HIV

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PROGRESS REVIEW

In the 12th session in the second series of assessments of *Healthy People 2010,* Anand Parekh, Acting Deputy Assistant Secretary for Health (Science and Medicine), chaired a focus area Progress Review on HIV. He was assisted by staff of the co-lead agencies for this *Healthy People 2010* focus area, the Centers for Disease Control and Prevention (CDC) and the Health Resources and Services Administration (HRSA). Also participating in the review were representatives from other U.S. Department of Health and Human Services (HHS) offices and agencies. While noting the progress that has been made in prevention, diagnosis, treatment, and the provision of services for HIV infection, Dr. Parekh acknowledged that major challenges remain, such as reaching some 250,000 individuals who are HIV-infected but unaware of their infection. Disparities in rates of HIV/AIDS and deaths among communities of color remain a daunting problem that must be addressed more vigorously.

The complete November 2000 text for the HIV focus area of *Healthy People 2010* is available online at **www.healthypeople.gov/document/html/volume1/13hiv.htm**. Revisions to the focus area chapter that were made after the January 2005 Midcourse Review are available at **www.healthypeople.gov/data/midcourse/html/focusareas/fa13toc.htm**. Some more recent data used in the Progress Review for this focus area's objectives and their operational definitions can be accessed at **wonder.cdc.gov/data2010**. For comparison, the report on the first-round Progress Review (held on August 4, 2003) is archived at **www.healthypeople.gov/data/2010prog/focus13/2003fa13.htm**. The meeting agenda, tabulated data for all focus area objectives, charts, and other materials used in the Progress Review can be found at a companion site maintained by the CDC National Center for Health Statistics (NCHS): **www.cdc.gov/nchs/about/otheract/hpdata2010/focusareas/fa13-hiv2.htm**.

Data Trends

In his overview of data for the focus area, Richard Klein of the NCHS Health Promotion Statistics Branch summarized the impact of HIV/AIDS on the Nation. More than one million persons were estimated to be living with HIV in 2003, of whom approximately one quarter did not know that they were infected. As of December 2005, 952,629 cumulative cases of AIDS had been diagnosed and the number of cumulative deaths amounted to 530,756. Federal spending for HIV-related medical care came to $11.6 billion in 2005. The lifetime cost of such care per person is estimated at $385,200. Overall, the situation with respect to AIDS in the United States has somewhat ameliorated over the past decade-and-a-half: the incidence (new cases) of AIDS decreased from a high of almost 80,000 diagnosed in the early 1990s to an estimated 40,608 in 2005; the number of deaths from AIDS decreased from more than 50,000 in the mid-1990s to16,316 in 2005. Geographically, AIDS prevalence is highest in urban areas, particularly in the Northeast. However, AIDS incidence patterns are shifting. In 2005, AIDS rates per

100,000 population were highest in the South for large- and medium-sized metropolitan areas, as well as for rural areas. About two-thirds of the HIV objectives are moving toward or have met their targets. Mr. Klein then examined in greater detail the objectives selected for highlighting during the Progress Review.

(Obj. 13-1): The rate of new AIDS cases diagnosed among persons aged 13 years and older decreased from 17.8 per 100,000 population in 1998 to 16.6 per 100,000 in 2005. Rates in 2005 were higher among males (24.9 per 100,000) than among females (8.6 per 100,000). Among five ethnic and racial groups for which data were available, the 2005 rate of new cases among non-Hispanic blacks was highest—68.7 per 100,000—higher than the rate for Hispanics (24.0 per 100,000), American Indians/Alaska Natives (9.3 per 100,000), non-Hispanic whites (6.9 per 100,000), and Asians/Pacific Islanders (4.3 per 100,000). The rate for non-Hispanic black males in 2005 was 95.1 per 100,000 (almost nine times higher than for non-Hispanic white males). The rate for non-Hispanic black females in 2005 was 45.5 per 100,000 (more than 20 times higher than for non-Hispanic white females). In 1985, 59 percent of new AIDS cases were among non-Hispanic whites and 25 percent among non-Hispanic blacks. In 2005, 28 percent of cases were among non-Hispanic whites and 49 percent among non-Hispanic blacks. Hispanics accounted for about 21 percent of new cases in 2005. The target is 1.0 per 100,000.

(Objs. 13-2, 13-3, 13-4): Among males aged 13 years and older, 70 percent of new AIDS cases diagnosed in 1985 were among men who have sex with men (MSM), 16 percent were among injection drug users (IDU), and 10 percent were among males who were both MSM and IDUs. Less than 1 percent of cases were acquired through heterosexual contact and 4 percent involved other or unknown modes of transmission. Among females aged 13 years and older, 55 percent of new AIDS cases diagnosed in 1985 were among IDUs, 27 percent were acquired through heterosexual contact, and 18 percent involved other or unknown factors. In 2005, among males aged 13 years and older, 58 percent of new AIDS cases diagnosed were among MSM, 18 percent were among IDUs, 16 percent were acquired through heterosexual contact, 7 percent were among men who were both MSM and IDUs, and 1 percent involved other or unknown factors. Among females aged 13 years and older, 70 percent of new AIDS cases diagnosed in 2005 were acquired through heterosexual contact, 27 percent were among IDUs, and 2 percent involved other or unknown factors. The targets for the three transmission categories of MSM, IDU, and MSM/IDU are, respectively, 13,385 cases, 9,075 cases, and 1,592 cases. In general, the incidence of AIDS is increasing among MSM, decreasing among IDUs, and showing little change among MSM/IDUs.

(Obj. 13-5): In the 33 States with mature HIV/AIDS surveillance systems, the number of new cases of HIV/AIDS diagnosed among adolescents and adults decreased from 39,576 in 2001 to 37,163 in 2005. This is a newly measurable objective, so the target has not yet been determined.

(Obj. 13-13d): Pursuant to Public Health Service guidelines, treatment of HIV-infected persons aged 13 years and older with highly active antiretroviral therapy (HAART) increased from 61 percent in 1997 to 70 percent in 2003. Among five ethnic and racial groups for which data were available in 2003, 75 percent of Hispanic patients received HAART (the highest proportion), compared with 63 percent of American Indian/Alaska Native patients (lowest). The target is 95 percent.

(Obj. 13-14): The age-adjusted death rate among persons with HIV/AIDS decreased from 5.3 per 100,000 in 1999 to 4.5 per 100,000 in 2004. The target is 0.7 deaths per 100,000. In 2004, the death rate among persons with HIV/AIDS was 2.4 per 100,000 among women and 6.6 per 100,000 among men. Among socioeconomic and racial groups, death rates among persons with HIV/AIDS in 2004 were higher for those

who had not completed high school (17.9 per 100,000) and for non-Hispanic blacks (20.9 per 100,000). A noteworthy concentration of higher death rates among persons with HIV/AIDS occurs in the strip of Atlantic seaboard and Gulf coastal States running from Massachusetts through Texas.

(Obj. 13-17b): The number of new cases of perinatally acquired AIDS decreased from 103 in 2002 to 67 in 2005, surpassing the target of 75. The number of new cases occurring annually peaked at 894 in 1992.

Key Challenges and Current Strategies

In presentations that followed the data overview, the principal themes were introduced by Kevin Fenton, Director of CDC's National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention; Steve Smith, Senior Advisor to the Administrator, HRSA; and Deborah Parham Hopson, Associate Administrator of HRSA's HIV/AIDS Bureau. Their statements and Progress Review briefing materials identified a number of barriers to achieving the objectives, as well as activities under way to meet these challenges, including the following:

- Changing social contexts pose major challenges to continued progress in combating the HIV/AIDS epidemic, including the following—shifting patterns and modes of substance abuse (e.g., methamphetamines); use of the Internet for meeting partners; alternate social venues for casual sex; prevention fatigue among persons at risk for HIV; a high degree of HIV treatment optimism; an aging cohort of HIV prevention and outreach workers, who increasingly are leaving the field; low pay, high pressure, and rapid turnover among the HIV/AIDS workforce; the changing epidemiology of bacterial and viral sexually transmitted diseases (STDs); and complex socioeconomic dysfunctionalities, including poverty, homelessness, racism, homophobia, gender inequality, and mental illness.
- Although MSM are still the most highly affected population group, their participation in HIV/AIDS prevention programs is still relatively low. A survey showed that fewer than one in five MSM had participated in intensive HIV/AIDS prevention interventions in the previous year. Furthermore, recent outbreaks of syphilis among MSM have the potential to increase HIV transmission.
- The HIV and tuberculosis (TB) epidemics are commingled, but HIV screening of TB patients is not yet routine. Expansion of HIV screening in TB clinics is challenged by provider perceptions that not all TB patients should be tested, patient reluctance to be tested, and administrative and legal barriers that may limit HIV screening in public health programs.
- Some HIV-infected individuals have not responded adequately to currently available HIV drugs, cannot tolerate their toxicities, or have difficulty complying with complex dosing schedules. In addition, the ability of HIV to mutate and become resistant to the current drugs is a persistent threat to individuals receiving therapy and to their uninfected sexual or drug-using partners.
- From 2001 to 2005, the estimated number of HIV/AIDS diagnoses among adolescent and young females aged 13 to 24 years that are associated with heterosexual contact declined by 14 percent, from 1,790 to 1,544.
- To combat perinatally acquired HIV/AIDS, CDC is promoting recommendations for routine HIV testing of all pregnant women and, as a safety net, for the routine screening of any infant whose mother was not screened during pregnancy.

- HRSA's HIV/AIDS Bureau administers the Ryan White HIV/AIDS Program to fund comprehensive outpatient care and essential support services for individuals living with HIV disease who do not have the resources to acquire services on their own. The program—first enacted in 1990 and amended and reauthorized most recently in 2006—is the largest source of Federal funding for HIV/AIDS care after Medicaid and Medicare and functions as the "payer of last resort." With a fiscal year 2007 budget of $2.1 billion, the program is administered through hundreds of grantees, which serve some 531,000 individuals annually in the United States and its Territories. The beneficiaries are mostly low-income, uninsured, and underinsured individuals and their families, over 70 percent of whom are from minority population groups most heavily affected by the HIV/AIDS epidemic.
- In September 2006, CDC issued *Revised Recommendations for HIV Testing of Adults, Adolescents and Pregnant Women in Health-Care Settings*, which are intended to reduce the number of persons who are HIV-infected but not aware of their HIV infection (estimated to be about 250,000). Through streamlined consent and counseling procedures, the intention is to simplify HIV testing in busy healthcare settings and make HIV screening a routine part of clinical care for all patients age 13–64. CDC, HRSA, and other federal agencies are collaborating to implement HIV screening widely in healthcare settings across the United States.
- As part of its Diffusion of Effective Behavioral Interventions (DEBIs) activity, CDC has overseen the training of staff in more than 3,600 healthcare agencies in effective behavioral interventions against the HIV/AIDS epidemic. A total of 14 DEBIs are packaged and available for use.
- The recent decline in HIV-related mortality in the United States is due to several factors, particularly the increased use of potent combinations of anti-HIV drugs. Also, the number of medications used to prevent and treat the opportunistic infections associated with HIV continues to grow. Consensus guidelines on treatment appropriately applied have improved the prognosis for HIV-infected individuals.
- From 1998 to 2002, the proportion of unmarried females aged 18 to 44 years whose partners used condoms at last sexual intercourse increased from 23 percent to 31 percent. In 2002 (the baseline year for males), the proportion of unmarried males who used condoms at last sexual intercourse was 42 percent.
- Currently, 48 States and the District of Columbia have implemented confidential, name-based HIV surveillance in addition to AIDS surveillance. Of these, 33 States have had their HIV surveillance systems in place long enough to allow for stabilization of the data collection and the ability to monitor trends. As more States develop longstanding name-based HIV surveillance systems, their data will be included in the national collection. HIV surveillance data are a key tool for epidemiologic monitoring because they reflect more recent trends in HIV transmission than AIDS surveillance data.
- The HHS Office of Population Affairs will implement HIV screening in Title 10 family planning clinics.
- The participation of the HHS Substance Abuse and Mental Health Services Administration (SAMHSA) in the Minority AIDS Initiative has been instrumental in providing prevention, treatment, and mental health programs for identified minority populations at risk for HIV or living with HIV/AIDS. These include black and Hispanic men (including MSM), women, and young people. SAMHSA has also been working with HRSA and CDC on the development of more effective services to integrate HIV prevention and care, substance abuse prevention, and mental health services.
- From 1998 to 2005, the proportion of TB patients who were tested for HIV increased from 61 percent to 65 percent.

Approaches for Consideration

Participants in the Progress Review made the following suggestions for public health professionals and policymakers to consider as steps to enable further progress toward achievement of the objectives for HIV:

- Strive to attain the goal that every person with HIV infection will have the opportunity to get tested and have access to state-of-the-art medical care and ongoing prevention services.
- Strengthen efforts to promote adoption of simplified HIV-testing procedures in medical settings that do not require separate informed consent and prevention counseling before testing.
- Enhance collaboration with SAMHSA to ensure that HIV-infected persons and those at high risk for infection are referred into drug counseling and treatment when they are candidates for such referrals.
- Include State HIV/AIDS coordinators in policy discussions at the Federal level.
- Increase the number of Ryan White HIV/AIDS Program beneficiaries who are in clinical care.
- Find new ways to support HIV/AIDS workers in the field and to draw on their experience in establishing networks for sharing best practices.
- Expand activities to deliver targeted, sustained, and evidence-based prevention interventions to high-risk priority populations.
- Take steps to ensure that all States devote a portion of their 5 percent set-aside Federal funds to combating perinatally acquired HIV/AIDS.
- Work with professional medical associations and other partners to make voluntary HIV testing a routine part of medical care on the same basis as other diagnostic and screening tests.
- Expand opportunities to interface with the criminal justice system, especially those opportunities that relate to persons being discharged to the community who have or are at risk for HIV.
- Focus outreach and prevention activities to a greater extent on the southeastern States and on rural communities.
- Place greater emphasis on increasing diagnosis of HIV infection as a component of the Nation's response to the HIV/AIDS epidemic.
- Sustain the commitment to learn more about the HIV disease process and develop the next generation of antiretroviral therapies. These agents ideally would be potent, inexpensive, relatively nontoxic (even after prolonged periods), active against viral strains resistant to currently available agents, and easy to administer.

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[Signed November 13, 2007]

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