19. HIV Infection & Sexually Transmitted Diseases

Goal:
Prevent sexually transmitted diseases (STDs) and Human Immunodeficiency Virus (HIV) infection and treat infections to reduce their impact on health.
## 19. HIV Infection & Sexually Transmitted Diseases

### Health Goal for the Year 2010: Prevent sexually transmitted diseases (STDs) and human immunodeficiency virus (HIV) infection and their related complications, illness and deaths.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Alaska Data Source</th>
<th>U.S. Baseline</th>
<th>Alaska Baseline</th>
<th>Alaska Target Year 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Reduce Chlamydia trachomatis rate (per 100,000 population).</td>
<td>DHSS, DPH, Epidemiology</td>
<td>250.9 (1999)</td>
<td>304 (1999)</td>
<td>114</td>
</tr>
<tr>
<td>2 Reduce gonorrhea rate (per 100,000 population).</td>
<td>DHSS, DPH, Epidemiology</td>
<td>131.4 (1999)</td>
<td>49 (1999)</td>
<td>19</td>
</tr>
<tr>
<td>3 Eliminate primary and secondary syphilis (per 100,000).</td>
<td>DHSS, DPH, Epidemiology</td>
<td>3.2 (1997)</td>
<td>0.2 (1999)</td>
<td>0</td>
</tr>
<tr>
<td>4 Maintain level of zero (0) congenital syphilis infections per year.</td>
<td>DHSS, DPH, Epidemiology</td>
<td>27 new cases (1997)</td>
<td>0 (1999)</td>
<td>0</td>
</tr>
<tr>
<td>5 Increase the proportion of all STD patients reported with chlamydia, gonorrhea, or syphilis who are provided public health assistance in notifying their sex partners of exposure.</td>
<td>State HIV/STD Program</td>
<td>90% (1999) Anchorage, MatSu, Fairbanks</td>
<td>90% statewide</td>
<td></td>
</tr>
<tr>
<td>6 Regularly offer voluntary screening for chlamydia and gonorrhea in all residential youth detention facilities, treat STDs (when necessary) before youth are released, and offer public health assistance in notifying and treating sexual partners.</td>
<td>DHSS/DJJ</td>
<td></td>
<td>Developmental</td>
<td>100%</td>
</tr>
<tr>
<td>7 Given appropriate technology and evidence of cost effectiveness in Alaska settings, increase the proportion of adult correctional institutions that routinely provide voluntary screening of inmates for chlamydia and gonorrhea upon remand, treat STDs (when necessary) before persons are released, and request public health assistance in notifying and treating sexual partners.</td>
<td>DOC</td>
<td></td>
<td>No routine STD screening (1999)</td>
<td>80%</td>
</tr>
<tr>
<td>8 Increase the proportion of recently postpartum women who recall that a health care worker discussed HIV testing with them during their prenatal care.</td>
<td>PRAMS</td>
<td>73.7% (1998)</td>
<td></td>
<td>85%</td>
</tr>
<tr>
<td>9 Increase the proportion of all persons reported with newly diagnosed HIV infection who are provided public health assistance in notifying their sex partners of exposure.</td>
<td>State HIV/STD Program</td>
<td>48% (1999)</td>
<td></td>
<td>90%</td>
</tr>
<tr>
<td>10 Maintain the low rate of newly diagnosed AIDS cases among adolescents and adults aged 13 years and older (per 100,000).</td>
<td>DHSS, DPH, Epidemiology</td>
<td>19.5 (1998)</td>
<td>0.8 (1999)</td>
<td>&lt;1.0</td>
</tr>
<tr>
<td>11 Increase the proportion of adults aged 25 to 44 years with tuberculosis (TB) disease who have been tested for HIV.</td>
<td>State TB Program</td>
<td>55% (1998)</td>
<td>69% (1998)</td>
<td>85%</td>
</tr>
</tbody>
</table>
### 19. HIV Infection & Sexually Transmitted Diseases

#### Health Goal for the Year 2010: Prevent sexually transmitted diseases (STDs) and human immunodeficiency virus (HIV) infection and their related complications, illness and deaths.

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<tr>
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</thead>
<tbody>
<tr>
<td>12</td>
<td>Given appropriate technology and evidence of cost effectiveness in Alaska settings, increase the proportion of inmates in state correctional institutions who receive voluntary HIV testing during incarceration. Establish targets according to length of stay or similar criterion.</td>
<td>State Virology Laboratory DOCC</td>
<td>3 to 4%</td>
<td>Targets to be developed.</td>
</tr>
<tr>
<td>13</td>
<td>Increase the proportion of sexually active, unmarried females aged 18-44 years who report condom use at last intercourse.</td>
<td>BRFSS</td>
<td>23% (1995)</td>
<td>33% (1997)</td>
</tr>
<tr>
<td>14</td>
<td>Increase the proportion of adolescents in grades 9-12 who abstain from sexual intercourse (never had intercourse or no intercourse in past 3 months) or use condoms if currently sexually active (used a condom at last intercourse).</td>
<td>YRBS</td>
<td>82% (females) 87% (males) (1997)</td>
<td>88% (all) 85% (females) 91% (males) (1999)</td>
</tr>
<tr>
<td>15</td>
<td>Increase the proportion of high school students who report ever having had sexual intercourse who report condom use at last intercourse.</td>
<td>YRBS</td>
<td>57% (all) 51% (females) 63% (males) (1997)</td>
<td>50% (females) 63% (males) (1999)</td>
</tr>
<tr>
<td>16</td>
<td>Increase the proportion of high school students who have been taught at school about HIV/AIDS.</td>
<td>YRBS</td>
<td>92% (1997)</td>
<td>89% (1999)</td>
</tr>
</tbody>
</table>

1. Healthy People 2010 sets 2010 targets for Chlamydia trachomatis infections of 3.0% for: (1) males 15-24 attending STD clinics infected (compared to 15.7% in 1997), (2) females 15-24 attending family planning clinics (as compared to 5.0% in 1997), and (3) females attending STD clinics (as compared to 12.2% in 1997)
2. Data are estimated; adjusted for delays of AIDS in reporting

**DHSS/DPH** - Alaska Department of Health and Social Services/Alaska Division of Public Health  
**DHSS/DJJ** - Department of Health and Social Services/Division of Juvenile Justice  
**DOC** - Alaska Department of Corrections  
**PRAMS** - Alaska Pregnancy Risk Assessment Monitoring System  
**BRFSS** - Alaska Behavioral Risk Factor Surveillance System. All US BRFSS data are age-adjusted to the 2000 population; the Alaska BRFSS data have not been age adjusted, so direct comparisons are not advised. See Technical Notes.  
**YRBS** - Alaska Youth Risk Behavior Survey. Alaska sample for 1999 did not include Anchorage. High school data for 1999 are weighted and representative of the state student population excluding Anchorage.
Overview

The term Sexually Transmitted Diseases (STD) refers to the more than 25 infectious organisms that are transmitted through sexual activity and the dozens of clinical syndromes that they cause. STDs are almost always transmitted from person to person by sexual intercourse. These infections are most efficiently transmitted by anal or vaginal intercourse and less efficiently by oral intercourse. Some STDs, such as hepatitis B virus infection and HIV infection, are also transmitted by the injection of infected blood. Eight new sexually transmitted pathogens have been identified since 1980, including HIV, while the effects of others such as syphilis and gonorrhea have been documented for centuries.

Women suffer more frequent and more serious STD complications than do men. Among the most serious STD complications are pelvic inflammatory disease (PID), ectopic pregnancy, infertility, and chronic pelvic pain. Women are biologically more susceptible to infection when exposed to a sexually transmitted agent. Acute STDs often are very mild or are completely asymptomatic in men. This can result in men being unaware of an STD, which may result in delayed diagnosis and treatment.

STDs in pregnant women can cause serious health problems or death to the fetus or newborn. Sexually transmitted organisms in the mother can cross the placenta to the fetus or newborn, resulting in congenital infection or perinatal infections.

The United States has the dubious distinction of having the highest STD rates of any country in the industrialized world. One important contributing factor is identified in a recent national report: “The secrecy surrounding sexuality and STDs adversely impacts on STD prevention in the United States by impeding sexuality and STD education programs for adolescents, hindering communication between parents and their children and between sex partners, promoting unbalanced sexual messages in mass media, compromising education and counseling activities of health care professionals, and hindering community activism regarding STDs, and impeding research on sexual behaviors.”

Issues and Trends in Alaska

Gonorrhea, chlamydia, and syphilis are reportable to the Alaska Division of Public Health (DPH). Chlamydia and gonorrhea are the conditions most frequently reported to health departments both in Alaska and throughout the United States and in 2000 accounted for 67 percent of all health conditions reported in Alaska. Chlamydia, gonorrhea, and syphilis are readily transmitted during sexual contact. Symptoms may be severe, mild, or even absent, and all can have serious health consequences if left untreated.

HIV infection is also reportable to the DPH. HIV is transmitted sexually, by blood to blood contact (primarily through contaminated injection drug equipment), and from an infected woman to the fetus or newborn. The period between initial HIV infection and the development of acquired immunodeficiency disease syndrome (AIDS) varies, but averages over ten years in the absence of treatment. Recent advances in medical treatment for HIV infection extend life and improve health for many infected individuals. Although some individuals now living with HIV infection have been infected for many years, HIV infection is currently considered incurable and fatal.

Many other organisms can be transmitted through sexual contact. Among them are Hepatitis B virus (see Chapter 18: Immunizations and Infectious Diseases) and human papillomavirus virus (see Chapter 22: Cancer).

All rates in the following discussion were calculated using 1999 population estimates of the Alaska Department of Labor and Workforce Development.

Syphilis

Syphilis is a complex STD caused by the bacterium Treponema pallidum. It can cause death or disability if not treated with penicillin or other antibiotics. A pregnant woman infected with syphilis may deliver a stillbirth or a baby with a congenital infection.

Fortunately, cases of infectious syphilis (primary or secondary stages) are uncommon in Alaska and in much of the rest of the United States. Half the infectious syphilis cases reported in the United States in 1999 were reported from only 25 counties (0.8% of all United States counties), most of which were in the south. Syphilis is more common in some foreign countries than it is in this country.
A total of 6 cases of syphilis were reported in Alaska in 2000 (rate of 1 per 100,000), and none were infectious syphilis. Of the six cases, 4 were reported in males and 2 in females. All cases were reported in individuals older than 35 years. The overall and infectious syphilis case rates in Alaska have been stable over the past five years and are well below the national Healthy People 2000 target rate of 4 per 100,000. No cases of congenital syphilis have been reported in Alaska since 1979.

Although syphilis is rare in Alaska, imported cases occur sporadically. Many Alaska providers have never diagnosed a case of syphilis. A strong infrastructure, including responsive and experienced Public Health Laboratory, Nursing and Epidemiology resources, are essential to work with clinicians to effectively diagnose, treat, and follow up on any syphilis case to prevent transmission in Alaska.

**Gonorrhea**

Untreated gonorrhea can cause serious and permanent problems in both women and men. In women, gonorrhea is a common cause of pelvic inflammatory disease (PID). About 1 million women each year in the United States develop PID. PID can lead to internal abscesses (pus pockets that are hard to cure), long-lasting pelvic pain, and infertility. PID can damage to the fallopian tubes (egg canals) and increase the risk of ectopic pregnancy. Ectopic pregnancy is a life-threatening condition in which a fertilized egg grows outside the uterus, usually in a fallopian tube.

In men, gonorrhea can cause epididymitis, a painful condition of the testicles that can sometimes lead to infertility if left untreated. Without prompt treatment, gonorrhea can also affect the prostate and can lead to scarring inside the urethra, making urination difficult. Gonorrhea can spread to the blood or joints. This condition can be life threatening. Also, persons with gonorrhea can more easily contract HIV, the virus that causes AIDS. Persons with HIV infection and gonorrhea are more likely than persons with HIV infection alone to transmit HIV to someone else.

Gonorrhea infection rates in Alaska have declined significantly in all populations since 1990 (Figure 19-1). The same is true for the United States as a whole, although some states have identified recent gonorrhea outbreaks in certain populations. A total of 362 cases of gonorrhea were reported in Alaska in 2000 for a case rate of 58 per 100,000 population, below the national Healthy People 2000 target rate of 100 per 100,000 and the Healthy Alaskans 2000 target of 74 per 100,000.

Of the 362 Alaska gonorrhea cases, 199 (55%) cases were reported in females and 163 (45%) in males. Gonorrhea disproportionately affected racial or ethnic minority populations in Alaska, as was the case in the rest of the United States. Highest Alaska case rates in the year 2000 were among Alaska Natives (201 per 100,000) and African Americans (163 per 100,000). Alaska case rates for African Americans were below the Healthy Alaskans 2000 target rate (520 per 100,000) and Alaska Native case rates in 2000 were slightly above the Healthy Alaskans 2000 target rate (172 per 100,000). Highest rates of gonorrhea occurred among African American males age 20-24 years (480 per 100,000) and age 35-39 (533 per 100,000). Alaska Native females age 15-29 years and African American females age 15-24 had the highest rates reported for females. The overall case rate for all persons age 15-19 in 2000 (137 per 100,000) was below the Healthy Alaskans 2000 target rate of 328 per 100,000 for this age group.

**Chlamydia**

Chlamydia is a common STD caused by Chlamydia trachomatis, a bacterium, which can damage a woman’s reproductive organs. Because symptoms of chlamydia are mild or absent, serious complications that cause irreversible damage, including infertility, can occur “silently” before a woman ever recognizes a problem. In women, the chlamydia bacteria often infect the cells of the cervix. If not treated, the infection...
can spread into the uterus or fallopian tubes and cause PID. Forty percent of women with untreated chlamydia experience such an infection.

Untreated chlamydia in men typically causes urethral infection. Infection sometimes spreads to the epididymis (tube that carries sperm from the testis), causing pain, fever, and, potentially, infertility.

Chlamydia infection was the most frequently reported disease in Alaska in 2000, with 2,570 cases reported (Figure 19-1). The year 2000 case numbers were greater than case numbers in 1999, when 1,888 chlamydia cases were reported in Alaska. In 2000, Alaska was ranked second highest in the United States in its chlamydia case rate. The increased number of cases most likely results from better case finding due to the introduction of targeted chlamydia screening, use of new urine screening technologies, and increased partner notification activities in 2000 rather than from an actual increase in the amount of disease. Of the 2,570 cases reported in 2000, 1,864 (73%) were in females and 706 (27%) in males.

Chlamydia disproportionately affected racial or ethnic minority populations and young adults age 15 to 24 in Alaska. Highest case rates in 2000 were among African Americans (1,180 per 100,000) and Alaska Natives (1,128 per 100,000). The case rate in females (625 per 100,000) was more than twice the rate in males (218 per100,000). Alaska Native females and African American females age 20 to 24 had the highest chlamydia case rates overall (8,538 per 100,000 and 7,457 per100,000 respectively). No target rates were established in Healthy Alaskans 2000 since population based chlamydia data were not then available locally or nationally.

### HIV Infection and AIDS

HIV infection and AIDS are important causes of illness and death in Alaska as well as in the nation as a whole. The barriers to effectively addressing STD mentioned above are magnified by the problems of drug addiction, stigma, and discrimination currently associated with HIV. Death rates due to HIV infection have declined in recent years, primarily due to advances in medical technology and treatment, and the number of persons living with HIV infection is increasing.

A cumulative total of 781 cases of HIV infection were reported to the DPH through December 31, 2000 (Figure 19-2). Of these 781 cases, 544 were reported with AIDS and 237 with HIV infection without AIDS. Of the 781 cases, 263 (34%) are known to have died. From 1996-2000, an average of 38 newly diagnosed cases of HIV infection (without or without AIDS) per year were reported in Alaska. The mean annual incidence rate of reported AIDS cases in Alaska residents diagnosed from 1996-2000 (mean annual AIDS incidence rate) was 4.41 cases per 100,000 population. (Because there are small and fluctuating numbers of cases diagnosed from year to year in Alaska, the mean annual rate is used to give a more reliable estimate of the AIDS incidence rate over that time period.) This rate compares to an annual incidence rate for AIDS cases reported in the United States from July 1999 through June 2000 of 15.7 cases per 100,000 population.

Although Alaska has a low prevalence of HIV infection, new cases of HIV and AIDS continue to occur. As is the case nationally, the greatest risk of exposure in Alaska is among men who have sex with men (MSM) (Table19-1). An increasing proportion of HIV cases in adult and adolescent males is among racial and ethnic minority MSM. MSM who do not self-identify as gay may have a low perception of risk, as may young MSM. Recent national data indicate increased risk behavior in this population and especially among young gay men of color.

Injection drug use (IDU) is an important HIV exposure risk in Alaska and accounts for a relatively large proportion of HIV and AIDS cases in females.
The combined exposure risks of MSM and IDU account for a relatively small but significant proportion of Alaska HIV and AIDS cases. National studies have indicated high levels of risk behavior among MSM/IDU and indicate that this population may act as an important bridge for HIV exposure across the populations of MSM, IDU, crack cocaine users, and women.

Heterosexual contact with a person known to be infected or at high risk for HIV infection (for example, a bisexual male or an injection drug user) accounts for a small but growing proportion of cases of HIV/AIDS in Alaska, and accounts for a larger proportion of cases among females than males. Perception of risk is generally low.

The proportion of HIV and AIDS cases in females, although much smaller than the proportion in males, is increasing in Alaska, as it is nationally.

There are few cases of HIV and AIDS in Alaska children. The predominant risk to children is being born to a mother with HIV infection (perinatal transmission). Preventing perinatal transmission is most effectively addressed through increasing the proportion of women participating in prenatal care, voluntary and routine HIV testing of pregnant women, and providing case management and supportive services for HIV positive women. Antiviral treatment of the pregnant woman and the newborn dramatically reduces the risk of transmission when the mother is HIV infected.

Adolescents and young adults in Alaska account for a relatively small proportion of HIV and AIDS cases, although risk behavior, especially sexual risk behavior, is prevalent in these age groups (see the Alaska Youth Risk Behavior Survey). Among young males (13 to 24 years) MSM is the predominant HIV exposure risk.

The proportion of HIV and AIDS cases in racial and ethnic minorities has increased as the epidemic has progressed over the years, both in Alaska and in the rest of the United States (Table 19-2). Although individuals are not at increased risk of HIV infection due to their race or ethnicity, it is sometimes considered an indicator of other social factors that influence risk of exposure. Alaska Native and African American females, and Hispanic, African American, and Alaska Native males are over-represented among persons with HIV and AIDS in Alaska in comparison to their representations in the Alaska population.

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**Table 19-1**

Cumulative HIV Cases by Exposure Risk through December 31, 2000 (N=781)

<table>
<thead>
<tr>
<th>Exposure Risk Category</th>
<th>Number of HIV Cases</th>
<th>Percent of HIV Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male-Male Sex*</td>
<td>367</td>
<td>47%</td>
</tr>
<tr>
<td>Injection Drug Use (IDU)</td>
<td>92</td>
<td>12%</td>
</tr>
<tr>
<td>Male-Male Sex &amp; IDU*</td>
<td>37</td>
<td>5%</td>
</tr>
<tr>
<td>Heterosexual contact to person with/at high risk for HIV infection</td>
<td>73</td>
<td>9%</td>
</tr>
<tr>
<td>Hemophilia</td>
<td>10</td>
<td>1%</td>
</tr>
<tr>
<td>Transfusion/Transplant</td>
<td>12</td>
<td>2%</td>
</tr>
<tr>
<td>Perinatal Transmission</td>
<td>4</td>
<td>1%</td>
</tr>
<tr>
<td>Other/Unknown/Unspecified**</td>
<td>186</td>
<td>24%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>781</td>
<td>100%</td>
</tr>
</tbody>
</table>

* These risks are applicable only to males
** The Other/Unknown/Unspecified category includes cases with no reported history of HIV exposure through the routes listed; where case information is incomplete due to death, declining an interview, or loss to follow up; or where investigation is underway.

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**Table 19-2**

Cumulative HIV Cases by Race/Ethnicity through December 31, 2000 (N=781)

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Total</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>458</td>
<td>59%</td>
</tr>
<tr>
<td>Alaska Native/American Indian</td>
<td>163</td>
<td>21%</td>
</tr>
<tr>
<td>Black</td>
<td>66</td>
<td>8%</td>
</tr>
<tr>
<td>Hispanic Ethnicity*</td>
<td>52</td>
<td>7%</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>9</td>
<td>1%</td>
</tr>
<tr>
<td>Unknown</td>
<td>33</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>781</td>
<td>100%</td>
</tr>
</tbody>
</table>

*People of Hispanic ethnicity may be any race.
HIV positive individuals are an extremely important population both for preventing further transmission of HIV infection (primary prevention) and for slowing individuals’ progression to AIDS (secondary prevention). The availability of increasingly effective therapies for HIV disease has contributed significantly to longer, healthier lives for many infected individuals. It is very important to increase the proportion of infected individuals who are aware of their HIV status and who participate in medical care, treatment, case management, and other services. Because of the low prevalence of HIV in Alaska and because partners’ risk behaviors may be unknown, partner notification services by public health personnel play a key role in facilitating early diagnosis and access to care, as well as in averting further transmission.

**Current Strategies and Resources**

A number of health care providers in the public and private sectors around the state offer screening services and clinical treatment for STD and HIV disease. Screening and diagnostic laboratory services for STD and HIV are offered through the State Public Health Laboratory as well as through many private laboratories, some of which are based in Alaskan hospitals and others out of state.

Tribal health organizations provide culturally appropriate STD and HIV prevention and treatment services. The Alaska Native Health Board (ANHB) established the HIV/AIDS Awareness program in 1988. Training, technical assistance, and informational materials are distributed through ANHB membership organizations.

The basic public health infrastructure for STD and HIV prevention and control is in place: public health laboratory services, public health capacity for patient and partner follow up, and capacity to provide epidemiologic support, data analysis, and data dissemination. Some elements of this infrastructure currently need additional resources to strengthen and expand them, and all require ongoing maintenance. Given changes in overall health care systems, efforts to assure and coordinate clinical and public health activities will be needed on an ongoing basis.

Technological advances have and will continue to assist STD prevention and control efforts. Effective, single dose medication to treat chlamydial infection is now available (as compared to a 7-day treatment regimen that many individuals failed to complete). Laboratory technologies are also advancing. A combined urine screening test for both gonorrhea and chlamydia is now available. The increased costs for this new technology will likely be partially offset by an increased ability to screen those at higher risk, an increase in males’ willingness to be screened (with non-invasive tests), and reduced clinician time.

HIV screening technologies are also expected to advance in the near future to include rapid HIV tests of oral and blood specimens. Such tests will eliminate waiting periods for test results, greatly reduce the number of patients lost to follow up, and will make delivery of screening services more practical in outlying areas. Advances in medical treatment for HIV have extended health and life for many individuals. Improvements in HIV drugs to reduce problems with toxicity and reduce the frequency with which medications must be taken are anticipated and will improve HIV care.

These and other technological advances will not, however, reduce the need for laboratory capacity for new screening and confirmatory tests, professional public health personnel to follow up with patients and partners to assure infected and exposed individuals are notified and appropriately treated, and the need for epidemiologic support, data analysis, and data dissemination.

A number of HIV and STD prevention activities are currently underway within or funded by the Department of Health and Social Services (DHSS), reaching infected individuals and many individuals at increased risk of infection. Public health infrastructure received increased state support in 2001 through Governor Knowles’ “Back to Basics” Initiative which focused on supporting public health elements critical to disease control and prevention statewide.

The importance of the public health infrastructure is highlighted by recent experience. Use of State Laboratory services for STD screening declined dramatically with the introduction of laboratory fees in the early 1990s. Failure to identify STD infections (which are frequently asymptomatic) also curtailed public health efforts to access and treat networks of infected persons to reduce the burden of disease within the community. Unexpectedly high rates of pelvic inflammatory disease in Anchorage were documented in a Section of Epidemiology study completed early in 1999, indicating missed opportunities to prevent these complications through early STD diagnosis, treatment, and partner services. The Section of Epi-
demiology and a coalition of Anchorage public health providers initiated activities in 1999 to increase targeted screening and partner notification services, and these activities resulted in significant increases in the numbers of infected individuals diagnosed and assisted to access medical treatment. Such targeted efforts will be expanded statewide, given appropriate resources.

The DHSS receives federal funding for STD surveillance, screening, treatment, and partner services as well as for HIV surveillance, prevention, and partner services. Federal HIV care funding to DHSS provides resources for medical and supportive services for low-income individuals and families with HIV infection. The Department of Education and Early Development receives federal funds for HIV prevention and the Department of Corrections provides important HIV prevention and care services with state funds.

Regional HIV care consortia establish priorities for uses of federal HIV care funds coming to DHSS to address local needs. Case management services to assist and support individuals and families with HIV infection to access and participate in care are high priority in all areas. HIV related medications are provided through the Alaska AIDS Drug Assistance Program, either directly or through purchase of health insurance coverage.

Federal HIV prevention funding provided to DHSS (and also directly to certain other Alaska entities) supports a limited range of targeted prevention interventions. A formal, ongoing planning process is conducted by the Alaska HIV Prevention Planning Group, an advisory body to the Alaska HIV/STD Program, to develop a statewide HIV Prevention Plan and establish priorities for uses of federal HIV Prevention funds.

Based on available data, the Alaska HIV Prevention Planning Group identified seven priority populations (not listed in any order of priority) for HIV prevention interventions in the 2001-2003 Alaska HIV Prevention Plan:

- Men who have sex with men, especially young adult MSM, non-gay identified MSM, and ethnic minority MSM (African American, Alaska Native, and Hispanic)
- Injection Drug Users
- Heterosexual adults, especially Alaska Native and other ethnic minority women, with partners who are HIV positive or at high risk for HIV infection
- Youth at increased risk due to sexual risk behaviors and other indicators of vulnerability
- HIV positive persons, both for interventions to help prevent further transmission of HIV and to slow progression to AIDS.

The plan also identifies priorities for the types of interventions to be supported for each target population, emphasizing interventions shown to be effective. The top priority intervention for all populations is partner notification services as conducted by public health providers. Many of the other priority interventions are conducted by community based organizations with particular access to at-risk populations. Correctional settings (for example, youth detention centers, prisons, community release centers) are key settings where youth and adults at increased risk for HIV and STD may be reached. Broader efforts to promote and support healthy behaviors are appropriately based in schools, communities, social organizations, and churches, and ideally involve community leaders. Community efforts to reduce stigma and discrimination and to support infected individuals participating in appropriate treatment and care are also critical to successful prevention and care efforts.

Alaska’s current dependence on federal funding requires that some resources be allocated to HIV prevention activities that may not be a high priority at the state level and also restricts some activities that might offer constructive additions to current services. For example, federal funds may not be used for syringe exchange programs, even though these programs have been shown to be very effective in reducing HIV and hepatitis C transmission among injection drug users, especially when rates of infection among injectors are relatively low. Federal guidelines also directly or indirectly encourage concentration of resources in higher population areas. Increased access to state general funds could increase the flexibility and scope of STD and HIV prevention efforts.

Successful prevention and control of STD and HIV in Alaska will involve interrelated activities conducted by public and private sector medical providers, public health professionals, social service providers, community organizations, and community leaders.

**Data Issues and Needs**

Disease reporting is a key source of data on STD and HIV in Alaska. Diagnosed and suspected cases of key STD and HIV are reportable by health care providers
and laboratories to the DPH under Alaska Administrative Code (AAC 27.005 and 27.007), and reporting systems are in place. Providers may soon use electronic reporting options. Section of Epidemiology personnel oversee STD/HIV surveillance activities, follow up with individual providers, analyze and regularly report out applicable data, and develop recommendations, as needed. Data to guide intervention efforts are also gathered from case follow up and partner notification activities.

Data from disease reporting activities provide population based indicators of disease occurrence in Alaska. The sources of these data, their quality, and the degree to which they represent the actual occurrence of disease need to be assessed on a regular basis, as changes in provider practices (screening activities, for example) and technologies (more sensitive tests, non laboratory tests) can influence them. Small case numbers for some conditions (HIV/AIDS, for example) also highlight the importance of interpreting local data within the context of broader scientific knowledge, national trends, and relevant community experience.

**Related Focus Areas**

A variety of objectives in other Healthy Alaskans chapters are linked to objectives in HIV Infection and Sexually Transmitted Diseases.

- Substance Abuse
- Maternal, Infant, and Child Health
- Family Planning
- Immunization and Infectious Diseases
- Cancer

Drug and alcohol use increases the chance of high-risk sexual behavior and transmitting or contracting a sexually transmitted disease or HIV. Early and adequate prenatal care, an indicator in the Maternal Infant and Child Health chapter, protects infants from congenital syphilis and perinatal transmission of HIV. Increasing the proportion of adults and adolescents who use contraception that provides barrier protection against disease is an important indicator in Family Planning. At least one sexually transmitted disease, Hepatitis B, can be prevented through immunization, which is addressed in the Immunization and Infectious Diseases chapter. Infections of the cervix with sexually transmitted human papilloma virus increases risk of cervical cancer.

**Endnotes**

4 Centers for Disease Control and Prevention, Division of Sexually Transmitted Diseases. Fact Sheet: Gonorrhea. http://www.cdc.gov/nchstp/dstd/Fact_Sheets/FactsGonorrhea.htm
# References and Sources

## Alaska
- Alaska AIDS Assistance
  - [www.alaskanaids.org/](http://www.alaskanaids.org/)

- DHSS: Section of Epidemiology HIV and STD Program
  - [www.epi.hss.state.ak.us/programs/aids&stds/aidsstd.stm](http://www.epi.hss.state.ak.us/programs/aids&stds/aidsstd.stm)

- DHSS: Section of Public Health Nursing
  - [www.hss.state.ak.us/dph/nursing/default.htm](http://www.hss.state.ak.us/dph/nursing/default.htm)

## National
- CDC Division of HIV/AIDS
  - [www.cdc.gov/hiv/wwwlinks.htm](http://www.cdc.gov/hiv/wwwlinks.htm)

- CDC Division of STD Prevention
  - [www.cdc.gov/nchstp/dstd/dstdp.html](http://www.cdc.gov/nchstp/dstd/dstdp.html)

- National Library of Medicine

- HIV/AIDS Information

- National Native American AIDS Prevention Center
  - [www.nnaapc.org/](http://www.nnaapc.org/)
Chapter Notes