

Health Priority: High Risk Sexual Behavior
Objective 3: Sexually Transmitted Disease, including HIV Infection
(Template)

Long-term (2008-2010) Outcome Objective: It is a public health goal to reduce the incidence of sexually transmitted disease (STD), including human immunodeficiency virus (HIV) infection by promoting responsible sexual behavior throughout the life span, strengthening community capacity, and increasing access to quality prevention services.

3a: By the year 2010 the incidence of primary and secondary syphilis in Wisconsin will be 0.2 cases per 100,000 population.

3b: By the year 2010 the incidence of genital *Chlamydia trachomatis* infection in Wisconsin will be 138 cases per 100,000 population.

3c: By the year 2010 the incidence of *Neisseria gonorrhoeae* infection in Wisconsin will be 63 cases per 100,000 population.

3d: By the year 2010 the incidence of human immunodeficiency virus (HIV) infection in Wisconsin will be 2.5 cases per 100,000 population.

Long-term outcome objective updated as of: Sept 2004

Wisconsin Baseline	Wisconsin Sources and Year
(3a) 0.8 cases of primary and secondary syphilis per 100,000 population in Wisconsin during 1999. (See Appendix A for more detail)	Centers for Disease Control and Prevention. <i>Sexually Transmitted Disease Surveillance, 2001</i> . Atlanta, GA: US Department of Health and Human Services, Sept. 2002. Table 27, p112.
(3b) 275.4 cases of genital <i>Chlamydia trachomatis</i> infection per 100,000 population in Wisconsin during 1999. (See Appendix A for more detail)	Centers for Disease Control and Prevention. <i>Sexually Transmitted Disease Surveillance, 2001</i> . Atlanta, GA: US Department of Health and Human Services, Sept. 2002. Table 4, p85.
(3c) 126.9 cases of <i>Neisseria gonorrhoeae</i> infection per 100,000 population in 1999. (See Appendix A for more detail)	Centers for Disease Control and Prevention. <i>Sexually Transmitted Disease Surveillance, 2001</i> . Atlanta, GA: US Department of Health and Human Services, Sept. 2002. Table 14, p97.
(3d) 4.9 diagnosed cases of HIV infection per 100,000 population in Wisconsin during 1999. (See Appendix A for more detail)	<i>Wisconsin AIDS/HIV Quarterly Surveillance Summary, Cases reported through December 31, 2003</i> , Table 1b (diagnosed cases). p 1.

Federal/National Baseline	Federal/National Sources and Year
0.2 cases of primary and secondary syphilis per 100,000 population.	<i>Healthy People 2010</i> , November 2000, USDHHS (Objective 25.3)
138 cases of genital <i>Chlamydia trachomatis</i> infection per 100,000 population.	<i>Healthy People 2010</i> , November 2000, USDHHS (Objective 25.1)
63 cases of <i>Neisseria gonorrhoeae</i> infection per 100,000 population.	<i>Healthy People 2010</i> , November 2000, USDHHS (Objective 25.2)
2.5 cases of HIV infection per 100,000	<i>Healthy People 2010</i> , November 2000,

population.	USDHHS (Developmental Objective 13.5)
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Related USDHHS Healthy People 2010 Objectives			
Chapter	Goal	Objective Number	Objective Statement
13 - HIV	Prevent human immunodeficiency virus (HIV) infection and its related illness and death.	13-1	Reduce AIDS among adolescents and adults.

Related USDHHS Healthy People 2010 Objectives			
Chapter	Goal	Objective Number	Objective Statement
		13-5	(Developmental) Reduce the number of cases among HIV infection among adolescents and adults.
		13-6	Increase the proportion of sexually active persons who use condoms.
		13-11	Increase the proportion of adults with tuberculosis (TB) who have been tested for HIV.
		13-12	(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.
		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.
		13-4	Reduce deaths from HIV infection.
25 - Sexually Transmitted Diseases	Promote responsible sexual behaviors, strengthen community capacity, and increase access to quality	25-1	Reduce the proportion of adolescents and young adults with <i>Chlamydia trachomatis</i> infections.

	services to prevent sexually transmitted diseases (STDs) and their complications.		
		25-2	Reduce gonorrhea.
		25-3	Eliminate sustained domestic transmission of primary and secondary syphilis.
		25-4	Reduce the proportion of adults with genital herpes infection.

Related USDHHS Healthy People 2010 Objectives			
Chapter	Goal	Objective Number	Objective Statement
		25-5	(Developmental) Reduce the proportion of persons with human papillomavirus (HPV) infection.
		25-6	Reduce the proportion of females who have ever required treatment for pelvic inflammatory disease (PID).
		25-11	Increase the proportion of adolescents who abstain from sexual intercourse or use condoms if currently sexually active
		25-18	Increase the proportion of primary care providers who treat patients with sexually transmitted diseases and who manage cases according to recognized standards.

Definitions	
Term	Definition
Sexually transmitted disease (STD)	A complex array of infections, diseases, and syndromes caused by more than 25 infectious agents that are transmitted through sexual contact.
Human immunodeficiency virus (HIV)	The virus that causes acquired immunodeficiency syndrome (AIDS). HIV is predominately a sexually transmitted disease. HIV can also be transmitted through bloodborne exposure and from an infected mother to her infant.
Syphilis	A sexually transmitted disease (STD) caused by the bacterium <i>Treponema pallidum</i> .
<i>Chlamydia trachomatis</i>	A bacterium that is the causative agent of genital chlamydia, a common sexually transmitted disease.
<i>Neisseria gonorrhoeae</i>	A bacterium that is the causative agent of gonorrhea, a common sexually transmitted disease.
“Safer sex” practices	A set of strategies aimed at reducing the risk of acquiring HIV infection diseases through sexual contact.
Partner counseling and referral services	A prevention strategy that assists persons with STDs and HIV with the notification and referral of sexual partners.
Counseling, testing, and referral services	A prevention strategy aimed at reducing the spread of STDs and HIV through diagnostic testing, risk reduction counseling, and referral to community services.

Rationale:

The term “sexually transmitted disease” (STD) refers to a complex array of infections, diseases, and syndromes caused by more than 25 infectious agents that are transmitted through sexual contact. Common STDs include, but are not limited to, syphilis, gonorrhea, chlamydia, human papillomavirus virus infection, hepatitis B virus infection, human immunodeficiency virus (HIV) infection, and others.

STDs are remarkably common. It is estimated that 12 million new STD cases occur in the United States each year. STD rates in the United States exceed those in all other countries of the industrialized world. There are more STDs reported in the United States than all other communicable diseases combined.

The public health effects of STDs are great. In addition to acute illness, STDs are a significant cause of infertility and a contributing factor to many cases of cervical cancer. HIV infection, which is predominately sexually transmitted, is among the leading causes of death for persons ages 25 to 44. It is estimated that the annual direct and indirect cost associated with STDs in the United States, excluding the cost of sexually transmitted HIV infection, is \$10 billion.

STDs are also very common in Wisconsin. In 1997, 19,089 cases of STD were reported to the Wisconsin Division of Public Health¹. The overall reported rate was 382 STD cases per 100,000

¹ As of April 1, 2000, the following STDs are reportable in Wisconsin: syphilis, gonorrhea, chlamydia trachomatis, primary genital herpes simplex, chancroid, and sexually transmitted pelvic inflammatory disease.

population. The most frequent STDs reported were chlamydia and gonorrhea, together representing 84 percent of all reported cases. While the number of reported cases is large, reported cases may represent only a fraction of overall morbidity. In the United States, it is believed that more than 90 percent of all STDs are **not** reported to public health authorities².

In Wisconsin STDs predominately occur among teenagers and young adults. In 1997, one third (34 percent) of persons reported with STDs in Wisconsin were between 15 and 19 years of age, 30 percent were 20 to 24 years of age, and 15 percent were 25 to 29 years of age. Teenagers 15 to 19 years of age had the highest STD rate (1,859 per 100,000 population).

In Wisconsin, reported STDs represent a major race/ethnic health disparity. The reported rate for African Americans (3,160 per 100,000 population) is more than 26-fold greater than the rate among whites (119 per 100,000 population). For African Americans, the peak rate (10,951 per 100,000 population) occurred in the 20 to 24 age group. This rate implies that in Wisconsin during 1997 there was one reported case of STD for every 9 African Americans in that age group. For a significant proportion of cases, however, race was unspecified; thus, the reported rates for each race group must be considered minimum values.

Despite the high incidence of STDs, and the resultant human and economic loss, STDs remain largely a hidden problem. The reluctance to address sexual health issues and a lack of recognition of the scope, impact, and consequences of STD have hindered efforts to reduce STD morbidity. The goal of this objective is to reduce the incidence of STD and HIV infection by promoting responsible sexual behavior throughout the life span, strengthening community capacity and increasing access to quality prevention services.

Outcomes, Inputs and Outputs

Short and medium term outcomes for this objective are considered in two categories - community outcomes and infrastructure outcomes:

Community Outcomes

Short-term Outcome Objectives (2002-2004)

The public health system will:

- Increase community recognition of the importance of STDs, including HIV infection.
- Increase community members' knowledge of STDs, including "safer sex" practices and symptoms.
- Increase community members' awareness of their risk for STDs, including HIV infection.
- Increase the availability of free and accessible condoms in the community.

Medium-term Outcome Objectives (2005-2007)

The public health system will:

- Increase the percentage of adolescents who delay the initiation of sexual intercourse.
- Increase the percentage of community members who engage in "safer sex" practices.

²In the United States it is estimated that only about two-thirds of syphilis cases, one half of gonorrhea cases, and one sixth of chlamydia cases are reported to public health authorities. In addition, some very common STDs (i.e., human papilloma virus infection, and trichomonas) are not reportable diseases.

- Increase the percentage of community members who have the skills to negotiate “safer sex” with partners.
- Increase the willingness of community members to seek testing and treatment for STDs, including HIV infection.
- Reduce stigma associated with STDs, including HIV infection.

Inputs:

- Recognition of the problem among legislative, state, community, education, public health, and health care policy leadership.
- Commitment of above groups to mobilizing resources to implement plan.
- Leadership from above groups in developing public policy.
- Funding for educational materials.

Outputs:

- Conduct media campaigns to increase community awareness of the problem.
- Conduct school-based education.
- Conduct community-based health education aimed at parents and populations at risk.
- Conduct health education in correctional and other institutional settings.
- Provide individual risk reduction counseling in a variety of settings including health care facilities, schools, half-way houses and alcohol and other drug treatment facilities.
- Provide partner notification and risk reduction counseling services to all individuals diagnosed with HIV and/or STDs.
- Build coalitions of community leaders to raise awareness in specific groups.

Infrastructure Outcomes

Short-term Outcome Objectives (2002-2004)

The public health system will:

- Improve education of health care providers regarding STDs, including HIV infection.
- Increase testing and treatment services provided by primary health care providers.
- Increase funding for partner counseling and referral services for STDs, including HIV infection.
- Improve laboratory training and support for testing.
- Improve disease surveillance systems.
- Increase knowledge among public health providers of the populations affected by STDs, including HIV infection.
- Increase funding/reimbursement for testing and treatment.
- Seek ways to remove institutional barriers that inhibit innovation.

Medium-term Outcome Objectives (2005-2007)

The public health system will:

- Increase the availability of public and private testing and treatment services.
- Improve the accessibility (e.g., cost, location, hours, culture, language) of testing, treatment, and other services.

- Increase use of innovative methods for treatment, care or public health follow up of STDs, including HIV infection.
- Increase the availability of improved treatments for STDs, including HIV infection.
- Increase access to improved testing technologies.
- Improve availability of accurate and timely data at state and local levels.
- Improve evaluation of services at state and local levels.

Inputs:

- Recognition of the problem among legislative, state, community, education, public health, and health care policy leadership.
- Commitment of above groups to providing resources to implement plan.
- Leadership from above groups in developing public policy.
- Funding for increased staffing, staff education, improved surveillance/data system, and increased and improved testing procedures.

Outputs:

- Educate private and public health care providers regarding risk, testing, treatment, and risk reduction strategies related to STDs, including HIV infection.
- Provide reimbursement for appropriate testing and treatment services.
- Increase public health staffing for partner counseling and referral, surveillance, and laboratory services related to STDs, including HIV infection.
- Build coalitions between public and private providers to coordinate services.
- Establish coordination and collaboration between existing services that serve only persons with HIV infection or only persons with STDs.
- Develop improved surveillance/data collection systems.

Crosswalk to Other Health and System Priorities in Healthiest Wisconsin 2010

Existing, Emerging, and Re-Emerging Communicable Diseases: Efforts to address STDs, including HIV infection, are closely tied to the efforts of the public health system to address existing, emerging, and re-emerging communicable diseases. Because sexually transmitted infections (STI) and HIV services are often housed or coordinated closely with communicable disease programs, both systems must work together to ensure adequate resources, infrastructure, and staff capacity to address mutual program objectives.

Access to Primary and Prevention Health Care Services: Access includes addressing the cultural, linguistic, and socio-economic barriers to accessing prevention, care, and treatment services related to STDs, including HIV infection.

Social and Economic Factors that Influence Health: STDs, including HIV infection, disproportionately impact ethnic and racial minorities.

Intentional and Unintentional Injuries and Violence: There are associations between STDs and sexual assault and violence.

Significant Linkages to Wisconsin’s 12 Essential Public Health Services

Educate the public about current and emerging health issues: By conducting public health education and training to both clients and providers based in sound behavioral science practice and research that assists persons at risk for STDs, including HIV infection, in changing their behavior.

Monitor health status to identify community health problems: Through ongoing public health needs assessment, surveillance, and laboratory testing activities.

Identify, investigate, control, and prevent health problems and environmental health hazards in the community: By developing, implementing, and evaluating effective surveillance, testing, and intervention activities related to the prevention, identification, and treatment of STDs and HIV infection.

Promote community partnerships to identify and solve health problems: By sustaining existing, effective collaborations and creating new partnerships whenever possible, particularly between individual providers of services to persons with HIV infection and providers of persons with STDs.

Connection to the Three Overarching Goals of Healthiest Wisconsin 2010

Protect and promote health for all: By trying to reach and serve all persons at high risk for STDs and HIV infection. This includes improving access to sexual health services for all persons in all communities, and providing adequate training in sexual health to service providers to assist them in improving the quality and accessibility of services to their clients.

Eliminate health disparities: By addressing the disproportionate impact of STDs and HIV infection on communities of color, youth, and women, and targeting interventions to community members with less access to health education and services.

Transform Wisconsin's public health system: By improving coordination and collaboration between providers of services for persons with STDs and HIV infection, and enhancing the overall service infrastructure. In addition, prioritize the use of limited resources by funding and supporting behaviorally sound, well evaluated, and effective interventions.

Key Interventions and/or Strategies Planned:

- Raising awareness of the risk factors associated with STDs and HIV infection.
- Raising awareness of the impact of these infections on the communities' health.
- Providing comprehensive training and education to health care providers.
- Enhancing the overall infrastructure of surveillance, prevention, care, and treatment services.

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APPENDIX A

Health Priority: High Risk Sexual Behavior Objective 3: Sexually Transmitted Disease, including HIV Infection

Long-term (2008-2010) Outcome Objective: It is a public health goal to reduce the incidence of sexually transmitted disease (STD), including human immunodeficiency virus (HIV) infection, by promoting responsible sexual behavior throughout the life span, strengthening community capacity, and increasing access to quality prevention services. Progress towards this long-term goal will be measured through the following four outcome objectives.

Outcome objective 3a: By the year 2010 the incidence of primary and secondary syphilis in Wisconsin will be 0.2 cases per 100,000 population.

- **Measurement:** Progress toward this objective will be measured by the incidence of primary and secondary syphilis (i.e., the annual number of diagnosed cases of primary and secondary syphilis per 100,000 population derived STD case surveillance data and U.S. Census data). Temporal comparison of syphilis incidence rates derived from surveillance data needs to take into account any differences in the rate at which conditions are diagnosed and any changes in the completeness of reporting.
- **Current availability:** Ongoing availability.
- **Agency responsible for measuring progress:** STD Program, Bureau of Communicable Disease, Division of Public Health, Wisconsin Department of Health and Family Services.
- **Baseline:** 0.8 cases of primary and secondary syphilis per 100,000 population in Wisconsin during 1999. (Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance, 2001. Atlanta, GA: U.S. Department of Health and Human Services, September 2002. Table 27, p112.)
- **2010 target:** 0.2 cases of primary and secondary syphilis per 100,000 population.
- **Comment:** The Wisconsin 2010 target represents an incidence rate that is considered to eliminate the sustained domestic transmission of primary and secondary syphilis. Federal Healthy People 2010 objective 25.3 also calls for a reduction to 0.2 cases per 100,000 population in 2010, from 3.2 cases of primary and secondary syphilis per 100,000 population in 1997.

Outcome objective 3b: By the year 2010 the incidence of genital chlamydia trachomatis infection in Wisconsin will be 138 cases per 100,000 population.

- **Measurement:** Progress toward this objective will be measured by the incidence of genital chlamydia trachomatis infection (i.e., the annual number of diagnosed cases of genital chlamydia trachomatis infection per 100,000 population derived STD case surveillance data and U.S. Census data). Temporal comparison of genital chlamydia trachomatis infection incidence rates derived from surveillance data needs to take into account any differences in the rate at which conditions are diagnosed and any changes in the completeness of reporting.
- **Current availability:** Ongoing availability.
- **Agency responsible for measuring progress:** STD Program, Bureau of Communicable Disease, Division of Public Health, Wisconsin Department of Health and Family Services.
- **Baseline:** 275.4 cases of genital chlamydia trachomatis infection per 100,000 population in Wisconsin during 1999. (Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance, 2001. Atlanta, GA: U.S. Department of Health and Human Services, September 2002. Table 4, p85.)

- 2010 Target: 138 cases of genital chlamydia trachomatis infection per 100,000 population.
- Comment: The 2010 Wisconsin target represents a 50 percent reduction in the incidence of genital chlamydia trachomatis infection compared to the baseline. Federal *Healthy People 2010* objective 25.1 calls for a reduction in the percentage of family planning and STD clinic attendees 15-24 years of age who present with chlamydia trachomatis infection. The federal target specifies a reduction from 5 percent to 3 percent among females attending family planning clinics, from 12.2 percent to 3 percent among female STD patients and from 15.7 percent to 3 percent among male STD patients.

Outcome objective 3c: By the year 2010 the incidence of neisseria gonorrhoeae infection in Wisconsin will be 63 cases per 100,000 population.

- Measurement: Progress toward this objective will be measured by the incidence of neisseria gonorrhoeae infection (i.e., the annual number of diagnosed cases of neisseria gonorrhoeae infection per 100,000 population derived from Wisconsin STD case surveillance data and U.S. Census data). Temporal comparison of neisseria gonorrhoeae infection incidence rates derived from surveillance data needs to take into account any differences in the rate at which conditions are diagnosed and any changes in the completeness of reporting.
- Current availability: Ongoing availability.
- Agency responsible for measuring progress: STD Program, Bureau of Communicable Disease, Division of Public Health, Wisconsin Department of Health and Family Services.
- Baseline: 126.9 cases of neisseria gonorrhoeae infection per 100,000 population in 1999. (Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance, 2001. Atlanta, GA: U.S. Department of Health and Human Services, September 2002. Table 14, p97.)
- 2010 target: 63 cases of neisseria gonorrhoeae infection per 100,000 population.
- Comment: The Wisconsin 2010 target represents a 50 percent reduction in the incidence Neisseria gonorrhoeae infection compared to the baseline. Federal *Healthy People 2010* objective 25.2 specifies an 85 percent reduction from 123 new cases of gonorrhea per 100,000 population in 1997, to 19 new cases per 100,000 population in 2010.

Outcome objective 3d: By the year 2010 the incidence of human immunodeficiency virus (HIV) infection in Wisconsin will be 2.5 cases per 100,000 population.

- Measurement: Progress toward this objective will be measured by the incidence of human immunodeficiency virus (HIV) infection (i.e., the annual number of diagnosed cases of HIV infection per 100,000 population derived from HIV case surveillance data and U.S. Census data). Temporal comparison of HIV infection incidence rates derived from surveillance data needs to take into account any differences in the rate at which conditions are diagnosed and any changes in the completeness of reporting.
- Current availability: Ongoing availability.
- Agency responsible for measuring progress: Wisconsin AIDS/HIV Program, Bureau of Communicable Disease, Division of Public Health, Wisconsin Department of Health and Family Services.
- Baseline: 4.9 diagnosed cases of HIV infection per 100,000 population in Wisconsin during 1999. (Wisconsin AIDS/HIV Quarterly Surveillance Summary, Cases reported through December 31, 2003, Table 1b (diagnosed cases). p 1.)
- 2010 Target: 2.5 cases of HIV infection per 100,000 population.
- Comment: Wisconsin has conducted HIV surveillance since 1985, therefore, baseline HIV incidence data are available. The Wisconsin 2010 target represents a 50 percent reduction in the

incidence of HIV infection compared to the baseline. Federal *Healthy People 2010* developmental objective 13.5 calls for an unspecified reduction in the number of cases of HIV infection among adolescents and adults because HIV surveillance is not conducted in all states. *Healthy People 2010* states that once HIV case surveillance is implemented nationwide, the Centers for Disease Control and Prevention will be able to report baseline data and progress toward this objective.