



Sexually Transmitted Diseases

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n the 23rd session of the second series of assessments of *Healthy People 2010*, Principal Deputy Assistant Secretary for Health Donald Wright chaired a Progress Review on Sexually Transmitted Diseases (STDs). He was assisted by staff of the lead Agency for this *Healthy People 2010* focus area, the Centers for Disease Control and Prevention (CDC). Also participating in the review were representatives from other Agencies and offices within the U.S. Department of Health and Human Services (HHS). While acknowledging the substantial progress that has been made in preventing, diagnosing, and treating STDs in recent years, Dr. Wright stated that these diseases remain a major public health challenge in this country. By CDC's estimate, approximately 19 million new infections occur each year, almost half of them among young people 15 to 24 years of age. Moreover, direct medical costs associated with STDs in the United States are estimated at up to \$15.3 billion annually.

Data Trends

In his overview of data that relate to the focus area, Richard Klein, Chief of the NCHS Health Promotion Statistics Branch, noted that the objectives for STDs present a mixed picture of successes and failures to close in on their targets. The 2010 targets for objectives related to pelvic inflammatory diseases (PID) and genital herpes have been met or surpassed. The objective for congenital syphilis, two subobjectives related to responsible adolescent sexual behavior, and the two subobjectives

related to screening for genital chlamydia are moving closer to their targets. On the other hand, the subobjectives related to chlamydia are moving away from their targets. The rate of new cases of gonorrhea infection declined steeply through the late 1980s and early 1990s, a downward trend that came to an end in the late 1990s. Since then, the rate has changed little and remains well above the target rate. Also showing little or no change are the objectives related to primary and secondary syphilis and



to fertility problems. In a larger frame of reference, more than 65 million people in the United States are currently living with an incurable STD. Mr. Klein then provided a more detailed examination of objectives selected by the focus area workgroup for highlighting at the Progress Review.

(Objs. 25-1a, -1b, -1c): From 1997 to 2006, chlamydia infection rates among persons 15 to 24 years of age increased as follows: by 21 percent among females attending STD clinics (from 12.2 percent to 14.8 percent); by 32 percent among males attending STD clinics (from 15.7 percent to 20.8 percent); and by 42.3 percent among females attending family planning clinics (from 5.0 percent to 7.1 percent). In part, the increase in these proportions can be attributed to the increased use of more sensitive testing procedures. The target of each subobjective is 3.0 percent. In 2006, chlamydia infection rates among persons 15 to 24 years of age attending STD clinics by racial and ethnic group for whom data were available and by gender were as follows: American Indians/Alaska Natives—18.3 percent of females, 21.3 percent of males; non-Hispanic blacks—17.9 percent of females, 27.3 percent of males; non-Hispanic whites—11.0 percent of females, 14.2 percent of males; and Hispanics—15.7 percent of females, 20.7 percent of males.

(**Obj. 25-2a**): Prior to 1996, the rate of new cases of gonorrhea was higher among males than among females. However, for 6 consecutive years between 2000 and 2006 the rate was slightly higher among females than among males. In 2006, the rate was 124.3 cases per 100,000 population among females and 116.8 per 100,000 among males. From 1997 to 2006, the gonorrhea rate among non-Hispanic blacks decreased by 18.6 percent (from 809 cases per 100,000 in 1996 to 658.4 cases per 100,000 in 2006). However, the rate for that population group increased by 6.3 percent between 2005 and 2006, the first increase

since 1996. Certain other racial and ethnic groups experienced increases in the gonorrhea rate between 1996 and 2006: among American Indians/Alaska Natives, an increase of 42.2 percent; among Asians/ Pacific Islanders, an increase of 1 percent; among non-Hispanic whites, an increase of 42.3 percent; and among Hispanics, an increase of 18.4 percent. In 2006, the gonorrhea rate among non-Hispanic blacks was 18 times greater than the rate for non-Hispanic whites, a decrease in the disparity from 1997, when the rate among non-Hispanic blacks was 31 times higher. The disparity between the rate for non-Hispanic whites in 2006 and the rate for other population groups for whom data were available was as follows: American Indians/Alaska Natives, 3.8 times greater; Hispanics, 2.1 times greater; and Asians/Pacific Islanders, 1.7 times lower. The target for all groups is 19 cases per 100,000. Viewed geographically, a concentration of health service areas with very high rates (163.4-508.7 per 100,000) of gonorrhea infections in 2006 extends from the Carolinas through other southeastern States and into Texas.

(Obj. 25-6): The proportion of females 15 to 44 years of age who had ever been treated for PID decreased from 8 percent in 1995 to 5 percent in 2002, meeting the target. Particularly notable reductions in the proportion treated occurred over that period among two difficult-to-reach groups of females in that age category: non-Hispanic blacks (a decrease from 11 percent to 7 percent) and those who had not completed high school (a decrease from 14 percent to 7 percent). Decreases in the proportion for two other racial or ethnic groups were as follows: among non-Hispanic whites, the rate decreased from 7 percent to 5 percent and, among Hispanics, from 8 percent to 6 percent. By age group, notable reductions in the proportion ever treated for PID were recorded for those females 30 to 34 years of age and for those 35 to 39 years of age. Among racial and ethnic groups for whom data were available, non-Hispanic blacks had

higher proportions in 2002 of those ever treated for PID than Hispanics and non-Hispanic whites in all the age subgroupings except for those 30 to 34 years of age and 35 to 39 years of age, in which Hispanics had the highest proportions.

(Objs. 25-16a, -16b): The proportion of females 25 years of age and younger enrolled in commercial

Managed Care Organizations (MCOs) that received screening for genital chlamydia increased from 25 percent in 2002 to 37 percent in 2006. The proportion of females in the age group enrolled in Medicaid MCOs that received screening for genital chlamydia increased from 41 percent in 2002 to 52 percent in 2006. The target for both these subobjectives is 62 percent.

Key Challenges and Current Strategies

As the principal CDC representative, John Douglas, Jr., Director of the Division of STD Prevention of CDC's National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, presented the main themes of the Progress Review. The statements of Dr. Douglas, the discussion that ensued, and Progress Review briefing materials prepared by an interagency workgroup identified a number of barriers to achieving the objectives, as well as activities under way to meet these challenges, including the following:

Barriers

- Multiple factors contribute to STD disparities in non-Hispanic blacks, including social determinants that are outside of the traditional public health paradigm. Among these are the prevalence of high incarceration rates, low educational attainment, low rates of health insurance, and racial inequalities.
- Untreated chlamydia and gonorrhea are the major forerunners of PID, the most serious consequences of which can be infertility, chronic pelvic pain, or ectopic pregnancy. An estimated 50 percent of all preventable infertility among women is a result of infections with chlamydia and gonorrhea.
- Many health care providers resist performing routine chlamydia screening for asymptomatic women, and there is a widespread perception among private providers that chlamydia is not prevalent in insured populations. Chlamydia screening was identified by the National Commission on Prevention Priorities as

- one of the top four most cost-effective and underutilized clinical preventive services.
- Re-infection rates among women diagnosed with and treated for chlamydia and gonorrhea are high, in many cases because their partners do not receive treatment, thus increasing the risk of PID.
- Expedited partner therapy (EPT) is the practice
 of treating the sex partners of persons with STDs
 without an intervening medical evaluation or
 professional prevention counseling. Index patients
 infected with an STD provide prescriptions or
 medications directly to their exposed partners.
 EPT has the potential to be a more effective STD
 prevention and control strategy nationwide, but
 its legality is uncertain in some States, and overt
 statutory impediments exist in others. The practice
 is clearly legal in a relatively few States.
- Measurement of cases of PID can be imprecise.
 Identification of symptomatic cases relies on
 clinicians' diagnosis of a clinical condition, not a
 specific laboratory test result. Among clinicians,
 expertise for recognizing PID varies greatly and this
 can result in under-diagnosis and under-reporting of
 mild cases.
- Currently, there is no national system for reporting on infertility and no sentinel system that would allow cases of infertility to be systematically linked to a prior STD.

- Prevention of cases of PID not attributable to gonorrhea or chlamydia is problematic because these cases are likely to be due both to sexually transmitted infections for which screening programs have not been developed and to non-sexually transmitted endogenous vaginal bacteria.
- Among one at-risk age group, the process of billing by clinics and health care practitioners for STD screening services can act as a deterrent to the wider use of such services, in that young people may not be comfortable at the prospect their parents would learn they had sought out testing for STDs.
- Quinolone-resistant N. gonorrhoeae strains have become so widespread that CDC no longer recommends Fluoroquinolones for the treatment of gonorrhea. This leaves only a single class of recommended antibiotics, Cephalosporins.
- Many State and local STD prevention programs are experiencing dual epidemics of infectious syphilis, one among men who have sex with men (MSM), and a second that has re-emerged recently in heterosexual populations, raising the possibility for subsequent increases in congenital syphilis.
- CDC estimates that most new hepatitis B infections are transmitted sexually. Among persons with acute hepatitis B, 56 percent have been treated for an STD or served time in a correctional facility where they could have been vaccinated. The cost of the vaccine is the major barrier to vaccination of at-risk adults, for whom there is no national program to finance purchase of the vaccine.

Activities and Outcomes

 CDC provides approximately \$100 million annually to State and local STD programs to support Comprehensive STD Prevention Services. The Agency is developing a comprehensive action plan to reduce STD disparities in black communities.

- CDC's Sexually Transmitted Disease Treatment Guidelines 2006 recommend the retesting of individuals treated for either gonorrhea or chlamydia approximately 3 months after such treatment.
- A National Chlamydia Coalition has been organized and has the objective of increasing public awareness of the need for chlamydia screening and for addressing provider and policy-level barriers to widespread adherence to screening guidance.
- CDC has been working with the HHS Indian
 Health Service (IHS) since 1994 to support the
 implementation of chlamydia screening guidelines,
 strengthen IHS surveillance methods, develop
 culturally appropriate educational materials, and
 raise awareness of STDs as a priority health issue.
- CDC recently entered into a partnership with the HHS Health Resources and Services Administration and the National Association of Community Health Centers to examine current chlamydia screening rates at community health centers, to develop strategies to increase screening among young women in primary care settings, and to provide treatment to infected patients and their partners.
- CDC has begun discussions with the Department of Defense (DOD) to identify opportunities to expand screening for chlamydia infection at accession of new military recruits and to implement EPT for military personnel who are infected.
- CDC is actively monitoring antimicrobial resistance through the Gonococcal Isolate Surveillance Project and global collaborations, developing guidance on resistant outbreak response strategies, and identifying effective options for the treatment of resistant gonorrhea.
- CDC collaborates with the World Health
 Organization and DOD to enhance international surveillance for antimicrobial resistant gonorrhea.

- Also, the Agency is collaborating with the HHS National Institutes of Health to investigate alternate treatment options for resistant strains of gonorrhea.
- CDC undertook a review of the State-level legal issues related to EPT to provide information to States that want to pursue this strategy. As of mid-2008, more than 15 States have formally added EPT to their clinical options for chlamydia and gonorrhea. Among other professional organizations that have officially endorsed EPT, or soon will, are the American Medical Association, the American Association of Public Health Physicians, and the American Academy of Pediatrics.
- To help prevent STD-related infertility, CDC administers the National Infertility Prevention Project in partnership with the HHS Office of Population Affairs (OPA) to provide screening for and treatment of chlamydia and gonorrhea infections to low-income, sexually active women in family planning, STD, and other healthcare clinics, including prenatal clinics, adolescent health centers, school-based clinics, community health centers, migrant health centers, IHS sites, and correctional

- facilities. OPA reported that, in 2006, 51 percent of women under 25 years of age who were attending Title X family planning clinics were being screened for chlamydia.
- CDC's Together We Can: The National Plan to Eliminate Syphilis from the United States provides for collaboration with diverse organizations, including State and local health departments, public health professionals, the private medical community, and other key agencies and organizations to ensure effective case surveillance and access to quality health care to control and prevent syphilis. CDC directs funds to areas with high rates of syphilis morbidity in support of these activities.
- CDC's Division of Adolescent and School Health funds 49 States, the District of Columbia, 6 U.S. territories, and 16 large urban education agencies to strengthen school health policies centering on HIV, other STDs, and teen pregnancy prevention. The funds ensure school districts implement evidencebased, effective prevention curricula to provide young people with the skills and information they need to avoid behaviors that would put them at risk.

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 achieving the objectives for Sexually Transmitted Diseases:

- Expand population-based surveillance of STDs to improve geographic representativeness of the data.
- Strive to increase awareness of the impact of STDs on the part of the general public and key stakeholders, for example, health care providers and policymakers.
- To better address STD disparities, ensure that members of affected communities are closely involved at all stages in the process of devising and

- implementing prevention and control strategies. In all of these efforts, seek to enhance prevention without increasing stigma.
- Increase promotion of behaviorally based STD prevention strategies—for example, practicing abstinence, delaying sexual debut, decreasing the number of sexual partners, and increasing the consistent use of condoms.
- Increase screening of males for chlamydia in selected high-prevalence venues.
- Expand activities to monitor and respond to outbreaks of drug-resistant gonorrhea and seek to develop new therapeutic approaches.

- Improve identification and dissemination of strategies for treating partners of people infected with STDs.
- Seek to develop a rapid syphilis test to facilitate testing and prompt application of treatment in both the United States and the developing world.
- Support innovative solutions to combat the resurgence of syphilis among MSM.
- Pursue further integration of STD prevention and control strategies with those for HIV to maximize the impact of these strategies.
- Take greater advantage of current and developing electronic technology to maximize the capability for collecting data on STDs and for disseminating information about prevention and control programs and methods.

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[Signed October 17, 2008]

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