

HIV 13

Co-Lead Agencies:

Centers for Disease Control and Prevention Health Resources and Services Administration

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Goal: Prevent human immunodeficiency virus (HIV) infection and its related illness and death.

Introduction*

Healthy People 2010's two overarching goals are to increase quality and years of healthy life and to eliminate health disparities. This focus area identifies objectives to help achieve these goals through reducing the burden of HIV and acquired immunodeficiency syndrome (AIDS) on individuals and communities.

Since 1981, the HIV/AIDS epidemic has presented an unprecedented public health challenge. It has required an integrated approach to address the medical and behavioral science, sociocultural, economic, and political issues involved in preventing and treating this disease.

In the United States, the annual number of new HIV cases peaked in the mid-1980s and then declined, stabilizing in the early 1990s at about 40,000 new HIV infections per year. With the advent of highly active antiretroviral drug therapy in the mid-1990s, significant progress has been made in decreasing illness and death in HIV-infected persons in the United States. As a result, HIV-infected persons are living longer, healthier lives. Accordingly, the number of HIV-infected persons with a chronic infection continues to increase. At the end of 2003, an estimated 1,039,000 to 1,185,000 persons were living with HIV infection in the United States.

Meeting the treatment and prevention needs of this increasingly larger pool of chronically infected persons, especially HIV-positive low-income Americans, has become a priority for public health programs. A second challenge is to develop new and more effective strategies to prevent new infections and to detect undiscovered cases.

The overall goal of the focus area is to prevent HIV infection and its related illness and death. Since the late 1990s, trends in new HIV/AIDS diagnoses have remained consistent. To achieve further decreases in new HIV/AIDS diagnoses, the U.S. Department of Health and Human Services (HHS) announced a new initiative—Advancing HIV Prevention (AHP)—in 2003. The Health Resources and Services Administration (HRSA) and the Centers for Disease Control and Prevention (CDC) are active partners in the implementation of the AHP initiative.

The AHP initiative addresses the fact that one-fourth, or approximately 250,000 individuals of the more than 1 million HIV-infected persons in the United States, have no knowledge of their HIV status and consequently place themselves and others at risk of infection. The primary goal is to reduce HIV transmission. Three recent advances have informed this initiative:

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^{*} Unless otherwise noted, data referenced in this focus area come from Healthy People 2010 and can be located at http://wonder.cdc.gov/data2010. See the section on DATA2010 in the Technical Appendix for more information.

- Approval of a rapid HIV test.⁷
- Effective drug treatment that can be given early in the course of the infection to allow HIV-infected persons to live longer, healthier lives.
- Effective drug treatment that significantly reduces transmission of HIV from pregnant women to their babies.⁸

One component of this initiative is an effort to make HIV testing a part of routine medical care, including routine medical screening of pregnant women to reduce perinatal transmission. In addition, new models for diagnosing HIV infection outside medical settings are being implemented, and guidance is provided to encourage infected persons and their partners to reduce their high-risk behaviors to prevent new infections. Through the Ryan White Comprehensive AIDS Resources Emergency (CARE) Act program, HHS is providing HIV care and treatment to an estimated 531,000 low-income HIV-infected individuals, including pregnant women. One achievement in HIV prevention during the past decade has been the reduction in transmission of HIV from pregnant women to their babies, as indicated by the decline in perinatally acquired AIDS from about 1,000 cases in the early 1990s to 57 cases in 2003. An AHP strategy is to further reduce perinatal transmission.

Modifications to Objectives and Subobjectives

The following discussion highlights the modifications, including changes, additions, and deletions, to this focus area's objectives and subobjectives as a result of the midcourse review.

To reflect improvements in HIV/AIDS treatment, surveillance, and medical knowledge, modifications were made to 10 of the 18 objectives in this focus area. These modifications further explore improved ways of examining the HIV/AIDS epidemic. Two developmental objectives became measurable with the identification of a data source.

"Increase the proportion of sexually active persons who use condoms—males aged 18 to 49 years" (13-6b) was reworded to incorporate males aged 18 to 44 years to be consistent with the already measurable subobjective 13-6a for females aged 18 to 44 years and to coincide with the age of the sample in the data source, Survey of Men and Women 2002: The National Survey of Family Growth. This subobjective became measurable, and additional trend data are anticipated by the end of the decade.

Objective 13-16 was reworded to "increase the proportion of HIV-infected persons surviving more than 3 years after a diagnosis of AIDS." The objective became measurable because the CDC HIV/AIDS Surveillance System data accurately represent all States and Territories that report AIDS cases. The target is 88 percent, and the baseline is 83 percent of HIV-infected persons diagnosed with AIDS in 1998 were still living in 2002.

Three objectives and one subobjective (13-5, 13-15, 13-17a, and 13-18), which use the CDC HIV/AIDS Surveillance System as a data source, remained developmental, because not all States have in place confidential, name-based HIV/AIDS reporting systems and the data are not nationally representative. For this reason, AIDS case surveillance data are used as a surrogate for perinatal, adolescent, and HIV transmission. Consequently, these objectives were reworded to include the term HIV/AIDS instead of HIV infection. The new term more appropriately reflects the three categories of cases that refer to HIV infection: new diagnoses of HIV infection only, new diagnoses of HIV infection with later

AIDS diagnoses, and concurrent diagnoses of HIV infection and AIDS. Two additional subobjectives (13-13a and b) remained developmental, with data anticipated from the new CDC HIV Medical Monitoring Project Morbidity Monitoring Survey.

Objective 13-5 was reworded to "reduce the number of new cases of HIV/AIDS diagnosed among adolescents and adults." This objective remained developmental at the midcourse review with data anticipated by the end of the decade.

Objective 13-15 was retained as developmental and revised to "increase the proportion of new HIV infections diagnosed before progression to AIDS." Objective 13-17 was expanded to include two subobjectives: "reduce the number of new cases of perinatally acquired HIV/AIDS diagnosed each year" (13-17a) and "reduce the number of new cases of perinatally acquired AIDS" (13-17b). Subobjective 13-17a was retained as developmental. Subobjective 13-17b became measurable with a baseline of 82 new cases of perinatally acquired AIDS in 2002, and a target of 75 was set.

Objective 13-18, formerly objective 25-8, was reworded to "reduce the number of new cases of HIV/AIDS diagnosed in adolescent and young females aged 13 to 24 years that are associated with heterosexual contact." It also remained developmental pending reporting of HIV/AIDS cases by all States.

Two subobjectives for increasing the proportion of HIV-infected persons aged 13 years and older who receive testing, treatment, and prophylaxis consistent with current Public Health Service (PHS) treatment guidelines were retained: viral load testing (13-13a) and tuberculin skin testing (13-13b). These subobjectives remained developmental, with data anticipated from the HIV Medical Monitoring Project Morbidity Monitoring Survey.

As stated in *Healthy People 2010*: "Most developmental objectives have a potential data source with a reasonable expectation of data points by the year 2004 to facilitate setting 2010 targets in the mid-decade review. Developmental objectives with no baseline at the midcourse will be dropped." Accordingly, at the midcourse review, four developmental objectives were deleted because they lacked a data source: knowledge of serostatus (13-7); HIV/AIDS, sexually transmitted disease (STD), and tuberculosis (TB) education in State prisons (13-9); HIV counseling and testing in State prisons (13-10); and screening for STDs and immunization for hepatitis B (13-12). However, HHS and the agencies that serve as the leads for the Healthy People 2010 initiative will consider ways to ensure these public health issues retain prominence despite their current lack of data.

Progress Toward Healthy People 2010 Targets

The following discussion highlights objectives that met or exceeded their 2010 targets; moved toward the targets, demonstrated no change, or moved away from the targets; and those that lacked data to assess progress. Progress is illustrated in the Progress Quotient bar chart (see Figure 13-1), which displays the percent of targeted change achieved for objectives and subobjectives with sufficient data to assess progress.

At the time of the midcourse review, progress had been made toward achieving the objectives and targets set for 2010. Data were available to measure the progress of 14 objectives and subobjectives. One subobjective exceeded its target. Ten objectives and subobjectives moved toward their targets, one objective was static, while one objective and one subobjective moved away from their targets.

Objectives that met or exceeded their targets. The target for the number of new cases of perinatally acquired AIDS (13-17b) was exceeded. New cases declined from a baseline of 82 new cases in 2002 to 57 cases in 2003, surpassing the target of 75 cases. Prevention of perinatal HIV transmission requires routine HIV screening of all pregnant women and the use of appropriate antiretroviral and obstetrical interventions that begin during the pregnancy and continue through the first few months of the infant's life. Together, these actions can reduce the rate for mother-to-child HIV transmission to 2 percent or lower. HRSA continually monitors the number and proportion of babies tested who are born to HIV-positive mothers enrolled in programs funded under the Ryan White CARE Act, the number of children receiving care and treatment, the number of pregnant HIV-positive women in care, and the number of pregnant women on prophylaxis. The reduction of babies born infected with HIV is also apparent in CARE Act programs. This decline is attributable, in part, to the emphasis placed on testing high-risk women of child-bearing age, enrolling those women testing positive into primary care, and ensuring that pregnant women are provided with appropriate primary care for therapy and prenatal care through CARE Act providers.

HHS plans to issue revised recommendations through CDC for HIV screening of adults, adolescents, and pregnant women in health care settings. Incorporating routine HIV testing into the standard battery of tests related to pregnancy has the potential to increase the proportion of pregnant women who are tested for HIV.¹³ Accordingly, HHS recommends that HIV testing be a routine screening procedure. Also recommended is implementing rapid HIV testing in postnatal settings for infants of women not tested prenatally.¹⁴ In an effort to further increase the number of pregnant women who get tested for HIV, many States have implemented opt-out perinatal HIV testing for all pregnant women whereby HIV screening is included as part of routine medical screening, unless the woman specifically declines an HIV test.

Objectives that moved toward their targets. Ten objectives and subobjectives moved toward their targets.

A reduction in new AIDS cases per 100,000 persons aged 13 years and older (13-1) occurred—from 19.5 cases per 100,000 in 1998 to 17.6 cases per 100,000 in 2003. The 2010 target is 1 case per 100,000. Between 1998 and 2003, a decline was observed in AIDS cases among men aged 13 years and older who have sex with men (13-2), and this objective achieved 2 percent of the targeted change. During the same period, new AIDS cases among persons aged 13 years and older who inject drugs (13-3) declined, achieving 99 percent of the targeted change. A reduction occurred in new cases of AIDS among adolescent and adult men who have sex with men and inject drugs (13-4), and this objective achieved 55 percent of the targeted change. Condom use in the partners of unmarried females aged 18 to 44 years (13-6a) achieved 30 percent of the targeted change between 1995 and 2002. To further improve monitoring of behaviors among persons at high risk for HIV, CDC has implemented a national HIV behavioral surveillance system. ¹⁵

HIV testing in tuberculosis patients aged 25 to 44 years (13-11) increased, achieving 20 percent of the targeted change.

Three of four measurable subobjectives related to the proportion of HIV-infected adolescents and adults who receive testing, treatment, and prophylaxis consistent with current PHS treatment guidelines (13-13) demonstrated improvement. Use of any antiretroviral therapy (13-13c) demonstrated 33 percent of the targeted change, highly active antiretroviral therapy (13-13d) achieved 51 percent of the targeted change, and *Mycobacterium avium* complex prophylaxis achieved 29 percent of the targeted change (13-13f).

These subobjectives reflect complex dynamics in HIV disease and treatments. Not all patients respond equally well to antiretroviral therapy. For many patients, adherence to difficult treatment regimens is also a barrier to sustained viral load suppression. The increasing problem of drug resistance, coupled with the use of CD4 cell counts that are used as measurement criteria, adds to the complicated treatment decision process. Treatment has also affected the need for prophylaxis against opportunistic infections. Some scenarios are difficult to capture in a study or surveillance system, and the result is misleading data. Examples include patients with increased CD4 cells due to highly active antiretroviral therapy (HAART) who no longer meet the recommendation for *Pneumocystis carinii* pneumonia prophylaxis and patients who stop HAART due to adverse side effects or who use an individually tailored drug therapy not specified in the PHS treatment guidelines.

To assist HIV clinicians in providing clinical care consistent with PHS guidelines, the AIDS Education and Training Center program implements training programs, documents, and mentoring services, while the Warmline service advises and provides information to clinicians on PHS guidelines and antiretroviral management of HIV.^{16, 17} In addition, HRSA grantees provide HAART and prophylaxis therapies to clients in CARE Act-funded programs through the AIDS Drug Assistance Program (ADAP). The results are measured by the number of persons in ADAP, the number of persons receiving HAART, demographics of the individuals served through ADAP, and the proportion of eligible people in care receiving antiretrovirals.¹⁸

Deaths from HIV infection (13-14) decreased—moving from a baseline of 5.3 deaths directly attributable to HIV per 100,000 persons in 1999 to 4.9 deaths per 100,000 persons in 2002, achieving 9 percent of the targeted change.

Objectives that demonstrated no change. Survival of persons more than 3 years after diagnosis of AIDS (13-16) remained static at 83 percent between the 1998 baseline and 1999.

Objectives that moved away from their targets. One objective and one subobjective moved away from their targets at the time of the midcourse review. Between 1997 and 2003, HIV counseling and education for persons in substance abuse treatment programs (13-8) decreased from 58 percent to 57 percent, moving away from the 2010 target of 70 percent. *P. carinii* pneumonia prophylaxis in HIV-infected patients (13-13e) declined from 80 percent in 1997 to 70 percent in 2002 and moved away from the target of 95 percent. One reason for this trend away from the target is that the effectiveness of HAART therapy given at an earlier stage in the disease has dramatically reduced the need for *P. carinii* pneumonia prophylaxis.

Objectives that could not be assessed. Data to assess progress toward their targets were not available for new HIV/AIDS cases (13-5), condom use among sexually active unmarried males (13-6b), testing according to guidelines (13-13a and b), HIV diagnosis prior to AIDS (13-15), perinatally acquired HIV/AIDS (13-17a), and heterosexually transmitted HIV/AIDS in women (13-18).

Data are expected by the end of the decade for the following objectives and subobjectives: new HIV/AIDS cases (13-5), condom use among sexually active unmarried males aged 18 to 44 years (13-6b), treatment of individuals with HIV according to guidelines (including viral load and TB skin testing [13-13a and b]), HIV diagnosis prior to AIDS (13-15), perinatally acquired HIV/AIDS (13-17a), and heterosexually transmitted HIV/AIDS in women (13-18). With respect to objective 13-15, individuals are

being offered and provided the opportunity to receive counseling and testing throughout selected CARE Act sites.¹⁹ Data are being collected for the number of persons receiving counseling and testing, the number of persons testing positive, and the number of persons returning for their results.

The CARE Act programs primarily test individuals at clinical sites and refer those persons with new infections to clinical care. Data have shown that persons tested at clinical sites are more likely to return for their results than those tested elsewhere, thus increasing the opportunity to receive referral for clinical care and decreasing the interval between HIV infection and AIDS diagnosis.

Progress Toward Elimination of Health Disparities

The following discussion highlights progress toward the elimination of health disparities. The disparities are illustrated in the Disparities Table (see Figure 13-2), which displays information about disparities among select populations for which data were available for assessment.

Data were available to assess disparities for six of the HIV-related objectives and subobjectives. Among racial and ethnic populations, the black non-Hispanic population had the best rates for condom use (13-6a and b). The American Indian or Alaska Native population had the best rate for HIV testing of TB patients (13-11). This group was almost twice as likely to receive testing as was the Asian or Pacific Islander population and 50 percent more likely to be tested than persons of Hispanic origin. Although the testing rates increased among all racial and ethnic populations between 1998 and 2002, the disparities between the American Indian or Alaska Native population and the Asian or Pacific Islander and Hispanic population increased at a much faster pace than the testing rates of the Asian or Pacific Islander and Hispanic populations.

The Asian or Pacific Islander population had the best rates of new cases of AIDS per 100,000 persons aged 13 years and older (13-1) and of HIV-infected persons surviving 3 or more years after AIDS diagnosis (13-16). Significant disparities in new cases of AIDS occurred in 2003. The black non-Hispanic population had a rate that was 15 times the rate of the Asian or Pacific Islander (best) population. The rate for the Hispanic population was more than five times the best rate, and the rate for the American Indian or Alaska Native population was twice the best rate. Between 1998 and 2003, disparities between the black non-Hispanic and Hispanic populations and the Asian or Pacific Islander population decreased by more than 100 percentage points. The disparity between the white non-Hispanic and the Asian or Pacific Islander population decreased nearly 45 percentage points. The white non-Hispanic population had the best rate for HIV-infection deaths (13-14). The rate of the black non-Hispanic population was 10 times the white non-Hispanic rate, while the rate of the Hispanic population was almost three times as great as the white non-Hispanic rate. The disparity between these two groups decreased between 1999 and 2002.

Women had better rates for new AIDS cases (13-1) and HIV-infection deaths (13-14) than men. The rates for men were more than double those for women. Between 1999 and 2002, the disparity between males and females in HIV-infection deaths declined by about 30 percent. HIV-infected men had better rates for surviving 3 or more years after AIDS diagnosis (13-16) than had HIV-infected women.

Best group rates for varying objectives showed a broad distribution. Persons with at least some college had the best rates for condom use (13-6a and b) and HIV-infection deaths (13-14). The HIV-infection death rates for persons with less than a high school education and high school graduates were more than

three times the rate of persons with at least some college. While HIV-infection death rates declined for all education groups between 1999 and 2002, the disparities between the group with at least some college and the other education groups increased. This increase occurred because the rate of the population with at least some college declined at a faster pace than the rates of the other education groups.

Opportunities and Challenges

Continued progress toward the AIDS-related targets can be achieved in the following ways:

- Early diagnosis and delaying the onset of AIDS through medical treatment among persons infected by HIV.
- Expanding HIV testing so that infected persons are diagnosed earlier.
- Making HIV testing a routine part of medical care.
- Identifying new methods and venues to access and test infected persons to improve early diagnosis.²⁰

CD4 count and viral load are two indicators of the progression of HIV that are used to determine treatment of HIV-infected persons. CARE Act programs ensure that these two factors will be tested among new HIV-infected clients and that quality management programs will be implemented in primary care service delivery. Both of these requirements serve to ensure that individuals are receiving early diagnosis and are enrolled in appropriate medical care and treatment that will, in turn, increase survival rates.

The AHP initiative seeks to reduce barriers to early diagnosis of HIV infection as well as increase access to quality medical care, treatment, and ongoing prevention services for persons with HIV. It emphasizes the use of public health approaches already proven effective in reducing new infections and the spread of disease.²¹

The AHP initiative also expands current HIV prevention strategies and models other approaches that have proven efficacious in preventing infectious diseases. Demonstration projects are under way to test the feasibility of the strategies and will provide detailed information to implement the initiative's four strategies: making HIV testing a routine part of medical care, creating new models for diagnosing HIV infections outside medical settings, preventing new infections by working with persons diagnosed with HIV and their partners, and further decreasing mother-to-child transmission by incorporating HIV testing among routine prenatal tests. ²²

The demonstration projects for the *Implementation of Rapid HIV Testing in Historically Black Colleges and Universities and Alternative Venues and Populations*²³ address the first two strategies. These projects will demonstrate new models for diagnosing HIV infection through greater access to rapid HIV testing, along with prevention and care services for persons diagnosed with HIV. New models are being tested in sites that serve migrant and seasonal farm workers, communities with transgender persons, communities with members of the American Indian or Alaska Native population, and historically black colleges and universities. In addition, the Social Networks Demonstration Project, which investigates the feasibility of using social network strategies to reach persons at high risk for HIV infection and to provide them with HIV counseling, testing, and referral services, focuses on the second strategy to create new models for diagnosing HIV infection outside medical settings.²⁴

CDC recommends that all States and Territories adopt confidential, name-based surveillance systems to report HIV infections. Such HIV reporting has been shown to be accurate and reliable. Studies have found that HIV surveillance conducted using name-based patient identifiers produces better data than coded patient identifier-based surveillance systems.²⁵ Currently, 45 State and local health departments have adopted name-based reporting.

Interventions intended to change risky behavior and improve the health of the persons served are a major component of HIV prevention efforts sponsored through HHS. Among these programs are the *Compendium of HIV Prevention Interventions with Evidence of Effectiveness*²⁶ and the *Diffusion of Effective Behavioral Interventions* (DEBI) project.²⁷ The compendium offers science-based interventions that work to prevent HIV transmission. All interventions selected for the compendium came from behavioral or social studies that had both intervention and control/comparison groups and positive results for behavioral or health outcomes. It is also the source of certain interventions for the DEBI project, which focuses on moving prevention strategies proven effective into prevention practice by diffusing evidence-based individual-, group-, and community-level HIV prevention interventions to health departments and community-based organizations nationwide.

Behavioral interventions offer opportunity for progress and are being diffused by HHS through CDC and health departments.²⁸ These interventions include the following:

- The Sisters Informing Sisters about Topics on AIDS project specifically targets sexually active African American women. This group-level gender- and culturally relevant intervention is designed to increase condom use among the partners of African American women.
- Many Men, Many Voices is a seven-session group-level STD/HIV prevention intervention for gay men of color. The intervention addresses behavioral influencing factors specific to gay men of color, including sociocultural norms, sexual relationship dynamics, and the social influences of racism and homophobia.
- VOICES/VOCES²⁹ is a single-session group-level video-based intervention designed to increase condom use among heterosexual African American and Hispanic/Latino men and women who visit STD clinics. Participants, grouped by gender and ethnicity, view an English or Spanish video on HIV risk behaviors and condom negotiation, take part in a facilitated discussion on barriers to and negotiation of condom use, and receive samples of condoms.
- Healthy Relationships³⁰ is a five-session small-group intervention for men and women living with HIV/AIDS. Using Social Cognitive Theory, which states that persons learn by observing other people practice a new behavior, the intervention focuses on developing skills and building self-efficacy and positive expectations about new behaviors through modeling behaviors and practicing new skills.

HHS addresses behavioral and other preventive issues related to HIV/AIDS through CDC and primary care issues through HRSA. HRSA's HIV/AIDS Bureau's focus is on the provision of primary care services to individuals diagnosed with HIV who are uninsured or underinsured. HRSA also implements programs in conjunction with CDC and through its other programs that emphasize prevention. The projects include the following:³¹

 Prevention for HIV Infected Persons in Primary Care Settings is designed to evaluate different models of providing prevention interventions for HIV-positive patients in clinical care settings.

- Outreach, Care, and Prevention to Engage HIV Seropositive Young MSM of Color is designed to develop and evaluate the innovative service models for reaching HIV-infected young men who have sex with men but who are not engaged in clinical care and linking them to appropriate clinical, supportive, and preventive services.
- HHS's Prevention with Positives guidelines is integrated into AIDS Education and Training Center (AETC) training and is intended to prioritize and integrate prevention with positive clinical guidelines into AETC provider training.
- National Perinatal HIV Consultation and Referral Services (Perinatal Hotline) provides advice from HIV experts and answers on indications and interpretations of HIV testing, consultation on treating HIV-infected pregnant women and their infants, and a referral service to connect HIVinfected pregnant women and exposed infants to experienced HIV providers.

Emerging Issues

Continuing efforts are needed to address the racial and ethnic disparities that persist in the areas of HIV and AIDS. HHS provides support to several initiatives aimed at reducing these disparities.

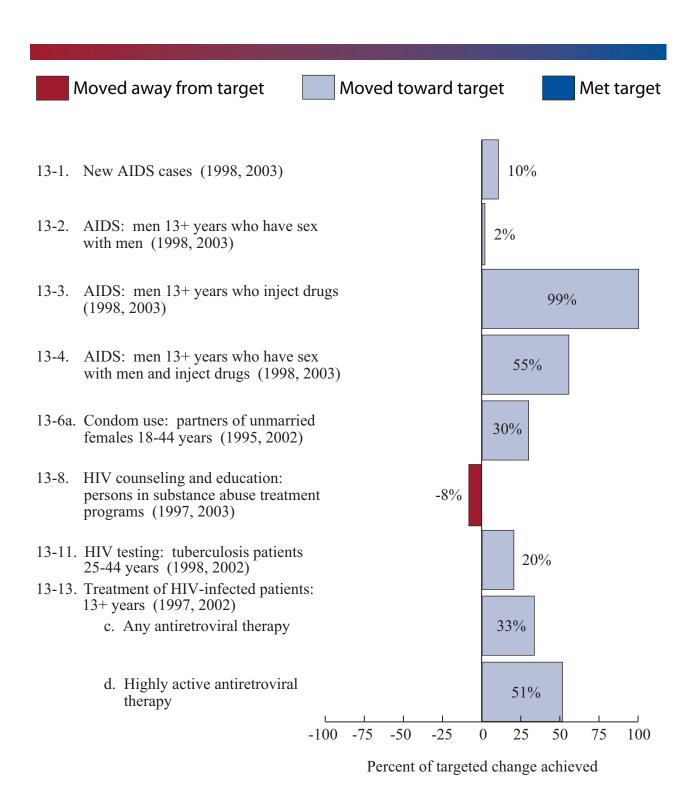
Through CDC, HHS is working to increase the proportion of HIV-infected persons who know about their infection by making testing routine in medical care settings and expanding testing in groups that may not have been tested previously.³²

Through HRSA, HHS is addressing these disparities by enhancing access to medications and care across the country. Individuals served through CARE Act-supported programs are from a disproportionately affected racial or ethnic population, primarily African American and Hispanic populations.²¹

Finally, the HHS-sponsored Minority AIDS Initiative supports programs that enhance HIV/AIDS efforts, which directly benefit these communities in three broad funding categories:³³

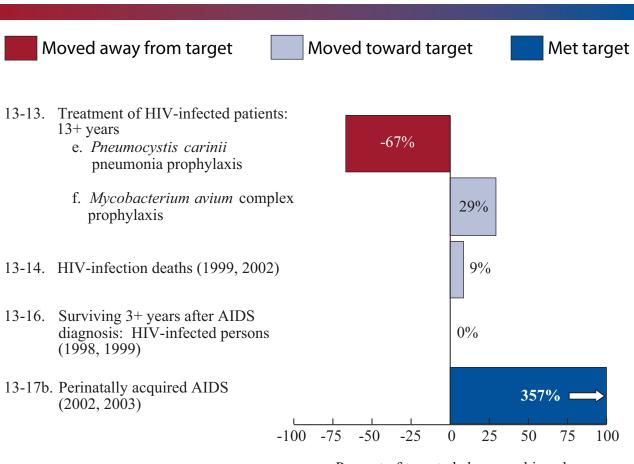
- Initiatives to increase access to prevention, care, and treatment services.
- Technical assistance, health system infrastructure support, and organizational capacity building.
- Building of stronger community linkages to address the HIV prevention and health care needs of specific populations.

Figure 13-1. Progress Quotient Chart for Focus Area 13: HIV



See notes at end of chart. (continued)

Figure 13-1. (continued)



Percent of targeted change achieved

Notes: Tracking data for objectives 13-5, 13-6b, 13-13a and b, 13-15, 13-17a, and 13-18 are unavailable. Objectives 13-7, 13-9, 13-10, and 13-12 were deleted at the midcourse.

Years in parentheses represent the baseline data year and the most recent data year used to compute the percent of the Healthy People 2010 target achieved.

Percent of targeted change achieved = $\left(\frac{\text{Most recent value} - \text{baseline value}}{\text{Year 2010 target} - \text{baseline value}}\right) \times 100$

Figure 13-2. Disparities Table for Focus Area 13: HIV

Disparities from the best group rate for each characteristic at the most recent data point and changes in disparity from the baseline to the most recent data point.

		Characteristics																		
			Rac	e and	ethni	city			Gen	Gender Education				Income				Loc	ation	
Population-based objectives	American Indian or Alaska Native	Asian	Native Hawaiian or other Pacific Islander	Two or more races	Hispanic or Latino	Black non-Hispanic	White non-Hispanic	Summary index	Female	Male	Less than high school	High school graduate	At least some college	Summary index	Poor	Near poor	Middle/high income	Summary index	Urban or metropolitan	Rural or nonmetropolitan
13-1. New AIDS cases (1998, 2003) †		E	3 ¹		†	†	Ţ	← ‡	В	↓										
13-6a. Condom use: partners of unmarried females 18-44 years (1995, 2002) [†]						В							В				В		В	
13-6b. Condom use: males 18-44 years (2002) [†]						В							В				В		В	
13-11. HIV testing: tuberculosis patients 25-44 years (1998, 2002) [†]	B ² ₩	1	1		1			1		В										
13-14. HIV-infection deaths (1999, 2002) *			b ¹		1		В		В	1	↑ ↑	1	В	11						
13-16. Surviving 3+ years after AIDS diagnosis: HIV-infected persons (1998, 1999) [†]	1	E	3 ¹					1	3	B ³										

Notes: Data for objectives 13-2 through 13-5, 13-8, 13-13a through f, 13-15, 13-17a and b, and 13-18 are unavailable or not applicable. Objectives 13-7, 13-9, 13-10, and 13-12 were deleted at the midcourse.

Years in parentheses represent the baseline data year and the most recent data year (if available).

Disparity from the best group rate is defined as the percent difference between the best group rate and each of the other group rates for a characteristic (for example, race and ethnicity). The summary index is the average of these percent differences for a characteristic. Change in disparity is estimated by subtracting the disparity at baseline from the disparity at the most recent data point. Change in the summary index is estimated by subtracting the summary index at baseline from the summary index at the most recent data point. See Technical Appendix for more information.

The best group rate at the most recent data point. B The group specified cl	with the best rate for haracteristic.	b	Most favorable group rate characteristic, but reliabil				Best group rate reliability criterion not met.
			Percent difference fro	m the	e best group rate		
	0 percent or not significant		10-49 percent		50-99 percent		100 percent or more
			Increase in di	sparit	y (percentage points)		
Changes in disparity over time are shown when the change is greate equal to 10 percentage points and statistically significant, or when the	change is	↑	10-49	$\uparrow \uparrow$	50-99	↑ ↑↑	100 or more
greater than or equal to 10 percentage points and estimates of variabil	lity were not	Decrease in disparity (percentage points)					
available.		\downarrow	10-49	$\downarrow \downarrow$	50-99	$\mathop{\downarrow\downarrow}_{\downarrow}$	100 or more
Availability of data. Data not av	ailable.				Characteristic not selected	l for th	nis objective.

^{*} The variability of best group rates was assessed, and disparities of \geq 10% are statistically significant at the 0.05 level. Changes in disparity over time, noted with arrows, are statistically significant at the 0.05 level. See Technical Appendix.

[†] Measures of variability were not available. Thus, the variability of best group rates was not assessed, and the statistical significance of disparities and changes in disparity over time could not be tested. See Technical Appendix.

Data are for Asians or Pacific Islanders.

² Disparity declined substantially for American Indians or Alaska Natives relative to black non-Hispanics, the group with the best rate at baseline.

³ Baseline data only.

Objectives and Subobjectives for Focus Area 13: HIV

Goal: Prevent human immunodeficiency virus (HIV) infection and its related illness and death.

As a result of the Healthy People 2010 Midcourse Review, changes were made to the Healthy People 2010 objectives and subobjectives. These changes are specific to the following situations:

- Changes in the wording of an objective to more accurately describe what is being measured.
- Changes to reflect a different data source or new science.
- Changes resulting from the establishment of a baseline and a target (that is, when a formerly developmental objective or subobjective became measurable).
- Deletion of an objective or subobjective that lacked a data source.
- Correction of errors and omissions in *Healthy People 2010*.

Revised baselines and targets for measurable objectives and subobjectives do not fall into any of the above categories and, thus, are not considered a midcourse review change.¹

When changes were made to an objective, three sections are displayed:

- 1. In the Original Objective section, the objective as published in *Healthy People 2010* in 2000 is shown.
- 2. In the Objective With Revisions section, strikethrough indicates text deleted, and underlining is used to show new text.
- 3. In the Revised Objective section, the objective appears as revised as a result of the midcourse review.

Details of the objectives and subobjectives in this focus area, including any changes made at the midcourse, appear on the following pages.

¹ See Technical Appendix for more information on baseline and target revisions.

NO CHANGE IN OBJECTIVE

13-1. Reduce AIDS among adolescents and adults.

Target: 1.0 new case per 100,000 persons.

Baseline: 19.5 cases of AIDS per 100,000 persons aged 13 years and older in

1998. Data are estimated; adjusted for delays in reporting.

Target setting method: Better than the best.

Data source: HIV/AIDS Surveillance System, CDC, NCHSTP.

NO CHANGE IN OBJECTIVE

13-2. Reduce the number of new AIDS cases among adolescent and adult men who have sex with men.

Target: 13,385 new cases.

Baseline: 17,847 new cases of AIDS in 1998 among males aged 13 years and older. Data are estimated; risk redistributed; adjusted for delays in reporting.

Target setting method: 25 percent improvement.

Data source: HIV/AIDS Surveillance System, CDC, NCHSTP.

NO CHANGE IN OBJECTIVE

13-3. Reduce the number of new AIDS cases among females and males who inject drugs.

Target: 9,075 cases.

Baseline: 12,099 new cases of AIDS among injection drug users aged 13 years and older (females, 3,667; males, 8,432) in 1998. Data are point estimates; risk redistributed; adjusted for delays in reporting.

Target setting method: 25 percent improvement.

Data source: HIV/AIDS Surveillance System, CDC, NCHSTP.

NO CHANGE IN OBJECTIVE

13-4. Reduce the number of new AIDS cases among adolescent and adult men who have sex with men and inject drugs.

Target: 1,592 cases.

Baseline: 2,122 new cases of AIDS among males aged 13 years and older in 1998.

Data are point estimates; risk redistributed; adjusted for delays in reporting.

Target setting method: 25 percent improvement.

Data source: HIV/AIDS Surveillance System, CDC, NCHSTP.

ORIGINAL OBJECTIVE

13-5. (Developmental) Reduce the number of cases of HIV infection among adolescents and adults.

Potential data source: HIV/AIDS Surveillance System, CDC, NCHSTP.

OBJECTIVE WITH REVISIONS

13-5. (Developmental) Reduce the number of <u>new</u> cases of HIV/AIDS diagnosed infection among adolescents and adults.

Potential data source: HIV/AIDS Surveillance System, CDC, NCHSTP.

REVISED OBJECTIVE

13-5. (Developmental) Reduce the number of new cases of HIV/AIDS diagnosed among adolescents and adults.

Potential data source: HIV/AIDS Surveillance System, CDC, NCHSTP.

ORIGINAL OBJECTIVE

13-6. Increase the proportion of sexually active persons who use condoms.

Target and baseline:

Objective	Increase in Sexually Active Persons Using	1995	2010	
	Condoms	Baseline Targe		
		Percent		
13-6a.	Females aged 18 to 44 years	23	50	
13-6b.	Males aged 18 to 49 years	Developmental		

ORIGINAL OBJECTIVE (continued)

Target setting method: Better than the best.

Data source: National Survey of Family Growth (NSFG), CDC, NCHS.

OBJECTIVE WITH REVISIONS

13-6. Increase the proportion of sexually active persons who use condoms.

Target and baseline:

Objective	Increase in Sexually Active Persons Using Who Use Condoms	1995 Baseline (unless noted)	2010 Target	
		Percent		
13-6a.	Unmarried females aged 18 to 44 years	23	50	
13-6b.	Unmarried males aged 18 to 494 years	42 (2002)	<u>54</u>	

Target setting method: Better than the best.

Data source: National Survey of Family Growth (NSFG), CDC, NCHS.

REVISED OBJECTIVE

13-6. Increase the proportion of sexually active persons who use condoms.

Target and baseline:

Objective	Increase in Sexually Active Persons Who Use Condoms	1995 Baseline	2010 Target	
	OSE CONDOMS	(unless noted)	rarget	
		Percent		
13-6a.	Unmarried females aged 18 to 44 years	23	50	
13-6b.	Unmarried males aged 18 to 44 years	42 (2002)	54	

Target setting method: Better than the best.

Data source: National Survey of Family Growth (NSFG), CDC, NCHS.

OBJECTIVE DELETED

13-7. (Objective deleted due to lack of data source) (Developmental) Increase the number of HIV-positive persons who know their serostatus.

NO CHANGE IN OBJECTIVE

13-8. Increase the proportion of substance abuse treatment facilities that offer HIV/AIDS education, counseling, and support.

Target: 70 percent.

Baseline: 58 percent of substance abuse treatment facilities offered HIV/AIDS

education, counseling, and support in 1997.

Target setting method: 21 percent improvement.

Data source: Uniform Facility Data Set (UFDS), SAMHSA.

OBJECTIVE DELETED

13-9. (Objective deleted due to lack of data source) (Developmental) Increase the number of State prison systems that provide comprehensive HIV/AIDS, sexually transmitted diseases, and tuberculosis (TB) education.

OBJECTIVE DELETED

13-10. (Objective deleted due to lack of data source) (Developmental) Increase the proportion of inmates in State prison systems who receive voluntary HIV counseling and testing during incarceration.

NO CHANGE IN OBJECTIVE

13-11. Increase the proportion of adults with tuberculosis (TB) who have been tested for HIV.

Target: 85 percent.

Baseline: 55 percent of adults aged 25 to 44 years with TB were tested for HIV in

1998.

Target setting method: Better than the best.

Data source: National TB Surveillance System, CDC, DTBE.

OBJECTIVE DELETED

13-12. (Objective deleted due to lack of data source) (Developmental) Increase the proportion of adults in publicly funded HIV counseling and testing sites who are screened for common bacterial sexually transmitted diseases (STDs) (chlamydia, gonorrhea, and syphilis) and are immunized against hepatitis B virus.

NO CHANGE IN OBJECTIVE

13-13. Increase the proportion of HIV-infected adolescents and adults who receive testing, treatment, and prophylaxis consistent with current Public Health Service treatment guidelines.

Target and baseline:

Objective	Increase in HIV-Infected Persons Aged 13 Years and Older Receiving Testing, Treatment, and Prophylaxis Consistent With Current Public Health Service Guidelines	1997 Baseline	2010 Target	
		Percent		
	Testing			
13-13a.	Viral load testing	Developmental		
13-13b.	Tuberculin skin testing (TST)	Developmental		
	Treatment			
13-13c.	Any antiretroviral therapy	80	95	
13-13d.	Highly active antiretroviral therapy (HAART)	40	95	
	Prophylaxis			
13-13e.	Pneumocystis carinii pneumonia (PCP) prophylaxis	80	95	
13-13f.	Mycobacterium avium complex (MAC) prophylaxis	44 95		

Note: Data from 11 cities and 9 States.

Target setting method: An improvement to the same percentage as that projected for Pneumocystis carinii pneumonia prophylaxis.

Data source: Adult Spectrum of Disease (ASD) Surveillance Project, CDC, NCHSTP.

NO CHANGE IN OBJECTIVE (Data updated and footnoted)

13-14. Reduce deaths from HIV infection.

Target: 0.7 deaths per 100,000 persons.

Baseline: 5.31 deaths from HIV infection per 100,000 persons in 19991 (age adjusted to the year 2000 population).

Target setting method: Better than the best.

NO CHANGE IN OBJECTIVE (continued) (Data updated and footnoted)

Data source: National Vital Statistics System, CDC, NCHS.

¹ Baseline and baseline year revised from 4.9 and 1998 after November 2000 publication.

ORIGINAL OBJECTIVE

13-15. (Developmental) Extend the interval of time between an initial diagnosis of HIV infection and AIDS diagnosis in order to increase years of life of an individual infected with HIV.

Potential data source: HIV/AIDS Surveillance System, CDC, NCHSTP.

OBJECTIVE WITH REVISIONS

13-15. (Developmental)Extend the interval of time beween an initial diagnosis of Increase the proportion of new HIV infections and AIDS diagnosised in order to increase years of life of an individual infected with HIV before progression to AIDS.

Potential data source: HIV/AIDS Surveillance System, CDC, NCHSTP.

REVISED OBJECTIVE

13-15. (Developmental) Increase the proportion of new HIV infections diagnosed before progression to AIDS.

Potential data source: HIV/AIDS Surveillance System, CDC, NCHSTP.

ORIGINAL OBJECTIVE

13-16. (Developmental) Increase years of life of an HIV-infected person by extending the interval of time between an AIDS diagnosis and death.

Potential data source: HIV/AIDS Surveillance System, CDC, NCHSTP.

OBJECTIVE WITH REVISIONS

13-16. (Developmental) Increase years of life of an the proportion of HIV-infected persons by extending the interval of time between an AIDS diagnosis and deathsurviving more than 3 years after a diagnosis of AIDS.

Target: 88 percent.

Baseline: 83 percent of HIV-infected persons diagnosed with AIDS in 1998 were still

living in 2002.

OBJECTIVE WITH REVISIONS (continued)

Target setting method: Better than the best.

Potential dData source: HIV/AIDS Surveillance System, CDC, NCHSTP.

REVISED OBJECTIVE

13-16. Increase the proportion of HIV-infected persons surviving more than 3 years after a diagnosis of AIDS.

Target: 88 percent.

Baseline: 83 percent of HIV-infected persons diagnosed with AIDS in 1998 were still

living in 2002.

Target setting method: Better than the best.

Data source: HIV/AIDS Surveillance System, CDC, NCHSTP.

ORIGINAL OBJECTIVE

13-17. (Developmental) Reduce new cases of perinatally acquired HIV infection.

Potential data source: HIV/AIDS Surveillance System, CDC, NCHSTP.

OBJECTIVE WITH REVISIONS

13-17. (Developmental) Reduce the number of new cases of perinatally acquired HIV/ AIDS diagnosed each year and perinatally acquired AIDS infection.

Target and baseline:

Objective	Reduction in the Number of New Cases of Perinatally Acquired HIV/AIDS Diagnosed Each Year and Perinatally Acquired AIDS	2002 Baseline	2010 Target
		Number of	f Cases
<u>13-17a.</u>	Perinatally acquired HIV/AIDS diagnosed each year	Developmental	
<u>13-17b.</u>	Perinatally acquired AIDS	<u>82</u>	<u>75</u>

Target setting method: For 13-17a, 8 percent improvement; for 13-17b, consistent with Government Performance and Results Act (GPRA) goal (21 percent improvement).

Potential dData source: HIV/AIDS Surveillance System, CDC, NCHSTP.

REVISED OBJECTIVE

13-17. Reduce the number of new cases of perinatally acquired HIV/AIDS diagnosed each year and perinatally acquired AIDS.

Target and baseline:

Objective	Reduction in the Number of New Cases of Perinatally Acquired HIV/AIDS Diagnosed Each Year and Perinatally Acquired AIDS	2002 Baseline	2010 Target	
		Number of Cases		
13-17a.	Perinatally acquired HIV/AIDS diagnosed each year	Developmental		
13-17b.	Perinatally acquired AIDS	82	75	

Target setting method: For 13-17a, 8 percent improvement; for 13-17b, consistent with Government Performance and Results Act (GPRA) goal (21 percent improvement).

Data source: HIV/AIDS Surveillance System, CDC, NCHSTP.

ORIGINAL OBJECTIVE

13-18. Originally Objective 25-8. (This objective has been moved from Focus Area 25 to Focus Area 13.)

(Developmental) Reduce HIV infections in adolescent and young adult females aged 13 to 24 years that are associated with heterosexual contact.

Potential data source: HIV/AIDS Surveillance System, CDC, NCHSTP.

OBJECTIVE WITH REVISIONS (As moved from Focus Area 25)

13-18. <u>25-18.</u> (Objective moved from 25-8 in Sexually Transmitted Diseases to Focus Area 13 as objective 13-18.)

(Developmental) Reduce the number of new cases of HIV/AIDS diagnosed in adolescent and young adult females aged 13 to 24 years that are associated with heterosexual contact.

Potential data source: HIV/AIDS Surveillance System, CDC, NCHSTP.

REVISED OBJECTIVE

13-18. (Developmental) Reduce the number of new cases of HIV/AIDS diagnosed in adolescent and young adult females aged 13 to 24 years that are associated with heterosexual contact.

Potential data source: HIV/AIDS Surveillance System, CDC, NCHSTP.

References

- ¹ Karon, J.M., et al. HIV in the United States at the turn of the century: An epidemic in transition. *American Journal of Public Health* 91:1060–1068, 2001.
- ² Lee, L.M., et al. Survival after AIDS diagnosis in adolescents and adults during the treatment era, United States, 1984–1997. *Journal of the American Medical Association* 285:1308–1315, 2001.
- ³ Centers for Disease Control and Prevention (CDC). *HIV/AIDS Surveillance Report, 2004*. Vol. 16. Atlanta, GA: U.S. Department of Health and Human Services, CDC, 2005.
- ⁴ Glynn, M., and Rhodes, P. *Estimated HIV prevalence in the United States at the end of 2003*. Presented at the 2005 National HIV Prevention Conference, Atlanta, GA, June 12–15, 2005. [Abstract #595.]
- ⁵ CDC. Advancing HIV Prevention: New strategies for a changing epidemic. *Morbidity and Mortality Weekly Report* 52:329–332, 2003.
- ⁶ More information available at www.cdc.gov/mmwr/pdf/wk/mm5215.pdf; accessed October 31, 2006.
- ⁷ CDC. Notice to readers: Approval of a new rapid test for HIV antibody. *Morbidity and Mortality Weekly Report* 51(46):1051–1052, 2002.
- ⁸ Cooper, E.R., et al. Combination antiretroviral strategies for the treatment of pregnant HIV-1-infected women and prevention of perinatal HIV-1 transmission. *Journal of Acquired Immunodeficiency Syndrome* 29:484–494, 2002.
- ⁹ Title XXVI, Public Health Service Act, commonly referred to as the Ryan White Comprehensive AIDS Resources Emergency Act (RWCA) of 1990 (Public Law 101–38), as amended by the RWCA Amendments of 1996 (Public Law 104–146) and the RWCA Amendments of 2000 (Public Law 106–345).
- Christiansen, C.L. Estimate of Unduplicated Client Counts for Ryan White CARE Act Programs (Titles I–IV) Using Data from the CARE Act Data Report and Client Level Data Project: Statistical Modeling Exercise. Boston University. Final report submitted to the Health Resources and Services Administration (HRSA), HIV/AIDS Bureau, September 2005.
- ¹¹ CDC. Revised recommendations for HIV screening of pregnant women. *Morbidity and Mortality Weekly Report* 50(RR-19):59–86, 2001.
- ¹² HRSA. *A Guide to the Clinical Care of Women with HIV*. 2005 ed. More information available at http://hab.hrsa.gov/publications/womencare05; accessed October 31, 2006.
- ¹³ CDC. HIV testing among pregnant women—United States and Canada, 1998–2001. *Morbidity and Mortality Weekly Report* 51:1013–1016, 2002.

- AIDS Education and Training Centers National Resource Center. More information available at www.aids-ed.org; accessed October 31, 2006.
- National HIV/AIDS Clinicians' Consultation Center. Warmline: The National HIV Telephone Consultation Service. More information available at www.ucsf.edu/hivcntr/Hotlines/Warmline.html; accessed October 31, 2006.
- ¹⁸ HRSA, HIV/AIDS Bureau. 2004 AIDS Drug Assistance Program (ADAP) Quarterly Report.
- ¹⁹ HRSA, HIV/AIDS Bureau. *2004 Ryan White CARE Act Annual Data Book*. More information available at http://hab.hrsa.gov/reports/annual2004/default.htm; accessed October 31, 2006.
- ²⁰ Gardner, L.I., et al. Efficacy of a brief intervention to link recently diagnosed HIV-infected persons into care. *AIDS* 19:423–431, 2005.
- ²¹ More information available at http://hab.hrsa.gov/about/collaboratives.htm; accessed October 31, 2006.
- ²² More information available at www.cdc.gov/programs/hiv01.htm; accessed October 31, 2006.
- ²³ CDC. Demonstration Projects for Implementation of Rapid HIV Testing in Historically Black Colleges and Universities and Alternative Venues and Populations. July 2005. More information available at www.cdc.gov/hiv/topics/prev_prog/ahp/resources/factsheets/demoproject_rapid_black.htm; accessed October 31, 2006.
- ²⁴ CDC. Use of social networks to identify persons with undiagnosed HIV infection—seven U.S. cities, October 2003–September 2004. *Morbidity and Mortality Weekly Report* 54:601–605, 2005.
- ²⁵ CDC. Guidelines for national human immunodeficiency virus case surveillance, including monitoring for human immunodeficiency virus infection and acquired immunodeficiency syndrome. *Morbidity and Mortality Weekly Report* 48:1–28, 1999.
- ²⁶ CDC. HIV/AIDS Prevention Research Synthesis Project. Compendium of HIV Prevention Interventions with Evidence of Effectiveness. Atlanta GA: CDC, revised November 1999. More information available at www.cdc.gov/HIV/pubs/HIVcompendium/HIVcompendium.pdf; accessed October 31, 2006.
- ²⁷ AED Center on AIDS & Community Health. *DEBI: Diffusion of Effective Behavioral Interventions*. More information available at www.effectiveinterventions.org; accessed October 31, 2006.
- ²⁸ More information available at www.cdc.gov/hiv/projects/rep/default.htm; accessed October 31, 2006.

¹⁴ Bulterys, M., et al. Rapid HIV-1 testing during labor: A multicenter study. *Journal of the American Medical Association* 292:269–271, 2002.

¹⁵ CDC. HIV prevalence, unrecognized infection, and HIV testing among men who have sex with men—five U.S. cities, June 2004–April 2005. *Morbidity and Mortality Weekly Report* 54:597–601, 2005.

- ²⁹ CDC, Division of HIV/AIDS Prevention, National Center for HIV, STD, and TB Prevention. VOICES/VOCES: Video Opportunities for Innovative Condom Education and Safer Sex. More information available at www.cdc.gov/HIV/projects/rep/voices.htm; accessed October 31, 2006.
- ³⁰ CDC, Division of HIV/AIDS Prevention, National Center for HIV, STD, and TB Prevention. *Healthy Relationships: Prevention for Positives*. More information available at www.cdc.gov/HIV/projects/rep/HealthyRelationships.htm; accessed October 31, 2006.
- ³¹ HRSA, HIV/AIDS Bureau. More information available at http://hab.hrsa.gov/programs.htm; accessed October 31, 2006.
- ³² CDC. HIV *Testing in Healthcare Settings*. More information available at www.cdc.gov/hiv/topics/testing/healthcare/index.htm; accessed October 11, 2006.
- ³³ HRSA, HIV/AIDS Bureau. *Special Initiatives: Minority HIV/AIDS Initiatives (MAI)*. More information available at http://hab.hrsa.gov/special/mai.htm; accessed October 31, 2006.

Related Objectives From Other Focus Areas

7. Educational and Community-Based Programs

7-2. School health education

9. Family Planning

9-10. Pregnancy prevention and sexually transmitted disease (STD) protection

14. Immunization and Infectious Diseases

- 14-11. Tuberculosis
- 14-13. Treatment for latent tuberculosis infection

20. Occupational Safety and Health

20-10. Needlestick injuries

25. Sexually Transmitted Diseases

25-11. Responsible adolescent sexual behavior