

**Midcourse  
Review**



**Sexually Transmitted  
Diseases**

**25**

**Lead Agency:**

Centers for Disease Control and Prevention

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# **Goal: Promote responsible sexual behaviors, strengthen community capacity, and increase access to quality services to prevent sexually transmitted diseases (STDs) and their complications.**

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## **Introduction\***

Sexually transmitted diseases (STDs) refer to the more than 25 infectious organisms that are transmitted primarily through sexual activity and are a major public health challenge in the United States. Although progress has been made in preventing, diagnosing, and treating STDs in recent years, an estimated 19 million new infections occur each year, almost half of them among young persons aged 15 to 24 years.<sup>1</sup> In addition to the physical and psychological consequences of STDs, these diseases exact an economic toll. Direct medical costs associated with STDs in the United States are estimated at \$13 billion annually.<sup>2</sup>

Of the 19 objectives in this focus area, 2 met or exceeded their targets, and another 4 made progress toward their targets. Two objectives demonstrated mixed movement relative to targets, varying by individual subobjectives. The remaining objectives could not be assessed at the midcourse review.

The most notable progress in meeting the Healthy People 2010 overarching goal of improving quality and years of healthy life occurred in genital herpes and treatment for pelvic inflammatory disease (PID). Both objectives met or exceeded their targets. In addition, progress was made in addressing fertility problems, increasing responsible sexual behavior in adolescents, and reducing overall rates for primary and secondary syphilis and congenital syphilis. Significant progress also was made in reducing the disparity in primary and secondary syphilis rates between the black non-Hispanic and white non-Hispanic populations.

## **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.

Four objectives were modified by the addition of subobjectives, seven objectives were deleted because of lack of nationally representative data sources, one developmental objective was moved to another focus area, one developmental objective became measurable, and one objective was reworded at the midcourse review.

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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.

A subobjective was added to the proportion of females aged 24 years and under with chlamydia enrolled in the National Job Training Program (25-1d). This subobjective was added to provide data for a high-risk population in a nonhealth care setting. With the 2002 baseline at 10.1 percent, the 2010 target for objective 25-1d was set at 6.8 percent.

The objective for gonorrhea infections (25-2) was divided into two subobjectives, with new cases of gonorrhea in the total population (25-2a) retaining a baseline of 122 cases per 100,000 persons. Subobjective 25-2b was established to measure new cases of gonorrhea among females aged 15 to 44 years, with a 2002 baseline of 279 cases per 100,000 women and a target of 42 cases per 100,000 women. This subobjective was added to provide data for women at greatest risk of complications from gonorrhea—women in their reproductive years. The developmental objective for human papillomavirus (HPV) infection (25-5) was revised to clarify that it will measure females and match the potential data source. The objective for heterosexually transmitted HIV/AIDS in women (25-8) was moved to HIV (Focus Area 13) as objective 13-18.

Responsible adolescent sexual behavior (25-11) was divided into three subobjectives:

- Never had sexual intercourse (25-11a), with a 1999 baseline of 50 percent and a target of 56 percent.
- If sexually experienced, were not currently sexually active (that is, did not have sexual intercourse within the past 3 months) (25-11b), with a 1999 baseline of 27 percent and a target of 30 percent.
- If currently sexually active, used a condom at last sexual intercourse (25-11c), with a 1999 baseline of 58 percent and a target of 65 percent.

These subobjectives distinguish between the proportion of students in grades 9 to 12 who are not sexually active and students who are currently sexually active and use condoms.

The developmental objective for annual screening for genital chlamydia (25-16) became measurable and was divided into two subobjectives. The added subobjectives track sexually active females aged 25 years and under enrolled in commercial managed care organizations (MCOs) (25-16a) or enrolled in Medicaid MCOs (25-16b).

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 these developmental objectives were deleted from this focus area because they lacked data sources: neonatal STDs (25-10), responsible sexual behavior messages on television (25-12), STD screening in youth detention facilities and jails (25-14), contracts to treat nonplan partners of STD patients (25-15), STD screening of pregnant women (25-17), and provider referral services for sex partners (25-19). One previously measurable objective, compliance with recognized STD treatment standards (25-18), was also deleted because it could not be tracked by the existing data source. The U.S. Department of Health and Human Services (HHS) will consider ways to ensure that 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 25-1), which displays the percent of targeted change achieved for objectives and subobjectives with sufficient data to assess progress.

Two objectives met or exceeded their targets, four full objectives and three subobjectives moved toward their targets, and four subobjectives moved away from their targets. Eleven objectives were not assessed, including seven that lacked data sources and one that moved to HIV (Focus Area 13).

**Objectives that met or exceeded their targets.** From the 1988–94 baseline of 17 percent, the proportion of adults aged 20 to 29 years with genital herpes infection (herpes simplex virus type 2 [HSV-2]) (25-4) decreased to 11 percent in the 1999–2002 period. This decline exceeded the target of 14 percent, reflecting achievement of 200 percent of the targeted change. No national program to prevent HSV-2 exists, and there is sparse evidence of specific strategies effective in reducing HSV-2.

Recent data from the Youth Risk Behavior Surveillance System suggest that increases in responsible sexual behavior among youth may be partially responsible for decreases in total HSV-2 cases.<sup>3</sup> Decreases were measured in the percentage of students with multiple sex partners and in the percentage of students in grades 9 through 12 who engaged in sexual intercourse. An increase occurred in the use of condoms by students in grades 9 through 12.<sup>3</sup>

Recently published data more clearly demonstrate the benefit of condoms in reducing the risk of HSV-2 transmission.<sup>4,5</sup> Data are now collected and released for analysis on a regular 2-year cycle. More frequent data may help identify other factors contributing to the decrease in the overall portion of the population with herpes.

From 1995 to 2002, the proportion of females aged 15 to 44 years who have ever required treatment for PID (25-6) decreased from 8 percent to 5 percent, meeting the target. In addition, from 1995 to 2002, the proportion of childless females with fertility problems who had an STD or who required treatment for PID (25-7) decreased from 27 percent to 22 percent. Although objective 25-7 only met 42 percent of its targeted change, its progress is related directly to the forward movement demonstrated by objective 25-6. Reducing cases of PID is essential to reducing infertility among women.<sup>6</sup> The combined success of these two objectives can be attributed, at least in part, to the National Infertility Prevention Program.<sup>7</sup> This initiative, an HHS partnership with the Centers for Disease Control and Prevention (CDC) and the Office of Population Affairs, provides screenings and treatment of chlamydia and gonorrhea for low-income, sexually active women in family planning clinics, STD clinics, and other health care settings.

**Objectives that moved toward their targets.** From 1997 to 2003, the rate of new cases of gonorrhea (25-2a) decreased from 122 cases per 100,000 persons to 116 per 100,000 persons. The rate of new cases for females aged 15 to 44 years (25-2b) decreased from 279 cases per 100,000 females in 2002 to 270 per 100,000 females in 2003. These declines represented 6 percent and 4 percent achievement of the targeted change, respectively. The relatively small change in these rates may be linked to the fact that

broad-based gonorrhea screening, the foundation of the national gonorrhea control program,<sup>8</sup> has not sustained continued reductions of infection. Since gonorrhea disproportionately affects the black non-Hispanic population, focused prevention and control efforts are needed to enhance progress toward objective 25-2.<sup>9, 10</sup>

From 1997 to 2003, the rate of new cases of primary and secondary syphilis (25-3) declined from 3.2 cases per 100,000 population to 2.5 cases, achieving 23 percent of the targeted change, but still well above the target of 0.2 cases per 100,000 population. From 1997 to 2003, the rate for congenital syphilis (25-9) achieved 63 percent of its targeted change. The overall rate declined from 28 cases per 100,000 live births to 11 cases per 100,000 live births. An initiative focused on syphilis prevention and treatment is the National Plan for the Elimination of Syphilis in the United States.<sup>11</sup> Under the plan, affected communities are mobilized to develop and implement local syphilis elimination efforts. These efforts include enhancing surveillance, expanding access to high-quality clinical preventive services, improving knowledge about prevention of syphilis, strengthening outbreak-response preparedness, and increasing health promotion.

The proportion of childless females with fertility problems (25-7) moved toward its target and achieved 42 percent of its targeted change. The progress of objective 25-7 is intrinsically tied to PID treatment levels (25-6).

The proportion of females aged 24 years and under with chlamydial infections and enrolled in the National Job Training Program (25-1d) decreased from 10.1 percent to 9.9 percent between 2002 and 2003, achieving 6 percent of the targeted change.

Two of three subobjectives that examine responsible sexual behavior among adolescents (25-11a and c) demonstrated progress. From 1999 to 2003, the proportion of adolescents in grades 9 through 12 who have never had sexual intercourse (25-11a) increased from 50 percent to 53 percent, and the proportion of adolescents who used condoms at last intercourse (25-11c) increased from 58 percent to 63 percent, achieving 71 percent of the targeted change. Providing youth with effective education to protect themselves and others from HIV/STD infection over a lifetime and targeting youth at highest risk for HIV/STD infection with focused, intensive prevention activities is a component of national efforts. For example, some public schools use HIV/AIDS surveillance data by ZIP code to identify high schools serving areas with disproportionately high rates for HIV infection to offer intensive student-centered prevention workshops.<sup>12</sup>

**Objectives that demonstrated no change.** No objective or subobjective for this focus area remained static since the launch of Healthy People 2010.

**Objectives that moved away from their targets.** Between 1997 and 2003, the proportion of females aged 15 to 24 years with chlamydial infections who attended family planning clinics increased from 5.0 percent to 6.4 percent (25-1a), and those who attended STD clinics increased from 12.2 percent to 14.1 percent (25-1b), moving away from the target of 3.0 percent. From 1997 to 2003, the proportion of males aged 15 to 24 years with chlamydial infections who attended STD clinics (25-1c) increased from 15.7 percent to 19.3 percent. The increase in the overall number of cases of chlamydial infections in family planning and STD clinics may be a reflection of increasingly sensitive diagnostic tests.<sup>10</sup>

Between 1999 and 2003, the proportion of adolescents who had sexual intercourse in their lifetime but not within the past 3 months (25-11b) decreased from 27 percent to 26 percent, moving away from the target of 30 percent. However, this change was not statistically significant.

**Objectives that could not be assessed.** Data to assess the proportion of Tribal, State, and local STD programs that routinely offer hepatitis B vaccines to all STD clients (25-13) were not available at the time of the midcourse review.

The objective for annual screening for genital chlamydia by MCOs (25-16) became measurable but lacked data to assess progress. Recognizing the increasingly important role of MCOs in STD prevention, the National Committee for Quality Assurance has developed a survey measure for the Health Employer Data and Information Set.<sup>13</sup> This survey measure estimates the proportion of sexually active women aged 15 to 25 years who are screened in managed care settings (25-16a and b). In 2002, commercial MCOs reported 25 percent of sexually active women aged 25 years and under were screened (25-16a). Medicaid MCOs reported better performance (25-16b), with approximately 41 percent screened. The target for this objective is 62 percent.

## 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 25-2), which displays information about disparities among select populations for which data were available for assessment.

Among racial and ethnic groups, the white non-Hispanic population generally had the best rate for STD objectives. For both gonorrhea (25-2) and primary and secondary syphilis (25-3), the Asian or Pacific Islander population had the best rates.

The white non-Hispanic population had the best congenital syphilis rate (25-9), with disparities of more than 100 percent for the American Indian or Alaska Native, Asian, and Native Hawaiian or other Pacific Islander, Hispanic or Latino, and black non-Hispanic populations. Between 1997 and 2003, disparities increased for the American Indian or Alaska Native, Asian or Pacific Islander, and Hispanic populations and decreased for the black non-Hispanic population. These changes in disparity occurred in the context of substantial reductions in congenital syphilis rates overall. Rates declined for the black non-Hispanic population by 72 percent and by smaller proportions for the other populations.

The Asian or Pacific Islander population had the best rates for new cases of gonorrhea (25-2a), new cases of gonorrhea in women (25-2b), and new cases of primary and secondary syphilis (25-3). Between 1997 and 2003, the rates for the Asian or Pacific Islander population increased for each of these objectives, contributing to the reduction in disparities experienced by the American Indian or Alaska Native, Hispanic or Latino, and the black non-Hispanic populations. Although the rates for most of the other populations also increased for these three objectives, the rates for the black non-Hispanic population declined.

The disparities in the proportion of females aged 15 to 24 years with chlamydia who attended family planning clinics (25-1a) decreased for the Native Hawaiian or other Pacific Islander, Hispanic, and black non-Hispanic populations, compared with the white non-Hispanic (best) population. The declines in disparity occurred, in part, because the best group moved away from the target at a faster pace than the other groups. Disparity between the Asian population and the best group increased. The proportion of

black non-Hispanic females with chlamydia who attended STD clinics was almost three times that of white non-Hispanic females.

Decreasing disparities in chlamydia among females who attended STD clinics (25-1b) were seen between the white non-Hispanic (best) population and the American Indian or Alaska Native, Hispanic, and black non-Hispanic populations. Declines in chlamydia disparity among males aged 15 to 24 years who attended STD clinics (25-1c) were seen between the white non-Hispanic (best) population and the American Indian or Alaska Native, Native Hawaiian or other Pacific Islander, and Hispanic populations. Disparities increased between the white non-Hispanic population (best) and the Asian and black non-Hispanic populations.

Males had better rates than females for new cases of gonorrhea (25-2a), genital herpes (25-4), abstinence in the past 3 months (25-11b), and condom use at last intercourse (25-11c). The proportion of females aged 20 to 29 years old with genital herpes (25-4) was more than double that of males. Compared with males, females had a better rate for primary and secondary syphilis (25-3). The largest disparity for males compared with females was noted for cases of primary and secondary syphilis (25-3). Males demonstrated an increase in disparity of more than 100 percentage points from 1997 to 2003. In 2003, the syphilis rate for males was more than five times that of the rate for females.

Objectives also demonstrated disparities between income and education levels. The middle/high-income population had the lowest proportion in persons aged 20 to 29 years with genital herpes (25-4). Treatment for pelvic inflammatory disease in females aged 15 to 44 years (25-6) was best for persons with at least some college.

## Opportunities and Challenges

Opportunities and challenges for STD prevention include the HPV vaccine, antimicrobial resistance in STD infections, enhanced chlamydia screening, and management of partners of infected patients.

An HPV vaccine, which can protect against types of HPV that account for 70 percent of cervical cancers<sup>14</sup> and 90 percent of genital warts,<sup>15</sup> presents both opportunities and challenges. While widespread preventive HPV vaccination may reduce the number of people affected by HPV, some challenges of a vaccine include the following:

- Vaccine delivery to an adolescent population.
- Coordinating resources and messages associated with both preventive vaccination and continued screening for cervical cancer.
- Determining if booster immunization is required for continued vaccine effectiveness.
- Evaluation of new data on vaccine effectiveness in other populations, potentially requiring revision of vaccine recommendations.

The emergence of drug-resistant strains of STDs presents problems for treatment that may affect the ability to meet STD prevention objectives. For example, increasing gonorrheal resistance to fluoroquinolone antibiotics, until recently a large part of treatment, is a growing global problem. Treatment of gonorrhea with fluoroquinolones is inadvisable in many areas, including Asia and the Pacific.<sup>16</sup> In 2004, CDC recommended that fluoroquinolones no longer be used as first-line treatment for gonorrhea among men who have sex with men (MSM). The recommendation was made after preliminary data showed that drug-resistant gonorrhea cases increased significantly among gay and bisexual men in

the United States in 2003.<sup>17</sup> The loss of this class of antibiotics for treatment of gonorrhea leaves only a single class of antibiotics (cephalosporins) with known effectiveness available for treatment.

CDC and other professional health organizations recommend annual chlamydia screening for sexually active women aged 25 years and under to detect and treat chlamydial infection, which is largely asymptomatic, and prevent its adverse health outcomes for women.<sup>16</sup>

PID can lead to infertility, ectopic pregnancy (pregnancy occurring outside the uterus), and chronic pelvic pain.<sup>18</sup> While STD clinics and Title X family planning clinics provide screening and treatment, the majority of chlamydial infections are reported from the private sector.<sup>10</sup> Screening rates are low in both the public and private sectors when compared with other screening programs, such as breast and cervical cancer.<sup>13</sup> Partnerships with private-sector providers to increase adherence to recommended screening guidance will be required to address the challenge of low screening rates and to take advantage of the opportunity to enhance women's health. New technologies, such as nucleic acid amplification tests, provide opportunities for expansion of screening programs beyond traditional clinical settings to reach more women. At the same time, they present challenges for followup treatment of both patients and their partners.

Effective clinical management of patients with treatable STDs requires treatment of the patients' current sex partners to prevent reinfection and curtail further transmission.<sup>19</sup> Since recurrent infections in females may be the result of reinfections from untreated male partners, improved partner management could reduce the rate for reinfections and related consequences for health and fertility.<sup>20</sup>

The standard approach to partner management has included clinical evaluation in a health care setting, with partner notification accomplished by the index patient (patient making first contact with the provider), by the provider or an agent of the provider, or a combination of these methods.<sup>21</sup> In recent years, expedited partner therapy (EPT), an approach in which partners are treated without an intervening clinical assessment, has been evaluated and found to be an alternative option for partner management.<sup>22</sup> EPT typically is effected when patients deliver medications or prescriptions to their partners. EPT represents an additional strategy for partner management, a key tool in preventing the spread of STDs. Results of recent studies suggest that improved management of partners could have a significant effect on the total national rate for chlamydia.<sup>23, 24</sup>

## Emerging Issues

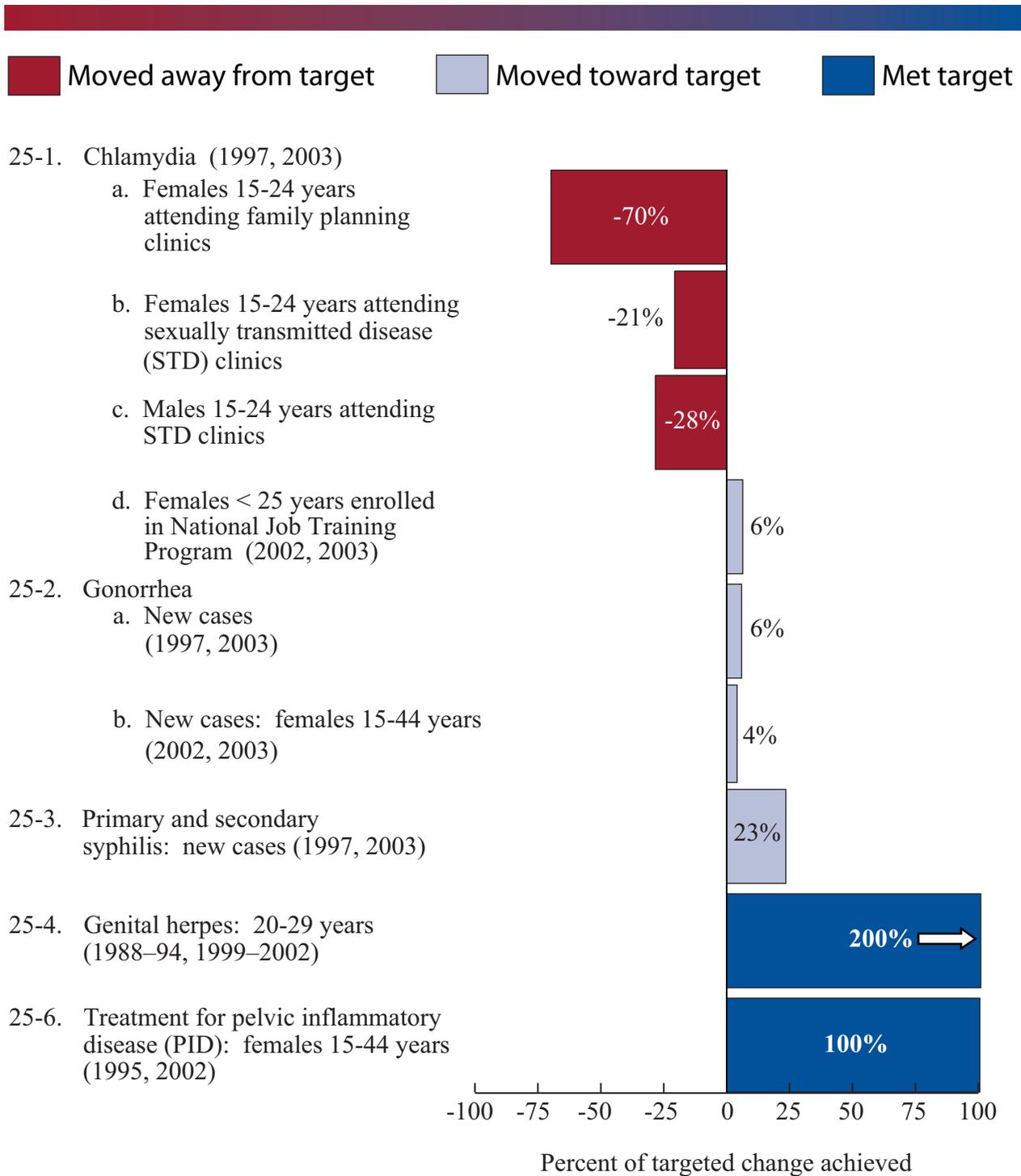
A number of new issues have emerged in the STD field. Several health issues among MSM have emerged that affect the overall health of the Nation. Much of the rise in syphilis rates since the launch of Healthy People 2010 is attributable to an increase in primary and secondary syphilis among MSM.<sup>25</sup>

Increases also have occurred in gonorrhea and in a previously rare form of chlamydia, lymphogranuloma venereum.<sup>26</sup> Some of these increases may be attributable to an overall rise in the use of methamphetamines (crystal meth) among MSM, which has a documented association with increased risky sexual behavior.<sup>27, 28</sup> The Internet also has become a major venue for men to connect with other men to arrange sexual encounters.<sup>29, 30</sup> These phenomena present substantial challenges for STD/HIV prevention programs.<sup>19</sup>

Current chlamydia screening programs for males are limited. CDC recommends screening all sexually active females 25 years of age and under for chlamydia on an annual basis.<sup>31</sup> In 1999, CDC initiated a research project on male screening to determine the proportion of males with cases of asymptomatic

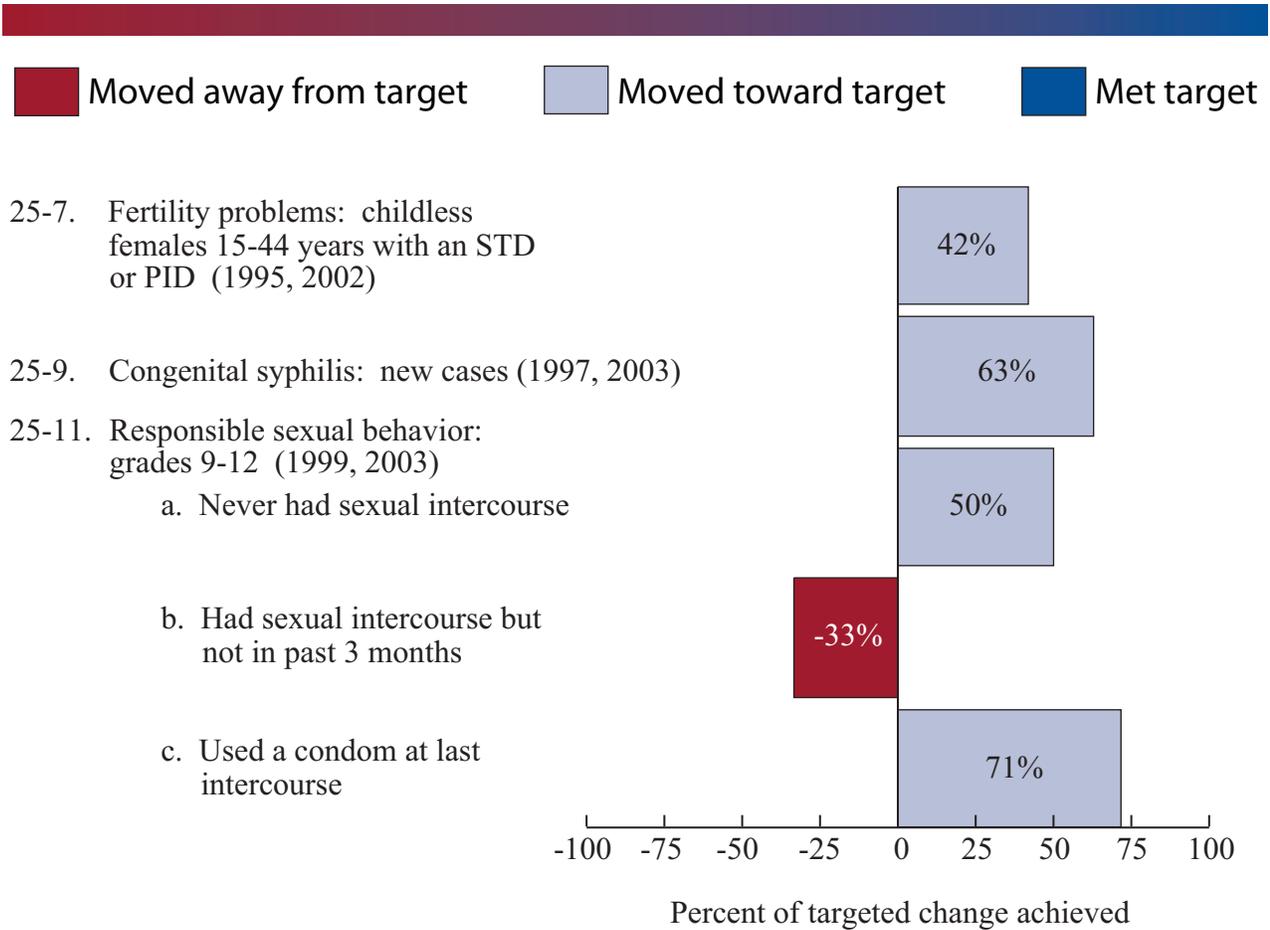
chlamydial infections, the feasibility of screening asymptomatic males for chlamydia in multiple venues, and the risk factors for infection. This research project comprises a screening demonstration, a longitudinal study, and a cost-effectiveness analysis.<sup>32, 33</sup> Recommendations about screening men in settings with a high proportion of chlamydial infections are under development.

**Figure 25-1. Progress Quotient Chart for Focus Area 25: Sexually Transmitted Diseases**



See notes at end of chart. (continued)

Figure 25-1. (continued)



**Notes:** Tracking data for objectives 25-5, 25-13, and 25-16a and b are unavailable. Objectives 25-10, 25-12, 25-14, 25-15, 25-17, 25-18, and 25-19 were deleted at the midcourse. Objective 25-8 has been moved to Focus Area 13; see objective 13-18.

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.

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

**Figure 25-2. Disparities Table for Focus Area 25: Sexually Transmitted Diseases**

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.

Population-based objectives	Characteristics																	
	Race and ethnicity							Gender		Education			Income					
	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
25-1a. Chlamydia: females 15-24 years attending family planning clinics (1999, 2003) †		↑	↓		↓	↓	B	↓										
25-1b. Chlamydia: females 15-24 years attending STD clinics (1999, 2003) †	↓				↓	↓	B	↓										
25-1c. Chlamydia: males 15-24 years attending STD clinics (1999, 2003) †	↓	↑	↓		↓	↑	B	↓										
25-1d. Chlamydia: females < 25 years enrolled in National Job Training Program (2002, 2003) †	↑	1					B											
25-2a. Gonorrhea: new cases (1997, 2003) †	↓	B <sup>1</sup>			↓	↓		↓		B								
25-2b. Gonorrhea: new cases females 15-44 years (2002, 2003) †	↓	B <sup>1</sup>			↓	↓	↓	↓										
25-3. Primary and secondary syphilis: new cases (1997, 2003) †	↓	B <sup>1</sup>			↓	↓	↓	↓	B	↑								
25-4. Genital herpes: 20-29 years (1988-94, 1999-2002) *					2	↑	B			B							B	
25-6. Treatment for pelvic inflammatory disease: females 15-44 years (1995, 2002) *							B				↓		B	↓			B	
25-7. Fertility problems: childless females 15-44 years with an STD or PID (1995, 2002) *																		
25-9. Congenital syphilis: new cases (1997, 2003) †	↑	↑	1		↑	↓	B	↓										
25-11a. Never had sexual intercourse: grades 9-12 (1999, 2003) †							B		B									
25-11b. Had sexual intercourse but not in past 3 months: grades 9-12 (1999, 2003) †					B	↓			B									
25-11c. Used a condom at last intercourse: grades 9-12 (1999, 2003) †						B			B									

**Notes:** Data for objectives 25-5, 25-13, and 25-16a and b are unavailable or not applicable. Objectives 25-10, 25-12, 25-14, 25-15, 25-17, 25-18, and 25-19 were deleted at the midcourse. Objective 25-8 has been moved to HIV (Focus Area 13); see objective 13-18.

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.

*(continued)*

**Figure 25-2. (continued)**

The <b>best group rate</b> at the most recent data point.	 The group with the best rate for specified characteristic.	 Most favorable group rate for specified characteristic, but reliability criterion not met.	 Best group rate reliability criterion not met.	
<b>Percent difference from the best group rate</b>				
<b>Disparity from the best group rate</b> at the most recent data point.	 Less than 10 percent or not statistically significant	 10-49 percent	 50-99 percent	 100 percent or more
<b>Changes in disparity</b> over time are shown when the change is greater than or equal to 10 percentage points and statistically significant, or when the change is greater than or equal to 10 percentage points and estimates of variability were not available.	<b>Increase in disparity (percentage points)</b>			
	↑ 10-49	↑↑ 50-99	↑↑↑ 100 or more	
	<b>Decrease in disparity (percentage points)</b>			
	↓ 10-49	↓↓ 50-99	↓↓↓ 100 or more	
<b>Availability of data.</b>	 Data not available.	 Characteristic not selected for this 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.

<sup>1</sup> Data are for Asians or Pacific Islanders.

<sup>2</sup> Data are for Mexican Americans.

## Objectives and Subobjectives for Focus Area 25: Sexually Transmitted Diseases

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**Goal:** Promote responsible sexual behaviors, strengthen community capacity, and increase access to quality services to prevent sexually transmitted diseases (STDs) and their complications.

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.<sup>1</sup>

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.

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<sup>1</sup> See Technical Appendix for more information on baseline and target revisions.

## Bacterial STD Illness and Disability

### ORIGINAL OBJECTIVE

#### 25-1. Reduce the proportion of adolescents and young adults with *Chlamydia trachomatis* infections.

##### Target and baseline:

Objective	Reduction in <i>Chlamydia trachomatis</i> infections	1997 Baseline	2010 Target
		<i>Percent</i>	
<b>25-1a.</b>	Females aged 15 to 24 years attending family planning clinics	5.0	3.0
<b>25-1b.</b>	Females aged 15 to 24 years attending STD clinics	12.2	3.0
<b>25-1c.</b>	Males aged 15 to 24 years attending STD clinics	15.7	3.0

**Target setting method:** Better than the best.

**Data source:** STD Surveillance System, CDC, NCHSTP.

### OBJECTIVE WITH REVISIONS

#### 25-1. Reduce the proportion of adolescents and young adults with *Chlamydia trachomatis* infections.

##### Target and baseline:

Objective*	Reduction in <i>Chlamydia trachomatis</i> infections	1997 Baseline (unless noted)	2010 Target
		<i>Percent</i>	
<b>25-1a.</b>	Females aged 15 to 24 years attending family planning clinics	5.0	3.0
<b>25-1b.</b>	Females aged 15 to 24 years attending STD clinics	12.2	3.0
<b>25-1c.</b>	Males aged 15 to 24 years attending STD clinics	15.7	3.0
<b>25-1d.</b>	Females 24 years and under enrolled in National Job Training Program <sup>†</sup>	10.1 (2002) <sup>†</sup>	6.8

\* For data control purposes, subobjectives are not renumbered.

<sup>†</sup> Data source does not track *Chlamydia trachomatis* infections among males 24 years and under.

**Target setting method:** Better than the best.

**Data sources:** STD Surveillance System, CDC, NCHSTP; [National Job Training Program](#), U.S. Department of Labor.

## REVISED OBJECTIVE

### 25-1. Reduce the proportion of adolescents and young adults with *Chlamydia trachomatis* infections.

**Target and baseline:**

Objective*	Reduction in <i>Chlamydia trachomatis</i> infections	1997 Baseline (unless noted)	2010 Target
		<i>Percent</i>	
<b>25-1a.</b>	Females aged 15 to 24 years attending family planning clinics	5.0	3.0
<b>25-1b.</b>	Females aged 15 to 24 years attending STD clinics	12.2	3.0
<b>25-1c.</b>	Males aged 15 to 24 years attending STD clinics	15.7	3.0
<b>25-1d.</b>	Females 24 years and under enrolled in National Job Training Program <sup>†</sup>	10.1 (2002) <sup>†</sup>	6.8

\* For data control purposes, subobjectives are not renumbered.

<sup>†</sup> Data source does not track *Chlamydia trachomatis* infections among males 24 years and under.

**Target setting method:** Better than the best.

**Data sources:** STD Surveillance System, CDC, NCHSTP; National Job Training Program, U.S. Department of Labor.

## ORIGINAL OBJECTIVE

### 25-2. Reduce gonorrhea.

**Target:** 19 new cases per 100,000 population.

**Baseline:** 122<sup>1</sup> new cases of gonorrhea per 100,000 population occurred in 1997.

**Target setting method:** Better than the best.

**Data source:** STD Surveillance System, CDC, NCHSTP.

<sup>1</sup> Baseline revised from 123 after November 2000 publication.

## OBJECTIVE WITH REVISIONS

### 25-2. Reduce gonorrhea.

**Target and baseline:**

Objective	Reduction in Gonorrhea	1997 Baseline (unless noted)	2010 Target

### OBJECTIVE WITH REVISIONS *(continued)*

		<i>Rate per 100,000 Population</i>	
<b>25-2a.</b>	<u>New cases of gonorrhea in the total population</u>	122 <sup>1</sup>	19
<b>25-2b.</b>	<u>New cases of gonorrhea among females aged 15 to 44 years</u>	279 (2002)	42

**Target setting method:** Better than the best.

**Data source:** STD Surveillance System, CDC, NCHSTP.

<sup>1</sup> Baseline revised from 123 after November 2000 publication.

### REVISED OBJECTIVE

#### **25-2. Reduce gonorrhea.**

**Target and baseline:**

		1997 Baseline (unless noted)	2010 Target
		<i>Rate per 100,000 Population</i>	
<b>25-2a.</b>	New cases of gonorrhea in the total population	122 <sup>1</sup>	19
<b>25-2b.</b>	New cases of gonorrhea among females aged 15 to 44 years	279 (2002)	42

**Target setting method:** Better than the best.

**Data source:** STD Surveillance System, CDC, NCHSTP.

<sup>1</sup> Baseline revised from 123 after November 2000 publication.

### NO CHANGE IN OBJECTIVE

#### **25-3. Eliminate sustained domestic transmission of primary and secondary syphilis.**

**Target:** 0.2 new cases per 100,000 population.<sup>1</sup>

**Baseline:** 3.2 new cases of primary and secondary syphilis per 100,000 population occurred in 1997.<sup>1</sup>

**Target setting method:** Better than the best and consistent with the National Plan to Eliminate Syphilis from the United States, CDC, 1999.

### NO CHANGE IN OBJECTIVE (*continued*)

**Data source:** STD Surveillance System, CDC, NCHSTP.

<sup>1</sup> Target and baseline corrected at the midcourse to specify new cases.

## Viral STD Illness and Disability

### NO CHANGE IN OBJECTIVE

**25-4. Reduce the proportion of adults with genital herpes infection.**

**Target:** 14 percent.

**Baseline:** 17 percent of adults aged 20 to 29 years had genital herpes infection in 1988–94 (as measured by herpes simplex virus type 2 [HSV-2] antibody).

**Target setting method:** Better than the best.

**Data source:** National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.

### ORIGINAL OBJECTIVE

**25-5. (Developmental) Reduce the proportion of persons with human papillomavirus (HPV) infection.**

**Potential data source:** National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.

### OBJECTIVE WITH REVISIONS

**25-5. (Developmental) Reduce the proportion of ~~persons~~ females with human papillomavirus (HPV) infection.**

**Potential data source:** National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.

### REVISED OBJECTIVE

**25-5. (Developmental) Reduce the proportion of females with human papillomavirus (HPV) infection.**

**Potential data source:** National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.

## STD Complications Affecting Females

### NO CHANGE IN OBJECTIVE

**25-6. Reduce the proportion of females who have ever required treatment for pelvic inflammatory disease (PID).**

**Target:** 5 percent.

**Baseline:** 8 percent of females aged 15 to 44 years required treatment for PID in 1995.

**Target setting method:** Better than the best.

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

### NO CHANGE IN OBJECTIVE

**25-7. Reduce the proportion of childless females with fertility problems who have had a sexually transmitted disease or who have required treatment for pelvic inflammatory disease (PID).**

**Target:** 15 percent.

**Baseline:** 27 percent of childless females aged 15 to 44 years with fertility problems had a history of STDs or PID treatment in 1995.

**Target setting method:** 44 percent improvement.

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

### ORIGINAL OBJECTIVE

**25-8. (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

**25-8. *(Objective moved to Focus Area 13 as objective 13-18)* (Developmental) Reduce the number of new cases of HIV/AIDS diagnosed 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.

### REVISED OBJECTIVE

**25-8. Objective 25-8 moved to Focus Area 13 as new objective 13-18.**

## STD Complications Affecting the Fetus and Newborn

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

#### 25-9. Reduce congenital syphilis.

**Target:** 1 new case per 100,000 live births.

**Baseline:** 28<sup>1</sup> new cases of congenital syphilis per 100,000 live births were reported in 1997.

**Target setting method:** Better than the best and consistent with the National Plan to Eliminate Syphilis from the United States, CDC, 1998.

**Data sources:** STD Surveillance System, CDC, NCHSTP; National Vital Statistics System (NVSS), CDC, NCHS.

<sup>1</sup> Baseline revised from 27 after November 2000 publication.

### OBJECTIVE DELETED

25-10. *(Objective deleted due to lack of data source)* (Developmental) Reduce neonatal consequences from maternal sexually transmitted diseases, including chlamydial pneumonia, gonococcal and chlamydial *ophthalmia neonatorum*, laryngeal papillomatosis (from human papillomavirus infection), neonatal herpes, and preterm birth and low birth weight associated with bacterial vaginosis.

## Personal Behaviors

### ORIGINAL OBJECTIVE

#### 25-11. Increase the proportion of adolescents who abstain from sexual intercourse or use condoms if currently sexually active.

**Target:** 95 percent.

**Baseline:** 85 percent of adolescents in grades 9 through 12 abstained from sexual intercourse or used condoms in 1999 (50 percent had never had intercourse; 14 percent had intercourse but not in the past 3 months; and 21 percent currently were sexually active and used a condom at last intercourse).

**Target setting method:** 12 percent improvement.

**Data source:** Youth Risk Behavior Surveillance System (YRBSS), CDC, NCCDPHP.

## OBJECTIVE WITH REVISIONS

**25-11. Increase the proportion of adolescents who abstain from sexual intercourse or use condoms if currently sexually active.**

Objective	Increase in Proportion of Students in Grades 9 Through 12 Who Abstain From Sexual Intercourse or Use Condoms if Currently Sexually Active	1999 Baseline	2010 Target
		<i>Percent</i>	
<b>25-11a.</b>	Never had sexual intercourse	50	56
<b>25-11b.</b>	If sexually experienced, are not currently sexually active	27	30
<b>25-11c.</b>	If currently sexually active, used a condom the last time they had sexual intercourse	58	65

**Target:** 95-percent.

**Baseline:** 85 percent of adolescents in grades 9 through 12 abstained from sexual intercourse or used condoms in 1999 (50 percent had never had intercourse; 14 percent had intercourse but not in the past 3 months; and 21 percent currently were sexually active and used a condom at last intercourse).

**Target setting method:** 12 percent improvement.

**Data source:** Youth Risk Behavior Surveillance System (YRBSS), CDC, NCCDPHP.

## REVISED OBJECTIVE

**25-11. Increase the proportion of adolescents who abstain from sexual intercourse or use condoms if currently sexually active.**

**Target and baseline:**

Objective	Increase in Proportion of Students in Grades 9 Through 12 Who Abstain From Sexual Intercourse or Use Condoms If Currently Sexually Active	1999 Baseline	2010 Target
		<i>Percent</i>	
<b>25-11a.</b>	Never had sexual intercourse	50	56
<b>25-11b.</b>	If sexually experienced, are not currently sexually active	27	30
<b>25-11c.</b>	If currently sexually active, used a condom the last time they had sexual intercourse	58	65

**Target setting method:** 12 percent improvement.

**Data source:** Youth Risk Behavior Surveillance System (YRBSS), CDC, NCCDPHP.

### OBJECTIVE DELETED

25-12. *(Objective deleted due to lack of data source)* (Developmental) Increase the number of positive messages related to responsible sexual behavior during weekday and nightly prime-time television programming.

## Community Protection Infrastructure

### NO CHANGE IN OBJECTIVE

25-13. Increase the proportion of Tribal, State, and local sexually transmitted disease programs that routinely offer hepatitis B vaccines to all STD clients.

**Target:** 90 percent.

**Baseline:** 5 percent of State and local STD programs offered hepatitis B vaccines to clients in accordance with CDC guidelines in 1998. Tribal STD program data are developmental.

**Target setting method:** 85 percentage point improvement.

**Data sources:** Survey of STD Programs, National Coalition of STD Directors (NCSD); IHS.

### OBJECTIVE DELETED

25-14. *(Objective deleted due to lack of data source)* (Developmental) Increase the proportion of youth detention facilities and adult city or county jails that screen for common bacterial sexually transmitted diseases within 24 hours of admission and treat STDs (when necessary) before persons are released.

### OBJECTIVE DELETED

25-15. *(Objective deleted due to lack of data source)* (Developmental) Increase the proportion of all local health departments that have contracts with managed care providers for the treatment of nonplan partners of patients with bacterial sexually transmitted diseases (gonorrhea, syphilis, and chlamydia).

## Personal Health Services

### ORIGINAL OBJECTIVE

25-16. (Developmental) Increase the proportion of sexually active females aged 25 years and under who are screened annually for genital chlamydia infections.

**Potential data sources:** Family Planning Annual Report, OPA; STD Surveillance System, CDC, NCHSTP.

## OBJECTIVE WITH REVISIONS

**25-16. (Developmental) Increase the proportion of sexually active females aged 25 years and under who are screened annually for genital chlamydia infections.**

**Target and baseline:**

Objective	Increase in Sexually Active Females Aged 25 Years and Under Who Are Screened Annually for Genital Chlamydia Infections	2002 Baseline	2010 Target
		<i>Percent</i>	
<b>25-16a.</b>	Enrolled in commercial managed care organizations (MCOs)	25	62
<b>25-16b.</b>	Enrolled in Medicaid MCOs	41	62

**Target setting method:** Percent improvement consistent with HEDIS measures for breast and cervical cancer screenings.

**Potential dData source:** Health Employer Data and Information Set (HEDIS), National Committee for Quality Assurance (NCQA), Family Planning Annual Report, OPA; STD Surveillance System, GDC, NGHSTP

## REVISED OBJECTIVE

**25-16. Increase the proportion of sexually active females aged 25 years and under who are screened annually for genital chlamydia infections.**

**Target and baseline:**

Objective	Increase in Sexually Active Females Aged 25 Years and Under Who Are Screened Annually for Genital Chlamydia Infections	2002 Baseline	2010 Target
		<i>Percent</i>	
<b>25-16a.</b>	Enrolled in commercial managed care organizations (MCOs)	25	62
<b>25-16b.</b>	Enrolled in Medicaid MCOs	41	62

**Target setting method:** Percent improvement consistent with HEDIS measures for breast and cervical cancer screenings.

**Data source:** Health Employer Data and Information Set (HEDIS), National Committee for Quality Assurance (NCQA).

## OBJECTIVE DELETED

**25-17. (Objective deleted due to lack of data source) (Developmental) Increase the proportion of pregnant females screened for sexually transmitted diseases (including HIV infection and bacterial vaginosis) during prenatal health care visits, according to recognized standards.**

## OBJECTIVE DELETED

25-18. *(Objective deleted because objective is no longer trackable through the existing data source)* Increase the proportion of primary care providers who treat patients with sexually transmitted diseases and who manage cases according to recognized standards.

**Target:** 90 percent.

**Baseline:** 70 percent of primary care providers treated patients with STDs according to CDC STD Treatment Guidelines in 1988.

**Target setting method:** Retain 2000 target.

**Data sources:** National Disease and Therapeutic Index, IMS America; National Ambulatory Medical Care Survey (NAMCS), CDC, NCHS.

## OBJECTIVE DELETED

25-19. *(Objective deleted due to lack of data source)* (Developmental) Increase the proportion of all sexually transmitted disease clinic patients who are being treated for bacterial STDs (chlamydia, gonorrhea, and syphilis) and who are offered provider referral services for their sex partners.

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## Related Objectives From Other Focus Areas

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### 1. Access to Quality Health Services

- 1-3. Counseling about health behaviors
- 1-7. Core competencies in health profession training

### 3. Cancer

- 3-4. Cervical cancer deaths
- 3-11. Pap tests

### 7. Educational and Community-Based Programs

- 7-2. School health education

### 9. Family Planning

- 9-8. Abstinence before age 15 years
- 9-9. Abstinence among adolescents aged 15 to 17 years
- 9-10. Pregnancy prevention and sexually transmitted disease (STD) protection
- 9-11. Reproductive health education
- 9-12. Problems in becoming pregnant and maintaining a pregnancy

### 13. HIV

- 13-5. New HIV/AIDS cases
- 13-6. Condom use
- 13-18. Heterosexually transmitted HIV/AIDS in women

### 14. Immunization and Infectious Diseases

- 14-3. Hepatitis B in adults and high-risk groups
- 14-28. Hepatitis B vaccination among high-risk groups

### 15. Injury and Violence Prevention

- 15-35. Rape or attempted rape
- 15-36. Sexual assault other than rape

### 16. Maternal, Infant, and Child Health

- 16-1. Fetal and infant deaths
- 16-6. Prenatal care
- 16-10. Low birth weight and very low birth weight
- 16-11. Preterm births

