic women who interviewed as AW). There were fewer women aged 50 or older and more women aged 18 to 24 in the CWHRS sample, compared to Chicago women as a whole. Almost 30% of the CWHRS women were pregnant or had been pregnant in the past year.

The CWHRS women tended to be more disadvantaged than the average Chicago woman, with less education and a lower household income. They were much more likely to have a PTSD diagnosis than women nationwide. Levels of depression were high, with almost 30% of all CWHRS women, and almost half of the Latina/Hispanic women, saying that they had been bothered by depression in the past month. A quarter of CWHRS African/American/Black women, and a third of the Latina/Hispanic women and the white or other women, had threatened or attempted suicide.

CWHRS women were less likely to have a handgun in their home, compared to similar groups of women in the general U.S. population. While almost all of the African/ American/Black women in the CWHRS sample had been born in Illinois or the Midwest, and most had lived in Chicago their whole life or for many years, only 23% of Latina/ Hispanic women and 44% of white or other women had been born in Illinois. About 15% of the Latina/Hispanic women and 9% of the white or other women had lived in Chicago less than three years.

The woman's relationship to her partner tended to differ for different racial/ethnic groups. Over half of the Latina/Hispanic women were married to or in a commonlaw relationship with their partner, while the partner for about three-quarters of the African/ American/Black women was a boyfriend or ex-boyfriend. Most of the partners were close in age to the woman. About a fifth of the women had been together with their partner for 12 months or less, and over a third had been together more than five years. Over a quarter (27%) of the CWHRS women had never lived with her partner; the majority of these women had been in the relationship for at least a year.

There was a child living in the household of 85% of CWHRS women, but only 53% had her own child or children living in the same household. For the rest, the children in the household were her siblings, or the children of friends or relatives. For a quarter of all

CWHRS women (26%), but over half (52%) of Latina/Hispanic women, Name was the father of all of her children living at home.

Differences Between Women Who Interviewed AW Versus NAW

Of the 705 women in the CWHRS sample, 497 interviewed as AW and 208 interviewed as NAW. The overall percent who interviewed AW was a result of the sample design, not the proportion of women in the population who were being physically abused by an intimate partner. As discussed above, the sample design called for interviewing every women who screened AW, but only about 30% of the women who screened as NAW. We succeeded in doing this, and, as a result produced a sample that includes about 70% women who interviewed as AW and 30% women who interviewed as NAW.

To be categorized as NAW after the interview, the woman must have been age 18 or older, have a current intimate partner, and answered "no" to every question in Section J (Appendix II). Some women who interviewed as NAW had screened as AW. See the section on Screening, above, for a full discussion of these women. We did not do a calendar history for women interviewed as NAW. Further abuse questions other than Section J were not asked of NAW women, because we were concerned about seeming to harangue them.

While the focus of the CWHRS was to compare women at high risk of a lethal outcome to other abused women, the NAW comparison sample connects CWHRS results to the many studies that compare abused women to women in general, and provides information for clinic or hospital practitioners to use when designing intervention strategies for abused women. The following analysis looks at the association between a number of risk factors and the likelihood that the percent interviewing as AW is higher, or lower, than the design-driven 70% "base rate" of the study.

Age and Race/Ethnicity

Women in certain age groups were more likely to interview as AW than women in other age groups, but the specific "higher-risk" age groups were not the same for women of different racial/ethnic groups (Exhibit 54). For African/American/Black women, all age groups from 18 to 40 were about the same, but older women were less likely (38%) to interview as AW, compared to the 70% "base rate." For Latina/Hispanic women, the opposite was the case. The highest proportion of women interviewing AW (86%) was the 14 Latina/Hispanic woman over age 40.

Type of Union and Relationship

Looking at the CWHRS women as a whole, how she described her marital status was not related to the percent who interviewed as AW, compared to the 70% "base rate." However, when we consider each racial/ethnic group separately, we see that marital status does make a difference, but in the opposite direction for Latina/Hispanic women, compared to African/American/Black women or white or other women (Exhibit 55).

Of the 68 Latina/Hispanic women who said they were married, 72% interviewed as AW, a considerably higher percentage than the 46 Latina/Hispanic women who said they were single (54%). In contrast, for African/American/Black women, 58% of the 55 who said they were married interviewed AW, much lower than the 75% of the 317 women

who said they were single. Percents for the white or other group were in the same direction as for African/American/Black group, but more extreme. Thus, Latina/Hispanic who said they were married versus single were more likely to interview as AW, while other women who said they were single versus married were more likely to interview as AW.

Exhibit 54
Interview Status by Race/Ethnicity and Age

Percent of Women Who Interviewed AW (N in parentheses)			
	Woman's Racial/Ethnic Group		
Woman's Age Group	African/ American/Black	Latina/ Hispanic	White or Other
18-20	78.4% (88)	59.1% (22)	(3/5)
21-25	74.6% (67)	61.5% (39)	(5/6)
26-30	72.2% (72)	60.5% (38)	(7/9)
31-40	78.3% (161)	71.7% (46)	66.7% (18)
41-50	59.1% (66)	84.6% (13)	59.1% (22)
51-67	38.5% (13)	(1/1)	(3/6)

Exhibit 55
Percent Interviewing AW, by Marital Status and Racial/Ethnic Group

Marital Status	African/ American/Black	Latina/ Hispanic	White or Other	Total*
Single	75.4% (317)	54.3% (46)	81.3% (16)	72.9% (387)
Married	58.2% (55)	72.1% (68)	45.8% (24)	62.8% (148)
Commonlaw	(1/1)	62.1% (29)	(1/1)	64.5% (31)
Separated/ Divorced	74.7% (79)	80.0% (15)	76.2% (21)	75.2% (117)
Widowed or Other	61.5% (13)	(1/1)	(1/3)	58.8% (17)

*Total includes 11 women for whom racial/ethnic group is missing.

Overall, women in a current relationship were less likely to interview as AW than women in an ex- or former relationship. Of the 139 women who described their relationship with Name as husband, 61% interviewed as AW, compared to 79% of the 28 who

said that Name was an ex- or former husband. Similarly, of the 34 women who were in a commonlaw relationship, 59% interviewed as AW, compared to 73% of the 15 who said that Name was an ex- or former commonlaw husband. Of the 255 women who called Name their boyfriend, 61% interviewed as AW, compared to 88% of the 178 in an ex- or former boyfriend relationship.

For Latina/Hispanic women, this was somewhat different, however. Of the 67 Latina/Hispanic women who said that Name was their husband, 71% interviewed as AW, compared to five of the six women who said that Name was an ex- or former husband. Of the 28 who said that Name was a commonlaw husband, 64% interviewed as AW, compared to 64% of the 11 in an ex- or former commonlaw relationship. Of the 34 who said that Name was their boyfriend, 47% interviewed as AW, compared to seven of the nine who said that Name was her ex- or former boyfriend.

Same-sex Relationship

Since 18 of the 19 interviewed women in a same-sex relationship interviewed as AW, it is not possible to compare the AW and NAW same-sex groups.

Co-residence, Estrangement, and Leaving the Relationship

In the initial interview, when women were asked to tell us who was living in their household, 48% of the 208 NAW women and 34% of the 495 AW women who responded were living in the same household as Name. An additional eight women who interviewed AW (1.6%) said that they were living in the same household with their closest intimate partner, but that person was not Name (the selected intimate partner who was threatening or attacking them).

As we have discussed above, the typical use of co-residence to indicate whether or not a woman was estranged or had left the relationship is too simplistic to reflect the complexity of the lives of the CWHRS women. Many of them, 114 of the 497 women (23%) who interviewed AW and 77 of the 208 women (37%) who interviewed NAW, were in long-term, committed relationships with Name, but had never lived with him or her. Of the 114 who interviewed AW, Name was the current boyfriend of 45 (39%), and the current same-sex partner, fiancé or friend of four more. Twenty-eight (25%) of the couples had children, and 71 (62%) had been in the relationship for more than a year. Of the 77 women who interviewed NAW, Name was the current boyfriend of 55 (71%), and the current friend or child's father of three more. Seventeen (22%) of the couples had children, and 47 (61%) had been in the relationship for more than a year.

Was there an association between co-residence and the percent who interviewed AW, relative to the 70% base rate? The greatest risk was for the women who had lived with Name at some time in the year but were now living apart. Of these 215 women, 92% interviewed as AW (Exhibit 56). On the other hand, the 223 women who had lived with Name for the entire past year and the 191 who had never lived with Name were less likely to interview as AW (60%). In addition, only 62% of the 458 women who said they were in a current relationship interviewed as AW, in contrast to 87% of those who said that their relationship with Name was former.

The lowest proportion of women who interviewed as AW were women in a current relationship who had never lived with Name (45%), followed by women in a current

relationship who had lived with Name the entire year (60%). The highest proportion of women who interviewed as AW were women in a former relationship who had lived with Name in the past year but were now living apart (95%), followed by women in a former relationship who had never lived with Name (81%).

Exhibit 56
Co-Residence and Interview Status

Was she living in the same place with Name at any time during the past year?	% who Interviewed as AW (N in parentheses)
Yes, entire year	60.0% (223)
Yes, but now living apart	91.6% (215)
Yes, recently moved in together	72.7% (33)
No, but lived together in prior year(s)	68.6% (35)
No, never	59.7% (191)

Compared to the 70% base rate, women who said that they had not left or attempted to leave the relationship with Name in the past year were much less likely to interview as AW (Exhibit 57). Of the 275 women who had not left the relationship, only 44% interviewed as AW. In comparison, for those women who had left or attempted to leave, or who had asked Name to leave, the percent interviewing as AW was close to or higher than 90%.

Exhibit 57
Leaving the Relationship in the Past Year and Interview Status

In the past year, did you leave or stay away from Name or ask Name to leave or stay away from you?	% who Interviewed as AW
Yes, left or stayed away	86.6% (292)
Yes, asked Name to leave or stay away	87.9% (58)
Asked, but Name refused	93.2% (74)
No	44.0% (275)

Half (129, 51%) of the 252 AW women who had left or attempted to leave Name in the past year said that she left because she feared for her safety, another 21 (8%) mentioned physical abuse or rape, and 15 (6%) said that she feared for her children's safety. (Multiple answers were possible.) Of the 51 women who interviewed AW and asked Name to leave or stay away, 23 (45%) said she feared for her safety, another

seven (14%) mentioned physical abuse or rape, and five (10%) feared for their children's safety, and of the 69 who asked Name to leave, but Name refused, 45 (65%) said that they feared for their safety, four more (6%) mentioned physical abuse, and 17 (25%) feared for their children's safety.

Naive observers of the issue of violence against women sometimes ask, why doesn't the woman just leave? One reason for not leaving might be that Name threatens her or her children with serious harm. In the CWHRS, Name used threats to harm or take the children, to kill her, or to commit suicide, in order to prevent the woman from leaving (Exhibit 58).

Exhibit 58
Percent Threatened by Name if She Left the Relationship, or Stayed Away
(N in parentheses)

Name's Threat "if you leave or don't come back"	Interview Status	
	AW	NAW
to harm the kids	7.5% (382)*	.0% (145)*
to take the kids	22.4% (379)*	4.8% (145)*
to kill himself or herself	30.4% (494)	4.8% (207)
to kill you	38.5% (494)	2.4% (206)

*Total includes only those who responded and who had children.

These threats were mentioned by both women who interviewed as AW and as NAW, but they were much more likely to happen to women who interviewed as AW. In particular, 38% of the 494 AW women who responded said that Name had threatened to kill her, and 30% said that Name had threatened suicide. In 22% of the 379 AW women who responded and had children, Name had threatened to take the children away from her. This threat was much more common for Latina/Hispanic women, whether they interviewed as AW or NAW. Of the women who interviewed AW, 49% of the Latina/Hispanic women said that Name had threatened to take the children, compared to 14% of the African/American/Black women and 32% of the white or other women. Of the women who interviewed NAW, 11% of the Latina/Hispanic women said that Name had threatened to take the children, compared to 1% of the African/American/Black women and 6% of the white or other women.

Length of Relationship

Women who interviewed as AW and women who interviewed as NAW cannot be distinguished by the length of their relationship with Name or their closest intimate partner (Exhibit 59). No matter how long the relationship, the percent who interviewed AW was close to the 70% base rate.

Whether they interviewed as AW or NAW, many women interviewed in the

CWHRS had been in a relationship with Name for a considerable period, as much as 32 years in a former relationship and 40 years in a current relationship for women who interviewed as NAW, and 29 years in a former relationship and 40 years in a current relationship for women who interviewed as AW.

Exhibit 59
Length of Relationship with Name (Closest Intimate Partner)

Length of Relationship	% Who Interviewed AW
One year or less	69.6% (135)
13 months to 2 years	68.4% (136)
25 months to 3 years	72.0% (93)
37 months to 5 years	77.3% (110)
61 months to 15 years	68.9% (167)
181 months to 40 years	66.7% (63)

Disparity between Woman's Age and Name's Age

The age disparity between the woman and Name also made no difference in her interview status, regardless of her racial/ethnic group (Exhibit 60). In almost every category, the percent who interviewed as AW was close to the 70% base rate, and the one or two exceptions are not reliable because of small numbers.

Exhibit 60
Interview Status, by Age Disparity and Racial/Ethnic Group
Percent Who Interviewed AW (N in parentheses)

Age Disparity between Woman and Name (Closest Partner)	African/ American/ Black	Latina/ Hispanic	White or Other	Total
Same age within 5 years	72.7% (260)	62.6% (99)	70.6% (34)	70.0% (400)
Woman 5-9 years older	78.6% (28)	(8/8)	(2/4)	78.0% (41)
Woman 10-20 years older	(5/9)	(3/4)	(3/4)	64.7% (17)
Name 5-9 years older	75.3% (93)	68.7% (32)	57.1% (14)	71.8% (142)
Name 10-19 years older	69.5% (59)	75.0% (12)	(5/8)	69.1% (81)
Name 20-42 years older	83.3% (12)	(1/ 2)	(0/1)	73.3% (15)

Children

The 31 Latina/Hispanic women with four to eight children were significantly (Chi square p = .058; Gamma = .319, p=.004) more likely to interview as AW (84%) than the 26 Latina/Hispanic women who had no children (42%) (Exhibit 61). The average number of children was 2.48 for the 104 Latina/Hispanic women who interviewed AW and 1.69 for the 54 who interviewed NAW (t test p = .004). However, there was no relationship for other women.

Exhibit 61
Number of Children and Percent of Women Who Interviewed as AW

Number of Children by Birth	Percent Interviewing AW, by Racial/Ethnic Group (N in parentheses)			
	African/ American/Black	Latina/ Hispanic	White or Other	Total*
None	67.2% (116)	42.3% (26)	64.7% (17)	63.0% (162)
One	76.6% (107)	66.7% (33)	66.7% (15)	73.4% (158)
Two	67.1% (85)	67.5% (40)	55.6% (18)	65.5% (145)
Three	78.6% (70)	64.3% (28)	(5/8)	72.9% (107)
Four or More	77.5% (89)	83.9% (31)	(5/5)	79.8% (129)
Total	73.0% (467)	65.8% (158)	65.1% (63)	70.5% (701)

*Total includes 13 women who said they were inter-racial or who did not answer.

On the other hand, there was no relationship between the number of children living in the woman's household and whether she interviewed as AW or NAW. For Latina/ Hispanic women, 61% of the 31 with no children in the household interviewed as AW, compared to 79% of the 34 women with four or more children in the household. However, this did not reach statistical significance, and there was no difference at all for the rest of the women.

Almost the same percent of women interviewed as AW, whether she had a child who was a stepchild to Name (71%) or she did not (70%). However, Latina/Hispanic women with a child who was a stepchild to Name were much more likely to interview as AW (81%) compared to other Latina/Hispanic women (62%) (Chi square = .036; Gamma = .441, p=.021). Also all five of the white or other women with a child who was a stepchild to Name interviewed as AW, compared to 65% of the other 65 women.

Controlling Behavior

The woman's score on the Power and Control scale was strongly and significantly (Chi square <.0001; Gamma = .821, p <.0001) related to whether she interviewed as AW or NAW (Exhibit 62). Only 18% of the 120 women who said that Name did not do any of the five Power and Control items interviewed as AW, compared to 49% of the 101

woman who said that Name did one of the five, 69% of the 83 who said that Name did two of the five, 81% of the 106 who said that Name did three of the five, 95% of the 117 who said that Name did four of the five, and 97% of the 175 who said that Name did all five things. This pattern was consistently true for African/American/Black, Latina/Hispanic and white or other women.

Exhibit 62
Percent Interviewing AW, by Name's Controlling Behavior

Number of Power and Control Responses (of 5)	Woman's Racial/Ethnic Group			
	African/ American/Black	Latina/ Hispanic	White or Other	Total*
None	16.4% (67)	12.9% (31)	22.2% (18)	17.5% (120)
One	50.0% (62)	50.0% (28)	40.0% (10)	48.5% (101)
Two	66.1% (56)	68.4% (19)	(6/6)	68.7% (83)
Three	81.7% (71)	80.8% (26)	(5/7)	81.1% (106)
Four	95.2% (84)	95.2% (21)	90.0% (10)	94.9% (117)
Five	97.6% (125)	97.1% (34)	100.0% (14)	97.1% (175)

*There were three women who did not respond to the Power and Control questions. The total includes 13 women who were multi-racial or who did not tell us their racial/ethnic group.

Each of the five Power and Control items was independently and strongly associated with the percent of women who interviewed as AW (Exhibit 63). The strongest association was for the item, "called you names to put you down or make you feel bad." The question about control of family income was not relevant to those women who had no shared family income, but for those women for whom it was relevant, her answer was strongly related to whether or not she interviewed as AW. There was no difference between the 634 women who had a shared family income and the 66 women who did not, in the percent who interviewed AW (71% versus 65%, respectively).

Stalking and Other Harassment

Like Name's controlling behavior, Name's stalking or other harassment was strongly related to whether the woman interviewed as AW or NAW. Overall, 22% of the 701 women who responded scored zero on the HARASS scale, and 33% scored six or higher, but only 7% of the 494 responding AW women scored zero, and 46% scored six or higher. The average (mean) number of responses indicating that the woman's partner was stalking or otherwise harassing her was 5.59 for the 494 women who interviewed as AW, versus 0.88 for the 207 women who interviewed as NAW (t test $p < .0001$).

Almost all (99%) of the 231 women who answered "yes" to six or more of the 19 HARASS questions interviewed as AW, but only 23% of the 151 women who did not answer "yes" to any question (Exhibit 64). This was true for the African/American/Black,

the Latina/Hispanic and the white or other women.

Exhibit 63
Name's Controlling Behavior and Percent Who Interviewed AW

Power and Control Item and Response In the past year, an intimate partner		% AW	N	Gamma
Was jealous and didn't want you to talk to other men (women)	Yes	85.6%	487	.828***
	No	36.0%	214	
Tried to limit your contact with family or friends	Yes	91.1%	337	.813***
	No	51.4%	364	
Insisted on knowing who you are with and where you are at all times	Yes	86.4%	462	.810***
	No	39.9%	238	
Called you names to put you down or make you feel bad	Yes	92.2%	397	.884***
	No	42.1%	304	
Prevented you from knowing about or having access to family income, even if you ask	Yes	92.2%	245	.793***
	No	57.8%	389	

Exhibit 64
Percent Interviewing AW, by HARASS Score and Racial/Ethnic Group

Number of HARASS Responses (of 17)	Racial/Ethnic Group			
	African/ American/Black	Latina/ Hispanic	White or Other	Total Sample
None	25.3% (87)	22.2% (45)	7.1% (14)	23.2% (151)
One	45.6% (57)	40.9% (22)	50.0% (10)	44.9% (89)
Two	62.2% (37)	89.5% (19)	(5/8)	69.2% (65)
Three	79.5% (39)	94.4% (18)	(2/3)	83.6% (61)
Four	96.0% (25)	83.3% (12)	(5/6)	91.1% (45)
Five	93.0% (43)	(8/9)	(5/5)	91.5% (59)
Six to Ten	98.4% (129)	100.0% (24)	100.0% (15)	98.8% (170)
Eleven to 17	97.9% (47)	100.0% (10)	(4/4)	98.4% (61)
Gamma	.845***	.854***	.896***	.848***

In addition, each individual HARASS item was related to interviewing as AW, for each racial/ethnic group (Exhibit 65). The association was particularly strong, or stronger for one group of women, for certain HARASS items. For example, almost all of the 241 women who said that an intimate partner had followed her in the past year interviewed as AW, compared to only 56% of the 457 other women, and this association was equally strong for all CWHRS women.

Exhibit 65
Percent Interviewing AW, for those Answering "Yes" to Specific HARASS Item

Response to Selected HARASS Items		African/ American/ Black	Latina/ Hispanic	White or Other	Total
Showed up without warning	Yes	90.6% (255)	84.4% (64)	86.4% (22)	89.0% (347)
	No	51.7% (209)	54.3% (94)	53.5% (43)	52.4% (353)
Threatened to harm her pet	Yes	96.6% (29)	100.0% (10)	(6/8)	93.6% (47)
	No	58.2% (170)	50.0% (66)	52.0% (25)	56.3% (272)
	NA*	80.0% (265)	74.7% (83)	71.9% (32)	77.7% (382)
Left notes on her car	Yes	100.0% (20)	(5/5)	(4/4)	100.0% (30)
	No	58.2% (213)	60.2% (108)	52.9% (34)	58.1% (393)
	NA*	84.4% (231)	76.1% (46)	74.1% (27)	82.1% (308)
Frightened or threatened family	Yes	97.0% (67)	100.0% (27)	100.0% (10)	98.1% (106)
	No	69.0% (397)	59.1% (132)	58.2% (55)	65.5% (595)
Followed her	Yes	98.4% (182)	97.1% (35)	100.0% (21)	97.9% (241)
	No	56.6% (281)	57.7% (123)	47.7% (44)	56.0% (457)
Called on the phone and hung up	Yes	88.0% (192)	93.5% (31)	88.2% (17)	88.6% (246)
	No	62.4% (258)	55.1% (107)	53.3% (45)	59.2% (417)

*Not applicable, because woman does not have a pet or a car.

The item, "called on the phone and hung up," was especially important for Latina/ Hispanic women (Gamma = .844, $p < .0001$), with 29 of the 31 (94%) women who said "yes" interviewing as AW, compared to 59 of the 107 (55%) women who said "no." The item, "showed up without warning, " was particularly important for African/American/Black women (Gamma = .464, $p < .0001$), with 231 of the 255 (91%) of the women who said

"yes" interviewing as AW, compared to 108 of the 209 (52%) who said "no." Some HARASS items, such as, "In the past year, has an intimate partner threatened to harm your pet?", or "In the past year, did an intimate partner leave notes on your car?", were answered positively by only a small proportion of women. However, the women who did answer them positively were much more likely to interview as AW.

"Not applicable" responses to a few HARASS items tell us about risk factors in women's lives. Of the 308 women who said that they had no car (the question was not applicable to them), 253 (82%) interviewed as AW. Similarly, of the 382 women who said that they had no pet, 297 (78%) interviewed as AW.

It might seem that the HARASS item, "reported you to the authorities for taking drugs when you didn't" would be applicable only to those woman who said that they had never had a drug problem. However, of the 52 women who answered "yes" to this item, only 19 also said that they had never had a drug problem, while 21 said that they had a drug problem in the past and 12 said that they had a current drug problem. Perhaps the intimate partner had reported them for using during a period when they were not using. All but one of the 52 women interviewed as AW.

Physical Health

Overall Health. There was no difference in the general health of women who interviewed as AW versus NAW. Of the 82 women who said that their general health was "excellent," 68% interviewed as AW, as did 76% of the 50 women who said that their general health was "poor." The 129 women who said that their health was "much better now" than a year ago were equally likely to interview as AW as the 31 women who said that their health was "much worse now" (75% and 74%). There was a slight difference for women who said that they "were limited in the past month due to a physical condition" and other women (Chi square p = .055; Gamma = .170, p = .049). Of the 240 who answered "yes" 75% interviewed as AW, compared to 68% of the 463 who answered "no."

There was a slight relationship between interviewing as AW and doctor visits, but only for women who had "never" seen a doctor for their own health (before today) in the past year, versus women who had seen a doctor five or more times (61% of 64 versus 74% of 249).

Pregnancy. Previous research shows that pregnancy is positively associated with the risk of battering, and that between 7% and 25% of obstetrics patients are abused women (Gelles, 1988; McFarlane, 1992; Gazmararian, *et al.*, 1996). In the CWHRS by comparison, 8% of the women who interviewed as AW and 15% of the women who interviewed as NAW were pregnant at the initial interview.

Consistent with McFarlane's findings that the risk of abuse is lower during pregnancy but increases after the baby is born, the 74 women in the CWHRS who said that they were "pregnant now" were least likely to interview as AW (57%), compared to the 126 women who said that they had been "pregnant in the past year" (75%) or to the 493 who said that they had not been pregnant (71%). (Eight of the nine women who said that they did not know if they were pregnant interviewed as AW.) This was true, however, for Latina/Hispanic women only, with 46% of the 41 women who were pregnant at the initial

interview interviewing as AW compared to 73% of the 115 other women (Chi square p = .002; Gamma = .517, p = .003). There was no significant difference for either African/ American/Black or for white or other women.

Though a review of the literature (Petersen, *et al.*, 1997) concluded that, "no pregnancy outcome was consistently found to be associated with violence during pregnancy," in the CWHRS, pregnancy outcome was related to whether the woman interviewed as AW or NAW. Of the 95 women who interviewed as AW and who had been pregnant in the past year, only 64 (67%) had a live birth, compared to 27 of the 32 (84%) of the women who interviewed as NAW. This was true for women of all ages, but particularly true for the 61 women aged 25 and older who had been pregnant in the past year. All of the 15 women over age 24 who interviewed as NAW had a live birth, compared to only 31 (67%) of the 46 women who interviewed as AW. Most of the difference between AW and NAW women in their pregnancy outcome was accounted for by miscarriages, not abortions. Of the 95 women who interviewed as AW and had been pregnant in the past year, 20 (21%) suffered a miscarriage in that pregnancy, compared to only two of the 32 women (6%) who interviewed as NAW.

Part of the association between interviewing as AW and having a miscarriage could be due to delay in prenatal care (Dietz, *et al.*, 1997). However, we know that the violence was directly responsible for the miscarriage in at least twelve cases. In detailing their calendar history, twelve of the women who interviewed as AW told us that they had miscarried as a result of a violent episode in the past year. In addition to these twelve, other women experienced incidents in which Name had apparently tried to induce a miscarriage, but the woman did not miscarry, or it is unclear whether or not she miscarried as a result of the violence. For example, one woman said that Name had beaten her "with a baseball bat in the stomach" while she was pregnant, and another woman had been thrown down steps.

Drug or Alcohol Use

There are numerous reviews of the literature relating intimate partner violence and intoxication (Johnson, 1996:11-13; Leonard & Roberts, 1998, 1996; Leonard, 1993; Fagan, 1993:172-175; Kantor & Straus, 1990; Miller, 1990; Hotaling & Sugarman, 1986: 173-176; Fagan, *et al.*, 1983). Many carefully-done surveys and well-controlled studies find an association between living with a drinker and the risk of being assaulted by him (Statistics Canada, 1993), and an association between the amount of drinking and the likelihood that drinking will be involved in an intimate assault. Goldberg (1997) describes some of the cultural issues that may make it difficult for a woman who is being abused by a Latino/Hispanic man who abuses alcohol or drugs, as well as issues for treatment.

Leonard and Roberts (1998) find that the husband's drinking behavior (problem drinking and average daily consumption) before marriage predicted marital aggression in the first year of marriage. They argue that this could be due to various causal "pathways." A heavy drinking pattern may lead to increased discord with more opportunities for conflict, or acute alcohol consumption in an incident may increase the chance and severity of violence in that incident. CWHRS incident-level data allow us to test the extent to which these two pathways operate.

In the CWHRS, women whose intimate partner used drugs or had a drinking problem were more likely to interview as AW than those whose partner did not. Almost all (93%) of the 200 women who responded that their partner used drugs interviewed as AW, compared to 61% of the 480 women who said the partner did not. Of the 286 women who said that their partner had "ever had an alcohol problem," 86% interviewed as AW, compared to 60% of the 408 women who answered "no." Both of these relationships were statistically significant for women in each of the three racial/ethnic groups.

Research also indicates that alcohol use, medication, or illicit drug use can be a coping mechanism for abused women to deal with the emotional impact of violence in her life, including lowering of self esteem, depression and anxiety (Johnson, 1996:202; Kantor & Straus, 1989:185). In the Canadian Violence Against Women Survey, a fourth of victims of wife assault had turned to the use of one of these substances (Rogers, 1994).

The CWHRS also found an association between the woman's substance use and whether she interviewed as AW or NAW. Of the 566 women who said that they had never had a problem with alcohol, 377 (67%) interviewed as AW, compared to 85 of the 100 (85%) who said that they had an alcohol problem in the past and 34 of the 38 (89%) who said that they had a current problem (Chi square < .0001; Gamma .508, p < .0001). This was true for each of the three racial/ethnic groups. Although very few Latina/ Hispanic women said that they had ever or currently had an alcohol problem, eight of the ten who said "ever" and all of the four who said "currently" interviewed as AW, compared to only 64% of the 145 other women. Similarly, for white or other women, nine of the 11 who said "ever" and all of the five who said "currently" interviewed as AW, compared to 58% of the 50 others. Of the African/American/Black women, 87% who said "ever" and 86% who said "currently" interviewed as AW, compared to 69% of the 360 others (Chi square p = .001; Gamma = .477, p < .0001).

The association was even stronger for the woman's drug use. Of the 522 women in the CWHRS who said in the initial interview that they had never had a problem with drugs, 338 (65%) interviewed as AW. In contrast, 104 of the 126 (83%) who said that they had a drug problem in the past and 54 of the 56 (96%) who said that they had a current problem interviewed as AW (Chi square < .0001; Gamma = .569, p < .0001). Again, there were few Latina/Hispanic women who said that they had ever or currently had a drug problem (only nine and four, respectively), but all of them interviewed as AW, compared to 63% of the 156 who had never had a problem. Similarly, 10 of the 13 white or other women who said "ever" and all of the six who said "current" interviewed as AW, compared to 57% of the 47 other women. Of the African/American/Black women, 83% who said "ever" and 96% who said "currently" interviewed as AW, compared to 67% of the 317 others (Chi square p > .0001; Gamma = .534, p < .0001).

Mental Health

Depression. Women with higher scores on the Depressed Feelings II scale were more likely to interview as AW (Exhibit 66). This does not necessarily mean that there was any causal relationship between being depressed and experiencing violence. However, for all racial/ethnic groups, the great majority (91%) of women who had a "five"

score on the Depressed Feelings II scale interviewed as AW, compared to 55% of women who had a "zero" score.

Exhibit 66
Interview Status and Score on Depressed Feelings II Scale

Score on Depressed Feelings II Scale	Percent Who Interviewed as AW (N in parentheses)			
	African/American/ Black	Latina/ Hispanic	White or other	Total*
Zero	59.6% (198)	30.8% (39)	51.9% (27)	55.0% (271)
One	76.0% (104)	55.6% (18)	(6/8)	72.4% (134)
Two	85.7% (56)	57.7% (26)	(6/7)	76.9% (91)
Three	84.2% (57)	86.7% (30)	70.0% (10)	83.5% (97)
Four	91.7% (36)	90.5% (21)	(0/6)	87.9% (66)
Five	93.3% (15)	92.0% (25)	(4/5)	91.1% (45)

*Includes those women who were multi-racial or did not respond to the question.

Latina/Hispanic women in general were more likely than others to have a higher score on the Depressed Feelings II scale (see Exhibit 52, above), and those who interviewed as AW had particularly high scores, with 42 of the 105 (40%) Latina/Hispanic women who interviewed as AW scoring four or five, compared to only four of the 54 (7%) who interviewed as NAW (Chi square $p < .0001$; Gamma = .684). The relationship for African/American/Black women was also significant, but not quite as strong (Gamma = .480). However, the relationship for white or other women was not significant.

As we have seen above ("Sample Characteristics" section), depression was related to substance abuse problems for CWHRS women, as research has found for other populations of women as well. However, even if we control for substance abuse problems, there was still an association between the score on the Depressed Feelings II scale and whether the woman interviewed as AW. Among women who said that they had ever had a problem with alcohol, 75% of those who scored "zero" versus 92% of those who scored "five" interviewed as AW. Among women who said that they had not ever had a problem with alcohol, 52% of those who scored "zero" versus 91% of those who scored "five" interviewed as AW. Similarly, among women who said that they had ever had a problem with drugs, 74% of those who scored "zero" interviewed as AW versus 93% of those who scored "five", while among women who said that they had not ever had a problem with alcohol, the comparable figures were 50% and 90%, respectively.

In addition, women who said that they had ever threatened or attempted suicide were more likely to interview as AW (85%) compared to other women (65%). This was true for each racial/ethnic group, but the association was strongest for Latina/Hispanic women. Fully 42% of the 105 Latina/Hispanic women who interviewed AW told us they

had threatened or attempted suicide, compared to 30% of the 337 African/American/ Black women and 38% of the 42 white or other women who interviewed AW. Thus, practitioners who are talking with a woman who has experienced violence or a violent threat in the past year should be aware of the possibility that the woman may be suicidal.

PTSD. The 376 CWHRS women with a PTSD diagnosis were significantly (Chi square $p < .0001$; Gamma = .620) more likely to interview as AW than the 314 women who did not have a PTSD diagnosis (84% versus 56%). In addition, CWHRS women who scored zero on the PTSD items were much less likely than women who scored 16 or 17 to interview as AW. Less than 4% of the AW women scored zero on the PTSD, compared with 21% of the NAW women. Of the AW women, 17% scored 16 or 17, compared to only 3% of the NAW women. Almost all (93.4%) of the 91 women who had a PTSD score or 16 or 17 (maximum was 17) at the initial interview had been physically abused in the past year, compared to only 30.5% of women who scored zero.

Thompson, *et al.* (1999) found that the relationship between partner abuse and suicide attempts disappeared when controlled for PTSD symptoms. This suggests that a women becomes suicidal only when she experiences PTSD in response to the violence. Was this true for the CWHRS women? Among the 491 women who interviewed AW and responded to these questions, 18% of the 176 women without a PTSD diagnosis said that they had attempted or threatened suicide, versus 41% of the 315 women without a PTSD diagnosis (Chi square $p < .0001$; Gamma = .519, $p < .0001$). Among the 194 responding women who interviewed as NAW, 8% of the 135 without a PTSD diagnosis said that they had attempted or threatened suicide, versus 31% of the 59 women with a PTSD diagnosis (Chi square p .0001; Gamma = .664, $p = .001$).

For the CWHRS women, therefore, being suicidal was strongly associated with having a PTSD diagnosis, and both having a PTSD diagnosis and being suicidal were strongly associated with interviewing as AW. However, the relationship between being abused and being suicidal did not disappear when controlled for having a PTSD diagnosis. For example, among women without a PTSD diagnosis, 18% of the AW women versus 8% of the NAW women had attempted or threatened suicide.

Name's Suicide Risk. A threat to commit suicide can be a means of exerting control. As we have seen in Exhibit 58, above, only 5% of the women who interviewed as NAW, compared to 30% of the women who interviewed as AW, said that Name had threatened to commit suicide if she left or refused to return to the relationship. In addition, women who said, in the Danger Assessment, that Name had "ever" threatened or tried to commit suicide were much more likely to interview as AW (Chi square < .0001; Gamma = .808, $p < .0001$). Of the 129 women who answered "yes," 95% interviewed as AW, compared to 65% of the 554 who said "no."

Presence of a Firearm in the Home

Very few of the women interviewed in the CWHRS said that there was a firearm in their home (see Exhibit 53, above). Of the 641 who responded to the question and who were not homeless or living in a group home, only 51 (8%) said "yes." Of these, 36 women interviewed as AW (70.6%), compared to 67.8% of the 590 women who did not have a gun in the house. Thus, having a gun in the home was not associated with inter-

viewing as AW or NAW. However, when the firearm was kept loaded, there was a relationship. Many more (87%) of the 23 women who had a loaded firearm in the house interviewed as AW, compared to 67% of the 618 other women (Chi square p = .047; Gamma =.528, p = .017).

Social Support Network and Other Resources

Social Support Network Scale. The total Social Support Network scale, and two of the three subscales (Acceptance and support and Tangible help in emergencies) are significantly correlated with whether the woman interviewed as AW for the entire sample and for each racial/ethnic group (Exhibit 67). The subscale, Access to and knowledge of resources, is correlated with interviewing as AW for the entire sample and for African/ American/Black and Latina/Hispanic women, but does not reach significance for white or other women.

Exhibit 67
Correlations of Interview Status with Social Support Network

Social Support Network Scale and Subscales	African/ American/ Black	Latina/ Hispanic	White or Other	Total
Acceptance and support	.171**	.309**	.282*	.195**
Tangible help in emergencies	.168**	.358**	.296*	.215**
Access, knowledge of resources	.129**	.246**	.152	.120**
Total SSN Scale	.204**	.381**	.333**	.230**

** p < .01; * p < .05

Most of the individual items that make up the SSN scale are significantly related to interviewing as AW (Exhibit 68). There was one exception -- the item, "I would know where to tell a friend to get help if they were harmed or beaten by their partner." This was not related to interviewing as AW, either for the CWHRS women as a whole or for any racial/ethnic group. Apparently, women who interview AW and women who interview NAW both know how to get help.

In addition, the item, "It is difficult for me to ask for help because people don't always speak my (native) language," is not related to interviewing as AW for the entire sample, but is very strongly related for the Latina/Hispanic women (Chi square p = .004; Gamma = .497, p = .001). Of the 64 Latina/Hispanic women who said that it was difficult for them to ask for help because of language, 80% interviewed as AW, compared to 57% of the 95 who said that language was not a problem for them.

Employment, Education, and Income. There were slight differences, overall, in the percentage of women with different occupations who interviewed as AW. In general, the percent interviewing AW was higher for women who were unemployed (76%) or only a student (76%), compared to women who were a homemaker (62%) or who had a full or

part-time job (63%).[18]

Exhibit 68
Interview Status, by Response to Social Support Network Questions

Social Support Network Item, by Type	% Interviewing AW		
	Agree	Disagree	Gamma
Acceptance and support			
F1. Someone I'm close to makes me feel confident in myself.	68.2%	77.6%	.237*
F2. There is someone I can talk to openly about anything.	67.0%	81.1%	.350***
F4. There is someone I can talk to about any problems in my relationship.	65.0%	83.1%	.452***
F5. Someone I care about stands by me through good times and bad times.	66.2%	85.7%	.507***
F7. Someone I know supports my decisions no matter what they are.	64.4%	80.1%	.382***
Tangible help in emergencies			
F6. I have someone to stay with in an emergency.	65.0%	87.0%	.564***
F8. Someone I know will help me if I am in danger.	68.3%	83.9%	.415***
F12. I have someone who will be there for me in times of trouble.	67.5%	84.6%	.452***
F13. I have someone to borrow money from in an emergency.	64.9%	82.0%	.423***
Access to and knowledge of resources			
F3. It is difficult for me to ask for help because people don't always speak my native language. (Latina/Hispanic women only)	79.7%	56.8%	.497***
F10. I would know where to tell a friend to get help if they were harmed or beaten by their partner.	68.8%	74.3%	NS
F11. I hesitate to tell anyone about my problems because I am worried that the authorities, like DCFS or Immigration, may find out.	82.6%	67.1%	.398***

* p < .05; ** p < .01; ***p < .001

However, the patterns differed for women of particular ages or racial/ethnic groups. Of the 116 women aged 18 to 20, those who were students were more likely to interview as AW than others. Of the 28 women aged 18 to 20 who were students, 82% interviewed as AW, compared to 65% of the 31 with a job and 75% of the 48 who were unemployed. Of the 47 African/American/Black women who were students, 81% interviewed as AW, and 78% of the 256 who were unemployed, compared to 62% of the 157 women who had a full or part-time job.

In contrast, the 14 Latina/Hispanic women who were students were slightly *less* likely to interview as AW (57%) compared to 72% of the 40 unemployed women, 66% of the 61 homemakers and 64% of the 44 women with a full or part-time job.

Thus, although being a full-time homemaker, for Latina/Hispanic women, is negatively related to all three Support Network variables, it is not related to whether she interviewed as AW. There is still a significant correlation between her SSN score and whether she interviewed as AW, even if we control for whether she said she was a homemaker or not (Partial correlation = .399, $p < .0001$).

It is possible that an abusive partner might prevent the woman from being employed out of the home. Browne, *et al.* (1999) found that recent physical violence by a man partner decreased the odds of a woman being employed by a third. On the other hand, in a recent Chicago study, Lloyd and Taluc (1999) found that women who had been physically abused by a man intimate partner were no more likely to be currently unemployed.

CWHRS data show a relationship between the severity of violence in the past year and whether or not the women would be employed at the follow-up interview, but only for Latina/Hispanic women. Only 10% of the 62 Latina/Hispanic women who had experienced less extreme violence in the past year were unemployed on follow-up, compared to 38% of the 13 who had experienced extreme violence (Chi square p =.019; Gamma =.717). However, there is no relationship between whether or not the woman said at the initial interview that Name had tried to get her fired (a HARASS item), and whether or not she was unemployed at the follow-up. Of the 33 African/American/Black women who said that Name had tried to get her fired, 45% were unemployed at follow-up, almost the same as the 43% of the 101 women who said that Name had not tried to get her fired. Three of the six Latina/Hispanic women who said that Name had tried to get her fired were unemployed on follow-up, compared to 7% of the 29 other women, but the numbers are too small to be reliable. (The number of white or other women is even smaller.)

Among the 703 women who responded, a little less than half (45%) had not graduated from high school. These 317 women were significantly (Chi square p = .017; Gamma = .198, p = .016) more likely to interview as AW (75%) than the 386 women who had at least a high school education (67%). This was consistently true for all three racial/ethnic groups.

Having any "money or income that you control" was not associated with the percent of women who interviewed as AW. Of the 562 women who said "yes," 70% interviewed as AW, as did 71% of the 133 who said "no." Of the women who did have a personal income, the amount of that income was not associated with her interview

status. Further, the amount of her household income was not associated with her interview status.

Place of Birth and Language. Being born in the United States was not associated with interviewing as AW. Of the 58 Latina/Hispanic women born in the United States, 66% interviewed AW, compared to 67% of the 100 born outside of the U.S. Of the 55 white or other women born in the United States, 67% interviewed as AW, compared to 55% of the 11 women born outside of the U.S. Only one African/American/Black woman was not born in the United States.

For the Latina/Hispanic women, however, there was a significant (Chi square p = .045; Gamma = .333, p = .051) difference in the interview status of the women who were interviewed in Spanish (only two white or other women and no African/American/Black women were interviewed in Spanish). Of the 109 who were interviewed in Spanish, 79 (72%) interviewed as AW, compared to 16 of the 50 (52%) who were interviewed in English.

There was a slight but not statistically significant tendency for fewer women who had lived in Chicago for many years or their whole life to interview as AW, versus women who had lived in Chicago for four years or less, but this was only for Latina/Hispanic women and for white or other women. Of the 464 African/American/Black women who responded, only ten had not lived in Chicago for many years, but nine of these ten interviewed as AW compared to 72% of the other women.

Divorce. The woman's response to the item, "Divorce is not acceptable in my family," was not related to her interview status, either for the entire sample or for any individual racial/ethnic group.

Having a Home. Being homeless or living in an institution or group home at the time of the initial interview was strongly and significantly (Chi square < .0001; Gamma = .797, p < .0001) related to whether the woman interviewed as AW. Of the 60 women who were homeless or in an institution or group home, fully 95% interviewed as AW, compared to 68% of the 644 other women. Of the four homeless women, three interviewed as AW. It is not surprising, however, that women living in an institution or group home would interview as AW, since some of these places were domestic violence shelters.

This was true of the African/American/Black women (96% of 53 versus 70% of 413) and of the white or other women (six of seven versus 63% of 59). None of the Latina/Hispanic women in the CWHRS was homeless or in a group home.

Summary: AW versus NAW Comparison

The CWHRS sample design dictated that about 70% of the women interviewed as AW, but some groups of women were even more likely to interview as AW than this "base rate" dictated. The following list reviews the characteristics that were significantly more likely to be true for the women who interviewed as AW, versus the women who interviewed as NAW. If a characteristic is not mentioned in the list below, there was no association with the woman's interview status. When a particular group is mentioned in parentheses after the characteristic, such as a racial/ethnic group or pregnant women, that means that the characteristic was important *only* for that group. When no particular group is specified, that means that the characteristic was important for everyone.

Each of the characteristics in the list was significantly associated with whether or not the woman interviewed as AW. That does not mean, however, that the characteristic caused the violence, or that the violence caused the characteristic. To demonstrate a causal relationship, we would have to look at all of the factors combined together, plus look at the time sequence of all of the factors. The suggested causal relationship would have to make sense; there would have to be a logical explanation for the connection. In addition, a suggested causal relationship would be interesting from a practical point of view when an intervention could possibly change the "effect" by changing the "cause." For example, even if we could find some explanation for the association between age and interviewing as AW, no intervention would change a woman's age.

Whether or not we can determine any causal relationship, it is important to know that women who are experiencing violence at the hands of an intimate partner tend to have particular characteristics, concerns and needs for services. For example, those offering support or advice need to know that, in the CWHRS, controlling behavior and harassment were very strongly associated with an intimate partner's violence. Practitioners talking to a woman who has been experiencing intimate partner violence should be aware of the high rate of miscarriage, the extremely high rate of PTSD diagnosis, the high rate of suicidal behavior and plans, and the high rate of depression among CWHRS women who interviewed as AW. Armed with this information, helping professionals could work together across disciplines to help abused women address the multitude of challenges they often face.

As an overall summary, then, the following factors were significantly associated with interviewing as AW versus NAW:

Demographic characteristics:

-- age group 40 or under (African/American/Black women)
-- age group over 40 (Latina/Hispanic women)
-- single (African/American/Black and white or other women)
-- married (Latina/Hispanic women)
-- separated or divorced (all women)

Children:

-- mother of four or more children (Latina/Hispanic women)
-- a child is the stepchild to Name (Latina/Hispanic women)

Estrangement and ending the relationship:

-- in an ex- or former relationship with Name
-- had lived with Name during the past year but were now living apart
-- had ended or tried to end the relationship in the past year
-- Name had threatened to harm or take the kids if she left or did not return
-- Name had threatened to kill her or commit suicide if she left or did not return

Name's controlling behavior and harassment:

-- score of three to five on the Power and Control scale
-- each of the five Power and Control questions, for example, Name "called you names to put you down or make you feel bad"
-- score of six or more on the HARASS scale

-- almost all of the individual HARASS questions, for example, Name had followed her, frightened or threatened her family or friends, left notes on her car, showed up without warning

Name's characteristics:

-- Name had attempted or threatened suicide
-- Name had used drugs
-- Name had ever had an alcohol problem

Woman's physical and mental health:

-- high score on the Depressed Feelings II scale (Latina/Hispanic and African/American/Black women)
-- previous suicide attempt or threat
-- PTSD diagnosis
-- woman had ever had an alcohol or drug problem

Firearms:

-- loaded firearm in her home

Social support and material resources:

-- low Social Support Network scale score
-- unemployed
-- no high school diploma
-- interviewed in Spanish (Latina/Hispanic women)
-- difficult to ask for help because of language (Latina/Hispanic women)
-- homeless or living in a group home or institution (African/American/Black women and white or other women)

On the other hand, some "risk" factors were associated in the opposite direction with the woman's interview status. That is, women with these characteristics were significantly *less* likely to interview as AW. These factors, which might be considered "protective," were the following:

-- she had not ever lived with Name
-- she was pregnant at the initial interview (Latina/Hispanic women)
-- she was married (African/American/Black or white or other women)
-- she was single (Latina/Hispanic women)

Finally, some factors found by other studies to be related to physical violence by an intimate partner were *not* associated, in either direction, with whether or not CWHRS women interviewed as AW. Characteristics not associated with interview status included the following:

-- the length of her relationship with Name
-- the disparity between the woman's age and Name's age
-- the number of children living in the woman's household
-- her general health, compared to other women her age
-- knowledge of resources for domestic violence (item F10)
-- whether or not she had been born in the United States
-- whether "divorce is not acceptable" to her family
-- whether or not she had recently moved to Chicago

Characteristics of Violence in the Past Year

Though the CWHRS found differences between women who interviewed as AW versus NAW, that certainly does not mean that the women who had experienced violence at the hands of an intimate partner in the past year were all alike in the kinds of violence they experienced. Quite the contrary was the case. The 4,974 incidents these women told us that they had suffered at the hands of Name varied widely in their characteristics. In addition, the 493 responding women varied widely in the total number of incidents, the life-threatening severity of those incidents, and how recently the last incident took place. Though each woman's experience was unique, in this section, we describe some general patterns in the violence they experienced in the last year.

Incident Characteristics

Of the 4,974 incidents recorded by the 493 women who completed a calendar history, 12% (584 incidents) could be considered very serious and possibly life threatening (see Exhibit 16, above). These included 391 incidents (7.9%) in which the woman was severely beaten, choked, or sustained burns, broken bones or severe contusions; 112 (2.3%) in which she was threatened with a weapon, lost consciousness or sustained a head injury or an internal or permanent injury; and 81 (1.6%) in which she was attacked with a weapon.

Twelve women miscarried their baby following a violent incident in the past year. One of these women was pushed downstairs by her boyfriend, one woman's partner jumped up and down on her abdomen, and another woman was severely beaten and sustained broken ribs. In addition to these twelve, other women experienced incidents in which Name had apparently tried to induce a miscarriage, but the woman did not miscarry, or it is unclear whether or not she miscarried as a result of the violence. For example, one woman said that Name had beaten her "with a baseball bat in the stomach" while she was pregnant, and another woman had been thrown down steps.

In 987 of the 4,969 reported incidents (20%), the woman experienced forced sex. Unfortunately, in 470 of these, the interviewer did not record the type of violence or threat of violence involved in the incident (see Exhibit 16 and discussion, above). The most frequent violent setting for the other 517 forced sex incidents was the 1,143 incidents involving a "threat to hit with a fist or anything else that would hurt you" (23%). However, forced sex was also common in incidents that were severe enough to be life threatening. About 8% of the 391 "beating up" incidents, 4% of the 112 weapon threat or extreme injury incidents, and 12% of the 81 weapon use incidents included forced sex.

In 110 incidents, occurring to 57 women, she was restrained in the incident ("Did Name tie you up, handcuff you or restrain you?"). For 49 women, this happened in one incident, but five women experienced two or three, one woman experienced eight, one experienced 17, and one experienced 23 such incidents. Being restrained was associated with some of the most severe attacks. In 30 of the 110 (27%) incidents in which the woman was restrained, she was beaten up or worse, compared to only 554 of the 4,864 (11%) incidents in which she was not restrained. The nine incidents involving both restraint and forced sex were particularly severe (Exhibit 69).

Exhibit 69
Incidents in Which the Woman was Tied Up, Handcuffed or Restrained*

Type of Incident	Restrained		Not Restrained	
	Forced Sex		Forced Sex	
	Yes	No	Yes	No
Threat to hit with a fist or anything that can hurt her	(0)	3.4%	52.0%	22.5
Slapping, pushing, throwing something; No injury, no lasting pain	(2)	20.7	27.8	39.9
Punching, kicking; Bruises, cuts or continuing pain	(2)	47.1	11.8	24.5
"Beaten up" or choked; Burns, broken bones or severe contusions	(3)	16.1	5.9	8.8
Threat to use weapon; head, internal or permanent injury, loss of consciousness	(0)	10.3	1.0	2.5
Use of a weapon; Wounds from a weapon	(2)	2.3	1.6	1.8
Total	(9)	100.0% (87)	100.1% (508)	100.0% (3,900)

*The 470 forced sex incidents in which the type of violence or violent threat is not known are not included in this table.

Being choked can indicate an especially high-risk incident. (As we will see in the analysis of the homicide data below, ten of the 57 women killed by a man partner were strangled to death.) The CWHRS calendar did not have a "choking" code comparable to the "TD" code for being tied down or restrained. However, we often were able to determine if she had been choked, because incidents in which she was choked were coded either 3 (choked or grabbed around the neck) or 4 (when she lost consciousness), and interviewers frequently wrote notes and explanations on the calendar about these incidents.

In 74 of the 4,688 incidents for which we have information, the woman was choked. This included 60 of the 160 incidents (37%) in which she was beaten up, choked, burned or seriously injured, nine of the 70 (13%) incidents in which she was severely injured or experienced a weapon threat, and five of the 68 (7%) incidents in which she experienced weapon use or wounds from a weapon. Of the 373 women with information, 59 (16%) had been choked at least once in the past year, eight of them twice, one woman three times and one woman six times. This is probably a low estimate, because 274 of the responding 490 clinic/hospital women (56%) said that Name had "ever" tried to choke her.

Number of Incidents in the Past Year

The average (mean) number of incidents in the past year reported by the 493 women who completed a calendar history was just over ten per woman (10.1), but the number varied from only one to 172 incidents. Half of the women experienced three or fewer incidents (median = 3.00). A little less than a third (29%) of the 493 women told us about only one incident in the past year, and a little over a third (34%) told us about two to four incidents. However, 74 women (15%) told us about five to ten incidents and 109 (22%) told us about more than ten. Twenty-six women (5%) reported experiencing at least fifty incidents.

In general, the less severe incidents were more frequent than the most severe incidents (Exhibit 70). CWHRS women experienced as many as 171 threats of violence, 99 slapping/pushing incidents, and 129 punching/kicking incidents. However, no woman experienced more than 28 beating/choking incidents, nine incidents of severe injury or weapon threat, or eight incidents of weapon use in the previous year. Half or more of the women who interviewed as AW had experienced at least one incident of forced sex, threat of violence, slapping or pushing without injury, or punching or kicking with minor injury. However, only 36% had experienced at least one incident in which she was beaten up, choked, burned, or seriously injured; 16% had experienced at least one incident in which she sustained severe or permanent injury or was threatened with a weapon; and 12% had experienced one or more incident in which a weapon was used against her.

Exhibit 70
Number of Incidents Women Experienced in the Past Year, by Type*

Number of Incidents	Forced Sex	Violent Threat	Slap, Push, No Injury	Punch, Kick, Cuts or Bruises	Beaten up, Choked, Burned	Weapon Threat, Severe Injury	Weapon Use, Wounds
None	75.9%	78.7%	43.6%	51.7%	64.1%	83.6%	88.2%
One	11.6	9.1	24.9	23.5	23.5	13.4	10.0
2 to 4	5.1	3.9	16.0	15.0	9.1	2.4	1.6
5 to 10	3.4	3.9	8.1	5.7	2.2	.6	.2
Over 10	4.1	4.5	7.3	4.1	1.0	.0	.0
Maximum	171	171	99	129	28	9	8
Total	100.0% (493)	100.0% (493)	100.0% (493)	100.0% (493)	100.0% (493)	100.0% (493)	100.0% (493)

*Table includes only those 493 women who completed a calendar history.

Although 8% of the 493 responding women had experienced five or more incidents in which they were threatened with violence (not with a weapon), and 15% had experienced five or more incidents in which they were slapped, pushed or had something thrown at them that could hurt them, but not injured, only 3% had experienced five or more incidents in which they were beaten up, choked, burned, or sustained serious injury. Eleven women experienced two incidents in which she was severely or permanently injured or threatened with a weapon, one woman experienced four, one five, one six, and one nine. Forty-nine women reported one weapon use incident, nine women reported two or three, and one reported eight.

Severity of Incidents in the Past Year

If we look at the totality of incidents in the retrospective year for the 493 women who completed a calendar history, 113 women experienced being beaten up, choked, burned or serious injury but not severe injury or weapon threat or use, 64 women experienced severe or permanent injury or weapon threat but not weapon use, and 61 women experienced weapon use in at least one incident. However, the "most serious" incident did not necessarily define every incident that happened to the woman in the previous year. Looking at the average and maximum number of each type of incident experienced by CWHRS women, according to the "most serious" incident (Exhibit 71), we see that most women who had experienced very severe incidents had also experienced many less severe incidents.

Exhibit 71
Mean and Maximum Number of Each Type of Incident, by the Most Severe Incident Experienced in the Past Year

Type of Incident	Most Severe Incident in Year			All CWHRS Women
	Beaten, Choked	Weapon Threat	Weapon Use	
Threat of violence	4.39 171	3.47 98	1.02 26	2.32 171
Slapping, pushing; No injury	2.89 36	3.66 83	8.02 99	3.49 99
Punching, kicking; Injury	3.03 129	2.97 68	3.92 62	2.15 129
Beaten, choked; Serious injury	1.76 26	1.59 19	1.48 28	.79 28
Threat of weapon; Severe injury	0 0	1.44 9	.33 2	.23 9
Weapon use; weapon wounds	0 0	0 0	1.33 8	.16 8
Total	113	64	61	493

For example, the 61 women who had experienced at least one incident in which she was attacked with a weapon had also experienced over eight incidents, on average, in which she was slapped, pushed or had something thrown at her but not injured. One of the 61 had experienced 99 such incidents. By comparison, the 113 women for whom "slapping or pushing" had been the most serious type of incident in the past year had experienced only 3.84 slapping/pushing incidents on average (not shown in Exhibit 71, above). One CWHRS woman had experienced 44 incidents in the previous year, of which nine were weapon threats (her partner played "gun games" on her), one was forced sex with restraint, one was being beaten up, six were being punched or kicked, and 27 were being slapped. Therefore, one incident may not accurately represent the level of severity and risk of injury in the woman's life. It is important for clinicians to realize that the severity of any single incident, such as the presenting incident in a clinic setting, is not necessarily indicative of the overall severity of abuse.

The total number of incidents of all types in the past year was related to the likelihood that at least one incident would be severe (Exhibit 72). For example, 27% of the 143 women who told us about only one incident described being beaten up or worse in at least one (in this case, the only) incident, compared to 51% of the 167 women who told us about two, three or four incident, 58% of the 74 women who told us about five to ten incidents, and 66% of the 109 women who had experienced over ten incidents in the past year. On the other hand, the only incident was a severe incident for a considerable minority (27%) of the 143 women.

Most Recent Incident

Even though the severity of any given incident, including the most recent, is not necessarily indicative of the overall severity of the violence in the past year, the recency of the incident may be an important predictor of continuing violence. One of the precepts of time series analysis and prediction is that the best predictor of what happens tomorrow is what happened today.

Severity. Of the 56 women whose most recent incident was a threat of violence (other than a weapon threat), 19 (34%) also had experienced at least one other incident where she was beaten up or worse. This was also true for 37 of the 155 women (24%) who most recently experienced being slapped, pushed, or having something thrown at her, and for 31 of the 116 women (27%) whose most recent incident was being punched or kicked, with minor injuries. Overall, a fourth to a third of women who most recently had experienced a less severe incident, had also experienced being beaten up, choked or something more severe in the past year.

In addition, 27 of the 87 women (31%) whose most recent incident involved being beaten up, choked or sustaining serious injury had also experienced at least one other incident in the previous year where she had been threatened with a weapon, had a weapon used on her, or sustained very severe or permanent injury. Therefore, to gauge the overall severity of a woman's experience of violence, it is necessary to look at more than only the most recently occurring incident.

Exhibit 72
Most Severe Incident and Overall Number of Incidents in Past Year

Most Severe Incident in Past Year	Overall Number of Incidents of Any Type				
	One	2-4	5-10	11-172	Total
Forced sex only; No injury, weapon or threat of violence	3.5%	.0%	.0%	1.8%	1.4%
Threat to hit with a fist or anything that can hurt her	11.2	2.4	.0	.0	4.1
Slapping, pushing, throwing; No injury, no lasting pain	30.8	21.0	23.0	15.6	22.9
Punching, kicking; Bruises, cuts or continuing pain	28.0	25.7	18.9	16.5	23.3
"Beaten up" or choked; Burns, broken bones, severe contusions	18.2	22.8	27.0	26.6	22.9
Threat to use weapon; head, internal, or permanent injury, loss of consciousness	4.2	15.6	16.2	18.3	13.0
Use of a weapon; Wounds from a weapon	4.2	12.6	14.9	21.1	12.4
Total	100.0% 143	100.0% 167	100.0% 74	100.0% 109	100.0% 493*

*Four women did not complete a calendar history.

Recency. The incidents reported by each woman usually were not randomly scattered across the year. The most recent incident reported happened anywhere from the morning of the initial interview (four cases) to 364 days before the interview (two cases). Over 22% of the women (111 of the 493) had experienced at least one violent incident during the week before the initial interview (within six days). At least ten of these 111 women were visiting the clinic or hospital because of injuries sustained during that incident. On the other hand, half of the 493 women had experienced their most recent violent incident 43 or more days before the initial interview, and 107 women (22%) had not experienced any violence for at least 181 days.

There were small but statistically significant correlations between the number of days between the most recent incident and the initial interview, and the most severe incident in the past year (Pearson $r = -.136$, $p = .01$), as well as the number of incidents in the past year (Pearson $r = -.186$, $p < .01$).The shorter the period in days between the initial interview and the last reported incident, the more incidents reported in the past year, and the more severe the most severe incident in the year.

Children's Exposure to Violence

At least one child was present in 1,180 (24%) of the 4,974 incidents, including nine of the 81 weapon use incidents (11%), 11 of the 112 "weapon threat or severe

injury" incidents (10%), and 82 of the 391 "beating, choking or serious injury" incidents (21%). Of the 493 responding women, 119 told us that a child was present in at least one incident in the past year, and 64 women said that a child was present in two or more incidents. One woman said that a child was present in 145 incidents in the past year.

Weapons Used in Incidents

In 83 (1.7%) of the 4,974 incidents, the woman was threatened with a weapon (14 incidents are missing this information), and in 81 (1.6%) incidents a weapon was used on her, a total of 164 incidents involving weapon threat or use (3.3%). In 16 of these 164 incidents, we do not have specific information about the type of weapon. Of the 148 weapon threat or use incidents for which we know the weapon type, it was a firearm in 64 (43%), a knife or sharp instrument in 42 (28%), a club, blunt object or belt in 30 (20%), a car in three (2%), and another weapon in nine (6%). Among the clubs, blunt objects or belts, there were three incidents in which a woman was beaten with a belt, four in which she was hit with a telephone, and seven in which she was beaten up with a baseball bat. The nine other weapons included arson fire, drowning in water, hot coffee, acid, bleach, two incidents of deliberate HIV transmission, and two incidents of poisoning with drugs.[19]

These 164 incidents of weapon threat or use happened to 110 different women (22% of the 493 who responded), of whom 79 women experienced one incident in the past year, 23 experienced two, five experienced three, one experienced six and two experienced nine. The 64 incidents of firearm threat or use happened to only 46 different women (9%), of whom 39 (8%) experienced one such incident in the past year, five women experienced two, one woman experienced six, and one woman experienced nine (Name repeatedly played "gun games" with her). The 43 knife incidents happened to 40 different women, with 38 experiencing one knife incident and two experiencing two incidents. Eleven (24%) of the 46 women who had experienced a firearm incident had also experienced at least one knife incident.

Overall, very few women in the CWHRS had a handgun in their household (see Exhibit 53, above). However, these few women were much more likely than other women to have experienced a firearm threat or attack at the hands of their intimate partner in the past year, especially when the handgun was kept loaded. Of the 19 women who told us that there was a loaded handgun in her household, six (32%) experienced one or more incident with a firearm, compared to 34 of the 414 (8%) who lived in a home where there was no loaded firearm (Chi square $p = .001$; Gamma = .654, $p = .54$). By comparison, only one of the 19 women with a loaded handgun at home had experienced a threat or attack with a knife (5%), compared to 35 of the other 414 women (8%).

Of course, we have no way of knowing whether any of the firearms in the home was the same weapon that was threatened or used in the incident. The risk factor is the same, however, whether the weapon came from the woman's home or elsewhere. The abusing partners of women who had a loaded handgun in her home were more likely use a firearm to threaten or attack her, compared to the partners of women who did not have a loaded handgun in the home. In any case, it appears that the risk factor is not just having a firearm in the home, but having a loaded firearm. None of the 17 women who said that there was an unloaded handgun, rifle or shotgun in the home was threatened or

attacked with a firearm in the past year by her partner.

A weapon was not necessary for the woman to sustain severe, life-threatening injury. In 15 of the incidents coded as "severe injury or weapon threat," the only weapon was the partner's hands, fists or feet, but the woman's injuries were very severe or permanent. For example, seven were choked or beaten to unconsciousness or suffered a concussion, one was stomped on the head and suffered permanent brain damage, two were stomped in the belly and genitals and required lengthy hospitalization, one required reconstructive surgery to the face, and two were thrown out of a window and severely injured. In all of the 74 incidents in which the woman was choked, the partner used only hands to choke her. In ten of the 74, however, the partner not only choked her but also used a weapon on her.

It was much less likely for a firearm to be the weapon when the weapon was actually used, instead of being only threatened. A firearm was the weapon in 56 (70%) of the 80 weapon threats (where the weapon was known), and a knife or sharp instrument was the weapon in 23 (29%). However, a firearm was the weapon in only eight (12%) of the 68 incidents in which a weapon was actually used, and a knife or sharp instrument was the weapon in 19 (28%). Thus, a knife was the weapon in the same percent of weapon threat incidents as weapon use incidents, but a firearm was the weapon in a much higher percent of weapon threat incidents than weapon use incidents.

One reason for this could be that the threat of a firearm was sufficient for Name to produce the desired effect in the woman, so that it was not "necessary" for Name to actually use the firearm. Another possible reason is that these are non-fatal incidents. The proportion of firearms in the weapon-use category might have been higher if we had information about the fatal firearm incidents, but women experiencing a fatal incident would not have been included in the clinic/hospital sample. However, an estimate of this analysis is possible in the CWHRS, because we have information on the 87 homicide incidents. (See the Homicide Findings section, below.)

Drug or Alcohol Use in Incidents

Research suggests that the role of alcohol or drugs in violent incidents may be related to whether or not the partner has a substance-use problem, but the relationship is not perfect. For example, the Violence Against Women Survey found that 28% of women who said that their husbands never or rarely drank heavily, still said that the husband was usually drunk during an assault (Johnson, 1996: 157). More than half of prison or jail inmates convicted of a violent crime against an intimate were drinking or using drugs at the time of the offense (Greenfield, *et al.*, 1998:26), with 31% drinking only, 4% using drugs only and 20% using both substances.

In the CWHRS, Name was drunk in 1,990 (40%) of the 4,974 reported incidents, high on pot in 581 (12%) and high on drugs in 1,077 (22%). In an additional six incidents, Name beat the woman to get money to buy drugs. The woman was drunk in 279 (6%) of the incidents, high on pot in 180 (4%) and high on drugs in 360 (7%). Usually, when the woman was drunk, Name was drunk also (74% of the 279 incidents), when she was high on pot, Name was high on pot also (76% of the 180 incidents), and when she was high on drugs, Name was also high on drugs (67% of the 360 incidents).

Of the 493 responding women, 236 (48%) had experienced at least one incident in which Name was drunk in the previous year, 154 experienced two or more incidents, 46 women experienced ten or more incidents, and one experienced 171. Only 62 women (13%) experienced at least one incident in which both were drunk, and the maximum number was 23 incidents. In contrast, 138 (28%) of the 493 women had experienced at least one incident in which Name was high on drugs in the previous year, 97 had experienced two or more, 27 had experienced ten or more, and one had experienced 171. Only 43 had experienced at least one incident in which both were high on drugs, and the maximum number was 25.

Both alcohol use and hard drug use were involved in 677 of the 4,974 incidents (14%). In 453 of these (67%), it was Name alone who was both drunk and high, and in 109 (16%) both the woman and Name were drunk and high. Overall, there was no substance use in 44% of the 4,978 incidents, Name alone was drunk and not on pot or other drugs in 24%, the woman or the woman and Name were drunk and not high on pot or other drugs in 2%, Name alone was using drugs or a combination of substances in 20%, and the woman or the woman and Name were using drugs or a combination of substances in 10%.

Much research has found an association between substance use and the seriousness of a violent incident, such as assault (Gorney, 1989), violence against women (Johnson, 1995), and intimate assault (Greenfield, *et al.*, 1998:16). In a study of 67 pregnant women, McFarlane, *et al.* (1998) found that the partner's daily intoxication was strongly associated with whether he had used a gun or knife against her. Did those CWHRS incidents involving substance use tend to be more serious than incidents in which neither partner was drunk or high on drugs?

The most likely situation for the most serious incidents in the CWHRS occurred when the woman was drunk, either alone or with Name, and neither were high on pot or hard drugs (Exhibit 73). In almost a quarter of these 104 incidents (24%), the woman experienced being beaten, choked, burned, or worse. (There was no difference between the situations in which the woman alone was drunk, and when both she and Name were drunk.) When only Name was drunk, and again neither was high on drugs, the incident was more likely to be a threat (25%) compared to when the woman was drunk with or without Name (3%). However, when anyone was drunk, slapping and pushing with no injury was the most likely kind of incident (42% when Name alone was drunk and 51% when the woman was drunk with or without Name).

In addition, a weapon was threatened or used in 5% of the 104 incidents in which the woman was drunk, with or without Name, and she was choked or grabbed around the neck in 4%, much higher than for any other kind of situation. The woman was most likely to have been tied up or restrained in the 499 incidents in which she with or without Name were high on drugs or using drugs with another substance (6%). However, this situation was still less likely to involve being beaten up or worse, compared to incidents in which the woman was using alcohol only, with or without Name.

Exhibit 73
Incident Severity and Substance Use (N in parentheses)

Substance Use in Incident*	Beaten up or worse	Weapon Threatened or Used	Restrained	Choked
None (N=2,209)	12.6%	4.2%	2.5%	1.6%
Alcohol Only, Name only (N=1,183)	5.2%	1.0%	.7%	.9%
Alcohol only, both or Woman only (N=104)	24.0%	4.8%	1.9%	4.3%
Drug Use or Combination, Name Only (N=979)	15.3%	3.7%	1.4%	2.1%
Drug Use or Combination, Both or Woman Only (N=499)	13.8%	3.8%	6.2%	1.7%
Total (N=4,974)	11.7%	3.3%	2.2%	1.6%

*Our definition of "drugs" included cocaine, crack, heroin and speed.

**The table does not include six cases in which the woman was beaten because Name wanted money to buy drugs.

Was there an association between the weapon used and drug or alcohol use in CWHRS incident data? Of the 164 incidents in which a weapon was threatened or used, the woman was somewhat *less* likely to have been a firearm in the 72 incidents when substance use was involved (35%) compared to the 92 with no substance use (42%). In contrast, the weapon was somewhat more likely to have been a knife was in the 72 incidents with substance use (31%) compared to the 92 others (22%), and the weapon was equally likely to have been a club, blunt object or belt.

Summary: Incidents Experienced in the Past Year

CWHRS women told us about close to 5,000 incidents that had happened to them in the past year, ranging in severity from a violent threat to life-threatening or permanent injury. Though the most severe incidents were generally the least frequent, about half of the women (48%) had experienced at least one incident in which she had been beaten up, choked, sustained severe or permanent injury, or was threatened or attacked with a weapon. The woman was restrained or tied up in 110 incidents, occurring to 57 women, and choked in 74 incidents, occurring to 59 women. At least 12 women had miscarried their baby following a violent incident in the past year.

From these incidents, we can learn the following things:

– To gauge the overall severity of a woman's experience of violence, it is neces-

sary to look at incidents over a period of months. A single incident may not represent the overall level of severity and risk of injury in the woman's life. Many women who experienced less severe incidents had also experienced very severe incidents in the past year. Although only 12% of the incidents women told us about were at least as serious as being beaten up, choked, burned, or worse, almost half of the women had experienced at least one such incident in the previous year.

-- Women who told us about the most incidents were not necessarily the same women who had experienced the most severe incidents. When women told us about only one incident, for 27% that single incident involved being seriously or severely injured or weapon threat or use. Thus, contrary to a common belief, violent incidents did not necessarily begin with a less serious incident and escalate. In some cases, the first incident was serious enough to be life-threatening.

-- The total number of incidents, the greatest severity of any of the incidents, and the recency of the most recent incident are related to each other. In general, the fewer days that had passed between the last reported incident and the interview, the greater the total number of incidents in the past year, and the more severe the most severe incident that had happened.

-- A child was present in 24% of the incidents, including 21% of those in which the woman was beaten, choked, burned or sustained serious injury.

-- About 3% of the incidents, happening to 22% of the women, involved the threat or use of any kind of weapon. In 43% of these 148 weapon threat or use incidents, the weapon was a firearm, and in 28%, the weapon was a knife.

-- Of the 80 weapon threat incidents, the weapon was a firearm in 56 (70%) and the weapon was a knife in 23 (29%). Of the 68 weapon use incidents, the weapon was a firearm in only eight (12%) and the weapon was a knife in 19 (28%). Thus, it was much less likely for a firearm to be the weapon when the weapon was actually used (12%), instead of only being threatened (70%), while a knife was the weapon in the same percentage of incidents where the weapon was used and where the weapon was only threatened. One reason for this could be that the threat of a firearm was sufficient for Name to produce the desired effect in the woman, so that it was not "necessary" for Name to actually use the firearm.

-- Though very few women in the CWHRS had a loaded handgun in their household, they were much more likely to have experienced a firearm threat or attack at the hands of their intimate partner in the past year. However, they were no more likely to have experienced a knife threat or attack.

-- Over half (56%) of the 4,974 incidents CWHRS women told us about, either she, Name, or both were drunk, high on pot, high on other drugs, or using a combination of these substances. In 1,287 (26%), only alcohol was involved and in 1,478 (30%), drugs were involved, with or without alcohol. However, the association between substance use and the severity of the incident was not strong. The 104 incidents in which the woman was drunk, with or without Name being drunk as well, and in which neither was high on pot or other drugs, tended to be the most serious.

Correlates of Severity and Number of Incidents in the Past Year

This section begins to address issues that were the central focus of the CWHRS. One of the primary goals was to identify factors that indicated that an abused woman was in a situation in which life-threatening injury or death (of either partner) was a high risk. Assuming that the risk of death is greater when a woman is being frequently attacked with life-threatening force, in this section, we look at factors correlated with the number of incidents and the severity incidents in the past year, for those women who had experienced at least one incident of violence or violent threat. Going systematically through each risk and protective factor, we ask what was different between situations in which the abused woman had experienced at least one severe incident and situations in which she had not, and what was different when women had experienced many incidents in the past year versus one or two.

As a quick indicator of whether or not the woman had experienced any incident of abuse that might have been life-threatening, we dichotomized the "Most Severe Incident" variable (see Exhibit 72, above) into those that could easily have ended in death (severe) and those that probably would not have ended in death (less severe). In the first group, we included being "beaten up" (when a woman says that she was beaten all over or "beaten to a pulp"); being choked or losing consciousness; burns, broken bones or severe contusions; head or internal injury; permanent injury, and the use or threat to use a weapon (see Zimring, 1972). In the second group were incidents with no weapon and no injury at all or nothing more serious than minor cuts or bruises.

About half of the CWHRS women who interviewed as AW were in the first group and half in the second. Although this two-category summary, of necessity, loses the detail of each individual woman's situation (see the "Incident Characteristics" section above), with it we can begin to answer some of the key questions of the study.

Age and Race/Ethnicity

Of those women who interviewed as AW, Latina/Hispanic women were the least likely to have been severely abused in the past year. Only 34 (32%) of the 105 Latina/Hispanic women had experienced at least one incident where they were beaten up or worse, compared to 180 (53%) of the 338 African/American/Black women and 22 (52%) of the 42 white or other women. This was true even within the six age groups (Exhibit 74). At every age group with ten or more women, the Latina/Hispanic women who interviewed as AW were less likely to have experienced a severe incident in the past year than African/American/Black women or white or other women.

The age pattern differs by racial/ethnic group. Although African/American/Black women over age 40 were less likely to interview as AW (see Exhibit 54, above), among those who did interview as AW, older women were just as likely to have experienced severe abuse as younger women. In contrast, though older Latina/Hispanic women were more likely to interview as AW, the 45 women over age 30 who did interview as AW were less likely (29%) to have experienced at least one severe incident than women who were in age groups 21 to 25 (42%) or 26 to 30 (35%). For both African/American/Black women and Latina/Hispanic women, the youngest were the least likely to have experienced a severe incident. Among the white or other women, the 20 youngest women (aged 18 to

30) were not only the most likely to have interviewed as AW (75%), but the 15 who interviewed as AW were also the most likely to have experienced at least one severe incident in the past year (60%).

Exhibit 74
Percent with at Least One Severe Incident, by Racial/Ethnic Group and Age
(N in parentheses)

Age Group	African/ American/Black	Latina/ Hispanic	White or other	Total*
18-20	38.2% (68)	23.1% (13)	(2/3)	36.9% (84)
21-25	57.1% (49)	41.7% (24)	(4/5)	53.2% (79)
26-30	61.5% (52)	34.8% (23)	(3/7)	51.2% (86)
31-40	54.4% (125)	24.2% (33)	50.0% (12)	48.5% (171)
41-50	64.1% (39)	36.4% (11)	53.8% (13)	56.3% (64)
51-67	(1/5)	(1/1)	(0/2)	(2/9)

*Total includes eight women for whom racial/ethnic group is missing.

Type of Union and Relationship

Although the Latina/Hispanic women who said they were married were more likely than women who said they were single to interview as AW (see Exhibit 52, above), they were less likely to have experienced at least one severe incident (Exhibit 75). Only 29% of the 49 married women experienced an incident in which she was beaten up or worse, compared to 40% of the 25 single women. However, the difference was not statistically significant.

Women who described Name as an "ex" or former partner were more likely to have experienced at least one very severe incident in the past year, compared to other women. Of the 85 women who said that Name was her current husband, only 31 (36%) were beaten up or worse, compared to 14 (64%) of the 22 women where Name was her ex- or former husband; 35% of the 20 women where Name was her current commonlaw husband, versus 73% of the 11 women where Name was her ex- or former commonlaw husband, experienced at least one very severe incident; as did 46% of the 158 women where Name was her current boyfriend versus 53% of the 158 where Name was her ex- or former boyfriend.

This was true for each racial/ethnic group. For African/American/Black women, 54% of the 28 who said Name was her current husband were severely abused, compared to 69% of the 13 where Name was her ex- or former husband; and 48% of the 126 women who said Name was her current boyfriend, versus 53% of the 138 women who said he was her ex- or former boyfriend. For Latina/Hispanic women, only 25% of the 48

who said Name was her current husband were severely abused, compared to four of the five where Name was her ex- or former husband; 28% of the 18 who said that Name was her current commonlaw husband versus four of the seven who said that he was her ex- or former commonlaw husband; and 31% of the 16 women who said Name was her boyfriend, versus three of the seven who said he was her ex- or former boyfriend. For white or other women, however, there was no difference (though the numbers were very small).

Exhibit 75
Percent With at Least One Very Severe Incident,
by Racial/Ethnic Group and Marital Status (N in parentheses)

Marital Status	African/ American/Black	Latina/ Hispanic	White or Other	Total*
Single	50.8% (236)	40.0% (25)	53.8% (13)	49.5% (279)
Married	59.4% (32)	28.6% (49)	45.5% (11)	40.9% (93)
Commonlaw, engaged	(2/2)	26.3% (19)	(1/1)	36.4% (22)
Separated/ Divorced	55.9% (59)	41.7% (12)	53.3% (15)	52.9% (87)
Widowed	(4/7)	(0/0)	(1/1)	(5/8)

*Total includes eight women for whom racial/ethnic group is missing.

Same-Sex Relationship

Of the 18 women in a current or former same-sex relationship who interviewed as AW, eleven (61%) had experienced at least one incident of severe abuse in the past year, defined as beating up or worse, compared to 48% for the 475 women abused by a man intimate partner. This included nine of the thirteen current partners but only two of the five ex- or former partners, compared to (43% of current and 54% of ex- or former heterosexual partners). Again, this higher rate may be due to reluctance on the part of women experiencing less severe abuse in a same-sex relationship to divulge their relationship to the interviewer.

Four of the 18 women (22%) had been threatened or attacked by a weapon in an incident in the past year, the same as the 106 of the 475 other women (22%). However, women being abused by a same-sex partner were more likely to have been threatened or attacked by a firearm, compared to women being abused in a heterosexual relationship. Three of the 18 women (17%) experienced the threat or use of a firearm in any incident, compared to 43 of the 475 other women (9%). In addition, women being abused by a woman were more likely to have been beaten up, choked, burned, or seriously injured in at least one incident (50%), compared to other women (35%).

Co-Residence, Estrangement, and Leaving the Relationship

Simple "co-residence" was not related to the severity of violence in the past year. The 175 women who were living in the same household with Name at the time of initial interview were only slightly less likely to have experienced at least one very severe incident than women who were not living with Name (45% versus 51%, respectively), and the difference was not statistically significant.

However, two groups of women were less likely to have experienced one or more very severe incident, women who had lived with Name the entire year and women who had never lived with Name. The 134 women who had lived with Name the entire year were significantly (Chi square p = .047; Gamma = .201, p = .045) less likely to have experienced a severe incident (41%) compared to the other 358 women (51%). The 155 women who had "never" lived with Name were significantly (Chi square p < .0001; Gamma = .392, p < .0001) less likely to have experienced a severe incident (33%), compared to the other 377 women (53%). In contrast, over half of all other groups of women had experienced at least one very severe incident in the past year: 60% of the 196 who had lived with Name earlier in the year but were now living apart, 54% of the 24 who had recently moved in with Name, and 61% of the 23 who had lived with Name in prior years.

Without analyzing the time sequence of these events, we do not know whether the serious incident or incidents occurred before or after the woman left. However, the 252 women who had left or tried to leave Name in the past year were much more likely to have experienced at least one severe incident (57%), compared to only 29% of the 121 who did not leave or attempt to leave (Chi square < .0001; Gamma = .494, p < .0001). In addition, 49% of the 51 women who had asked Name to leave and 51% of the 69 who asked but Name refused had been severely abused. Women who left or asked Name to leave were much more likely to have been beaten up, choked, or seriously injured, or to have experienced a threat with a weapon or severe injury (Exhibit 76). This association was consistently true for African/American/Black women (Chi square p = .001; Gamma = .399, p = .002) and for Latina/Hispanic women (Chi square p = .001; Gamma = .706, p < .0001). For white or other women, there was a difference, but it was not statistically significant.

Did the woman leave because of the severity of the incidents, or did the severity increase when she left or tried to leave, or did both happen? Anecdotal reading of the 500 case files has found examples of each type of situation. One woman had experienced severe violence, including being choked and beaten up, put Name out and called the police, after which Name called, watched, followed and threatened her daily or every other day for almost a year. She then saw him a few times, he attacked her again, and she left. At the second follow-up, which was over a year after the last violent incident, she was not being abused. She said, "I haven't seen him" and that she had called the police and cut off all contact. This illustrates that the relationship between leaving and severity is not simple. As many other researchers have found (Okun, 1986; Horton & Johnson, 1993), leaving the situation is a process.

Exhibit 76
Leaving the Relationship in the Past Year and Incident Severity

Most Severe Incident in the Past Year, Selected Types	In the past year, did you leave or stay away from Name or ask Name to leave or stay away from you?			
	Yes, left or stayed away	Yes, asked Name to leave or stay away	Asked, but Name refused	No
"Beaten up," choked; Burns, broken bones	29.0%	21.6%	18.8%	13.2%
Threat with Weapon; Severe injury	13.9	13.7	24.6	4.1
Weapon use; Wounds from weapon	13.9	13.7	7.2	11.6
Total Cases	252	51	69	121

The only relationship between leaving and the number of incidents was for the 69 women who said that they had asked Name to leave but Name had refused. These women had significantly more incidents than the other women, 20.68 on average compared to 9.47 of the 252 women who left, 12.47 of the 51 women who asked Name to leave and 4.33 of the 121 women who did not leave or ask Name to leave (t test $p < .0001$, $p = .068$, and $p < .0001$, respectively). Only 13% of the 69 women experienced one incident but 43% experienced over ten incidents, compared to 45% and 10%, respectively, of the 121 women who did not leave. This was true for each racial/ethnic group. The mean number of incidents for the 31 African/American/Black women who asked Name to leave but Name refused was 12.48, compared to 4.40 for the 73 woman who did not leave or ask Name to leave; for the Latina/Hispanic women, it was 26.74 versus 4.49, and for the white or other women, it was 41.20 versus 4.00.

For many of the CWHRS women who interviewed as AW, Name had made serious threats against her life or her children's safety if she tried to end the relationship (see Exhibit 58, above). When Name used threats to keep the woman from leaving, or to make her return if she had already left, she was likely to have more incidents and more serious incidents in the past year (Exhibit 77).

When Name threatened to harm her children, she was much more likely to have experienced at least one very serious incident and to have over ten incidents, though there was only a slight difference when Name threatened to take her children. When Name threatened to kill her if she left the relationship, she was twice as likely to have at least one severe incident and to have over ten incidents. When Name threatened to kill himself or herself, the difference was not as great. The relationships with incident severity were all consistently true for each racial/ethnic group. The relationship between

the number of incidents and Name's threat to harm the kids was true only for African/ American/Black women, and the relationship between the number of incidents and Name's threat to take the kids was true only for Latina/Hispanic women.

Exhibit 77
Number and Seriousness of Incidents in Past Year, by Being Threatened by Name if She Left the Relationship or Stayed Away

Name's Threat "if you leave or don't come back"		% with at least one very serious incident	% with over 10 incidents	Total N
to harm the kids	Yes	79.0%	41.4%	29*
	No	47.9%	20.3%	330*
to take the kids	Yes	54.1%	29.4%	85*
	No	49.3%	19.7%	274*
to kill him- or herself	Yes	59.1%	30.2%	149
	No	43.6%	18.6%	344
to kill you	Yes	69.3%	34.9%	189
	No	35.2%	14.1%	304

*Total includes only those who responded and who had children.

Women appeared to be at particular risk when Name had threatened to do more than one of these things. Of the 20 women where Name had threatened to not only take the kids but to harm them as well, 14 (70%) experienced at least one severe incident. Of the 91 women where Name had not only threatened to commit suicide but to kill her as well, 69 (76%) experienced at least one severe incident. Of the 22 where Name had threatened to kill her and to harm the kids, 18 (82%) experienced at least one severe incident in the previous year.

Length of Relationship

In general, there was no association between the length of the woman's relationship with Name and the number of incidents or the most severe incident in the previous year (Exhibit 78), although the 42 women who were in a relationship that had lasted 15 or more years were somewhat less likely (38%) than all other women (49%) to have had at least one very severe incident in the past year. However, this was not statistically significant either for all women or for any group. Women in longer relationships were somewhat more likely to have experienced more incidents in the past year, but this association was of borderline significance (Chi square p = .070; Gamma = .160, p = .025).

Exhibit 78
Most Severe Incident and the Number of Incidents by Length of Relationship

Length of Relationship	Percent: Most Severe Incident "Beaten up" or Worse	Percent: Number of Incidents in Past Year				N
		1	2-4	5-10	11-171	
One year or less	50.5%	31.2%	41.9	16.1	10.8	93
13 months to 2 years	49.5%	28.0%	33.3	17.2	21.5	93
25 months to 3 years	52.3%	26.2%	29.2	16.9	27.7	65
37 months to 5 years	47.6%	17.9%	35.7	19.0	27.4	84
61 months to 15 years	47.8%	39.1%	28.7	9.6	22.6	115
181 months to 40 years	38.1%	23.8%	35.7	11.9	28.6	42

Disparity Between the Woman's Age and Name's Age

There was no relationship between the disparity between the woman's age and Name's age, and the number or severity of incidents in the past year. The percent of women who were beaten up or worse was somewhat lower (27%) for the 11 women who were ten or more years older than Name, and somewhat higher (73%) for the 11 women who were 20 or more years younger than Name. However, these extremes represented very few cases. There was no difference in the number of incidents, except that the 11 women who were 20 or more years younger than Name were less likely to have experienced at least 10 incidents (9%) versus other women (22%).

Effect of Children on Abuse Severity and Number of Incidents

For CWHRS women as a whole, there was no relationship between the number of children a woman had by birth and the number or severity of the incidents she had experienced in the past year. For African/American/Black women, however, there was a significant difference (Chi square = .039; Gamma = .157, p = .040), but only for severity, not for the number of incidents. Of the 76 African/American/Black women who had no children, 35 (46%) had experienced at least one "very severe" incident in the past year, compared to 44 of the 68 (65%) who had four or more children.

There was no association between the number of children age 18 or younger living in the woman's household and either the severity of the incidents or the number of the incidents she had experienced in the previous year. There was also no relationship between whether Name was the stepparent of one or more of the woman's children living at home, and the risk of a severe incident. Almost the same percent of the 132 who had a child that was Name's stepchild and the 355 other women had at least one severe incident (51% and 48%). There was no difference at all for African/American/Black

women or for white or other women, and a non-significant difference for Latina/Hispanic women (45% versus 27%, respectively). In addition, there was no relationship between the presence of Name's stepchildren and the number of incidents, either for the entire CWHRS sample or for any of the racial/ethnic groups.

Controlling Behavior

The score on the five Power and Control items was strongly related to whether the woman had experienced at least one incident involving being beaten up or worse in the past year (Exhibit 79). This relationship was highly significant both for the whole sample and for each racial/ethnic group. The strongest differences were for those women who answered "yes" to four or five of the items, compared to other women. For example, 63 of the 169 (37%) who scored "five" and 46 of the 110 (42%) who scored "four" had experienced at least one incident of weapon use, weapon threat, or extreme injury in the previous year. In contrast, only 10 of the 87 (11%) who scored "three," 11 of the 57 (19%) who scored "two," three of the 49 (6%) who scored "one," and three of the 21 (14%) who scored zero had experienced at least one such incident.

Exhibit 79
Name's Controlling Behavior and Incident Severity

Number of Power and Control Responses (of 5)	Percent Who Experienced at Least One Very Severe Incident in Past Year			
	African/ American/Black	Latina/ Hispanic	White or Other	Total*
None	45.5% (11)	(0/4)	(0/4)	23.8% (21)
One	9.7% (31)	7.1% (14)	(2/4)	12.2% (49)
Two	37.8% (37)	23.1% (13)	(1/6)	33.3% (57)
Three	39.0% (59)	28.6% (21)	(2/5)	36.8% (87)
Four	58.2% (79)	35.0% (20)	(7/9)	54.5% (110)
Five	73.6% (121)	51.5% (33)	71.4% (14)	68.6% (169)
Gamma	.517***	.508***	.585**	.514***

*There were three women who did not respond to the Power and Control questions. The total includes eight women who were multi-racial or who did not tell us their racial/ethnic group.

**Gamma is statistically significant at the .001 level.

***Gamma is statistically significant at the .0001 level.

In addition, the two questions in the Danger Assessment in which the woman was asked about Name's controlling behavior were both strongly related to the severity of incidents and the number of incidents experienced in the past year (Exhibit 80).

Like the Danger Assessment items, Name's controlling behavior was also related to the number of incidents in the past year. Of the 169 women who scored "five" on the

Power and Control scale, 34% had experienced 11 or more incidents, compared to 24% of the 110 scoring four, 15% of the 87 scoring three, 9% of the 57 scoring two, 14% of the 49 scoring one, and 5% of the 21 scoring zero.

Exhibit 80
Danger Assessment "Control" Questions and Incidents in Past Year

Danger Assessment Item		N	Very Severe		Over 10	
			Percent	Gamma	Percent	Gamma
Does Name control most of your daily activities?	Yes	300	58.3%	.492***	28.0%	.437***
	No	189	32.3%		13.2%	
Is Name violently and constantly jealous of you?	Yes	299	58.5%	.501***	30.8%	.634***
	No	188	31.9%		9.0%	

***Gamma is statistically significant at the .0001 level.

Stalking and Other Harassment

HARASS was related to the severity of the most severe incident in the past year (Pearson r = .453, p<.0001) and to the number of incidents in the past year (Pearson r = .184, p < .0001). The correlations were equally strong for African/American/Black women (r = .456 and .230, respectively), Latina/Hispanic women (r = .366 and .194, respectively) and for white or other women (r = .506 and .275, respectively). Of the 60 women who had a HARASS score of eleven or higher, 85% had at least one incident of being beaten up or worse, and 47% had experienced over ten incidents in the past year, compared to 45% and 20%, respectively, of the 398 women who had a HARASS score of one to ten, and 17% and 6%, respectively, of the 35 women who had a HARASS score of zero.

Almost every individual HARASS item was significantly related to experiencing one or more severe incident in the past year, and to experiencing more than one incident in the past year (Exhibit 81). For details of four of the HARASS questions, those relating to threats if she left or did not return to the relationship, see Exhibit 77, above.

Although some of the individual HARASS items were relevant for only a small group of women, such as "threatened to harm her pet" (applied only to women with a pet) or "tried to get her fired from her job" (applied only to women with a job), within that small group, women who answered "yes" were much more likely to have experienced more severe and frequent violence. In addition, the question, "reported her for taking drugs when she doesn't" had some interpretation problems (see discussion of Exhibit 65, above). In addition, women who answered "yes" to "scared her with a weapon" were, of course, more likely to tell us about an incident of weapon threat or use. Aside from these issues, the HARASS items most strongly associated with the severity of violence in the past year were "followed her," "destroyed something she valued," and "frightened or threatened her friends."

Exhibit 81
Selected HARASS Questions and Incidents in Past Year

HARASS Item: In the past year, an intimate partner . . .		N	Very Severe		11 or more incidents	
			Percent	Gamma	Percent	Gamma
Scared her with a weapon	Yes	135	78.5%	.724***	34.1%	.415***
	No	358	36.9%		17.6%	
Threatened to harm her pet	Yes	44	61.4%	.489**	34.1%	.542*
	No	153	35.3%		16.3%	
Called her on the phone and hung up	Yes	217	53.5%	.185*	23.0%	NS
	No	247	44.1%		20.2%	
Left threatening messages on the phone	Yes	69	66.7%	.429**	30.4%	.325*
	No	351	44.4%		18.2%	
Tried to get her fired from her job	Yes	63	68.3%	.532***	27.0%	.374*
	No	222	39.6%		14.4%	
Followed her	Yes	235	62.6%	.510***	29.4%	.396***
	No	256	35.2%		15.2%	
Sat in a car or stood outside her home	Yes	198	61.6%	.420***	24.2%	NS
	No	293	39.6%		20.8%	
Destroyed something of hers, or that she liked	Yes	243	63.4%	.547***	28.0%	.399**
	No	250	33.6%		16.4%	
Frightened or threatened her family	Yes	104	66.3%	.439***	32.7%	.341**
	No	389	43.4%		19.3%	
Left notes on her car	Yes	30	56.7%	NS	20.0%	NS
	No	212	37.7%		20.3%	
Showed up without warning	Yes	308	54.9%	.343***	26.0%	.307**
	No	185	37.3%		15.7%	
Made her feel like he/she can force her again into sex	Yes	196	61.7%	.440***	37.8%	.636***
	No	210	38.6%		11.9%	
Frightened or threatened her friends	Yes	138	70.3%	.564***	38.4%	.538***
	No	355	39.7%		15.8%	
Agreed to pay certain bills, then didn't pay them	Yes	230	59.1%	.391***	28.3%	.324**
	No	263	38.8%		16.7%	
Reported her for taking drugs when she doesn't	Yes	51	74.5%	.559***	37.3%	.398*
	No	442	45.2%		20.4%	

*Gamma significant at the .05 level.
**Gamma significant at the .01 level.
***Gamma significant at the .0001 level.

Physical Health

Overall Health. The 37 women who said that their general health was "poor" at the initial interview were much more likely to have experienced at least one incident where they were beaten up or worse (62%), compared to all (47%) of the other 456 women. However, the difference was statistically significant only for Latina/Hispanic women (Chi

square p = .041; Gamma = .548, p = .076). Seven of the 12 Latina/Hispanic women (58%) whose health was "poor" were beaten up or worse in the past year, versus 29% of the other 93 women. Women who answered that their health was "excellent" to "fair" did not differ from each other significantly. Without looking at the time sequence, we do not know whether the violence preceded her poor health, or her poor health preceded the violence, or both.

There was a significant (Chi square p < .0001; Gamma = .336, p < .0001) association between the woman's general health and the number of incidents in the past year. Only seven of the 56 women who said they had "excellent" health (12.5%) reported more than ten incidents, compared to 17 of the 37 women (46%) who said they had "poor" health. This relationship was significant for all three racial/ethnic groups. However, neither the severity nor the number of incidents was associated with the women's health "now" compared to a year ago, or to the number of health visits in the past year. The 180 women who said that they had been limited in the past month due to a physical condition were slightly more likely to have been severely abused (53% versus 46%), and to have experienced more incidents, but this was significant only for the number of incidents.

Pregnancy. The 42 women who were pregnant at the initial interview were equally likely to have experienced at least one incident where she was beaten up or worse in the past year (40%) as the 93 women who had been pregnant in the previous year (48%) or the 349 women who had not been pregnant (49%). This was true for each racial/ethnic group.

Women who answered "yes" to the Danger Assessment question, "Has Name ever beaten you while you were pregnant?" at the initial interview and who had been pregnant at some time in the previous year were more likely to have had a miscarriage. Of the 44 women who answered "yes," 12 (27%) had a miscarriage, compared to eight of the 47 (17%) who answered "no." When these women had experienced severe violence, they were even more likely to have had a miscarriage. For the 43 women who had been pregnant and who had experienced at least one severe incident in the past year, eight of the 28 who said that they had been beaten while pregnant (29%) had a miscarriage, compared to two of the 15 (13%) who answered "no."

There was a slight difference in the number of incidents for the women who were pregnant at the initial interview and the women who were not. Six of the 42 pregnant women (14%) had experienced over ten incidents in the past year, compared to 19% of the 93 women who had been pregnant in the past year, and 24% of the 349 other women. Again, this was not statistically significant.

Drug or Alcohol Use. Name's drug use was strongly and significantly (Chi square p < .0001; Gamma = .440, p < .0001) related to the severity of past violence. Of the 186 women who said that Name used drugs, 62% had experienced at least one incident where she was beaten up or worse, compared to 39% of the 291 who said "no." This was true for each racial/ethnic group. The relationship between Name's alcohol use and the severity of past violence was similar, but not as strong. Of the 244 woman who said that Name had "ever" had an alcohol problem, 55% had experienced at least one extremely severe incident, compared to 42% of the 244 women who said "no" (Chi square p = .005;

Gamma = .250, p = .005). The direction of the association was consistent for each racial/ethnic group (42% versus 25% for Latina/Hispanic women, 58% versus 48% for African/American/Black women, and 57% versus 47% for white or other women), although none of these reached statistical significance.

Of the 118 women in the CWHRS who had "ever" had an alcohol problem, 74 (63%) experienced at least one incident in the past year where she was beaten up or worse, compared to 164 (44%) of the 375 other women (Chi square p < .0001; Gamma = .369, p < .0001). This was significant only for African/American/Black women (Chi square p = .001; Gamma = .401, p = .001), with 68% versus 48%, respectively, having experienced severe violence. The direction of the association was the same, but not significant, for Latina/Hispanic women. However, the 14 white or other women who said that they had ever had an alcohol problem were less likely (43%) to have experienced at least one severe incident than the 28 women who had not had an alcohol problem (42%), though the association was not significant.

Of the 157 women who had ever had a drug problem, 97 (62%) had experienced at least one severe incident in the past year, compared to 141 of the 336 (42%) other women (Chi square p < .0001; Gamma = .382, p < .0001). While the direction of the relationship was consistent for all groups, it was significant (Chi square p = .008; Gamma = .294, p = .007) only for African/American/Black women.

In the Canadian Violence Against Women Survey (Rogers, 1994), substance abuse was more common for women who had suffered emotional abuse in addition to violence (31%) and for women who had suffered physical abuse serious enough to cause physical injury (41%). Was substance abuse more common for women who had suffered emotional abuse as well as violence in the CWHRS, as in the Canadian survey? Yes, among the 494 AW women who responded, there was a strong relationship between the woman's score on the Power and Control scale and whether or not she ever had an alcohol problem or a drug problem (Exhibit 82)

Whether or not the woman "ever" had an alcohol problem and Name's controlling behavior interacted with each other in their association with severity. Where Name was extremely controlling, the woman's alcohol use was unrelated to the severity of past incidents, but not for other women. For the 169 women who had a Power and Control score of five, the 56 with an alcohol problem and the 113 without were almost equally likely to have experienced at least one severe incident. The 80 with a drug problem were also about equally likely to have experienced a severe incident as the 89 without. For the other 324 women, however, 56% of the 62 with an alcohol problem had one or more severe incident, compared to 33% of the 262 without (Chi square p = .001; Gamma .446, p = .001), and 51% of the 77 with a drug problem had one or more severe incident, compared to 34% of the 247 without (Chi square p = .007; Gamma .339, p = .009).

Research also suggests that alcohol or drug use may increase the frequency of violence. In the Canadian Violence Against Women survey (Johnson, 1996: 155-156), the rate of violence was over five times higher for wives of frequent heavy drinkers than for wives of nondrinkers. In the CWHRS, the number of incidents was significantly higher for women when Name used drugs or alcohol, though not five times higher. The mean

number of incidents for the 186 women who said that Name had a drug problem was 13.5, versus 8.2 for the 291 other women (t test p = .006), and the mean number of incidents for the 244 women who said that Name had a drinking problem was 13.8, versus only 6.5 for the other 244 women (t test p < .0001).

Exhibit 82
Substance Abuse and Name's Controlling Behavior

Score on Power and Control Scale	% Who Ever had an Alcohol Problem	% Who Ever had a Drug Problem	Total N
0	4.8%	9.5%	21
1	10.2%	10.2%	49
2	19.3%	29.8%	57
3	20.7%	18.4%	87
4	24.5%	33.6%	110
5	33.5%	47.6%	170
Gamma	.328***	.424***	

***Gamma significance, p < .0001.

The woman's drug "problem," but not her alcohol "problem," was related to the number of incidents in the past year. The average number of incidents was much higher for the 53 woman who had a current drug problem (17.4), compared to the 103 women who had a drug problem in the past (7.1) (t test p = .006), or to the 336 women who had never had a drug problem (9.4) (t test p = .049). By comparison, the average number of incidents was almost exactly the same for the 33 women who had a current alcohol problem (9.8), the 85 women who had a problem in the past (10.1) and the 375 women who had never had a problem (10.1).

Like the severity of past incidents, however, the relationship between the whether the woman had "ever" had an alcohol problem and the number of incidents depended on Name's controlling behavior. For the 169 women with a Power and Control scale score of "five," the mean number of incidents was higher but not statistically significant for the 113 who did *not* have an alcohol problem (17.8) versus the 56 who did (10.9). For the 324 women with a score of "four" or less, the mean number of incidents was higher but not significant for the 62 who *did* have an alcohol problem (9.6) compared to the 262 who did not (6.8).

Mental Health

Depression. The woman's depression at the initial interview was related to the number of incidents she had experienced in the past year, but not to the severity of the

most severe incident (Exhibit 83). Almost half of the 41 women who scored "five" on the Depressed Feelings II scale had experienced more than ten incidents, compared to only 11% of the 148 women who scored "zero." This pattern was true for African/American/ Black women and for Latina/Hispanic women, although there were too few white or other women for analysis.

Exhibit 83
Depression and Incident Number and Maximum Severity in the Past Year

Score on Depressed Feelings II Scale	% Beaten up or Worse*	% 11 or More**	Total N
0	43.2%	12.2%	148
1	52.6%	17.9%	95
2	41.4%	17.1%	70
3	53.1%	32.1%	81
4	63.8%	27.6%	58
5	36.6%	48.8%	41
Total	51.7%	22.1	493

*Chi square p = .033; Gamma = .075, p = .231.
**Chi square p < .0001; Gamma = .374, p = < .0001.

On the other hand, the 41 women who scored five on the Depressed Feelings II scale seemed to be less likely (37%) than other women to have experienced at least one incident in which she was beaten up, choked, or worse, compared to the 452 other women (49%), but the difference was not significant. The 58 women who scored "four" were significantly (Chi square p = .012; Gamma = .345, p = .012) more likely to have been beaten up or worse (64%) compared to the other 435 women (46%). However, because the direction of the relationship was not consistent through "four" and "five," we cannot say that there was an association between past severity and the scale. In addition, there was no association between either of the two variables that made up the Depressed Feelings II scale (having an "emotional condition" of depression, and the Depressed Feelings scale) and whether she had experienced severe violence.

The 162 women who had "ever" threatened or attempted suicide were more likely to have experienced at least one severe incident in the past year than the 329 women who had not (54% versus 45%, respectively), but the difference was statistically significant only for African/American/Black women. Of the 101 African/American/Black women who had tried or threatened suicide, 62 had experienced a severe incident in the previous year, compared to 49% of the 235 who had not (Chi square p = .024; Gamma = .267, p = .022). There was no difference for Latina/Hispanic women, but for white or other women there was a strong association (62% versus 46%) that did not reach statistical signifi-

cance. Again, without looking at the time sequence, we do not know which came first, the violence or the threat or attempt to commit suicide.

Over a third (34%) of the 162 women who had attempted or threatened suicide had experienced over ten incidents in the past year, compared to 16% of the 329 other women (Chi square $p < .0001$; Gamma = .447, $p < .0001$). The association was in the same direction and highly significant for women in each racial/ethnic group.

PTSD. A diagnostic score on PTSD was strongly related to greater incident severity. Of the 316 women who met the PTSD diagnostic criteria, 58% had at least one very severe incident, compared to 32% of the 176 who did not meet the criteria (Chi square $p < .0001$; Gamma = .489, $p < .0001$). Of the 201 African/American/Black women who met the criteria for PTSD, 67% had experienced at least one incident in which they were beaten up or worse in the past year, compared to 33% of the 137 women who did not meet the criteria (Chi square $p < .0001$; Gamma = .614, $p < .0001$). The difference was in the same direction for Latina/Hispanic women (36% versus 22%) and for white or other women (60% versus 33%), but not significant for either group.

PTSD diagnosis was even more strongly related to the number of incidents in the past year. Of the 316 women who met the PTSD diagnostic criteria, 29% had experienced more than ten incidents in the past year, compared to 10% of the 176 women who did not meet the criteria. For African/American/Black women, the difference was 28% versus 9% (Chi square $p < .0001$; Gamma = .581, $p < .0001$), for Latina/Hispanic women the difference was 35% versus 13% (Chi square $p = .046$; Gamma = .558, $p = .020$), and for white or other women, it was 20% versus 18% (NS).

Name's Suicide Risk. Whether or not Name had "ever" threatened or attempted to commit suicide was significantly (Chi square $p = .004$; Gamma = .294, $p = .004$) related to whether or not the woman had experienced at least one incident in the past year that involved being beaten up, choked, or worse. Of the 122 women who answered said that Name had tried or threatened suicide, 59% had experienced at least one very severe incident, compared to 44% of the 359 other women. This pattern was consistent for each racial/ethnic group (64% versus 49% for the African/American/Black women, 48% versus 24% for the Latina/Hispanic women, and 64% versus 50% for the white or other women), but it was not significant for the white or other women.

There was a small and non-significant a relationship with the number of incidents experienced in the past year. The mean number of incidents for the 122 women who said that Name had attempted or threatened suicide was 13.0, compared to 9.3 for the 359 other women (t test p = NS). This was consistently true for women in each racial/ethnic group. However, the 31 Latina/Hispanic women who said that Name had threatened or tried suicide were significantly (Chi square $p = .029$; Gamma = .454, $p = .038$) more likely to have experienced over ten incidents in the past year (45%), compared to the other 72 Latina/Hispanic women (24%).

Presence of a Firearm in the Home

Overall, the 20 women who reported that there was a loaded firearm in their home were not significantly more likely to have experienced a severe incident than the other 413 women (55% versus 45%, respectively). The relationship could not be tested for the

Latina/Hispanic women, because there was only one with a loaded gun in her home. Similarly, there were only three white or other women with a loaded gun in the home. Although 62% of the 16 African/American/Black women who had a loaded gun at home experienced a severe incident, compared to 50% of the 269 other women, the association was not significant.

Similarly, having a firearm in the home was only slightly, and non-significantly, related to the number of incidents in the past year. Six of the 20 (30%) women with a loaded gun in the home had 11 or more incidents, compared to 87 of the 413 (21%) other women. For African/American/Black women, this was 37% of the 16 who had a loaded gun in the home versus 19% of the 269 who did not (not significant).

Of the 232 women who had not experienced at least one incident in which she was beaten up or worse, the 70 who were pregnant at the initial interview or had been pregnant in the previous year were significantly (Chi square $p = .015$; Gamma = .665, $p = .057$) more likely to have a loaded firearm in their home (9%) than the 162 who were not pregnant (2%). However, of the 193 women who had experienced a severe incident, the 54 pregnant women were somewhat less likely (4%) compared to the 139 other women (6%) to have had a loaded firearm at home (not significant).

Social Support Network and Other Resources

Social Support Network Scale. Neither the Social Support Network scale, nor any of the three subscales was related to whether the woman was beaten up or worse in at least one incident in the past year. However for African/American/Black women, having experienced at least one severe incident was significantly correlated with the total SSN scale ($r = .145$, $p < .01$), Acceptance and Support ($r = .129$, $p < .05$), and Tangible Help in Emergencies ($r = .145$, $p < .01$). There were no significant correlations for the Latina/Hispanic women or for the white or other women.

On the other had, the number of incidents experienced in the past year was significantly correlated with the SSN scale score ($r = -.148$, $p < .01$), Acceptance and Support ($r = -.126$, $p < .01$), and Access to Resources ($r = -.160$, $p < .01$), but there were no significant correlations for the African/American/Black women, Latina/Hispanic women, or white or other women, taken separately.

None of the individual SSN items was associated with severe abuse in the past year for the sample as a whole. The item asking women whether or not they hesitated to get help because of a language barrier was significant for the entire sample (Chi square $p = .018$; Gamma = .136, $p = .016$), but the Latina/Hispanic women who said "yes" to this question and those who said "no" were equally likely to have been severely abused.

A number of SSN items were important for African/American/Black women only. Those women who said that they hesitated to get help because they were "worried that the authorities might find out" were more likely (66% versus 50%) to have experienced serious abuse in the past year (Chi square $p = .025$; Gamma = .316, $p = .022$). Those African/American/Black who said that they did not have someone to borrow money from in an emergency were more likely to have been beaten up or worse (63% versus 49%, Chi square $p = .018$; Gamma .277, $p = .016$). African/American/Black women who said that "there is someone I can talk to openly about anything" were less likely (50%) to have

been severely abused, compared to the women who did have someone to talk to (64%) (Chi square p = .038; Gamma = .269, p = .035). Similarly, women who said that they had someone to talk to about "any problems in my relationship" were less likely to have been severely abused (49% versus 64%, Chi square p = .013; Gamma = .296, p = .001). The item, "someone stands by me" was also significant only for African/American/Black women (49% versus 69%, Chi square p = .004; Gamma = .384, p = .003). Finally, women who said that she knew someone to help her if she was "in danger" were less likely to have experienced severe abuse in the past year (51% versus 71%, Chi square p = .037; Gamma = .398, p = .032).

The tendency for women with more resources to have fewer incidents was true only for five of the 12 SSN scale items. More of the 177 women who answered "no" to "There is someone I can talk to about any problems in my relationship" had over ten incidents in the past year, compared to the 315 women who said "yes" (29% versus 18%) (Chi square p = .004; Gamma = .306, p = .005). More of the 213 women who answered "no" to whether someone would "support her decisions" had over ten incidents in the past year, compared to the 279 women who said "yes" (28% versus 18%) (Chi square p = .010; Gamma = .274, p = .011). More of the 131 women who answered "no" to whether someone "stands by her" had over ten incidents in the past year (28% versus 20%) (Chi square p = .048; Gamma = .226, p = .062). More of the 73 women who answered "no" to "Someone I know will help me if I am in danger" had over ten incidents in the past year, compared to the 417 women who said "no" (33% versus 20%) (Chi square p = .013; Gamma = .327, p = .029). More of the 123 women who said she hesitate to get help because of fear of "the authorities" had over ten incidents in the past year, compared to the 370 women who said "no" (32% versus 19%) (Chi square p = .003; Gamma = .331, p = .007). For all other items, there was no association with the number of incidents.

Employment, Education and Income. The 250 women who were unemployed at the initial interview were significantly (Chi square p < .0001; Gamma = .354, p < .0001) more likely (57%) to have experienced at least one incident in which she was beaten up or worse, compared to the 239 women who had a job or said they were students or homemakers (39%). There was no significant difference between women who were employed (37%), students (46%), or homemakers (35%). This was true for each group of women, but significant only for African/American/Black women (Chi square p = .002; Gamma .322, p = .003). However, unemployment was a significant (Chi square p < .0001; Gamma = .497, p < .0001) risk factor only for those 233 women who had not graduated from high school. Two-thirds (66%) of the 127 who had not graduated from high school and were unemployed had experienced a severe incident, compared to 40% of the 106 who had graduated from high school and were unemployed.

Whether the woman had a job, was unemployed, was a student, or was a home-maker at the initial interview was not related to the number of incidents in the past year, either for the entire sample or for any individual racial/ethnic group.

The 237 women without a high school education were significantly (Chi square = .016; Gamma = .215, p = .015) more likely to have experienced at least one severe incident in the past year, compared to the 255 other women (54% versus 43%). This

relationship, was in a consistent direction for each racial/ethnic group, but significant only for African/American/Black women. Again, however, this association was significant only for women who were unemployed (Chi square p = .004; Gamma = .359, p = .003), with 66% of the 127 unemployed and with no high school education experiencing a severe incident versus 48% of the 123 unemployed but with a high school education.

In addition, the 237 women without a high school education were significantly (Chi square p < .0001; Gamma = .432, p < .0001) more likely to have experienced at over ten incidents in the past year, compared to the 2554 women with at least a high school education (30% versus 15%). This was consistently true and statistically significant for each group of women, African/American/Black women (26% versus 15%), Latina/Hispanic women (36% versus 18%), and white or other women (43% versus 7%).

Whether or not the women had a personal source of income that she controlled was not associated with the severity of the incidents in the past year, for all CWHRS women or for any individual group. It was associated with the number of incidents, but only for African/American/Black women. Of the 53 African/American/Black women who did not have any personal income, 36% experienced over ten incidents, compared to only 18% of the 284 women who had a personal source of income (Chi square p = .003; Gamma = .437, p = .013). The amount of personal income made no difference.

However, the 140 women who said that their household income was less than $5,000 were more likely to have experienced at least one severe incident in the past year than the 274 other responding women (61% versus 42%). This was true of African/ American/Black women (62% of 113 versus 47% of 193), Latina/Hispanic women (47% of 15 versus 24% of 51), and white or other women (73% of 11 versus 46% of 24). The amount of household income was not associated with the number of incidents in the past year.

Place of Birth and Language. There was no association between whether a woman was born in the United States or elsewhere and whether she had experienced at last one severe incident in the past year than women born elsewhere, for all CWHRS women or for any separate group.

Similarly, for Latina/Hispanic women, whether she interviewed in English or Spanish was not associated with whether she had experienced a severe incident in the past year.

In general, whether a woman had lived in Chicago for many years made no difference in the severity of abuse in the past year. However, seven of the nine African/ American/Black women who had lived in Chicago less than five years had at least one incident where she was beaten up or worse, compared to 53% of the 328 who had lived in Chicago for many years (NS). There was no difference in the number of incidents in the past year.

Divorce. The woman's family's attitude toward divorce was related to abuse severity in the opposite direction to our original expectation. Of the 109 woman who said that divorce was not acceptable in her family, 39% experienced at least one severe incident, compared to 51% of the 373 other women (Chi square p = .033; Gamma = .231, p = .031). However, this association was statistically significant only for white or

other women (Chi square p = .008; Gamma = .782, p = .005). Only two of the 11 women who said that divorce was unacceptable in her family experienced a severe incident, compared to 65% of the 31 other women.

There was no association between the family's attitude toward divorce and the number of incidents in the past year, either for the CWHRS women as a whole or for any individual racial/ethnic group.

Having a Home. Of the 492 responding women who interviewed as AW, 57 were homeless or living in an institution at the initial interview. These women were much more likely (72%) to have had experienced at least one incident in the past year that was as severe as being beaten up or worse, compared to the other 435 women (45%) (Chi square p <.0001; Gamma = .512, p < .0001). This association was true only of African/ American/Black women and white or other women, however, since none of the Latina/ Hispanic women was homeless or living in a group home or institution. Having a home was not related to the number of incidents in the past year, either for the sample as a whole or for any individual racial/ethnic group.

The difference between the women who told us that they had no place to go "where you feel safe" versus other women was much smaller (52% versus 46%) and non-significant for all CWHRS women, but strong and significant (Chi square p < .0001; Gamma = .558, p < .0001) for African/American/Black women. Of the 45 who said that they had no safe place, 78% had experienced at least one severe incident, compared to 50% of the other 287 African/American/Black women. On the other hand, having a safe place was related to the number of incidents in the past year only for Latina/Hispanic women. Of the 41 who said that they had no safe place, 46% had experienced over ten incidents, compared to 19% of the other 64 Latina/Hispanic women.

Combinations of Risk Factors

Many of the risk factors for the number or severity of the incidents in the past year are strongly associated with each other. Because of this association, certain combinations of risk factors are more strongly related to the severity or the number of past incidents than other combinations. Though some factors may seem to be important when we consider them by themselves, when we look at them in combination with other factors we see that they really have no effect. In addition, the configuration of risk factors that is significantly related to the severity of past incidents for one racial/ethnic group may be completely different from the most important configuration of risk factors for another group.

In this section, we review an exploratory assessment of the effect of combinations of risk factors on whether or not the woman experienced at least one incident in the past year in which she was beaten up or worse. To do this, we used multiple regression, with variables measuring a similar type entered in together in groups, one step for each group. For example, at the first step, we entered the Power and Control score together with the HARASS score, and at the second step, we entered three measures of mental health (Depressed Feelings II, PTSD diagnosis, and whether she had attempted or threatened suicide). (See Exhibit 30, above, for a complete list of the risk factors used in these multiple regressions.) Within each step, we eliminated variables that did not add

significantly to the model. Then we looked at the degree to which each step contributed significantly to increasing the accuracy of the model (significant R square change), and eliminated entire steps that did not contribute significantly to the model. This process led to the final "best models" outlined below.

Finally, we developed separate "best models" for women in each of the three racial/ethnic groups, for women who were pregnant, and for women in a same-sex relationship. To do this, we started with the model that was best for the entire CWHRS sample, and tried to fit that model to each separate group of women. When the "general" model was not a good fit for a particular group, we added and subtracted factors until we had found a good fit.

This entire process was exploratory, and somewhat subjective. Though it did not produce exact estimates for the effect of each variable, the analysis did give us an idea of the different configurations of risk factors that are important to past abuse severity for different groups of women.

Total CWHRS Sample. For the sample as a whole, the best multiple regression model had a multiple R of .463 (R^2 = .214), and contained five factors in four steps: 1) the Power and Control score and the HARASS score; 2) PTSD diagnosis; 3) household income; and 4) length of the woman's relationship with Name.

HARASS was highly significant (Beta = .278; $p < .0001$), and the Power and Control score was also significant but not as strong (Beta = .126; p = .030). Women who had a PTSD diagnosis were also more likely to have had a serious incident (Beta = .112, p = .022). The higher the household income, the less likely it was that she would have had a very serious incident (Beta -.132, p = .003). Finally, the longer she had been in the relationship with Name, the less likely that she would have had a very serious incident (Beta = -.115, p = .010). Even though the length of the relationship was not associated with seriousness when considered by itself (see Exhibit 78, above), it did have a significant association when considered in combination with other risk factors.

Equally interesting, perhaps, were the factors that were not significantly related to seriousness in the best model. The following factors were not related to whether or not she had experienced a very serious incident in the past year, when combined in a model with other risk factors for the CWHRS women as a whole: marital status, overall health, her alcohol or drug use, the Depressed Feelings II scale, being suicidal, having a loaded gun at home, her age, her personal income (even when the household income was not included in the model), whether she had graduated from high school, whether she was unemployed, whether she said that her occupation was homemaker, Name's alcohol or drug problems, whether Name had attempted or threatened suicide, her total children or children under 18, SSN or any of the three SSN subscales, whether she had a safe place, or whether she had left or tried to leave Name in the past year.

African/American/Black Women. The best multiple regression model for the African/American/Black women had a multiple R of .477 (R^2 = .228), and contained five factors in four steps: 1) the HARASS score and the Power and Control scale score; 2) PTSD diagnosis; 3) the length of her relationship with Name; and 4) her total number of children.

As in the best model for the total sample, HARASS was strong and highly significant (Beta = .258, p < .0001), while Name's controlling behavior was weaker but still significant (Beta = .128, p = .045). PTSD diagnosis was an important factor (Beta = .178, p < .001), but depression was not. As in the total sample, the longer the relationship, the less likely she was to have had at least one very severe incident (Beta = -.135, p = .007). In addition, African/American/Black women with more children were more likely to have experienced severe abuse (Beta = .114, p = .023).

Latina/Hispanic Women. The best multiple regression model of risk factors for serious violence in the past was very different for the Latina/Hispanic women. Compared to the best model for the total CWHRS sample, Name's controlling behavior was not a factor in the model, none of the mental health factors was significant, and neither her household income nor the length of her relationship with Name was important. Though it was almost completely different, however, the best model for the Latina/Hispanic women was equally strong, with a multiple R of .465 (R^2 = .216). The best model for Latina/Hispanic women contained only three factors in three steps: 1) her HARASS score, 2) her general health compared to other women her age, and 3) whether she had left or tried to end the relationship in the past year.

For Latina/Hispanic women, her HARASS score was a strong and significant factor (Beta = .283, p < .0001), but the Power and Control scale score did not figure into the model, even when it was entered by itself without HARASS. How she rated her general health at the initial interview was also important for Latina/Hispanic women (Beta = .181, p = .047). In addition, having left or tried to ended the relationship was important to the model, though of borderline significance (Beta = .182, p = .061). None of the other factors that were explored were significant: her children, her marital status, her language, her education or income, social support network, alcohol and drugs, and so on.

White or Other Women. Again, the best multiple regression model of risk factors for serious violence in the past was very different for the white or other women, compared to the sample as a whole. In contrast to the best model for the total CWHRS sample, or for either of the other two racial/ethnic groups, her score on HARASS was not one of the significant risk factors. Instead, her score on the Power and Control scale was very important. Unlike other women, whether or not she ever had a problem with alcohol was important. Though it was almost completely different, the best model for the white or other women was strong. It had a multiple R of .552 (R^2 = .304). It contained only two risk factors in two steps: 1) Power and Control score, and 2) whether she had ever had an alcohol problem.

For white or other women, her score on the Power and Control scale was a very strong and significant risk factor (Beta = .569, p < .0001). The more Name's controlling behavior, the more likely that she had experienced at least one severe incident in the past year. In addition, women who said that they had "ever had a problem with alcohol" were more likely to have at least one very serious incident (Beta = .327, p = .027), when they also were experiencing controlling behavior from Name.

Pregnant Women. The best model for the 136 women who interviewed as AW and who said at the initial interview that they were pregnant or had been pregnant in the

past year was, again, very different from the best model for the total CWHRS sample. The best model for pregnant women was strong, with a multiple R of .528 (R^2 = .279). It contained three risk factors in three steps: 1) her HARASS score; 2) whether or not she had left or tried to leave in the past year; and 3) whether there was a loaded gun in her house.

This was a very different model from all the others. It contained a risk factor not seen in any other model (a loaded gun in the house), and another risk factor that was important for only one other group, Latina/Hispanic women (whether she had left or tried to leave the relationship). Like most of the other models, HARASS was a strong and significant risk factor (Beta = .453, p < .0001). Like the Latina/Hispanic women, pregnant women who had left or tried to leave Name were likely to have also experienced a very severe incident in the past year. This was important to the model, though of borderline significance (Beta = .147, p = .078). In addition, pregnant women who said that there was a loaded gun in her house were more likely to have experienced at least one very severe incident in the past year (Beta = .153, p = .052.

Same-Sex Relationship. There were only 18 women in the CWHRS who were in a same-sex relationship with Name, not enough women to be able to conduct a multiple regression or other analysis combining the effect of the numerous risk factors. We ran a multiple regression anyway, on a purely exploratory basis, and found two risk factors, PTSD diagnosis and score on the SSN subscale Acceptance and Support. We then analyzed these two risk factors using basic cross-tabulations.

A PTSD diagnosis was a strong and statistically significant risk factor for these 18 women (Chi square p = .001; Gamma = .967, p < .0001). Ten of the eleven women who had a PTSD diagnosis at the initial interview had experienced at least one very serious incident in the past year, compared to only one of the seven women who did not have a PTSD diagnosis. The woman's score on the Acceptance and Support scale is also important (Chi square p = .040; Gamma = -.826, p = .015). Only four of the ten women who had "supportive" answers to all five of the Acceptance and Support items had been beaten up or worse in the past year, compared to seven of the eight women who had from zero to four supportive answers.

In combination, however, the woman's PTSD diagnosis was an important risk factor for women in a same-sex abusive relationship, but Acceptance and Support was not. Whatever their Acceptance and Support score, women who had a PTSD diagnosis were much more likely to have experienced severe abuse in the past year. Conversely, Acceptance and Support was not important once the PTSD diagnosis was taken into account.

Summary: Severity and Number of Incidents in the Past Year

This section was the first to address issues that were the central focus of the CWHRS: what situations indicate a high risk of serious injury or death when a woman is being violently abused by an intimate partner? Going systematically through each risk and protective factor, we looked at the association between the factor and whether or not an abused woman had experienced at least one severe incident, as well as whether she had experienced many incidents in the past year versus one or two. We then used an

exploratory multi-variate analysis to ask what combinations of factors were more important for distinguishing those abused women who had experienced the most severe violence.

The following were the most important findings discovered in this analysis. If a factor was not significantly associated with severe violence, it does not appear in the list below. When a factor was important for only one or two groups, the group or groups are noted in parentheses. If no particular group appears, the factor was important for everyone. Factors that were significantly important in a multiple regression model combining all of the risk and protective factors have a star (*) after them.

Demographic and relationship characteristics:

- age group 18 to 30 (white or other women)[20]

Children:

- woman's total children, in household or not (African/American/Black women)*

Estrangement and ending the relationship:

- ex- or former relationship with Name
- had left or tried to end the relationship in the past year*
- Name had threatened to harm the kids if she left or refused to return
- Name had threatened to kill her if she left or refused to return

Name's controlling behavior and harassment:

- high score on the Power and Control scale*
- "yes" to "Name controls most of your daily activities"
- "yes" to "Name is violently and constantly jealous of you"
- high HARASS score*
- Name destroyed something she valued
- Name frightened or threatened her friends
- Name followed her

Name's characteristics:

- "yes" to "Does Name use drugs?"
- "yes" to "Does Name have an alcohol problem?"
- Name had threatened or attempted suicide

Woman's physical and mental health:

- "poor" general health (Latina/Hispanic women)*
- had "ever" had an alcohol problem plus low Power and Control score
- had ever had a drug problem plus low Power and Control score
- had attempted or threatened suicide (African/American/Black women)
- PTSD diagnosis*

Firearms

- loaded gun in the house (pregnant women)*

Social support and material resources:

- low SSN scale score (African/American/Black women)
- low score on Acceptance and Support scale (women in a same-sex relationship)
- unemployed and no high school diploma
- household income less than $5,000 annually*

– homeless or living in a group home or institution

Other factors can be considered "protective." When the following characteristics described a woman or a woman's situation, she was less likely to experience severe violence in the past year:

– age 18 to 20 (African/American/Black women, Latina/Hispanic women)
– relationship had lasted over 15 years*
– she never lived with Name
– she had lived with Name the entire previous year

Help-Seeking and Interventions in the Past Year

In addition to potential risk factors, the CWHRS looked at protective or support factors (the SSN scale and subscales, and material resources), as well as help-seeking activities and formal interventions. The CWHRS interview asked women about four types of help-seeking activity after any incident in the past year, including talking to someone, contacting an agency or counselor, seeking medical care (before the current visit), and contacting the police. Of the 492 responding women, 89 (18%) had not done any of these things in the past year, and 182 (37%) had sought only one type of help. Of these 181, the single type of help sought was usually talking to someone (79%). Only five women (3%) had contacted a counselor as their only type of help-seeking, 13 (7%) had sought medical care, and 21 (12%) had contacted the police.

Even when women sought help from two or more types of resource, one of them was likely to be talking to someone. Of the 123 women who had tried two types of help-seeking in the past year, almost all (92%) had talked to someone plus something else -- 22 had contacted an agency or counselor, 21 had sought medical care, and 70 had contacted the police, in addition to talking to someone. There were only ten women who had tried two types of help but had not talked to someone (eight had sought medical care plus contacted the police, one had sought medical care plus contacted an agency, and one had contacted an agency plus the police). Similarly, 63 of the 66 women (95%) who did three things talked to someone, including 38 who talked to someone, sought medical care and called the police; 15 who talked to someone, contacted an agency and called the police; and 10 who talked to someone, contacted an agency, and got medical care.

Contacting the police was the second most likely type of help-seeking for CWHRS women. Although only 21 women (12%) had contacted the police as their only type of help-seeking, 168 had contacted the police together with doing something else. Getting medical care was the third most likely activity, with 13 women doing it alone, and another 114 seeking medical care as well as doing one or more other type of help-seeking. The fewest women had contacted an agency or counselor, with only five women doing this as their only type of activity, and another 85 doing it in combination with one or more other types of help-seeking.

There was a strong relationship (Chi square $p < .0001$; Gamma = .472, $p < .0001$) between the severity of incidents in the past year and the number of types of help-seeking activities the woman had tried. Further, this relationship was consistent and highly significant for each racial/ethnic group (Exhibit 84). Of the 238 women who had

been beaten up or worse in at least one incident in the past year, 29 (12%) had tried all four types of help-seeking activities, compared to only four (2%) of the 253 women whose most severe incident had been less serious. Of the 180 African/American/Black women who had experienced a severe incident in the previous year, 19 (11%) had sought help from all four sources, compared to only four of the 156 women (3%) who had not. Of the 34 Latina/Hispanic women who had experienced a severe incident, six (18%) had sought help from all four sources, but none of the other 71 women, and of the 22 white or other women who had experienced a severe incident, three (14%) had sought help from all four sources, but none of the 20 other women.

Exhibit 84
Help-Seeking Activities and Most Severe Incident in Past Year
Code: AAB: African/American/Black; LH: Latina/Hispanic; WO: white or other

Different Types of Help Sought in the Past Year	She Beaten Up or Worse in At Least One Incident in the Past Year?					
	No			Yes		
	Racial/Ethnic Group			Racial/Ethnic/Group		
	AAB	LH	WO	AAB	LH	WO
None	22.4%	28.2%	40.0%	8.9%	20.6%	9.1%
One	42.9	46.5	25.0	31.7	20.6	31.8
Two	25.0	16.9	30.0	27.2	35.3	13.6
Three	7.1	8.5	5.0	21.7	5.9	31.8
Four	2.6	.0	.0	10.6	17.6	13.6
Total	100.0% (156)	100.0% (34)	100.0% (20)	100.0% (180)	100.0% (34)	100.0% (22)

However, not all women who had experienced at least one severe incident had sought help from any source. Of the 238 women who had experienced at least one severe incident, 25 (11%) had not sought any type of help in the past year (9% of the 180 African/American/Black women, 21% of the 34 Latina/Hispanic women, 9% of the 22 white or other women, 9% of the 11 women being abused by a same-sex partner, and 15% of the 62 women who had been pregnant in the previous year). An additional 50 of the 238 women (21%) had only talked to someone and not sought help from any formal resource. Of the Latina/Hispanic women who had experienced one or more severe incident, seven had not sought help from any resource, and six others had sought help from only informal resources (talking to someone), totaling well over a third (38%) of the 34 women. Of the pregnant women who had experienced one or more severe incident, nine had not sought help from any resource, and eleven others had sought help from only informal resources (talking to someone), totaling 32% of the 62 women.

On the other hand, the 253 women who had not experienced an incident in the previous year in which they were beaten up or worse were even more likely not to have sought help from any source or from any formal source. Of these women, 64 (25%) had not tried any type of help-seeking (22% of the 156 African/American/Black women, 30% of the 71 Latina/Hispanic women, 40% of the 20 white or other women, none of the seven women in a same-sex relationship, and 33% of the 73 pregnant women). An additional 92 of the 253 women (36%) had only talked to someone.

Multiple regressions, using the same methods described above, looked at the combined relationship between the characteristics of the violence in the past year, all of the risk factors described above, and the number of types of help seeking in the past year. For all CWHRS women, the best multiple regression model for the number of types of help-seeking had a Pearson R of .456 (R^2 square = .208), and contained four factors in three steps: 1) whether she had experienced at least one incident in which she had been beaten up or worse plus her score on the HARASS scale; 2) the Acceptance and Support subscale of the SSN; and 3) whether she had left or tried to end the relationship in the past year. There was a strong association between the number of types of help-seeking and having experienced at least one severe incident in the previous year (Beta = .235, $p < .0001$), her HARASS score (Beta = .189, $p < .0001$, her Acceptance and Support scale score (Beta = .172, $p < .0001$), and having left or tried to end the relationship in the past year (Beta = .146, $p = .001$). Essentially, the more severe the physical abuse and stalking in the previous year, the greater the informal support and acceptance available to her, and when she had tried to end the relationship, the more types of help-seeking she had tried in the previous year.

This same model was the best for African/American/Black women, with a Pearson R of .438 ($R^2 = .192$). Having experienced a severe incident (Beta = .199, $p < .0001$), her HARASS score (Beta = .235, $p < .0001$), her Acceptance and Support scale score (Beta = .100, $p = .047$),and whether she had left or tried to end the relationship in the past year (Beta = .162, $p = .002$) were all associated with the number of types of help-seeking she had tried in the past year.

For Latina/Hispanic women, the best model contained only three factors in three steps: 1) whether or not she had experienced at least one severe incident in the past year, 2) her score on the Acceptance and Support scale, and 3) the number of children aged 17 or younger living in her household. This was a strong model, with a Pearson R of .497 ($R^2 = .247$). Neither HARASS nor the Power and Control scale was significant in the model. PTSD was not significant in the model, and neither was her depression, alcohol or drug problem, or whether she had left or tried to leave or end the relationship. However, whether she had experienced at least one severe incident was strongly associated with the number of types of help-seeking (Beta = .340, $p < .0001$), as were the Acceptance and Support scale (Beta = .308, $p = .001$). In addition, Latina/Hispanic women who had more children aged 17 or younger living in their household were more likely to seek help from more sources (Beta = .177, $p = .043$). Half of the 20 Latina/Hispanic women who had no children age 17 or younger living in her household had not sought any kind of help in the previous year, compared to 25% of the 61 women who had

one, two, or three children, and 12% of the 25 women who had four or more children living in her household.

For white or other women, the best model also had only three factors: 1) whether or not she had experienced at least one severe incident in the past year, 2) her score on the Acceptance and Support scale, and 3) whether she had left or tried to end the relationship in the past year. The model was strong, with a Pearson R of .643 (R^2 = .414). All three factors were strongly associated with the number of types of help-seeking in the model, including having experienced a severe incident (Beta = .425, p = .002), Acceptance and Support (Beta = .316, p = .015), and leaving (Beta = .333, p = .011).

The best multiple regression model for pregnant women was not as strong (Pearson R = .380, R^2 = .144), and had only two factors. Neither the Acceptance and Support scale nor any of the other SSN scales, and neither HARASS nor the Power and Control scale was represented in the best model. However, the most severe incident was still very important (Beta = .287; p = .001), as was leaving or trying to end the relationship (Beta = .172, p = .046).

For the 18 women in a same-sex relationship, we could not find any variable that was related to the types of help-seeking activities. Even the severity of incidents in the past year was not related to types of help seeking. Though only one of the 18 women had not sought any type of help in the past year, compared to 87 of the 474 other women (18%), most sought only one type (61% of the 18 versus 36% of the 474). For eight of the eleven who had sought only one type of help, that type was talking to someone. None of the women had sought help from an agency or counselor as their only type of help-seeking, none of them had contacted the police, and three had sought medical care. All of the six women who sought more than one type of help had talked to someone, five had contacted a counselor or agency, four had sought medical help, and one - the only woman who had sought four types of help - had contacted the police.

Talking to Someone

The majority (72%) of the 492 responding CWHRS women said that they had talked about their domestic violence with someone in the past year. Those who had experienced one or more severe incident were significantly (Chi square p = .049; Gamma = .196, p = .047) more likely to have talked about the violence (76% versus 68%). The difference was consistent for each racial/ethnic group, but not statistically significant (77% versus 72% for African/American/Black women, 71% versus 61% for Latina/Hispanic women, and 73% versus 50% for white or other women). This was also true for women who had been pregnant in the previous year (68% versus 57%). However, the eleven women in a same-sex relationship who had experienced a severe incident were less likely to have talked to someone about the violence (73%) compared to six of the seven women who had not (not significant).

Most (86%) who had talked to someone found it "helpful," though 12% said it was not helpful, and 2% said that they were not offered any help. For example, a woman might say that talking was not helpful because the confidant blamed her or took the abuser's side ("my mother-in-law told me it was my fault and I didn't understand him"). The proportions were almost exactly the same for women who had experienced a severe

incident or not.

Regardless of the severity of the violence in the past year, more women spoke to a family member (61% of all 492 women who responded) or a friend or neighbor (70%) than to anyone else. (Note that women could mention more than one person they had talked to.) Eight women (2%) had talked to her partner's family about the incidents. Six women had talked to religious clergy or a "spiritual counselor."

Women apparently felt free to interpret the "who did you talk to?" question to include anyone they considered a confidant. Five mentioned talking to a doctor both in answer to this question and in response to the "medical help" question. Twenty-four said that they had talked with a counselor or social worker. Twenty of these 24 also said that they had sought help from a "counselor or agency," but four said "no" in response to that question. Two of the four had talked about the incidents to a drug treatment counselor, one had asked for advice from a school counselor who had never called back, and one had talked to her "case manager" who gave her "information about what to do," had not sought help from a "counselor" because they could do "nothing" and she was afraid of Immigration. Four said that they had talked to the police. Three answered "yes" to the question about contacting the police. The other woman said that she had talked to a "woman police officer" who had told her about a shelter, but said that she had not contacted the police. It could be that the "woman police officer" was an acquaintance.

The most common reasons given for not talking about the violence were desire for privacy, being embarrassed, being uncomfortable discussing it, thinking that the incident was not that serious, and fear of retaliation. Eleven women said that someone knew already, but that these other people didn't care or were tired of hearing about it.

The 18 women in an abusive same-sex relationship were a little more likely to talk to someone about an incident in the past year (78%) compared to other women (71%), but the difference was not statistically significant.

Counselors and Helping Agencies

Ninety (18%) of the 492 women responding had contacted an agency or counselor after at least one incident in the past year. Of these, 59 (66%) had contacted domestic violence services (shelter, crisis line or domestic violence counselor), and 35 (38%) had contacted a different type of counselor or mental health provider.[21] Women who had experienced at least one incident in which she was beaten up or worse were significantly (Chi square p = .002; Gamma = .355, p = .002) more likely to have sought help from an agency or counselor than women who had not (24% versus 13%). This was consistently true for each racial/ethnic group, and statistically significant for all but white or other women. It was also true, and significant, for women who had been pregnant in the past year. For women in a same-sex relationship, however, there was a significant (Chi square p = .001; Gamma = .394, p = .001) in the opposite direction. The eleven women who had been beaten up or worse were much less likely (18%) than the other women (three of the seven) to have contacted a counselor or helping agency.

Eighty-two percent of the women who had talked to a counselor reported that it had been helpful, 35% because she felt supported or felt better about herself (someone to talk to; they listen; relief of tension), 39% because she got information or questions

answered, and 23% because of help making decisions (helped me work through my problems).

When asked why they had not contacted a counselor or agency in the past year, 25 of the 176 women who had experienced at least one severe incident said they did not know any agency or how to contact them, ten had a barrier such as lack of insurance or language, 16 were concerned about privacy or confidentiality, 21 said that counseling was not needed, 19 did something else, three were prevented by Name, 12 were afraid of retaliation, and 11 thought it would not help.

Women who had experienced one or more severe incident in the past year were significantly (Chi square p =.002; Gamma = .355, p = .002) more likely to have contacted an agency or counselor. Of the 238 women who had experienced being beaten up or worse, 24% had contacted an agency or counselor, compared to 13% of the 253 with only less severe incidents. Latina/Hispanic women and white or other women were over twice as likely to seek help from an agency or counselor if they had experienced at least one severe incident. The difference was smaller but statistically significant for African/ American/Black women.

Arbuckle, *et al.* (1996:213) suggest that alcoholism or drug addiction may make it more difficult for a woman to find help. They argue, for example, that some shelters may not accept them. If this were true in the CWHRS, it could increase women's risk of serious injury or death. However, CWHRS women who said they "ever" or "currently" had an alcohol problem or a problem with drugs were equally likely to seek help from a counselor or agency as women who said they did not. Of the women who contacted an agency or counselor, those who had an alcohol problem were somewhat less likely to say that the agency or counselor had been helpful (71% versus 84%), but the difference was not statistically significant.

Again, women in an abusive same-sex relationship were a little more likely to talk to some an agency or counselor about an incident in the past year (28%) compared to other women (18%), but the difference was not statistically significant.

Medical and Health Care

Of the 492 women who answered, 127 (26%) reported seeking medical attention after at least one incident in the prior year, and 15 (3%) stayed at least overnight in the hospital. For an additional ten women, the current visit was the first time they had sought medical attention after an incident. Contacting a medical provider was significantly (Chi square p < .001; Gamma = .673, p < .0001) more common with women who had experienced at least one severe incident in the past year. Still, only 97 (41%) of the 238 women who had been beaten up or worse had sought medical attention, compared to 12% of the 253 who had experienced less severe violence. This was consistently true for each racial/ethnic group, for pregnant women, and for women in a same-sex relationship.

In many cases (28% of the 235 responding women who had experienced severe violence and 60% of the 252 women who had not), she decided not to seek medical care because she was "not hurt" or "not hurt enough for a doctor." Even 42 of the 111 women (38%) who had been beaten, choked, burned or suffered broken bones or other serious injury made this response. Some of these 42 women explained that they didn't need to

see the doctor because "I wasn't injured enough," "he didn't hit me in the face," "it was just a black eye," or "it wasn't that serious." An additional 66 women (11% of the 235 who had experienced severe violence and 15% of the other women) said that they did not seek medical care because they "didn't need to," "it wasn't important," the doctors "can't do anything," they "didn't want to," or "I can take care of it myself."[22]

Ten women said that they had not sought medical care because of "privacy" considerations ("very private," "didn't trust anyone"), and another nine mentioned that they had been "embarrassed." (Two women mentioned both.) For example, one woman said, "I didn't want them to see the scars," and another said "me da verguenza." Fourteen of these 19 had been beaten up or worse.

Fourteen women, twelve of whom had been beaten up or worse (5% of the 235), said that Name had prevented them from seeking medical help after an incident. Women said that "he told me not to," he wouldn't let me leave," "he didn't want me to go," or "el siempre va al doctor conmigo." In addition, three women just said that they were "scared," one said that she was "scared" and the "hospital was too far," and one that she was "scared to tell the medical staff what happened." Another three said that they were afraid to go because the medical staff might call the authorities (police, immigration). Of these 22 women, 19 had been beaten up or worse.

In addition, ten women, six of whom had been beaten up or worse, mentioned practical barriers, such as "I had to go to work," "I couldn't afford to," "no insurance," "didn't have the money," "didn't have a baby sitter," or "hospital too far."

Most of the time when a woman sought medical attention, the practitioner asked about the circumstances of the injury. Of the 127 women who sought medical attention, 102 (80%) said that they were "always" asked what had happened and another nine (7%) said they were sometimes asked. Women who had experienced at least one very severe incident in the past year were more likely to say that the practitioner had asked what had happened. "They always asked" 83 of the 97 women (86%) with "beating or worse," but 19 of the 30 (63%) with less severe incidents in the past year.

When the practitioner asked, 75% of the women said that they always or sometimes disclosed the domestic violence. When they did not, it was generally because they were afraid of retaliation from the abuser or were embarrassed. Most women (79%) who told the medical staff what had happened found that the staff's response was "helpful." The most common staff interventions were agency referrals, police notification, and formal or informal counseling.

Women in a same-sex relationship were somewhat more likely to have sought medical help (39% versus 25%), but the difference was not statistically significant.

Criminal Justice System

Domestic disputes are a common reason for calling the police; in Chicago it is estimated that there are several hundred such calls each day. In the CWHRS, the police were called at least once by or for 191 (39%) of the women. The 238 responding women who had experienced being beaten up or worse were significantly (Chi square $p < .0001$; Gamma = .530, $p < .0001$) more likely to have contacted the police (53%) compared to women who had experienced less severe incidents (26%). This was consistently true for

African/American/Black women (54% versus 26%), Latina/Hispanic women (44% versus 24%), white or other women (59% versus 15%), and pregnant women (52% versus 23%), but not for women in a same-sex relationship.

Of the 191 women where she or someone else had notified the police in at least one incident, 29 (15%) said that during at least one episode, police had responded but provided no intervention other than writing up a report. On the other hand, 83 (20%) said that Name had been arrested, another 34 (8%) said that Name had been "taken away," 67 (36%) said that the police had her sign a complaint, and three said that they helped her get a restraining order after at least one episode. Nine women said that the police had taken her to a "safe place," two said that they had confiscated a weapon, and nine said the police had put her in touch with an agency or organization. Two women reported that they themselves had been arrested after an incident. One of these said that the police had arrested her "because I had a warrant" and that the police had been "helpful" because they "took kids away from me." This woman had a drug problem, and was living in a shelter at the initial interview.

The 126 women who had experienced a severe incident were as likely as other women (14% and 19%, respectively) to say that the police had responded, but had provided no intervention. However, women who had experienced a severe incident were much more likely (55%) than women who had not (24%) to say that the police had arrested Name (Chi square $p < .0001$; Gamma = .614, $p < .0001$). They were less likely to say that the police had "taken Name away" (12% versus 30%).

Of the 175 women who responded, 118 (67%) said that they found the police response to have been helpful. Their reasons were that the police had removed Name from the home (59%), "scared" Name so that Name stayed away (10%), somehow led to the abuse stopping or lessening (10%), or had helped in a number of other ways (for example, helping her to get her clothes out of the house). Ten percent of the women said the police had helped her leave the situation. Perceived helpfulness of the police interventions did not vary by injury severity.

Women being abused by a same-sex partner were much less likely to have contacted the police after an incident in the past year. Only one of the 18 women had contacted the police (6%), compared to 190 of the 474 (40%) other women (Chi square $p = .003$; Gamma = .838, $p < .0001$). None of the eleven women who had experienced at least one severe incident had contacted the police in the previous year.

Summary: Help-Seeking and Interventions

This section addressed the relationship between the severity and frequency of the violence in the previous year and help-seeking activities and interventions in the previous year, for different groups of CWHRS women. The following are some key findings of this analysis:

-- Almost all women (over 90%) who had experienced severe violence had tried at least one type of help-seeking after an incident in the previous year (talking to friends, consulting an agency or counselor, seeking medical help, or contacting the police).

-- In general, those women who had experienced more severe incidents as well as more harassment and stalking, and who had left or tried to end the relationship in the

past year, had tried more types of help-seeking.

-- Latina/Hispanic women were much less likely than others to have sought help, despite having experienced severe violence. In total, 21% of the Latina/Hispanic women who had experienced a severe incident in the previous year had not sought any help, and well over a third (38%) had not sought help from any formal resource.

-- Even though women who were pregnant or who had been pregnant in the past year had made significantly more health-care visits, of the pregnant women who had experienced one or more severe incident, 32% had not sought medical help or help from any other formal resource after a violent incident.

-- The first type of help-seeking a woman tried was usually talking to someone.

-- Women tended to seek counseling only when they had also sought medical care or contacted the police. Possibly the medical or law enforcement people helped or encouraged them to contact a counselor or agency.

-- In the CWHRS, we did not find that alcohol or drug problems prevented women from consulting an agency or counselor about the violence.

-- Women being abused by a same-sex partner were much less likely than others to have contacted the police in the past year, even when the violence had been severe. They were more likely to have sought medical help, however.

-- Over 80% of women who told medical staff about the violence said that they received helpful advice or assistance, and 67% of those who contacted the police said that they were helpful.

Risk Factors for Future Violence: Continuation and Severity

The primary goal of the CWHRS was to identify risk factors for serious injury or death in situations where a woman is being physically abused by an intimate partner. A key necessity for severe injury or death is the continuation of intimate partner violence. If there is never another violent incident, there can never be an incident severe enough to cause death. In this section, we look at factors associated with whether or not the violence continued in the follow-up period for the women who had interviewed as AW and had completed at least one follow-up interview, and if the violence did continue, whether at least one of the follow-up incidents was severe (potentially life-threatening).

Of the 497 CWHRS women who interviewed as AW, we were able to interview 323 women at least once. We were not able to reach 163 women, six did not consent to a follow-up, three were incarcerated, and two died before the first follow-up. The 323 women who were followed-up did not differ in their characteristics from the 163 women who were not. For example, the average age of the two groups was 30.7 and 30.6, respectively. (For more detail, see "Was there Retention Bias in the Follow-up?" above.) Of the 323 women followed-up, three did not complete a calendar history. Therefore, the analysis in this section was based on the remaining 320.

Of these 320 CWHRS women, 319 completed a calendar history, and 171 (54%) of these women told us about at least one violent incident in the follow-up period (Exhibit 85). Of the 171, 92 women (54%) told us about at least one incident that was as severe or more severe than being beaten up. Only 47 women (15%) experienced a severe

incident both in the previous year and on follow-up, but an additional 45 women who had not experienced a severe incident in the previous year did experience a severe incident on follow-up. However, 67 of the 143 women (47%) who had experienced a severe previous incident experienced no incident at all on follow-up, and 29 others (20%) did not experience a severe incident.

Exhibit 85
Violence in the Previous Year and on Follow-up

Most Severe Incident on Follow-up	Most Severe Incident in Previous Year			
	Beating-up or Worse	Other Violence	Missing Calendar	Total
Beating-up or Worse	47	45	0	92
Other Violence	29	50	0	79
No Incident	67	81	1	149
Missing Calendar	3	0	0	3
No Follow-up	92	79	3	174
Total	238	255	4	497

Like the previous analysis sections, this section goes systematically through each risk and protective factor, looking at their relationship to continuing severe violence, and concludes with an exploratory multi-variate analysis. Because the focus of this section is the relationship between the woman's experiences and situation in the past year and the violence she experienced in the follow-up year, the analysis relates data gathered at the initial interview to violence occurring in the follow-up period. It relates help-seeking and intervention that occurred in the year prior to the initial interview are related to later violence. In addition to the risk factors and protective factors discussed in previous analysis sections, the analysis in this section adds the characteristics of the incidents that happened to the woman in the past year to the list of risk factors for future violence.

The "continuation of intimate partner violence" was defined, for this analysis, as any violence or violent threat by an intimate partner against the woman. Some women were experiencing violence from a different partner than the partner discussed in the initial interview. As described in detail above, the CWHRS collected information on one partner at the initial interview (called Name). If there were two partners who threatened or attacked her, the woman was asked to choose one as Name. However, some women told us at the first follow-up interview that she had experienced physical violence or the threat of violence at the hands of an another intimate partner or partners, not Name. This person became Name2, and if she told us about an additional violent partner at the second follow-up interview, that person became Name3. The analysis presented in this section, however, did not distinguish between violence by Name, Name2 and Name3.

This analysis was limited, but a necessary foundation for more detailed analysis of issues related to each violent partner.

In addition, the analysis presented in this section used a highly summaritive definition of future intimate partner violence, similar to the summaritive measures of past violence in the analysis in the above section. For each of the 323 women who were re-interviewed, no matter how long the follow-up period was, the analysis focused on three summary pieces of information. First, we asked whether or not the woman experienced any incident of violence or the threat of violence at the hands of any intimate partner in the follow-up period. Second, we looked at the Campbell "violent incident severity" code for each follow-up incident, and determined the highest severity code for any incident in the follow-up period. Third, we asked whether any of these follow-up incidents was potentially life-threatening. The definition of "potentially life-threatening" was the same as the definition used for the incidents in the past year: the incident involved being beaten up, choked, burned, or serious injury (code 3), severe or permanent injury or weapon threat (code 4), or weapon use or wounds from a weapon (code 5).

The analysis in this section did not look at the number or frequency of incidents in the follow-up period, because the time span for the follow-up differed for each woman. A detailed analysis of the time sequence and clusters of incidents in the follow-up period, like a detailed analysis of clusters of incidents in the past year, was not part of the analysis presented in this report. Again, however, the summary analysis presented below is a necessary foundation for that detailed analysis.

Violence in the Past Year as a Risk Factor for Future Violence

When a woman is talking to a counselor or other helping professional about the violence of her partner, one of the things she may mention is the number and kind of violent incidents she has experienced recently. Since counselors or advocates are likely to have this piece of information, it is important to know what it may tell them about the women's risk for serious violence in the future. Was there anything about the violence in the previous year that was associated with the continuation and the severity of violence in the future? To answer this question, we looked at three aspects of a woman's experience in the past year: the severity of the most severe incident, the number of incidents, and the recency of the most recent incident.

Recency. Of the three aspects of the woman's experience of violence in the past year, the one that was most strongly associated with whether or not she would experience intimate partner violence in the future was recency -- how many days had passed between the most recent incident and the initial interview. The longer the period of time, the more likely the woman was to escape violence on follow-up. Women who had not experienced any violence at the hands of their intimate partner for at least 181 days were much less likely to experience an incident on follow-up (Exhibit 86). For example, almost 80% of the 57 Latina/Hispanic women who told us about an incident that had happened within the last 180 days went on to experience at least one incident in the follow-up period, compared to less than a quarter of the 17 whose most recent incident had happened longer ago than that.

Exhibit 86
Violence on Follow-up and Most Recent Incident in Past Year:
Percent Abused in Follow-up Period (N in parentheses)

	When Was the Most Recent Incident?			
Racial/Ethnic Group	180 days or less	181 days or longer	Chi square Significance	Gamma
African/American/Black	55.8% (163)	39.2% (51)	p = .038	-.324*
Latina/Hispanic	78.9% (57)	23.5% (17)	p <.0001	-.848***
White or Other	47.4% (19)	(1/7)	NS	-.688
Total	60.1% (243)	32.9% (76)	p <.0001	-.509***

*Gamma significant at the .05 level.
***Gamma significant at the .0001 level.

The most recent 30 days appear to have been an especially critical period for the likelihood of future violence. Of the 136 women whose most recent incident had occurred within 30 days before the initial interview, 63% experienced at least one incident on follow-up, compared to 47% of the 183 whose most recent incident had happened longer ago (Chi square p = .006; Gamma = .306, p = .005). This relationship was in a consistent direction for African/American/Black women (61% versus 44%, respectively) and for Latina/Hispanic women (75% versus 61%, respectively), but not for white or other women (two of six versus 40%, respectively).

However, for those 171 women who did experience an incident on follow-up, the association between recency and the maximum severity of any follow-up incident was small and not statistically significant. Of the 146 women whose most recent incident had happened within 180 days and who experienced at least one incident on follow-up, 55% experienced at least one severe incident, only slightly more than the 48% of the 25 women whose most recent incident had happened longer ago (not significant). This was also true for the 85 women who had experienced an incident in the previous 30 days before the initial interview (55%) versus the 86 other women (52%).

Severity of Past Incidents. In contrast to the recency of the last previous incident, the severity of violence in the past year was not associated with experiencing at least one follow-up incident. Of the 143 women who had experienced at least one incident of beating up or worse in the previous year, 76 (53%) experienced an incident on follow-up, almost exactly the same as the 54% of the 176 women who had experienced less severe incidents in the previous year. Of those women who experienced at least one follow-up incident, the 76 who had experienced a severe incident in the previous year were more likely to experience a severe incident on follow-up (62%) than the 95 who had not (47%). This difference approached statistical significance (Chi square p = .059; Gamma = .286, p = .056). However, even this association was mediated by whether or not the woman

had left or tried to end the relationship in the past year (Exhibit 87).

Exhibit 87
Violence in Past Year and Violence on Follow-up, by Whether She Left or Tried to End the Relationship in the Past Year

Most Serious Incident on Follow-up and Whether She Had Left or Tried to Leave in Past Year	Most Severe Incident in Past Year: "Beating up" or Worse?		
	No	Yes	Total*
Did Not Leave or Try to End Relationship			
Follow-up: no incident	33.3%	44.4%	36.1%
Follow-up: less severe	40.7	22.2	36.1
Follow-up: beating up or worse	25.9	33.3	27.8
Total	100.0% (54)	100.0% (18)	100.0% (72)
Did Leave or Try to End Relationship			
Follow-up: no incident	51.6%	47.2%	49.6%
Follow-up: less severe	23.0	20.0	21.4
Follow-up: beating up or worse	25.4	32.8	29.0
Total	100.0% (122)	100.0% (125)	100.0% (248)
Total			
Follow-up: no incident	46.0%	46.9%	46.6%
Follow-up: less severe	28.4	20.3	24.7
Follow-up: beating up or worse	25.6	32.9	28.8
Total	100.0% (176)	100.0% (143)	100.0% (320)

*Total includes one women who did not respond to the "leaving" question.

The 72 women who had *not* left or tried to leave in the past year were somewhat less likely to experience one or more incident on follow-up if they had experienced a severe incident in the past year (56%) than if they had not (67%), but this difference was not statistically significant. If they did experience at least one follow-up incident, more (60%) of the ten women who had been beaten up or worse in the previous year were again beaten up or worse on follow-up, compared to 39% of the other 36 women (not significant).

Similarly, of the 247 women who had left or tried to end the relationship in the past

year, 53% of the 125 who had experienced a severe incident in the past year experienced at least one follow-up incident, slightly more than the 48% of the 122 other women, but not statistically significant. Of the 125 women who experienced at least one follow-up incident, the 66 who had experienced a severe incident in the past were somewhat more likely to experience a severe follow-up incident (62%) than the 59 who had not (53%), but again, this difference did not approach significance.

Therefore, the apparent association between the seriousness of past violence and the seriousness of future violence disappeared when we controlled for whether or not the woman had left or tried to end the relationship in the past year.

Number of Incidents in the Past Year. The 98 women who had told us about only one incident in the previous year were significantly (Chi square $p < .0001$; Gamma = .485, $p < .0001$) less likely to experience at least one incident on follow-up (36%), compared to the 221 who had experienced more than one incident (62%), and the 120 women who had told us about five or more incidents in the previous year were significantly (Chi square $p < .0001$; Gamma = .431, $p < .0001$) more likely to experience at least one incident on follow-up (67%), compared to the 199 who had experienced four or fewer (45%).

This was consistently true for each racial/ethnic group (Exhibit 88), though only the difference between one incident and more reached statistical significance for white or other women. Similarly, for women who had been pregnant at the initial interview or in the previous year, the 24 who had experienced had only one incident in the past year were much less likely to experience a follow-up incident (38%) compared to the 61 who had experienced more than one incident (70%) (Chi square $p = .005$; Gamma = .599, $p = .006$). However, the 31 pregnant women who had experienced five or more incidents were equally likely to experience a follow-up incident (71%) as the 30 pregnant women who had experienced two to four incidents (70%).

On the other hand, of the 171 women who experienced at least one incident on follow-up, the 35 women who had told us about only one incident in the past year were not significantly less likely to experience a severe incident on follow-up (46%) than the 136 women who had experienced more than one (56%), and the 81 women who had told us about five or more incidents in the past year were no more likely to experience a severe incident (53%) than the 90 women who had told us about four or fewer (54%). This also was true for each racial/ethnic group and for pregnant women.

Summary and Conclusions: Past Violence and Future Violence. Of these three factors related to violence in the previous year the recency of the last incident before the initial interview was the most important (Exhibit 89). For all CWHRS women taken together, as well as for each of the racial/ethnic groups considered separately, there was a fairly high and usually significant negative correlation between the number of days since the last incident and violence on follow-up. The correlations were particularly strong for Latina/Hispanic women (Pearson R = -.422 for any incident and -.362 for a severe incident), compared to African/American/Black women (Pearson R = -.176 for both) or for white or other women (non-significant). However, there was no significant correlation between the number of incidents in the past year and violence in the future, and the

maximum severity of past incidents was correlated with future severity only for the total group of CWHRS women.

Exhibit 88
Number of Incidents in Past Year and Violence on Follow-up, by the Woman's Racial/Ethnic Group

Follow-up Incidents by Racial/Ethnic Group	Incidents in Past Year		
	One	2 to 4	5 to 172
African/American/Black			
No incidents	61.4%	48.5%	35.5%
Less serious incidents	15.7	13.2	19.7
At least one incident of beating up or worse	22.9	38.2	44.7
Total	100.0% (70)	100.0% (68)	100.0% (76)
Latina/Hispanic			
No incidents	57.2%	30.0%	22.9%
Less serious incidents	42.1	50.0	60.0
At least one incident of beating up or worse	0.0	20.0	17.1
Total	100.0% (19)	100.0% (20)	100.0% (35)
White or Other			
No incidents	(7)	50.0%	(4)
Less serious incidents	(0)	30.0	(2)
At least one incident of beating up or worse	(0)	20.0	(3)
Total	(7)	100.0% (10)	(9)
Total			
No incidents	64.3%	45.5%	32.5%
Less serious incidents	19.4	21.8	31.7
At least one incident of beating up or worse	16.3	32.7	35.8
Total	100.0% (98)	100.0% (101)	100.0% (120)

Exhibit 89
Correlations Between Past Violence and Violence on Follow-up***

Violence in the Past Year	African/ American/Black		Latina/Hispanic		White or Other		Total	
	Follow-up		Follow-up		Follow-up		Follow-up	
	Abuse	Sever-ity	Abuse	Sever-ity	Abuse	Sever-ity	Abuse	Sever-ity
Most Severe Incident	.113	.111	.005	.047	.092	.101	.059	.111*
Number of Incidents	.115	.116	.079	.064	-.008	.083	.089	.078
Days from last Incident	-.176*	-.176*	-.422**	-.362**	-.252	-.253	-.233**	-.217**

*Correlation is significant at the .05 level (2-tailed).

**Correlation is significant at the .01 level (2-tailed).

***Follow-up abuse is a dichotomy (1= at least one incident on follow-up; 0 = followed up and no incidents). Follow-up severity is a three-point scale (0 = no incidents on follow-up; 1 = incidents less severe than beating up or choking; 2 = at least one beating up, choking, or more severe incident.

For women who had been pregnant at the initial interview or in the previous year, the maximum severity of past incidents was not significantly correlated with follow-up abuse or severity, the total number of incidents in the past year was significantly correlated with both follow-up abuse (Pearson R = .233, $p < .05$) and severity (Pearson R = .263, $p < .05$), and the number of days since the most recent incident was significantly correlated with follow-up abuse (Pearson R = -.228, $p < .05$) but not severity (Pearson R = -.209, NS).

Combining all three characteristics of past violent incidents together in a multiple regression, including recency (the number of days from the most recent incident to the initial interview), maximum severity, and the number of incidents (recoded in four categories), all entered together in the same step in a model of the continuation and severity of follow-up violence (no incident, less severe incidents, at least one severe incident), the model was not strong for CWHRS women as a whole (R = .266, R^2 = .071), and only recency (Beta = -.135, p =.028) and the recoded number of incidents (Beta = .176, p = .004) were significant factors.

However, the best models were different for CWHRS women in different racial/ ethnic groups. For African/American/Black women, neither the maximum severity nor the

recency of past violent incidents was significant, only the total number of incidents (Beta = .205, p = .003), and the model was weaker (R = .205, R^2 = .042) than the best model for all CWHRS women. In contrast, for Latina/Hispanic women, neither past severity nor the number of incidents was significant in the model, but recency was a much stronger factor (Beta = -.362, p = .002) and the model was stronger (R = .362, R^2 = .131), the association of "recency" was much stronger for Latina/Hispanic women (Beta = -.430, p = .001) and the regression coefficient was higher (R^2 = .148). The best model for the 25 white or other women was similar to that for the African/American/Black women, with only the recoded number of incidents a significant factor (Beta = .413, p = .036), but the model was stronger (R = .413, R^2 = .171).

For women who had been pregnant at the initial interview or in the previous year, recency was not significant in the combined model, and neither was severity. The total number of incidents in the past year (recoded) was the only significant factor (Beta = .318, p = .003). The currency of past violence was not as important for pregnant women as whether or not the total number of incidents in the past year was five or more.

Overall lessons of the analysis of the relationship between past violence and future violence were the following:

1. The recency of the most recent incident was an important risk factor for the continuation of violence, especially for Latina/Hispanic women. A particularly critical period was the last 30 days.

2. The maximum severity of any incident in the previous year was not related to the continuation or the severity of violence in the follow-up period, after we had taken into consideration whether or not the woman had ever left or tried to end the relationship in the past year.

3. The risk of continued violence was lower for women who had experienced only one incident in the previous year, versus women who had experienced two or more. It was higher for women who had experienced at least five incidents than for women who had experienced four or fewer.

4. Combining all three aspects of past violence, the number of incidents in the past year and the recency of the most recent incident were associated with the severity of continued violence on follow-up.

5. For African/American/Black women, however, it was only the number of incidents that was important in the combined model. For Latina/Hispanic women, it was only the recency of the most recent incident that was important.

6. For women who were pregnant or had been pregnant in the year before the initial interview, recency was not associated with continued violence. Instead, the number of incidents experienced in the past year was an important factor.

Controlling Behavior

Only three of the 13 women (23%) who scored zero on the Power and Control scale were physically abused at the follow-up interview (Exhibit 90), compared to 11 of the 33 (33%) who scored one, 24 of the 42 (57%) who scored two, 30 of the 53 (57%) who scored three, 40 of the 73 (55%) who scored four, and 63 of the 106 (59%) who scored five (Chi square p = .032; Gamma = .194, p = .014). This pattern was consistent

for African/American/Black women and Latina/Hispanic women, but not for white or other women.

Exhibit 90
Name's Controlling Behavior and Violence in Follow-up

Follow-up Violence	Power and Control Scale Score, Initial Interview					
	Zero	One	Two	Three	Four	Five
No Incidents	76.9%	66.7%	42.9%	42.4%	45.2%	40.6%
Less Severe	15.4	24.2	23.8	30.2	23.3	24.5
Beaten up or Worse	7.7	9.1	33.3	26.4	31.5	34.9
Total	100.0% (13)	100.0% (33)	100.0% (42)	100.0% (53)	100.0% (73)	100.0% (106)

Each of the five Power and Control scale items was independently associated with whether or not the woman would continue to be abused on follow-up. For example, of the 192 women who had said at the initial interview that an intimate partner had tried to limit her contact with family or friends, 115 (60%) experienced violence on follow-up, in contrast to 56 of the 128 (44%) women who said that had not happened to her (Chi square p = .005; Gamma = .315, p = .004). Of the 171 women who did experience a follow-up incident, women who had said that the partner tried to limit her contact with family or friends were more likely to experience a severe incident on follow-up (57% versus 48%), but the difference was not statistically significant.

For women who experienced at least one follow-up incident, those who had scored zero or one on the Power and Control scale were similar to each other, and women who scored two to five were similar to each other, in whether one of the follow-up incidents would be beating up or worse. The 14 women who scored zero or one were significantly (Chi square p = .048; Gamma = .522, p = .054) less likely to experience a severe follow-up incident (29%) than the 157 who scored two to five (56%). This was consistently true for each racial/ethnic group, although the numbers were small. None of the six Latina/Hispanic women or the one white or other woman who scored zero or one and who experienced incidents on follow-up experienced a severe incident, and only four of the seven African/American/Black women (57%) compared to 69% of the 104 who scored two to five.

In addition, the two Danger Assessment items relating to Name's controlling behavior were associated with continuing violence, especially the question, "Is Name violently and constantly jealous of you?" Of the 195 women who had answered "yes" to this question at the initial interview, 120 (62%) experienced intimate partner violence in the follow-up period, compared to 49 of the 122 (40%) who answered "no" (Chi square p <.0001; Gamma = .409, p < .0001). This was consistent, and statistically significant, for

Additional factors were important in the multiple regression analyses for particular groups of women. For African/American/Black women, whether she was the mother of four or more children was an additional risk factor. For Latina/Hispanic women, her "poor" general health and having tried to leave or end the relationship in the past year were risk factors. White or other women who had "ever" had a problem with alcohol and who scored high on the Power and Control scale were especially at risk of severe previous violence. For women who were pregnant at the initial interview or in the past year, having left or tried to leave and having a loaded gun in the home were important risk factors.

In sharp contrast, the most important factors associated with whether the woman would experience severe violence in the future were the number and recency of incidents in the past year and Name's controlling behavior, combined with *not* having left or tried to leave the relationship in the past year. More personal factors, such as the type of union and relationship, her children and stepchildren, her overall health, the partner's suicide risk, her material resources, and alcohol or drug problem, were less important risk factors for future violence. When a woman had experienced frequent and recent violence, when she had also experienced controlling behavior, and when she was actively seeking help but had not left or tried to end the relationship, she was more likely to experience severe follow-up incidents.

On the other hand, both personal factors and past violence factors were important for homicide. Some factors that were not significant at other points were very strongly associated with women who became a homicide victim or offender. For example, though whether Name's had threatened or tried suicide was not associated with continuing violence, the men who killed their partner and then themselves were much more likely to have threatened or attempted suicide previously. Homicide women victims and offenders were more likely to have children than clinic/hospital women. Homicide women were in much poorer health than clinic/hospital women, even though health was not associated with the continuation of violence.

Personal factors were especially important for women who became a homicide offender. They tended to have fewer material resources and less education, to be older, to be in poorer health, to be married to their partner, and to be in a long-term relationship, compared to women at other points in the abuse process. However, the history of violence was also important (for more detail, see below).

Because we assumed that help-seeking and interventions in the past year were more likely to have been a result of the violence in the past year, rather than the other way around, associations with each type of help-seeking are not presented in the overview table, above. (For these associations, see "Key Findings on Help-Seeking and Intervention," below.) Women who had experienced severe violence and had also been actively seeking help in the past year, however, were more likely to experience an incident in the follow-up period. Compared to their clinic/hospital counterparts, abused Latina/Hispanic women homicide victims were more likely to have sought informal help, but less likely to have contacted an agency or counselor. Abused African/American/Black homicide victims were more likely to have talked with someone, but equally likely to have sought help from any formal resource. Women homicide offenders, however, were much

the 141 women who had been beaten up or worse in the previous year (59% versus 35%), and for the 175 women who had not (66% versus 42%). Of the 120 women who answered "yes" to the jealousy question and experienced at least one follow-up incident, 56% experienced a severe incident, compared to 49% of the 49 women who answered "no," but this difference was not statistically significant. However, for the 74 women who had experienced a severe incident in the previous year, the difference was large (69% versus 31%) and statistically significant (Chi square p = .010; Gamma = .665, p = .017).

Stalking and Other Harassment

The average number of "yes" answers to the 19 HARASS items was 5.05 for the 149 CWHRS women who had no incident on follow-up and 6.08 for the 171 women who had at least one incident (t test p = .017). The 92 women who experienced at least one follow-up incident in which she was beaten up or worse had an average HARASS score of 6.62, significantly (t test p = .050) higher than the 79 women who experienced less severe follow-up violence (5.44).

This was true only for African/American/Black women, who had an average HARASS score of 5.25 for the 104 women who had no incident on follow-up, compared to 6.72 for the 111 women who had at least one incident (t test p = .005). However, for the African/American/Black women who experienced at least one follow-up incident, those who experienced severe violence did not differ from other women in their average HARASS score. For Latina/Hispanic women and for white or other women, the average HARASS score was slightly higher for the women who had no follow-up incident, but the difference was not statistically significant.

The 20 women who had scored zero on the HARASS scale at the initial interview were by far the least likely to experience violence on follow-up (30% versus 53% and 69%) (Exhibit 91). This was statistically significant for CWHRS women as a whole (Chi square = .015; Gamma = .391, p = .004), and for African/American/Black women (Chi square p = .010; Gamma = .478, p = .002). For Latina/Hispanic women and for white or other women, however, there was no association.

Exhibit 91
Stalking and Harassment and Violence in Follow-up

	HARASS Score, Initial Interview		
Follow-up Violence	**Zero**	**1 to 10**	**11 to 17***
No Incidents	70.0%	47.1%	30.8%
Less Severe	20.0	25.7	20.5
Beaten up or Worse	10.0	27.2	48.7
Total	100.0% (20)	100.0% (261)	100.0% (39)

*The highest score on the HARASS scale was 17 of 19 items.

Of those 171 women who experienced at least one follow-up incident, the 27 who had scored 11 or higher on HARASS were more likely to experience a severe incident (70%) compared to the 144 who had scored zero to 10 (51%), but this was of borderline significance (Chi square p = .060; Gamma = .396, p = .052), and there was no relationship at all within each racial/ethnic group.

The 146 women who said that an intimate partner had "followed" her in the past year were significantly (Chi square p = .016; Gamma = .268, p = .014) more likely to experience a follow-up incident (61% versus 47%), and to experience severe violence if they were abused (61% versus 46%, Chi square p = .060; Gamma = .282, p = .058). (Because of the low numbers, these relationships were significant only for African/American/Black women, but the trends were consistent for all groups.) On the other hand, the woman's response to whether her intimate partner had "destroyed something that belongs to you or that you like very much," or to whether the partner had "frightened or threatened" her friends, both of which were strongly related to the severity of violence in the past year, were not related either to the continuation of violence or to the severity of violence in the future.

Age and Racial/Ethnic Group

Overall, 38% of the 26 white or other women, 52% of the 215 African/American/Black women, and fully 66% of the 74 Latina/Hispanic women continued to experience violence on follow-up. If they experienced a follow-up incident, 68% of the 111 African/American/Black women, 20% of the 49 Latina/Hispanic women and 50% of the 10 white or other women experienced a severe incident.

The woman's age did not make a difference in the likelihood of follow-up violence or the likelihood that the violence would be severe for any of the three racial/ethnic groups, with one exception. Twelve of the 15 (80%) African/American/Black women aged 41 to 62 who experienced at least one incident on follow-up experienced a severe follow-up incident, higher than the 67% for the 96 women who were younger, but this difference was not statistically significant.

Type of Union and Relationship

There was no relationship between whether a woman said that she was married and whether or not the abuse would continue in the future. Of the 21 African/American/Black women who had said that they were married, 52% experienced a follow-up incident, exactly the same as for the other 192 women; of the 37 Latina/Hispanic women who said they were married, 65% continued to be abused versus 68% of the other 37 women; and three of the seven white or other women who said they were married continued to be abused versus 37% of the 19 other women. However, the 14 Latina/Hispanic women who said they were in a commonlaw marriage were much more likely to experience continuing abuse (93%).

Similarly, there was no difference in the continuation of violence for women who said they were single, versus other women. However, if the abuse continued, African/American/Black women and white or other women who said they were single were more likely to experience a very severe incident in the future. Almost three-quarters (73%) of the 74 African/American/Black women who said they were single and experienced at

least one follow-up incident experienced one or more severe incident, compared to 58% of the 36 women who had some other marital status. Four of the five white or other women who said they were single and who experienced at least one follow-up incident had a severe incident, versus one of the five who had some other marital status.

There was an association between being in an "ex" or former relationship and experiencing a follow-up incident, but the association was in the opposite direction as was the association with the severity of incidents in the previous year. Though women in an "ex" or former relationship were more likely to have experienced severe violence in the past year, they were significantly (Chi square = .001; Gamma = .365, p = .001) *less* likely to continue to experience violence in the future (43%) compared to other women (62%). Specifically, the 15 women who said that at the initial interview that Name was their ex- or former husband were less likely to experience a follow-up incident (40%) than the 60 women who said that Name was their husband (58%), the eight who said that Name was an ex- or former commonlaw husband were less likely to experience a follow-up incident (50%) than the 15 women who said that Name was their commonlaw husband (87%), and the 106 who said that Name was an ex- or former boyfriend were less likely to experience a follow-up incident (43%) the 94 women who said that Name was their boyfriend (62%).

There was an association between being in an "ex" or former relationship with Name and having a recent incident. Of the 213 women in an "ex" or former relationship, only 34% had experienced an incident within 30 days of the initial interview, compared to 49% of the 279 other women. Because those who had experienced a recent incident were more likely to experience a follow-up incident, could that have accounted for the association between having a follow-up incident and being in an "ex" or former relationship? No, it did not. For the 136 women who had experienced an incident within 30 days, 52% of the 48 in an "ex" or former relationship experienced a follow-up incident, compared to 68% of the 88 women in other relationships. For the 183 women who had not experienced an incident within 30 days, 39% of the 95 in an "ex" or former relationship experienced a follow-up incident, compared to 56% of the other 88 women.

On the other hand, among women who did experience a follow-up incident, those in an "ex" or former relationship were *more* likely to experience a severe follow-up incident. Of the 171 women who experienced at least one incident, 63% of the 62 in an "ex" or former relationship experienced a severe incident, compared to 49% of the 109 women in other relationships. This did not reach significance, either for CWHRS women as a whole or for any racial/ethnic group, but the direction was consistent across types of relationship. Half of the six women with an ex- or former husband versus 23% of the 35 with a husband experienced a severe follow-up incident, as did half of the four women with an ex- or former commonlaw husband versus 23% of the 13 with a commonlaw husband. However, the 58 women who said that Name was their boyfriend were more likely to experience a severe follow-up incident (71%) than the 45 women where Name was their ex- or former boyfriend (64%).

Same-sex Relationship

We were able to re-interview only nine of the 18 women who had been abused by

a same-sex partner in the past year, five of the thirteen women with a current same-sex partner and four of the five with an ex- or former same-sex partner. Only three of these nine were still being abused in the follow-up period (33%), two of the five in a current relationship and one of the four in a former relationship, compared to 168 of the 311 (54%) other women who were followed-up (44% of the 140 in an "ex" or former relationship and 63% of the 171 other women). Only one of the three experienced at least one very severe incident on follow-up. Therefore, there were too few women being abused by a same-sex partner for an analysis of future violence.

Co-residence, Estrangement and Leaving the Relationship

The 85 women who had been living with Name the entire year before the initial interview were significantly (Chi square $p < .0001$; Gamma = .511, $p < .0001$) more likely to continue to experience intimate partner violence in the follow-up period (73%) than the other 234 women (47%). Women who had never lived with Name (44% of 80), women who had lived with Name in prior years (29% of 14), women who had recently moved in with Name (50% of 18), and women who had been living with Name in the past year but were living apart at the initial interview (50% of 122) were all less likely to experience a follow-up incident. This was true for African/American/Black women (76% versus 47%), Latina/Hispanic women (76% versus 54%), and white or other women 43% versus 37%), but not significant for white or other women. It was also true regardless of whether or not the woman had experienced at least one severe incident in the previous year (68% versus 49%) or had not (76% versus 45%).

On the other hand, for women who experienced at least one follow-up incident, the 62 who had lived with Name for the entire year were significantly (Chi square $p < .0001$; Gamma = .570, $p < .0001$) *less* likely to experience a severe incident (34%) compared to other women (65%). Women in all other living situations were more likely to experience a severe incident than women who had lived with Name the entire year. All of the four women who had lived with Name in a prior year but were living apart at the initial interview, and experienced at least one follow-up incident, experienced a severe follow-up incident.

Thus, although women who had been living with Name the entire year had the highest risk of continuing intimate partner violence in the future, they had the lowest risk of that follow-up violence being severe. This was true regardless of whether women had experienced severe violence in the previous year. Of the 95 women who had not experienced at least one incident in which she had been beaten up or worse in the past year and who experienced at least one follow-up incident, the 41 who had lived with Name the entire previous year were less likely (32%) to experienced a severe incident on follow-up than the 54 other women (59%). Of the 76 women who had experienced at least one incident in which she had been beaten up or worse in the past year and who experienced at least one follow-up incident, the 21 who had lived with Name the entire previous year were also less likely (38%) to experienced a severe incident on follow-up than the 55 other women (71%).

Did attempts to leave or end the relationship increase or decrease the chance that the violence would continue in the future? Of the 72 women who had *not* left or tried to

end the relationship in the past year, 64% experienced at least one incident on follow-up, compared to only 44% of the 198 women who had left. However, this association depended upon whether the woman had experienced severe violence in the past year. The 238 women who had experienced at least one incident in the past year in which she was beaten up or worse were significantly (Chi square $p < .0001$; Gamma = .494, $p < .0001$) more likely to have left or tried to end the relationship in the past year (85%) than the 255 women who had not (66%). Did attempts to leave in the past increase or decrease the likelihood of future violence, regardless of how severe the violence had been in the past?

Of the 176 women who had *not* experienced at least one severe incident in the past year, the 122 who had left or tried to end the relationship were significantly (Chi square $p = .025$; Gamma = .362, $p = .021$) *less* likely (48%) to experience a follow-up incident, compared to the other 54 women (67%). For the 95 women who did experience a follow-up incident, the 59 who had left or tried to end the relationship were slightly and non-significantly more likely to experience a severe incident (53%) compared to the 36 women who had not (39%).

Most (85%) of the 143 women who had been beaten up or worse in the past year had left or tried to end the relationship, compared to 66% of those who had experienced less severe violence (Chi square $p < .0001$; Gamma = .494, $p < .0001$). However, the likelihood that the violence would continue did not differ for the 125 who had left or tried to leave (53%) versus the 18 who had not (56%). In addition, for the 76 who experienced at least one follow-up incident, there was no difference in the likelihood that at least one would be severe for the 66 who had left or tried to leave (62%) in the past year compared to the ten women who had not (60%).

Further, the 50 women who said that they had asked Name to leave or stay away in the past year but Name had refused were significantly (Chi square $p < .0001$; Gamma = .531, $p < .0001$) more likely (76%) than the other 270 women (49%) to experience a follow-up incident, regardless of whether the past violence had been severe or not. Of the 24 who had experienced at least one severe incident in the previous year, 76% experienced a follow-up incident, as did 77% of the 26 who had experienced less severe incidents in the past year. Of the 38 who did experience a follow-up incident, half of the 18 who had experienced a severe incident in the previous year also experienced one or more severe follow-up incident, not significantly more than for the 20 women who had not experienced a severe incident in the previous year (40%).

When Name had threatened the woman in the preceding year if she left the relationship or refused to return to the relationship, she was likely to experience more serious incidents on follow-up (Exhibit 92). When Name had threatened to harm the kids if she left or did not return, she was not more likely to experience a follow-up incident. For women who did, the incidents were more likely to be severe (67% versus 49%), but the difference was not significant. When Name had threatened to take the kids if she left, she was slightly more likely to experience a follow-up incident (63% versus 51%, non-significant), but not more likely to experience a severe incident. There was no increase in risk when Name had threatened to do both.

Exhibit 92
Continued Violence and Threats

Name's Threat "if you leave or don't come back"		No Incident	Less Severe Incident(s)	Beaten up or Worse	Total N
to harm the kids	Yes	43.8%	18.8	37.5	16*
	No	46.6%	27.4	27.3	219*
to take the kids	Yes	37.3%	35.6	27.1	59*
	No	49.4%	23.9	26.7	176*
to kill himself or herself	Yes	41.0%	25.0	34.0	100
	No	49.1%	24.5	26.4	220
to kill you	Yes	36.3%	24.2	39.5	124
	No	53.1%	25.0	21.9	196

*Total includes only those who responded and who had children.

When Name had threatened to kill her if she left or tried to leave, she was significantly (Chi square = .003; Gamma = .330, p = .003) more likely to experience violence on follow-up (64% versus 46%), and if she did, the incidents were significantly (Chi square p = .046; Gamma = .301, p = .043) more likely to be severe (62% versus 47%). The differences were not greater when Name had also threatened to harm the children.

When Name had threatened to commit suicide, there was no difference in the likelihood that she would experience a follow-up incident, and if she did, it was only slightly and non-significantly more likely to be severe (58% versus 52%). When Name had threatened both to kill her and to commit suicide, there was no greater risk of continued or severe violence relative to the risk when Name had only threatened to kill her.

Length of Relationship

The 62 women who, at the initial interview, had been in a relationship with Name for only a year or less were significantly (Chi square p = .021; Gamma = .317, p = .022) *less* likely to experience a follow-up incident (40%) than the 258 women who had been in longer relationships (57%). If they did experience an incident, however, they were slightly and not significantly more likely to experience a severe incident (60% versus 52%). Thus, being in a short-term relationship may be seen as a protective factor against future violence. This is contrary to what might have been expected based on Okun's research (1986: 196-197), in which shelter residents with relationships less than one year old were "less than half as likely to experience the immediate termination of cohabitation" as were shelter residents with lengthier relationships. The experience of shelter residents may differ from the experience of CWHRS women, many of whom had not sought help from a shelter or from any other source.

Of the 44 CWHRS women who had been in a relationship with Name for two to

three years (25 to 36 months), 31 (70%) experienced a follow-up incident, significantly (Chi square p = .024) more than any other group of women (55% of the 58 in the relationship for 37 months to five years, 53% of the 75 women in the relationship for five to 15 years, and 54% of the 26 women in the relationship longer than 15 years). This was true both for women who were in an "ex" or former relationship (53% of the 17 who had been in the relationship for two to three years versus 42% of the 127 others) and for women who were not (81% of the 27 who had been in the relationship two to three years versus 58% of the 149 others).

Although Okun (1986:197) found that the peak relationship length for leaving was five years, in the CWHRS about 54% of the women experienced continued violence, whether the relationship had lasted three years, four years, five to fifteen years, or longer. Given that the violence continued, 68% of the 31 women in a relationship for 25 to 36 months experienced at least one severe incident, compared to 49% of the 86 women in a longer relationship, and 54% of the 54 in a shorter relationship (not significant). Again, this was true both for women in an "ex" or former relationship and for other women.

Age Disparity

The 178 women who were the same age or close to the same age as Name (up to four years older or younger) were equally likely to experience at least one incident on follow-up (55%) as other women. The 98 who did experience a follow-up incident were somewhat less likely to experience at least one incident where they were beaten up or worse (49%) compared to the 73 other women (60%). However, the difference was not statistically significant.

Children

Overall, there was no relationship between whether or not a woman had children and whether she would experience a follow-up incident (54% of the 251 women with at least one child and 52% of the other 69 women). Of the 171 women who did experience a follow-up incident, the 135 with a child were somewhat less likely to experience severe violence (51%) than the 36 others (64%), but this difference was not statistically significant. Similarly, almost exactly the same percent of the 189 women who one or more children under 18 living in their household (53%) and the 105 women who did not (54%) experienced intimate partner violence in the follow-up period. Of those who did, the 100 who had a child were slightly less likely to experience a severe incident (48%) than the 57 who did not (58%), but the difference was not statistically significant.

However, the direction of these relationships was different for African/American/Black women and Latina/Hispanic women. The 117 African/American/Black women living in a household with any children age 17 or younger were *less* likely to experience a follow-up incident (48%) than the 73 women who were not (59%), but the 59 Latina/Hispanic women with children in the household were *more* likely to experience a follow-up incident (69%) than the 15 women who were not (53%). However, these differences were not statistically significant, and there was no difference at all for white or other women. Similarly, though there was no association between experiencing a follow-up incident and whether or not she was the mother of any children, among any group of women, the 111 African/American/Black women who did experience a follow-up incident

were more likely to experience a severe incident if they did not have a child (73% of 26) than if they did (67% of 85). However, this was not statistically significant, and there was no difference at all for Latina/Hispanic or for white or other women.

African/American/Black women with a child who was the stepchild of Name were less likely to experience a follow-up incident (42% versus 56%), but Latina/Hispanic women with a stepchild of Name were more likely (81% versus 62%), although neither difference quite reached statistical significance (Exhibit 93).

Exhibit 93
Follow-up Incidents, by Whether Woman Had a Child who was a Stepchild of Name

Abuse on Follow-up, by Whether there is a Stepchild	African/ American/ Black		Latina/ Hispanic		White or Other		Total*	
	Yes	No	Yes	No	Yes	No	Yes	No
No incidents	58.3%	44.2%	19.0%	38.5%	(3)	61.9%	49.4	45.0%
Less severe	13.3	17.5	76.2	44.2	(1)	19.0	28.7	23.4
Beaten up or worse	28.3	38.3	4.8	17.3	(1)	19.0	21.8	31.6
Total	100.0% (60)	100.0% (154)	100.0% (21)	100.0% (52)	(5)	100.0% (21)	100.0% (87)	100.0% (231)

*Total includes five women who were multi-racial or refused to answer.

For women who did experience a follow-up incident, the 111 African/American/ Black women were equally likely to experience a severe incident if they had a stepchild to Name (68%) or not (69%), but the 49 Latina/Hispanic women were less likely to experience a severe incident if they had a stepchild to Name (28%) than if they did not (6%) (Chi square p = .066; Gamma = .725, p = .026).

Physical Health

Overall health. There was no relationship between a woman's general health at the initial interview and whether or not the abuse continued in the follow-up period, or the severity of that abuse. Although Latina/Hispanic women with "poor" health at the initial interview were more likely to have experienced severe violence in the past, there was no association with future violence or the severity of that violence.

There was also no relationship between violence on follow-up and the woman's current health compared to her health a year ago, to the number of health visits in the past year, or to whether she had been limited in the past month by a physical condition, for all CWHRS women or for any separate racial/ethnic group.

Pregnancy. The 85 women who had been pregnant at the initial interview or in the previous year were more likely to experience a follow-up incident (61%) compared to 49% of the 227 other women, but this was of borderline significance (Chi square p = .062; Gamma = .236, p = .059). This pattern was consistent for African/American/Black women (57% versus 49%), Latina/Hispanic women (76% versus 61%), and white or

other women (three of five versus 30%). However, the 164 women who did experience a follow-up incident were not more likely to experience at least one severe incident (56% versus 54%).

Of the 23 women who had been pregnant at the initial interview and were followed-up, four were still pregnant at the first follow-up interview, 14 had given birth, one had had an abortion, one a stillborn child, and three did not respond.

Alcohol or Drug Use

Some researchers (Kantor & Straus, 1990; Dobash & Dobash, 1979; Gelles, 1974) argue that bystanders, helping professionals, the criminal justice and health systems, the batterer, and the women themselves may see drunkenness as a mitigating factor that excuses the violence. This could set the stage for a continuing pattern of drunken violence. In the CWHRS, however, the percent of women who experienced continued violence in the follow-up period was not significantly different whether Name had an alcohol problem or not or a drug problem or not at the initial interview.

When Name had an alcohol problem at the initial interview, there was a slightly greater tendency for the woman to experience a follow-up incident (58% versus 48%, not significant), and if she did, to experience a severe incident (59% versus 47%, not significant). This was consistent for each racial/ethnic group.

Name's drug problem at the initial interview made no difference in the likelihood of a follow-up incident for CWHRS women as a whole (54% versus 55%), or for any racial/ethnic group. However, for women who did experience a follow-up incident, she was somewhat more likely to experience at least one severe incident when Name had a drug problem (60% versus 50%, not significant). This was true, however, only for the 48 Latina/Hispanic women who experienced a follow-up incident. Of the 13 where Name had a drug problem, 38% experienced a severe follow-up incident, compared to 14% of the 45 where Name did not. This was not significant, however (Chi square p = .067; Gamma = .579, p = .111).

Though women may use alcohol and drugs to cope with the depression and trauma associated with abuse, Dobash and Dobash (1979) and Miller, Downs and Gondoli (1989) point out that such "self medication" may seem helpful in the short run, but could increase the threat of escalating seriousness in the long run. This agrees with Blount, *et al.* (1994:174), who conclude that "it is reasonable to suggest as well that the heavy use of alcohol would certainly make it difficult for the drinker to find alternative ways to cope with a violent partner."

In the CWHRS, there was no relationship between the woman saying that she had an alcohol problem at the initial interview and experiencing a follow-up incident (52% versus 54%), or saying that she had a drug problem and experiencing a follow-up incident (54% versus 53%). This was also true for each racial/ethnic group. Name's controlling behavior made no difference in these relationships.

For the 171 women who did experience violence on follow-up, the 44 who had ever had an alcohol problem were more likely (66%) than the 127 who had not (50%) to experience severe violence on follow-up, though the difference was of borderline significance (Chi square p = .062; Gamma = .325, p = .056). The 54 women who had ever had

a drug problem were significantly (Chi square p = .050; Gamma = .320, p = .045) more likely (65%) to experience severe violence than the 117 who had not (49%), but this difference disappeared completely when controlled for racial/ethnic group.

Mental Health

Depression. The higher the score on the Depressed Feelings II Scale in the initial interview, the higher the likelihood that the woman would experience a follow-up incident (Chi square p = .037; Gamma = .265, p < .0001). Of the 100 women who had a score of zero, 41% experienced a follow-up incident, compared to 66% of the 65 women who had scored a four or five. This was also true of each racial/ethnic group. For the 171 who did experience a follow-up incident, however, there was no association between her Depressed Feelings II Scale score and whether or not she experienced at least one severe incident.

The percent of women who experienced an incident on follow-up was almost exactly the same for women who said that they had ever threatened or attempted suicide or not (57% versus 51%), regardless of the woman's racial/ethnic group. There was also no relationship between suicide and the severity of incident(s) on follow-up.

Post Traumatic Stress Disorder (PTSD). Having a PTSD diagnosis was not only strongly associated with severe violence in the past year, but a past PTSD diagnosis was also a risk factor for continued violence on follow-up. Of the 203 women who had met diagnostic criteria for PTSD in the initial interview, 60% experienced at least one follow-up incident, compared to 42% of the 116 women who did not meet the PTSD diagnosis (Chi square p = .002; Gamma = .346, p = .002). This was true for each racial/ethnic group, but the association was strongest for the 215 African/American/Black women, and significant only for them. Of the 125 women with a PTSD diagnosis, 59% experienced a follow-up incident, compared to 41% of the 90 without (Chi square p = .009; Gamma = .350, p = .008).

However, for the 171 women who did experience a follow-up incident, there was no difference between women with a PTSD diagnosis and those without in whether they experienced at least one severe incident (52% versus 59%). Again, this was true for each racial/ethnic group.

Name's Risk of Suicide. The 77 women who had said that Name had "ever" threatened or attempted suicide were not significantly more likely to experience at least one follow-up incident than the 236 women who had said "no" to that question (58% versus 51%). This was consistent across racial/ethnic groups. For the 171 who experienced at least one follow-up incident, there was no difference in the likelihood that one was severe (51% versus 54%).

Presence of a Firearm in the Home

The presence of a loaded handgun in the home had a weak and non-significant association with whether the woman experienced a follow-up incident. Nine of the 13 women with a loaded firearm in their household (69%) experienced violence on follow-up, compared to 52% of the 277 other women. However, the 171 women who experienced at least one incident were more likely to experience one or more severe incident when they had said that there was a loaded firearm in their home. Seven of the nine women (78%)

who had a loaded firearm at home were beaten up or worse, compared to 49% of the 146 women who did not, but this difference did not reach significance (Chi square p = .097; Gamma = .565, p = .091).

In addition, 17 of the 16 women (65%) who had experienced at least one incident of firearm threat or use in the previous year, compared to 53% of the 293 who had not, experienced a follow-up incident.

Social Support Network and Other Resources

Johnson (1998) found that two important factors related to the cessation versus continuation of violence were the woman's "attachment to others who might be able and willing to respond" and, conversely, her isolation from a network of social support and assistance. Was this true among CWHRS women?

Social Support Network Scale. There were small but significant correlations between the woman's score on the SSN scale and each SSN subscale at the initial interview, and whether or not she continued to experience intimate partner violence on follow-up. The correlations were .214 ($p < .01$) for the entire scale, .141 ($p < .05$) for access to and knowledge of resources, .178 ($p < .01$) for tangible help in emergencies, and .185 ($p < .01$) for acceptance and support. However, none of these correlations reached statistical significance for the Latina/Hispanic women or for white or other women. For pregnant women, the correlation with the total SSN scale was significant ($R = .214$, $p < .05$), but not the sub-scales. In contrast, all of the Social Support Network scales, except the subscale Access to and Knowledge of Resources, were significantly related to continuing violence for the African/American/Black women.

Some of the individual items in the SSN were more strongly associated with continued violence than others, and two were not significant (Exhibit 94). Only one of the three items measuring access to and knowledge of resources was associated with follow-up violence. About half of the 221 who said that they would know where to tell a friend to get help experienced a follow-up incident, compared to 62% of the 98 women who said that they would not.

However, this was true only for the 175 women who had not experienced at least one severe incident in the previous year. For the 143 women who had experienced such an incident, there was no difference. For the women who did experience an incident on follow-up, their answer to "knowing where to tell a friend" was not associated with experiencing a severe follow-up incident.

In contrast, four of the five items in the "Acceptance and Support" sub-scale were significantly related to experiencing a follow-up incident. The direction of the associations with F1, F2 and F4 were generally consistent for the three racial/ethnic groups, but statistically significant only for African/American/Black women. However, the association with F7 ("supports my decisions") was strong and significant for both African/American/Black women and Latina/Hispanic women.

Of the 215 African/American/Black women, 64% of the 88 who said that they did not have someone who "supports my decisions" experienced a follow-up incident, compared to 43% of the 127 who did (Chi square p = .003; Gamma = .392, p = .003). Of the 74 Latina/Hispanic women, 81% of the 36 who said that they did not have someone who

"supports my decisions" experienced a follow-up incident, compared to 53% of the 38 who did (Chi square p = .011; Gamma = .577, p = .008).

Exhibit 94
Continuation of Abuse, by Response to Social Support Network Questions

Social Support Network Item, by Type	% Abused on Follow-up		
	Agree	Disagree	Gamma
Acceptance and support			
F1. Someone I'm close to makes me feel confident in myself.	49.8%	63.5%	.275*
F2. There is someone I can talk to openly about anything.	47.8%	67.4%	.386***
F4. There is someone I can talk to about any problems in my relationship.	48.8%	62.5%	.273*
F5. Someone I care about stands by me through good times and bad times.	51.5%	59.5%	NS
F7. Someone I know supports my decisions no matter what they are.	44.8%	65.0%	.391***
Tangible help in emergencies			
F6. I have someone to stay with in an emergency.	49.3%	64.5%	.282*
F8. Someone I know will help me if I am in danger.	50.9%	68.9%	.362*
F12. I have someone who will be there for me in times of trouble.	50.8%	64.2%	.269*
F13. I have someone to borrow money from in an emergency.	46.7%	64.7%	.353**
Access to and knowledge of resources			
F3. It is difficult for me to ask for help because people don't always speak my native language. (Latina/Hispanic women only)	71.1%	58.6%	NS
F10. I would know where to tell a friend to get help if they were harmed or beaten by their partner.	49.8%	62.2%	.249*
F11. I hesitate to tell anyone about my problems because I am worried that the authorities, like DCFS or Immigration, may find out.	59.0%	51.5%	NS

*p < .05; ** p < .01; *** p < .001

Of the 171 women who experienced at least one follow-up incident, those who answered "yes" to item F1 ("confident in myself") were significantly *more* likely (59% versus 43%) to experience a severe incident, as were those who answered yes to item F2 ("talk to about anything") (60% versus 44%). There was no difference for those who answered "yes" to F4 ("talk about relationship"), F5 ("stands by me"), or F7 ("supports my decisions").

All four of the items in the "Tangible Help in Emergencies" sub-scale were significantly associated with experiencing a follow-up incident. However, F8 ("help in danger") was significant (Chi square p = .042; Gamma = .486, p = .038) only for African/American/Black women. Of the 19 women who disagreed, 74% experienced a follow-up incident, compared to 49% of the 195 who agreed.

Only F13 ("I have someone to borrow money form") was associated with experiencing a severe follow-up incident, and this was in the opposite direction. Of the 93 who experienced at least one follow-up incident and answered "yes" to this question, 62% experienced at least one severe incident, compared to 43% of the 77 who answered "no" (Chi square p = .011; Gamma = .377, p = .010). This was consistently true for each racial/ethnic group, but did not reach statistical significance.

In general, women who had more social support were less likely to experience a violent incident in the follow-up period. However, when a woman experienced any follow-up incident, she was more likely to experience at least one severe incident when she had more social support.

Employment. The 31 women who said at the initial interview that their occupation was homemaker were significantly (Chi square p = .005; Gamma = .536, p .003) more likely to experience a follow-up incident (77%) compared to the other 289 women (51%). This included 49% of the 103 women with a full or part-time job, 50% of the 34 women who were students, and 52% of the 150 women who were unemployed. For each racial/ethnic group taken separately, however, there was no difference for African/American/Black or white or other women, and for Latina/Hispanic women the difference was less and not significant (77% versus 59%). Overall, of the 171 women who experienced at least one follow-up incident, the 24 homemakers were significantly (Chi square p < .0001; Gamma = .693, p .001) less likely (21%) to experience at least one severe follow-up incident than the 147 other women (59%). Again, however, there was no difference for each racial/ethnic group separately.

Women who were unemployed at the initial interview were no more likely than other women to experience a follow-up incident, or to experience a severe incident. This was true for each racial/ethnic group.

Education. Overall, women who had a high school education were less likely to experience a follow-up incident (49% versus 58%), but the difference was significant only for white or other women. Only three of the 17 white or other women with a high school degree experienced a follow-up incident (18%), compared to seven of the nine who did not (Chi square p = .003; Gamma = .885, p = .001). There was no difference at all for African/American/Black women (51% and 52%), and for Latina/Hispanic women, the difference was 63% versus 68% and not significant. For white or other women, those

with no high school education were significantly more likely to experience a follow-up incident regardless if they had been unemployed at the initial interview (75% versus 20%) or not (75% versus 14%).

In addition, for the 171 women who did experience a follow-up incident, those who had a high school education were less likely to experience a serious incident (49% versus 59%). The difference was not statistically significant for CWHRS women as a whole. However, the difference was significant for African/American/Black women (59% versus 82%; Chi square p = .011; Gamma = .511, p = .007) and white or other women (zero of three versus 71%; Chi square p = .038; Gamma = 1.000, p = .006).

Income. Of the 51 women who said that they did not have any personal income, 35 (69%) experienced an incident on follow-up, compared to 134 of the 266 (50%) women who said that they did (Chi square p = .017; Gamma = .366, p = .014). The direction was consistent for each racial/ethnic group, though none of the differences reached significance. However, for the 171 women who did experience an incident on follow-up, there was no association with severity, either for the CWHRS women as a whole or for any group.

Given that the woman had some personal income, there was no association between the amount of her personal income and the likelihood of follow-up incidents. Similarly, there was no association between the amount of her household income and whether she experienced a follow-up incident. This was true for each racial/ethnic group. However, for the 171 women who experienced a follow-up incident, the 42 who had less than $5,000 household income were more likely to experience a severe incident (69%), compared to of the 102 who had more money (49%) (Chi square p = .028; Gamma = .398, p = .023).

Place of Birth and Language. Overall, women who had not been born in the United States were slightly more likely to experience a follow-up incident (65%) compared to other women (51%), but the difference was of borderline significance (Chi square p = .063; Gamma = .279, p = .058). However, there was no relationship for each racial/ethnic group separately. This was also true for the likelihood of a severe follow-up incident, given that any incident had occurred.

There was no relationship between experiencing a follow-up incident and whether the woman had recently moved to Chicago, either for all CWHRS women or for any racial/ethnic group.

For Latina/Hispanic women, her likelihood of experiencing a follow-up incident was not associated with whether she had been interviewed in Spanish or English in the initial interview. For those who did experience at least one incident, more of the ten who were interviewed in English (30%) experienced at least one severe incident, compared to 18% of the 39 who were interviewed in Spanish. However, the difference was no significant.

Divorce. Whether or not the woman told us at the initial interview that divorce was acceptable to her family made no difference in whether she continued to be experience intimate partner violence on follow-up, if she experienced any severe incident.

Having a Home. The 28 women who had been homeless or living in a group home or institution at the initial interview were just as likely to experience a follow-up incident

(54%) as the other 292 women (53%). This was true for each racial/ethnic group. (There was no Latina/Hispanic and only one white or other woman who was homeless.) Of those women who did experience at least one follow-up incident, the 15 who had been homeless or living in a group home or institution were significantly (Chi square p = .033; Gamma = .583, p = .025) more likely to experience a serious follow-up incident (80%) compared to the 156 other women (51%). Within racial/ethnic groups, however, the difference was smaller and not significant. For the 111 African/American/Black women who experienced a follow-up incident, 79% of the 14 homeless women versus 67% of the other women experienced a severe incident on follow-up (not significant).

Help Seeking and Interventions

In this section, we examine whether or not the woman's help-seeking activities and interventions that happened in the year prior to the initial interview were related to the continuation of violence or to the severity of violence in the follow-up period.

Talking to Someone. The 234 women who had talked to someone in the past year were somewhat less likely to experience violence in the follow-up year (51%) compared to the 86 women who had not (60%), but the difference was not statistically significant. For African/American/Black women, however, there was a large and significant (Chi square p = .036; Gamma = .328, p = .033) difference. Of the 162 women who said that they had talked to someone, only 77 (48%) experienced a follow-up incident, compared to 64% of the 53 women who did not talk to anyone.

However, for the 171 women who did experience at least one follow-up incident, those who had talked to someone about the violence in the past year did not differ from those who did not in the likelihood that one of the follow-up incidents would be severe. This was true for CWHRS women as a whole and for each racial/ethnic group.

Counselors and Helping Agencies. There was an association between seeking help from a counselor or agency and whether or not the woman would experience a follow-up incident, but only for women who had experienced severe violence in the past year. Of the 143 women who had been beaten up or worse in the past year, the 36 who had contacted an agency or counselor were much more likely (75%) to experience an incident on follow-up than the 107 women who had not (46%) (Chi square p =.002; Gamma = .561, p = .001). This was true for African/American/Black women (82% versus 48%, respectively), but not true for Latina/Hispanic women (four of eight versus 69%) or for white or other women (one of three versus 30%).

However, of the 171 women who experienced at least one follow-up incident, whether the woman had sought help from a counselor or agency the severity of the was not associated with experiencing a severe follow-up incident. This was true both for women who had experienced a severe incident in the previous year and for women who had not. It was also true for each racial/ethnic group.

Why was there an association between contacting a counselor or helping agency and continuing violence, for those women who had been the most severely abused in the past year? We have seen above that seeking counseling appeared to be a "last resort" for the CWHRS women. In general, women did the other help-seeking activities before they sought counseling. This could be because the other sources of help had advised

them to see a counselor. Many of the women who had sought help from a counseling agency had already done a lot of help-seeking. This could indicate that the women who sought help were in a more severe abuse situation.

In fact, of the 146 women who had experienced at least one severe incident in the previous year and were followed-up, 23 of the 36 women (64%) who sought help from a counselor had experienced a permanent or life-threatening injury or been threatened or attacked with a weapon, compared to 57 of the 110 women (52%) who had not sought help. In addition, 44 of the 57 women (77%) who had sought a counselor's help said that they thought their life might be in danger, compared to 122 of the 265 women (46%) who had not (Chi square $p < .0001$; Gamma = .597, $p < .0001$), they were more likely to have sought medical help (27% versus 12%), and they were more likely to have contacted the police (32% versus 21%). Thus, those severely abused women who had sought a counselor's help in the past year had two high-risk characteristics - the violence in the past year tended to be even more severe than other severely-abused women, and they were making active efforts to obtain formal interventions to stop the violence. This could very well explain the continuation of the violence on follow-up.

Medical and Health Care. There was no association between seeking medical care in the past year and the continuation of violence on follow-up, regardless of how severely the women had been abused in the past. This was true for CWHRS women as a whole and for each racial/ethnic group.

For the 171 women who did experience one or more follow-up incident, however, the 51 who had sought medical help after an incident in the past year were significantly (Chi square = .028; Gamma = .363, $p = .024$) more likely to experience a severe follow-up incident (67%), compared to the 120 women who had not sought health care (48%). This was only true, however, for the 76 women who had experienced a severe incident in the previous year, not for the 95 who had not. For these 76 women, the 37 who had sought health care were more likely to experience a severe incident on follow-up (73%) than the 39 who had not (51%) (Chi square $p = .052$; Gamma = .439, $p = .045$).

However, the 37 women who had experienced a severe incident and who had sought health care after an incident in the past year were significantly (Chi square $p = .005$; Gamma = .655, $p = .002$) to have said at the initial interview that they thought their live was in danger (86%) compared to the 39 who had not (56%). If we control for whether or not the woman said at the initial interview that her life was in danger, there is no association between having sought medical care in the past year and experiencing a severe follow-up incident.

Criminal Justice System. Whether or not a woman would experience a follow-up incident was significantly (Chi square $p = .038$; Gamma = .239, $p = .036$) associated with whether she had contacted the police in the year before the initial interview (61% versus 49%). This was true for each racial/ethnic group. Also, the association was significant (Chi square $p = .028$; Gamma = .358, $p = .025$) only for the 143 women who had experienced at least one severe incident in the past year. Of the 78 who had contacted the police (or someone else had contacted the police), 62% experienced a follow-up incident, compared to 43% of the 65 who had not. However, for the 171 women who experienced

at least one follow-up incident, there was no difference between those who had contacted the police versus those who had not in the likelihood that a follow-up incident would be severe.

The association between contacting the police and an increased likelihood of a follow-up incident may be interpreted in the same way as the association between seeking help from a counselor or agency and future violence. In general, women tended to contact the police only when they had experienced very severe violence. Like contacting a counselor or agency, contacting the police may represent an active effort on the woman's part to stop the violence, possibly to end the relationship. This combination of severe violence plus efforts to obtain formal interventions to stop the violence may be related to the continuation of severe violence in the future.

Combinations of Risk and Supportive Factors

Using the same methods we used for the exploratory multiple regression analysis of combination of risk factors on the severity of past abuse, described above, we looked at combinations of risk and supportive factors as they relate to the continuation of violence in the future. Specifically, we looked at the combined relationship of risk factors and supportive factors on a three-level variable measuring the severity of violence on follow-up: no incidents on follow-up; incidents on follow-up but none as severe as being beaten up, choked, seriously injured, or attacked or threatened with a weapon; and at least one follow-up incident of being beaten up, choked or worse. Because not all of the 497 women interviewed as AW were followed-up, the number of cases in this exploratory analysis was sometimes very small.

There were a few changes in the risk and supportive factors we looked at in the multiple regressions for the continuation of severe violence. First, we looked at the association of risk and supportive factors in the past year with severe violence in the follow-up period. Second, to the list of factors explored in the exploratory regressions for the severity of past violence, we added the number of types of help-seeking activities in the past year. Third, we added to the mix the three summaries of violence in the past year: the number of incidents, the greatest severity of any incident, and recency (the number of days prior to the initial interview when the most recent incident had occurred). Fourth, we began each analysis by checking to see if at the combination of factors that had been a good model for the severity of past violence would also be a good model for future violence. In most cases, it was not. We then added all the other possible factors to find the best model.

Total CWHRS Sample. For all CWHRS women who were followed-up, the best multiple regression model for severe violence in the future contained five factors in four steps: 1) the number of incidents (recoded to four categories) and the recency of incidents in the past year; 2) the Power and Control scale; 3) whether she had left or tried to end the relationship in the past year; and 4) whether she had sought help from an agency or counselor in the past year. This combination was a fairly good model ($R = .336$, $R^2 = .113$). Both the number of incidents (Beta = .151, $p = .020$) and the number of days since the most recent incident (Beta = -.127, $p = .036$) were strong factors in this model, as was Name's controlling behavior was a strong factor (Beta = .136, $p = .019$). Women

who had *not* left Name or tried to end the relationship in the last year were significantly more likely (Beta = -.125, p = .028) to experience severe violence in the future, and women who had sought help from an agency or counselor were significantly more likely (Beta = .122, p = .025) to experience severe future violence, when these factors were combined with the number and recency of past incidents and Name's controlling behavior.

African/American/Black Women. The best multiple regression model for severe violence on follow-up for African/American/Black women was even stronger (R = .377, R^2 = .142), and contained several help-seeking variables as well as other factors. The best model had six factors in four steps: 1) the number of incidents in the past year (recoded to four categories); 2) the number of her children (birth, adopted or foster); 3) whether she had left or tried to end the relationship in the past year; and 4) whether she had talked to anyone, contacted an agency or counselor, or contacted the police after any incident in the past year.

As for the total sample of women, the number of incidents was very important (Beta = .178, p = .009), but recency was not. However, neither HARASS nor the Power and Control scale score was a significant factor. Although African/American/Black women with more children were more likely to have experienced severe violence in the previous year, they were less likely to experience severe violence in the follow-up period (Beta = -.148, p = .046). Like the best model for all CWHRS women, *not* having left or tried to end relationship was an important risk factor (Beta = -.136, p = .046). Finally, three types of help-seeking were important factors in this model. If a woman had *not* talked to anyone in the past year about the violence, she was more likely to experience a severe incident in the future (Beta = -.178, p = .012). On the other hand, women who *had* contacted an agency or counselor were more likely to experience a severe follow-up incident (Beta = .197, p = .004), as were women who had contacted the police (or someone else did) in the past year (Beta = .141, p = .049).

Latina/Hispanic Women. For the Latina/Hispanic women, the best model was very similar to the two other models, but much stronger (R = .536, R^2 = .287). It contained three factors in three steps: 1) recency of the most recent incident, 2) Name's controlling behavior, and 3) whether she had left or tried to end the relationship in the past year. Recency was a very strong factor for the Latina/Hispanic women (Beta = -.382, p < .0001), as was the score on the Power and Control scale (Beta = .433, p < .0001). Not having left or tried to leave the relationship was of borderline significance (Beta = -.205, p = .073), but important to the model. None of the types of help-seeking was important in the multiple regression model for Latina/Hispanic women. For Latina/Hispanic women, then, the likelihood of severe violence in the future was higher when the last incident had occurred recently, Name's controlling behavior was severe, and she had *not* left or tried to end the relationship in the past year.

White or Other Women. We tried an exploratory analysis for the 26 white or other women, but their high school education was so important in this small group that the possible effect of any other factor could not be determined. Of the 17 white or other women with a high school education, only three (18%) experienced a follow-up incident,

compared to 78% of the nine others. None of those with a high school education were beaten up or worse on follow-up, but five of women without a high school education were beaten up or worse.

Pregnant Women. The best model for the women who were pregnant at the initial interview or who had been pregnant in the previous year was fairly strong (R = .414, R^2 = .171), and contained only three factors in three steps: 1) the number of incidents in the past year (recoded), 2) score on the Power and Control scale, and 3) whether the woman had left or tried to end the relationship in the past year. The number of incidents was a very strong factor (Beta = .286, p = .009), though the number of days since the last incident was not significant in the best model for pregnant women. Name's controlling behavior was also a strong factor (Beta = .225, p = .041), and *not* having left or tried to end the relationship was important to the model though of borderline significance (Beta = -205, p = .054). None of the types of help-seeking was important in the multiple regression model for pregnant women. Pregnant women who had experienced more incidents in the past year, where Name was very controlling, and who had *not* tried to leave or end the relationship were significantly more likely to experience severe violence in the future.

Same-Sex Relationship. Because of the small number of cases, models for women in a same-sex abusive relationship could not be tested. Of the 18 women being abused by a same-sex partner at the initial interview, only ten were followed-up, and that was not enough for even a tentative analysis.

Summary: Risk Factors for Future Violence

This section examined whether or not the violence continued in the follow-up period, and if the violence continued, how severe the incidents were. The analysis considered each risk factor and protective factor, as well as the effect of help-seeking and interventions that happened in the past year. In addition, the recency, severity and frequency of the violence in the past year was analyzed as a risk factor for violence in the follow-up period. An exploratory multiple regression analysis then looked at the effect of all of these factors in combination.

The analysis of follow-up incidents presented in this section was highly summaritive, focusing only on whether the violence continued and whether the continued incidents were very severe or life-threatening. In addition, the analysis did not differentiate between incidents done by the partner originally identified in the initial interview, and those done by a new or additional intimate partner. This kind of detailed analysis will rest on a foundation of the descriptive, summary findings in this section.

In general, the woman's characteristics, such as demographic characteristics, marital status, whether she was homeless, or her physical or mental health, were less important risk factors for violence in the future than for violence in the previous year. Instead, aspects of the violence itself, especially the recency of the violence, were central, as well as the extent to which Name had exhibited controlling or harassing behavior towards her, and whether the woman had not left or tried to end the relationship in past year.

A key finding for clinical practice was the importance of one question in predicting a woman's risk of experiencing intimate partner violence in the follow-up period: "how

long ago did the last incident happen?" The most recent 30 days were an especially critical period, with almost two-thirds (63%) of the women who had experienced violence within the past month experiencing an incident on follow-up. Women who had experienced a violent incident within the last six months (180 days) were also at high risk (60%). In addition, the number of days since the last incident was a significant factor in multiple regression models of future severe violence, for the total sample of CWHRS women, and for Latina/Hispanic women.

This finding suggests three lines of inquiry for further analysis. First, we should look in more detail at the help-seeking and intervention needs of women who had experienced recent violence. Second, we should look in more detail at the help-seeking and intervention experiences of those women who were successful in ending the violence against her. Third, we should look at the experiences of those women who had not experienced violence for over six months, yet who did experience continued violence in the future.

A second key finding concerned the effect of pregnancy on intimate partner violence. Even though pregnancy may have been a protective factor while the woman was pregnant, the risk for severe violence increased after pregnancy. The 85 women who had been pregnant at the initial interview or in the previous year were more likely to be abused at follow-up, and more likely to experience at least one severe incident on follow-up.

A third key finding concerned an apparent paradox in the CWHRS data. Some of the results seemed to indicate that women who were trying to end or leave the relationship were at higher risk, but other results seem to indicate that these women were at lower risk. For example, women in an "ex" or former relationship were *more* likely to have experienced severe violence in the past year, *less* likely to continue to experience violence in the future, but any future violence was *more* likely to be severe. Similarly, women who had been living with Name the entire year were more likely to continue to experience violence in the follow-up period, but less likely to experience severe violence. Women who had asked Name to leave or stay away had a lower risk of experiencing a follow-up incident, but if they did, they were at greater risk of severe violence.

Leaving or trying to end the relationship had a high potential gain for the woman, but it also had a high potential risk. In some cases, the woman stopped the violence by leaving or ending the relationship. In other cases, the violence did not stop when she left or tried to leave, and in those cases it often became more severe. Women who had experienced severe violence were more likely to have left or tried to end the relationship in the past year, and to have sought formal interventions in order to end the violence. However, those women who tried to end the relationship but failed, for example women who asked Name to leave but Name refused, were at high risk for future violence.

This same reasoning may help to explain another apparent paradox in the data - that those severely-abused women who sought help in the past year were more likely to experience severe violence in the follow-up period. Women who had experienced severe violence in the past year and who were making active efforts to obtain formal interventions to stop the violence, such as seeking help from a counselor or agency or contacting

the police, were at higher risk for continued violence in the follow-up period.

What were some of the conditions under which leaving the relationship seemed to be a protective factor? Women in relationships that were short-term (a year or less), more independent (had never lived together), and less committed (no children, not married) seemed to find it easier to get out of the relationship, even if there was severe violence.

The following lists point out the key findings of this analysis. When a characteristic is not mentioned, that characteristic was not related to the continuation of abuse or to continued severe violence. Factors that were significant in the exploratory multiple regression analysis are starred (*). When a factor was important for only a specific group or groups, those groups are noted in parentheses. If there is no specific group noted, then the factor was important for everyone. All of the risk factors and protective factors were measured in the past year.

I. Risk factors for continuation of any violence or threat of violence

Violence in the past year:

-- most recent incident happened within six months of the initial interview*

-- five or more incidents in the past year*

Name's controlling behavior and harassment:

-- high Power and Control scale score*

-- an intimate partner had tried to limit her contact with family or friends

-- Name was "violently and constantly jealous"

-- HARASS scale score over 10 (African/American/Black women)

-- an intimate partner had followed her in the past year

Demographic and relationship characteristics:

-- commonlaw relationship with Name (Latina/Hispanic women)

-- not in an ex- or former relationship with Name

-- relationship with Name had lasted two years (25 to 26 months)

Children:

-- mother of more children (African/American/Black)*

Estrangement and ending the relationship:

-- had been living with Name the entire year before the initial interview

-- she had *not* left or tried to end the relationship in the past year (women who had not experienced a severe incident)*

-- had asked Name to leave, and Name had refused

-- Name threatened to kill her if she left or refused to return

Woman's physical and mental health:

-- pregnant at the initial interview or the year before (borderline significance)

-- high score on the Depressed Feelings II scale

-- PTSD diagnosis (African/American/Black women)

Social Support and Material Resources:

-- low Social Support Network scale score (African/American/Black women)

-- no one she can "talk to about anything" (African/American/Black women)

-- no one who supports her "decisions no matter what they are"
-- no high school degree (white or other women)
-- no personal income that she controls

Help-seeking activities and interventions:

-- had *not* talked to anyone about the incidents (African/American/Black)*
-- severe violence in past year combined with active help-seeking (seeking help from a counselor or agency or contacting the police)*

II. Factors supporting the cessation of violence

-- only one incident in the previous year
-- the most recent violent incident had happened over six months previously
-- scored zero or one on the Power and Control scale
-- scored zero on the HARASS scale (African/American/Black women)
-- ex- or former relationship with Name
-- had been in the relationship with Name for 12 months or less
-- had someone she could "talk to openly about anything"
-- had someone who "supports my decisions no matter what they are"
-- high school education (white or other women)
-- had some personal income that she controlled

III. Risk factors for severe violence incidents in the future

Name's controlling behavior and harassment:

-- Power and Control scale score of two or higher*
-- Name "violently and constantly jealous" (if previous violence had been severe)
-- an intimate partner had followed her in the past year

Demographic and relationship characteristics:

-- single (African/American/Black women, white or other women)

Estrangement and ending the relationship:

-- had lived with Name, but were living apart at the initial interview
-- Name threatened to kill her if she left or refused to return

Social support and material resources:

-- no high school diploma (African/American/Black, white or other women)
-- less than $5,000 household income

Help-seeking activities and interventions:

-- severe violence combined with seeking medical help in the past year

HOMICIDE FINDINGS

The focus of the Chicago Women's Health Risk Study was to examine risk factors that would place a physically abused woman or her partner in immediate danger of death or life-threatening injury. The design of the CWHRS was based on a comparison of abused women with and without a lethal outcome, taking into account the interaction of numerous events, circumstances and intervention attempts occurring over a year. For example, the CWHRS addressed situations in which interventions were tried, but in

which the woman or her partner were still killed.

The CWHRS was primarily concerned with situations in which a woman was being physically abused by her intimate partner, whatever the lethal outcome. Whether the woman become a homicide victim or a homicide offender, neither outcome was good. However, little was known about risk patterns in situations in which the woman becomes the offender. Is it true, as previous research (Browne, 1986; Dobash, *et al.*, 1992; Wilson & Daly, 1992) has suggested, that the death of the partner is usually an outcome of physical abuse against a woman? By including in the study all of the Chicago cases of fatal intimate partner violence in which a woman was either the homicide victim or the homicide offender, the CWHRS was designed to answer this question.

In addition, the CWHRS was concerned with whether or not the risk factors for situations in which the woman became the homicide offender differed from the risk factors for situations in which the woman became the homicide victim. For example, some research had suggested that barriers to the use of support services for domestic violence are an important risk factor for women killing an abusive partner (Browne, 1986; Browne & Williams, 1989). In order to build effective intervention strategies for both kinds of situation, it is important to know if the women homicide offenders and the women homicide victims had different characteristics and needs.

In 1995 and 1996, 87 intimate partner homicides involving at least one woman aged 18 or older occurred in Chicago. (The CWHRS was not designed to include man-man intimate partner homicides.) In 57 of the 87, a woman was killed by her man partner, in two, a woman was killed by her woman partner, and in 28, a woman killed her man partner (Exhibit 95). The CWHRS gathered questionnaire information in 76 of these cases and information from official records on all of the 87 homicides. As detailed in the "Proxy Case Completion" section above, there was no systematic bias in the cases completed versus not completed.

Exhibit 95
CWHRS Homicide Sample

Information Gathered	Woman Victim	Woman Offender	Woman Victim and Offender	Total Sample
Official record data only	8	2	1	11
Questionnaire data	49	26	1	76
Total	57	28	2	87

The analysis presented in this section includes all the information available for the question at hand. In analyses for which information is available for all 87 cases in the homicide sample, for example, the weapon used in the homicide or basic demographic information on victim and offender, the number of cases in the analysis was 87. Most of

the analysis, however, was based only on the 76 cases for which we were able to gather questionnaire information as well as official record data.

The "Homicide Findings" begin with an overview of the characteristics of the fatal incidents, including the circumstances surrounding the incident, the place, the weapon or weapons, drug or alcohol use, the availability of medical help, whether the offender committed suicide, and the prior history of violence or controlling behavior against the woman (woman victim or woman offender). The second section describes the characteristics of the women in the homicide sample, compared to the characteristics of the women in the clinic/hospital sample. The third section presents the analysis that determined whether characteristics of the two same-sex homicides were similar enough to the other women-victim homicides that they could be combined for analysis, and whether the woman-offender homicides and the women-victim homicides should be analyzed separately.

The final section addresses one of the key questions posed by the CWHRS: the comparison of women who have been physically abused by an intimate partner in the past year (the clinic/hospital women who interviewed as AW), and women who were also physically abused by an intimate partner, and who became a homicide victim or offender. In order to conduct this nonlethal-versus-lethal comparison, it was necessary to limit the homicide women to those who had experienced violence at the hands of their intimate partner in the past year.

Characteristics of the Fatal Incident

Though a homicide often represents the culmination of a long process of events occurring between victim and offender (Block & Christokos, 1995), it is defined as a homicide by the final incident. This fatal incident can be compared to and contrasted with the 4,974 incidents reported at the initial interview by the clinic/hospital women. In 76 of the 87 homicide cases, interviews provided information about the events that had occurred just before the final incident, and in a few of the other eleven cases, this information was available from official records. Usually, however, there was little official record information in the cases for which we were unable to obtain an interview.

Circumstances Immediately Preceding the Final Incident

In 83 of the 87 cases, we had information about the "causative factor," a code used by the Chicago Police Department to summarize the motive, the type of altercation and the general circumstances surrounding the homicide. Of the 83 homicides, 26 (31%) involved jealousy or infidelity, 22 (27%) involved the termination or attempted termination of the relationship (including forced entry by a rejected partner), 19 (23%) were "general domestic" altercations, five (6%) were altercations about drugs, ten (12%) were altercations about other things (usually money or sex), and one was caused by the offender's "mental illness."

In the 76 cases with interviews, however, we have more detailed information about the situation and circumstances immediately preceding the homicide. This section combines both official record and interview data to examine the interaction between the offender and the victim (if any), whether there was evidence of intent to kill, extreme jealousy, or lack of compliance with a demand just before the homicide, and whether one

partner was had left, tried to leave, or announced an intention of leaving or ending the relationship just before the fatal incident.

Victim/Offender Interaction. In 73 cases, we know something about the interaction of the couple just prior to the homicide. In 35 cases (all of them heterosexual), some type of violent physical interaction immediately preceded the homicide. In addition to these 35, four other homicides were immediately preceded by a threat to kill. Interviews indicated that the man had initiated the violence in 30 of the 35 cases, but 16 of these were mutually violent altercations.

In two cases, both the homicide victim and offender were wounded in the violence that had preceded the final attack. The preceding violence involved pushing or slapping (eight cases); punching, kicking or hitting (five cases); striking with an object (seven cases); severe beating or being choked to unconsciousness (nine cases); and rape (four cases). Many of the violent episodes contained combinations of attack types. For example, one woman who was finally choked to death had been clubbed with a hammer and strangled with a cord beforehand.

In another 34 of the 73 cases, the couple had been arguing, but the argument was not physical. For example, one couple was visiting friends and the woman wanted to leave, but the man was too drunk. In four of these 34, there was a threat to kill. In the one same-sex homicide, the partners had been arguing just before the final incident.

In four of the 73 cases, all of which involved a man killing a woman, there was little or no interaction immediately prior to the fatal blow. In all four, the man specifically pursued her, apparently with the intention of killing her, and shot her when he found her. Two women were killed in their safe place. One was killed in the home she shared with the offender, when he was unexpectedly released from jail, entered their home and shot her while she was on the phone. One was tracked down on the street, pushed into an alley and shot. In two of the four, the man committed suicide after killing her. One man had written a suicide note to his family, then went to where she was staying, talked his way in, and shot her. In two cases, the woman had left or tried to leave the relationship, in a third, the man was extremely jealous of her, and the fourth woman was a potential witness against the offender in a murder case.

Intent to Kill. In 60 cases, we have interview information about the homicide offender's intention to kill. Interviews indicated that the offender intended to kill the victim in 35 (58%) of the 60 cases, including 66% of the 47 woman-victim cases. In four (31%) of the 13 woman-offender cases for which we had information, the proxy respondent said that there was intent to kill. However, all four of the women offenders who answered the question themselves said that they had not intended to kill.

Compliance with a Demand. Another common occurrence immediately preceding the homicide was a demand from one partner for something (such as money, sex or drugs) from the other. According to interview information, in six of the 49 man-offender homicides, the man was demanding something of the woman, and in three, the woman was demanding something of the man. In three of the 26 women-offender homicides, the man was demanding something of the woman, and in two, the woman was demanding something of the man.

Jealousy or Suspected Infidelity. In a review of studies of wife-killing across many societies, Margo Wilson and Martin Daly (1993:279) found that, "The majority of cases in every well-described sample were precipitated by suspected or actual female infidelity and/or by the woman's decision to leave the marriage." In the CWHRS, the immediate motive for the homicide incident involved sexual jealousy or suspected infidelity in 27 (33%) of the 81 cases where there was information, 19 of 54 woman-victim cases (35%) and eight of 27 woman-offender cases (30%). One of the 19 woman-victim cases in which jealousy was a motive was the one same-sex homicide for which we have information. The man was jealous of the woman in 14 woman-victim cases and four woman-offender cases. The woman was jealous of the man in four woman-victim cases and four woman-offender cases.

The 27 cases include only those in which jealousy was clearly an important motive in the homicide incident itself. In one case, for example, a man who had been dating a woman for several weeks saw her in a bar with another man, walked in, and shot her. In the interviews, however, the CWHRS also gathered information about whether or not the woman's partner had been "violently and constantly jealous" in the year before the homicide, and whether the partner "was jealous and didn't want her to talk to" another man (or woman). In some cases in which jealousy was a motive in the homicide, there was information that the partner had been jealous in the previous year, but in other cases this risk factor was not present.

The partner's jealousy was a common experience for most homicide women, as well as most abused clinic/hospital women. Of the 73 homicide cases with information, the woman's partner had been jealous in the previous year in 60 (82%), somewhat higher than the 74% of the 235 clinic/hospital women who had experienced a severe incident and much higher than the 252 clinic/hospital women who had not (49%). Further, of the 60 homicide women whose partner was jealous in the past year, jealousy was an immediate precipitating motive in the homicide incident for 18 (30%), compared to three of the 16 (19%) homicide women whose partner was not known to have been jealous. For these three women, the people interviewed had no information that the partner had been jealous in the previous year, even though extreme jealousy was a motive for the fatal incident.

Leaving or Trying to End the Relationship. Ending or trying to end the relationship was a common theme in the 87 homicides as well as in the histories of the 497 women who interviewed as AW. Some of the homicide women who tried to leave were pursued and killed in their "safe place," their work place, or on the street.

In addition to information on leaving as an immediate precipitating factor of the fatal incident, the CWHRS has information on leaving or attempts to leave in the past year. Both or either of these could have happened. The homicide might have followed immediately or shortly after the woman told her partner that she was leaving. Alternatively, the woman could have already left or tried to leave the relationship, and in the fatal incident, the partner tried to force her to return or punish her for leaving. In combination with these aspects of the incident itself, the women might have left or tried to leave the relationship one or more times in the year prior to the homicide.

Exhibit 96 presents the available information on leaving the relationship as a factor in the fatal incident. Of the 59 homicides of a woman victim, we have information about leaving as an issue in the fatal incident in 52 (48 interviewed cases and five non-interviewed cases). In 12 of the 52 (23%), the woman was leaving or trying to leave during or just before the fatal incident. In nine incidents (17%), the woman had already left and the partner was trying to renew the relationship.

Exhibit 96
Leaving or Trying to Leave
as an Immediate Precipitating Factor in the Fatal Incident*

During or just before fatal incident:	Woman Victim**	Woman Offender
Woman left or tried to leave	23.1%	4.3
Partner trying to get her to return	17.3	8.7
Partner left or tried to leave	0.0	13.0
No one left or tried to leave	61.5	73.9
Total	100.0% (52)	100.0% (23)

*Based on the 75 cases with information from official record or interview data.
**The two same-sex cases are included in the "Woman Victim" column.

Of the 28 homicides of a man victim, we have information about leaving as an issue in the fatal incident in 23 (23 interviewed and neither of the non-interviewed). In one of the 23 (4%), the woman was leaving or trying to leave during or just before the fatal incident. In three (13%), the man was trying to leave the relationship. In two (9%), the woman had already left and the man was trying to renew the relationship.

In 18 of the 83 homicides about which we have information (22%), a precipitating issue was the presence of one of the intimate partners at the premises. In these cases, the couple had been interacting in a home, and then one had asked the other to leave. In 15, six woman-offender and nine woman-victim homicides, the woman had asked the man to leave the premises. In three, one woman-offender and two woman-victim homicides, the man had asked the woman to leave the premises. In 13 of the 15 cases in which the woman was asking the man to leave, he had invaded her home or other safe place, and in three of these he had violated an order of protection in order to do so. The man had invaded her "place" in two other cases that did not involve "premises," one case in which he had forced his way into a car where she was sitting, and another case in which a homeless woman's ex-boyfriend attacked her while she was sleeping in her usual spot in the park.

For 70 of the 76 interviewed cases, we have information about whether or not the woman had left, tried to leave, or tried to end the relationship in the previous year, or had

asked her partner to leave. In many cases, this had happened more than once. Exhibit 97 shows the answer to the question, "During the past year, did she leave or stay apart from (the partner) or ask (the partner) to leave or stay apart from her?" The 46 women victims were similar to the 494 abused clinic/hospital women, in the percent who had left, tried to leave, or asked their partner to leave. However, more of them had asked the partner to leave. In contrast, the 24 women offenders were less likely to have left, tried to leave or asked their partner to leave (58%), compared to AW women (76%) or women victims (74%).

Exhibit 97
Leaving or Trying to End the Relationship in the Past Year*

In the past year:	CWHRS Women		Homicide Women	
	NAW	AW	Victim**	Offender
Woman left or stayed away	19.0%	51.2%	37.0%	25.0%
Asked partner to leave or stay away	3.4	10.3	28.3	29.2
Asked, but partner refused	2.4	14.0	8.7	4.2
No one left or tried to leave	75.1	24.5	26.1	41.7
Total	100.0% (205)	100.0% (494)	100.1% (46)	100.0% (24)

*Based on the 70 interviewed cases with information.
**The same-sex case is included in the "Woman Victim" column.

Many partners of CWHRS homicide women used a threat to kill to dissuade the woman from leaving. As Wilson and Daly point out (1993: 281), "A credible threat of violent death can very effectively control people." This was true for 34% of the 37 women homicide victims who had been abused in the past year and for 53% of the 22 women homicide offenders who had been abused in the past year, compared to 38% of the 494 clinic/hospital women who interviewed as AW. Fifteen of the 16 women victims (94%) and eight of the ten women offenders who had received such a threat in the past year actually left, tried to leave or asked the partner to leave in the year before the homicide incident.

Multiple Victims or Multiple Offenders

Research has found that intimate partner homicides are less likely than other homicides to have multiple offenders, though it does occasionally occur (Block & Christakos, 1994). When it does occur, it often involves a contract killing, or a woman offender otherwise eliciting the assistance of another person, such as her current boyfriend, to kill a former intimate partner. However, in the two years of the CWHRS lethal data, there was no case with multiple offenders.

There were multiple victims in four of the 87 cases. In each of the four, a man killed a woman intimate partner and one other person, the victim's child in two cases, a

niece in one case, and a possible sexual rival in one case. An ex-boyfriend killed his ex-girlfriend and her new boyfriend, saying, "If I can't have her, no one can." A boyfriend killed his girlfriend and her seven-year-old daughter, then fled the country. A woman was shot when she was six months pregnant; the baby was surgically delivered and died the next day of prematurity. A man suffering from severe mental illness killed his wife and teen-age niece and then himself. The proportion of "familicides" is lower in the CWHRS than in Houston, Texas (Brewer & Paulsen, 1999) or Hamilton, Ontario (Martin, *et al.*, 1997; Wilson, *et al.*, 1995).

In addition, in some incidents, another person was seriously injured. In one case, a man stabbed both his girlfriend to death and then attacked her 13-year-old daughter in order to keep her from calling the police. He left both for dead. In another incident, when a man who had been dating a woman saw her in a bar with someone else and shot her as she sat in the bar, another bar patron was wounded.

Place of the Fatal Incident

Though most of the homicides took place in the common home of the victim and offender (52%) or the home of the victim (22%), there was a difference in the homicides with a woman victim or a woman offender (Exhibit 98). Women victims were more likely to be killed in the offender's home (15%) than were the men victims (4%). Women were also more likely to be followed or tracked down somewhere and killed. Two women were killed in their safe place, one in her work place and one in a tavern (she had not gone to the tavern with the offender), and four women versus one man were killed on the street.

Exhibit 98
Location of the Homicide by the Victim's Gender

	Victim		
Location of Homicide Incident	Woman	Man	Total
Victim and offender's home	29	16	45
Victim's home	10	9	19
Victim's safe place	2	0	2
Victim's work place	1	0	1
Offender's home	9	1	10
Tavern	1	0	1
On the street	4	1	5
Park or EL station	1	1	2
Total	59	28	87

Weapon Use in the Fatal Incident

The most frequent weapon in the 87 CWHRS homicides was a knife or sharp instrument (Exhibit 99), but the weapon differed when the offender was a woman or a

man. Women offenders were much more likely to use a knife or sharp instrument (79%) than men offenders (37%), and men offenders were more likely to use a gun. Men used a firearm in 23 (40%) of the 57 cases, compared to five (17%) of the 30 women. The five women who used a firearm all used a handgun.

Exhibit 99
Murder Weapon by Gender of Homicide Offender

Type of Weapon	Offender		
	Man	Woman*	Total
Semi-automatic handgun	8	0	8
Other handgun	12	5	17
Nonautomatic rifle	1	0	1
Shotgun	2	0	2
Knife or sharp instrument	16	22	38
Club or blunt instrument	5	1	6
Car	0	1	1
Smothered	1	1	2
Strangled**	10	0	10
Beaten up with hands, feet, fists	2	0	2
Total	57	30	87

Source: Chicago Police Department, Murder Analysis Reports.

*The two same-sex cases are included in this table under "woman offender."

**This includes strangulation with the hands only, and strangulation with a weapon, such as a hair dryer cord.

The weapon given in Exhibit 99, above, for each case is the weapon that struck the fatal blow. There were commonly multiple weapons in the incident. In some cases, one partner had used a weapon on the other, but the first partner was then killed with another weapon. For example, when one man hit a woman with a garbage can cover, she became scared, grabbed a knife and stabbed him. A woman hit a man with "an object," and he shot her. A man chased a woman around with a shovel handle, she ran into another room, got a gun, and shot him. There were other cases in which there were multiple weapons available, but only one was used in the incident. One man, a drug dealer, had a loaded 45 automatic and an antique rifle, but killed his girlfriend with an antique sword and a showcase knife.

Although we did not have complete forensic data on the CWHRS homicides, the available information did support the common finding that intimate partner homicides often involve "overkill," that is, much more violence than was probably necessary to kill the person. One woman, who had left the offender and was living with a cousin, was

tracked down by the offender, who was let into the apartment by the cousin and then waited until the woman returned. He then shot her twelve times before shooting himself. In another case, a woman had asked her husband for a divorce. He beat her with a hammer, strangled her until she passed out, then got a cord and strangled her again to ensure death. The children were there at the time.

In ten of the 57 (17.5%) incidents in which a man killed a women, he strangled her. In contrast, only 74 (1.5%) of the 4,689 incidents reported by the clinic/hospital women at the initial interview, and about which we have information, involved choking. However, by definition, when a woman was choked or grabbed around the neck, the CWHRS categorized the incident as "severe." Of the 311 severe incidents for which we have information, the woman was choked in 74 (24%). These non-fatal choking incidents occurred to 59 of the 373 women for whom we have information (16%), but in addition, 274 of the responding 490 women (56%) said that Name had "ever" tried to choke her. One difference between the non-fatal and the fatal choking incidents was that none of the women in the non-fatal incidents was choked or strangled with any instrument, such as a cord or piece of clothing.[23] Of the ten women strangled to death, some kind of instrument was used in half (two electrical cords, one telephone cord, a belt and a braided cord).

The weapons used or threatened in the 4,974 non-fatal incidents that occurred to the 493 abused clinic/hospital women who completed a calendar history are most closely comparable to the weapon in the 59 homicide incidents with a woman victim. A firearm was threatened or used in 64 of the 4,944 non-fatal incidents about which we had information on weapon type, and a knife was threatened or used in 42 incidents (see "Characteristics of Violent Incidents" section, above). Adding the 59 woman-victim homicide incidents to the 4,944 non-fatal incidents, there were a total of 5,003 fatal and non-fatal incidents of intimate partner violence or violent threat. Of these, a firearm was threatened or used in 87 (64 non-fatal plus 23 fatal), a knife was threatened or used in 58 (42 non-fatal plus 16 fatal), another weapon was threatened or used in 48 (42 non-fatal and six fatal), and no weapon was threatened or used in 4,810 (4,796 non-fatal plus 14 fatal). Of the 87 firearm incidents, 23 were fatal (26%). Of the 58 knife incidents, 16 were fatal (28%). Of the 48 incidents with another weapon, six were fatal (12%). Of the 4,810 incidents with no weapon, 14 were fatal (0.3%). Thus, the fatality rate for firearm incidents and knife incidents was much higher than for incidents with another type of weapon or with no weapon.

Firearm in the Home

CWHRS clinic/hospital women were very unlikely to have a firearm in their home. Only 51 (8%) of the 639 clinic/hospital women who had a home said that there was a firearm in their home, including 12% of the women who had experienced at least one severe incident, 4% of the women who had experienced other types of violence, and 1% of the women who interviewed as NAW. This section presents comparable figures for the homicide women.

In general, homicide women were more likely than abused clinic/hospital women to have a firearm in their home. Of the 76 interviewed cases, we had information on 68 (46 women victims and 22 women offenders), of whom 17 (25%) had a firearm in her

home (23% of the victims and 30% of the offenders). This was much higher than the 12% for the clinic/hospital women who had experienced a severe incident, or the 4% for the clinic/hospital women who had experienced other violence. However, this total figure is misleading. It was true only for homicide women who were living with their partner at the time of the fatal incident. Homicide women living separately from their partner were very unlikely to have a firearm in their home (Exhibit 100).

Exhibit 100
Firearm in the Household: Homicide Women Victims and Offenders*

Is there a gun in the house?	Women Victims			Women Offenders		
	Woman's Home	Partner's Home	Home of Both	Woman's home	Partner's Home	Home of Both
No, no firearm	100.0%	33.3%	56.0%	(5)	(2)	68.8%
Yes, any firearm	.0%	66.7%	44.0%	(1)	(4)	31.2%
Yes, a handgun	.0%	53.3%	32.0%	(1)	(3)	25.0%
Yes, a loaded handgun	.0%	26.7%	20.0%	(1)	(2)	25.0%
Total N	21	15	25	6	6	16

Source: 67 interviewed cases.

*The same-sex victim is included in the "women victims" column.

Of the 27 homicide women living separately from her partner, none of the 21 women homicide victims and only one of the six women offenders had a firearm in her home (4% of all 27 women). This percent was slightly less than the percent for CWHRS women as a whole (8%) or the 7% for the 258 abused clinic/hospital women who were not living with Name at the initial interview. Despite having no firearm in her home, however, ten of the 21 women victims were killed with a firearm, two in her home or just outside it and eight elsewhere. In addition, the single one of the six women offenders who had a firearm in her home killed her partner with a firearm. However, the murder took place in his home.

In contrast, the 41 homicide women who lived with their partner were much more likely to have a firearm in that joint household, compared to the 27 women living separately. Eleven of the 25 women victim couples (44%) and five of the 16 woman offender couples (31%) had a gun in the home. By comparison, only 9% of the 175 abused clinic/hospital women who were living with Name at the initial interview had a firearm in their joint home. Further, a firearm was the homicide weapon for 11 of the 16 women (68%) who were living with their partner and there was a firearm in the home, all but one of whom were killed in their home. In contrast, a firearm was the weapon for only one of the 25 women where there was not a firearm in the home (4%), and that woman was killed at home.

In addition, for the 31 cases where the woman was living apart from her partner at

the time of the homicide, we have information about whether the partner had a firearm in his or her household in 21, 15 woman-victim cases and six woman-offender cases. In 11 of the 15 (73%) and four of the five, the partner had a firearm at home. Thus, there was a firearm in the separate home of 71% of the 21 partners about whom we have information. In nine of the 14 cases in which the partner had a firearm (64%), the murder weapon was a firearm, compared to none of the six other cases. In four of the nine cases, the murder took place in his home, two in her home and three somewhere else.

When there was any firearm in the home, at least one was usually a handgun and at least one was usually kept loaded. Of the 31 cases in which there was a firearm in someone's home (the woman's home, her partner's home, their shared home, or any combination), there was at least one handgun in 24 (77%), and there was a loaded handgun in 16 (52%).

Because the CWHRS did not have access to firearm trace information, we do not know whether or not the particular firearm in the home was connected in any direct way with the fatal incident. In some cases we do know, in fact, that any firearm kept at home was not the murder weapon, since the lethal weapon was not a firearm. Thus, the higher percent of homicide women who have a firearm in the household that they share with their partner does not necessarily indicate that the presence of a firearm increases the risk of being injured or killed at home with that particular gun. However, even though there is no way to know the exact mechanism, the presence of a firearm in the home could be considered a risk factor for death, in the sense that the homicide women were much more likely to have a firearm in their home than the clinic/hospital women.

In summary, homicide women were much more likely to have a firearm in their home than clinic/hospital women, but only when they shared the home with their partner. When homicide women did not live with their partner, they were less likely to have a firearm in the home than clinic/hospital women. When the couple did not share a home, the women's partner was very likely to have a firearm in the home.

Drug or Alcohol Use in the Incident

Studies of intimate homicide victims have found percents ranging from 9% to 50% of women victims had been drunk at the time of the incident, with rates for men victims usually higher. In North Carolina, Smith, *et al.* (1998) found that 9% of women victims versus 29% of men victims had blood alcohol levels over 200 mg at the time of death (a significant difference), and less than a third of the women versus just under 70% of the men had been drinking. Campbell (1992) found that 14% of women victims and 52% of men victims were intoxicated when killed, and a third of both the men and women homicide offenders were intoxicated. Dawson and Langen (1994) found that about half of all victims and offenders of spousal homicides had used alcohol.

In the CWHRS, there was information on alcohol or drug use in the incident for 41 of the 57 cases where a man killed a woman, 25 of the 28 cases where a woman killed a man, and one of the two same-sex cases. Of the cases with information, 13 of the 39 (33%) women victims and 15 of the 24 (62.5%) men victims were drunk when they were killed. Six women (15%) and 12 men (50%) were high on drugs when they were killed. Four women and eight men victims were both drunk and high on drugs. Of the offenders,

13 of the 25 (52%) women and 19 of the 37 (51%) men were drunk during the fatal incident. Ten women (40%) and 19 men (51%) were high on drugs, and six women (24%) and 12 men (32%) were both drunk and high. In the same-sex homicide, both victim and offender were drunk.

In ten of the 35 (29%) women-victim homicides for which we have information on both partners, both the victim and offender were drunk, and in six (17%) both were high on drugs. In nine of the 23 (39%) woman-offender homicides for which we have information on both partners, both the victim and offender were drunk, and in six (26%) both were high on drugs.

CWHRS homicides of a woman by a man tended to involve alcohol or drug use by the man much more often than the woman. In 10 of the 13 cases where the woman victim was drunk, the man offender was drunk as well; in all of the six cases where the woman was high on drugs, the man was high as well. In contrast, CWHRS homicides of a man by a woman tended to involve alcohol, drug use, or use of both substances by both partners.

Though there was a relationship between the use of alcohol or drugs in the incident and whether or not the person had "ever had a problem" with alcohol or drugs, this relationship was not perfect. In 29 of the 36 incidents (81%) in which the woman's partner was using alcohol and we had information, that partner had ever had an alcohol problem, and in all of the 30 incidents in which the partner was using drugs and we had information, the partner had ever had a drug problem. Further, in all but four of the 37 cases in which the partner had ever had an alcohol problem, and all but three of the 39 cases in which the partner had ever had a drug problem, the partner was using either alcohol or drugs or both in the homicide incident.

Research suggests that alcohol may be more likely to be involved in intimate homicide when the offender is a commonlaw spouse, rather than a husband. In Canadian homicide statistics (Johnson & Chisholm, 1989), alcohol was involved in 21% of murders of wives and 39% of murders of commonlaw spouses. This was confirmed by an examination of femicides in Ontario over 21 years (Dawson & Gartner, 1998), which found that legal unions were significantly less likely than commonlaw or dating relationships to have involved drinking or drug use at the time of the fatal incident (31% versus 61% and 54%, respectively). In addition, current versus estranged relationships were significantly more likely (47% versus 33%) to involve liquor or drug use.

Though the numbers are small, there is some support in the CWHRS homicide sample for the Canadian findings. Only eight of the women victims were the wife of the offender, and none of them was drunk or high or drugs at the time of the incident, compared to five of the 12 commonlaw wives (for two wives and three commonlaw wives, the proxy respondent did not know). On the other hand, three of the eight husband offenders were drunk or high on drugs during the incident, compared to 75% of the 12 commonlaw husband offenders. The only current versus estranged relationship for which there are enough cases to analyze in the CWHRS is boyfriend/ex-boyfriend. Of the 16 cases in which a woman was killed by her boyfriend, 38% of the women and 62% of the men were drunk or using drugs during the incident. Of the nine cases in which a woman was killed

by her ex-boyfriend, three of the women and two of the men were drunk or using drugs during the incident.

There does not seem to be a relationship between substance use and the weapon. For the 38 men offenders for whom we have information, seven of the 20 (14%) who were using alcohol at the time of the incident used a gun in the homicide, six of the 20 who were using drugs (30%), and five of the 13 who were using both (38%), compared to three of the 11 who were using neither (27%). For the 23 women offenders, two of the 13 (15%) who were using alcohol, two of the ten who were using drugs and one of the six who were using both used a gun in the homicide, compared to two of the six who were using neither.

Contrary to what might be expected, substance use in the incident was not related to where the incident took place. Of the 74 homicides that took place in the victim's or offender's home, either the victim or offender or both were using alcohol or drugs in 20 (27%), compared to five of the 13 other homicides (38%). The one homicide in a tavern and one of the two in a car involved drinking, and three of the five homicides committed on the street involved alcohol or drug use.

Overall, someone was drunk in 44 of the 67 homicides (66%) for which we have information. In contrast, someone was drunk in only 2,034 (42%) of the 4,859 non-lethal incidents. In 215 of the 550 non-lethal incidents in which the woman was beaten up or worse (39%), someone was drunk. Thus, someone was more likely be drunk in the fatal than the non-fatal incidents. However, there was no difference between the lethal and non-lethal incidents in whether someone was high on drugs. In 16 of the 67 lethal incidents (24%), someone was high on drugs. This percent was similar to the 1,194 (25%) of all 4,859 non-lethal incidents, and a little lower than the 177 (32%) of the 550 incidents in which the woman was beaten up or worse. There were also no significant differences in weapon used in the fatal incident by offenders who were high or not.

Availability of Medical Help

Each of the 87 incidents is unique and complex. In reading through the cases, we were struck by a few cases in which a series of circumstances turned a non-lethal incident into a lethal incident. These cases are difficult to categorize, but many involved the availability or the timeliness of medical help. In one incident, for example, the man locked all of the doors and hid the key, then attacked the woman. She grabbed the weapon (a knife), and slashed him. When she saw that he was injured, she called 911, but the paramedics could not get into the house to treat him and he bled to death. In another case, police records note that the victim, a man who was drunk and had been had been beating, choking and hitting his wife with a broomstick and then had been stabbed, was "uncooperative" when medical assistance came.

There were also a few incidents in which the victim might not have died if he or she had been wounded in a slightly different part of the body or had received different medical care. One man, for example, was angry because they had run out of beer and began stabbing the woman. She grabbed the knife and stabbed him in the leg. The knife cut an artery and he bled to death quickly. In a another similar, case, the man was attacking the woman and her family with a phone, and she stabbed him in the leg. He

walked out, but died several days later. The death of a homeless woman, who died many days after she had been beaten, may have been related to her inability to obtain and take the medicine that had been prescribed to keep her head from swelling.

Prior History of Violence

Homicide is often the culmination of a long series of violent incidents, and must be viewed in light of earlier violent incidents and threats. These 87 homicide incidents are no exception. Overall, 62 (85%) of the 73 homicide women in the CWHRS about whom we have information, including 42 (87%) of the 48 homicide victims and 20 (80%) of the 25 homicide offenders, had experienced some type of physical violence at the hands of their partner in the past year prior to the fatal incident. This was higher than Campbell's (1992) study of Dayton homicides, in which she found police documentation that 64% of the 28 women killed by a man intimate partner had been physically abused by that partner prior to the homicide. The difference probably is due to the more exhaustive information available with the proxy interview methodology.

In three of the 76 cases in which we obtained an interview, we still had no information about whether or not there had been prior violence in the relationship. In 11 (15%) of the 73 homicide cases with information, that information indicates that there was no prior violence at all against the woman in the previous year. In six of these, the woman was the homicide victim and in five the woman was the homicide offender. (In the one same-sex case with information, there had been prior violence.)

The degree of violence that occurred just prior to the fatal incident does not necessarily reflect the level of previous violence in the relationship. All of the four women who were killed by a man without any other interaction in the incident had experienced serious and repeated violent incidents at his hands in the previous year. In the 34 fatal incidents that had begun with a verbal argument or a threat to kill, the woman had experienced at least one incident of violence or threat of violence at the hand of her partner in the past year in 28 (82%). In three of the 24 for which we have information, the most recent incident had happened within 24 ours of the death, five had happened the same week but not that day, and seven had happened the previous month but not that week. In 16 of the 23 incidents where there is information, the homicide offender had been the first to use physical violence against the eventual homicide victim in that earlier incident.

Cases with No Prior Violence Against the Woman. In eleven cases, our information indicated that there had been no physical violence or violent threats prior to the fatal incident. These homicides were similar in many ways, such as the place and the circumstances, to the 62 in which there had been prior violence. However, none of the eleven victims was killed with a firearm, compared to 31% of the 62 victims where there had been prior violence. Eight were killed with a knife compared to 39% of the others, one was killed with a blunt instrument compared to 6% of the others, and two were killed by strangulation compared to 11% of the others. Many of these homicides involved sudden and explosive rage on the part of one of the partners, and in these situations the weapon used tends to be whatever happens to be at hand. Of the 11 women, only five were living with the partner, and none of these had a gun in the home. Of the 62 abused women, 38

(61%) were living together, and 15 of the 37 with information (41%) had a gun in the home.

In only one of the 11, versus 33% of the others, was the incident precipitated by someone leaving or trying to end the relationship. In fact, in four of the 11 (36%), the homicide was precipitated by an altercation about drugs or money, compared to only 16% of the 62 homicides in which the woman had been abused. Thus, the situation of the incident itself was more salient for these 11 homicides in which there had been no prior violence.

Each of these eleven incidents involved a unique set of circumstances, which are summarized below:

There were five cases in which a woman killed a man, and the interviews indicated that there had been no prior violence. In two of these cases, we interviewed the woman offender herself. One woman said that the first time he had been physically abusive in their three-month relationship was the day of the fatal incident. She was trying to break off the relationship. He came to her apartment, refused to leave, threatened to kill her, the children and her roommate, raped her and threatened to sexually assault her two-year-old. At that point, she stabbed him. In the second case, we interviewed a proxy respondent as well as the woman herself. The respondent did not know, but the woman told us that there had never been any physical violence in the three months of the relationship. He grabbed her arm in an argument and she stabbed him.

In the third case, the victim's mother, who lived right above the couple in the same house and was a credible proxy respondent, said she had never heard any fighting between them. The fatal incident, however, was very violent, with the man coming home drunk and hitting, kicking and choking his wife, before she stabbed him. Another case was similar. The proxy respondent lived in the apartment upstairs and said there had been no fighting or separations in the nine-year marriage, and that the death was a great shock and mystery to the whole family. In the fatal incident, the man came home drunk and began striking his wife with a broomstick and choking her, when she stabbed him.

In the fifth case, there had been prior violence against the man but not against the woman. In addition to the violence in the relationship, the woman had been arrested for attacking people on the street. In this case, she befriended a disabled man with a large trust fund, and eventually stabbed him.

There were six cases in which a man killed a woman, and the interviews indicated that there had been no prior violence. In one case, we interviewed the victim's mother, who had talked to her daughter every day and was certain that her daughter would have told her if there had been violence. It was a short-term relationship (three months) that the daughter had been trying to end when she was killed. There was some question about whether or not they were intimate partners, and the offender claimed in court that the motive was a dispute about money. However, the victim was stabbed multiple times and then strangled. In a second case, we interviewed members of both families, who said that there had never been any indication of violence in the five-year commonlaw relationship. There was very little known about the incident, but she died of multiple stab wounds.

In a third case, the proxy respondent was a friend who had lived with the couple since they were married and was very knowledgeable about the relationship, and said that the man had injured her five years previously, but there had been no violence in the year before the homicide. For five days before her death, she had talked about divorce and had asked him to leave, but he refused. He and his brother searched her things, found what they thought was evidence of infidelity, and confronted her. She confessed and he killed her. In a fourth case, the proxy respondent was a good friend of the homeless woman who died at the hands of a former boyfriend. The friend said that there had never been any violence between the victim and the offender until the day he beat her up. She died several days later. The offender committed suicide after six months.

In a fifth case, we interviewed a very knowledgeable friend, who told us that there had never been any signs of physical abuse, since the woman was being protected by a man who was the leader of a drug organization. The murder happened when she tried to break off the two-year relationship. Her family denied that the couple were intimate, but the friend knew about the relationship. In the sixth case, the two proxy respondents agreed that the offender was a drug addict who had taken all of the woman's money and even had depleted the savings of her friends, who were trying to help her. However, there was never any indication of physical violence at any time in their six-year relationship. In the fatal incident, he became enraged because she tried to prevent him from taking money out of her purse, stabbed her repeatedly in a fit of rage, and also stabbed her young daughter.

In summary, nine of the eleven cases with no prior violence seemed to have begun when the man began attacking the woman in an explosive rage. In three of the five woman-offender cases with no prior violence, the man began the violence that ended in his death. One of the five was apparently a mutual argument, and in one the woman was the aggressor. All six woman-victim cases with no prior violence seem to have involved a sudden fit of rage in which the man attacked the woman. They show some similarity to the three woman-offender cases in which the man began the violence, except that there was no indication that any of the women who became the victim in the homicide had fought back.

Types of Violence Against the Woman in the Past Year. Were the types of violence experienced by the 62 homicide women (42 victims and 20 offenders) who had experienced any violence at the hands of her partner in the past year similar to the types of violence experienced by the CWHRS clinic/hospital women who had interviewed as AW? For some kinds of violence, the homicide and clinic/hospital groups had similar experiences in the past year (Exhibit 101). Almost all of both groups had been pushed, grabbed or shoved, under 20% had been forced to do something that she thought was wrong or illegal, and about half of all three groups thought that their life was in danger, or could be in danger.

However, in many ways the homicide women, whether they became the victim or offender in the homicide, differed from the clinic/hospital women. More of them had been slapped (88% versus 66%); kicked, bit or hit with a fist (80% versus 57%); hit with an object that could hurt her (60% versus 36%); choked (57% versus 47%); threatened with

or had a knife used on her (47% versus 23%); threatened with or had a gun used on her (35% versus 14%); or the violence was increasing in severity (48% versus 27%). For both groups of homicide women, the violence was more likely to have been increasing in frequency than for the clinic women (26%), but this was more common for the homicide offenders (67%) than the victims (46%).

Exhibit 101
Types of Violence Women Had Experienced in the Past Year*

Type of Intimate Partner Violence Experienced in Past Year	CWHRS Clinic AW Women	Abused Homicide Women	
		Victims**	Offenders
Threatened to hit her	75.6%	82.5% (40)	90.0% (20)
Threw anything that could injure her	47.7%	55.5% (36)	77.7% (18)
Pushed, grabbed, shoved her	88.6%	87.5% (40)	100.0% (20)
Slapped her	66.4%	87.5% (40)	90.0% (20)
Kicked, bit, hit her with a fist	57.2%	74.3% (39)	90.0% (20)
Hit her with an object that could hurt her	36.0%	54.3% (35)	77.7% (18)
Beat her up, hit her repeatedly	45.0%	43.6% (39)	70.0% (20)
Choked her	47.3%	53.1% (32)	64.7% (17)
Threatened to or used a knife on her	22.8%	45.2% (31)	50.0% (18)
Threatened to or used a gun on her	14.1%	37.1% (35)	31.6% (19)
Forced her to into sexual activity	35.4%	34.5% (29)	53.8% (13)
Forced her to do something wrong or illegal	17.3%	15.6% (32)	16.6% (18)
She was afraid of her partner	49.8%	50.0% (38)	64.7% (17)
She thought her life in danger	51.3%	45.2% (31)	58.8% (15)
Violence was increasing in frequency	26.2%	45.9% (37)	66.6% (18)
Violence was increasing in severity	26.8%	47.4% (38)	50.0% (18)

*For comparison to the clinic/hospital women, the homicide women in this table include only those women who had experienced violence in the past year. Each percent is based on the "valid cases," excluding don't know or missing answers. The number of valid cases is in parentheses.

**The victim in the same-sex case is included in this table under Women Victims.

Women homicide offenders were more likely to have experienced some types of violence than either women homicide victims or abused clinic/hospital women. Many more offenders had been beaten up or hit repeatedly (70%) than either the victims (44%)

or the AW women (45%). More offenders had been forced into sexual activity (54%) than the victims (34%) or the clinic women (35%), and more offenders thought her life was in danger (59%) than victims (45%) or clinic women (51%).

When a woman had been choked in at least one incident in the past year, she was more likely to be killed by strangulation; when one of the incidents had involved a knife threat or attack, she was more likely to killed with a knife; and when one of the incidents had involved a gun threat or attack, she was more likely to be killed with a gun. Six of the 17 women victims who had been choked in the past year were strangled to death in the fatal incident (35%), but only one of the 15 women who had been abused but not choked (7%). Seven of the 14 (50%) women homicide victims who had been threatened with a knife or had a knife used on her were killed with a knife, compared to two of the 17 women (12%) who had not been abused but not with a knife in the past year. Seven of the 13 women homicide victims (54%) who had been threatened with a gun or had a gun used on her in the previous year were killed with a gun, compared to seven of the 22 women who had been abused but not with a gun in the past year (32%).

Summary: Prior History of Violence. The great majority of women involved in an intimate partner homicide, whether they were the victim or the offender, had experienced violence at the hands of their partner in the past year, and the violence they experienced tended to be more severe than the violence experienced by women who interviewed as AW. The homicide women were more likely to have been choked or to have had a weapon threatened or used against them, compared to the clinic/hospital women. The women who became homicide offenders tended to have experienced more severe kinds of violence than either the homicide victims or the women who interviewed as AW.

In eleven (15%) of the homicides, however, the available information indicates that the woman had not experienced any violence prior to the fatal incident. In many of these cases, there was a history of controlling behavior in the past year, extreme jealousy, or a threat to leave the relationship. However, there was no violence that our proxy respondents, or the women themselves in some cases, knew about. In cases such as these, the characteristics of the incident itself are especially important.

Controlling Behavior Against the Woman in the Past Year

In addition to physical violence, many of the homicide women had experienced controlling behavior on the part of their partner in the previous year. It is difficult to compare the score on the Power and Control scale for the homicide women to the clinic/hospital women, because of the high number of homicide women for whom the proxy respondent could not answer one or more of the five questions. However, there were a substantial number of homicide women who had experienced four or five of the Power and Control scale behaviors on the part of their partner (Exhibit 102). This applied to 19 of the 48 women victims (40%) and to nine of the 26 women offenders (35%).

Four of the six women victims who had not experienced physical violence in the past year still had experienced controlling behavior. One of the six scored "three" and three of them scored "one" on the Power and Control scale. Similarly, one of the five women offenders who had not experienced physical violence in the past year had a Power and Control scale score of "three."

Exhibit 102
Controlling Behavior Against the Woman in the Past Year

Score on Power and Control Scale	CWHRS Clinic AW Women	Homicide Women	
		Victims*	Offenders
Zero	4.3%	10.4%	19.2%
One	9.9	22.9	23.1
Two	11.5	10.4	11.5
Three	17.6	16.7	11.5
Four	22.3	25.0	19.2
Five	34.4	14.6	15.4
Total	100.0% (494)	100.0% (48)	100.0% (26)

*The same-sex victims are included in the victim column.

However, two women victims and four women offenders had experienced neither prior violence nor controlling behavior from their intimate partner in the previous year. Both of the women victims were killed in the process of a robbery by the intimate partner, and one of the women offenders killed her partner to get money for drugs. In two of the four woman-offender cases, including the drug-related robbery, the woman had attacked and severely injured the man in the previous year, and the man had not reciprocated. Both of the other two homicides in which the woman offender had experienced neither physical violence nor controlling behavior in the previous year began with the man attacking the woman, though there was no information about any previous violence.

Homicide Followed by Suicide

In the CWHRS, ten offenders (nine men and one woman) killed themselves at the scene or immediately afterwards. Two men attempted suicide, one at the scene and the other soon after. Three more men killed themselves sometime later that year. In addition, two men died otherwise immediately after the homicide, one in the squad car from a suspected drug overdose and one when he took hostages after the murder.

Thus, nine of the 57 men offenders committed suicide at the scene, a rate slightly under that found in Houston, Texas (Brewer and Paulsen, 1999) (Exhibit 103). Both cities had lower rates than the male-offender suicide rate in "couple" homicides found in Albuquerque, New Mexico from 1978 to 1987 (Rosenbaum, 1990), or in Australian intimate homicides from 1989 to 1991 (Easteal, 1994). Ten of the 23 Albuquerque men committed suicide (43%), and 31 of the 121 Australian men committed suicide (26%).

One of the 30 women offenders committed suicide, a woman who had killed her husband. The proxy respondents in this case told us that she had been suffering from a terminal disease. It is very unusual for a woman to commit suicide following homicide (Daly & Wilson, 1988; Nie, *et al.*, 1999). In Canadian homicides from 1961 to 1983, none of the women killing a husband or commonlaw husband committed suicide, compared to

32.5% of the 807 husbands who killed their wives and 15.9% of the 314 men who killed their commonlaw wives (Gillespie, *et al.*, 1998). We were able to find only two studies reporting a woman's homicide/suicide. Easteal (1994) found that one of the 29 women offenders in Australian intimate homicides from 1989 to 1991 committed suicide (3%), and Rosenbaum found that one of the 13 woman offenders in "couple" homicides in Albuquerque committed suicide (8%).

Exhibit 103
Suicide of the Man Offender: Chicago and Houston

Did the Man Offender Commit Suicide?	Houston, Texas 1985-1994*	Chicago, Illinois 1995-1996
Yes, before arrest	20.9%	15.7%
Yes, in the following year	NA*	5.3
No	79.1	80.7
Total	100.0% (191)	100.0% (57)

Sources: Chicago: Chicago Police Department, Murder Analysis Reports; Houston, Brewer and Paulsen, 1999.

*The Houston data do not include information about suicides in the following year.

Many studies find that a homicide offender is more likely to commit suicide if the homicide weapon was a firearm (for reviews, see Rosenberg, *et al.*, 1999; Miller, *et al.*, 1999). For example, Gillespie, *et al.* (1998:58) found that 50.8% of the 415 husbands who used a gun to kill their wives committed suicide, versus 13.0% of the 392 who did not use a gun, and that 36.6% of the 112 commonlaw husbands who used a gun committed suicide, versus 4.5% of the 202 who did not. In Australia, Easteal (1994: 143) found that the offender committed suicide in two-thirds of the 36 firearm homicides of adult sexual intimates, but in only 11% of the 36 in which the weapon was a knife or sharp instrument, and 4.9% of the 41 in which the weapon was assault or strangulation.

In the CWHRS homicide/suicides, weapon was also a factor. Of the 19 men offenders who killed their victim or victims with a handgun, five (26%) committed suicide. In all five, the offender also used the handgun to kill himself. The only woman offender who committed suicide used a handgun for both the homicide and the suicide. One of the three men who killed their victim with a rifle or shotgun committed suicide, also using a rifle for the suicide. In total, then, seven of the 24 men or women (29%) and six of the 23 men (26%) who committed homicide with a firearm also committed suicide. On the other hand, only two of the 29 (7%) men and none of the 25 women who used another weapon or no weapon committed suicide. These include one of the 15 (7%) men who killed their victim(s) with a knife or sharp instrument, none of the five man who killed their victim with a blunt instrument or other weapon, and one of the nine who beat their victim to death or strangled her (the weapon was "hands, fists or feet"). One man stabbed himself to death

after killing his wife and niece, and another man strangled her and then killed himself with gas from the oven.

Several studies have found a relationship between the offender's age and whether or not he or she commits suicide following the murder. In North Carolina, homicide offenders who committed suicide were older than other offenders (Palmer & Humphrey, 1980:111). Of the 57 men offenders in the CWHRS lethal sample, one of the ten (10%) who were age 25 or younger committed suicide immediately, compared to five of the 35 (14%) men aged 26 to 40, and three of the 12 (25%) men aged 41 to 55. The mean age of the men who committed suicide was 36.11, and the mean age of those who did not was 34.23, not a significant difference.

Studies also tend to find that white homicide offenders commit suicide more often than others (Palmer & Humphrey, 1980; Wolfgang, 1958). In Chicago, two of the nine (22%) Latino/Hispanic men committed suicide, as did two of the nine (22%) white or other men. The proportion of African/American/Black men who committed suicide was somewhat less (5 of the 34, or 13%), but not a significant difference.

Others (Rosenbaum, 1990; Block & Christakos, 1995) have argued that being in a legally sanctioned relationship, compared to being in a commonlaw or boyfriend-girlfriend relationship, is related to the likelihood that a man will kill his intimate partner. Among the 57 men offenders, there were nine husbands, two of whom committed suicide, as did two of the eight commonlaw husbands, indicating no difference between marital and commonlaw relationship. Combining these two groups, four (24%) of the 17 husbands or commonlaw husbands committed suicide, compared to five (14%) of the 36 boyfriends, and none of the four ex-boyfriends.

There were only four homicides in which more than one person was killed, all of which had a man offender. The offender committed suicide after two of these four homicides, compared to seven of the other 53 man-offender homicides (13%). In addition, a man who had killed his girlfriend and left her young daughter for dead (she survived), attempted suicide after the incident by jumping in a river, but when he did not drown he turned himself in to the police.

Nie, *et al.*, in an analysis of all homicide/suicides in Wisconsin FIRS (Firearm Injury Reporting System) data, found a high rate of alcohol usage in men who committed homicide/suicide (100% of the people were men). In the CWHRS, we had information for six of the nine suicide cases and 32 of the 48 other man-offender cases. In five of the six suicide cases, the man was either drunk (two cases) or high on drugs (one case) or both (two cases). Of the 32 other man-offender cases, five (16%) of the men were drunk, six (19%) were high on drugs, and eleven (34%) were both drunk and high. Thus, five of the six men who committed suicide were drunk or high or both (83%), compared to 22 of the 32 other men (69%). However, even though drinking or drugs may have been a factor in the homicide, the men may not have had a prior "problem" with either. In only three of the proxy respondents said that a man who committed suicide had ever had a problem with alcohol, and only four said that he had ever had a problem with drugs. Similarly, 64% of the proxy respondents for the other men said that he had ever had a problem with alcohol and 69% said that he had ever had a problem with drugs. The one woman who

killed herself was using alcohol at the time of the incident, had a problem with alcohol, and did not have a problem with drugs.

If the final incident had been preceded by any indication that the offender was depressed or suicidal, it would have obvious implications for prevention. An offender who plans to kill himself or herself might also decide to kill his or her partner or children, believing that they could not live or be happy without him or her. Alternatively, an offender could commit suicide in response to the homicide, either because he or she was overwhelmed with guilt or because he or she was afraid of the consequences. Rosenbaum (1990) found that the offenders in homicide/suicide were much more likely to be suffering from depression, compared to the offenders in other couple homicides.

In the CWHRS homicide data, we do not have information on the man offender's depression, but we do have information on prior suicide threats or attempts, for six of the nine man suicide cases and 41 of the 48 other man-offender cases. Of the six men who committed suicide, four had previously attempted or threatened suicide, compared to ten of the 41 other men offenders. The one woman had also attempted or threatened suicide. Thus, more than half of the offenders who committed suicide had threatened or attempted suicide in the past, compared to about a fourth of the other men offenders. By comparison, 32% of the 228 responding clinic/hospital women who had experienced severe violence in the past year, and 20% of the 253 other abused women said that Name had ever threatened or tried to commit suicide.

Another precursor of homicide/suicide might be the partner's attempt to leave the relationship. Rosenbaum (1990), for example, found that half of the woman victims in Albuquerque homicide/suicides had been in the process of "threatened separation." We have information about six of the nine man-offender suicides in the CWHRS, and in all six, the woman victim was trying to or had left the relationship that day or a few days prior to the final incident, or the man was trying to get her to come back. By comparison, 13 of the 42 other man-offender homicides about which we have information (31%) leaving the relationship was an issue in the fatal incident. In the one case in which a woman committed homicide/suicide, the man was trying to leave the relationship.

Summary: Homicide Incidents

Analysis in this section showed the importance of risk factors that occur in the immediate situation of the fatal incident. It is important to realize, however, that incident-related factors were not of prime importance in every homicide. Very little happened in some homicides, other than the homicide itself. For example, in four cases, there was no interaction between the couple just prior to the fatal attack and there was every indication in each case that the man came into the situation armed and ready to kill the woman, usually tracking her down to do so.

Conversely, in those homicides where there had been no prior violence against the woman, the incident itself was one of the most important factors for understanding the reasons for the fatal violence. Nine of these 11 cases apparently began when the man suddenly attacked the woman in an explosive rage. In three of the nine, the man was eventually killed in the incident, but these cases did not differ from the six where the woman was killed, except that there was no indication that any of the women who

became the homicide victim had fought back.

The CWHRS clinic/hospital sample was specifically designed to reflect the population from which most Chicago intimate partner homicide incidents originated. We chose sample sites because their clients were from areas of the city with the highest rates of intimate partner homicide, and we made extensive efforts to assure that screening and interview bias would be minimal. There is considerable evidence that the study succeeded in these sampling goals (see details in the "Clinic and Hospital Sample" and "Sample Characteristics" sections, above). However, the characteristics of the 87 fatal incidents differed in many respects from the characteristics of the non-fatal incidents. Some of the key differences and similarities were the following:

-- One of the main factors distinguishing fatal from non-fatal intimate partner violent incidents was the weapon that was threatened or used. By combining the fatal and non-fatal incidents, we can estimate the fatality rate for various kinds of violent incident. The fatality rates for firearm incidents (26%) and for knife incidents (28%) were much higher than the fatality rate for incidents with another weapon (12%) or the rate for incidents with no weapon (0.3%).

-- Homicide women who did not live with their partner were much less likely to have a firearm in their home than clinic/hospital women. However, over a third of homicide women who lived with their partner had a firearm in the household, compared to 9% of clinic/hospital women who lived with their partner. When the woman did not live with the partner, the partner had a firearm in his or her home in three-quarters of the cases.

-- Although the relationship was not strong, alcohol use was present more often in fatal than in non-fatal intimate partner violent incidents.

-- The woman leaving or trying to end the relationship was an immediate precipitating factor for 40% of the homicides of women victims, and for 13% of the incidents that led to homicides committed by women offenders.

-- Women homicide victims and clinic/hospital women were similar to each other in the percent who had had left, tried to leave, or asked the partner to leave in the previous year. However, only 58% of the women homicide offenders had done any of these things, compared to 74% of the women victims and abused clinic/hospital women (76%).

-- In the great majority of homicides, whether the woman was the victim or the offender, she had experienced violence at the hands of her partner in the year prior to the fatal incident. The level and kinds of violence were similar in many ways to the violence experienced in the past year by the CWHRS clinic/hospital women. However, women homicide offenders were more likely to have been beaten up, to have been injured, and to have thought that their life was in danger.

-- Both women offenders and women victims were twice as likely to have been threatened with a gun or to have had a gun used on them in the past year and twice as likely to have been threatened with a knife or to have had a knife used on them, compared to abused clinic/hospital women.

-- The means of death for about a third of the women who had been choked in the

previous year was strangulation, the means of death for half of the women whose partner had threatened or used a knife on her in the previous year was a knife, and the means of death for over half of the women whose partner had threatened or used a gun on her in the previous year was a gun.

-- Although Name's suicidal behavior (threat or attempt) was not associated with the continuation of violence, severe or not, for the clinic/hospital women, it was associated with homicides. A combination seen in many of the fatal incidents was the man's suicide, together with the woman's leaving or attempting to leave the relationship. Extreme jealousy was often part of this configuration as well. Therefore, the two Danger Assessment items about Name's suicidal behavior and jealousy may be especially important risk factors when combined with each other.

Sample Characteristics of Homicide Women

Woman's Employment, Education and Income

Of the 76 homicide women in interviewed cases, the homicide offenders were much less likely to have a job (13%), compared to the homicide victims (51%) or to the clinic/hospital women (29%) (Exhibit 104). They were also much less likely to have a high school diploma (29%) compared to the women victims (63%) or the clinic/hospital women (52%). On the other hand, almost all (87% and 92%, respectively) of the homicide women victims and offenders had a personal income of her own that she controlled, more than the clinic/hospital women (74%).

Exhibit 104
Employment, Education and Income of Clinic/Hospital and Homicide Women

Occupation, Education or Income Categories	AW	Homicide Women*	
		Victims	Offenders
Employment			
Full or part-time job	29.4%	51.0%	12.5%
Student only	10.3	6.1	0.0%
Other (homemaker or unemployed)	60.2	42.8	87.5
Total	100.0% (493)	100.0% (49)	100.0% (24)
Education			
Less than High School Degree	48.0%	37.0%	71.4%
High School, or GED	23.4	26.1	14.3%
Post-High School Education	28.6	37.0	14.3%
Total	100.0% (496)	100.1% (46)	100.0% (21)
Has personal income she controls	74.5% (494)	87.5% (48)	92.0% (25)

*For the two same-sex homicides, the characteristics of the victim are in this table.

Age and Racial/ Ethnic Group

The 87 homicide women (victims and offenders) ranged from age 18 to 62. (Recall that homicides with a woman victim under age 18 were not included in the study, in order that the lethal sample would be comparable to the non-lethal sample.) Like the women in the CWHRS clinic/hospital sample, the homicide women's ages were related to the racial/ethnic group (Exhibit 105). Latina/Hispanic homicide victims tended to be much younger than the other women victims. The oldest Latina/Hispanic victim was 33, but the oldest African/American/Black woman victim was 54 and the oldest white or other woman was 42. Mercy and Saltzman (1989:597) found a "strong inverse relationship between age and the risk of spouse homicide for Black husbands and wives, but not for White husbands and wives." In the CWHRS, the age distribution of women homicide women victims was similar to that of clinic/hospital women of the same racial/ethnic group. However, women homicide offenders tended to be older.

Exhibit 105
Age and Race/Ethnicity: Clinic/Hospital and Homicide Women*

Age Group	African/American/Black			Latina/Hispanic			White or Other		
		Homicide			Homicide			Homicide	
	AW	Vic.	Off.	AW	Vic.	Off.	AW	Vic.	Off.
18 - 20	18.8%	12.2%	3.7%	13.8%	11.1%	NA	7.6%	.0%	(0)
21 - 25	14.3	21.9	11.1	24.5	22.2	NA	9.1	.0	(0)
26 - 30	15.4	4.9	14.8	23.9	33.3	NA	13.6	33.3	(1)
31 - 40	34.5	46.3	37.0	28.9	33.3	NA	27.3	44.4	(0)
41 - 50	14.1	12.2	22.2	8.2	.0	NA	33.3	22.2	(0)
51 - 67	2.8	2.4	11.1	.6	.0	NA	9.1	.0	(0)
Total	100.0%	100.0%	100.0%	100.0%	100.0%	NA	100.0%	100.0%	NA
Mean	31.07	32.39	35.89	29.08	27.78	NA	36.91	33.89	30
Median	31.00	35.00	35.00	29.00	27.00	NA	38.00	32.00	30
Range	18-62	18-54	20-54	18-56	20-33	NA	18-64	27-42	30
Total	467	41	27	159	9	0	66	9	1

Source: Chicago Homicide Dataset.

*For the two same-sex homicides, the characteristics of the victim are in this table.

In the clinic/hospital sample, screened women aged 51 to 67 were less likely than younger women to be interviewed (see Exhibit 8, above). Therefore, we might expect some differences in age between the lethal and non-lethal samples. For all three racial/ethnic groups, however, the clinic/hospital women were just as likely to be in age group 51 to 67 as the homicide women victims. This indicates that any age bias in the clinic/hospital sample did not affect the sampling goal, to interview women who would be comparable to homicide women.

The intimate partner couples were almost always the same racial/ethnic group as each other (Exhibit 106). This is generally true of homicides in Chicago (Block, 1985, 1993; Block & Christakos, 1995), because it is one of the most segregated cities in the country (Massey & Denton, 1987). All of the African/American/Black homicide women were in a relationship with an African/American/Black partner. Eight of the nine Latina/Hispanic homicide victims were in a relationship with a Latino/Hispanic partner, and eight of the nine non-Latina white homicide women were in a relationship with a non-Latino white partner.

Exhibit 106
Racial/Ethnic Groups of Women and Men Partners

	Woman Intimate Partner				
Man Intimate Partner	African/ American/ Black	White (non-Latina)	Latina/ Hispanic	Other	Total*
African/American/Black	65	0	0	0	65
White (non-Latino)	0	8	1	1	10
Latino/Hispanic	0	1	8	0	9
Other**	0	0	0	1	1
Total	65	9	9	2	85

*The two same-sex cases are not included in this table. The race/ethnicity of the two partners was African/American/Black in both cases.

**The two "other" homicide women, both offenders, were Native American and Haitian and their partners were non-Latino white and Haitian, respectively.

Type of Union and Relationship

In many of the 76 interviewed cases, the official record data and the interview data differed on the relationship of the partner to the woman. Though the people interviewed agreed with the official record in 13 of the 14 "husband" relationships, two of the 13 called "commonlaw" in official records were called "husband" in the interview, and three were called "boyfriend. The most disparity between the two data sources was in the 46 relationships called "boyfriend" in official records. The interviewers agreed in only 23 of the 46, calling 13 of them "commonlaw" and ten "ex-boyfriend."

There were several reasons for the differences. "Ex-boyfriend" is not a code in police records. It was added in the Chicago Homicide Dataset, based on descriptions in the CPD narrative, but there were still only two "ex-boyfriend" cases in official record data, compared to 12 in interview data.

Both the official record and the people interviewed tended to use "commonlaw" to designate couples living together, and "boyfriend" to designate couples living apart, but the people interviewed may have had more information about the couples' living arrangements. Whatever the reason for the differences between the two data sources, we decided that the interview data would be more closely comparable with the clinic/hospital interview data. Therefore, the analysis here (Exhibit 107) was based on relationship information in the interviews, not on official record data.

Exhibit 107
Relationship with Partner by Woman's Racial/Ethnic Group

Relationship with Partner	African/American/ Black		Latina/Hispanic		White or Other	
	Victim	Offender	Victim	Offender	Victim	Offender
Husband	3	7	3	0	2	0
Ex- or former husband	1	0	0	0	0	0
Commonlaw husband	10	8	2	0	0	1
Boyfriend	13	8	2	0	2	0
Ex- or former boyfriend	7	2	1	0	2	0
Same-sex partner	1	0	0	0	0	0
Other (fiancé)	1	0	0	0	0	0
Total	36	25	8	0	6	1

Source: 76 CWHRS interviewed cases.

Of the 50 women victims, eight (16%) were killed by their husband, 12 (24%) by their commonlaw husband, 18 (36%) by their boyfriend or fiancé, and one (2%) by a same-sex partner. Of the 26 women offenders, seven (26%) killed their husband, nine (35%) their commonlaw husband, and eight (31%) their boyfriend. Compared to women victims in Houston, Texas (Brewer and Paulsen, 1999), Chicago women killed by a man intimate partner were much less likely to be married to him and more likely to be his ex- or former girlfriend (Exhibit 108). Only eight of the 49 (16%) Chicago women were married to the man who killed them, compared to 40% of the Houston women and 44% of the women victims in Hamilton, Ontario (Daly, *et al.*, 1997).[24]

Though many of the homicide women had left or tried to leave the relationship in the past year, relatively few of the interviews (17%) described the relationship as "former"

or "ex", and most of these (12 of the 13) were ex- or former boyfriend/girlfriend. There was only one couple who had been legally divorced (ex-husband relationship). This is much lower than for the clinic/hospital women. Of the women who interviewed as AW, a total of 43% said that Name was an ex- or former partner at the initial interview, including 4% who were their ex- or former husband, 2% their ex- or former commonlaw husband, 32% their ex-boyfriend, 1% their former same-sex partner, and 4% some other former relationship.

Exhibit 108
Type of Union in Intimate Homicides of a Woman by a Man*
Comparison of CWHRS Data with Ontario Data and Houston Data

Type of Union	Hamilton, Ontario 1974-1995*	Houston, Texas 1985-1994	Chicago, Illinois 1995-1996
Registered Marriage (husband)	43.8%	40.3%	16.3%
Commonlaw	25.0	22.0	24.5
Divorced, ex-married, ex-commonlaw	31.2	1.6	2.0
Girlfriend/boyfriend, fiancé	NA*	30.9	36.7
Ex- or former girlfriend/boyfriend	NA*	5.2	20.4
Total	100.0% (32)	100.0% (191)	99.9% (49)

Sources: Chicago data, CWHRS interviewed cases; Houston data, Brewer and Paulsen, 1999; Hamilton data, Daly, *et al.*, 1997; Wilson, *et al.*, 1995.

*The Ontario data do not include cases with boyfriend/girlfriend or ex-boyfriend/ex-girlfriend relationships. Women separated from a marital partner are included under "divorced, ex-married."

Because the woman's relationship tended to differ across racial/ethnic groups, however, the fairest comparison would be within groups. For African/American/Black homicide women, the partner of the 36 victims was much less likely to be her husband (8%) than the 25 offenders (28%), with the victims the same as the African/American/Black clinic/hospital women (8%). However, the partner of both victims (28%) and offenders (32%) was much more likely to be her commonlaw husband than the clinic/hospital women (0.3%). In addition, the partner of victims (36%), offenders (32%) and clinic/hospital women (37%) were equally likely to be her boyfriend. Therefore, a commonlaw relationship was more common for African/American/Black homicide women, and a husband relationship was much more common for the women offenders.

Of the eight Latina/Hispanic homicide victims, three (37%) were killed by their husband, two (25%) by their commonlaw husband, two (25%) by their boyfriend, and one (12%) by her ex- or former boyfriend. In comparison, Name was her husband for 46% of the Latina/Hispanic clinic/hospital women, the commonlaw husband for 17%, the boy-

friend for 15%, and the ex-boyfriend for 7%. Considering the small numbers of homicide women, these percents are very similar.

The pattern of age disparity between CWHRS homicide women and their partner was very similar to the pattern of age disparity between abused clinic/hospital women and Name (Exhibit 109). In the two of the three homicide cases where the woman was at least 20 years younger than her partner, she was the offender in the homicide. One 51-year-old woman shot her 71-year-old husband when he tried to leave the relationship, and a 24-year-old women stabbed her 63-year-old boyfriend after he kicked and punched her. The victim was a 23-year-old woman strangled and stabbed numerous times by her 55-year-old boyfriend when she tried to leave the relationship.

Exhibit 109
Age Disparity Between Woman and Partner: Clinic/Hospital and Homicide Women

Age Disparity	CWHRS Clinic AW Women	Homicide Women	
		Victims*	Offenders
Same age within 5 years	56.7%	54.2%	53.6%
Woman 5 to 9 years older	6.5	11.9	3.6
Woman 10 to 19 years older	2.2	3.4	7.1
Partner 5 to 9 years older	20.9	15.3	17.9
Partner 10 to 19 years older	11.4	13.6	10.7
Partner 20 or more years older	2.2	1.7	7.1
Total	100.0% (492)	100.0% (59)	100.0% (28)

*The same-sex victims are included in the victim column. In both cases, the two women were five years apart. In one case the victim was older and in the other case the offender was older.

Pregnancy and Children

Sharps, *et al.* (1999) found that two of 119 women (1.7%) in ten cities who had been killed by a man intimate partner had been pregnant at the time of death. This figure was higher in Chicago, with two of the 59 CWHRS women homicide victims (3.4%) and none of the 28 women offenders pregnant at the time of the fatal incident. Although 74 of the 690 responding women (10.7%) interviewed in the clinic/hospital sample and 42 of the 487 (8.6%) who interviewed as AW were pregnant at the initial interview, a goal of the CWHRS sample design was to include pregnant women.

Of the 76 CWHRS homicide women for whom we have information, only nine (12%) did not have any children (8% of the 26 women offenders and 14% of the 50 women victims). On the other hand, 29 (38%) of the 76 homicide women (35% of the offenders and 40% of the victims) had no child living in her household (whether her own child or not).

The living arrangements of the homicide women's children was also similar to that

for the clinic/hospital women. Of the 24 women offenders with children, four had grown children living on their own, two had children under DCFS or foster care, three had children living with relatives, and four had some children living with relatives and some with her. Of the 41 women victims with children where there was information, four had grown children living on their own, one had children under DCFS or foster care, ten had children living with relatives, and five had some children living with relatives and some with her.

In 25 of the 76 homicides with information, a child was present or in the home at the time of the incident. These 25 included 13 of the 50 women victims (26%) and 12 of the 26 women offenders (46%). In eight of these 25 homicides, a child found the body. In two cases, a child was killed as well as the woman victim. In one case, the three children in the home were injured as well. In another case, the victim's daughter was left for dead by the offender.

The CWHRS women offenders were similar to the women victims, except that the offenders were more likely to live in a "blended" household with children of a previous partner plus children with the partner who was killed. This may be due to the older age of the offenders, compared to the victims. CWHRS women victims were similar to Hamilton victims in the proportion who had children living at home who were not the offender's biological children (Exhibit 110). Patterns in Houston, however, were much different than either Chicago or Hamilton.

Summary: Sample Characteristics

Overall, the 87 homicide women were similar in their characteristics to the 497 abused clinic/hospital women. However, the homicide offenders differed from the homicide victims. This may have been due to characteristics associated with the woman's racial/ethnic group, because Latina/Hispanic and white and other women were over-represented among the homicide victims. The following section discusses the analysis that sought to determine whether there were significant differences between the women who were homicide victims and offenders. In addition, for a fair comparison of the homicide women and the abused clinic/hospital women, it is necessary to consider only those homicide women who had experienced violence or the threat of violence in the previous year. This analysis is presented in the final section of Homicide Findings.

Are Same-Sex and Woman-Offender Homicides Separate Types?

Analysis of the CWHRS homicides to this point has considered all 87 incidents as a whole (or all of the incidents for which there is information). However, the 87 incidents include two kinds of homicide that possibly should be examined separately from the others -- same-sex homicides and woman-offender homicides. (See the Project Methodology section, above.) Before looking at risk factors in more detail, it is necessary first to determine whether all 87 homicides are similar enough to each other so that we may combine them for this detailed analysis.

Were the two intimate partner homicides with a woman victim and offender sufficiently different from the 57 homicides with a woman victim and a man offender that they must be analyzed separately, or could we combine all 59 woman-victim homicides

for analysis? Were the 28 homicides with a man victim and a woman offender sufficiently different from the 57 homicides with a woman victim and a man offender that they must be analyzed separately, or could we combine all 85 for analysis?

Exhibit 110
The Paternity of Her Children:
CWHRS Homicide Women compared to Victims in Hamilton and Houston

Paternity of the Woman's Children Living in Her Household	Women Victims		CWHRS*	
	Hamilton Ontario 1974-95**	Houston Texas 1985-94***	Women Victims	Women Offenders
All woman's children her partner's	28.1%	14.2%	22.4%	26.9%
None of her children were partner's	31.2	11.2	28.6	23.1
Her children and his or their children	3.1	1.8	6.1	15.4
No children, or none of her children were living in her household***	37.5	72.8	42.8	34.6
Total	100.0% (32)	100.0% (169)****	99.9% (49)	100.0% (26)

Sources: Chicago data, CWHRS interviewed cases; Houston data, Brewer and Paulsen, 1999:323; Hamilton data, Daly, *et al.*, 1997; Wilson, *et al.*, 1995.

*For comparison, the CWHRS victims column excludes the same-sex victim.

**The Hamilton data do not include women killed by her boyfriend or ex-boyfriend.

***In Houston, there were two cases in which the victim was pregnant with the offender's child and had no other children, in addition to 22 cases in which all her born children were the offender's.

****The Houston data excludes 22 women with adult children, because the children's residence was undetermined. The Chicago data include three children living at home who were older than age 17.

Do Woman-Woman Cases Differ from Heterosexual Cases?

Because there were only two same-sex homicides, and we were able to conduct an interview for only one of these, we can only answer this question in a very tentative way. However, the two same-sex incidents were similar in many ways to the other 57 homicides of a woman victim. Jealousy was involved, and both parties had been drinking. The fatal incident was preceded by an argument, as were most of the hetero-sexual homicides about which we have information.

One exception is the murder weapon. Neither of the same-sex homicide offenders used a firearm. One woman was killed with a car, and the other with a blunt instrument. Neither woman was choked or strangled. In this aspect, these homicides are more similar to the 28 woman-offender homicides than to the 57 woman-victim homicides. On the other hand, the interviewed case had a long history of prior violence, including an incident of firearm violence in which the future homicide victim was wounded.

The two women killed by a same-sex partner were similar in many ways to the

women killed by a male partner, and to the women interviewed in the clinic/hospital sample. The mean age was 31 for both groups of women in the clinic/hospital sample, and 32 for the other 57 women victims, ranging from age 18 to age 54, while the two women who were killed by a same-sex partner were ages 25 and 36. In the clinic/hospital sample, about a third of both groups had a full or part-time job, as did 35 of the other 48 women victims about whom we have information. The one woman killed by a same-sex partner about whom we have information did not have a job and was a high school graduate.

Based on the above, our conclusion was that the two same-sex homicides in the CWHRS sample were similar enough to other woman-victim homicides so that we could reasonably combine the two groups in most analyses of other woman victims, with the exception of analyses of weapon. Therefore, further analysis will combine all 59 women victims (or all 50 for whom we obtained an interview). However, where possible, we note the specific characteristics of the same-sex case.

Do Woman-Victim Cases Differ from Woman-Offender Cases?

In the CWHRS homicide data, the woman victims differed from the woman offenders in several aspects, such as level of education and employment status. In addition, the racial/ethnic group of the woman offenders differed, in that none of the offenders was Latina/Hispanic (Exhibit 111).

Exhibit 111
Woman's Racial/Ethnic Group in Heterosexual Homicides

Race/Ethnicity	Victims	Offenders	Total
African/American/Black	41	27	68
White or other	9	1	10
Latina/Hispanic	9	0	9
Total Cases	59	28	87

It would be misleading to compare the characteristics of all 59 woman-victim cases to all 28 woman-offender cases, because, as we have seen above, Latina/ Hispanic women in the CWHRS tend to differ from African/American/Black women in many ways (for example, their marital status and their age). A comparison of all 59 woman-victim cases to all 28 woman-offender cases could be confounded by the fact that there are Latina/Hispanic women among the victims but not among the offenders. Therefore, for most analyses, we cannot combine the woman-victim cases with the woman-offender cases.

Based on the difference in racial/ethnic group, we could not combine the women victims and the women offenders. However, if the African/American/Black women victims and offenders were similar to each other, it might have been possible to combine them for analysis. To investigate this possibility, we conducted an analysis comparing the

characteristics of women victims and offenders for the African/American/Black homicide women only. If the 27 African/American/Black women who became the offender in the homicide were similar in their characteristics from the 41 women who became the victim, it would be possible to combine all of the 68 homicides to look at risk factors. If they differed sufficiently, we must analyze risk factors separately. Therefore, the following analysis compares basic demographic characteristics of the 41 woman-victim cases and the 27 woman-offender cases, for heterosexual homicides only.

Age. Of the 68 African/American/Black homicide women, the 41 who had been the offender in the homicide were significantly (Gamma = -.550, $p < .002$) older than the 27 who had been the victim. Offenders' ages ranged from 20 to 63 years, compared to 18 to 54 years for the victims. Fully 43% of the offenders but only 12% of the victims were aged 41 or older. Only three (13%) of the offenders were 25 or younger compared to 13 (39%) of the victims.

Employment and Education. Educational level was known for 50 of the African/ American/Black homicide women. The 31 who had been the victim in the homicide were significantly (Gamma =.576, $p < .008$) more likely to have graduated from high school (36%), compared to the 19 who had been the offender (74%). Employment was known for 55 of the African/American/Black homicide women. The 33 who had been the victim of the homicide were significantly (Gamma = -.739, $p < .000$) more likely (58%) than the 22 who had been the offender (14%) to have been working at the time of the fatal incident.

Type of Union/ Relationship. The relationship was known for 56 of the African/ American/Black homicide women. Of the 23 who became the offender in the homicide, seven (30%) were the wife of their partner, compared to only three of the 33 (9%) women who became the victim in the homicide. In addition, only two of the 23 homicide offenders (9%) were in a former or "ex" relationship with the man, compared to seven of the 33 victims (21%).

Conclusion. Of the 68 African/American/Black homicide women, the offenders differed significantly from the victims. The offenders were more likely to be older, to never have graduated from high school, to be unemployed, to be married to the man, and to be in a current instead of former relationship with him. In general, the women offenders appear to have fewer resources but to be in a more committed relationship. The large differences between these two groups indicate that an analysis of risk factors should be conducted on each of the two groups separately..

Before assuming that all of the homicide women victims should be combined together for analysis, however, we checked to make sure that there were no significant differences by the women victims' racial/ethnic group. We found none. Of the 50 women victims, there were no significant differences in their relationship with the partner who killed them, their education, or their employment. Therefore, all subsequent analyses were conducted separately for total woman victims and total women offenders, regardless of their racial/ethnic group.

How Did Abused Homicide Women Compare to Abused Clinic/Hospital Women?

So that we could make reasonable comparisons between the CWHRS clinic/ hospital women who had interviewed as AW, and the CWHRS women who were a victim or an offender in an intimate partner homicide, we focused only on the 62 homicides (42 women victims and 20 women offenders) in which the woman had experienced at least one violent threat or attack at the hands of her partner in the year prior to the homicide.

Violence Prior to the Lethal Incident

As we have seen (Exhibit 101, above), most of these 62 homicide women had experienced considerable violence in the previous year at the hands of the partner who eventually killed them. More abused women offenders had experienced violence in all but two of the 16 categories, compared to the AW women and to the abused women victims.

In the CWHRS homicide interviews, we asked the proxy respondent to tell us about the most recent incident before the fatal incident, and we obtained information in 33 of the abused woman-victim cases and 18 of the abused woman-offender cases. In 51% of the 33 woman-victim cases, the most recent incident had occurred more than a month before the fatal incident, and the most recent incident had occurred within 24 hours of the woman's death in 6%. In 16% of the 18 abused woman-offender cases, an incident had occurred within 24 hours of the man's death. In only 15%, the most recent incident had occurred more than a month prior to the fatal incident. In comparison, for 283 of the 493 (57%) abused clinic/hospital women, and for 119 of the 238 women who had experienced severe violence (50%), the most recent incident had occurred more than 30 days before the initial interview.

Controlling Behavior

Information was available on at least four of the five Power and Control scale responses for 38 of the 42 women homicide victims who had experienced violence or the threat of violence in the past year, and for 19 of the 20 women homicide offenders who had experienced violence or the threat of violence in the past year (Exhibit 112). In general, the partners of abused homicide women seem to have done fewer of these controlling behaviors than the abusing partners of the clinic/hospital women. It is difficult to know whether this difference was due to lack of knowledge on the part of the proxy respondents, or to a real difference in the partner's behavior.

Stalking and Harassment

For 40 of the 42 abused women victims and for 19 of the 20 abused women offenders, information was available from the proxy respondents on at least half (ten or more) of the 19 HARASS items. Because many proxy respondents did not know the answers to half or more of the HARASS items, we did not analyze the total HARASS scale score. However, differences on the individual HARASS items were sometimes revealing.

The partner of 13 of the 40 victims (33%) and seven of the 19 offenders (37%) had scared her with a weapon in the year before the homicide, compared to 27% of the abused clinic/hospital women. The partner of 13 of the 40 victims (33%) and three of the 19 offenders (16%) had threatened to kill himself or herself if the woman left or did not return to the relationship, compared to 30% of the abused clinic/hospital women. The partner of five of the 40 victims (12%) and one of the 19 offenders (11%) had threatened

to harm the kids if the woman left or did not return to the relationship, compared to 8% of the abused clinic/hospital women. None of the women victims' partners, but one of the 19 women offenders' partners (5%) had threatened to harm her pet, compared to 9% of the abused clinic/hospital women.

Exhibit 112
Partner's Controlling Behavior in the Past Year
Abused Homicide Women versus Clinic/Hospital Women

Number of Power and Control Responses (of 5)	Clinic AW Women	Homicide AW Women	
		Victims	Offenders
None	4.3%	7.1%	5.0%
One	9.9	19.0	25.0
Two	11.5	11.9	15.0
Three	17.6	16.7	10.3
Four	22.3	28.6	25.0
Five	34.4	16.7	20.0
Total	100.0% (494)	100.0% (38)	100.0% (19)

Similarly, the partner of four of the 40 victims (10%) and two of the 19 offenders (11%) had left threatening messages on the phone in four cases, compared to 16% of the abused clinic/hospital women. The partner of 19 of the 40 victims (48%) and nine of the 19 offenders (47%) had followed her, compared to 48% of the abused clinic/hospital women. The partner of nine of the 40 victims (22%) and seven of the 19 offenders (37%) had sat in a car or stood outside her home, compared to 40% of the abused clinic/ hospital women. The partner of two of the 40 victims (5%) and none of the 19 offenders had left notes on her car, compared to 6% of the abused clinic/hospital women. The partner of eight of the 40 victims (20%) and three of the 19 offenders (16%) had frightened or threatened her friends, compared to 28% of the abused clinic/hospital women. The partner of 12 of the 40 victims (30%) and eight of the 19 offenders (42%) had destroyed something that belonged to her or that she liked very much, compared to 49% of the abused clinic/hospital women.

In two HARASS items, the homicide women victims, offenders or both had higher positive responses than the abused clinic/hospital women. The partner of 12 of the 40 victims (30%) and three of the 19 offenders (16%) had frightened or threatened her family, compared to 21% of the abused clinic/hospital women. The partner of 16 of the 40 victims (40%) and ten of the 19 offenders (53%) had threatened to kill her, compared to 38% of the abused clinic/hospital women.

Characteristics of the Women and Their Relationship

The abused women victims were similar demographically to the clinic/hospital women. Of the 42 women, 32 were African/American/Black, six were Latina/Hispanic, and four were white or other, and the age pattern was very similar to that shown in Exhibit 105, above, except that the six abused Latina/Hispanic women victims were even younger.

Of the 20 abused women offenders, 19 were African/American/Black and one was American Indian. The African/American/Black abused women offenders were older, on average, than the African/American/Black abused women victims (mean ages 38 versus 33, respectively).

The partner who killed abused homicide women victims was about equally likely to be her husband, as was Name for the clinic/hospital women who interviewed as AW (Exhibit 113). Of the 32 abused African/American/Black women homicide victims, 9% were in a husband relationship compared to 8% of the 180 clinic/hospital women who had experienced severe violence and 8% of the 158 who had not. Similarly, two of the six Latina/Hispanic homicide women victims were in a husband relationship with the man who killed them, compared to 35% of the 34 clinic/hospital women who had experienced severe violence and 51% of the 71 who had not. One of the four white or other women victims was killed by her husband, compared to 18% of the 22 clinic/hospital women who had experienced severe violence and 21% of the 19 who had not.

Exhibit 113
Relationship with Partner; Abused Homicide Women by Racial/Ethnic Group

Relationship with Partner	African/ American/Black		Latina/Hispanic		White or Other	
	Victim	Offender	Victim	Offender	Victim	Offender
Husband	3	6	2	0	1	0
Ex- or former husband	1	0	0	0	0	0
Commonlaw husband	8	8	2	0	0	1
Boyfriend	12	4	1	0	2	0
Ex- or former boyfriend	6	1	1	0	1	0
Same-sex partner	1	0	0	0	0	0
Other (Fiancé)	1	0	0	0	0	0
Total	32	19	6	0	4	1

Source: CWHRS questionnaire data; 62 women who had experienced violence in previous year.

According to the people interviewed, the abused women homicide victims were more likely to have been in a commonlaw relationship with their killer than the abused clinic/hospital women to Name. Eight of the abused African/American/Black women

victims (25%) were in a commonlaw relationship with their partner, while only one of the 338 clinic/hospital women (0.3%) said she was in a commonlaw relationship with Name. This probably was not due to the proxy respondents defining relationships as "common-law" rather than as "girlfriend/boyfriend," because 37% of the homicide victims were in a girlfriend relationship with the man who killed them, about the same as the 33% of the 180 clinic/hospital women who had experienced severe violence and 42% of the 158 who had not.

Two of the six Latina/Hispanic abused homicide victims were in a commonlaw relationship with the man who killed them, more than the 15% of the 34 clinic/hospital women who had experienced severe violence or the 18% of the 71 women who had not, and one was in a girlfriend/boyfriend relationship, compared to less than the 15% for both groups of abused clinic/hospital women. None of the four white or other women victims was killed by a commonlaw husband, but two were killed by their boyfriend and one by her ex-boyfriend.

The relationship of the 19 abused African/American/Black homicide offenders to the man they killed was very different from the relationship of the clinic/hospital women to Name. Six of the 19 (32%) were the wife of the man they killed, compared to only 8% of the clinic/hospital women. Eight (42%) were the commonlaw wife, compared to almost none of the clinic/hospital women, and 21% were the girlfriend, compared to 37% of the clinic/hospital women (33% of those who had experienced severe violence and 42% who had not). None of the abused women offenders was the ex- or former wife or commonlaw wife of the man she killed, which was not dissimilar to the low number for the abused clinic/hospital women (16 of the 338, or 5%). However, only one of the 19 (5%) was an ex- or former girlfriend, compared to 41% for the abused clinic/hospital women (41% for those who had experienced a severe incident and 41% for those who had not). Thus, women offenders were much less likely to be in an ex- or former girlfriend relationship with their partner, than either the clinic/hospital women or the abused homicide victims (19%).

The length of the couple's relationship at the time of the homicide was about the same as the relationship length for the abused clinic/hospital women. Of the 42 abused women homicide victims, six (14%) had been in the relationship for a year or less, compared to two of the 20 (10%) abused women homicide offenders, and 19% of the 496 abused clinic/hospital women. Similarly, 15 of the 42 victims (36%) had been in the relationship for 13 months to two years, and three of the 20 offenders (15%), compared to 19% of the abused clinic/hospital women. Only 11 of the 42 victims (26%) had been in the relationship over five years, but eight of the 20 offenders (40%), compared to 32% of the clinic/hospital women.

Disparity Between Partners' Ages

The abused homicide women were no different from the abused clinic/hospital women in the disparity between their age and their partner's age (Exhibit 114).

Leaving the Relationship

The abused homicide women were similar to the clinic/hospital women who had experienced severe violence, in whether or not she had left or tried to end the relation-

ship in the previous year. Of the 40 abused homicide victims with information, 31 (77%) had left or tried to end the relationship, and 13 (72%) of the 18 homicide offenders with information, compared to 85% of the clinic/hospital women who had experienced severe violence, and 34% of the clinic/hospital women who had experienced other types of violence. Three of the abused women victims and one abused women offender had asked the partner leave but he had refused, compared to 15% of the clinic/hospital women who had experienced a severe incident.

Exhibit 114
Age Disparity with the Partner: Abused Clinic/Hospital and Homicide Women

Age Disparity with Partner	CWHRS Clinic AW Women	Homicide AW Women	
		Victims*	Offenders
Same age within 5 years	56.7%	59.5%	50.0%
Woman 5 to 9 years older	6.5	7.1	5.0
Woman 10 to 19 years older	2.2	4.8	5.0
Partner 5 to 9 years older	20.9	16.7	20.0
Partner 10 to 19 years older	11.4	11.9	15.0
Partner 20 or more years older	2.2	.0	5.0
Total	100.0% (492)	100.0% (42)	100.0% (20)

*The same-sex victim is included in the victim column. She was five years younger than the woman who killed her.

The partner of 38% of the 40 abused homicide women victims with information had threatened to kill her if she left, about the same as the clinic/hospital women (38%), but somewhat less than the abused homicide women offenders (55%).

Physical and Mental Health

Both abused women homicide victims and offenders were about twice as likely to have been in "poor" general health in the month before the homicide as were the abused clinic/hospital women in the month before the initial interview (Exhibit 115). Further, none of the 20 abused homicide offenders had been in "excellent" health, and many more had been in "fair" health in the month before the fatal incident.

Of the 42 abused women victims, 17 (40%) had been "limited by an emotional condition" in the month before the death, about the same as 209 of the 494 responding abused clinic/hospital women (42%). Of these 17 women, 13 (76%) had been depressed, either alone or in combination with other problems, such as panic attacks or "nerves," again the same as the 77% for the clinic/hospital women. In total, 31% of the victims mentioned "depression" as a current limiting condition, about the same as 34% of the responding 490 abused clinic/hospital women (32% of those who had experienced

severe violence). For example, one proxy respondent said that the woman had "depression, tension, observed her sitting and rocking." Two of the proxy respondents specifically mentioned that the woman had become depressed when she "started losing the kids" or the "kids were taken away." The other four responses included drugs, nerves or nervousness, and "recently hospitalized for a nervous breakdown."

Exhibit 115
Woman's General Health

General Health the Month Before	Clinic AW Women		Homicide AW Women	
	Less Serious	Extreme Violence	Victims	Offenders
Excellent	11.0%	11.8%	9.5%	0.0%
Very good	16.5	15.1	31.0	15.0
Good	37.3	33.6	19.0	25.0
Fair	29.8	29.8	26.2	45.0
Poor	5.5	9.7	14.3	15.0
Total	100.0% (255)	100.0% (238)	100.0% (42)	100.0% (20)

Ten of the 19 abused women offenders with information had been limited by an emotional condition (53%), somewhat more than the women victims (40%). However, that condition was less likely to have been depression. Three of the nine with information about the specific emotional condition mentioned depression, with one respondent saying that the woman was depressed because she had been raised in a foster home and had no family. Several mentioned stress or "nervousness." One had had a "nervous breakdown about four years ago due to beatings and losing children." Another had had a nervous breakdown in the previous month, and one woman was suffering from stress because of a new baby and a "restraining order against" the partner. Proxy respondents said that one abused woman offender had a "character disorder" and another just had a "mental problem."

Of the 42 abused women homicide victims, we had information about their suicide threat or attempt for 36. Of these 36, only two had threatened or tried to commit suicide (6%). Of the 20 abused women offenders, we had information about 12, and none of these 12 had threatened or tried to commit suicide. By comparison, 38% of the 233 responding clinic/hospital women who had experienced severe violence in the past year, and 29% of the other abused women, said that they had ever threatened or tried to commit suicide.

Pregnancy and Children

Only two of the homicide women, both victims, were pregnant when they were killed (3%), and both babies died. Nine additional women (13%) had been pregnant in the year prior to the homicide. By comparison, 42 of the 487 (9%) abused clinic/hospital

women were pregnant at the initial interview, and another 94 (19%) had been pregnant earlier in the past year. (However, a goal of the clinic/hospital sample was to include pregnant women.)

Of the nine homicide women who had been pregnant in the previous year, five had given birth to a live baby, two had suffered a miscarriage, and two had ended the pregnancy with an abortion, compared to 69% of the clinic/hospital women who had a live birth, 22% who had a miscarriage and 9% who had an abortion. However, the proxy respondents may not have been aware of a miscarriage or abortion for some of the homicide women.

Only six of the 42 abused homicide women victims (14%) and two of the 20 offenders (10%) had no children. This was less than for either the 494 responding abused clinic/hospital women (21%) or for the 207 NAW women (28%). Although the greater tendency to have children may have been a factor of their older age for the African/American/Black homicide women, that could not have been the explanation for the Latina/Hispanic homicide women, who were younger on average than the AW women.

Though homicide women were more likely to have at least one child, they were less likely to have children (theirs or others) living in their household. Close to half of the 62 homicide women, including 18 victims (43%) and nine offenders (45%), were living in a household with no children, compared to 39% of the 201 clinic/hospital women who had experienced a severe incident and had a home and 32% of the 237 other clinic/hospital women who were living in a home. Some of the homicide women's children who were not living at home were grown, but others were in the custody of DCFS or living with relatives or in foster care.

Having a child who was the stepchild of her partner was not a factor that distinguished the abused homicide women from the abused clinic/hospital women. About the same proportion of abused homicide women as clinic/hospital women who interviewed as AW were had at least one child at home who was not the biological child of her intimate partner (Exhibit 116).

Alcohol or Drug Use

In general, abused homicide women and their partners were more likely to have "ever" had an alcohol problem than abused clinic/hospital women and their partners (Exhibit 117). The 42 abused women homicide victims, however, were more similar to those clinic/hospital women who had experienced severe violence (38% versus 31% with an alcohol problem) than to the other women (17%). The 20 abused women homicide offenders were more likely to have had an alcohol problem (55%) than any other group of women.

These patterns generally held true for each racial/ethnic group, with some exceptions. African/American/Black and white or other women were much more likely to have had an alcohol problem than Latina/Hispanic women, and Latina/Hispanic homicide victims were even less likely to have an alcohol problem than Latina/Hispanic clinic/hospital women. On the other hand, five of the seven Latino/Hispanic men homicide offenders had an alcohol problem, much more than Name in the clinic/hospital sample.

The four white or other women homicide victims were much more likely to have an alcohol problem than any of the clinic/hospital counterparts, and all of the white or other partners had an alcohol problem versus about half of the partners in the clinic/hospital sample.

Exhibit 116
Children Fathered by Previous Partners

Paternity of Woman's Children Living in Her Household	Clinic/ Hospital AW Women	Homicide AW Women		
		Victims**	Offenders	Total
All woman's children her partner's	22.4%	21.9%	25.0%	22.6%
None of her children were partner's	25.7	26.8	10.0	22.6
Her children and his or their children	1.6	7.3	20.0	11.3
No children, or none of her children living in her household	50.3*	43.9	45.0	43.5
Total	100.0% (491)	100.0% (41)	100.0% (20)	100.0% (62)

*Although only 21% of "CWHRS AW women" had no children, half did not have any children living in her household. This included 106 women who had children age 17 and younger, and 67 age 18 or older.

**The "victims" column in this table excludes the woman killed by a same-sex partner.

Exhibit 117
Alcohol Problems: Abused Women and Their Partners
(N in parentheses)

Percent Who "Ever" Had an Alcohol Problem	Clinic AW Women		Homicide AW Women	
	Other	Severe	Victims	Offenders
Woman	17% (258)	31% (235)	38% (42)	55% (20)
African/American/Black	18% (160)	35% (178)	41% (32)	53% (19)
Latina/Hispanic	8% (72)	18% (33)	(0/6)	NA
White or Other	40% (20)	27% (22)	(3/4)	(1/1)
Her Partner	44% (256)	56% (232)	62% (40)	80% (20)
African/American/Black	46% (159)	55% (175)	57% (30)	79% (19)
Latina/Hispanic	40% (72)	57% (33)	(5/7)	NA
White or Other	50% (20)	59% (22)	(3/3)	(1/1)

The abused homicide women generally were similar to the clinic/hospital women in whether or not they had ever had a drug problem, especially those clinic/hospital women who had experienced severe violence (Exhibit 118). On the other hand, drug

problems were much more prevalent among the partners of the abused homicide women than the partners of the clinic/hospital women. Whether the partner was the homicide offender or the victim, about three-quarters had "ever" had a drug problem, compared to about half of the partners of clinic/hospital women who had experienced severe violence. There was very little difference across racial/ethnic group.

Exhibit 118
Drug Problems: Abused Women and Their Partners (N in parentheses)

Percent Who "Ever" Had a Drug Problem	Clinic AW Women		Homicide AW Women	
	Other	Severe	Victims	Offenders
Woman	23% (258)	41% (235)	43% (42)	50% (18)
African/American/Black	30% (160)	45% (178)	44% (32)	47% (17)
Latina/Hispanic	10% (72)	18% (33)	(1/6)	NA
White or Other	25% (20)	50% (22)	(3/4)	(1/1)
Her Partner	28% (250)	51% (227)	73% (37)	74% (19)
African/American/Black	30% (156)	50% (171)	70% (30)	72% (18)
Latina/Hispanic	21% (70)	50% (32)	(4/5)	NA
White or Other	47% (19)	59% (22)	(2/3)	(1/1)

Social Support and Material Resources

The questions on the Social Support Network (SSN) scale were asked of the proxy interviewers, and most of them answered, but their responses were not reliable. For almost all of the SSN items, each proxy respondent told us that the woman did have support, tangible help in emergencies, and access to resources. However, the answers of the women offenders who were interviewed themselves were much less positive. It may be that the confidants of the couple were remembering the situation from their point of view, not the woman's point of view. In retrospect, perhaps we would have received more accurate information from the proxy respondents if we had spent more time training the interviewers to handle these questions, and if we had included a more sensitive and elaborate introduction to this section.

Therefore, the only reliable information on social support and material resources for the lethal sample is information on material resources, plus factual information such as help-seeking activities or how long the woman had been living in Chicago. In general, the abused women offenders had fewer resources (employment or education), but the abused women victims had about the same level of resources, compared to the abused clinic/hospital women (Exhibit 119).

Women homicide victims who had been abused in the past year were more likely to have a full or part-time job (49%) than clinic/hospital women in general (29%), and even more likely than those clinic/hospital women who had experienced severe violence in the past year (23%). In contrast, only 5% of the 19 abused women homicide offenders

had a full or part-time job at the time of the fatal incident.

Exhibit 119
Employment, Education and Income of Clinic/Hospital and Homicide Women

Occupation, Education, Income	Clinic AW Women		Homicide AW Women*	
	Other	Severe	Victims	Offenders
Employment				
Full or part-time job	35.6%	22.9%	48.8%	5.3%
Student only	11.1	10.2	4.9	0.0
Other (homemaker or unemployed)	53.4	66.9	46.3	89.5
Total	100.0% 253)	100.0% (236)	100.0% (41)	100.0% (19)
Education				
Less than High School Degree	42.9%	53.8%	36.8%	82.3%
High School, or GED	27.2	18.9	28.9%	5.9%
Post-High School Education	29.9	27.3	30.9%	11.8%
Total	100.0% (254)	100.0% (238)	100.0% (38)	100.0% (17)
Has personal income she controls	79.0% (252)	82.7% (237)	87.5% (40)	89.5 (19)

*For the one same-sex homicide, the characteristics of the victim are in this table.

Similarly, while 52% of the clinic/hospital women had a high school degree (46% of those who had experienced severe violence), fully 24 of the 38 (63%) abused women victims had a high school degree, but only three of the 17 (18%) of the abused women offenders. On the other hand, both groups of abused homicide women were slightly more likely to have at least some personal income that she herself controlled, compared to the clinic/hospital women.

Of the 338 responding abused African/American/Black women in the clinic/ hospital sample, 329 (97%) had lived in Chicago all her life or for many years (96% of the 179 women who had experienced severe violence in the past year). The African/ American/Black homicide women were similar, with 29 of the 31 victims (94%) and 18 of the 19 offenders (95%) having lived in Chicago all her life or for many years. Similarly, 75 of the 105 abused Latina/Hispanic clinic/hospital women (71%) had lived in Chicago all her life or for many years, compared to four of the six abused homicide victims.

Of the 40 abused homicide victims, ten (25%) "hesitated to tell anyone her problems because she was worried that the authorities, like DCFS or Immigration, might

find out," the same as for the abused clinic/hospital women (123 of 494). Two of the ten women had actually lost children to DCFS. More of the abused women offenders, however (40%) "hesitated to tell anyone her problems because she was worried" about the authorities.

Only one of the homicide women was homeless, though a second woman may have been homeless. Neither of these women was included in the "abused" homicide women group. None of the homicide women was living in a group home, shelter, or institution at the time of the homicide.

For two of the 40 abused women homicide victims (5%), and three of the 17 abused homicide offenders (18%), but for 23% of the 484 responding abused clinic/ hospital women, divorce was not acceptable in her family.

Help-Seeking and Interventions

In a recent study of deaths of 119 women at the hands of an intimate partner in ten United States cities, Sharps, *et al.* (1999) found that 30% had visited a health provider in the year before the death, 21% had received medical care for an injury, and 74% of these women had been seen in an emergency department. The CWHRS abused homicide women had similar experiences with seeking medical help, with 29% of the victims and 33% of the offenders having sought medical help following an incident in the past year (Exhibit 120).

Exhibit 120
Help Seeking Among Clinic/Hospital Women and Homicide Women who Had Experienced Violence in the Past Year (N in parentheses)

	Clinic AW Women		Homicide AW Women	
Type of Help Seeking	Less Serious	Extreme Violence	Abused Victims	Abused Offenders
Talked things over with others	67.6% (253)	75.6% (238)	78.0% (41)	75.0% (16)
Talking was helpful	87.7% (171)	85.6% (180)	73.1% (26)	44.4% (9)
Contacted agency or counselor	13.0% (253)	23.9% (238)	12.8% (39)	7.1% (14)
Sought medical help	11.9% (253)	40.8% (238)	28.9% (38)	33.3% (15)
Called the police	25.7% (253)	52.9% (238)	48.6% (37)	70.6% (17)
Police were helpful	66.1% (59)	68.1% (116)	56.2% (16)	75.0% (12)

The help-seeking experiences of the 41 abused women homicide victims were generally similar to those of the abused clinic/hospital women. About three-quarters had talked with someone about the incidents (81% of the 31 African/American/Black women, five of the six Latina/Hispanic women, and half of the four white or other women). This was somewhat higher than for the corresponding abused clinic/hospital women (75% of African/American/Black women, 64% of Latina/Hispanic women and 62% of white or other women). Of the 26 who had talked with someone, 19 (73%) had found talking to have been helpful, slightly less than for the clinic/hospital women.

Only five (13%) of the 39 victims with information had contacted an agency or counselor about an incident in the past year (four of the 29 (14%) African/American/Black women, none of the six Latina/Hispanic women, and one of the four white or other women). For African/American/Black women, this was about the same as the 15% of the 337 abused clinic/hospital women who had contacted a counselor or agency. For Latina/Hispanic women and white or other women, however, more abused clinic/hospital women had sought counseling help (22% and 31%, respectively) than homicide women.

Eleven of 38 (29%) abused homicide women victims had sought medical help after an incident in the previous year (seven of the 28 African/American/Black women (25%), two of the six Latina/Hispanic women and half of the four white or other women victims). For African/American/Black women, this was about the same as for the abused clinic/hospital women (30%), but less than for the women who had experienced severe violence (43%). For Latina/Hispanic women, the number who had sought medical help was slightly higher than for the 34 clinic/hospital women who had experienced severe violence (29%), and much higher than for the other 71 clinic/hospital women (6%). For white or other women, the number who had sought medical help was higher than for either the 22 clinic/hospital who had experienced severe violence (36%) or the other 20 clinic/hospital women (15%).

Eighteen of 37 abused women homicide victims (49%) had contacted (or someone else contacted) the police, 13 of the 28 (46%) African/American/Black women, two of the five Latina/Hispanic women, and three of the four white or other women. For African/American/Black women, this was comparable to the percent of the 180 clinic/hospital women with a severe incident (54%), and somewhat more than for the other 156 clinic/hospital women (26%). For Latina/Hispanic women, the percent who contacted the police was about the same as the 34 clinic/hospital women who had experienced severe violence (44%), and more than for the other 71 clinic/hospital women (24%). For white or other women, this was much higher than for either group (59% and 15%, respectively). When homicide women victims contacted the police, however, the police were slightly less likely to have been "helpful" (56%), compared to the clinic/hospital women who had experienced severe violence (68%) or who had not (66%).

Previous research (Browne, 1986; Browne & Williams, 1989) had suggested that availability of support services for abused women was negatively related to the risk of men being killed in domestic violence, and that the women who had killed or attempted to kill their abuser were less likely to have sought or received support, compared to women who had been killed by their abuser. In contrast, the CWHRS found that abused

women offenders were more likely to have contacted the police in the previous year, though they were much less likely to have contacted an agency or counselor.[25]

Although the 75% of the 16 abused women offenders who had talked with someone about the violence was about the same as for women victims or clinic/hospital women, talking had been helpful for only four of the nine. The abused women offenders were the least likely to have contacted an agency or counselor (7%), compared to the others, or compared to abused women victims who were African/American/Black (14%). They did not differ in seeking medical help. However, they were the most likely to have called the police in the year prior to the lethal incident (71%). In addition, the police had been "helpful" for 75% of the 12 homicide offenders who had contacted the police, compared to 56% of the 18 homicide victims.

Summary: How Did CWHRS Homicide Women Differ from Clinic/Hospital Women?

The analysis presented in this section focused on a comparison of abused women who were in fatal versus non-fatal situations. It compared the 62 homicide women (42 victims and 20 offenders) who had experienced violence or the threat of violence at the hands of their intimate partner in the previous year to the clinic/hospital women who had interviewed as AW. Some key findings of this analysis were the following:

-- The violence experienced in the past year by abused homicide women victims was very similar to the violence experienced by the abused clinic/hospital women, in most types of violence. There were two differences. First, the violence was more likely to have been increasing in frequency and severity. Second, the homicide victims were much more likely to have experienced an incident in which a knife or a gun had been threatened or used.

-- The violence experienced in the past year by abused homicide women offenders, on the other hand, was more likely to have been severe than the violence experienced by the abused homicide victims or by the clinic/hospital women. Abused women offenders were more likely to have been beaten, choked or burned, and they were more likely to have been hit with an object that could hurt her. Almost all of them had been slapped, kicked, bitten, or hit with a fist. The violence against the offenders was more likely to have been increasing in frequency than for either the victims or the clinic/hospital women, and like the homicide victims, the offenders were more likely than the clinic/hospital women to have experienced an incident with a knife or gun.

-- The most recent violent incident that the woman had experienced before the homicide occurred within the month for 49% of the women victims and 75% of the women offenders, compared to 50% of the clinic/hospital women who had experienced a severe incident and 36% of the other abused clinic/hospital women. For 16% of the abused women offenders, a violent incident had occurred within 24 hours of the homicide, compared to 6% of the clinic/hospital women.

-- Almost three-fourths of the women homicide victims (74%) and over half (58%) of the women homicide offenders had left or tried to end the relationship in the previous year, compared to 85% of the clinic/hospital women who had experienced a severe incident and 66% of the other abused clinic/hospital women. In addition, an immediate precipitating factor in 38% of the homicides of women victims was when the woman was

leaving or trying to end the relationship. In 13% of the homicides by a woman offender, the incident began when the woman left or tried to end the relationship and the partner attacked her.

-- Homicide women who had experienced abuse were about twice as likely to have been in "poor" general health in the month before the homicide as were the abused clinic/hospital women in the month before the initial interview. This was true for both homicide victims and offenders. None of the 20 abused homicide offenders had been in "excellent" health, and many more had been in "fair" health in the month before the fatal incident.

-- Abused homicide women were more likely to have children than their clinic/ hospital counterparts. On the other hand, they were less likely to be living in the same household as a child, either their child or another child, at the time of the homicide. They were no more likely to have a child fathered by a previous partner.

-- Abused homicide women were more likely to have "ever" had an alcohol problem or a drug problem than were abused clinic/hospital women in general, but about the same as women who had experienced severe violence. However, the largest differences in alcohol or drug use were for the partners of these women. Both the partners who became the victim and those who became the offender in the homicide were much more likely to have "ever" had a drug problem, compared to the partners of the abused clinic/hospital women. The men who were killed were much more likely to have ever had an alcohol problem than were the abusing partners of clinic/hospital women.

-- Abused women homicide victims tended to have more resources than women who became homicide offenders or clinic/hospital women. The were much more likely to have a full or part-time job (49%) than clinic/hospital women in general (29%), and even more likely than those clinic/hospital women who had experienced severe violence in the past year (23%). They were also more likely to have a high school degree (63%) than all clinic/hospital women (52%) or those who had experienced severe violence (46%).

-- Women who became a homicide offender usually had experienced more severe and recent violence, and had fewer resources than clinic/hospital women or women who became a homicide victim. They were much less likely to have a full or part-time job (5%) or to have a high school diploma (18%) than any of the other groups of women. They were also more likely to be older, to have been suffering from an "emotional condition" the month before the homicide, to have been in the relationship with the man for five years or more, and to be currently married to him. The man they killed was much more likely to have ever had an alcohol problem and the women offenders themselves were somewhat more likely to have an alcohol problem than for the other women.

-- Compared to their clinic/hospital counterparts, abused Latina/Hispanic women homicide victims were more likely to have talked to someone about the violence, but much less likely to have contacted an agency or counselor.

-- Compared to their clinic/hospital counterparts, abused African/American/Black women homicide victims were slightly more likely to have talked to someone about a violent incident, but were equally likely to have sought help from any formal resource.

-- In contrast, abused women homicide offenders were much less likely to have

sought help from a counselor or agency than either their clinic/hospital counterparts or abused women homicide victims. However, they were much more likely to have contacted the police.

CONCLUSIONS

The Chicago Women's Health Risk Study (CWHRS) was designed to give nurses, beat officers and other primary support people information they needed to know in order to help women being violently abused by an intimate partner lower the risk of life-threatening injury or death. Previous research did not provide this practical information. Although it told us who, in the general population, was most likely to be abused, it did not tell practitioners which abused women were in a situation where the risk of serious injury or death may be especially high. In addition, previous research tended to measure only one or two things, and did not take into account the interaction of events and circumstances as they change over time.

Field practitioners also need to know whether risk patterns differ for different racial or ethnic groups, for women in a same-sex relationship, or for pregnant women, and they need to be able to respond to women who may be in high risk situations but do not contact shelters or support networks. Prior to the CWHRS, information about the needs and best interventions for these groups was very limited.

The design of the CWHRS and the energy and dedication of the collaborators who made the design reality produced a tremendously rich data set with the detail and the accuracy to answer the questions practitioners ask. We now can tell them combinations of factors that indicate that a woman in an abusive situation is at high risk for serious injury or death. The "Conclusions" section of this report reviews key findings and the most important conclusions of the CWHRS.

The Stereotypical "Battered Woman" Does Not Exist

Women's lives are complex. Intimate relationships are sensitive and private areas of a woman's life, and there are cultural and racial/ethnic differences in how women may describe these relationships to a stranger such as an interviewer. Therefore, it is important for both researchers and helping professionals to provide many opportunities for a woman to tell them about her relationship, without pushing her into the constraints of artificial categories. Interventions aimed at simplistic categories of women will not succeed, and research designs or practitioner protocols will yield misleading results.

The CWHRS found that the challenges facing women who had experienced physical violence at the hands of an intimate partner in the past year differed for women at different points in the "abuse process;" that risk patterns differed for women within different racial/ethnic groups, for pregnant women, for women being abused by a same-sex partner, and for women who would become the offender in the homicide; that it was important to consider risk factors relating to the particular incident as well as factors relating to the general situation in the previous year; and that it was also important to consider factors that were "protective" or supportive for women in high-risk situations. This section outlines these findings.

The Challenges Facing Abused Women Change Over Time

Many research analysts and domestic violence advocates have stressed that woman experience physical abuse as a process. The decision to leave, the definition of the situation as abusive, the collection of resources, all involve change over time. The CWHRS found that constellations of risk factors differed for women who were at different points in this process. The risks associated with whether or not a woman was physically abused by an intimate partner in the past year were not always the same as the sets of risk factors associated with the severity of that violence, and these differed from the factors associated with whether she would continue to be abused in the future, the severity of that future abuse, and whether death would be an outcome.

In fact, sometimes the same risk factor had the opposite association for women at different points in the abuse process. Take age, for example. Older Latina/Hispanic women were more likely than younger women to interview as AW, but those older women who did interview as AW were less likely to have experienced severe violence than younger women. African/American/Black older women were less likely to interview as AW, equally likely to have experienced severe violence in the past year, but more likely to experience severe violence in the future, and abused homicide women, especially women offenders, were much older than other abused women.

As an overview, Exhibit 121 shows whether or not each of a number of risk factors was significantly associated with interviewing as AW versus NAW; with experiencing at least one incident in the past year in which she was beaten up, choked, burned, or severely injured, or threatened or attacked with a weapon; with continuing violence in the follow-up period; and with becoming a homicide victim or offender. A "Yes" signifies that there was a statistically significant association between the risk factor considered by itself and the type of violence. (The "Yeses" in the homicide column are based on large percentage differences, not on significance tests.) "No" signifies that there was no significant association.

Though this overview cannot include all of the detailed analysis covered in the report, particularly the multi-variate analysis, it does illuminate patterns and connections across points in the abuse process. It makes it easier to pick out the risk factors that were extremely important for all CWHRS women, no matter where they might have been in the abuse process.

The factors that were never important for any group of women also stand out. For example, age disparity was not associated with intimate partner violence at any point in the process. In contrast, trying to end or leave the relationship was important at every point (though not always in the same direction; see below).

When all of the risk factors were combined in exploratory multiple regressions, certain of them stood out. For all of the clinic/hospital women taken together, five factors, in combination, were the most important factors associated with the severity of violence in the previous year. These factors were Name's controlling behavior, Name's harassment and stalking, whether the woman had a PTSD diagnosis, whether she had a household income less than $5,000, and whether she had been in a relationship with Name less than 15 years.

Exhibit 121
Factors Associated with Four Degrees of Intimate Partner Violence

Code: Yes = significant association; Yes! = significant and strong association; AAB = association only for African/American/Black women; LH = association only for Latina/Hispanic women; WO = association only for white or other women; No = no significant association; --- = not applicable or not measured

Factor	Inter-viewing as AW	Severe Violence in Past Year	Contin-uing Violence	Homicide
Woman's age	Yes	WO	No	AAB
Disparity with Name's age	No	No	No	No
Type of union and Relationship	Yes	No	Yes	Yes
Estrangement, Leaving	Yes	Yes	Yes	Yes!
Length of relationship	No	Yes	Yes	Yes
Children	LH	AAB	AAB	Yes
Name's stepchildren	LH	No	No	No
Name's controlling behavior	Yes!	Yes!	Yes!	-----
Stalking, Harassment	Yes!	Yes!	Yes	Yes
Overall health	No	LH	No	Yes
Pregnancy	LH	No	No	Yes
Alcohol problem	Yes	Name	No	Yes
Drug problem	Yes	Name	No	Yes
Depression, Suicide threats	AAB, LH	AAB	Yes	Offender
PTSD	Yes	Yes	AAB	-----
Name's suicide risk	Yes	Yes	No	Yes!
Presence of a firearm	Yes	Pregnant	No	Yes!
Social Support Network scale	Yes!	AAB	AAB	-----
Employment, Education, Income	Yes	Yes	Yes	Yes
Place of birth, Language	LH	Yes	No	No
Being homeless, in group home	AAB, WO	AAB, WO	No	No
Family's divorce attitude	No	WO	No	No
Violence severity in past year	-----	-----	No	Yes
Violence frequency in past year	-----	-----	Yes	Yes
Recency of most recent incident	-----	-----	Yes	Yes
Help-seeking: Informal	-----	-----	AAB	Yes
Help-seeking: Agency	-----	-----	Yes	LH, Off.
Help-seeking: Medical	-----	-----	Yes	LH, WO
Help-seeking: Police	-----	-----	Yes	Offender

less likely to have consulted a counselor or agency, and much more likely to have contacted the police.

Characteristics of the Incident Itself may be the Primary Risk Factor

The CWHRS focused on gathering information that would help to prevent one particular incident of intimate partner violence, the incident resulting in death. Research describes two different scenarios in intimate partner homicide. In one scenario, a regular pattern of violence eventually leads to a fatal incident, which is similar to those that preceded it, except that someone died. In a second scenario, something different happens in the fatal incident. Perhaps a weapon was used for the first time, the abuser threatened her child for the first time, or something prevented a wounded partner from receiving medical attention.

In the CWHRS, most women who became a homicide victim or offender had experienced violence at the hands of her partner in the previous year, but 15% had not. In addition, when the clinic/hospital women told us about only one incident, for 27% that single incident involved being seriously or severely injured or weapon threat or use. Thus, the first incident that happens may be fatal or life-threatening. Even in those homicides in which prior risk factors such as violence were important, aspects of the incident itself were important as well. Therefore, we must look at the incident itself if we are to understand the reasons for the fatal violence.

The CWHRS clinic/hospital sample was specifically designed to reflect the population from which most Chicago intimate partner homicide incidents originated, and there is considerable evidence that it succeeded in this sampling goal. Therefore, the 4,974 non-fatal incidents the clinic/hospital women told us about can be compared to the 87 fatal incidents. Differences between the two provide an indication of the characteristics of fatal incidents, compared to non-fatal incidents. Some of the key differences and similarities were the following:

-- The use of a firearm or a knife was an important difference between fatal and non-fatal intimate partner violent incidents. The fatality rates for firearm incidents (26%) or for knife incidents (28%) were much higher than the fatality rate for incidents with another weapon (12%) or for incidents with no weapon (0.3%). Less than 2% of the non-fatal incidents, happening to 9% of the women, involved the threat or use of a firearm, but 40% of the women killed by a man were killed by a gun.

-- In the non-fatal incidents, it was much less likely for a firearm to be the weapon when the weapon was actually used, instead of being only threatened. A knife, however, was equally likely to be the weapon when it was threatened or used. One reason for this could be that the threat of a firearm was sufficient for Name to produce the desired effect in the woman, so that it was not "necessary" for Name to actually use the firearm.

-- A weapon was not necessary for the woman to sustain severe, life-threatening injury, however. Thirteen of the non-fatal incidents ended with the woman sustaining very severe or permanent injury, such as brain damage from being struck on the head, being choked to unconsciousness, or breaking her back when she was thrown out of a window, but this was done with no weapon other than the partner's hands, fists or feet. In addition, 10% of the fatal incidents did not involve any weapon.

-- In ten of the 57 (18%) incidents in which a man killed a women, he strangled or choked her to death. The woman was choked in less than 2% of all the non-fatal incidents, but in 24% of the most serious incidents. Only the fatal choking incidents involved a weapon.

-- Though Name's suicidal behavior or threat was not associated with continuing violence, severe or not, the majority of those who committed homicide/suicide had tried or threatened to commit suicide previously. A combination seen in many fatal incidents was the man's suicide, together with the woman's leaving or attempting to end the relationship. Extreme jealousy was often part of this configuration as well. Thus, the two Danger Assessment items about Name's suicidal behavior and jealousy may be especially important risk factors when combined with each other.

-- Someone was more likely to be drunk in the fatal than the non-fatal incidents. In 44 of the 67 homicide incidents (66%) for which we have information, someone was drunk, compared to 41% of the 4,974 non-lethal incidents. In addition, the woman was more likely to experience severe violence in those non-lethal incidents in which she was drunk, compared to all other types of incident.

Past-Year Risk Factors for Serious Injury or Death in Intimate Violence

In contrast to homicides in which the events in the incident itself were of primary importance, in other homicides there was no interaction between the couple in the incident prior to the fatal attack. In some of these, the man came into the situation armed and ready to kill the woman, usually tracking her down to do so. In looking for risk factors for all intimate partner homicides, but especially in homicides like these, it is important to consider factors outside the incident itself, such as the continuation of a prior pattern of violence. This section summarizes types of risk factors that were important for all groups of CWHRS women.

Past Violence. In the great majority of homicides, whether the woman was the victim or the offender, she had experienced violence at the hands of her partner in the year prior to the fatal incident. The level and kinds of violence that had occurred prior to the fatal incident were similar in many ways to the violence experienced in the past year by the CWHRS clinic/hospital women, but the homicide women were more likely to have experienced the more serious kinds of violence, and the violence was more likely to have been increasing in frequency and severity.

The ten cases in which the woman was strangled to death underscore the importance of having been choked in a past incident as a risk factor for serious injury or death in a future incident. Therefore, the Danger Assessment question asking the woman whether or not an intimate partner had ever tried to choke her may represent an important risk factor for a fatal outcome.

A key question in assessing a woman's risk of experiencing continued intimate partner violence was: "how long ago did the last incident happen?" The most recent 30 days were an especially critical period, with over a third of the clinic/hospital women who had experienced violence within the past month experiencing severe violence in the future. Half of the women homicide victims and 75% of the women offenders had experienced a violent incident within the month. For 16% of the abused women offenders, a

violent incident had happened within 24 hours of the homicide.

Controlling Behavior and Stalking. Name's controlling behavior and Name's stalking and harassment were very strongly associated with the severity of violence in the past year and continued severe violence in the future, even when other risk and protective factors were taken into account. This was true for each individual racial/ethnic group, as well as for pregnant women.

In some homicide cases, there had been no physical violence prior to the fatal incident, but the partner had demonstrated controlling behavior or harassment. For example, for many of the women for which the fatal incident began with the man suddenly attacking her in an explosive age, the woman had not experienced violence in the past year but there had been previous controlling behavior. Often extreme jealousy was involved in these cases as well.

Morbid Jealousy. The partner's extreme jealousy was an important risk factor for greater severity for all groups of women and at each stage of the abuse process. The partner of 82% of the homicide women was extremely jealous, and jealousy was an immediate precipitating factor in a third of the homicide incidents.

In addition, when a clinic/hospital woman said at the initial interview that, "Name is violently and constantly jealous," she was more likely to have experienced severe violence in the past year and the violence was more likely to continue in the future. For women who had experienced a severe incident in the previous year, Name's jealousy was strongly associated with the severity of future violence.

Estrangement and Leaving the Relationship. Leaving or trying to end the relationship had a high potential gain for CWHRS women, but it also had a high potential risk. For clinic/hospital women who had not experienced a severe incident, leaving the relationship could be a protective factor. In fact, women who had *not* tried to leave or end the relationship were at higher risk for continued violence. However, if the violence did continue, it was likely to be more severe when the woman had left or tried to end the relationship. For women who had experienced at least one severe incident in the past year, on the other hand, leaving was *not* associated with future violence, in either direction.

A woman was at especially high risk for a serious incident on follow-up if she had asked her partner to leave, but the partner had refused. She was also at high risk when her partner had threatened to kill her if she left the relationship or, if she had left, she refused to return. In 17% of the homicides of women victims, the woman had already left and the partner was trying to get her to return. The man had invaded the woman's home or other safe place just before 13 homicides, and in three of these the man had violated an order of protection in order to do so.

Almost three-fourths of the women homicide victims (74%) and over half (58%) of the women homicide offenders had left or tried to end the relationship in the previous year, compared to 85% of the clinic/hospital women who had experienced a severe incident and 66% of the other abused clinic/hospital women. In addition, the woman leaving or trying to end the relationship was an immediate precipitating factor in 38% of the homicides of women victims. In 13% of the homicides by a woman offender, the

incident began when the woman left or tried to end the relationship and the partner attacked her.

In summary, women who had experienced severe violence were more likely to leave or try to end the relationship, and the potential gain for them was great if they succeeded. However, her leaving was an immediate precipitating factor for over a third of the homicides of women victims. Thus, the potential risk was also great. Similarly, for women who had not experienced at least one severe incident in the previous year, leaving could also be protective, but only if she succeeded. Women who seemed to be able to end the violence by leaving or ending the relationship were often in relationships that were short-term (a year or less), more independent (had never lived together), and less committed (no children, not married).

Weapon. The presence of a firearm in the home was an important factor distinguishing the abused clinic/hospital women from the homicide women. CWHRS clinic/hospital women were less likely to have a firearm in her home than were women nationwide. In contrast, the homicide women were much more likely to have a firearm in the home, but only when she was living with her partner. Over a third of the homicide women who lived with her partner had a firearm in their home, and 75% of the partners who were not living with the woman had a firearm in their home. However, almost none of the homicide women who were living separately from their partner had a firearm in her home. Many of these women were killed with a firearm, even though they did not keep one in their home. For these women, firearm "availability" was not related to firearms in their own home or safe place, but to availability to the man who killed them.

Women who told us in the initial interview that an intimate partner had "scared them with a weapon" in the past year were much more likely to experience severe violence in the follow-up period. In addition, women homicide victims and offenders were about twice as likely to have been threatened with a knife or gun or to have a knife or gun used on them than were other abused women.

Physical and Mental Health. Abused homicide women were much more likely to have been in "poor" health, compared to the clinic/hospital women. The women homicide offenders were even more likely to be in poor or fair health than the victims. However, there was no association between the woman's poor health and continuing or severe violence in the future for the clinic/hospital women.

Women who became a homicide victim were equally likely to have "been limited by an emotional problem" in the month before the incident, compared to clinic/hospital women. Women who became a homicide offender were more likely to have been experiencing an emotional problem than either women victims or clinic/hospital women. However, that condition was less likely to have been depression for the women offenders than for the women victims.

Alcohol or Drug Use. Compared to all abused clinic/hospital women and their abusing partner, homicide women and their partners were more likely to have "ever" had an alcohol problem or a drug problem. However, the abused homicide women and clinic/hospital women who had experienced severe violence were similar in this respect.

On the other hand, the partners of abused homicide women, whether the partner

became the homicide victim or the offender, were much more likely to have ever had an alcohol problem or a drug problem than the partners of the clinic/hospital women, even women who had experienced severe violence.

Protective Factors

Many of the CWHRS women who interviewed as AW had experienced multiple and severe high-risk factors in the past year, but did not experience continued violence. What were the "protective" factors that distinguished these women from others?

A more distant relationship with Name was a protective factor. Women who had never lived with Name at all, or had not lived with Name at any time in the previous year were less likely to have experienced severe violence in the past year. Women who had been in a relationship with Name for twelve months or less, and women who said at the initial interview that they were in an ex- or former relationship were more likely to have no violence to report in the follow-up period.

When Name had no controlling behaviors (scored zero on the Power and Control scale), the women was much more likely to escape future violence. In addition, women were more likely to escape future violence when they had said at the initial interview that there was someone she could "talk to openly about anything" or that there was someone who supported her decisions.

Do Risk and Protective Factors Differ for Different Groups of Women?

Though many of the risk factors for serious violence in the past year, continued serious violence, or fatal violence were the same for all groups of women, there were some differences for women in different racial/ethnic groups, for pregnant women, and for women in an abusive same-sex relationship. In addition, the pattern of risk and protective factors differed for those women who became the offender in the homicide, compared to the women who became the victim.

Latina/Hispanic Women. Latina/Hispanic women, as a group, had experienced less severe violence, but were more likely to continue to experience violence. They were much more likely to become a homicide victim than a homicide offender. The most important risk factors for serious violence in the past year for Latina/Hispanic women were the partner's harassment and stalking, her general health compared to other women her age, and having left or tried to end the relationship in the previous year. For continuing severe violence, the most important risk factors for Latina/Hispanic women were the recency of the most recent incident, Name's controlling behavior, and *not* having left or tried to leave in the past year.

Latina/Hispanic women who said that they had "poor" health were much more likely to have experienced severe violence in the past year, but their health was not associated with whether they continued to experience violence in the future. In addition, Latina/Hispanic women who had experienced severe violence in the past year were more likely to be unemployed in the following year.

Latina/Hispanic women were much less likely to have sought any kind of help, even those women who had experienced a severe incident in the previous year. In total, 21% had not sought any help, formal or informal, and well over a third (38%) had not sought help from any formal resource. Even fewer Latina/Hispanic women homicide

victims had sought help from a counselor or agency in the year before her death.

African/American/Black Women. For the African/American/Black women, the most important risk factors for serious violence in the past year were harassment and stalking, Name's controlling behavior, PTSD diagnosis, length of her relationship with Name, and her total number of children. The most important risk factors for severe violence in the future were the number of incidents in the past year, her total number of children, *not* having left or tried to end the relationship in the past year, and having talked to anyone, contacted an agency or counselor, or contacted the police in the past year. Women who had experienced more incidents in the past year, who had more children, who had not left or tried to end the relationship, and who had sought formal help were more likely to experience severe violence in the future.

African/American/Black women tended to have a stronger social support network than other women in the CWHRS samples. However, those African/American/Black women who had fewer resources and a weaker support network were at higher risk for severe violence in the past year, and for continuing severe violence. Abused women who became a homicide offender were likely to say that informal support (talking to someone) had not been helpful, were very unlikely to have contacted an agency or counselor, but were more likely to have contacted the police after an incident in the past year.

White or Other Women. The CWHRS clinic/hospital sample contained 43 white or other women who were being physically abused by an intimate partner, 26 of whom were followed-up. The 87 homicides included eleven white or other women. Based on these limited numbers, the most important risk factors for serious violence in the past year were the partner's controlling behavior and whether the woman had ever had an alcohol problem. Because of the small number of cases, a combined analysis of risk factors for future violence could not be conducted. However, for this particular group of women, whether or not they had a high school education was an important risk factor for future severe violence. Unlike Latina/Hispanic women and African/American/Black women, younger white or other women were more likely to interview as AW and more likely to have experienced severe violence in the past year.

Pregnant Women. Pregnancy may have been a protective factor against intimate partner violence for some women. However, the risk of violence increased at the end of the pregnancy. Women who had been pregnant at the initial interview or in the previous year were more likely to experience continued violence.

For pregnant women, the most important risk factors for severe violence in the past year were harassment and stalking, if she had *not* left or tried to end the relationship in the past year, and having a loaded gun in her house. The most important factors associated with severe future violence were the number of incidents in the past year, Name's controlling behavior, and if she had *not* left or tried to end the relationship.

In addition to the risk to the woman, the baby was at risk as well. Pregnant clinic/hospital women who had experienced violence at the hands of her intimate partner in the past year were much more likely to have had a miscarriage (21%) than women who had not experienced a violent incident (6%). A miscarriage was even more likely to have happened when the violence had been severe and when the partner had beaten her

Key Findings for Research Methods

Standard Questionnaire Items Do Not Measure "Intimate Partner"

Research often uses marital status as an indicator of the type of relationship between individuals, with "ex" or "former" unions indicating an estranged relationship, and "co-habitation" indicating an intimate relationship in which the partners are not married. In the CWHRS, we found that these constructs did not accurately represent women's relationships, and results based on them might well be misleading or incorrect. The CWHRS sample included many women, about a quarter of the sample, who were experiencing violence at the hands of an intimate partner, but who were not "married to" and had never "co-resided with" that partner. These women would not have been included in a research study that used marital status or co-residence as criteria for being in an intimate relationship.

Research Designs Must Capture the Complexity of Women's Lives

Questions about intimate relationships are sensitive, and there are cultural and racial/ethnic differences in how women may describe these relationships to an stranger such as an interviewer. Therefore, it is very important to provide many opportunities for the woman to tell us about her relationship, and to avoid constraining language as much as possible. Otherwise, women in non-traditional intimate relationships will be systematically excluded. In addition, the CWHRS found that it helped establish rapport when we asked women to tell us about the real circumstances of their lives, without forcing them into pre-determined categories.

Develop a Collaborative Culture with Shared Research and Practice Standards

The collaborative culture in the CWHRS was the foundation of the high quality of the data. Our collaboration included the development of culturally sensitive survey instruments, the creation of safe and respectful interview climates, the problem-solving approach to finding ways to collect data safely and to retain women in the study over the twelve-month study period, the training and support of interviewers, collaborative interpretation of the data, and the dissemination of results to a wide audience. The project became a catalyst for institutional change in many of the participating agencies, bringing them closer to universal screening for domestic violence.

Include "Strangulation" in Reports of Homicide Data

Information about whether or not the victim was choked or strangled is often collected by police departments and others who maintain homicide archive datasets, but seldom published. In reports of homicide research, cases in which the victim was strangled are usually scattered under various weapon categories, such as belt or scarf, and under "hands, fists, feet," but not presented as a separate figure. Public health records are even more restricted in the available information.

Strangulation has never been seen as important, because very few homicide victims are killed by that method, overall. However, the CWHRS found that it is important for women killed by men. It may also be important for victims who are young children, elderly or disabled. A substantial proportion (18%) of intimate partner homicides of a woman victim by a man were committed by strangulation, and having been choked in a previous incident was a risk factor for being killed. In order to develop better preventive

when she was pregnant. The woman suffered a miscarriage after at least twelve of the non-fatal incidents, and the baby died as well in the two homicides of pregnant women.

Pregnant woman were less likely than other women to have sought help from either formal or informal resources. This was true even of pregnant women who had experienced at least one severe incident in the previous year, and even though women who were pregnant or who had been pregnant in the previous year tended to have made many more health-care visits than other women. Almost a third (32%) had not sought help from a medical provider or from any other formal source after an incident in the past year.

Women in an Abusive Same-Sex Relationship. The CWHRS sample contained 18 women who were being physically abused by a same-sex partner, and two intimate partner homicides with a woman victim and a woman offender. Based on these very limited numbers, some of the risk factors for serious injury or death do appear to be different for women in abusive same-sex relationships compared to women whose abusive partner is a man. Women were particularly at risk for serious violence when they had a PTSD diagnosis, and when they did not have the level of social support and acceptance measured by the Support subscale of the Social Support Network scale.

Women who were in an abusive same-sex relationship, compared to women in an abusive heterosexual relationship, were equally likely to talk to someone, consult an agency or counselor after an incident. They were somewhat more likely to seek medical attention. However, they were much less likely to notify the police, however, compared to women who were being abused by a man. The seriousness of the incidents they had experienced made no difference.

Risk Factors for Becoming a Homicide Offender. There were some strong and consistent differences that point to different risk factors for a woman becoming the homicide offender versus a woman becoming the homicide victim.

-- Women offenders had experienced more severe violence in the past year than either clinic/hospital women or women who became homicide victims. In the past year, she was more likely to have been beaten up, injured, choked, or attacked or threatened with a knife. She was more likely to have believed that her life was in danger, and the violence was more likely to have been increasing in frequency.

-- Compared to women homicide victims or to other abused women, women who killed their intimate partner were more likely to be in long-term, legally sanctioned relationships, and were less likely to have social support networks and other resources. They were much less likely to have a high school education, and much more likely to be unemployed, and their health was more likely to be "fair" or "poor." Women offenders were much more likely to be older than other women, to be married to their partner, and to be in a long-term relationship with their partner.

-- Having a firearm available in the home was a higher risk factor for women victims than women offenders. Forty percent of the women homicide victims were killed with a firearm, compared to 25% of the men victims. Forty-four percent of the women victims had a firearm in the home she shared with her partner, compared to 31% of the women offenders.

policies and interventions for these homicides, it is necessary to collect and publish information on strangulation in criminal justice and public health epidemiological datasets.

Key Findings for Practice

The High Potential Risk of Seeking Help and Trying to Leave

Many of the findings of the CWHRS provide empirical support for things that advocates and practitioners have known through their experience. One of these findings was that leaving or trying to end the relationship placed women in a position where the potential for increased safety was high, but the potential for extreme risk was also high. Women who had experienced severe violence in the past year and who were making active efforts to obtain formal interventions to stop the violence, such as seeking help from a counselor or agency, contacting the police, going to court, or getting an order of protection, were at higher risk for continued severe violence. As domestic violence advocates know, it is important to help a woman who is beginning to seek help and is thinking of ending her relationship with an abuser to develop a safety plan that will increase her chances of the former, not the latter, outcome.

Ask Women: When Did the Last Incident Happen?

For the clinic/hospital women, the single most important risk factor for continuing violence was the length of the time period since the last incident. When the most recent incident had happened over six months ago, only 33% of the clinic/hospital women continued to experience violence on follow-up, compared to 60% of the other women. When the last incident had happened within 30 days, 63% continued to experience violence, compared to 47% of other women. In addition, the most recent violent incident for the abused homicide women tended to have happened only a few days before the homicide, within 30 days for 49% of the victims and 85% of the offenders.

Therefore, in talking with a woman about the past year, it is important to ask her when the most recent violent incident happened, even if the most recent incident involved only a threat with no violent attack or injury, and to be aware of the potential risks involved with delay of services. In addition, it is important to consider the specific support and intervention needs of women who have experienced a recent incident.

Do Not Judge a Woman's Risk by a Single Incident, Even the Most Recent

Though the recency of the last incident is crucial, the degree of severity of the most recent incident is not. One incident does not accurately represent the level of severity and risk of injury in the woman's life. For example, even when the most recent incident was a threat with no violent attack or injury, over a third of the women had experienced at least one other incident in the past year that was very severe. For 27% of the 238 women who had experienced being beaten up, choked, burned, or worse during the past year, their most recent incident involved a threat or a slap or push with no injury.

Therefore, to access the degree of life-threatening risk for a particular woman, it is important to talk with her about her experiences over previous months, not just her most recent experience. Specifically, it is important to talk to her about whether the violent incidents have been recently increasing in frequency or severity. The Campbell calendar

history is a good way to do this. The violence was much more likely to have been increasing in frequency and severity for the abused homicide women, compared to the clinic/hospital women.

Inter-agency Coordination is Vital

Women experiencing violence at the hands of an intimate partner are not only at risk of serious injury or death, but at risk in many other ways as well. For example, fully 42% of the 105 Latina/Hispanic women who interviewed as AW told us they had threatened or attempted suicide. Thus, practitioners who are talking with a woman who has experienced violence or a violent threat in the past year should be aware of the possibility that the woman may be suicidal. Similarly, those who work with pregnant women need to be aware of the association between intimate partner violence and miscarriage, as well as the risk that the violence against her will increase after the baby is born. In addition, professionals working in criminal justice or in medicine should be aware of their pivotal role as a gate-keepers for women to seek help from a counselor or agency.

In Screening and Selecting Clients, Beware of Age Bias

At many points in the "process of violence," the CWHRS found that older women (aged 41 and above) were at equal or greater risk of serious violence or homicide. Women who were homicide victims, and especially those who were homicide offenders were much more likely to be older than age 40 than clinic/hospital women. Despite this, however, we found that our "universal" screening tended to include older women less often.

Part of the reason for this may be that we looked only at violence that had happened in the past year. Many women said they were "currently afraid" of their partner, but did not tell us about violence in the past year. This suggests two things for clinicians who are screening women for high risk of serious injury or death. First, make every effort to interview older women at greater length, and with sensitivity to their situation. Second, explore with women why they say they are afraid of their partner, even if they have not experienced recent violence.

Key Findings on Help-Seeking and Intervention

Almost all CWHRS women who had experienced severe violence in the past year had sought help from at least one type of resource after an incident in the past year (talking to friends, consulting an agency or counselor, seeking medical help, or contacting the police). There were two exceptions. Latina/Hispanic clinic/hospital women were much less likely than others to have sought any help in the past year, even those women who had experienced severe violence. In addition, women who were pregnant were much less likely to have sought help or advice about the violence from any kind of formal resource, even medical care.

Women who had experienced more severe incidents usually had sought help from more kinds of sources. In general, the more severe the violence and stalking in the past year, the stronger the social support network, and when she had tried to leave or end the relationship, the more types of help-seeking the woman had tried.

The first type of help-seeking a woman tried was usually talking to someone. Like many other studies, the CWHRS women found these informal sources of help and support extremely important, but not always useful. Almost all women had tried to talk with someone in the past year about their situation, but the women who had not were more likely to experience continued violence. Homicide women were even more likely to have talked to someone, but were less likely than clinic/hospital women to have found talking with someone helpful. This was especially true for women who became the offender in the homicide,

When CWHRS women contacted some type of formal source of help, it was almost always in addition to informal support (talking with someone). However, of the formal types of help-seeking, contacting the police was the most likely. This was especially true for women who had experienced the most serious violence in the past year, and for women who became the offender in a homicide. The police seem to have played a "gate-keeping" role for the CWHRS women, encouraging them and helping them to contact a counselor or helping agency.

Seeking medical help was the third most likely type of help-seeking, and about equally likely for clinic/hospital women and homicide women. Medical professionals, like criminal justice professionals, seemed to play a gate-keeping role, steering women to agencies or counselors. Because abused women had made more frequent health care visits in the previous year than had comparison women, medical professionals had frequent opportunities to offer help and advice. However, over a third of pregnant women who had experienced severe violence did not seek help from their medical provider or from any other formal source, even though they had made more health care visits.

Women tended to seek counseling only when they had also sought medical care or contacted the police. Possibly the medical or law enforcement people helped or encouraged them to contact a counselor or agency. The clinic or homicide women least likely to have contacted an agency or counselor were those who became a homicide offender.

Women who were experiencing violence from a same-sex partner were much less likely to contact the police than women being abused by a man partner. This means that these women could not have benefited from the role of the police in enabling women to contact a counselor or helping agency. On the other hand, women in an abusive same-sex relationship were more likely to have sought medical help. Therefore, the role of medical intervention was especially important for women in an abusive same-sex relationship.

Most CWHRS women told us that, when they sought help from medical and law enforcement professionals, the person responded and offered a range of options, though some women said that help was not offered or the help was not useful. Some of the clinic/hospital women credited the police with helping them to end the violence. On the other hand, though many of the homicide women had sought and received help in the past year, that help had not prevented the death. A third of the homicide victims and offenders had sought medical, and half of the victims and almost 70% of the offenders had called the police.

Further analysis of the rich CWHRS data should explore the following questions:

-- What were the specific intervention and support needs of women who had experienced an incident recently? CWHRS women who had experienced a violent incident within the past month or week were at high risk for a life-threatening or fatal outcome. Did they have needs that were different from other women?

-- What were the help-seeking and intervention experiences of CWHRS women who were successful in ending the violence against her? What formal and informal tools did they utilize, and what advice do they have for other women?

-- What were the help-seeking and intervention experiences of CWHRS women who had not experienced violence for over six months, yet who did experience continued violence in the follow-up period? Why did the violence stop and then start again? What did these women need that they did not receive?

A Final Word

Lengthy and detailed as this report was, it still only scratched the surface of the analysis that could be, and should be, done with the CWHRS dataset. Our primary goal in this report was to thoroughly document and explain the data. Therefore, the report traveled systematically and, we hope, exhaustively, through all of the information gathered in the CWHRS. We hope that this will become a foundation for further analysis of many issues, including the following:

-- This analysis hardly touched the tremendous resource of the calendar history data. It presented and analyzed summaries of the woman's experience over the retrospective and prospective years, but did not look at the relationships between clusters of incidents and events that changed over time for each woman. One of the most important issues to explore with the calendar history data is whether or not there was a change in the pattern of violence just before a life-threatening or fatal incident.

-- One of the key findings of the CWHRS analysis in this report was that the relationship between leaving or attempting to end the situation and the timing of violence differs for women in different points in the abuse process. For women in some situations, leaving or ending the relationship helps to protect her from further violence, but in other situations leaving or attempting to leave precipitates extreme or fatal violence. It is vital to be able to distinguish between the two kinds of situations, so that helping professionals can help women who are in a potentially dangerous situation build a strategic "safety plan." Data still unexplored in the CWHRS can provide this information.

-- There is also much unexplored information in the CWHRS about the sequential relationship between the woman's help-seeking activities, formal and informal interventions, and violent incidents,.

-- CWHRS data contain many stories of women who have escaped from intimate violence situations. Though the analysis in this report reflected their experiences, it did not begin to use the depth of information available. A thorough analysis of what these women have done, how they stopped the violence, what protective or support resources they may have had available to them, whether or not they utilized formal interventions and their evaluation of the effectiveness of those interventions, would be invaluable for

women in similar situations and the people who advise and try to help them.

-- Analysis so far has not fully examined the validity of the Campbell Danger Assessment in predicting life-threatening violence.

-- High on the agenda of domestic violence advocates has been the need to replace myths with facts (Okun, 1986). However, the movement itself has some strongly-held beliefs that have not been adequately tested with solid data. One of these is the Cycle Theory of Violence (Walker, 1979: 55-70). Despite the "controversy" surrounding it (see Walker, 1993; Bowker, 1993), the idea that most violent relationships cycle through three stages, tension-building, acute battering, and kindness and contrition (the honey-moon stage), has become a given assumption for many workers in the field. But is it a fact or a myth? Does the Cycle Theory of Violence apply to all women in abusive situations, or does it apply only to some women in some types of situation? With the calendar history data of the CWHRS, it is possible to address these questions.

We hope that the CWHRS dataset will inspire and support products aimed at many diverse audiences, not only academic research reports but also fact sheets, pamphlets and brochures that provide information to the people represented by the CWHRS clinic staff, the women in the clinic/hospital sample who worked with us for so long, and the proxy respondents who talked to us about the tragic events in their lives.

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Appendix I
Collaborating Agencies and Individuals in the CWHRS

Mayor's Office on Domestic Violence
Leslie Landis, Domestic Violence Project Manager
Chicago Police Department
Sgt. Debra Kirby, Domestic Violence Unit
Officer Mary V. Jensen, Domestic Violence Unit
Erie Family Health Center
Sara Naureckas, Pediatrician
Chicago Department of Public Health
Gloria Lewis, Director of Violence Programs
Nanette Benbow, Epidemiologist
Debra Clemmons, Roseland Health Center
Cook County Medical Examiner's Office
Edmund R. Donoghue, M.D., Chief Medical Examiner
Roy J. Dames, Executive Director
Cook County Hospital
Carole Warshaw, M.D., Director, Behavioral Science Department
Kim Riordan, HCIP Director
Roxanne Roberts, M.D., Trauma Office

Individual Collaborabors
* Jacquelyn Campbell, Johns Hopkins University, School of Nursing
* Alice J. Dan, UIC Center for Research on Women & Gender
* Barbara Engel, Illinois Criminal Justice Information Authority Member
* Eva Hernandez, Alivio Medical Center
* Holly Johnson, Canadian Centre for Justice Statistics
* Stephanie Riger, Director of Women's Studies, University of Illinois at Chicago
* Daniel Sheridan, Oregon Health Sciences University School of Nursing
* Richard Tolman, University of Michigan, School of Social Work
*Olga Becker, Chicago Abused Women Coalition
IL Criminal Justice Information Authority
Carolyn Rebecca Block, Principal Investigator; Christine Devitt, Katherine Klimisch, Christine Martin, Martine Sagan, Project Co-Managers; James Coldren, Research Consultant; Dickelle Fonda, Project Counselor; Teresa Johnson, Follow-up Coordinator and Interviewer; Charmaine Hamer, Data Coordinator and Interviewer; Michelle Fugate, Tracy Irwin, Andrea Leverentz and Tracy Pasold, Research Assistants; Debra Garrison, Guadalupe Gouveia, Sherry Harrington, Iliana Oliveros, clinic interviewers; Alicia Contreras, Rosa Martinez, Betty Thomas and Gail Rayford Walker, proxy interviewers; and Eugene Craig, field investigator.

Appendix II
CWHRS Questionnaires

Initial Interview, English and Spanish
First Follow-up Interview, English and Spanish
Second Follow-up Interview, English and Spanish
Proxy Interview for Female Victims, English and Spanish
Proxy Interview for Male Victims
Interview for Women Homicide Offenders
Sample of the Calendar

Appendix III
Consent Forms and Screeners

Cook County Hospital Consent Form
Erie Family Health Center Consent Form
Chicago Women's Health Center Consent Form
Roseland Public Health Clinic Consent Form

Cook County Hospital Screeners
    ASC (Ambulatory Screening Unit) and Obstetrics/ Gynecology
    Laminated card used in Trauma Department
Erie Family Health Center Screener
Chicago Women's Health Center Screener
Roseland Public Health Clinic Screener

Appendix IV
Interviewer Hiring Materials

Clinic/Hospital Interviewers:

- Job Description
- First Interview Schedule for Job Candidates
- Second Interview Schedule

Proxy Interviewers:

- Job Description
- Interview Schedule for Job Candidates

Appendix V
Interviewer Debriefing
by Dickelle Fonda L.C.S.W.

The designers of the Domestic Homicide Study wisely built into its design a debriefing component. The purpose of this component was to offer the research staff the opportunity to "debrief" or process the emotional impact and aftereffects that hearing women's stories could have on them personally. The training segment included some of the anticipated emotional effects inherent in this type of interview, as well as an introduction to stress management techniques to address them. Debriefing sessions were structured in a group format and planned weekly in the early stages, then bi-weekly, then resuming weekly meetings when the proxy interviews began. The format for the debriefing sessions was generally a combination of experiential stress reduction and relaxation techniques and verbal processing of the emotional, psychological and sometimes somatic reactions the interviewers were experiencing.

During our initial training session the group identified a list of anticipated concerns, questions and areas of discussion that they wanted to address during debriefing sessions. Those topics of discussion were as follows:

- Understanding the range of emotional and somatic reactions
- How to be with survivors and respond appropriately
- How to help people open up, tell their stories and answer the questions on the document
- How to get the information needed without further exacerbating the respondent's trauma
- When to push and probe
- When to let it go or lay back
- What to do if respondent "blows up", disintegrates, or disassociates
- When to terminate the interview
- Differences between phone and in-person interviews
- How to listen to painful material, difficult stories and graphic details
- How to protect yourself psychically, energetically and emotionally
- How to empathize with respondents, yet maintain research objectivity
- How not to carry the emotional pain of the respondent's stories within yourselves
- How to address interviewer reluctance to initiate process due to anticipatory anxiety
- How to put the respondent at ease
- How to not personalize rejection and resistance on part of respondents
- How to feel comfortable in unknown areas of the city and maximize personal safety
- How to avoid being perceived as part of an oppressive judicial and social systems by respondents with negative experiences with same

During the course of the study, all of those areas were addressed, some several times from different perspectives, depending upon what issues arose from experiences in

the field. It should also be noted that in order to find respondents, the interviewers frequently went into very dangerous and unfamiliar neighborhoods in Chicago in the process of doing their field work. They went in pairs whenever possible, but generally by themselves. There was a high-risk element to this piece of their work, which was often processed in debriefing.

The debriefing sessions provided a forum and opportunity for the interviewers to both discuss and process shared experience from their field work and to bond as a group in ways very reminiscent of a clinical support group. By the final months of the study, this group of women had forged bonds and relationships, which will last long beyond the end of this particular project. The debriefing time became an important and prioritized piece of this study for the interviewers in this group, as it became a safe haven to unload the residual emotional aftereffects from listening to the painful stories of the respondents on an ongoing basis.

From a clinical perspective, this scheduled "unloading" was an effective preventive strategy. It helped keep the researchers physically and emotionally healthy by preventing the buildup of unreleased chronic stresses, which could have resulted in varied post-stress symptomatology. The original intent, to provide that safe, confidential space for the interviewers, met and exceeded the designer's objectives.

The CWHRS design also incorporated a provision for interviewers to meet individually with me in my role as a clinical social worker, in order to process confidentially whatever aspects of this work may have triggered past trauma or unresolved issues of grief and loss in their personal lives. Interviewers took the opportunity to use these individualized sessions as needed and, particularly at the end of the study, to bring closure to this work and to its personal impact.

The positive residual benefits for each of the interviewers personally also exceeded anyone's imagination. As the study came to a close, the last month of debriefings were spent bringing closure, for the group as well as for each interviewer individually. One component of the closure process was to consider and share the impact of involvement in this project on each interviewer personally. Interviewers appreciated the stress management tools that each took from that piece of our sessions, which each interviewer will be able to use on an ongoing basis, personally and professionally. But, far beyond those practical benefits, were changes in the interviewers lives, such as career goals and plans, heightened awareness of the vulnerability of women in this country, adjustment in personal safety precautions for themselves and their children, and a sense of global connection to other women.

A summary of the debriefing component of this study would be incomplete without mention of the particular group of interviewers who carried out this study in the field. This was a group of exceptional, strong, intelligent, creative, brave and tenacious women. As the clinical facilitator of their debriefing process, I was continually in awe of their willingness to persevere under frequently trying and stressful circumstances and with their ability to connect with and engender trust among their respondents. At the same time, they managed to maintain a healthy balance of empathy and objectivity. They each brought their own personal qualities of excellent listening and interviewing skills and

compassion to their interviews.

While it wasn't the intention of this research study to assist the respondents to change their lives in any way (the interviewers were not social workers or counselors, a point that was regularly supported in debriefing), the interviewers inadvertently did help many of the respondents. This happened as a result of the interviewers' ability to provide a caring, authentic presence in which respondents were allowed to give voice to their stories and to their inner pain in a safe, non-judgmental atmosphere. No doubt, many women's lives have already changed in the process.

In summary, each interviewer found their debriefing experience to be meaningful and useful for them individually and also as a part of a bonded group. The consensus of the interviewers was that the debriefing sessions were an invaluable and beneficial component of their experience on this project. They provided the "glue" of continuity and support for this group of remarkable women interviewers. It was my honor as a clinician and facilitator to have been associated with them and with this very important research project.

Appendix VI
Proxy Study Training and Field Work Record Forms

Daily Activity Log
Potential Proxy Decision Form
Problem and Contacts Form

Appendix VII
CWHRS Reports and Publications

Collaboration paper
ICJIA collaboration research brief
Proxy field work strategies paper

Appendix VIII
Miscellaneous

1995 Intimate Partner Homicides Map
1996 Intimate Partner Homicides Map
Women's Health Risk Project Contact Letter
Women's Health Risk Project Poster
Selected Proxy and Clinic/Hospital Respondent Support Materials

Endnotes

1. Source: Chicago Homicide Dataset, annualized 1990-1992 data; Block & Block, 1993.
2. For 16 interviewed women, we do not know how they screened, because the screener is missing. In addition, one woman told us at follow-up that she had falsified the initial interview and the screener.
3.The question about whether the woman was in a current relationship was in the pre-interview screener, not the abuse screener. Women who screened NAW were not always asked for their consent to speak to an interviewer. Only women who were asked for consent were asked to complete the pre-interview screener. Therefore, for many women who screened NAW, we do not know if they were in a current relationship. These 14 women include only those for whom we have that information.
4. Screener figures for Cook County Hospital Obstetrics/Gynecology are an estimate, because the completed screeners for non-interviewed women were accidentally destroyed before they were collected for data entry. Screener figures for Cook County Hospital Trauma Department are preliminary, based on Trauma Department logs. In addition, the screener is missing for 16 interviewed women, and one interviewed woman signed the screener but refused to answer any of the screening questions.
5.We cannot reliably differentiate between women who denied consent and women who were not asked for their consent, especially for women screened as NAW. For almost all cases where the woman screened as AW and did not sign the consent, the person administering the screener noted that the woman did not want to be interviewed, or in a few cases, that the woman was not asked to sign. For many cases where the woman screened as NAW, however, she was not asked to sign the consent form. We were not trying to interview 100% of women who screened as NAW. For these women, an unsigned consent form does not necessarily indicate that the woman would not have consented to an interview.
6.In addition, one of the 705 women who refused to answer questions about her household. This woman was probably homeless, based on things she told us in other parts of the interview. She refused consent for a follow-up.
7.Source: *Demographic Characteristics of Chicago's Population: Community Area Profiles.* Chicago Department of Planning and Development, March, 1994. The City of Chicago, in pending litigation, is challenging these figures.
8.In addition, several women identified a person who had harmed her, but was not an intimate partner, for example, a father or a brother. In these cases, we added this information about violence against her to the calendar history, but we did not consider these instances to be "abuse by an intimate partner."
9.One woman responded to the questions by saying that "Only God" was there for her. For the Acceptance and Support subscale, we counted these answers as a no.
10.However, for nine of the 104, a second follow-up interview was actually conducted.
11.Five additional third follow-ups were conducted even though they were not necessary. (We already had a year of data.)
12.Sadly, there were some intimate partner homicides of women under age 18. These were not included in the study, because they would not have been comparable to the clinic/hospital sample.

[13]The Chicago Homicide Dataset project began in 1968 with the collection of 1965 data and continues today with the advice and close cooperation of the Crime Analysis Unit of the Chicago Police Department. The Authority has supported and maintained the data since 1979. The Joyce Foundation currently supports collecting 1991-1994 data and archiving prior years. The National Archive of Criminal Justice Data, ICPSR, has 1965-90 data on its violence CD-ROM. See Block and Block (1993) for details and bibliography.

[14]Source: conversation with Harold Rose, 12-7-94.

15.Communication with Joyce Banton, who was in charge of fielding the Kellermann team study, and who kindly lent her advise and suggestions to the CWHRS.

16.In addition to the ten cases of suicide at the scene, CWHRS investigation found that three men offenders committed suicide much later. In one case, proxy respondents told us that they had heard that the offender, who had not been charged because of a bar to prosecution, had committed suicide many months later in another state. We do not know if his suicide was in any way related to the homicide. One man was found guilty, and hanged himself in jail. A third man had never been linked to the homicide until he committed suicide seven months later, left a note citing his despondency over another woman who had left him, and the police investigation then determined that he had been the offender in the earlier homicide.

17.In one of the cases cleared exceptionally, the man offender fled the country, and in the other case, the offender was already dead when the police linked him to the homicide.

18.These figures are based on the woman's principal occupation. If she had a job and was also a student, she is included under "full or part time job" for this analysis.

19.In the "hot coffee" incident, the man first beat her up and kicked her, then threw a pot of hot coffee on her as she lay on the floor.

20.Remember that there were very few white or other women in the sample. This finding is based on the 20 who were aged 18 to 30.

21.The CWHRS questionnaire allowed women to give multiple answers to this question. Some women mentioned both domestic violence and other types of counseling.

22.Eight women made both types of response. In these percents, these eight are included with the women who said that their injuries were not serious enough for medical care.

23.In some choking incidents, the woman had a weapon threatened or used against her, in addition to being choked or grabbed around the neck.

24.Note that the Hamilton data do not include men who killed their ex-girlfriend.

25.About half of these women had answered the help-seeking questions themselves.