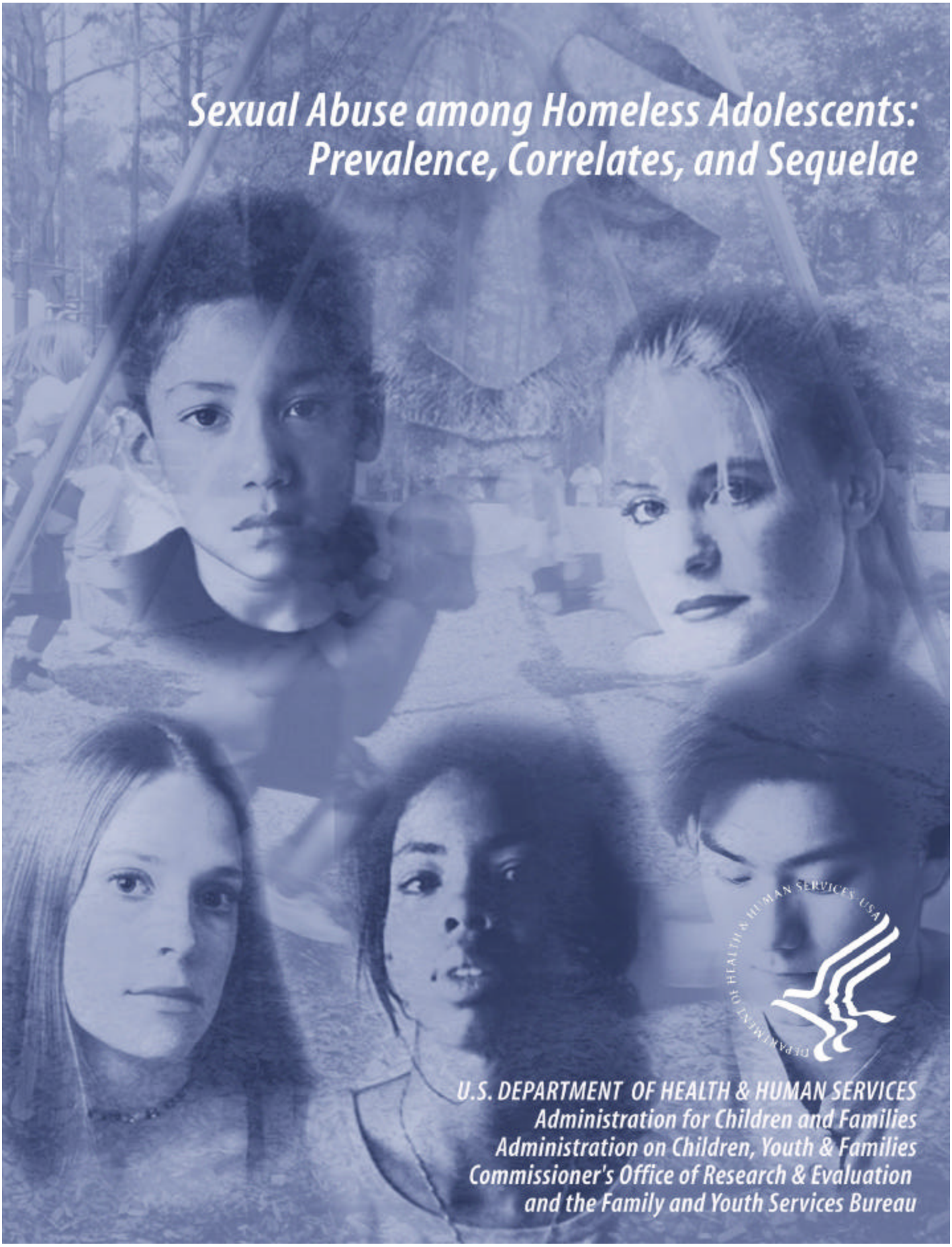
Sexual Abuse among Homeless Adolescents: Prevalence, Correlates, and Sequelae



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Sexual Abuse among Homeless Adolescents: Prevalence, Correlates, and Sequelae

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EXECUTIVE SUMMARY

Over the past two decades, there has been increasing recognition that runaway and homeless youth (RHY) constitute a vulnerable population that faces a multitude of problems while away from home and, often, difficulties of equal magnitude in the homes they have left. Many of these youth are thought to have been victimized by sexual abuse and to have left home as a means of escaping abusive families. Unfortunately, many of the physical and social environments that they then find for themselves increase the likelihood that they will engage in survival sex, substance use, and other risky behaviors. Although these behaviors are now well documented, relatively little is known about the scope and prevalence of sexual abuse among the families of origin of RHY, the extent to which such abuse may exceed that of comparable youth in the general population, and the role that sexual abuse plays in the youth's decision to leave home.

To learn more about the extent of sexual abuse among the RHY population, recent reauthorization legislation for the Runaway and Homeless Youth programs required the U.S. Department of Health and Human Services (DHHS) to conduct a study of a "representative sample of runaways to determine the percent who leave home because of sexual abuse." The legislation further required the study to include information on "the relationship of the assaulter to the runaway." To this end, the DHHS contracted with the Research Triangle Institute (RTI) to conduct a study entitled, "Sexual abuse experiences of runaway youth."

The overall purpose of the study was to begin to delineate the scope of the problem, to stimulate further discussion, and to make recommendations concerning research and policy. To accomplish study goals, we conducted both an extensive literature review and secondary analyses of existing datasets. This report presents the results of each of these initiatives, synthesizes findings, and presents recommendations.

Summary of Findings

- **How Many Runaway and Homeless Youth Are Sexually Abused Prior to Leaving Home?**

  In general, rates of sexual abuse among this population vary widely. However, among the most methodologically rigorous studies, rates of sexual abuse tended to cluster in a range from 21% to 42%.

- **How Do Rates of Sexual Abuse among Runaway and Homeless Youth Compare to Those among Youth in the General Population?**

  Sexual abuse is reported by youth in the general population at significantly lower rates than is reported by RHY: around 1% to 3% compared to 21% to 42% among RHY. Our secondary analysis of the National Longitudinal Study of Adolescent Health (AddHealth) data showed that 25% of females who had ever run away from home reported having been sexually victimized, compared to 6% of those without runaway experiences.

- **To What Extent Is Sexual Abuse a Factor in Runaway and Homeless Youth's Decisions to Leave Home?**

  Estimates of youth reporting sexual abuse as a reason for leaving home range from 4% to 38%. These findings suggest that sexual abuse is one of a myriad of factors affecting decisions by youth concerning whether they remain in a dangerous situation at home or move into a potentially dangerous one on the street.

- **Who Are the Sexual Abusers of Youth in the General Population and of RHY?**

  Perpetrators of sexual abuse among youth in the general population tended to be adult males who were known by the victim. Studies showed that approximately 75% to 89% of adolescents reported being sexually abused by a male, and around 68% to 88% were abused by someone they knew or by a family member.

  Only a few studies of RHY have queried sexually abused respondents about perpetrators. According to our analysis, non-relative adult acquaintances (i.e., teachers, neighbors, and friends of the family) were named by 32% of youth as perpetrators; peer acquaintances by 28%; and strangers by 25%. Biological relatives named by youths as abusers included fathers (for 9.9% of the youth), uncles (9.5%), cousins (6.8%), brothers (6.5%), and grandfathers (5.3%); non-biological relatives included stepfathers (14.4%), adoptive fathers (2.3%), stepbrothers (1.5%) and adoptive brothers (2.3%). Other individuals who might assume caregiving or supervisory roles also were named: mother's boyfriend was named by 8% of these respondents; male babysitters by 4.6%; female babysitters by 4.9%; and foster fathers by 1.1%. Female relatives were named by only 6% of the respondents. Our findings also suggest that many of the youth who had been sexually abused were abused by more than one person: on average, 2.6 people.

- **To What Extent Is Sexual Abuse Reported to Authorities, and What Actions Are Taken Against the Abuser?**

  Secondary analysis of the National Crime Victimization Survey (NCVS) data showed that, in the general population, approximately two-thirds of the adolescents who reported having been raped or sexually assaulted indicated that the police were not informed and did not find out about the incident. Approximately 81% of those who reported abuse to the police said that the police response was to take a report. Only 35% indicated that witnesses or suspects were questioned, and only 21% reported that an arrest was made. Unfortunately, no information on this subject was available for the runaway and homeless youth population.

- **Among Runaway and Homeless Youth, to What Extent Is Sexual Abuse Associated with Demographic and Other Background Characteristics?**

  The rates of sexual abuse for RHY (and adolescents in the general population) tend to be two to three times higher for females than for males. No consistent differences by age or race/ethnicity were found across studies. However, multivariate analysis of the AddHealth data indicated older adolescents were more likely to report sexual victimization, and White females were more likely to report victimization than Hispanic females; family composition and mother's education were also found to be associated with sexual victimization.

- **To What Extent Is Sexual Abuse Associated with Other Risk Factors and Adverse Events?**

  Females with runaway experiences were more likely to report substance use, poor mental health, school-related problems, high risk sexual behaviors, violence, and victimization than those without runaway experiences, even after controlling for demographic and family background characteristics as well as sexual abuse. Additionally, females who had been sexually victimized were more likely to report most of the problems than those who had not been victimized, even after controlling for demographic characteristics and family background variables, as well as runaway experiences.

  Among runaway and homeless youth, we found many generally consistent relationships between sexual abuse and poor mental health, externalizing behavior, risky sexual behavior, other forms of victimization, school-related problems, and violent behaviors.

Future Directions and Recommendations

While highlighting the high incidence among runaway and homeless youth of sexual abuse prior to leaving home, as well as some of the associated negative consequences, this report also provides a glimpse into the factors associated with sexual abuse among adolescents in the general population. Though these groups share many of the same difficulties, some features are unique to RHY. In particular, there is a heightened risk, even among the high-risk RHY population, for certain types of adverse consequences. Thus it is important for intervention efforts to focus not only on prevention of the sexual abuse itself but also of the negative sequelae of abuse once it has occurred. The analyses reported here suggest a number of areas for increased attention:

- Family support models that provide parenting education and skills, particularly for teenage parents, may be a strategy for primary prevention; it would be important to include fathers and, particularly, stepfathers, in such efforts.

- Physicians, school personnel, child care providers, and others who have routine contact with children need training in and greater awareness of the risk factors and behaviors associated with sexual abuse, as well as appropriate action to take when the abuse is suspected. For example, some communities have special, multidisciplinary emergency room teams that are trained in the recognition and treatment of sexual abuse; public health nurses often play a critical role in identification and referral to needed services both in school and community settings.

- Children and adolescents who are victims of sexual abuse often experience multiple family problems, particularly alcohol and substance abuse within the family. Those who work with substance-abusing populations should be more aware of the risk to children in such families. Similarly, law enforcement officials and court personnel, who frequently encounter domestic violence and troubled families, could benefit from heightened awareness of these issues.

- Service providers and others who work with children who have been sexually abused should be made more aware that sexual abuse, particularly within the family, greatly increases the likelihood of the youth running away. Youth need to be provided with options other than running to the streets. For example, alternative housing might be provided while comprehensive counseling is provided to the entire family, or shelters could be established where victims could go to find specialized staff trained in the specific issues around sexual abuse.

- Program staff must communicate to RHY that they understand the issues faced by sexually abused youth, that the youth's experiences will be taken seriously, and that help is available. Peer-oriented outreach and group counseling programs may be a promising strategy. Such programs have shown great promise in dealing with adult health risk crises, but the empirical basis for such programs with sexually abused youth has yet to be developed. There are numerous street-youth peer-outreach or peer-directed programs nationwide in the major

cities, and it is important to observe and enhance their functioning so that they can be optimally utilized as an effective resource.

- Practitioners and clinicians who work with RHY in clinical settings (including youth shelters) should develop procedures for systematically eliciting information about whether youth were sexually abused before they left home, and they should ascertain the particular circumstances of the abuse. Practitioners may wish to consider administering a fairly standard set of protocols that explicitly describe different types of sexual abuse (for example, the nature of the abusive incidents, the period of time over which they occurred, the number of sexual abusers, the relationship of the perpetrator(s) to the youth, to whom the youth reported the incidents and what actions may have been taken as a result, and the youth's construction or understanding of the incidents). This information is vital to a consideration of whether youth should return to their parents and what groundwork should be laid to ensure their safety if they do return.

- Because of the short-term nature of many RHY services, it is essential that programs develop effective relationships with agencies that can provide a comprehensive array of educational and social services to sexually abused youth. In particular, mental health services (including suicide and violence counseling), physical health services (including HIV/STD testing and counseling), and substance abuse services may be critical in assisting these young people. Access to services can be greatly enhanced by co-location of services with youth programs, or by using mobile services that can be moved according to the need.

- Practitioners in settings that serve RHY should be mindful of their legal obligations to report suspected cases of sexual abuse to child welfare authorities, who may at their discretion involve law enforcement officials either in the investigation or as a response to perpetrators. Close coordination and information sharing between child welfare and RHY program staff and administrators should be pursued at the State and community levels.

- Law enforcement officials and child welfare personnel must examine their attitudes and procedures to ensure that reports of sexual abuse are taken seriously and that appropriate investigative and prosecutorial tools are at their disposal for dealing with these difficult cases.

- More effort is needed to promote the recognition of the need for support and protection among adolescents, who may not be seen as sympathetically as younger children.

- Closer ties between law enforcement and supportive social and mental health services may provide opportunities for bringing needed services to young people, thereby ameliorating some of the negative consequences of these traumatic experiences. For example, many cities have adapted the Child Development Community Policing model, developed in New Haven, CT, for training police officers in children's mental health issues and providing immediate linkages with mental health providers for children who witness or experience violence.

- Given that many sexually abused RHY may be unable to return home, programs that serve these youth have a particular responsibility to ensure appropriate arrangements for their long-

term care before they are discharged. Transitional living programs such as those funded through the Family and Youth Services Bureau (FYSB) are an important resource. Youth who return to their families will require careful monitoring and comprehensive aftercare services to ensure their safety and well-being. Again linkages with appropriate community resources, particularly child welfare agencies, are essential.

- Mechanisms must be in place for ongoing, specialized training within shelter and street youth–focused agencies. This training should develop awareness among service providers of the prevalence of sexual abuse in the populations they serve, increase screening and assessment skills, and focus on psychological and health sequelae of sexual abuse that are frequent among sexually abused RHY.

- Development of comprehensive and reliable information systems provides a basis both for enhancing program management and for building the knowledge base. The past few years have seen major progress in creating management information systems and in the capacity of programs to use the information they provide [e.g., Runaway and Homeless Youth Information System (RHYMIS), National Child Abuse and Neglect Data System (NCANDS), and the Adoption and Foster Care Analysis and Reporting System (AFCARS)]. In some States and communities, agencies are collaborating to create integrated databases to track and monitor services received by children and youth across agencies and service sectors; these efforts represent a significant step toward coordinating services and maximizing resources.

- Uncertainties about funding for services often make providers reluctant to deploy scarce resources for program evaluation. Nonetheless, it is essential that service planners and providers begin to see evaluation as an essential component of effective service provision.

Next Steps: Working within a Youth Development Framework

Sexually abused children and youth have special needs, but targeting those needs is likely to be futile unless these young people have access to the same supports, choices, and opportunities that should be available to all youth. Opportunities for positive peer interactions, for education and training, for mentoring and adult guidance, and for involvement in meaningful and constructive leisure activities all must be part of the continuum of services available to RHY and other youth who have been victimized. Community-based programs for youth must make special efforts to reach out to these and other high-risk populations, and to link to the programs that serve them. Youth development is a special focus of the Administration for Children and Families, and programs within ACF have been encouraged to explore ways of using discretionary funds to support the healthy development of youth.

Over the past few years, the Department has developed significant relationships with other agencies, professional associations, and advocacy groups to address youth issues,

culminating in the development of the "Blueprint for Youth," which outlines a common vision for youth programs. The Department's commitment has continued with interagency activities that include staff from the Health Resources and Services Administration, the Substance Abuse and Mental Health Services Administration, the FYSB, the Office of the Assistant Secretary for Planning and Evaluation, and the Office of Family Assistance within the Department, as well as staff from the Departments of Justice, Labor, Education, Agriculture, Housing and Urban Development, Transportation, and the Corporation for National Service, who will be working together to further develop the Federal youth agenda. This collaborative structure offers a forum for better planning and coordination of programs for young people at the Federal level.

In the short term, the FYSB will begin focused efforts directed at the identification and treatment of sexual abuse and its consequences among the RHY population it serves. This report will be distributed to FYSB grantees as a first step in heightening awareness of the issues faced by these young people. In addition, the following initiatives are planned for the next year:

- We will work with FYSB's network of technical assistance providers to develop, document, and disseminate effective procedures for outreach and intake that result in disclosure of sexual abuse and appropriate service linkage. In particular, the use of peer counselors and peer liaisons will be examined, including the roles that peers assume and the kinds of supports and supervision needed to sustain effective peer networks.

- Recognizing the association between family domestic violence and sexual abuse, as well as some of the similarities between the programs operated under ACF's Family Violence Initiative and those operated by FYSB, we will begin a more focused effort to share information across the two programs. As a first step, we will seek opportunities to coordinate efforts between the technical assistance networks for those two programs, such as with joint meetings and dissemination efforts where appropriate.

- FYSB will encourage technical assistance personnel as well as front-line providers to develop and share promising gender-specific interviewing and treatment techniques. This is in response to concerns expressed by service providers that the stigma associated with sexual abuse may be very different for males than for females, which can differentially affect the willingness to disclose.

Although Federal leadership can provide guidance, most of the work of service development and service provision must be done at the State and local levels. No single sector can expect to provide the array of services necessary to meet the complex needs of this population. Advocacy groups and professional associations also play a key role in drawing attention to important issues, and in influencing dissemination, training, and technical assistance activities.

Unfortunately, the scarcity of services in many communities limits the resources and options available to serve runaway and homeless youth. Local RHY programs and others that deal with troubled young people often must deal with uncertainties in funding, high staff turnover, and the increasingly severe needs of the individuals they serve. Thus it is imperative that coordination occur at all levels and that programs serving these troubled youth be aware of opportunities to link to funding and service sources that may be helpful. Local communities are increasingly committing to coordinated programs for children and youth; the challenge for providers of services to runaway and homeless youth is to ensure that their clients have visibility and priority as the planning and implementation of these systems unfold.

1. INTRODUCTION

1.1 Study Background and Goals

Over the past two decades, there has been increasing recognition that runaway and homeless youth (RHY) constitute a vulnerable population that faces a multitude of problems while away from home and, often, difficulties of equal magnitude in the homes they have left. Many of these youth are thought to have been victimized by sexual abuse and to have left home as a means of escaping abusive families. Unfortunately, many of the physical and social environments that they then find for themselves increase the likelihood that they will engage in survival sex, substance use, and other risky behaviors. Although these behaviors are now well documented, relatively little is known about the scope and prevalence of sexual abuse among the families of origin of RHY, the extent to which such abuse may exceed that of comparable youth in the general population, and the role that sexual abuse plays in the youth's decision to leave home.

To learn more about the extent of sexual abuse among the RHY population, the August, 2000 reauthorization legislation for the Runaway and Homeless Youth programs required the Department of Health and Human Services (DHHS) to conduct a study of a "representative sample of runaways to determine the percent who leave home because of sexual abuse." The legislation further required the study to include information on "the relationship of the assaulter to the runaway." To this end, the DHHS contracted with the Research Triangle Institute (RTI) to conduct a study entitled the "Sexual Abuse Experiences of Runaway Youth" under Contract No. HHS-100-99-0006.

The overall purpose of the study was to begin to delineate the scope of the problem of sexual abuse among RHY, to stimulate further discussion of this issue, and to make recommendations concerning research and policy. Specific issues that RTI was asked to examine include the following:

- To what extent do RHY experience sexual abuse prior to leaving home? To what extent is this a factor in their decisions? How does sexual abuse in this population compare to sexual abuse in the general population?

- For both RHY and youth in the general population, who are the abusers? To what extent is sexual abuse reported to authorities? What actions are taken against the abusers?

- To what extent is sexual abuse associated with other risk factors (including demographic characteristics) and adverse events in this population, prior to their leaving home? What are the implications for RHY's subsequent risk behaviors and other negative outcomes of having been sexually abused before leaving home?

- What are the implications of the available data for prevention of sexual abuse? How can programs that serve RHY who are sexually abused better meet their needs?

To accomplish these goals, we conducted an extensive review of the literature and conducted secondary analyses of existing datasets. This report presents the results of each of these initiatives and synthesizes findings.

1.2 Parts of the Report

This report is divided into four sections:

Section 1: Introduction. This section contains Chapter 1 and provides an overview of the study.

Section 2: Literature Review. This section presents the results of the literature review and contains two chapters. Chapter 2 provides a discussion of the methodology and findings of the literature review on sexual abuse among RHY. Chapter 3 provides a brief literature review of sexual abuse among youth in the general population.

Section 3: Secondary Analysis. This section presents results of secondary analyses of extant datasets pertaining to sexual abuse among RHY, and, for comparison purposes, among youth in the general population. The section is divided into four chapters. Chapter 4 includes a description of selection criteria for the datasets targeted for secondary analysis and other methodological considerations. Chapter 5 summarizes the findings from our secondary analyses of three datasets that focused on RHY. In Chapter 6, findings are provided from secondary analysis of the National Longitudinal Study of Adolescent Health (AddHealth), which includes comparisons of females with and without runaway experiences and comparisons of adolescent females with and without sexual victimization experiences. Chapter 7 provides findings from our secondary analysis of the National Crime Victimization Survey (NCVS), which provides

information on the prevalence of rape and sexual assault among adolescents in the general population.

Section 4: Synthesis and Conclusions. This section, which contains Chapter 8, presents a synthesis of findings reported in Sections 2 and 3, and offers recommendations.

2. LITERATURE REVIEW OF SEXUAL ABUSE AMONG RUNAWAY AND HOMELESS YOUTH

2.1 Literature Review Methodology

2.1.1 Literature Search Procedures

The review of pertinent literature began with an extensive search of a number of large periodical journal databases, using keywords to identify any articles and books that addressed the topic of sexual abuse among runaway and homeless youth (RHY). In addition, we contacted researchers interested in this issue to secure what has been termed the "fugitive" literature (i.e., those studies that are in progress or in press). Altogether, 42 relevant documents were identified (see appendix).

2.1.2 Methodological Issues and Challenges

Because few studies have examined the prevalence, correlates, and sequelae of sexual abuse among RHY, we began our review using all empirical studies in this area (see appendix). These studies vary considerably both in the methodological rigor with which they were conducted and in the generalizability of their findings. The methodological issues we considered most problematic are as follows:

- The great majority of research on sexual abuse among RHY was conducted on convenience samples.[1] It is therefore difficult to assess the nature and extent of any bias resulting from selection and nonresponse. The confidence with which study findings, and especially estimates of prevalence, can be generalized to the RHY population is low.

- Many of the studies reported data from a limited number of respondents, increasing the likelihood that findings are unstable and reflecting the behavior of outliers who may be atypical of the population.

- Most of the studies surveyed youth in shelter settings and yielded results that are unrepresentative of the entire homeless and runaway population. RHY can be found in a number of locations. Studies have shown that relatively large numbers of youth have run away but that they often return within a few days

[1] A convenience sample is a collection of observations from respondents from whom it is convenient to collect data but who are not necessarily representative.

(e.g., Ringwalt, Greene, Robertson, & McPheeters, 1998). Studies typically show that 60% or fewer of RHY surveyed on the streets have used shelters (DeRosa et al., 1999; Greene, Ringwalt, Kelly, Iachan, & Cohen, 1995; Unger, Kipke, Simon, Montgomery, & Johnson, 1997). Additionally, research has shown that RHY in these various settings exhibit patterns of risk and background characteristics different from those surveyed in shelters (e.g., Greene, Ennett, & Ringwalt, 1997, 1999).

- The settings for the studies generally were limited to one geographic area. They also tended to cluster in the western and midwestern regions of the nation, which further limits the generalizability of their results.

- Almost all the studies were cross-sectional in nature and thus cannot be used to assess with confidence either the causes or consequences of sexual abuse among this population.

- Most studies of RHY rely on adolescents' self-reports of sexual abuse. The veracity of self-reports may be biased by the context and mode in which surveys are administered (e.g., extent of anonymity and the characteristics of the interviewers). For instance, the lack of trust with which many homeless adolescents view adults (Whitbeck & Hoyt, 1999) may be exacerbated by untrained adult interviewers with no previous experience with street culture.

- There is no consensus on an operational definition of sexual abuse. Questions about behaviors differed widely as to the content, frequency, and severity of the behaviors queried, as did the length of time over which respondents were asked to recall and report these behaviors (i.e., the reference period).

Taken together, these methodological issues not only illustrate the difficulties in conducting research with this population, but they also present formidable obstacles to our efforts to synthesize and summarize the literature on sexual abuse among RHY. For this reason, we have attempted to assess the quality of each study's methodology. A few of these obstacles proved insurmountable, such as inconsistencies in the operational definitions of homelessness and sexual abuse.

In an effort to identify the most methodologically sound studies, we assessed several components of the research designs. The first criterion was that the data collection must have occurred within the past 10 years (i.e., 1990 or more recently). The remaining criteria involved sample design:

use of stratified probability sampling,[2] adequate sample size (i.e., more than 250 participants), and use of multiple data collection sites. In all, 5 of the 42 studies cataloged met the criteria of date, sample design, and sample size. However, because only 2 of the 5 studies met the criteria of data collection in multiple sites, we omitted this criterion.

This literature review of sexual abuse among RHY focuses on the findings from these five studies. Note, however, that *all* the studies summarized in the appendix can provide valuable information about sexual abuse among RHY; key findings from studies that did not meet the restrictive criteria are therefore included in an attempt to prevent exclusion of important results.

The five studies employing the methodologically most rigorous methods are as follows:

- *Street Youth at Risk for AIDS (SYRA),* conducted in San Francisco, Denver, and New York City by Beth E. Molnar, Alex H. Kral, Robert E. Booth, and John K. Watters, and colleagues;
- *AIDS Evaluation of Street Outreach Project Street Intercept (AESOP),* conducted in Los Angeles by Michele D. Kipke, Jennifer B. Unger, and colleagues;
- *The Midwest Homeless and Runaway Adolescent Project (MHRAP),* conducted in Iowa, Nebraska, Missouri, and Kansas by Les B. Whitbeck and Dan R. Hoyt;
- *The Seattle Homeless Adolescent Research Project (SHARP),* conducted by Ana Mari Cauce and colleagues; and
- *The Seattle Homeless Adolescent Research and Evaluation Project (SHARE),* conducted by Ana Mari Cauce and Les Whitbeck.

Table 2.1 displays details on the study design of each of the above studies, including the following:

- definitions of homelessness and sexual abuse;
- region or city of data collection;

[2]Stratified probability sampling, also called "targeted sampling," involves selecting a specified percentage of youth from fixed locations, such as shelters and other youth services, and from nonfixed sites, such as the street and common hangouts of homeless youth. Participants are then either randomly selected from sign-in rosters at fixed sites or identified at nonfixed locations.

Table 2.1 Designs of the 5 Studies Targeted for the Literature Review on Runaway and Homeless Youth

	Street Youth at Risk for AIDS (SYRA)[1]	AIDS Evaluation of Street Outreach Project Street Intercept (AESOP)[2]	The Midwest Homeless and Runaway Adolescent Project (MHRAP)[3]	The Seattle Homeless Adolescent Research Project (SHARP)[4]	The Seattle Homeless Adolescent Research and Evaluation Project (SHARE)[5]
Definition of homelessness	On the street for at least 3 months (during that time lived with family members no more than 2 weeks)	Staying in a primary night-time residence that is a supervised public/ private shelter, an institution providing temporary residence, or public/private place not typically used for sleeping. Imminent risk for homelessness is defined as someone being temporarily and inade-quately housed in a location that was not his or her own.	Away from home at least overnight without the consent or knowledge of parents or caregivers.	No stable residence, no viable home to return to, and not in custody of the State.	
Definition of sexual abuse	"Sexual abuse includes all unwanted sexual behavior. This ranges from explicit sexual abuse such as forced intercourse, oral sex, or unwanted sexual fondling, to being forced to watch someone else expose themselves or sexually stimulate themselves or others, or being forced to undress or to fondle yourself. Given this definition, have you ever been sexually abused?"	"Have you ever been sexually assaulted, molested, or raped?"	"Whether a parent or guardian of the child had ever made a verbal request for sexual activity or had forced the child to engage in sexual activity."	"Has an adult or someone at least five years older than you ever had you do something sexual, kissed or touched you sexually, and put or tried to put anything or any part of their body into you sexually?"	
Region/city of data collection	San Francisco, CA; Denver, CO; New York City	Los Angeles, CA	Midwestern cities in Missouri, Iowa, Nebraska, Kansas	Seattle, WA	

See notes at end of table.

(continued)

Table 2.1 (continued)

	Street Youth at Risk for AIDS (SYRA)[1]	AIDS Evaluation of Street Outreach Project Street Intercept (AESOP)[2]	The Midwest Homeless and Runaway Adolescent Project (MHRAP)[3]	The Seattle Homeless Adolescent Research Project (SHARP)[4]	The Seattle Homeless Adolescent Research and Evaluation Project (SHARE)[5]
Data collection setting	Streets and shelters	Shelters/drop-in centers and hangout sites	Outreach vans, restaurants, shelters, transitional living facilities, drop-in centers	Daytime drop-in center	Streets
Sampling procedure[6]	Targeted sampling	Targeted sampling	Targeted sampling	Convenience sampling	Targeted sampling
Year(s) of data collection	1992 to 1993	July 1994 to September 1995	Early 1995 to August 1996	1991 to 1993	February 1996 to February 1998
Sample size	775: San Francisco - 305; Denver - 244; New York - 226	432	602	329	375
Gender	Males=65% Females=35%	Males=65% Females=35%	Approximately: Males=40% Females=60%	Approximately: Males=60% Females=40%	Approximately: Males=55% Females=45%
Age	12 to 19 years	13 to 23 years	12 to 21 years	13 to 21 years	12 to 21 years
Response rate	N/A	84%	Approx. 94%	Approx. 92%	95%
Study weaknesses	Self-reported data; cannot determine causality or generalize to larger population	Data are cross-sectional, self-reported; cannot generalize to larger population or determine causality	Cross-sectional, self-reported data; cannot determine causality or generalize to larger population	Small sample (only 39 sexually abused); self-reported data; cannot determine causality or generalize to larger population	Cross-sectional, self-reported data; retrospective measures; cannot determine causality or generalize to larger population

Note. Within each study, sample sizes vary between published papers; therefore, gender distribution and age ranges also vary across published papers.

N/A: Not available.

[1] Kral, Molnar, Booth, & Watters (1997); Molnar, Kral, & Watters (1994); Molnar, Shade, Kral, Booth, & Watters (1998).

[2] Kipke, Simon, Montgomery, Unger, & Iversen (1997); Unger et al. (1997).

[3] Tyler, Hoyt, & Whitbeck (2000); Whitbeck (1999); Whitbeck & Hoyt (1999); Whitbeck, Hoyt, & Ackley (1997a); Whitbeck, Hoyt, & Ackley (1997b); Whitbeck, Hoyt, & Bao (2000); Whitbeck, Hoyt, & Yoder (1999); Yoder (1999); Yoder, Hoyt, & Whitbeck (1998).

[4] Ryan, Kilmer, Cauce, Watanabe, & Hoyt (2000).

[5] Tyler, Hoyt, Whitbeck, & Cauce (1999).

[6] Targeted sampling involves selecting a specified percentage of youth from fixed locations and from nonfixed sites.

- data collection setting (i.e., shelter, street, site-based);
- year(s) of data collection;
- sample procedure;
- sample size;
- response rate (where available);
- the sample's characteristics (i.e., gender and age); and
- the study's weaknesses.

The reader is cautioned, in examining the prevalence estimates and other findings reported in this review, to weigh the results in light of the relative methodological merits of the particular study.

2.1.3 Definitions

Homelessness. Researchers and practitioners have used a variety of terms and definitions for youth who spend time on the street or in shelters. Having varying definitions is fully understandable given the considerable diversity of these youth. However, a diversity in definitions creates significant barriers to efforts to integrate and synthesize the literature.

Most often, homeless youth are defined as those who live on the streets, in shelters or other system-based institutions, or in unstable residences with friends or acquaintances (e.g., Kipke, Simon, et al., 1997; Kipke, Unger, et al., 1997). Other studies define youth in terms of their reasons for leaving home. One such category is "runaways," typically defined as those who leave home of their own volition without the consent of their caregiver; another category is "throwaways," who are generally defined as youth who have been pushed out or told to leave home (Kurtz, Kurtz, & Jarvis, 1991; Ringwalt, Greene, & Robertson, 1998). Length of time away from home is an important factor in many studies because research has shown that the longer an adolescent is away from home, the more likely he or she is to suffer severe negative consequences (Whitbeck & Hoyt, 1999).

The five studies targeted in this literature review vary across definitions:

- SYRA – Molnar et al. (1994) defined homelessness as being on the street for at least three months. During that time, the homeless adolescent could not have lived with his or her parent(s)/guardian(s) for more than two weeks.

- AESOP – Kipke, Simon, et al. (1997) considered adolescents to be homeless if they "did not have a fixed, regular, and adequate night-time residence or the

primary residence was a supervised public/private shelter, an institution providing temporary assistance, or a public/private residence not typically used for sleeping accommodations" (p. 361); such places include homeless shelters, public parks, and the streets. Eligible adolescents also either had to be living on the street or in shelters for two consecutive months without their families or to be integrated into the street economy (i.e., panhandling, stealing, selling goods, engaging in prostitution/survival sex), regardless of time spent away from home.

- MHRAP – Whitbeck and Hoyt (1999) classified an adolescent as homeless if he or she had been away from home at least overnight without the consent or knowledge of his or her parents or caregivers.

- SHARP and SHARE – For these studies, homelessness was defined as having no stable residence and no viable home to which to return (i.e., not having ongoing housing for the previous 45 days and not being able to project ongoing housing for another 45 days (Ryan et al., 2000). The adolescent also could not be in the custody of the State at the time of the interview.

- SHARE – Homelessness was defined as having no stable residence at the time of the interview (Tyler et al., 1999). This included not living with parents or guardians and not spending more than four nights at home in the past week. As in the SHARP study, the adolescent could not be in the custody of the State.

Although the definitions differ across studies, they share some similarities. The main similarity is the need for the adolescent to be disconnected from his or her parents. Without parental or other caregiver support, the adolescent is left to fend for himself or herself. Also, the adolescent cannot be living in a permanent residence. This component of the definitions prevents the inclusion of adolescents who have the security of a consistent roof over their head.

Sexual Abuse. Researchers and practitioners have also used a variety of definitions for sexual abuse. Again the diversity in definitions creates significant barriers to efforts to integrate and synthesize this literature. The Child Abuse Prevention and Treatment Act (CAPTA, 1996) defines child sexual abuse as "the employment, use, persuasion, inducement, enticement, or coercion of any child to engage in, or assist any other person to engage in, any sexually explicit conduct or simulation of such conduct for the purpose of producing a visual depiction of such conduct."[3] The act continues by including "the rape, and in cases of caretaker or inter-familial relationships, statutory rape, molestation, prostitution, or other form of sexual exploitation of children, or incest with children." The exploitation can also include exhibitionism, voyeurism, and verbal stimulation.

[3] See www.acf.dhhs.gov/programs/cb/laws/capta/index.htm.

The published literature on RHY has used various definitions of sexual abuse prior to leaving home that encompass all or parts of the CAPTA. In particular, the five studies targeted in this review similarly vary across these definitions:

- SYRA – During the data collection phase of this study, youth were asked in the questionnaire: "Sexual abuse includes all unwanted sexual behavior. This ranges from explicit sexual abuse such as forced intercourse, oral sex, or unwanted sexual fondling, to being forced to watch someone else expose themselves or sexually stimulate themselves or others, or being forced to undress or to fondle yourself. Given this definition, have you ever been sexually abused?" (Molnar et al., 1994). This question was followed by queries regarding who perpetrated the abuse and how long ago it had occurred.

- AESOP – The interviewers in the Kipke et al. (1997, p. 365) study asked the youth: "Have you ever been sexually assaulted, molested, or raped?"

- MHRAP – Youth were asked "whether a parent, foster parent, or adult relative had ever made a verbal request for sexual activity, attempted to physically touch the child, or succeeded in forced sexual activity with the child" (Whitbeck & Hoyt, 1999, p. 59).

- SHARP – Youth were asked: "Has an adult or someone at least five years older than you ever had you do something sexual, kissed or touched you sexually, and put or tried to put anything or any part of their body into you sexually?" (Ryan et al., 2000, p. 340). They were also asked who had perpetrated the abuse.

- SHARE – Youth were asked: "Has an adult or someone at least five years older than you ever had you do something sexual, kissed or touched you sexually, and put or tried to put anything or any part of their body into you sexually?" As in SHARP, youth were also asked who had perpetrated the abuse (Tyler et al., 1999, p. 13).

Although an initial reading of these definitions might suggest that the definitions are similar, a closer reading reveals several differences. First, the AESOP definition does not include any reference to a perpetrator, whereas MHRAP limits the question to abuse by relatives and foster parents, and SHARP and SHARE limit the questions on abuse before leaving home to that perpetrated by someone at least five years older than the respondent. SYRA asks about a very diverse set of possible perpetrators, including parents, relatives, friends, and strangers.

Another important element that distinguishes the definitions is their level of specificity regarding sexual abuse. For example, AESOP asks only about the severest forms of sexual abuse (i.e., molestation and rape), whereas MHRAP, SHARP, and SHARE include sexual touching and requests for sexual activity. SYRA's question is the most specific, including all of the behaviors mentioned in the other studies, as well as exhibitionism, voyeurism, and involvement in prostitution or pornography.

Again a note of caution: the above definitions were used in the published papers reviewed in this chapter; readers must assess carefully these variations in definitions in reviewing this report.

2.2 Literature Review Findings

2.2.1 Prevalence of Sexual Abuse

Many studies of sexual abuse among RHY have reported prevalence rates. As indicated earlier, however, it is difficult to synthesize the results of these studies in a meaningful way because of their heterogeneity of focus, methods, and instrumentation. For example, some studies reported a combined prevalence for females and males, whereas others disaggregated rates by gender. Some studies reported experiences of sexual abuse only; others reported a combination of sexual, physical, and emotional abuse.

In general, prevalence rates of RHY reporting sexual abuse range up to about 42% (Ryan et al., 2000). Among the most methodologically rigorous studies (see Table 2.1), prevalence rates for sexual abuse ranged from 21% to 42%. We consider the convergence of prevalence rates among these studies to be a result of similarities in sampling methodologies and definitions. Specific findings for each of the most rigorous studies are as follows:

- In the SYRA study, Molnar et al. (1998) found that 34% of the total sample reported being sexually abused before leaving home.
- In the MHRAP study, 21% of the total sample reported being sexually abused before leaving home (Yoder, 1999). In a separate analysis, Tyler et al. (2000) found that 32% of the females had been sexually abused while at home.
- In the SHARP sample, Ryan et al. (2000) found that 42% of the males and females surveyed had been sexually abused, of whom 12% reported sexual abuse only and 30% reported both sexual and physical abuse.

- A study using data from SHARE found that 22% of the males and females had experienced some form of contact sexual abuse (i.e., unwanted touching, oral stimulation, or anal or genital penetration) (Tyler et al., 1999). Of these, approximately 20% said yes when asked whether an adult had ever "had you do something sexual"; 15%, whether an adult had ever "had you touch them sexually"; 20.5%, whether an adult "kissed/touched you sexually"; and nearly 12%, whether an adult had ever "tried to put any part of their body into you sexually."

- Using AESOP data, Kipke, Simon, et al. (1997) found that, at the very least, 17% of the sample had been sexually abused before leaving home.

Although sexual abuse is a traumatic event that appears to be related to leaving home, not every adolescent who was sexually abused identified abuse as the reason for leaving home. Estimates of youth reporting this reason for leaving home vary across studies, ranging from 4% to 38%:

- Kral et al. (1997), using SYRA data, found that 34% of those who had been sexually abused mentioned sexual abuse or rape as a reason for leaving home.

- In a pilot study, Whitbeck and Simons (1993) found that 17% of their adolescent sample said that they ran away from home because of sexual abuse, whereas nearly 25% reported having been sexually abused.

- Ryan et al. (2000) found that only 4% of runaways claimed sexual abuse as the reason for leaving home, whereas a separate paper using the SHARE sample (Tyler et al., 1999) reported that 12% of the sample had been sexually abused only and 38% had been both sexually and physically abused.

- Terrell (1997) reported that 38% of females and almost 16% of males indicated that their reason for leaving home was sexual abuse (see appendix for a description of this paper, entitled "Aggravated and sexual assault among homeless and runaway adolescents").

The findings from these studies suggest that sexual abuse is one of myriad factors affecting decisions by youth concerning whether they remain in a dangerous situation at home or move into a potentially dangerous one on the street. Other high-risk situations for a youth at home could include, for example, physical but not sexual abuse, emotional abuse, parental substance use, spousal abuse, homophobic attitudes toward gay/lesbian/bisexual/transgendered youth, or other illegal activities perpetrated by members of the household.

2.2.2 Perpetrators of Sexual Abuse

Perpetrators of sexual abuse can be categorized as (1) family members, (2) acquaintances, or (3) strangers (Burnley, Edmunds, Baboury, & Seymour, 1998). The family can include not only the father and mother but also surrogate parents such as a live-in boyfriend or girlfriend, stepparents, grandparents, or siblings. Acquaintance abusers include family friends, neighbors, coaches, religious leaders, peers, teachers, and others. Strangers, though often a well-publicized contingent of perpetrators, actually constitute a small percentage of actual perpetrators.

Unfortunately, only a few studies of RHY have queried sexually abused respondents about perpetrators, and most of these asked only about perpetrators from within the respondents' families. SHARP data (Ryan et al., 2000) show that adolescent respondents who were only sexually abused were less likely to have been abused by a family member than those who had been both sexually and physically abused. Most of the sexually and physically abused group (86%), and almost 40% of the sexually abused only group, reported being abused by a family member. Both groups reported high rates of parental drug and alcohol use and paternal criminal justice histories.

2.2.3 Demographic Correlates of Sexual Abuse

We searched the literature for the demographic correlates (e.g., gender, age, and race/ethnicity) of sexual abuse. Note that not all studies reported prevalence rates for all or, in some cases, any of these demographics. In fact, almost none of the studies examined ethnicity in regard to sexual abuse prevalence in this population.

Overall, in regard to gender within the RHY (and, as will be seen later in this report, within the general population as well), females appear to be at much greater risk of sexual abuse than males:

- In the MHRAP, Whitbeck and Hoyt (1999) reported that 24% of females and 9% of males said that an adult had verbally solicited sexual activity. Approximately 29% of females and 9% of males said that an adult had forced them to engage in sexual activity.

- SHARE data showed that twice as many females as males (30% compared to 15%) were sexually abused (Tyler et al., 1999). Of these, 43% of females and 31% of males said that they had been the victims of extremely violent sexual abuse.

- An analysis of the SHARP data found that of the participants reporting being sexually abused only, 23% were males and 77% were females (Ryan et al., 2000). Of those who were both sexually and physically abused, 41% were male and 59% were female.

- In the SYRA data, Molnar et al. (1994) found that 70% of females and 24% of males reported having been sexually abused.

- Terrell (1997) found that 11% of males compared to 39% of females reported that a parent, foster parent, or adult relative had verbally solicited sex. Approximately 10% of males compared to 40% of females said that one or more of these adults had touched or attempted to touch them sexually, and 8% of males compared to 36% of females reported that one or more of these adults had engaged in sexual activities with them against their will.

Only one study that examined racial/ethnic differences and one that examined age differences were found in reports of sexual abuse among RHY. Kurtz et al. (1991) found no difference in incidence among racial/ethnic groups (see appendix for a description of this study). In regard to age, Tyler et al. (2000) found that homeless youth who had been sexually abused tended to run away at a younger age than those who had not been abused. We found no relationship between sexual abuse and economic correlates.

2.2.4 Sequelae of Sexual Abuse

Three main areas of inquiry appear to have guided research on the sequelae of sexual abuse among RHY: suicide ideation and mental health (including depression, anxiety, behavioral problems), other high-risk behaviors, and victimization while on the street (including physical and sexual assaults).

Suicide Ideation and Mental Health. Many studies have found a relationship between sexual abuse before leaving home and suicide ideation and poor mental health. Across studies, RHY who had been sexually abused were two to four times as likely to attempt (or think about attempting) suicide as those who had not been sexually abused. Sexual abuse was also a significant predictor of suicidal behavior among RHY. The following studies illustrate some of the research on the relationship of sexual abuse and suicide attempts and ideation among RHY:

- Yoder (1999), using MHRAP data, found that sexual abuse doubles the probability of being a suicide ideator or attempter. In a separate analysis, sexual abuse was found to be a significant predictor of suicide ideation and suicide attempts in a multiple regression model that included sociodemographic

factors, peer suicide ideation or attempts, street victimization, and externalizing (e.g., behavior problems) and internalizing behaviors (e.g., anxiety or depression) (Yoder et al., 1998).

- Using SYRA data, Molnar et al. (1998) found that after controlling for ethnicity and recruitment site, females who had been sexually abused were three times as likely to have attempted suicide as those who had not been abused. Sexually abused males were at even greater risk, being four times as likely to attempt suicide as males who were not abused.

- In a study using AESOP data, Unger et al. (1997) concluded that youth with a history of sexual abuse were three times as likely to report suicide ideation and attempts and were twice as likely to report other self-injurious behavior as those who were not sexually abused.

- Ryan et al. (2000), using SHARP data, found that youth who were sexually abused only were at a significantly higher risk for suicide attempts. Additionally, those who had been both sexually and physically abused were more likely to attempt suicide than youth who were not abused and those who were physically abused only.

Research also supports sexual abuse as a predictor of mental health problems, such as depression and conduct disorder. Findings from all five of the main studies (i.e., AESOP, MHRAP, SHARE, SHARP, and SYRA) found a relationship between being sexually abused at home and being suicidal, having a conduct disorder, or having a post-traumatic stress disorder (PTSD). Similar findings have been found in other studies (e.g., Kurtz et al., 1991). Sexual abuse was also a significant predictor in regression models predicting suicidal behavior among RHY. Moreover, research supports sexual abuse as a predictor of conduct disorder, with those who had been abused almost twice as likely to be diagnosed with conduct disorder as those who had not been abused (Booth & Zhang, 1996):

- Ryan et al. (2000) found that a larger percentage of sexually abused only adolescents had internalizing and externalizing problems than those who were not abused. Those who had been both sexually and physically abused had significantly higher rates of externalizing behaviors than those who had been sexually abused only and those who had not been abused. When entered into a multiple regression, sexual abuse contributed a significant amount of unique variance to the prediction of internalizing behaviors but not to externalizing behaviors.

- Using data from MHRAP, Whitbeck and Hoyt (1999) found that sexual abuse did not significantly predict the occurrence of depression for either males or

females after controlling for age of first time away from home and street experiences.

- Whitbeck and Hoyt also examined the presence and prediction of PTSD. In a model including family disorganization, parental characteristics, parenting behavior, and other family abuse variables, a significant interaction was found between gender and sexual abuse, with sexually abused males being more likely to meet criteria for PTSD than sexually abused females. However, once variables related to living on one's own (i.e., early independence) and street experiences (e.g., street networks, street risk behavior, and subsistence activities) were included, the interaction between gender and sexual abuse was no longer significant. The authors theorized that the effects of sexual abuse are moderated or mediated by negative experiences on the street (Whitbeck, 1999).

- Using SYRA data from the Denver site, Booth and Zhang found that RHY who had been sexually abused were twice as likely to be diagnosed with conduct disorder as those who had not been abused.

High-Risk Behaviors. In this report, "high-risk behaviors" are defined as drug use, survival sex and other high-risk subsistence strategies, association with deviant peers, and other high-risk sexual behaviors. Across the five most methodologically rigorous studies, sexually abused RHY were more likely to report participation in survival sex (i.e., selling sex for subsistence needs or money) and to report using alcohol and drugs, as compared to RHY who were not abused. The following studies illustrate some of the research conducted on the relationship of sexual abuse and high-risk behaviors among RHY:

- Rotheram-Borus et al. (1996) found that homeless adolescents who had been sexually abused (36%) were more likely to take drugs and drink alcohol than those who had not been abused (13%). Abused adolescents (91%) were also more likely than youth who were not abused to be sexually active (77%). In regard to sexual activity, there was an interaction with gender in that males engaged in more sex, including more unprotected sex, than females.

- Yates, MacKenzie, Pennbridge, and Swofford (1991) concluded that homeless adolescents involved in prostitution were three times as likely as those not involved in prostitution to have been sexually abused before leaving home.

- Using data from MHRAP, Tyler et al. (1999) found that early sexual abuse had a direct effect on participation in survival sex. There was also an indirect effect between sexual abuse and survival sex through associations with deviant peers.

The model demonstrated an indirect effect, through association with deviant peers among other high-risk correlates, between sexual abuse and deviant subsistence strategies, such as dealing drugs, petty theft, and shoplifting. This model was significant for both males and females (Whitbeck et al., 1997b; Whitbeck et al., 1999).

- Whitbeck and Simons (1993) examined both homeless adolescents and adults who were interviewed on the streets and in shelters. Using a path analysis, a significant model was found for adolescents that showed a direct relationship between family abuse history (physical, sexual, or neglect) and subsistence strategies. There was also an indirect relationship through antisocial behavior. Although this model was significant for both males and females, the effect was stronger for males.

- Using data from MHRAP, Tyler et al. (1999) and Whitbeck et al. (1999) investigated the impact of childhood sexual abuse on later outcomes. Using a path analysis, the investigators found that early sexual abuse had both direct and indirect effects on prostitution involvement and other deviant subsistence strategies (e.g., petty theft and dealing drugs) through time spent on the street and associating with deviant peers. An indirect effect, through such correlates as time spent on the street and association with deviant peers, was also found between being sexually abused and using drugs and alcohol.

- When Unger et al. (1997), in their analysis of AESOP data, entered sexual abuse prior to leaving home into a logistic regression model in conjunction with demographic variables, sexual abuse was not a significant predictor of either an alcohol or drug disorder. Although this result would appear to contradict other studies, this analysis examined only direct effects.

Victimization after Leaving Home. The victimization of RHY is one of the by-products of living on the streets and can be perpetrated by peers or adults. Regardless of who commits these crimes, however, in order to develop programs to prevent further victimization, it is important to examine the variables that place these adolescents at risk.

The strongest literature on the victimization of homeless adolescents has come out of the work started by Whitbeck and Simons (1990) and continued with analyses of MHRAP and SHARP data. A finding from Ryan et al.'s (2000) analysis of SHARP data shows that those who had been both sexually and physically abused were significantly more likely to be victims of rape since leaving home than those who had not been abused; they were also more likely to have been raped than those who reported

sexual abuse only. In fact, none of the adolescents who were not abused had been raped since being on the street. These results, however, did not control for other variables.

Whitbeck et al. (1999) proposed a risk-amplification model that included multiple variables. Briefly, the researchers hypothesized that events and behaviors on the street would exacerbate the effects of early family abuse (physical abuse, sexual abuse, or neglect) on later victimization. Total time on own, participation in deviant peer groups, risky sexual behaviors, high-risk subsistence strategies, and alcohol/drug use were included in this model. Although this model was supported in this and a few other studies, the reader should use caution in generalizing the results because the studies have all used MHRAP data.

- Tyler et al. (1999) tested the risk-amplification model. As can be seen, their model, which was aggregated across gender, had no direct paths between sexual abuse and victimization on the street. However, several indirect paths emerged, including paths through age on own, deviant peer group affiliation, and deviant subsistence strategies.

- Tyler et al. (2000) analyzed the relationship between sexual abuse at home and sexual victimization on the street for female homeless adolescents. A significant path model supported both direct and indirect effects of early sexual abuse on sexual victimization on the street. Again, as in the Whitbeck et al. (1999) study, age on own, deviant subsistence strategies, and deviant peer group affiliation were components of the paths.

3. BRIEF LITERATURE REVIEW ON SEXUAL ABUSE IN THE GENERAL POPULATION

To gain a better perspective on the findings described in the previous chapter, it is important to compare them to data from the general population. This chapter will examine prevalence rates, perpetrator characteristics, demographic correlates, and sequelae of sexual abuse in the general population. Two main sources are used for this task:

- The National Youth Victimization Prevention Study (NYVPS) (Finkelhor & Dziuba-Leatherman, 1994). This was a nationally representative telephone survey conducted with 2,000 10- to 16-year-olds.

- The National Crime Victimization Survey (NCVS) (Bureau of Justice Statistics [BJS], 2000). The data were collected by the U.S. Bureau of the Census and examined youth aged 12 to 17 years old. The total sample size for this study was 151,846.

The chapter also provides data from two studies of sexual abuse among maltreated youth in the general population. That is, the datasets are based on incidents reported to child protective services and other agencies:

- The Third National Incidence Study of Child Abuse and Neglect (NIS-3) (Sedlak & Broadhurst, 1996). Because this dataset yields low estimates of sexual abuse, data based on the less stringent reporting standard of endangerment will be used for this report. The total sample size for this study was 2,815,600.

- The National Child Abuse and Neglect Data System (NCANDS) (U.S. Department of Health and Human Services, Administration on Children, Youth and Families [DHHS/ACYF], 2000). This dataset, covering the period 1990-1999, contains administrative data provided by States on the number of reports and victims of sexual abuse. The percentage of States reporting rises over time, but it is incomplete even for 1999.

3.1 Prevalence of Sexual Abuse

Studies reporting prevalence data of sexual abuse in the general population show no definite trend. Some conclude that the rate of sexual abuse has risen, whereas others indicate that it has fallen over the past several years (DHHS/ACYF, 1999; Sedlak & Broadhurst, 1996). However, considering

that there are many confounding variables within society (e.g., greater awareness of sexual abuse), any observed change in the prevalence may simply be an artifact of the number of incidents that have been reported. Additionally, variation in methodological procedures and measurement may result in variation of rates and make it difficult to determine trends. There can be little argument, however, that there are too many incidents of sexual abuse.

The following studies illustrate some of the research on the prevalence of sexual abuse among youth in the general population:

- In the NYVPS (Finkelhor & Dziuba-Leatherman, 1994), 3.2% of the girls and 0.6% of the boys reported incidents of sexual abuse. The rate increased to 10% of the total sample when attempted abuse was included. Note that the interviews in this study were conducted over the phone in the child's home (and, therefore, possibly the home of the abusing parent). Therefore, one may expect a large number of the adolescents to be less than forthcoming.

- The NCVS (BJS, 2000) showed rates of 2.2 counts of rape or sexual assault (including verbal threats) per 1,000 persons for children aged 12 to 15 years old. The rate increased to 5.7 per 1,000 persons for those 16 to 19 years old.

The prevalence of sexual abuse among the general population is in sharp contrast to that of runaway and homeless youth. As shown in Section 2.2.1, the rates for the latter range from 21% to 42% among the most methodologically sound studies on runaway and homeless youth.

3.2 Perpetrators of Sexual Abuse

The perpetrators of sexual abuse in the general population, as among runaway and homeless youth, tend to be male, members of the victim's family, and over 18 years of age. Various other characteristics have been implicated as predicting abuse by caregivers. Low self-esteem, poor impulse control, aggressiveness, anxiety, and depression have all been found to be relatively high in caregiver perpetrators (English, 1998). Lack of knowledge of proper parenting practices and drug abuse also contribute to child maltreatment, though not necessarily sexual abuse.

- According to the NYVPS (Finkelhor & Dziuba-Leatherman, 1994), 59% of perpetrators were 18 or older, and 41% were under 18 years of age. Only 12% of perpetrators were strangers, whereas 14% were family members, and 74% were known to the victim but were not family members. Of the perpetrators who were 18 or older, 11% were family members, 41% were

known to the victim but not family members, and 7% were unknown to the child. For perpetrators under 18 years of age, 3% were family members, 33% were known to the child but were not family members, and 5% were strangers.

- In the NCVS, family members accounted for 68% of sexual assaults/rapes, including attempts. Stranger perpetrators accounted for 16% of sexual assaults/rapes among those aged 12 to 15 and for 45% of assault/rape perpetrators among those aged 16 to 19 (BJS, 2000). Among youth aged 12 to 15 years of age, no males (0%) were raped/sexually assaulted by a stranger, compared to 37% of females. Among youth aged 16 to 19, almost 50% of males were victimized by strangers, compared to almost 19% of females.

- In the NIS-3 (Sedlak & Broadhurst, 1996), biological parents accounted for 29% of perpetrators of sexual abuse. Of these, 61% committed fatal or serious sexual abuse, 10% committed moderate abuse, and 28% committed inferred abuse. Other parents and parent-substitutes constituted 25% of perpetrators. Of this group, 19% committed fatal or serious sexual abuse, 18% committed moderate abuse, and 63% committed inferred abuse. Others, who could include other adults or peers, accounted for 46% of perpetrators of sexual abuse. Within the "other" category, 26% committed fatal or serious abuse, 11% committed moderate abuse, and 63% committed inferred abuse.

- Sedlak and Broadhurst (1996) also found that across all perpetrators, males were the most common perpetrators, committing 89% of sexual abuse incidents. The age of perpetrators tended to be 26 or older for biological or other parents (47% for parents, 66% for other parents, and 31% unknown), and the age of all others who committed sexual abuse tended to be younger than 26 (39% for others, 38% unknown).

- According to NCANDS data from 1998, males were perpetrators of sexual abuse in 75% of the reported maltreatment cases in 16 States (DHHS/ACYF, 2000).

Although there is less published information on the perpetrators of sexual abuse among runaway and homeless youth, available data showed one similarity. In both the general population and among runaway and homeless youth, family members were the most likely perpetrators (see also Section 2.2.2).

3.3 Demographic Correlates of Sexual Abuse

Gender, race/ethnicity, and age were examined across surveys to determine if there were relationships with sexual abuse.

3.3.1 Gender

Overall, the data suggest that females are at greater risk for victimization than males. Data from the NYVPS (Finkelhor & Dziuba-Leatherman, 1994) showed that females were victimized at a higher rate than males, with 15% of females reporting that they had been sexually abused, compared to 6% of males. According to the NIS-3 (Sedlak & Broadhurst, 1996), there was a significant difference between the number of males and females who were victims of sexual abuse, with females almost three times as likely to be victims as males (2.3 males per 1,000 children and 6.8 females per 1,000). NCANDS data from 1998 also showed a higher rate of sexual abuse among females than males: 2.3 per 1,000 compared to 0.6 per 1,000, respectively (DHHS/ACYF, 2000).

The relationship between gender and sexual abuse was also found among runaway and homeless youth (see Section 2.2.3).

3.3.2 Ethnicity

Conflicting findings emerged regarding ethnic differences. For instance, NIS-3 data found no significant differences among ethnicities. However, according to 1997 NCANDS data, black children (20.7 per 1,000) and American Indian/Alaska Native children (9.8 per 1,000) were victimized at a rate twice as high as the proportion of those in the general population (DHHS/ACYF, 1999). White children (8.5 per 1,000) and Asian American children (3.8 per 1,000), on the other hand, were victimized at a lower rate than the general population. Note that NCANDS estimates are based on only those cases that come to the attention of child protective services.

Differences in prevalence were also found in the NYVPS study (Finkelhor & Dziuba-Leatherman, 1994). An estimated 9% of White Americans were sexually abused, compared to 19% of Black, 8% of Hispanic, and 11% of children of other ethnicities.

3.3.3 Age

Available data indicate that once a child reaches 3 to 4 years of age, up until a child is 16 or 17, the prevalence of sexual abuse stays relatively constant. From ages 0 to 3, rates tend to be low. For instance, in the NIS-3 (Sedlak & Broadhurst, 1996), those between birth and 2 years of age were abused at a rate of 1.1 children per 1,000, compared to approximately 6 children per 1,000 for 3- to 5-year-olds. That number stays consistent throughout childhood and adolescence, never dropping below approximately 4 children per 1,000.

NCANDS data from 1997 suggest a similar pattern (DHHS/ACYF, 1999). For children between 0 and 3 years of age, 9% of those who had been maltreated were sexually abused. That number increased to 27% for children between 4 and 7 and deviated very little across those between 8 and 15 years old. The percentage dropped significantly to 10% for children 16 or older.

Although the NCVS (BJS, 2000) collected data only for adolescents who were 12 years old or older, results showed that 12- to 15-year-olds (2.2 per 1,000 youth) were sexually abused at a lower rate than 16- to 19-year-olds (5.7 per 1,000 youth).

Note that NCANDS data are based only on cases reported to child protective services.

3.4 Sequelae of Sexual Abuse

Although individual factors (e.g., high intelligence, particular temperaments, the way that individuals appraise their abuse experiences, and whether they have a nonfamily member that they can trust) can serve as buffers to negative consequences, numerous problems arise among those who have been sexually abused (National Research Council, 1993). According to a review by Briere and Elliott (1994), several psychopathologies can result from childhood sexual abuse, such as PTSD, depression, and anxiety. An adult who has been victimized as a child may engage in a variety of strategies in order to avoid the trauma associated with the abuse. Dissociative disorders, substance abuse, and tension-reducing activities, such as binge eating and indiscriminate sexual behavior, are some of the many maladaptive strategies that victims implement to block out the adverse emotional memories of abuse. Uncontrollable anger, social withdrawal, aggressiveness, and overall social incompetence contribute to interpersonal problems as well.

Two separate studies have supported these conclusions. Molnar, Buka, and Kessler (2001) analyzed data from the National Comorbidity Survey (NCS) to determine the consequences of childhood sexual abuse. In this nationally representative sample of 15- to 54-year-olds, they found that both men and women who had been sexually abused before the age of 18 had significantly greater odds of having an anxiety or substance-use disorder than those that had not reported being sexually abused, after controlling for 19 other childhood adversities. Women were also more likely to have a mood disorder. Respondents who were sexually abused were also more likely to attempt suicide. In the same dataset, Molnar, Berkman, and Buka (2001) found that after controlling for psychopathology, the population with attributable risk of suicide attempts was 12% for child rape and 7% for child molestation. A smaller study conducted in Britain revealed similar results (Hobbs, 2000). Data were collected from children who had been identified as having been sexually abused at seven years of age or younger in 1989. It was found that 60% of those who had been sexually abused had negative behaviors, compared to 16% of a control group. Those who had been sexually abused also had a higher rate of educational problems (24%) compared to the control group (5%).

The strong relationships between sexual abuse and other negative life experiences were also found among runaway and homeless youth (see Section 2.2.4).

3.5 Summary

Comparison of the literature reviews on sexual abuse among the general population and among RHY shows several clear findings. First, sexual abuse among RHY prior to their leaving home appears to be quite high—ranging from 21% to 42%, which is significantly higher than among youth in the general population. Rates of sexual abuse reported among adolescents in the general population average around 1% to 3%.

Second, for both the homeless and non-homeless population, evidence suggests that perpetrators tend to be known to the victim. Third, the rates of sexual abuse for both RHY and adolescents in the general population tend to be two to three times higher for females than for males. Fourth, little analysis of sexual abuse by demographic characteristics other than gender has been conducted either among homeless and runaway youth or youth in general. Preliminary evidence suggests that rates of sexual abuse may be comparable across ethnic and racial groups.

Finally, in both homeless and nonhomeless populations, sexual abuse was strongly related to other negative life experiences such as substance use, suicide ideation and attempts, and other mental health problems.

4. SECONDARY ANALYSIS METHODOLOGY

The second major task of this project was to conduct secondary analysis of existing datasets. The secondary analysis was designed to add to the information learned during the literature-review segment of the project. An important item to note is that point estimates from the secondary analysis and from the literature review may differ slightly. These differences result from (1) variation in sample sizes (i.e., different age cutoffs may have been used) and (2) variation in reference periods (e.g., published data on the NCVS often presented 12-month point estimates, whereas we presented 6-month point estimates). The reader should note these differences when comparing the results of the secondary analysis to that of the literature review.

4.1 Dataset Selection Criteria

4.1.1 Runaway and Homeless Youth Datasets

Our effort to identify studies of runaway and homeless youth (RHY) to target for secondary analyses began during the development of the literature review. We chose three of the five studies described in the literature review as the most methodologically sound. These three studies were selected because they contain data on the issues most relevant for this report. The three studies of RHY targeted for secondary analysis were as follows:

- *Street Youth at Risk for AIDS (SYRA),* conducted in San Francisco, Seattle, Denver, and New York City by Beth E. Molnar, Alex H. Kral, Robert E. Booth, and John K. Watters, and colleagues;
- *The Midwest Homeless and Runaway Adolescent Project (MHRAP),* conducted in Iowa, Nebraska, Missouri, and Kansas by Les B. Whitbeck and Dan R. Hoyt;
- *The Seattle Homeless Adolescent Research and Evaluation Project, (SHARE)* by Ana Mari Cauce and Les Whitbeck.

4.1.2 General Population Datasets

Two general population datasets were targeted for secondary analysis for purposes of comparison to the data for RHY:

- *The National Longitudinal Study of Adolescent Health (AddHealth)*
- *The National Crime Victimization Survey (NCVS) (BJS, 2000).*

These general population studies were selected because they (1) were national in scope, (2) could address the needs of the study, and (3) had a sample size sufficient to provide estimates of low-prevalence behaviors such as sexual abuse. The AddHealth data had the additional strength of containing variables on both sexual abuse and runaway experiences.

4.2 Methodological Overview of Selected Datasets

A brief methodological overview of each dataset is provided below. Additional information is available from published materials from each study or from the study principal investigators.

4.2.1 Street Youth at Risk for AIDS (SYRA)

The main goal of SYRA was to develop and evaluate an HIV/AIDS intervention that would be effective among RHY on the street and delivered by social services agencies serving this population. To evaluate the intervention, a quasi-experimental, prospective equivalent control group design was used across three cities: San Francisco, Denver, and New York City. Collaborations were established with an agency in each city, and youth were recruited from those receiving services at each agency as well as by trained street outreach workers; the latter invited them to participate whether or not they chose to receive other agency services. A control group was recruited first from each site. This group received standard HIV/AIDS education and services from the agency, and were interviewed by trained research assistants. Interviews took place at intake, two days later, and three months after intake. For the experimental group, a two-day peer helper HIV/AIDS workshop took place between the first and second interviews, and enhanced contacts with street outreach workers occurred during the following three months. The experimental group was recruited following completion of the three-month follow-up interviews of the first control group. In two of the sites, a second control group was recruited following the completion of the interviews with the experimental group. The instrument used in the interviews included questions pertaining to demographics, present living situation, family background, arrest history, medical history, mental health care, drug and alcohol use, sexual behaviors, sexual and physical abuse history, HIV/AIDS knowledge and attitudes, and runaway history. Interviews were conducted in either English or Spanish.

Eligibility criteria included being in the targeted age group, living on the streets or in residential programs for a minimum of three months prior to study intake, and having spent no more than two consecutive weeks of those three months staying with a parent or guardian. Additionally, youth whose parents were homeless were excluded, as well as those unable to give informed consent. Overall, 775 street youth, 12 to 19 years of age, were recruited into the study, with 326 assigned to the control group, and 449 assigned to the experimental intervention. Data presented in this report come from the baseline interview and are limited to youth aged 13 to 19 (N=770). Results from the secondary analyses of this dataset are reported in Chapter 5.

4.2.2 The Midwest Homeless and Runaway Adolescent Project (MHRAP)

The purpose of MHRAP was to examine the lives of homeless youth to better understand the paths they take to the streets and the experiences they face once they leave home. Adolescents (N=602) were interviewed from early 1995 through August 1996 by street outreach workers in youth services agencies. The six participating agencies were located in cities of widely varying populations in four Midwestern states (Missouri, Iowa, Nebraska, and Kansas). Interviews were conducted in outreach vans, restaurants, shelters, transitional living facilities, and drop-in centers as part of regular agency outreach. Interviews lasted about one and a half hours. The overall response rate was 93%. Data presented in this report are limited to youth aged 13 to 19 (N=595). Results from the secondary analysis of this dataset are reported in Chapter 5.

4.2.3 The Seattle Homeless Adolescent Research and Evaluation Project (SHARE)

The purpose of SHARE was similar to that of the MHRAP study (see section 4.2.2). This study was conducted under contract with YouthCare Inc. The sample consisted of 375 adolescents between the ages of 12 and 21 (M = 17.14), all participating in an ethnographic study of street youth in Seattle. Youth were recruited via two primary methods: interviewers either approached them on the streets if they appeared to be between the ages of 13 and 21, or they were contacted at seven local agencies that serve street youth in the metropolitan area. The interviewers were trained in working with street youth, were knowledgeable about the street youth culture in their local area, and were already known to and trusted by many of the youth. All participants were homeless. Homelessness was defined as (1) not having lived with their parents within the past week, (2) not being within the custody of the State, and (3) not residing anywhere for the last 45 days and could not project out staying somewhere for another 45 days.

Interviews were conducted at the agencies and other inside areas (such as coffeehouses and restaurants), and outside (if weather permitted). Each interview was conducted on two different days, with each segment lasting approximately 1½ to 2 hours. The overall response rate for the study was 95%. Data presented in this report are limited to youth aged 13 to 19 who responded to the sexual abuse questions (N=295). Results for the secondary analysis of this report are presented in Chapter 5.

4.2.4 National Longitudinal Survey of Adolescent Health (AddHealth)

AddHealth is a school-based, nationally representative study of adolescents in grades 7 through 12. Funded by the National Institute of Child Health and Human Development and 17 other Federal agencies, it was designed by the Carolina Population Center, of the University of North Carolina at Chapel Hill. The purpose of the study is to investigate the factors that lead to healthy or unhealthy choices, with a focus on the influence of social context. AddHealth data include information on families, friends, schools, and communities of these adolescents. The study includes surveys of the adolescents themselves (including in-school and in-home surveys), of their parents, their peers, and the administrators of the schools they attend.

All high schools in the United States that included an 11th grade and had an enrollment of at least 30 students were included in the sampling frame. From this, a systematic random sample of 80 high schools was drawn, stratified by region, urbanicity, school type (public/ private/ parochial), ethnic diversity, and size. If a selected high school refused to participate, another from the same stratum was selected. Next, a "feeder school" for each high school was selected. Feeder schools included the 7th grade and sent their graduates to the selected high schools. The final sample consisted of a pair of schools in each of 80 communities, with a total of 134 schools in the "core" study (some high schools included grades 7 through 12, and thus functioned as their own feeder school).

For the first wave of data collection, questionnaires were distributed to students in grades 7 to 12 within the school on one given day between September 1994 and April 1995. More than 90,000 students filled out this survey. From the in-school students who filled out the in-school questionnaires, 12,105 students were randomly selected as a nationally representative sample of adolescents in grades 7 to 12 to be interviewed in further detail in an in-home survey. In addition, special groups were over-sampled for the in-home survey. These included black adolescents with a college-educated parent, Chinese adolescents, Cuban adolescents, Puerto Rican adolescents, disabled students, and a genetic sample including siblings and twins. These students completed a more extensive in-home survey between April and December of 1995. The in-home questionnaires were conducted on laptop

computers for greater confidentiality. For more sensitive questions, an audio-CASI format was used, in which the respondents listened to prerecorded questions through earphones and entered the answers directly.

The data reported here are drawn from Waves 1 and 2 of the AddHealth Public Use Sample. The Public Use Sample includes Wave I and II respondents and consists of one-half of the core sample, chosen at random, and one-half of the over-sample of black adolescents with a parent with a college degree. The total number of respondents in this dataset is 6,504.

In the AddHealth study, the question on sexual victimization was asked of females only.[1] Thus analyses on this topic could be conducted only for females. Although the public use sample includes 3,356 female respondents, our analysis in this report is limited to the 3,318 respondents with nonmissing data on the sexual victimization question; a total of 3,313 respondents had nonmissing data on both the runaway experience and the sexual victimization variables. All analyses were weighted to reflect population estimates. Results from the secondary analysis of this dataset are reported in Chapter 6.

4.2.5 National Crime Victimization Survey (NCVS)

The NCVS is sponsored by the Bureau of Justice Statistics and is conducted by the U.S. Census Bureau. Previously known as the National Crime Surveys, it has been carried out since 1973. It is the nation's primary source of information on criminal victimization. The NCVS has four primary objectives:

1. to develop detailed information about the victims and consequences of crime,
2. to estimate the number and types of crimes not reported to the police,
3. to provide uniform measures of selected types of crimes, and
4. to permit comparisons over time and types of areas.

The Census Bureau collects data from a nationally representative sample of approximately 50,000 households (100,000 individuals) per year. The NCVS is representative of the noninstitutionalized U.S. population aged 12 and over (with the exception of individuals who are on the

[1] Males were asked only whether they had ever forced a female to have sexual intercourse against her will.

crews of vessels or who are living in military barracks). Using a "rotating sample" design, the Census Bureau randomly selects households each month and interviews them every six months for a total of seven interviews. The frequency of the interviews is intended to reduce recall problems that would result from greater amounts of time between interviews.

One person in each household responds to a screener interview about household crimes, and each person in the household aged 12 or older answers a screener interview about personal crimes. Rather than asking if a person has been criminally victimized, the screener attempts to elicit information about victimization by using everyday language, giving specific examples of incidents people may have experienced. Information about any victimizations is then detailed in incident reports. Respondents are asked to report details about criminal victimizations, including the frequency, date, time, and place of the crime, as well as the relationship between the victim and offender, the consequences of the crime, and whether the crime was reported to police (and, if not, why). Additionally, the NCVS gathers socioeconomic and demographic information about both victims and nonvictims. The response rate for the NCVS is about 95%. Results from the secondary analysis of this dataset are reported in Chapter 7.

5. FINDINGS FROM SECONDARY ANALYSIS OF RUNAWAY AND HOMELESS YOUTH DATASETS

5.1 Background

5.1.1 Purpose

As mentioned earlier, secondary analyses were conducted on three studies of runaway and homeless youth:

- *Street Youth at Risk for AIDS (SYRA)*;
- *The Midwest Homeless and Runaway Adolescent Project (MHRAP);* and
- *The Seattle Homeless Adolescent Research and Evaluation Project (SHARE).*

Each study contained information that addressed the following research questions:

- How common is sexual abuse among runaway and homeless youth? Are there differences in the demographic characteristics of these youth?
- Are there characteristics or behaviors associated with sexual abuse? Characteristics and behaviors examined include those related to runaway/homeless experiences, mental health, substance use, risky sexual behaviors, and violence and victimization.

Table 5.1 displays the demographics of respondents in each dataset.

5.1.2 Definitions

Our analytic approach to answering the research questions was primarily descriptive and involved the computation and presentation of prevalence estimates (i.e., percentages). First, we produced prevalence estimates for runaway experiences for the total population and across demographic and background characteristics, such as age, gender, and race/ethnicity. Then, we produced prevalence estimates of sexual victimization by various correlates. For the SYRA and SHARE data, chi-square tests were used to test for significant ($p<.05$) differences between groups; only differences that are statistically different are discussed in this chapter. For MHRAP, we did not run statistical tests of significance because the principal investigators of this study are in the process of publishing many of these findings. Only findings that appear significantly

Table 5.1 Demographic Characteristics of Runaway and Homeless Youth Datasets: SYRA, MHRAP, SHARE

	SYRA		MHRAP		SHARE	
Demographic characteristics	**N**	**Unweighted %**	**N**	**Unweighted %**	**N**	**Unweighted %**
Total	775	100.0	595	100.0	295	100.0
Age						
12-14	26	3.3	113	19.0	31	11.4
15-17	336	43.4	337	56.6	148	54.4
18-20*	413	53.3	145	24.4	93	34.2
Gender						
Male	503	64.9	235	39.5	143	52.6
Female	272	35.1	360	60.5	129	47.4
Race/ethnicity						
White	354	45.8	360	61.0	131	45.0
Black	168	21.7	143	24.2	46	16.8
Other	251	32.5	87	14.8	114	38.2

*SHARE included youth up to 21 years of age.

Sources: SYRA = Street Youth at Risk for AIDS, 1992-1993.
MHRAP = The Midwest Homeless and Runaway Adolescent Project, 1995-1996.
SHARE = The Seattle Homeless Adolescent Research and Evaluation, 1996-1998.

different are discussed here. Along with prevalence estimates, such comparisons indicate whether sexually victimized youth were more likely than those who were not victimized to report the various correlates.

Understanding the differences in definitions across the three studies is crucial to understanding the findings in this chapter. The definitions of homelessness and sexual abuse for each study are presented in Table 5.2.

5.2 Prevalence of Sexual Abuse

Measures of sexual abuse prior to the adolescent leaving home were available from all three datasets; the prevalence ranged across the three datasets from about one in three adolescents to one in four (Table 5.3). In the SYRA study, 34% of youth reported that they had been sexually abused before leaving home, compared to 23% of those in the MHRAP study and 26% in the SHARE study.

Table 5.2 Designs of the 3 Studies on Runaway and Homeless Youth Selected for Secondary Analysis

	Street Youth at Risk for AIDS (SYRA)[1]	The Midwest Homeless and Runaway Adolescent Project (MHRAP)[2]	The Seattle Homeless Adolescent Research and Evaluation Project (SHARE)[3]
Definition of homelessness	On the street for at least 3 months (no more than 2 weeks lived with family members)	Away from home at least overnight without the consent or knowledge of parents or caregivers.	No stable residence at the time of the interview and not in the custody of the State (not living with parents/ guardians during the previous week, not spending more than 4 nights at home in the last week, not residing anywhere for the last 45 days and could not project out staying anywhere for another 45 days).
Definition of sexual abuse	"Sexual abuse includes all unwanted sexual behavior. This ranges from explicit sexual abuse such as forced intercourse, oral sex, or unwanted sexual fondling, to being forced to watch someone else expose themselves or sexually stimulate themselves or others, or being forced to undress or to fondle yourself. Given this definition, have you ever been sexually abused?"	"Whether a parent or guardian of the child had ever made a verbal request for sexual activity or had forced the child to engage in sexual activity."	"Has an adult or someone at least five years older than you ever had you do something sexual, kissed or touched you sexually, and put or tried to put anything or any part of their body into you sexually?"
Region/city of data collection	San Francisco, CA; Denver, CO; New York City	Midwestern cities in Missouri, Iowa, Nebraska, Kansas	Seattle, WA

[1]Kral et al. (1997); Molnar et al. (1994); Molnar et al. (1998).

[2]Tyler et al. (2000); Whitbeck (1999); Whitbeck & Hoyt (1999); Whitbeck et al. (1997a); Whitbeck et al. (1997b); Whitbeck et al. (2000); Whitbeck et al. (1999); Yoder (1999); Yoder et al. (1998).

[3]Tyler et al. (1999).

The percentages of youth reporting sexual abuse in our secondary analyses were either identical or very similar to the reviewed articles discussed in Section 2.2.1. Differences result from slight variations in age ranges of youth included in the analysis datasets and differences in definitions of sexual abuse.

The correlation between sexual abuse and demographic characteristics varied across the studies (Table 5.3). In all three studies, however, females were more likely to report sexual abuse than males (62% vs. 19% in SYRA, 32% vs. 10% in MHRAP, and 35% vs. 18% in SHARE). The percentages of youth by gender reporting sexual abuse in our secondary analyses were very similar to the reviewed articles discussed in Section 2.2.3. Again differences result

Table 5.3 Percentage of Runaway and Homeless Youth Reporting Sexual Abuse Before Leaving Home, by Demographic Characteristics: SYRA, MHRAP, SHARE

Demographic characteristics	SYRA Abused	MHRAP Abused	SHARE Abused
N (unweighted) =	770	595	295
Total	34.2	23	26
Age			
12-14	57.7	21.4	18.8
15-17	36.9	22.2	28.0
18-20	30.4	27.0	26.3
Gender			
Male	19.2	10.3	18.4
Female	61.8	31.5	34.5
Race/ethnicity			
White	36.6	26.6	19.5
Black	19.6	14.9	22.8
Other	40.3	24.1	19.0

Sources: SYRA = Street Youth at Risk for AIDS, 1992-1993.
MHRAP = The Midwest Homeless and Runaway Adolescent Project, 1995-1996.
SHARE = The Seattle Homeless Adolescent Research and Evaluation, 1996-1998.

from slight variations in age ranges of youth included in the analysis datasets and differences in definitions of sexual abuse.

In the SYRA dataset, younger adolescents (i.e., those aged 12 to 14) were more likely to report abuse than those in the two older age groups. In the other two datasets, however, prevalence of sexual abuse tended to be higher among the older age groups. Black youth reported the lowest rates of abuse in the SYRA and MHRAP datasets, but they reported rates equivalent to Whites and other race/ethnicity youth in SHARE. (Note that no data on sexual abuse by age or race/ethnicity were reported in the published reports discussed in Section 2.2.3).

Additional information on the history of sexual abuse were available from SHARE and SYRA:

- The SHARE data show that among youth who had been sexually abused, the average age at which it first occurred was 7 years (Table 5.4).

Table 5.4 Average Age at First Sexual Abuse and Number of Sexual Abusers among Sexually Abused Runaway and Homeless Youth: SHARE

	0	SD
N (unweighted) =	89	
Age at first sexual abuse	7.1	4.7
Number of people who asked youth to do something sexual	3.0	6.4
Number of people who messed around with youth sexually or had youth do something sexual	2.6	4.3

Source: SHARE = The Seattle Homeless Adolescent Research and Evaluation, 1996-1998.

- SHARE also indicates that, on average, 3 people had asked the youth to do something sexual, and 2.6 people actually sexually abused the youth (Table 5.4).

- The SYRA data specifically identified the abusers who were reported by the youth (Table 5.5); the youth may have reported more than one abuser. Most youth were abused by adults they knew. Only 25% of the youth reported that they were abused by strangers.

Additional information on family background characteristics was available from SYRA (Table 5.6). These data show that youth who had been abused were more likely to report having someone in their house with an alcohol problem than those who had not been abused. They were also more likely to report having someone in the house who used drugs.

5.3 Sexual Abuse and History of Runaway and Homeless Experiences

Variables measuring the age at which youth first left home were available from all three datasets. In all three studies, the age at which youth first left home was approximately equivalent for youth who had been sexually abused and those who had not (Table 5.7). The average age of first leaving home ranged from approximately 12.4 to 13.9 years of age.

Table 5.5 Percentage of Sexually Abused Runaway and Homeless Youth Reporting Various Perpetrators of Sexual Abuse: SYRA

Perpetrator	%
N (unweighted) =	**263**
Adult acquaintances[1]	32.0
Youth acquaintances[2]	27.8
Strangers	25.5
Step-father	14.4
Biological father	9.9
Uncle	9.5
Mother's boyfriend	8.0
Male cousin	6.8
Biological brother	6.5
Grandfather	5.3
Female babysitter	4.9
Male babysitter	4.6
Adoptive father	2.3
Biological mother	2.3
Respondent's boyfriend	1.9
Stepbrother	1.5
Adoptive brother	1.5
Female cousin	1.5
Foster father	1.1
Stepmother	0.8
Adoptive mother	0.8
Foster brother	0.8
Respondent's ex-boyfriend	0.8
Biological sister	0.4
Adopted sister	0.4
Grandmother	0.4
Other	2.7

Note 1: Categories are not mutually exclusive. Some youth reported more than one abuser.
Note 2: Unweighted N = 263.

[1] Teachers, friends, friends of parents, other adult acquaintances.
[2] Friends, friends of siblings.

Source: SYRA = Street Youth at Risk for AIDS, 1992-1993.

Table 5.6 Percentage of Runaway and Homeless Youth Reporting Sexual Abuse, by Family Background Characteristics: SYRA

	SYRA	
	Abused	**Not abused**
N (unweighted) =	260	501
Anyone in house with alcohol problem**	53.8	35.8
Anyone in house use drugs**	59.6	42.7

** p < .01.

Source: SYRA = Street Youth at Risk for AIDS, 1992-1993.

Table 5.7 Average Age First Left Home and Number of Times Runaway or Homeless, by Sexual Abuse: SYRA, MHRAP, SHARE Surveys

	SYRA		MHRAP		SHARE	
	Abused	**Not abused**	**Abused**	**Not abused**	**Abused**	**Not abused**
N (unweighted) =	263	507	136	451	77	2,159
Age first left home 0	13.0	13.9	12.4	13.5	12.4	13.4
# Times runaway/homeless 0	10.6	6.1	–	–	10.8	7.6

– = not available.

Sources: SYRA = Street Youth at Risk for AIDS, 1992-1993.
MHRAP = The Midwest Homeless and Runaway Adolescent Project, 1995-1996.
SHARE = The Seattle Homeless Adolescent Research and Evaluation, 1996-1998.

Both SYRA and SHARE included measures of the number of times a youth had run away or been homeless. In both studies, youth who had been abused reported having run away or been homeless more times than youth who had not been abused (an average of 11 times compared to an average of 6 or 7 times).

5.4 Sequelae of Sexual Abuse

5.4.1 Mental Health

Various information on the mental health status of runaway and homeless youth was available from each of the three datasets.

Results from SYRA indicate a strong association between sexual abuse and poor mental health (Table 5.8). In this study, youth who had been sexually abused were almost twice as likely to have considered committing suicide (81%) as were youth who had not been abused (46%). As in the published data (Molnar et al., 1998), our secondary analysis showed that youth who had been abused were nearly three times as likely to have attempted suicide (60%) as those who had not been abused (21%); however, among those who had attempted suicide there was no significant difference in the number of attempts or the age at the first suicide attempt.

Table 5.8 Percentage of Runaway and Homeless Youth Reporting Sexual Abuse, by Mental Health: SYRA

	SYRA	
	Abused	**Not abused**
N (unweighted) =	263	507
Ever thought about suicide (%)	81.0	46.4
Ever attempted suicide (%)	59.9	21.4
Number of suicide attempts (0)	6.8	4.0
Age at first suicide attempt (0)	12.8	13.6
Ever seen a mental health worker (%)	84.8	57.8
Ever admitted to a residential treatment center (%)	31.7	18.9
Ever attended a day treatment program (%)	18.3	9.1
Ever stayed overnight in a psychiatric ward (%)	36.9	17.8

Source: SYRA = Street Youth at Risk for AIDS, 1992-1993.

The SYRA analysis also showed that sexually abused youth had received more mental health care than youth who had not been abused (Table 5.8). They were more likely to have seen a mental health worker (85% vs. 58%), been admitted to a residential treatment center (32% vs. 19%), attend a day treatment program (18% vs. 9%), or stayed overnight in a psychiatric ward (37% vs. 18%).

The MHRAP and SHARE surveys contained scales on self-esteem (Rosenberg Self-Esteem Scale) and depressive symptomology (Center for Epidemiologic Studies Depression Scale), as well as externalizing behaviors (Youth Self-Report Form). Findings from our secondary analysis were similar to findings published by the principal investigators of these studies (see Section 2.2.4). Results from both studies show that youth who had and had not been sexually abused are similar in terms of their self-esteem (scores were 36 vs. 37 for MHRAP youth, and 25 vs. 23 for SHARE youth) and levels of depressive symptomology (26% vs. 24% for MHRAP, 23% vs. 18% for SHARE) (Table 5.9). Sexually abused youth (62%) were, however, more likely than youth who had not been abused (47%) to meet clinical cutoff criteria for externalizing behavior (MHRAP).

Table 5.9 Percentage of Runaway and Homeless Youth Reporting Sexual Abuse, by Mental Health: MHRAP and SHARE

	MHRAP		SHARE	
	Abused	**Not abused**	**Abused**	**Not abused**
N (unweighted) =	136	448	61	195
General mental health				
Self-esteem[1]	35.5	36.9	24.5	22.6
Depression[2]	26.4	23.7	22.8	17.8
Externalizing behavior[3]	61.5	46.7	53.3*	33.2

Note: Tests of statistical significance were not conducted for the MHRAP data.

[1]Self-esteem was measured using the Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965, 1979). Higher scores indicate greater self-esteem.

[2]Depressive symptomology was assessed with the Center for Epidemiologic Studies Depression Scale (CES-D Scale; Radloff, 1977).

[3]Externalizing behavior was measured with the Youth Self-Report Form (YSR; Achenback, 1991), which assesses self-reported competencies and behavioral problems in youth aged 11-18. The percentages listed in the table indicate the percentage in each group meeting YSR clinical cutoff criteria for externalizing behavior.

* $p < .05$.

Sources: MHRAP = The Midwest Homeless and Runaway Adolescent Project, 1995-1996.
SHARE = The Seattle Homeless Adolescent Research and Evaluation, 1996-1998.

5.4.2 Substance Use

Although measures of substance use were available from all three datasets, the measures varied across studies. Therefore, the results from each dataset are presented separately here.

SYRA. The SYRA study included questions on lifetime and past month use of a variety of substances (Table 5.10). The data show that lifetime and past month use of alcohol and marijuana were higher among youth who had been sexually abused. Rates of lifetime cocaine and other drug use, and past month use of other drugs were also more common among sexually abused youth. In addition, youth who were sexually abused were more likely to report having ever used an injection drug than youth who had not been abused. There were no differences in past month heavy use of alcohol or past month cocaine use between youth who had and had not been sexually abused.

Table 5.10 Percentage of Runaway and Homeless Youth Reporting Sexual Abuse, by Substance Use: SYRA

	SYRA	
	Abused	**Not abused**
N (unweighted) =	263	507
Lifetime		
Alcohol*	97.7	94.5
Any illicit drugs**	94.7	88.8
Marijuana*	92.8	87.6
Cocaine**	56.7	42.6
Other drugs**	76.4	57.0
Injection drugs**	27.4	18.7
Past month		
Alcohol*	71.9	64.5
Heavy alcohol[1]	38.4*	39.6
Any illicit drugs	75.3	69.0
Marijuana*	70.7	62.5
Cocaine	16.7	14.2
Other drugs**	46.8	34.5

[1]Defined as 5 or more times in the past month.

* $p < .05$.
** $p < .01$.

Source: SYRA = Street Youth at Risk for AIDS, 1992-1993.

SHARE. The SHARE study included information on lifetime substance use and use in the past six months (Table 5.11). These data show similar rates of substance use for youth who had been

sexually abused and those who had not. The only exception was for inhalant use in the past six months: use of inhalants was nearly three times as common among sexually abused youth as among youth who had not been abused (85% vs. 30%).

MHRAP. The MHRAP study provides information on past year substance use (Table 5.12). These data showed few differences between youth who had been sexually abused and those who had not.

Table 5.11 Percentage of Runaway and Homeless Youth Reporting Sexual Abuse, by Substance Use: SHARE

	SHARE	
	Abused	**Not abused**
N (unweighted) =	77	215
Lifetime		
Alcohol	100.0	93.6
Cigarettes	96.6	94.9
Any illicit drugs	93.2	92.4
Past 6 months		
Any illicit drugs	84.9	90.4
Marijuana	83.6	88.6
Cocaine/crack	46.2	53.8
Inhalants*	84.9	29.9

* $p < .05$.

Source: SHARE = The Seattle Homeless Adolescent Research and Evaluation, 1996-1998.

Table 5.12 Percentage of Runaway and Homeless Youth Reporting Sexual Abuse, by Substance Use: MHRAP

	MHRAP	
	Abused	**Not abused**
N (unweighted) =	136	451
Past year use		
Alcohol	79.3	80.7
Any illicit drugs	71.1	73.9
Marijuana	65.2	69.2
Cocaine	21.5	13.0
Inhalants	20.7	16.0

Note: Tests of statistical significance were not conducted for the MHRAP data.

Source: MHRAP = The Midwest Homeless and Runaway Adolescent Project, 1995-1996.

5.4.3 Sexual History

Information on various measures of risky sexual behaviors was available from all three datasets. Age at first consensual sex—available from each of the datasets (Table 5.13)— was consistently similar among youth who had and those who had not been sexually abused. The average for each dataset was around age 13.

Table 5.13 Percentage of Runaway and Homeless Youth Reporting Sexual Abuse, by Risky Sexual Behaviors: SYRA, MHRAP, SHARE Surveys

	SYRA		MHRAP		SHARE	
	Abused	**Not abused**	**Abused**	**Not abused**	**Abused**	**Not abused**
N (unweighted) =	263	507	136	451	77	215
Age at first consensual sex (mean)	13.2	13.3	13.2	13.2	13.1	13.7
Number of sexual partners in past 30 days (mean)	4.0	4.0	–	–	–	–
Ever had sex with a high risk partner (%)	60.8*	46.4	–	–	–	–
Ever had sex without birth control while drunk or high (%)	38.0*	27.4	–	–	–	–
Ever had STD (%)	20.4	16.0	–	–	–	–
Ever pregnant (females only) (%)	52.7*	32.7	–	–	48.4	37.1
Ever got someone pregnant (males only) (%)	38.7*	29.7	–	–	–	–
Ever traded sex for money, food, drugs, etc. (%)	37.6*	21.7	11.9	5.5	13.0	4.2

Note: Tests of statistical significance were not conducted for MHRAP.

– = not available.

[1]In past 3 months.

* $p < .05$.

Sources: SYRA = Street Youth at Risk for AIDS, 1992-1993.
MHRAP = The Midwest Homeless and Runaway Adolescent Project, 1995-1996.
SHARE = The Seattle Homeless Adolescent Research and Evaluation, 1996-1998.

Some additional findings were available from the SYRA data (Table 5.13). These data revealed the following:

- The average number of sexual partners in the last 30 days was 4, regardless of a youth's history of sexual abuse.
- Compared to youth who had not been abused (46%), abused youth were more likely to have had sex with a high-risk partner (61%).
- Abused youth (38%) were more likely than youth who had not been abused (27%) to have had sex without birth control while drunk or high.
- A history of sexual abuse did not change the likelihood that a youth would report having ever had a sexually transmitted disease (STD).
- Females who had been abused were significantly more likely to report having ever been pregnant (53%) than girls who had not been abused (33%). Note that sexually abused girls in the SHARE study were also more likely to report having ever been pregnant (48% vs. 37%).

Measures of survival sex (i.e., trading sex for money, food, or drugs) were available from all three datasets (Table 5.13). Similar to the findings from the literature review (see Section 2.2.4), data from all three studies indicate that abused youth were more likely to have engaged in survival sex. The prevalence rates in SYRA were 38% for abused youth vs. 22% for youth who had not been abused, 12% vs. 6% in MHRAP, and 13% vs. 4% in SHARE.

5.4.4 Victimization

The SHARE study included several measures on other types of victimization. These data show that, in general, youth who had been sexually abused were somewhat more likely to have suffered other forms of victimization than youth who had not been sexually abused; however, these differences were generally not statistically significant (Table 5.14).

5.4.5 Arrest History

The SYRA study included several measures of arrest history. These data show that youth who had been sexually abused and those who had not were equally likely to report having ever been arrested (34%), charged with a crime (31% to 35%), and convicted of a crime (33% to 35%). The average

number of arrests, age at first arrest, number of times in juvenile detention, and age first in juvenile detention were similar among youth who had been sexually abused (Table 5.15) and those who had not.

Table 5.14 Percentage of Runaway and Homeless Youth Reporting Sexual Abuse, by Victimization: SHARE

	SHARE	
	Abused	**Not abused**
N (unweighted) =	77	215
Physical fight	52.5	60.8
Threatened with a weapon	64.4	56.5
Wounded with a weapon	37.3	27.2
Shot	33.9	29.0
Robbed	32.2	21.8

Source: SHARE = The Seattle Homeless Adolescent Research and Evaluation, 1996-1998.

Table 5.15 Percentage of Runaway and Homeless Youth Reporting Sexual Abuse, by Arrest History: SYRA

	SYRA	
	Abused	**Not abused**
N (unweighted) =	263	507
Ever been arrested (%)	34.1	34.0
Number times arrested (0)	2.5	2.5
Age at first arrest (0)	13.9	14.4
Charged with crime when arrested[1] (%)	34.8	31.4
Convicted of crime when arrested[2] (%)	33.3	35.1
Number times in juvenile detention (0)	3.1	3.5
Age at first juvenile detention (0)	14.3	15.0

NA = not available.

[1]Among those arrested.
[2]Among those charged with a crime.

Source: SYRA = Street Youth at Risk for AIDS, 1992-1993.

5.5 Summary

The three datasets indicate that about one-fourth to one-third of runaway and homeless youth experienced sexual abuse prior to leaving home. In all three datasets, females were more likely to report abuse than males, and in two of the datasets Black youth reported lower rates of abuse than both White and Other race/ethnicity youth.

The SHARE data suggest that youth who are sexually abused often suffer this abuse at an early age (X=7.1 years old) and that they are abused by multiple perpetrators. The SYRA data suggest that most of the abused youth were abused by a male relative or other adult that they knew. The SYRA data also indicate a strong relation between sexual abuse and substance use by family members.

Poor mental health and some risky sexual behaviors were found to be strongly related to sexual abuse, but many other sequelae were equally likely among runaway and homeless youth who had been sexually abused as those who had not been abused.

6. SECONDARY ANALYSIS OF THE NATIONAL LONGITUDINAL STUDY OF ADOLESCENT HEALTH

6.1 Background

6.1.1 Purpose

It is important to compare data on sexual abuse among the general population to those of homeless and runaway adolescents in an effort to gauge the relative risk in each population group. The National Longitudinal Study of Adolescent Health (AddHealth) was the first dataset selected to provide such data. It was selected for secondary analyses because (1) it is national in scope, (2) it could address the needs of the study, and (3) it included questions on both sexual victimization and runaway behaviors.

In this report, data from the AddHealth survey are used to address the following research questions:

- How common is sexual victimization among adolescent females in the general population? Are there differences based on runaway history, age, or race?
- What characteristics or behaviors are associated with sexual victimization? Characteristics and behaviors examined include those related to school (history of expulsion or suspension), mental health (depressive symptoms, attempted suicide), substance use, and risky sexual behaviors (early initiation of sexual intercourse, substance use associated with sexual intercourse, failure to use contraception).
- Are females who have run away and/or been sexually victimized more likely to have been involved in other types of violence, or to be victims of other crimes?

A subset of the larger AddHealth dataset was used for this analysis. Analysis was based on 3,318 females in grades 7 through 12 with data on the sexual victimization question (Table 6.1). The analyses are limited to females because the question on sexual victimization was asked of females only.[1] A total of 3,313 respondents had data on both the runaway experience and the sexual victimization variables. All analyses were weighted to reflect population estimates.

[1]Males were asked only whether they had ever forced a female to have sexual intercourse against her will.

Table 6.1 Demographic Characteristics of Respondents in Grades 7-12: AddHealth

	Runaway experiences					
	Yes		No		Total	
	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted
Demographic characteristics	**N**	**%**	**N**	**%**	**N**	**%**
Total	298	100.0	3,015	100.0	3,318	100.0
Age						
12-14	60	19.8	1,034	37.5	1,097	35.8
15-17	178	58.9	1,538	48.6	1,717	49.6
18-19	59	20.9	432	13.6	492	14.3
Missing	1	0.4	11	0.3	12	0.3
Race/ethnicity						
White	188	71.0	1,782	66.9	1,972	67.2
Black	58	13.3	758	16.6	817	16.2
Hispanic	39	12.5	339	12.4	379	12.4
Other	13	3.3	134	4.2	148	4.1
Missing	0	0	2	0.1	2	0.1
Welfare receipt						
Yes	30	9.8	239	8.1	269	8.2
No	209	70.9	2,371	79.2	2,583	78.4
Missing	59	19.3	405	12.7	466	13.4
Mother's education						
High school or less	142	49.1	1,348	47.8	1,494	48.0
More than high school	132	41.5	1,568	48.7	1,701	48.0
Missing	24	9.4	99	3.5	123	4.1
Family structure						
2-parent family	159	53.8	2,014	68.5	2,176	67.1
Other	139	46.2	1,001	31.5	1,142	32.9
Missing	0	0	0	0	0	0

Source: The National Longitudinal Study of Adolescent Health, Wave I, 1995.

6.1.2 Definitions

Our analytic approach to answering the research questions was primarily descriptive and involved the computation and presentation of prevalence estimates (i.e., percentages). First, prevalence estimates were produced for runaway experiences for the total population and across demographic and background characteristics, such as age, race/ethnicity, whether the respondent's family received welfare, mother's education level, and family structure. The measure of runaway experiences was operationalized as ever having "run away from home."

Then we produced prevalence estimates of sexual victimization by various correlates. Sexual victimization was defined for respondents as "ever having been physically forced to have sexual intercourse against your will." Correlates examined include the following:

- school-related characteristics (i.e., whether the child had been suspended and whether the child had been expelled from school);
- mental health (i.e., depression in the past week and suicide attempts in the last year);
- substance use in the lifetime, past year, and past month;
- risky sexual behaviors (including early initiation of sexual intercourse, being drunk or under the influence of drugs the first time and most recent time they had sex, and whether they had failed to use contraception the first and most recent time they had sex);
- violent behaviors, including whether the respondent had been in a serious physical fight, took part in a group fight, seriously injured someone, or used (or threatened to use) a weapon; and
- victimization in the past year, including having a gun or knife pulled on them, being shot, being stabbed, and "being jumped."

We conducted analysis for the total sample (i.e., the general population) and for the subset of females who had runaway experiences. All analyses were conducted using SUDAAN (Shah, Barnwell, & Bieler, 1996). Confidence intervals based on t-tests were used to test for significant ($p<.05$) differences between groups. Along with prevalence estimates, such comparisons indicate whether sexually victimized youth were more likely than those who were not victimized to report the various correlates.

Note that the power in these analyses to detect differences within females with runaway experiences is limited because of the small number who reported having ever run away.

Finally, we conducted multivariate analysis (i.e., logistic regression) to further examine the relationship between sexual victimization and the sequelae. In logistic regression, each dependent variable (except age) is dichotomous (i.e., yes/no). The statistic produced from logistic regression analysis is an odds ratio (OR), which reflects the likelihood of a positive response relative to that for a defined reference group. ORs greater than 1.0 indicate an increased likelihood relative to the reference group, and ORs of less than 1.0 indicate a decreased likelihood. Because all analyses in this chapter are based on cross-sectional correlations, however, causal linkages cannot be established and should not be inferred.

6.2 Prevalence of Sexual Victimization

6.2.1 Bivariate Analysis

Among females in the AddHealth survey, about 8% reported an experience of sexual victimization in their lifetime (Table 6.2). Females with runaway experiences were significantly more likely to report having been sexually victimized than females without runaway experiences (25% and 6%, respectively). Conversely, nearly one-third (31%) of all the females who were sexually victimized had runaway experiences (statistic not shown in exhibits).

In the total population, sexual victimization was more common among older than younger females. Specifically, 13% of 18- to 19-years-olds and 10% of those aged 15 to 17 reported sexual victimization, compared to 3% of those aged 12 to 14. However, among those females with runaway experiences, rates of sexual victimization were fairly consistent across the age groups, with 20% of those aged 12 to 14, 26% of those aged 15 to 17, and 27% of those aged 18 to 19 reporting victimization.

In the total population, lifetime sexual victimization was more common among females who were black (11%) than those who were Hispanic (6%). Among those females with runaway experiences, rates of sexual victimization were fairly consistent across racial/ethnic groups.

No differences in sexual victimization were found by receipt of welfare or mother's education, either in the total population or among females with runaway experiences. In the total population, however, sexual victimization was less common among females from two-parent families than among

those in other situations; no differences were found for family structure for the females with runaway experiences.

Table 6.2 Percentage of Females in Grades 7-12 Reporting Sexual Victimization in Lifetime by Runaway Experiences and Demographic Characteristics: AddHealth

	Runaway experiences					
	Yes		No		Total	
Demographic characteristics	**%**	**95% CI**	**%**	**95% CI**	**%**	**95% CI**
Total	25.2	(18.9 - 31.5)	6.0	(4.9 - 7.1)	7.8	(6.5 - 9.2)
Age						
12-14	19.6	(4.6 - 34.6)	2.1	(1.2 - 3.0)	3.0	(1.7 - 4.4)
15-17	26.0	(18.3 - 33.8)	7.5	(5.8 - 9.2)	9.6	(7.8 - 11.4)
18-19	26.8	(14.9 - 38.8)	11.3	(8.2 - 14.3)	13.4	(10.1 - 16.7)
Race/ethnicity*						
White	23.9	(16.0 - 31.8)	5.8	(4.5 - 7.0)	7.6	(6.0 - 9.2)
Black	36.7	(24.0 - 49.3)	9.3	(6.5 - 12.0)	11.4	(8.7 - 14.1)
Hispanic	22.6	(10.7 - 34.4)	3.7	(1.2 - 6.2)	5.5	(3.0 - 8.0)
Welfare receipt						
Yes	22.1	(6.8 - 37.4)	9.0	(4.9 - 13.0)	10.4	(6.5 - 14.4)
No	22.9	(15.8 - 30.1)	5.1	(4.0 - 6.2)	6.6	(5.4 - 7.9)
Mother's education						
High school graduate or less	26.2	(17.6 - 34.8)	6.5	(5.1 - 8.0)	8.4	(6.7 - 10.2)
More than high school	24.1	(15.7 - 32.4)	4.6	(3.4 - 5.9)	6.2	(4.7 - 7.8)
Family structure						
2-parent family	21.9	(13.7 - 30.1)	4.4	(3.4 - 5.4)	5.7	(4.6 - 6.8)
Other	29.0	(19.6 - 38.3)	9.6	(7.2 - 11.9)	12.2	(9.7 - 14.6)

Notes: Sexual victimization is defined as "ever having been physically forced to have sexual intercourse against your will." Runaway experiences are defined as having ever "run away from home."

*Percentages were not calculated for "Other" and "Missing" because of the small numbers.

Source: The National Longitudinal Study of Adolescent Health, Wave I, 1995.

6.2.2 Multivariate Analysis

When demographic and family background characteristics were entered into a logistical regression model, some slightly different patterns appeared. Model 1 shows that all four variables entered into the model were associated with sexual victimization (Table 6.3). Specifically:

- Adolescents from two-parent families were about half (OR=.55) as likely to experience sexual victimization as those from single-parent households.
- Females with mothers who had very low educational attainment (either a GED or less than a high school education) were more than twice (OR=2.2) as likely to report that they had ever been sexually victimized as those whose mothers had a bachelor's degree or higher education.
- The likelihood of being sexually victimized also significantly increased with age. With each additional year of age, a female was 41% more likely to be sexually victimized.
- Hispanic females, however, were half (OR=0.5) as likely to report that they had been sexually victimized as White females.

Thus both the bivariate and multivariate analyses show that all four variables (i.e., family structure, mother's educational attainment, age, and race/ethnicity) are associated with sexual victimization.

Model 2 in Table 6.3 adds runaway experiences to the model and shows that after controlling for these demographic and background characteristics, females who had ever run away from home were four times (OR=4.2) as likely to have reported sexual victimization as those who had not run away from home. This further confirms the findings from the bivariate analysis.

Table 6.3 Odds Ratios from Logistic Regression Analyses of Demographic Correlates of Sexual Abuse, Wave 1

	Model 1	Model 2
Family background		
Family type: In 2-parent family	0.55 ***	0.61 **
Maternal education		
Less than H.S. or GED	2.16 **	2.12 **
H.S. graduate	1.21	1.20
Some college/trade school	1.32	1.35
BA or higher	1.00	1.00
Missing	2.40 *	2.11 +
Individual characteristics		
Age	1.41 ***	1.38 ***
Race/ethnicity		
Hispanic	0.53 *	0.56 +
Black	1.14	1.30
Other	0.57	0.61
White	1.00	1.00
Ever run away, Wave 1	--	4.23 ***
Satterthwaite adjusted x^2	840.09 ***	710.54 ***
d.f.	9	10
N	**3,311**	**3,311**

* p < .05
** p < .01
*** p < .001
+ p < .10

6.3 Sequelae of Runaway Experiences and Sexual Victimization

6.3.1 School-Related Characteristics

Runaway Experiences and School-Related Characteristics. Runaway experiences were strongly associated with problems in school. Specifically, females with runaway experiences were two to three times as likely as those in the general population to have reported having been suspended from school (41% compared to 18%) and having been expelled from school (10% compared to 3%) (see total columns, Tables 6.4 and 6.5).

Table 6.4 Percentage of Females in Grades 7-12, by Sexual Victimization and School-Related Characteristics: AddHealth

	Sexual victimization					
	Yes		No		Total	
School-related characteristics	**%**	**95% CI**	**%**	**95% CI**	**%**	**95% CI**
N (unweighted) =	260		3,058		3,318	
Suspended from school	43.2	(35.1 - 51.2)	16.2	(13.7 - 18.7)	18.3	(15.5 - 21.1)
Expelled from school	9.4	(5.0 - 13.8)	2.1	(1.3 - 2.8)	2.6	(1.8 - 3.5)

Note: Sexual victimization is defined as having ever been "physically forced to have sexual intercourse against your will."

Source: The National Longitudinal Study of Adolescent Health, Wave I, 1995.

Table 6.5 Percentage of Females in Grades 7-12 Reporting Runaway Experiences, by Sexual Victimization and School-Related Characteristics: AddHealth

	Sexual victimization					
	Yes		No		Total	
School-related characteristics	**%**	**95% CI**	**%**	**95% CI**	**%**	**95% CI**
N (unweighted) =	75		223		298	
Suspended from school	63.2	(52.2 - 74.1)	34.1	(25.9 - 42.2)	41.2	(33.7 - 48.7)
Expelled from school	17.5	(8.6 - 26.4)	7.5	(3.2 - 11.8)	9.9	(6.0 - 13.9)

Notes: Sexual victimization is defined as "ever having been physically forced to have sexual intercourse against your will."
Runaway experiences are defined as having ever "run away from home."

Source: The National Longitudinal Study of Adolescent Health. Wave I, 1995.

Sexual Victimization and School-Related Characteristics in the General Population. Sexual victimization was found to be related to problems in school in the general population. Those who were sexually victimized were significantly more likely to report having been suspended from school (43%) than among those who had not been victimized (16%) (Table 6.4). Expulsion from school also was more common among sexually victimized females (9%) than among females who had not been victimized (2%).

Sexual Victimization and School-Related Characteristics among Females with Runaway Experiences. Females with runaway experiences who were sexually victimized were about twice as likely to report having been suspended from school than those with runaway experiences who had not been victimized (63% and 34%, respectively) (Table 6.5). We also found that although the differences were not statistically significant for expulsion from school, the results were in the same direction as for the general population (18% of those who were sexually victimized and 8% of those who were not victimized).

Multivariate Analysis. Model 1 in Table 6.6 shows that females who ran away from home were 3.4 times as likely to report that they had ever been suspended and 5.1 times as likely to report that they had ever been expelled from school, even after controlling for all other variables in the model. This further confirms the findings from the bivariate analysis. The exhibit also shows that females who reported having ever been sexually victimized were twice as likely to report having ever been suspended (OR=2.5) and expelled from school (OR=2.9) as those who were not sexually victimized, even after controlling for family background characteristics and runaway experiences.

Model 2 adds an interaction effect that represents teens who were *both* sexually victimized and had ever run away from home. This measure, however, was not significantly associated with either school-related outcome.

6.3.2 Mental Health

Runaway Experiences and Mental Health. Runaway experiences were also associated with mental health problems. Specifically, females with runaway experiences were two to three times as likely as those in the general population to report having felt depressed a lot in the past week (29% compared to 13%) and having attempted suicide in the last year (19% compared to 5%) (see total columns of Tables 6.7 and 6.8).

Table 6.6 Odds Ratios from Logistic Regressions Predicting School-Related Sequelae of Sexual Abuse, Wave 1

	Ever suspended		Ever expelled	
	Model 1	**Model 2**	**Model 1**	**Model 2**
Family background				
Family type: In 2-parent family	0.50 ***	0.50 ***	0.53 *	0.53 *
Maternal education				
Less than H.S. or GED	5.36 ***	5.37 ***	3.20 **	3.19 **
H.S. graduate	3.67 ***	3.67 ***	1.85	1.86
Some college/trade school	2.43 ***	2.42 ***	1.58	1.58
BA or higher	1.00	1.00	1.00	1.00
Missing	4.42 ***	4.47 ***	5.34 **	5.28 **
Individual characteristics				
Age	1.01	1.02	0.86 +	0.86 +
Race/ethnicity				
Hispanic	1.45 *	1.45 *	2.90 **	2.91 **
Black	3.44 ***	3.44 ***	4.75 ***	4.75 ***
Other	1.23	1.23	0.46	0.46
White	1.00	1.00	1.00	1.00
Ever sexually abused, Wave 1	2.53 ***	2.32 ***	2.85 **	3.07 *
Ever run away, Wave 1	3.38 ***	3.17 ***	5.11 ***	5.37 ***
Sexually abused and ran away, Wave 1	--	1.34	--	0.85
Satterthwaite adjusted x^2	543.73 ***	539.45 ***	341.07 ***	335.59 ***
d.f.	11	12	11	12
N	**3,310**	**3,310**	**3,307**	**3,307**

* p<.05
** p <.01
*** p <.001
\+ p<.10

Table 6.7 Percentage of Females in Grades 7-12, by Sexual Victimization and Mental Health: AddHealth

	Sexual victimization					
	Yes		No		Total	
Mental health	**%**	**95% CI**	**%**	**95% CI**	**%**	**95% CI**
N (unweighted) =	260		3,058		3,318	
Felt depressed most or a lot of the time in that past week	29.2	(24.1 - 34.3)	11.8	(10.3 - 13.3)	13.1	(11.7 - 14.6)
Attempted suicide in the last year	12.7	(7.5 - 17.9)	4.4	(3.6 - 5.1)	5.1	(4.2 - 6.0)

Note: Sexual victimization is defined as "ever having been physically forced to have sexual intercourse against your will."

Source: The National Longitudinal Study of Adolescent Health, Wave I, 1995.

Table 6.8 Percentage of Females in Grades 7-12 Reporting Runaway Experiences, by Sexual Victimization and Mental Health: AddHealth

	Sexual victimization					
	Yes		No		Total	
Mental health	**%**	**95% CI**	**%**	**95% CI**	**%**	**95% CI**
N (unweighted) =	75		223		298	
Felt depressed most or all of the time in that past week	32.2	(19.8 - 44.6)	26.8	(19.2 - 34.5)	28.5	(21.6 - 35.3)
Attempted suicide in the last year	21.3	(8.2 - 34.5)	17.8	(12.5 - 23.0)	19.0	(13.8 - 24.1)

Notes: Sexual victimization is defined as "ever having been physically forced to have sexual intercourse against your will."
Runaway experiences are defined as having ever "run away from home."

Source: The National Longitudinal Study of Adolescent Health. Wave I, 1995.

Sexual Victimization and Mental Health in the General Population. Sexual victimization was also found to be related to mental health problems (Table 6.7). The following significant differences were found among females in the general population:

- Sexually victimized females were twice as likely to report having felt depressed "most of the time" or "a lot" in the past week as females who had not been victimized (29% versus 12%).

- Sexually victimized females were three times as likely to report having attempted suicide in the past year as females who had not been victimized (13% versus 4%).

Sexual Victimization and Mental Health among Females with Runaway Experiences. When the relationship between sexual victimization and mental health problems was examined for the females with runaway experiences, no statistically significant differences were found between those who had been sexually victimized and those who had not been victimized (Table 6.8).

Multivariate Analysis. Confirming the findings from the bivariate analysis, Model 1 in Table 6.9 shows that females who reported runaway experiences were more likely to report negative mental health outcomes. More specifically, females reporting runaway experiences were twice (OR=2.3) as likely to have felt depressed and five times (OR=5.5) as likely to have attempted suicide in the past year, even after controlling for all other variables. The table also shows that females who reported that they were sexually victimized were more than twice as likely to report feeling depressed (OR=2.2) and having attempted suicide in the past year (OR=2.1).

Model 2 adds an interaction effect that represents females who were *both* sexually victimized and had run away from home. This measure was associated with a reduced likelihood of both mental health outcomes, net of the independent effects of sexual victimization and runaway status (OR=0.4).

Table 6.9 Odds Ratios from Logistic Regressions Predicting Mental Health Sequelae of Sexual Abuse, Wave 1

	Felt depressed a lot in past week[1]		Attempted suicide in past year	
	Model 1	**Model 2**	**Model 1**	**Model 2**
Family background				
Family type: In 2-parent family	0.61 ***	0.61 ***	0.93	0.94
Maternal education				
Less than H.S. or GED	1.89 **	1.88 **	1.78 *	1.76 +
H.S. graduate	1.87 **	1.88 **	1.13	1.13
Some college/trade school	1.78 **	1.79 **	1.13	1.13
BA or higher	1.00	1.00	1.00	1.00
Missing	1.61	1.56	1.44	1.39
Individual characteristics				
Age	1.05 +	1.05	0.91 +	0.90 *
Race/ethnicity				
Hispanic	1.38	1.40 +	0.92	0.93
Black	1.07	1.08	0.80	0.80
Other	1.98 *	1.99	1.29	1.31
White	1.00	1.00	1.00	1.00
Ever sexually abused, Wave 1	2.17 ***	2.85 ***	2.06 **	3.21 ***
Ever run away, Wave 1	2.33 ***	2.88 ***	5.46 ***	6.71 ***
Sexually abused and ran away, Wave 1	--	0.42 *	--	0.40 +
Satterthwaite adjusted x^2	783.49 ***	787.34 ***	799.68 ***	769.29 ***
d.f.	11	12	11	12
N	**3,309**	**3,309**	**3,302**	**3,302**

[1]Defined as having felt depressed most of the time or all of the time in the past week.

* p<.05
** p <.01
*** p <.001
\+ p<.10

6.3.3 Substance Use

Runaway Experiences and Substance Use. Runaway experiences were strongly associated with substance use. Specifically, females with runaway experiences were much more likely than those in the general population to have reported substance use (see total columns, Tables 6.10 and 6.11). For example, 28% of the females in the general population reported having ever used an illicit drug compared to 65% of the females with runaway experiences.

Sexual Victimization and Substance Use in the General Population. Sexual victimization was also found to be related to substance use. Among females in the general population, those who had been victimized were generally more likely to report use of a variety of substances (Table 6.10).

- Females who had been sexually victimized reported a higher prevalence of lifetime use of all of the substances about which they were asked. For example, 58% of females who had been sexually victimized had ever used any type of illicit drug compared to only 25% of females who had not been victimized.

- Both any alcohol use and heavy alcohol use in the past year were more likely among sexually victimized females than females who had not been victimized.

- Females who had been sexually victimized reported a higher prevalence of past month use of all of the substances included in the survey (except inhalants). For example, 31% of females who had been sexually victimized had used any type of illicit drug in the past month compared to only 13% of females who had not been victimized.

Sexual Victimization and Substance Use among Females with Runaway Experiences. When the relationship between sexual victimization and substance use was examined for the females with runaway experiences, we found that rates of use were generally similar for those who had and those who had not been sexually victimized (Table 6.11). However, the following significant differences were found:

- The prevalence of having ever used any illicit drug was higher for females who had been sexually victimized (83%) than for those who had not (59%).

- Rates of having ever used any marijuana use were higher for victimized females (78%) than for those who had not been victimized (55%).

Table 6.10 Percentage of Females in Grades 7-12, by Sexual Victimization and Substance Use: AddHealth

	Sexual victimization					
	Yes		No		Total	
Substance use	**%**	**95% CI**	**%**	**95% CI**	**%**	**95% CI**
N (unweighted) =	260		3,058		3,318	
Substance use during lifetime						
Any illicit drug use	58.4	(50.3 - 66.5)	25.2	(22.4 - 28.0)	27.5	(24.7 - 30.3)
Any marijuana	53.5	(45.2 - 61.8)	21.4	(18.8 - 24.0)	23.6	(21.0 - 26.2)
Cocaine	9.9	(6.0 - 13.9)	2.6	(1.9 - 3.3)	3.2	(2.4 - 3.9)
Inhalants	12.7	(6.9 - 18.4)	4.8	(3.8 - 5.8)	5.4	(4.3 - 6.5)
Other drugs	21.1	(14.7 - 27.5)	7.2	(5.7 - 8.7)	8.3	(6.8 - 9.8)
Alcohol	82.8	(76.8 - 88.8)	51.9	(48.4 - 55.3)	54.0	(50.5 - 57.5)
Cigarettes	84.3	(79.3 - 89.4)	54.7	(51.5 - 57.8)	56.8	(53.7 - 59.9)
Substance use in past year						
Alcohol use	71.5	(64.7 - 78.3)	44.2	(40.7 - 47.7)	46.1	(42.7 - 49.5)
Heavy alcohol use[1]	33.7	(27.2 - 40.2)	13.9	(12.0 - 15.8)	15.4	(13.6 - 17.2)
Substance use in the past month						
Any illicit drug use	31.3	(24.0 - 38.6)	12.8	(11.0 - 14.7)	14.2	(12.4 - 16.0)
Any marijuana	29.9	(22.6 - 37.2)	11.3	(9.4 - 13.2)	12.6	(10.9 - 14.4)
Heavy marijuana[2]	22.1	(15.2 - 29.1)	6.2	(4.9 - 7.5)	7.3	(6.0 - 8.6)
Cocaine	4.0	(1.6 - 6.4)	0.7	(0.4 - 1.0)	0.9	(0.6 - 1.3)
Inhalants	1.1	(-0.3 - 2.5)	1.2	(0.7 - 1.7)	1.2	(0.7 - 1.6)
Other drugs	7.9	(3.9 - 11.8)	3.0	(2.2 - 3.8)	3.4	(2.5 - 4.3)
Any cigarette use	57.6	(49.3 - 66.0)	23.9	(21.1 - 26.8)	26.7	(23.8 - 29.6)
Regular cigarette use[3]	52.2	(45.1 - 59.3)	18.9	(16.0 - 21.7)	21.4	(18.5 - 24.3)

Note: Sexual victimization is defined as having ever been "physically forced to have sexual intercourse against your will."

[1]Defined as the use of alcohol 2-3 days a month or more in the past year.
[2]Defined as using marijuana 3 or more times in the past month.
[3]Defined as using at least 1 cigarette a day for the last 30 days.

Source: The National Longitudinal Study of Adolescent Health, Wave I, 1995.

Table 6.11 Percentage of Females in Grades 7-12 Reporting Runaway Experiences, by Sexual Victimization and Substance Use: AddHealth

	Sexual victimization					
	Yes		No		Total	
Substance use	**%**	**95% CI**	**%**	**95% CI**	**%**	**95% CI**
N (unweighted) =	75		223		298	
Substance use during lifetime						
Any illicit drug use	82.5	(73.3 - 91.6)	58.5	(50.7 - 66.3)	64.7	(58.4 - 71.0)
Any marijuana	77.6	(67.4 - 87.9)	54.9	(46.9 - 62.8)	60.8	(54.2 - 67.4)
Cocaine	20.1	(10.6 - 29.6)	11.2	(6.1 - 16.3)	13.4	(8.6 - 18.1)
Inhalants	27.1	(14.3 - 39.8)	10.2	(5.3 - 15.0)	14.4	(9.5 - 19.3)
Other drugs	40.9	(28.2 - 53.5)	23.3	(16.6 - 30.0)	27.8	(22.2 - 33.4)
Alcohol	87.4	(75.6 - 99.2)	81.7	(76.1 - 87.2)	83.1	(78.1 - 88.2)
Cigarettes	91.0	(84.5 - 97.5)	79.4	(72.8 - 85.9)	82.4	(77.5 - 87.3)
Substance use in past year						
Alcohol use	75.4	(62.0 - 88.8)	76.7	(70.3 - 83.1)	76.4	(70.5 - 82.4)
Heavy alcohol use[1]	37.4	(25.0 - 49.9)	32.5	(26.5 - 38.6)	34.0	(28.0 - 39.9)
Substance use in the past month						
Any illicit drug use	49.8	(36.0 - 63.7)	34.6	(27.3 - 41.9)	38.6	(32.2 - 45.1)
Any marijuana	47.0	(32.6 - 61.4)	33.3	(26.1 - 40.6)	37.0	(30.4 - 43.5)
Heavy marijuana[2]	36.2	(21.4 - 51.0)	26.5	(19.2 - 33.7)	28.8	(22.0 - 35.6)
Cocaine	9.1	(2.9 - 15.4)	2.3	(0.4 - 4.3)	4.0	(1.8 - 6.2)
Inhalants	1.8	(-1.5 - 5.1)	4.4	(1.7 - 7.1)	3.7	(1.6 - 5.9)
Other drugs	16.2	(8.1 - 24.2)	9.5	(4.1 - 14.9)	11.5	(7.1 - 15.8)
Any cigarette use	69.0	(56.9 - 81.2)	54.9	(46.5 - 63.3)	58.7	(51.6 - 65.7)
Regular cigarette use[3]	68.8	(57.8 - 79.8)	45.4	(37.0 - 53.9)	51.5	(44.6 - 58.4)

Notes: Sexual victimization is defined as having ever been "physically forced to have sexual intercourse against your will."
Runaway experiences are defined as having ever "run away from home."

[1]Defined as the use of alcohol 2-3 days a month or more in the past year.
[2]Defined as the use of marijuana 3 or more times in the past month.
[3]Defined as using at least 1 cigarette a day for the last 30 days.

Source: The National Longitudinal Study of Adolescent Health, Wave I, 1995.

- Past month use of cigarettes on a regular basis (i.e., at least one cigarette a day for the past month) was higher among sexually victimized females (69%) than among those who had not been victimized (45%).

Multivariate Analysis. Confirming the findings from the bivariate analysis, Model 1 in Table 6.12 shows that after controlling for family background and sexual victimization, females with runaway experiences were two to six times as likely to report substance use. In addition, females who reported they were sexually victimized were more likely to report all substance victimization outcomes, even after controlling for family background characteristics and runaway status. The size of the effects ranges from more than twice the likelihood of alcohol use (OR=2.1), marijuana use (OR=2.1), and illicit drug use (OR=2.0) to more than three times the likelihood of cigarette use (OR=3.2) among females who reported they had ever been sexually victimized.

Model 2 adds an interaction effect that represents females who were *both* sexually victimized and had runaway experiences. When this interaction effect was added, the positive association between sexual victimization and each type of substance use increased, as did the positive association between ever running away and each type of substance use. However, these associations were not multiplicative, as indicated by the fact that the odds ratios of the interaction terms were less than 1.0 in all cases. The interaction terms were significant ($p<.05$) for alcohol use. Thus, according to Model 2, among young women who had not run away, those who were sexually victimized were nearly three times as likely to use alcohol as young women who were not victimized. However, young women with runaway experiences were about four times as likely to use alcohol as those who had not, regardless of whether they had been sexually victimized.

6.3.4 Sexual Behaviors

Runaway Experiences and Sexual Behaviors. Females with runaway experiences were somewhat more likely than those in the general population to have reported risky sexual behaviors (see total columns in Tables 6.13 and 6.14). For example, 8% of the females in the general population reported having been drunk or under the influence of drugs the first time they had sex compared to 14% of the females with runaway experiences.

Table 6.12 Odds Ratios from Logistic Regressions Predicting Substance Use Sequelae of Sexual Abuse, Wave 1

	Any alcohol use in past year		Heavy alcohol use in past year[1]		Any marijuana use in past month		Heavy marijuana use in past month[2]		Any cigarette use in past month		Regular cigarette use in past month[3]		Any illicit drug use in past month	
	Model 1	**Model 2**	**Model 1**	**Model 2**	**Model 1**	**Model 2**	**Model 1**	**Model 2**	**Model 1**	**Model 2**	**Model 1**	**Model 2**	**Model 1**	**Model 2**
Family background														
Family type: In 2-parent family	0.74**	0.74**	0.89	0.89	0.60***	0.61***	0.59**	0.60**	0.67***	0.67***	0.48***	0.48***	0.67**	0.67**
Maternal education														
Less than H.S. or GED	0.97	0.96	0.85	0.84	0.83	0.83	1.17	1.17	1.59**	1.59**	1.65**	1.65**	0.96	0.96
H.S. graduate	0.98	0.99	0.85	0.85	0.98	0.98	1.05	1.05	1.32 +	1.32 +	1.56**	1.56**	0.98	0.98
Some college/trade school	1.08	1.08	0.80	0.81	1.15	1.15	1.37	1.39	1.24	1.24	1.36*	1.36*	1.23	1.23
BA or higher	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Missing	0.70	0.68	0.88	0.86	0.92	0.91	0.97	0.94	1.36	1.34	1.02	1.02	1.06	1.06
Individual characteristics														
Age	1.33***	1.32***	1.26***	1.25***	1.14**	1.14**	1.16**	1.15**	1.18***	1.17***	1.28***	1.28***	1.10*	1.10*
Race/ethnicity														
Hispanic	0.87	0.87	0.76	0.76	1.25	1.25	0.96	0.97	0.47***	0.47***	0.44***	0.44***	1.07	1.07
Black	0.38***	0.38***	0.61*	0.61*	0.59*	0.60*	0.44**	0.45**	0.20***	0.20***	0.09***	0.09***	0.58**	0.58**
Other	0.69	0.69	0.73	0.73	1.12	1.12	1.19	1.20	0.48*	0.48*	0.53*	0.53*	0.93	0.93
White	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ever sexually abused, Wave 1	2.12***	2.68***	2.11***	2.67***	2.11**	2.32**	2.40**	3.36***	3.15***	3.65***	3.45***	3.51***	2.01**	2.10**
Ever run away, Wave 1	3.29***	4.02***	2.46***	2.95***	2.93***	4.18***	5.52***	6.65***	3.44***	3.86***	3.42***	3.46***	3.68***	3.77***
Sexually abused and ran away, Wave 1	--	0.34*	--	0.45^{+}	--	0.76	--	0.45^{+}	--	0.54	--	0.93	--	0.89
Satterthwaite adjusted x^2	201.25***	191.44***	685.14***	652.40***	731.11***	716.77***	654.84***	645.91***	456.38***	461.96***	582.14***	588.95***	686.49***	682.75***
d.f.	11	12	11	12	11	12	11	12	11	12	11	12	11	12
N	**3,304**	**3,304**	**3,304**	**3,304**	**3,279**	**3,279**	**3,279**	**3,279**	**3,297**	**3,297**	**3,310**	**3,310**	**3,277**	**3,277**

[1] Defined as the use of alcohol 2-3 days a month or more in the past year.

[2] Defined as the use of marijuana 3 or more times in the past month.

[3] Defined as using at least 1 cigarette a day for the last 30 days.

* p<.05; ** p <.01; *** p <.001; + p<.10.

Table 6.13 Percentage of Females in Grades 7-12, by Sexual Victimization and Risky Sexual Behaviors: AddHealth

Risky sexual behaviors among the sexually experienced	Sexual victimization				Total	
	Yes		No			
	%	95% CI	%	95% CI	%	95% CI
N (unweighted) =	260		996		1,256	
Age 13 or younger the first time had sex	35.9	(28.0 - 43.7)	21.6	(18.0 - 25.3)	24.8	(20.9 - 28.6)
Drunk or high the first time had sex	11.9	(7.6 - 16.3)	6.2	(4.6 - 7.9)	7.5	(5.9 - 9.1)
Drunk or high the most recent time had sex	15.5	(9.7 - 16.3)	7.2	(5.2 - 9.2)	9.0	(6.8 - 11.2)
No contraception used the first time had sex	47.7	(39.7 - 55.7)	32.1	(27.7 - 36.5)	35.4	(31.0 - 39.7)
No contraception used the most recent time had sex	47.0	(40.7 - 53.2)	34.1	(30.1 - 38.0)	36.8	(33.3 - 40.3)

Note: Sexual victimization is defined as having ever been "physically forced to have sexual intercourse against your will."

Source: The National Longitudinal Study of Adolescent Health, Wave I, 1995.

Table 6.14 Percentage of Females in Grades 7-12 Reporting Runaway Experiences, by Sexual Victimization and Risky Sexual Behaviors: AddHealth

Risky sexual behaviors among the sexually experienced	Sexual victimization: Yes %	Sexual victimization: Yes 95% CI	Sexual victimization: No %	Sexual victimization: No 95% CI	Total %	Total 95% CI
N (unweighted) =	75		139		214	
Age 13 or younger the first time had sex	37.2	(24.4 - 49.9)	23.9	(16.1 - 31.6)	28.4	(21.2 - 35.6)
Drunk or high the first time had sex	19.4	(10.0 - 28.8)	11.1	(5.1 - 17.1)	14.3	(9.5 - 19.1)
Drunk or high the most recent time had sex	21.4	(8.1 - 34.7)	7.8	(3.1 - 12.4)	12.8	(6.9 - 18.7)
No contraception used the first time had sex	60.3	(48.1 - 72.5)	41.5	(31.7 - 51.3)	48.2	(40.3 - 56.1)
No contraception used the most recent time had sex	53.3	(38.6 - 68.0)	45.2	(36.9 - 53.5)	48.3	(40.8 - 55.7)

Notes: Sexual victimization is defined as "ever having been physically forced to have sexual intercourse against your will."
Runaway experiences are defined as having ever "run away from home."

Source: The National Longitudinal Study of Adolescent Health. Wave I, 1995.

Sexual Victimization and Sexual Behaviors in the General Population. In the general population, risky sexual behaviors were generally more common among females who had been sexually victimized than among those who had not (Table 6.13). The following significant differences were found:

- Early initiation of sexual intercourse was more common among sexually victimized females. In this group, 36% reported first sexual intercourse at age 13 or younger, compared to 22% of females who had not been victimized.

- Although there was no significant difference between the two groups in whether the respondents had been drunk or under the influence of drugs the first time they had sex, females who had been sexually victimized were more likely to report being drunk or under the influence of drugs the *most recent* time they had sex (16%), compared to the females who had not been victimized (7%).

- Failure to use contraception was more common among sexually victimized females than nonvictimized females. This was true for both the first time the females had sex (48% of females who had ever been sexually victimized did not use contraception, compared to 32% of nonvictimized females) and for the most recent time they had sex (47% vs. 34%).

Sexual Victimization and Sexual Behaviors among Females with Runaway Experiences. When the relationship between sexual victimization and risky sexual behaviors was examined for females with runaway experiences, we found that there were no significant differences between females who had been victimized and those who had not in terms of early initiation of sexual intercourse (at age 13 or younger), being drunk or under the influence of drugs the first or most recent time they had sex, or whether they had failed to use contraception the first or most recent time they had sex (Table 6.14). The results, however, were in the same direction as for the general population.

Multivariate Analysis. Confirming the findings from the bivariate analysis, Model 1 in Table 6.15 indicates that females who were sexually victimized or had runaway experiences were 1.6 times as likely to not use any contraceptive method the last time they had sex, even after controlling for family background characteristics. This further confirms the findings from the bivariate analysis.

Table 6.15 Odds Ratios from Logistic Regressions Predicting Risky Sexual Behavior among Sexually Experienced Teens, Wave 1

	No contraceptive use at last sex	
	Model 1	**Model 2**
Family background		
Family type: In 2-parent family	0.83	0.83
Maternal education		
Less than H.S. or GED	1.01	1.02
H.S. graduate	1.35	1.35
Some college/trade school	0.99	1.00
BA or higher	1.00	1.00
Missing	1.10	1.09
Individual characteristics		
Age	0.92	0.92+
Race/ethnicity		
Hispanic	1.92*	1.93*
Black	1.16	1.16
Other	1.85*	1.84*
White	1.00	1.00
Ever sexually abused, Wave 1	1.62**	1.72**
Ever run away, Wave 1	1.62*	1.73*
Sexually abused and ran away, Wave 1	--	0.81
Satterthwaite adjusted x^2	65.06***	63.34***
d.f.	11	12
N	**1,242**	**1,242**

* p<.05
** p <.01
*** p <.001
+ p<.10

Model 2 adds an interaction effect that represents females who were *both* sexually victimized and had runaway experiences. This measure was not associated with the risky sexual behavior outcomes in this model.

6.3.5 Violent Behaviors

Runaway Experiences and Violent Behaviors. Runaway experiences were associated with violent behaviors. Specifically, females with runaway experiences were about twice as likely as those in the general population to have reported violent behaviors (see total columns in Tables 6.16 and 6.17). For example, 24% of the females in the general population reported having been in a serious physical fight in the past year, compared to 49% of the females with runaway experiences.

Sexual Victimization and Violent Behaviors in the General Population. Violent behaviors were generally more common among females who had been sexually victimized than those who had not (Table 6.16). The following significant differences were found:

- Participating in a serious fight or a group fight, in the past year, was more common among sexually victimized females (46% and 23%, respectively) than among females who had not been victimized (22% and 15%, respectively).
- Seriously injuring someone in the past year was more common among sexually victimized females (24%), compared to those who had not been sexually victimized (10%).
- Sexually victimized females were more likely to report using or threatening to use a weapon against someone (7%) than were those who had not been victimized (2%).

Sexual Victimization and Violent Behaviors among Females with Runaway Experiences. In examining the relationship between sexual victimization and violent behaviors for females with runaway experiences, we found that violent behaviors were generally more common among those who had been sexually victimized than those who had not (Table 6.17). The following significant differences were found:

- Participating in a serious fight in the past year was more common among sexually victimized females (66%) than it was among those who had not been victimized (43%).

Table 6.16 Percentage of Females in Grades 7-12, by Sexual Victimization and Violent Behaviors: AddHealth

	Sexual victimization					
	Yes		No		Total	
Violent behaviors in the past year	**%**	**95% CI**	**%**	**95% CI**	**%**	**95% CI**
N (unweighted) =	260		3,058		3,318	
In a serious physical fight	46.3	(39.0 - 53.6)	21.7	(19.7 - 23.7)	23.5	(21.6 - 25.5)
Took part in a group fight	23.0	(17.6 - 28.4)	14.7	(12.9 - 16.6)	15.3	(13.4 - 17.1)
Seriously injured someone	23.5	(17.7 - 29.4)	10.0	(8.5 - 11.4)	11.0	(9.5 - 12.5)
Used or threatened someone with a weapon	7.1	(3.9 - 10.3)	2.1	(1.4 - 2.8)	2.5	(1.8 - 3.2)

Note: Sexual victimization is defined as having ever been "physically forced to have sexual intercourse against your will."

Source: The National Longitudinal Study of Adolescent Health, Wave I, 1995.

Table 6.17 Percentage of Females in Grades 7-12 Reporting Runaway Experiences, by Sexual Victimization and Violent Behaviors: AddHealth

	Sexual victimization					
	Yes		No		Total	
Violent behaviors in the past year	**%**	**95% CI**	**%**	**95% CI**	**%**	**95% CI**
N (unweighted) =	75		223		298	
In a serious physical fight	65.7	(55.4 - 76.0)	42.9	(35.7 - 50.1)	48.9	(42.9 - 54.9)
Took part in a group fight	32.3	(20.3 - 44.3)	30.7	(23.7 - 37.6)	31.3	(24.6 - 38.1)
Seriously injured someone	42.3	(30.6 - 54.1)	21.0	(14.3 - 27.7)	26.7	(20.5 - 32.8)
Used (or threatened someone with) a weapon	10.4	(3.3 - 17.4)	4.4	(1.6 - 7.2)	5.9	(3.4 - 8.4)

Notes: Sexual victimization is defined as "ever having been physically forced to have sexual intercourse against your will."
Runaway experiences are defined as having ever "run away from home."

Source: The National Longitudinal Study of Adolescent Health, Wave I, 1995.

- Seriously injuring someone in the past year was more common among sexually victimized females (42%) compared to those who had not been sexually victimized (21%).

Multivariate Analysis. Confirming the findings from the bivariate analysis, Model 1 in Table 6.18 shows that after controlling for family background characteristics and sexual victimization, females who had runaway experiences were more likely to report violent behaviors, with effect sizes ranging from 2.4 times the likelihood for using or threatening someone with a weapon to 3.4 times the likelihood of being in a serious fight. Effect sizes for females who reported that they had been sexually victimized ranged from 1.5 times the likelihood of taking part in a group fight to 3.3 times the likelihood of using or threatening someone with a weapon.

Model 2 adds an interaction effect that represents females who were *both* sexually victimized and had runaway experiences. This measure was not significantly associated with any of the violent behavior outcomes.

6.3.6 Other Victimization

Runaway Experiences and Other Victimization. Runaway experiences were associated with victimization experiences other than sexual victimization. Specifically, females with runaway experiences were two to three times as likely as those in the general population to have reported victimization (see total columns in Tables 6.19 and 6.20). For example, 7% of the females in the general population reported having had a gun or knife pulled on them in the past year compared to 22% of the females with runaway experiences.

Sexual Victimization and Other Victimization in the General Population. In the general population, victimization experiences in the past year were generally more common among females who had been sexually victimized than among those who had not (Table 6.19). Specifically, sexually victimized females were three times as likely as nonsexually victimized females to have had a knife or gun pulled on them (19% vs. 6%) or to have been stabbed (7% vs. 2%) in the past year. They were twice as likely to have been "jumped" (13% vs. 5%). There was no significant difference between the two groups relating to likelihood of having been shot in the past year.

Table 6.18 Odds Ratios from Logistic Regressions Predicting Violent Behavior Sequelae of Sexual Abuse, Wave 1

	In a serious physical fight in past year		Took part in a group fight in past year		Seriously injured someone in past year		Used/threatened someone with a weapon in past year	
	Model 1	**Model 2**	**Model 1**	**Model 2**	**Model 1**	**Model 2**	**Model 1**	**Model 2**
Family background								
Family type: In 2-parent family	0.70**	0.70**	0.79+	0.79+	0.82	0.82	0.64+	0.64+
Maternal education								
Less than H.S. or GED	2.63***	2.63***	2.25***	2.24***	1.63*	1.64*	1.20	1.19
H.S. graduate	2.13***	2.13***	1.95**	1.96**	1.72**	1.72**	1.60	1.61
Some college/trade school	1.84***	1.84***	1.50+	1.50+	1.24	1.24	1.05	1.06
BA or higher	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Missing	2.27**	2.26**	1.86*	1.83*	2.95**	3.00**	2.49+	2.45
Individual characteristics								
Age	0.88***	0.88***	0.79***	0.79***	0.84***	0.85***	0.79**	0.79**
Race/ethnicity								
Hispanic	1.77***	1.77***	1.90***	1.91***	1.27	1.26	3.78**	3.81**
Black	2.18***	2.18***	1.70***	1.70***	1.51*	1.51*	2.38*	2.37*
Other	1.08	1.08	1.56	1.57	0.80	0.80	2.49+	2.51+
White	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ever sexually abused, Wave 1	2.48***	2.49***	1.53*	1.86**	2.21***	1.90**	3.28**	3.74**
Ever run away, Wave 1	3.39***	3.40***	3.10***	3.47***	3.15***	2.86***	2.41**	2.73*
Sexually abused and ran away, Wave 1	--	0.99	--	0.58	--	1.49	--	0.70
Satterthwaite adjusted x^2	651.17***	653.87***	735.31***	747.41***	810.02***	803.51***	481.36***	482.56***
d.f.	11	12	11	12	11	12	11	12
N	**3,311**	**3,311**	**3,309**	**3,309**	**3,311**	**3,311**	**3,311**	**3,311**

* p<.05; ** p <.01; *** p <.001; + p<.10.

Table 6.19 Percentage of Females in Grades 7-12, by Sexual Victimization and Other Types of Victimization Experiences: AddHealth

	Sexual victimization					
	Yes		No		Total	
Other victimization in the past year	**%**	**95% CI**	**%**	**95% CI**	**%**	**95% CI**
N (unweighted) =	260		3,058		3,318	
Had knife/gun pulled on them	19.3	(11.3 - 27.2)	6.1	(4.9 - 7.2)	7.1	(5.6 - 8.6)
Jumped	12.7	(8.2 - 17.3)	5.2	(4.1 - 6.3)	5.8	(4.7 - 6.9)
Stabbed	7.4	(4.3 - 10.4)	2.1	(1.4 - 2.7)	2.5	(1.9 - 3.1)
Shot	2.7	(0.4 - 5.0)	0.4	(0.2 - 0.6)	0.6	(0.3 - 0.8)

Note: Sexual victimization is defined as having ever been "physically forced to have sexual intercourse against your will."

Source: The National Longitudinal Study of Adolescent Health, Wave I, 1995.

Table 6.20 Percentage of Females in Grades 7-12 Reporting Runaway Experiences, by Sexual Victimization and Other Types of Victimization Experiences: AddHealth

	Sexual victimization					
	Yes		No		Total	
Other victimization in the past year	**%**	**95% CI**	**%**	**95% CI**	**%**	**95% CI**
N (unweighted) =	75		223		298	
Had a gun or knife pulled on them	28.4	(15.7 - 41.0)	19.2	(13.0 - 25.3)	21.8	(16.0 - 27.6)
Was shot	5.5	(-0.4 - 11.4)	0.5	(-0.3 - 1.3)	1.7	(0.2 - 3.3)
Was stabbed	14.2	(6.6 - 21.9)	6.0	(2.6 - 9.4)	8.4	(5.2 - 11.6)
Was jumped	23.5	(11.3 - 35.7)	15.8	(10.3 - 21.3)	18.0	(12.6 - 23.4)

Notes: Sexual victimization is defined as "ever having been physically forced to have sexual intercourse against your will."
Runaway experiences are defined as having ever "run away from home."

Source: The National Longitudinal Study of Adolescent Health. Wave I, 1995.

Sexual Victimization and Other Victimization among Females with Runaway Experiences. When we examined the relationship between sexual victimization and other victimization for the females with runaway experiences, no significant differences were found in rates of victimization between those who had been sexually victimized and those who had not (Table 6.20). Note, however, that the results were in the same direction as for the general population.

Multivariate Analysis. As shown in Model 1 in Table 6.21, females with runaway experiences were four times as likely to report having a weapon pulled on them, or being "jumped" or stabbed, after controlling for family background characteristics. In addition, after controlling for family background characteristics and runaway status, females who reported that they had been sexually victimized were 7 to 27 times as likely to report all three victimization experience outcomes.

Model 2 adds an interaction effect that represents females who were *both* sexually victimized and had runaway experiences. This measure was not significantly associated with any of the victimization outcomes.

6.4 Summary

Secondary analysis of the AddHealth data revealed a number of significant findings:

- Approximately 8% of all females reported sexual victimization in their lifetime.
- Females with runaway experiences were four times as likely to report having been sexually victimized as those without runaway experiences (25% and 6%, respectively).
- Multivariate analysis indicated that both age and race/ethnicity were associated with the likelihood of sexual victimization, before and after controlling for runaway experiences. Specifically, older adolescents were more likely to report sexual victimization, and Caucasian females were more likely to report victimization than Hispanic females. Both of the family background characteristics (i.e., family type and maternal education) were also found to be associated with sexual victimization.

Table 6.21 Odds Ratios from Logistic Regressions Predicting Victimization Experience Sequelae of Sexual Abuse, Wave 1

	Had knife/gun pulled on them in past year		Jumped in past year		Stabbed in past year	
	Model 1	**Model 2**	**Model 1**	**Model 2**	**Model 1**	**Model 2**
Family background						
Family type: In 2-parent family	0.89	0.90	0.54**	0.55**	0.69	0.69
Maternal education						
Less than H.S. or GED	2.38*	2.36*	2.50**	2.49**	1.58	1.58
H.S. graduate	2.12*	2.13*	1.93*	1.93*	1.06	1.06
Some college/trade school	1.52	1.53	1.57	1.57	0.66	0.66
BA or higher	1.00	1.00	1.00	1.00	1.00	1.00
Missing	4.50***	4.38***	3.50***	3.49***	1.34	1.34
Individual characteristics						
Age	0.93	0.93	0.93	0.92	0.83*	0.83*
Race/ethnicity						
Hispanic	1.33	1.34	3.09***	3.09***	1.74	1.74
Black	2.22***	2.23***	1.54+	1.54+	1.72+	1.71+
Other	0.41	0.42	1.99+	1.99+	1.05	1.05
White	1.00	1.00	1.00	1.00	1.00	1.00
Ever sexually abused, Wave 1	2.36**	3.06***	1.69*	1.76+	2.71**	2.75*
Ever run away, Wave 1	3.95***	4.69***	4.04***	4.13***	3.92***	3.96**
Sexually abused and ran away, Wave 1	--	0.51+	--	0.91	--	0.97
Satterthwaite adjusted x^2	397.15***	405.27***	751.91***	723.85***	601.89***	602.34***
d.f.	11	12	11	12	11	12
N	**3,310**	**3,310**	**3,310**	**3,310**	**3,310**	**3,310**

* p<.05
** p <.01
*** p <.001
\+ p<.10

- Females with runaway experiences were more likely to report all of the sequelae (i.e., substance use, poor mental health, school-related problems, high risk sexual behaviors, violence, and victimization) than those without runaway experiences. Most of these relationships held even after controlling for demographic and family background characteristics as well as sexual abuse.

- Similarly, females who had been sexually victimized were more likely to report most of the sequelae than those who had not been victimized. Again most of these relationships were maintained even after controlling for demographic characteristics and family background variables, as well as runaway experiences.

- Among females with runaway experiences, bivariate analysis showed that sexual victimization was associated with a greater likelihood of school suspension, substance use, and violent behaviors, but significant differences generally were not found for school expulsion, depressive symptoms, suicide attempts, substance use, risky sexual behaviors, or other types of victimization. Note that the power in the analyses of runaways is limited due to the small number who reported having ever run away.

7. SECONDARY ANALYSIS OF THE NATIONAL CRIME VICTIMIZATION SURVEY (NCVS)

7.1 Background

7.1.1 Purpose

As discussed earlier, it is important to compare data on sexual abuse among the general population to that of runaway and homeless adolescents in an effort to gain perspective on the relative magnitude of the problem in this vulnerable population. The National Crime Victimization Survey (NCVS), the second dataset used to address this issue, was selected because it (1) is national in scope, (2) could address the needs of the study, and (3) has a sample size sufficient to provide estimates of low-prevalence behaviors such as rape and other sexual assaults.

In this report, Bureau of Justice Statistics (BJS) data from the NCVS are used to address the following research questions:

- What is the prevalence of rape and sexual assault among the general population of adolescents? Are there differences based on age, gender, race/ethnicity, urban status, or region of the country?
- Who are the perpetrators of rape and sexual assault involving adolescents?
- How common is it for adolescents to report rape and sexual assault to the police? When the incident is reported, what actions do the authorities take?

The data used in the analyses reported here were collected from 1995 through the first half of 1999 from 166,012 interviews of youth between the ages of 12 and 20 years (sample characteristics are presented in Table 7.1).

The reader should note that the estimates resulting from our secondary analysis differ from the results from the NCVS shown in the literature review (see Chapter 3). There are several reasons for the differences. First, our secondary analysis calculated six-month rates, whereas the articles reviewed in Chapter 3 reported annual rates. Second, the age ranges of individuals included in the analyses differ: in our analyses, age ranges are 12 to 14, 15 to 17, and 18 to 20; in the BJS report, the age ranges were 12 to 15 and 16 to 19. Finally, our analysis included data

Table 7.1 Demographic Characteristics of Respondents Aged 12 to 20: NCVS

Demographic characteristics	Unweighted N	Weighted %
Total	166,012	100.0
Age		
12-14	59,047	38.1
15-17	57,290	33.8
18-20	49,675	32.1
Gender		
Male	84,614	51.0
Female	80,595	49.0
Race/ethnicity		
White	110,124	66.5
Black	21,928	15.2
Hispanic	24,048	13.9
Other	7,824	8.4
Region		
Northeast	25,162	17.7
Midwest	33,911	25.1
South	46,907	38.9
West	32,560	22.3
Locality		
Central cities	51,394	29.9
Suburban	86,632	48.4
Outside metropolitan area	27,986	21.6

Note: Ns for individual variables may not equal the total N because of missing data. Percentages may not total 100.0 due to rounding.

Source: The National Criminal Victimization Survey, combined waves: 1995-1998.

from several years (i.e., 1995 to 1998), whereas analysis in the BJS report included data only for 1995. We averaged data over several years in an effort to improve reliability of estimates.

7.1.2 Definitions

Although the NCVS does not include questions on sexual abuse per se, it does secure information on reports of rape and sexual assault, asking respondents if they had been attacked, threatened, or forced to engage in unwanted sexual activity by relatives, friends, or strangers. Therefore, this chapter uses rape and sexual assault rather than sexual abuse as the measure of sexual victimization. We have defined rape and sexual assault as rape (i.e., forced vaginal, oral, or anal penetration by either physical force or psychological coercion), attempted rape (i.e., verbal threats of

rape), and sexual assault (i.e., attacks or attempted attacks generally involving unwanted sexual contact that may or may not have included force; verbal threats of sexual assault).

One noteworthy limitation of the NCVS is that even though it uses broad language to detect victimization, the fact that the NCVS is called—and presented as—a "crime survey" may lead to underreporting of rape and sexual assault; some respondents may not view assaults committed by partners or other known persons as a crime.[1]

7.2 Prevalence of Rape and Sexual Assault

The NCVS showed an overall six-month rate of 1.5 counts of rape or sexual assault per 1,000 adolescents (Table 7.2). This amounts to a national estimate of 51,581 rapes or sexual assaults of adolescents over a six-month period. The reader should refer to Section 7.1.1 for an explanation of why estimates from our secondary analysis differ from the results shown in the literature review.

7.3 Demographic Correlates of Rape and Sexual Assault

Some significant differences by demographic characteristics were found in the NCVS analysis (Table 7.2):

- Youth aged 12 to 14 were less likely to report sexual victimization than those aged 18 to 20 (1.0 per 1,000 compared to 2.0 per 1,000). Females aged 12 to 14 were also less likely to report sexual victimization than those aged 18 to 20 (1.9 per 1,000 compared to 3.8 per 1,000). Age differences for males were not statistically significant.

- Consistent with most other studies of sexual abuse, the NCVS results showed that females were more likely to be raped or sexually assaulted than were males. The rate of rape and sexual assault for females was 2.8 per 1,000, compared to 0.2 per 1,000 for males.

- Adolescents living outside metropolitan areas were less likely to be raped/sexually assaulted (0.6 per 1000) than were those living in suburban communities (1.5 per 1,000) or in central cities (2.2 per 1,000). The difference between suburban and urban adolescents was not statistically significant.

[1]When the prevalence of assault of women by intimates as measured by the 1992-1993 NCVS was compared to the prevalence of being the victim of violence by an intimate from the 1985 National Family Violence Survey (NFVS), the prevalence in the NFVS was 15 times as high—a finding likely to be attributable to the NFVS questions being asked outside the context of a crime survey. "Women may not view assaults by intimates as criminal, hence fail to report them . . ." [on the NCVS] (Crowell & Burgess, 1996).

Table 7.2 6-Month Rates (per 1,000) of Rape and Sexual Assault for Persons Aged 12 to 20, by Demographic Characteristics: NCVS

	Ages 12-14		Ages 15-17		Ages 18-20		Total	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
Total	1.0	(0.6 - 1.4)	1.5	(1.1 - 1.9)	2.0	(1.5 - 2.5)	1.5	(1.2 - 1.8)
Gender								
Male	0.2	(0.0 - 0.4)	0.1	(-0.1 - 0.3)	0.4	(0.0 - 0.8)	0.2	(0.1 - 0.3)
Female	1.9	(1.2 - 2.6)	2.9	(2.1 - 3.7)	3.8	(2.8 - 4.8)	2.8	(2.3 - 3.3)
Race/ethnicity								
White	1.1	(0.7 - 1.5)	1.4	(1.0 - 1.8)	2.1	(1.5 - 2.7)	1.5	(1.2 - 1.8)
Black	1.2	(0.2 - 2.2)	1.8	(0.5 - 3.1)	2.7	(0.8 - 4.6)	1.9	(1.1 - 2.7)
Hispanic	0.6	(-0.1 - 1.3)	1.5	(0.5 - 2.5)	0.8	(0.0 - 1.6)	1.0	(0.5 - 1.5)
Other	0.4	(-0.4 - 1.2)	2.1	(-0.7 - 4.9)	3.2	(0.0 - 6.4)	1.9	(0.5 - 3.3)
Family income								
Less than $7,500	3.1	(0.5 - 5.7)	2.1	(-0.3 - 4.5)	3.4	(1.7 - 5.1)	3.0	(1.7 - 4.3)
$7,500-$14,999	1.0	(-0.5 - 2.5)	4.0	(1.8 - 6.2)	2.7	(1.0 - 4.4)	2.5	(1.5 - 3.5)
$15,000-$24,999	1.0	(0.1 - 1.9)	2.3	(0.8 - 3.8)	2.0	(0.7 - 3.3)	1.7	(1.0 - 2.4)
$25,000-34,999	1.6	(0.2 - 3.0)	1.1	(0.2 - 2.0)	2.1	(0.5 - 3.7)	1.6	(0.9 - 2.3)
$35,000-$49,999	0.6	(0.1 - 1.1)	1.3	(0.4 - 2.2)	0.8	(-0.1 - 1.7)	0.9	(0.4 - 1.4)
$50,000-$74,999	0.5	(0.0 - 1.0)	0.9	(0.2 - 1.6)	1.1	(0.1 - 2.1)	0.8	(0.4 - 1.2)
$75,000 or more	0.6	(-0.1 - 1.3)	0.6	(-0.1 - 1.3)	2.8	(0.7 - 4.9)	1.2	(0.6 - 1.8)
Urbanicity								
Central cities	1.6	(0.7 - 2.5)	1.7	(0.9 - 2.5)	3.0	(1.9 - 4.1)	2.2	(1.6 - 2.8)
Suburban	0.8	(0.4 - 1.2)	1.7	(1.1 - 2.3)	2.0	(1.3 - 2.7)	1.5	(1.2 - 1.8)
Outside metropolitan areas	0.5	(-0.1 - 1.1)	0.7	(0.2 - 1.2)	0.5	(0.0 - 1.0)	0.6	(0.3 - 0.9)
Region								
Northeast	1.1	(0.1 - 2.1)	1.4	(0.4 - 2.4)	1.6	(0.6 - 2.6)	1.3	(0.7 - 1.9)
Midwest	0.8	(-0.2 - 1.8)	1.9	(1.0 - 2.8)	1.9	(0.8 - 3.0)	1.5	(0.9 - 2.1)
South	1.3	(0.5 - 2.1)	1.2	(0.6 - 1.8)	1.7	(0.6 - 2.8)	1.4	(0.9 - 1.9)
West	1.0	(0.3 - 1.7)	1.7	(0.7 - 2.7)	2.8	(1.6 - 4.0)	1.8	(1.2 - 2.4)

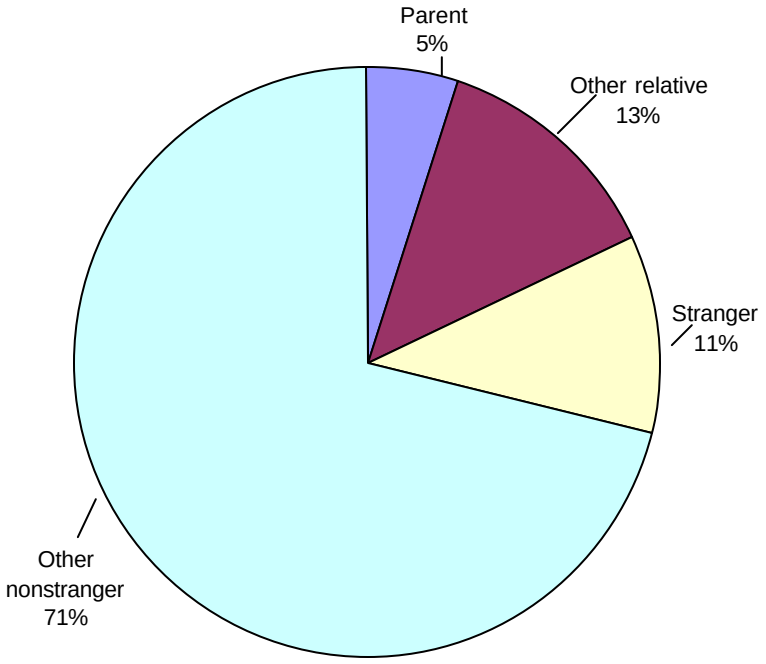
Note: Rape/sexual assault is defined as rape (i.e., forced vaginal, oral, or anal penetration either by physical force or psychological coercion), attempted rape (i.e., verbal threats of rape), and sexual assault (i.e., attacks or attempted attacks generally involving unwanted sexual contact that may or may not include force; also includes verbal threats).Source: The National Criminal Victimization Survey, combined waves: 1995-1998.

No significant differences were found among racial/ethnic groups or among regions of the country.

7.4 Perpetrators of Rape and Sexual Assault

Most of the adolescents who had been victimized were assaulted by someone they knew (Figure 7.1). Individuals who were acquaintances or friends (i.e., neither strangers nor relatives) were reported as the perpetrator in 71% of the cases, a percentage significantly higher than for any other group. Parents were reported as the perpetrator of sexual assault in 5% of the cases, and other relatives were implicated in 13% of the cases. Strangers accounted for 11% of rape and sexual assault reports. Again the reader should refer to Section 7.1.1 for an explanation of why estimates from our secondary analysis differ from the results shown in the literature review.

Figure 7.1 Percentage Distribution of Relationship Between Victim and Offender among Persons Aged 12 to 20 Who Were Raped/Sexually Assaulted in the 6 Months Prior to the Survey: NCVS



N (unweighted) = 156

Note: Rape/sexual assault is defined as rape (i.e., forced vaginal, oral, or anal penetration either by physical force or psychological coercion), attempted rape (i.e., verbal threats of rape), and sexual assault (i.e., attacks or attempted attacks generally involving unwanted sexual contact that may or may not include force; also includes verbal threats).

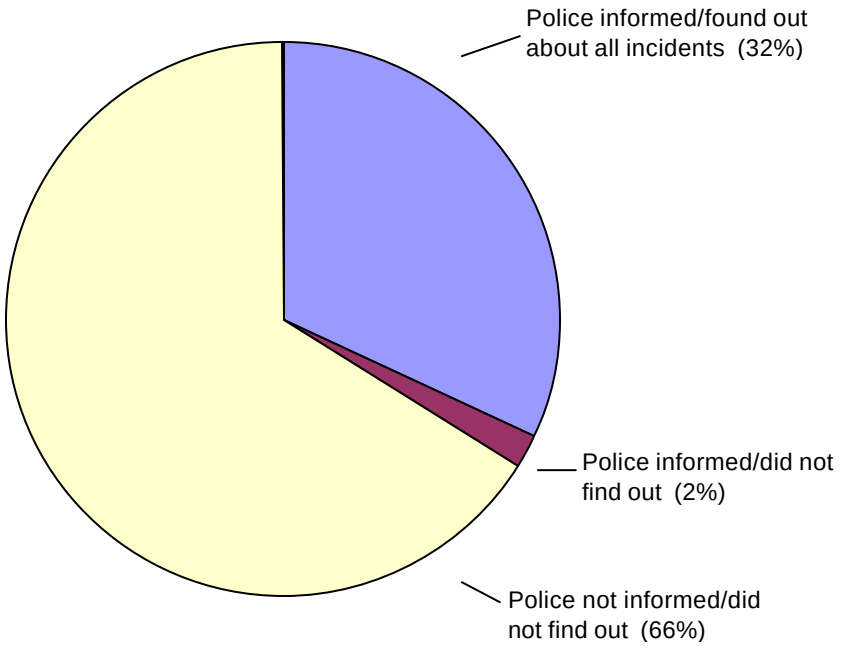
Source: The National Criminal Victimization Survey, combined Waves: 1995-1998.

7.5 Involvement of Authorities in Cases of Rape and Sexual Assault

Approximately two-thirds of the adolescents who reported having been raped or sexually assaulted indicated that the police neither were informed of nor found out about the incident (Figure 7.2). Just under one-third indicated that police were informed of or found out about all of the incidents; 2% indicated that the police knew about some, but not all, of the incidents.

Adolescents who reported rape and sexual assault were asked how the police responded (Table 7.3). (Note that the adolescents may have indicated multiple responses for these questions.) The most commonly reported police response was to take a report (81%). About one-third (35%) of those who reported the rape and sexual assault to the police indicated that witnesses or suspects were questioned, and only 21% reported that an arrest was made. Even less common were reports of the police looking around, taking evidence, or promising surveillance. Some 17% of respondents reported that some other (undescribed) action was taken, and 5% of adolescents did not know what action had been taken.

Figure 7.2 Percentage of Those Aged 12 to 20 Who Were Raped/Sexually Assaulted in the Past 6 Months Who Reported Involvement with Police: NCVS



N (unweighted) = 172

Note: Rape/sexual assault is defined as rape (i.e., forced vaginal, oral, or anal penetration either by physical force or psychological coercion), attempted rape (i.e., verbal threats of rape), and sexual assault (i.e., attacks or attempted attacks generally involving unwanted sexual contact that may or may not include force; also includes verbal threats).

Source: The National Criminal Victimization Survey, combined waves, 1995-1998.

Table 7.3 Percentage of Those Aged 12 to 20 Who Reported Rape and Sexual Assault to Police in the Past 6 Months, by Types of Police Response Indicated

	Total	
	%	95% CI
N (unweighted)	45	
Police:		
Took report	81	(67.1 - 98.9)
Searched/looked around	5	(-1.9 - 11.6)
Took evidence	4	(-2.0 - 9.8)
Questioned witnesses or suspects	35	(20.0 - 50.3)
Promised surveillance	1	(-1.2 - 3.7)
Promised to investigate	20	(7.9 - 32.0)
Made arrest	21	(8.7 - 33.9)
Other	17	(6.8 - 27.7)
Don't know	5	(-2.1 - 12.9)

Note: Rape/sexual assault is defined as rape (i.e., forced vaginal, oral, or anal penetration either by physical force or psychological coercion), attempted rape (i.e., verbal threats of rape), and sexual assault (i.e., attacks or attempted attacks generally involving unwanted sexual contact that may or may not include force; also includes verbal threats).

Source: The National Criminal Victimization Survey, combined waves, 1995-1998.

Adolescents who did not report the rape and sexual assault were asked why they had chosen not to contact the authorities (Table 7.4); they sometimes indicated multiple reasons for not reporting such incidents. The most common ones mentioned were that the matter was private or personal, that the adolescent took care of it himself or herself, or that the adolescent told the offender's parents (29%). Almost one-fifth (19%) of youth indicated that they did not report the incident because of fear of reprisal by the offender or someone else. Another relatively common response (11%) was that the incident was reported to another official, such as a guard or school official.

Table 7.4 Percentage of Those Aged 12 to 20 Who Were Raped/Sexually Assaulted But Did Not Report Sexual Victimization to Police, by Reasons Indicated for Not Reporting: NCVS

	Total	
	%	**95% CI**
N (unweighted)	115	
Reasons [1]		
Private or personal matter; took care of it myself or informally; told offender's parents	29	(20.3 - 37.8)
Afraid of reprisal by offender or others	19	(11.6 - 26.7)
Reported to another official (guard, apt. manager, school official, etc.)	11	(8.5 - 14.2)
Minor or unsuccessful crime; small or no loss	9	(3.6 - 15.0)
Did not want to get offender in trouble with the law	7	(1.8 - 11.4)
Police wouldn't think it was important enough; wouldn't want to be bothered or get involved	3	(0.2 - 6.5)
Didn't want to or could not take time – too inconvenient	3	(-0.5 - 7.1)
Could not find or identify the offender; lack of proof	2	(-0.7 - 4.7)
Child offender; "kid stuff"	1	(-0.9 - 2.9)
Not clear that it was a crime or that harm was intended	1	(-0.8 - 2.5)
Police would be biased; would harass/insult respondent; cause respondent trouble	1	(-0.6 - 3.5)
Was advised not to report to police	1	(-0.9 - 2.8)
Police would be inefficient, ineffective (they'd arrive late or not at all, wouldn't do a good job, etc.)	1	(-0.5 - 2.6)
Don't know	2	(-0.9 - 5.5)
Other	29	(20.1 - 37.4)

Note: Rape/sexual assault is defined as rape (i.e., forced vaginal, oral, or anal penetration either by physical force or psychological coercion), attempted rape (i.e., verbal threats of rape), and sexual assault (i.e., attacks or attempted attacks generally involving unwanted sexual contact that may or may not include force; also includes verbal threats).

[1]Responses are not mutually exclusive (i.e., a respondent could have reported more than one reason).

Source: The National Criminal Victimization Survey, combined waves, 1995-1998.

7.6 Summary

Results from the NCVS provide important information about rates of rape and sexual assault of children and adolescents in the general population. Overall, 1.5 adolescents in 1,000 had been the victim of rape or sexual assault during a six-month period. Several demographic correlates of rape and sexual assault were identified. Young adolescents (aged 12 to 14) were less likely to have been victims than older adolescents (aged 18 to 20). Males were much less likely to be victimized than females. The rate of rape and sexual assault was lower for adolescents living outside metropolitan areas than for those in either urban or suburban settings. No significant differences based on an adolescent's race/ethnicity or region of the country were found.

Most rapes/sexual assaults were committed by an individual known to the adolescent, most commonly acquaintances or friends (71%). Relatives other than parents accounted for 13% of the rape and sexual assault reports, and strangers accounted for 11%. Parents were reported as the perpetrators of rape and sexual assault in 5% of the cases.

About two-thirds of adolescents who had been raped or sexually assaulted never reported the incident to the authorities. The most common reasons mentioned were that the matter was private or personal, that the adolescent took care of it himself or herself, or that the adolescent told the offender's parents (29%); fear of reprisal by the offender or someone else (19%); and that the incident was reported to another official, such as a guard or school official (11%).

When an incident was reported, the most commonly reported police response was to take a report (81%). Only 35% of those who reported rape and sexual assault to the police indicated that witnesses or suspects were questioned, and only 21% reported that an arrest was made.

The most striking findings of this analysis of rape and sexual assault among adolescents in the general population are

- the high percentage of assaults perpetrated by friends or acquaintances,
- the low percentage of adolescents reporting the incident to the police, and
- the low occurrence of police questioning witnesses or suspects.

8. SUMMARY AND RECOMMENDATIONS

This chapter is divided into two sections: the first discusses the study's salient findings as they pertain to each of the research questions articulated in Chapter 1. The chapter concludes with a look at future directions for policy, practice, and research.

8.1 Summary and Discussion

8.1.1 How Many Runaway and Homeless Youth Are Sexually Abused Prior to Leaving Home?

In general, rates of sexual abuse among this population vary widely. However, among the most methodologically rigorous studies, rates of sexual abuse tended to cluster in a range from 21% to 42% (Molnar et al.,1998; Yoder, 1999; Tyler et al., 1999; Ryan et al.; also see Chapter 5).

8.1.2 How Do Rates of Sexual Abuse among Runaway and Homeless Youth Compare to Those among Youth in the General Population?

Sexual abuse is reported by youth in the general population at significantly lower rates than is reported by RHY. In the general population, around 1% to 3% of adolescents report having ever been sexually abused (Finkelhor & Dziuba-Leatherman, 1994; Finkelhor & Ormrod, 2000; also see Chapter 7), compared to 21% to 42% among RHY. Direct comparisons of female adolescents with and without runaway experiences in the National Longitudinal Study of Adolescent Health (AddHealth) data showed that those who had ever run away from home were four times as likely to report having been sexually victimized as those without runaway experiences (25% and 6%, respectively), even after controlling for demographic and familial background characteristics.

8.1.3 To What Extent Is Sexual Abuse a Factor in Runaway and Homeless Youth's Decisions to Leave Home?

Estimates of youth reporting sexual abuse as a reason for leaving home vary substantially, ranging from 4% to 38% (Kral et al., 1997; Whitbeck & Simons, 1993; Ryan et al., 2000; Terrell (1997). These findings suggest that sexual abuse is one of a myriad of factors affecting decisions by youth concerning whether they remain in a dangerous situation at home or move into a potentially dangerous one on the street. Other high-risk and dangerous situations for a youth at home could include physical but not sexual abuse, emotional abuse, parental substance use, or other illegal activities perpetrated by members of the household. The variation in

findings may also result in variations in how the questions were asked, when during the interview the questions were asked, and data collection methodology (i.e., who conducted the interviews, location of the interviews).

Females in the AddHealth Survey were not asked to indicate reasons they ran away, precluding any causal inferences about sexual abuse as a cause for leaving home. It is, however, interesting to note that nearly one-third (31%) of all the females who were sexually victimized had runaway experiences.

8.1.4 Who Are the Sexual Abusers of Youth in the General Population and RHY?

Our literature review and secondary analysis showed that the perpetrators of sexual abuse among youth in the general population tended to be adult males who were known by the victim. Specifically:

- approximately 75% to 89% of adolescents reported being sexually abused by a male (Sedlak & Broadhurst, 1996; DHHS/ACYF, 2000);
- around 68% to 88% were abused by someone known to them or by a family member (Finkelhor & Ormrod, 2000; Finkelhor & Dziuba-Leatherman, 1994; also see Chapter 7);
- only about 5% of adolescents who reported being sexually assaulted were assaulted by a parent (see Chapter 7); and
- adolescent girls living in two-parent households were half as likely to be sexually abused as those living in other types of households (see Chapter 6).

Only a few studies of RHY have queried sexually abused respondents about perpetrators. The SYRA data set provided a detailed breakdown of the identity of the abusers reported by that relatively small sample of youths. Nonrelative adult acquaintances (i.e., teachers, neighbors, and friends of the family) were named by 32%; peer acquaintances by 28%; and strangers by 25%. Biological relatives named by youths as abusers included fathers (for 9.9% of the youth), uncles (9.5%), cousins (6.8%), brothers (6.5%), and grandfathers (5.3%); non-biological relatives included stepfathers (14.4%), adoptive fathers (2.3%), stepbrothers (1.5%) and adoptive brothers (2.3%). Other individuals who might assume caregiving or supervisory roles also were named: mother's boyfriend was named by 8% of these respondents; male babysitters by 4.6%; female babysitters by 4.9%; and foster fathers by 1.1%. Female relatives were named by only 6% of the respondents. Note that respondents could name more than one abuser in the SYRA study, and in

fact, many were abused by multiple individuals. The SHARE study data also indicated that the youths were likely to have been abused by more than one person: on average, 3 people had asked the youth to do something sexual, and 2.6 people sexually abused the youth.

8.1.5 To What Extent Is Sexual Abuse Reported to Authorities?

Our secondary analysis of the National Crime Victimization Survey (NCVS) data showed that, in the general population, approximately two-thirds of the adolescents who reported having been raped or sexually assaulted indicated that the police were not informed and did not find out about the incident (see Chapter 7). Unfortunately, no information on this topic was available for the runaway and homeless youth population.

8.1.6 What Actions Are Taken Against the Abuser?

The secondary analysis of the NCVS data showed that in the general population, approximately 81% of those who reported abuse to the police reported that the police response was to take a report. Only 35% indicated that witnesses or suspects were questioned, and only 21% reported that an arrest was made. Unfortunately, no information on this topic was available for the runaway and homeless youth.

8.1.7 Among Runaway and Homeless Youth, to What Extent Is Sexual Abuse Associated with Demographic and Other Background Characteristics?

The literature review and secondary analysis conducted for this project revealed a clear pattern in the correlation between sexual abuse and gender. The rates of sexual abuse for RHY (and adolescents in the general population) tend to be two to three times higher for females than for males (Whitbeck & Hoyt, 1999; Tyler et al., 1999; Molnar et al., 1994; also see Chapters 5 and 7).

No consistent differences by age or race/ethnicity were found across studies. However, multivariate analysis of the AddHealth data indicated that both age and race/ethnicity were associated with the likelihood of sexual victimization, before and after controlling for runaway experiences. Specifically, older adolescents were more likely to report sexual victimization, and White females were more likely to report victimization than Hispanic females. In addition, both of the family background characteristics (i.e., family composition and mother's education) were also found to be associated with sexual victimization.

8.1.8 To What Extent Is Sexual Abuse Associated with Other Risk Factors and Adverse Events?

Our literature review and secondary analysis provided a wealth of information about the sequelae of sexual abuse, including mental health problems, substance use, risky sexual behaviors, other types of victimization, and history of arrest.

First, the AddHealth data revealed that females with runaway experiences were more likely to report sequelae (i.e., substance use, poor mental health, school-related problems, high risk sexual behaviors, violence, and victimization) than those without runaway experiences. Most of these relationships held even after controlling for demographic and family background characteristics as well as sexual abuse.

Second, the AddHealth data also showed that females who had been sexually victimized were more likely to report most of the sequelae than those who had not been victimized. Again most of these relationships were maintained even after controlling for demographic characteristics and family background variables, as well as runaway experiences.

Among females with runaway experiences, bivariate analysis showed that sexual victimization was associated with a greater likelihood of school suspension, substance use, and violent behaviors, but significant differences generally were not found for school expulsion, depressive symptoms, suicide attempts, substance use, risky sexual behaviors, or other types of victimization.

Finally, among runaway and homeless youth, we found many consistent relationships between sexual abuse and the sequelae:

- Poor mental health was consistently and strongly related to sexual abuse. Abuse was associated with higher rates of suicidal thoughts and attempts, as well as a greater prevalence of mental health care (SYRA). Sexual abuse also was related to higher rates of problems with externalizing behavior (MHRAP).

- The prevalence of substance use differed across datasets and generally showed few differences between abused and nonabused youth. In the few instances where significant differences were found, sexually abused youth had higher rates of use.

- Risky sexual behavior was more prevalent among sexually abused youth. They were more likely to have had sex with a high-risk partner (SYRA), to have had sex without birth control while drunk or high (SYRA), to have

been pregnant or gotten someone pregnant (SYRA), and to have engaged in survival sex (SYRA, MHRAP, SHARE). No differences in risky sexual behaviors were found in the AddHealth data, however.

Other forms of victimization also were more likely among youth who had been sexually abused, but no significant differences between the groups were found for arrest history.

In addition, the AddHealth data showed that school-related problems and violent behaviors were more likely among sexually victimized females with runaway experiences than among females with runaway experiences who were not victimized.

8.2 Future Directions and Recommendations

This report has highlighted the high incidence among runaway and homeless youth (RHY) of sexual abuse prior to their leaving home, as well as some of the negative consequences that are likely to be associated with these experiences. In addition, it has provided a glimpse into the factors associated with sexual abuse among adolescents in the general population. It should be noted that practitioners who work with this population frequently express concern about the ability of researchers to elicit honest and accurate responses from youth, particularly males, who are asked about these experiences; the research may underestimate the extent of the problem.

Although many of the difficulties encountered by sexually abused youth are shared by many in the RHY population, there also are some features unique to this group. In particular, there is a heightened risk, even among the high-risk RHY population, for certain types of adverse consequences. Thus it is important for efforts at intervention to focus not only on prevention of the sexual abuse itself but also on prevention of the negative sequelae of abuse once it has occurred. The analyses reported here suggest a number of areas for increased attention.

8.2.1 Implications for Prevention of Sexual Abuse

Sexually abused adolescents who leave home often have been subjected to maltreatment for a number of years prior to running away; the average age reported for first sexual abuse in the studies reviewed here was age 7. Unfortunately, sexual abuse in young children often happens within the context of the family, and the secrecy, fear, and shame that surround these incidents greatly reduce the likelihood of disclosure outside the family. Family support models that provide parenting education and skills, particularly for teenage parents, may be a strategy for primary prevention; it would be important to include fathers and, particularly, stepfathers, in such efforts.

Physicians, school personnel, child care providers, and others who have routine contact with children also need training in and greater awareness of the risk factors and behaviors associated with sexual abuse, as well as appropriate action to take when the abuse is suspected. These may be the first steps in breaking the cycle of physical and emotional damage that results from abuse. Provision of adequate health and mental health services within the schools, and greater access to those services within communities, is critical to early identification and treatment. For example, some communities have special, multidisciplinary emergency room teams that are trained in the recognition and treatment of sexual abuse; public health nurses often play a critical role in identification and referral to needed services both in school and community settings.

It is notable that children and adolescents who are victims of sexual abuse often experience multiple family problems, particularly alcohol and substance abuse within the family. Those who work with substance abusing populations should be more aware of the risk to children in such families. Similarly, law enforcement officials and court personnel, who frequently encounter domestic violence and troubled families, could benefit from heightened awareness of these issues.

Service providers and others who work with children who have been sexually abused also should be made more aware that sexual abuse, particularly within the family, greatly increases the likelihood of the youth running away or exiting the home. Once sexual abuse has been identified within a family, more attention might be given to risk-reduction approaches. Youth need to be provided with options other than running to the streets, which only exacerbates the negative cycle that often leads to further victimization and more negative health, social, and emotional consequences. For example, alternative housing might be provided while comprehensive counseling is provided to the entire family, or shelters could be established where victims could go to find specialized staff trained in the specific issues around sexual abuse.

8.2.2 Improving Services to Runaway and Homeless Youth Who Are Sexually Abused

It is incumbent on programs serving this population to ensure that youth have access to health and mental health professionals trained specifically to address the issues that these youth are likely to present. Many programs already have in place, or have access to, the key service components for serving this vulnerable group of young people; these programs should be

encouraged to continue their efforts and to share with their colleagues the practices that are shown to be most effective. Programmatic components must include the following:

Outreach. Earning the trust of youth who have run away, and engaging them in services, is a challenge to community-based programs. Programs must communicate to RHY that they understand the issues that are faced by sexually abused youth, that their experiences will be taken seriously, and that help is available. One promising strategy may be peer-oriented outreach and group counseling programs. Such programs have shown great promise in dealing with adult health risk crises (e.g, AIDS in homosexual communities), but the empirical basis for such programs with sexually abused youth has yet to be developed. Moreover, peer counselors must be carefully selected and then closely trained, supervised, and supported: it can be traumatizing for young people to hear their peers' horrifying stories on a routine basis; professional staff must be careful to monitor the distress of these counselors. Nonetheless, there are numerous street-youth peer-outreach or peer-directed programs nationwide in the major cities, and it is important to observe and enhance their functioning so that they can be optimally utilized as an effective resource.

Intake/Screening. There is no consensus on how, or even whether, to screen for the presence of sexual abuse among this group. Youth may be reluctant, for a variety of reasons, to talk about experiences of sexual abuse. For those coming into short-term shelter care, other issues may seem more immediate or important at the time of intake, and intake workers may not feel they can adequately address other issues at that time. It is essential that practitioners themselves be comfortable with the subject, be knowledgeable about the factors that may influence young people's willingness to either conceal or disclose highly personal and emotionally charged experiences, and that they develop skills that foster trust and openness with the youth they serve.

Given the prevalence of sexual abuse histories among RHY, and the potential consequences, practitioners and clinicians who work with these youth in clinical settings (including youth shelters) should develop procedures for systematically eliciting information about whether youth were sexually abused before they left home, and they should ascertain the particular circumstances of the abuse. Thus practitioners may wish to consider administering a fairly standard set of protocols that explicitly describe different types of sexual abuse. For those who respond positively, these would elicit the following information:

- the nature of the abusive incidents,
- the period of time over which they occurred,

- the relationship of the perpetrator to the youth,
- to whom the youth reported the incidents and what actions may have been taken as a result, and
- the youth's construction or understanding of the incidents.

We note the importance of inquiring whether multiple incidents of sexual abuse have occurred, given that findings suggest that on average RHY have been abused by two or three people. Altogether, this information is vital to a consideration of whether runaway youth should return to their parents and what groundwork should be laid to ensure their safety once they do return.

Linkages with Appropriate Services. In common with other RHY youth, those who have been sexually abused are likely to need a comprehensive array of educational and social services. Because of the short-term nature of many RHY services, it is essential that programs develop effective relationships with agencies that can provide more comprehensive services to sexually abused youth. In particular, mental health services may be critical in assisting young people, who are likely to manifest an array of problems (e.g., suicidal ideation or violent behavior). Unfortunately, practitioners often report that the lack of available resources limits early intervention with mental health issues, and youth may receive services only when they are in a crisis situation. Other barriers to mental health care cited by practitioners include lack of adequate services designed specifically for adolescents, as well as financial and insurance issues. Health services are another critical component for sexually abused RHY; such youth should be tested for HIV/STDs and considered at high risk both for future infection and for infecting others. Substance abuse services also must be part of the mix. Access to services can be greatly enhanced by co-location of services with youth programs, or by using mobile services that can be moved according to the need.

Appropriate Reporting of Incidents of Sexual Abuse. The extent to which incidents of sexual abuse in the RHY population are reported to authorities is unknown; not surprisingly, most incidents of sexual abuse in the general population go unreported to police. Practitioners in settings that serve RHY should be mindful of their legal obligations to report suspected cases of sexual abuse to child welfare authorities, who may at their discretion involve law enforcement officials either in the investigation or as a response to perpetrators. Close coordination and information sharing between child welfare and RHY program staff and administrators should be pursued at the state and community levels.

A striking finding from the NCVS was the extent to which victimization went unreported and, when reported, the apparent lack of action on the part of the authorities. Further exploration into the reasons behind the reluctance to disclose incidents of sexual abuse to the authorities is needed. Law enforcement officials and child welfare personnel must examine their attitudes and procedures to ensure that reports are taken seriously and that appropriate investigative and prosecutorial tools are at their disposal for dealing with these difficult cases. More effort is needed to promote the recognition of the need for support and protection among adolescents, who may not be seen as sympathetically as younger children who are maltreated. Public awareness campaigns, such as those that have resulted in increased attention to the importance of taking assertive action in domestic violence situations, may serve to stimulate a sense of accountability within agencies charged with protecting youth who are sexually abused. In addition, closer ties between law enforcement and supportive social and mental health services may provide opportunities for bringing needed services to young people, thereby ameliorating some of the negative consequences of these traumatic experiences. For example, many cities have adapted the Child Development Community Policing model, developed in New Haven, CT, for training police officers in children's mental health issues and providing immediate linkages with mental health providers for children who witness or experience violence.

It is of concern that most victims of sexual abuse indicate that police in whom they confided appear to have done nothing more than take a report. Even if this is a substantial underestimate, it would seem to be important that such victims believe that their reports have been taken seriously by law enforcement officials and that, insofar as they can, such officials make the victim aware of at least the broad details of their subsequent investigations. Programs that serve RHY can assist the victim in this regard through appropriate advocacy efforts and by serving as a liaison with law enforcement (or child welfare) officials.

Aftercare and Follow-up. Given that a certain proportion of sexually abused RHY may be unable to return home for reasons of personal safety, programs that serve these youth have a particular responsibility to ensure appropriate arrangements for their long-term care before they are discharged. Transitional living programs for youth, such as those funded through the Family and Youth Services Bureau (FYSB), are an important resource. Clearly, youth who return to their families will require careful monitoring and comprehensive aftercare services to ensure their safety and well-being. Again, linkages with appropriate community resources, particularly child welfare agencies, are essential.

Training and Technical Assistance to Service Providers. High staff turnover is an ongoing problem in programs serving RHY, and mechanisms must be in place for ongoing,

specialized training within shelter and street youth–focused agencies. This training should develop awareness among service providers of the prevalence of sexual abuse in the populations they serve, increase screening and assessment skills, and include some focus on specific psychological and health sequelae of sexual abuse, such as HIV/AIDS or post-traumatic stress disorder, as well as risk behaviors that are frequent among sexually abused RHY. Training specific to the issues faced by RHY and sexually abused youth is necessary, regardless of the formal education level of staff. Regardless of the efficacy of the training models, there is no substitute for having staff who have developed expertise and wisdom by working in these settings over a period of time; ways must be found to build the level of collective experience through staff retention. Both financial incentives and social support are needed to sustain staff commitment in these emotionally charged and demanding settings.

Other agencies that frequently encounter sexually abused children and youth also need to be made aware of the risk of running away within this population, and receive training on ways to ensure that children's homes are made more secure and stable. Child service personnel may need education to change their perceptions of RHY. Often these youth "look" undeserving of protection and intervention, because they may appear to ask for unwanted sexual attention.

Knowledge Development. Development of comprehensive and reliable information systems provides a basis both for enhancing program management and for building the knowledge base. The past few years have seen major progress in creating management information systems and in the capacity of programs to use the information they provide. For example, FYSB has made considerable progress in providing guidance and technical assistance to grantees for uniform reporting of data about the youth they serve through the Runaway and Homeless Youth Information System (RHYMIS); child welfare agencies are increasingly able to report on client characteristics and services through the National Child Abuse and Neglect Data System (NCANDS) and the Adoption and Foster Care Analysis and Reporting System (AFCARS). In some states and communities, agencies are collaborating to create integrated databases to track and monitor services received by children and youth across agencies and service sectors; these efforts represent a significant step toward coordinating services and maximizing resources.

Uncertainties about funding for services often make providers reluctant to deploy scarce resources for program evaluation. Nonetheless, it is essential that service planners and providers begin to see evaluation as an essential component of effective service provision. Program evaluations not only provide information for continuous program improvement and

accountability purposes but also serve to build the knowledge base and inform the field about promising and evidence-based practices.

8.2.3 Promoting Systems Development for Supporting the Needs of Sexually Abused Youth

The Federal Landscape. The Family and Youth Services Bureau is the major source of Federal support for local programs designed to assist youth who have run away or who have become homeless for other reasons. *The Street Outreach Program* is specifically targeted toward preventing the sexual abuse and exploitation of these young people; the program provides grants through which agencies can provide services to RHY, including access to emergency shelter, counseling and treatment, survival aid, education and information, crisis intervention, and follow-up and support. The *Basic Center Program* funds community services that address immediate needs of RHY and their families, including short-term emergency shelter, food, clothing, counseling, and referrals for health care. The centers focus on reuniting youth with their families, or finding suitable alternative placements. The *Transitional Living Program* provides grants to programs that serve older homeless youth who cannot return to their families, often because they are victims of abuse or neglect. The program provides longer-term residential services for youth aged 16 to 21, as well as supportive services to help them move toward independence. The grants provided to local agencies for these services are relatively small and often are supplemented through other funding streams.

Other relevant resources within the Department include programs aimed at mental health, substance abuse, and health services (particularly related to HIV/AIDS) for children and youth. For example, the Substance Abuse and Mental Health Services Administration (SAMHSA) also has recently funded an initiative on trauma identification and treatment. The program includes a national center, which will coordinate the national initiative to increase services and raise the standard of care for traumatized children, adolescents, and their families and will establish a nationwide collaborative network of organizations involved in the study, treatment, and support of children and families impacted by traumatic stress. A number of grantees will establish treatment/services development centers to support effective and developmentally appropriate identification and intervention approaches for children who may have experienced any of a number of traumatic events, including sexual abuse. The Center for Mental Health Services has since 1993 implemented the Comprehensive Community Mental Health Services for Children and their Families program, which supports the development of multi-agency, coordinated systems of care for children with emotional and behavioral disorders. The Center for Substance Abuse Treatment (CSAT) distributes, through its Model Programs dissemination efforts, comprehensive and detailed information about substance abuse prevention programs that have

been tested in community settings and proven to be effective. The CSAT, in collaboration with the Health Resources and Services Administration and the Centers for Disease Control and Prevention, offers a training model (Cross-Training) designed to strengthen local networks of resources related to substance abuse and infectious diseases (particularly HIV/AIDS), by bringing together public health and substance abuse treatment providers in workshop activities aimed at increasing crossdisciplinary understanding and collaboration.

Next Steps: Working within a Youth Development Framework. Sexually abused children and youth have special needs, but targeting those needs is likely to be futile unless these young people have access to the same supports, choices, and opportunities that should be available to all youth. Opportunities for positive peer interactions, for education and training, for mentoring and adult guidance, and for involvement in meaningful and constructive leisure activities all must be part of the continuum of services available to RHY and other youth who have been victimized. Community-based programs for youth must make special efforts to reach out to these and other high-risk populations, and to link to the programs that serve them. Youth development is a special focus of the Administration for Children and Families, and programs within ACF have been encouraged to explore ways of using discretionary funds to support the healthy development of youth.

Over the past few years, the Department has developed significant relationships with other agencies, professional associations, and advocacy groups to address youth issues, culminating in the development of the "Blueprint for Youth," which outlines a common vision for youth programs. The Department's commitment has continued with interagency activities that include staff from the Health Resources and Services Administration, SAMHSA, the FYSB, the Office of the Assistant Secretary for Planning and Evaluation, and the Office of Family Assistance within the Department, as well as staff from the Departments of Justice, Labor, Education, Agriculture, Housing and Urban Development, Transportation, and the Corporation for National Service, who will be working together to further develop the Federal youth agenda. This collaborative structure offers a forum for better planning and coordination of programs for young people at the Federal level.

In the short term, the FYSB will begin focused efforts directed at the identification and treatment of sexual abuse and its consequences among the RHY population it serves. This report will be distributed to FYSB grantees as a first step in heightening awareness of the issues faced by these young people. In addition, over the next year, the following initiatives are planned:

1. To address concerns about the difficulties faced by service providers in identifying past sexual abuse among the youth they serve, we will work

with FYSB's network of technical assistance providers to develop, document, and disseminate effective procedures for outreach and intake that result in disclosure of sexual abuse and appropriate service linkage. In particular, the use of peer counselors and peer liaisons will be examined, including the roles that peers assume and the kinds of supports and supervision that are needed to sustain effective peer networks.

2. Recognizing the association between family domestic violence and sexual abuse, as well as some of the similarities between the programs operated under ACF's Family Violence Initiative and those operated by FYSB, we will begin a more focused effort to share information across the two programs. As a first step, we will seek opportunities to coordinate efforts between the technical assistance networks for those two programs; for example, convening joint meetings and dissemination efforts between the two groups where appropriate.

3. FYSB will encourage technical assistance personnel as well as front-line providers to develop and share gender-specific interviewing and treatment techniques that appear to be promising. This is in response to concerns expressed by service providers that the stigma associated with sexual abuse may be very different for males than for females, which can differentially affect the willingness to disclose.

Although Federal leadership can provide guidance, most of the work of service development and service provision must be done at the State and local levels. No single sector can expect to provide the array of services necessary to meet the complex needs of this population. Advocacy groups and professional associations also play a key role in drawing attention to important issues, and in influencing dissemination, training, and technical assistance activities.

Unfortunately, the scarcity of services in many communities limits the resources and options available to serve runaway and homeless youth. Local RHY programs and others that deal with troubled young people often must deal with uncertainties in funding, high staff turnover, and the increasingly severe needs of the individuals they serve. Thus, it is imperative that coordination occur at all levels and that programs serving these troubled youth be aware of opportunities to link to funding and service sources that may be helpful. Local communities are increasingly committing to coordinated programs for children and youth; the challenge for providers of services to runaway and homeless youth is to ensure that their clients have visibility and priority as the planning and implementation of these systems unfold.

Appendix

Articles on Runaway and Homeless Youth Reporting Data on Sexual Abuse

Note: The articles described below are also listed in the Reference List.

Article title	Authors	Date	Sampling procedure	Data collection setting	Region/city of data collection	Sample size
Are there risk factors for hepatitis B infection in inner-city adolescents that justify prevaccination screening?	Alderman, E. M., Shapiro, A., Spigland, I., Coupey, S. M., Bashir, M. V. M., & Fox, A. S.	1998	Convenience sampling	Inner-city hospital-based clinic or health facility in drop-in center	New York City	148
Does sexual coercion play a role in the high-risk sexual behavior of adolescent and young adult women?	Biglan, A., Noell, J., Ochs, L., Smolkowski, K., & Metzler, C.	1995	Convenience sampling	Sample 1 - flyers were posted at drop-in centers, youth agencies, hangouts; samples 2 and 3 - STD clinics; sample 4 - homeless on the street; sample 5 - college campus	Eugene, OR	Sample 1=22; sample 2=206; sample 3=70; sample 4=51; sample 5=51
Severe aggression and related conduct problems among runaway and homeless adolescents	Booth, R. E., & Zhang, Y.	1996	Convenience sampling	Community drop-in centers	Denver, CO	219
HIV-risk behaviors associated with homelessness characteristics in youth	Ennett, S. T., Federman, E. B., Bailey, S. L., Ringwalt, C. L., & Hubbard, M. L.	1999	Purposive	Shelters, community center, outreach programs	Washington, DC	288
Shelter-based homeless youth. Health and access to care	Ensign, J., & Santelli, J.	1997	Convenience sampling	Emergency shelters	Baltimore, MD	109
Child maltreatment histories among runaway and delinquent children	Famularo, R., Kinscherff, R., Fenton, T., & Bolduc, S. M.	1990	Convenience sampling	Urban juvenile court cases	Boston, MA	189 delinquent; 189 status offenders
Characteristics of troubled youths in a shelter	Gary, F., Moorhead, J., & Warren, J.	1996	Convenience sampling	Shelter for runaways	North central Florida	78
A developmental perspective on runaway behavior: Its relationship to child abuse	Gutierres, S. E. ,& Reich, J. W.	1981	Convenience sampling	Child Protective Services	Arizona	1,674
Histories of sexual abuse in adolescent male runaways	Janus, M. D., Burgess, A. W., & McCormack, A.	1987	Convenience sampling	Home for runaways	Toronto, Canada	89
Self-reported risk factors for AIDS among homeless youth	Johnson, T. P., Aschkenasy, J. R., Herbers, M. R., & Gillenwater, S. A.	1996	Convenience sampling	Shelter and street locations	Chicago, IL	196
Substance use among youth seen at a	Kipke, M. D., Montgomery, S.,	1993	Convenience sampling	Primary health clinic	Los Angeles, CA	1,121 (62% were

community-based health clinic	& MacKenzie, R. G.					homeless)

(continued)

Article title	Authors	Date	Sampling procedure	Data collection setting	Region/city of data collection	Sample size
Homeless youth and their exposure to and involvement in violence while living on the streets	Kipke, M. D., Simon, T. R., Montgomery, S. B., Unger, J. B., & Iversen, E. F.	1997	Targeted sampling	Shelters, drop-in centers, and hangout sites	Hollywood, CA	432
Prevalence of sexual risk behaviour and substance use among runaway and homeless adolescents in San Francisco, Denver and New York City	Kral, A. H., Molnar, B. E., Booth, R. E., & Watters, J. K.	1997	Targeted sampling	Streets and shelters	San Francisco, CA; Denver, CO; New York City	775
Youth on the street: Abuse and neglect in the eighties	Kufeldt, K., & Nimmo, M.	1987	Convenience sampling	Downtown streets	Calgary, Canada	489
Problems of maltreated runaway youth	Kurtz, P. D., Kurtz, G. L., & Jarvis, S. V.	1991	Convenience sampling (data from records)	Services provided by network of youth and family services	8 Southeastern States	2,019
Runaway youths and sexual victimization: Gender differences in an adolescent runaway population	McCormack, A., Janus, M. D., & Burgess, A. W.	1986	Convenience sampling	Shelter	Toronto, Canada	149
Suicidal behavior and sexual/ physical abuse among street youth	Molnar, B. E., Shade, S. B., Kral, A. H., Booth, R. E., & Watters, J. K.	1998	Targeted sampling	Streets and shelters	San Francisco, CA; Denver, CO; New York City	775
Maltreatment among runaway and homeless youth	Powers, J. L., Eckenrode, J., & Jaklitsch, B.	1990	Convenience sampling	Runaway and homeless youth programs	New York State	223
Behavioral characteristics of maltreatment among runaway and homeless youth	Powers, J. L., Jaklitsch, B., & Eckenrode, J.	1989	Convenience sampling	Service sites	New York State	223
Sexual abuse history and associated multiple risk behavior in adolescent runaways	Rotheram-Borus, M. J., Mahler, K. A., Koopman, C., & Langabeer, K.	1996	Convenience sampling	Residential shelters	New York City	190
Psychological consequences of child maltreatment in homeless adolescents: Untangling the unique effects of maltreatment and family environment	Ryan, K. D., Kilmer, R. ., Cauce, A. M., Watanabe, H., & Hoyt, D. R.	2000	Convenience sampling	Drop-in center	Seattle, WA	329

(continued)

Article title	Authors	Date	Sampling procedure	Data collection setting	Region/city of data collection	Sample size
Child sexual abuse and adolescent prostitution: A comparative analysis	Seng, M. J.	1989	Convenience sampling	Temporary shelter	Chicago, IL	105
Sexual abuse as a precursor to prostitution and victimization among adolescent and adult homeless women	Simons, R. L., Whitbeck, L. B.	1991	Convenience sampling	Agencies serving runaway youth; adult homeless women: residents of shelters & missions	Des Moines, IA	40 adolescent runaways; 95 homeless women
Physical and sexual abuse in runaway youths	Stiffman, A. R.	1989	Convenience sampling	Emergency shelters (one for women)	Washington State	291
Aggravated and sexual assault among homeless and runaway adolescents	Terrell, N. E.	1997	Targeted sampling	Where youth congregated in downtown of city	Des Moines, IA	240
The effects of early sexual abuse on later sexual victimization among female homeless and runaway adolescents	Tyler, K. A., Hoyt, D. R., & Whitbeck, L. B.	2000	Targeted sampling	Streets, shelters, drop-in centers	4 Midwestern States (Missouri, Iowa, Nebraska, Kansas)	361
Homeless youths and young adults in Los Angeles: Prevalence of mental health problems and the relationship between mental health and substance abuse disorders	Unger, J. B., Kipke, M. D., Simon, T. R., Montgomery, S. B., & Johnson, C. J.	1997	Targeted sampling	Shelters, drop-in centers, and hangouts	Los Angeles, CA	432
Self-reported experiences of physical and sexual abuse among runaway youths	Warren, J. K., Gary, F., & Moorhead, J.	1994	Convenience sampling	Shelter for runaways	Nonurban area in southern North Central Florida	78
Nowhere to grow: Homeless and runaway adolescents and their families	Whitbeck, L. B., & Hoyt, D. R.	1999	Targeted sampling	Streets, shelters, drop-in centers	4 Midwestern States (Missouri, Iowa, Nebraska, Kansas)	602
Primary socialization theory: It all begins with the family	Whitbeck, L. B.	1999	Targeted sampling	Streets, shelters, drop-in centers	4 Midwestern States (Missouri, Iowa, Nebraska, Kansas)	257
Abusive family backgrounds and later victimization among runaway and homeless adolescents	Whitbeck, L. B., Hoyt, D. R., & Ackley, K. A.	1997a	Targeted sampling	Streets, shelters, drop-in centers	4 Midwestern States (Missouri, Iowa, Nebraska, Kansas)	108

(continued)

Article title	Authors	Date	Sampling procedure	Data collection setting	Region/city of data collection	Sample size
A risk-amplification model of victimization and depressive symptoms among runaway and homeless adolescents	Whitbeck, L. B., Hoyt, D. R., & Yoder, K. A.	1999	Targeted sampling	Streets, shelters, drop-in centers	4 Midwestern States (Missouri, Iowa, Nebraska, Kansas)	255
Depressive symptoms and co-occurring depressive symptoms, substance abuse, and conduct problems among runaway and homeless adolescents	Whitbeck, L. B., Hoyt, D. R., & Bao, W. N.	2000	Targeted sampling	Streets, shelters, drop-in centers	4 Midwestern States (Missouri, Iowa, Nebraska, Kansas)	602
Families of homeless and runaway adolescents: A comparison of parent/caretaker and adolescent perspectives on parenting, family violence, and adolescent conduct	Whitbeck, L. B., Hoyt, D. R., & Ackley, K. A.	1997b	Targeted sampling	Streets, shelters, drop-in centers	4 Midwestern States (Missouri, Iowa, Nebraska, Kansas)	120
A comparison of adaptive strategies and patterns of victimization among homeless adolescents and adults	Whitbeck, L. B., & Simons, R. L.	1993	Convenience sampling	Streets, shelters	Midwestern city	319 homeless adults, 156 homeless youth
Life on the streets: The victimization of runaway and homeless adolescents	Whitbeck, L. B., & Simons, R. L.	1990	Targeted sampling	Runaway and homeless youth either on the street or receiving services	Midwestern city	84
Minnesota's youth without homes: Minnesota statewide survey of persons without permanent shelter. Vol II: Unaccompanied youth	Wilder Research Center	2000	Targeted sampling	Emergency shelters, transitional housing programs, drop-in centers, street locations	Minnesota	114
A risk profile comparison of homeless youth involved in prostitution and homeless youth not involved	Yates, G. L., MacKenzie, R. G., Pennbridge, J., & Swofford, A.	1991	Convenience sampling	Outpatient free clinic	Los Angeles, CA	620
A risk profile comparison of runaway and non-runaway youth	Yates, G. L., MacKenzie, R., Pennbridge, J., & Cohen, E.	1988	Convenience sampling	First-time visit at ambulatory service	Los Angeles, CA	765
Comparing suicide attempters, suicide ideators, and nonsuicidal homeless and runaway	Yoder, K. A.	1999	Targeted sampling	Streets, shelters, drop-in centers	4 Midwestern States (Missouri, Iowa, Nebraska, Kansas)	527

adolescents						

(continued)

Article title	Authors	Date	Sampling procedure	Data collection setting	Region/city of data collection	Sample size
Suicidal behavior among homeless and runaway adolescents	Yoder, K. A., Hoyt, D. R., & Whitbeck, L. B.	1998	Targeted sampling	Streets, shelters, drop-in centers	4 Midwestern States (Missouri, Iowa, Nebraska, Kansas)	527
Sexual behavior, drug use, and AIDS knowledge among Midwestern runaways	Zimet, G. D., Sobo, E. J., Zimmerman, T., Jackson, J., Mortimer, J., Yanda, C. P., & Lazebnik, R.	1995	Convenience sampling	Shelters for runaways	Cleveland, OH	108

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