Background
More than 1.2 million persons in the United States are living with human immunodeficiency virus (HIV) infection, and roughly 13% of those infected are unaware of their status. Approximately 50,000 new HIV cases are reported each year in the United States; the annual incidence rate has remained stable in recent years. Nationally, incidence rates are highest among gay, bi-sexual, and other men who have sex with men (MSM), and African Americans. Both HIV and acquired immune deficiency syndrome (AIDS) are reportable conditions in Alaska. Persons at greatest risk for acquiring HIV in Alaska are MSM, high-risk heterosexuals, and injection drug users (IDU). We describe here a summary of HIV cases reported during 1982–2015, a discussion of linkage and retention services, and the HIV Care Continuum. A more comprehensive data summary and slide set are available online (available at: http://dhss.alaska.gov/dph/Epi/hivdata.aspx).

Methods
The Alaska Section of Epidemiology (SOE) receives reports from health care providers and laboratories for newly diagnosed cases of HIV and for persons living in Alaska who were previously diagnosed out-of-state. All persons newly diagnosed with HIV infection are offered an interview to determine risk factors and identify sexual and needle-sharing partners that need to be tested. Case and interview data are recorded in two SOE databases, Enhanced HIV/AIDS Reporting System (eHARS) and Patient Reporting Investigating Surveillance Manager (PRISM). By national convention, statewide incidence rates are calculated based on the number of cases diagnosed in each respective state.

Summary of HIV Cases
From January 1, 1982 through December 31, 2015, 1,680 cases of HIV were reported to SOE. Of the 1,680 reported cases:
• 1,128 (67%) ever had a diagnosis of AIDS;
• 1,156 (69%) were initially diagnosed in Alaska; and
• 1,094 (65%) are not known to have died, 671 (61%) of whom are currently living in Alaska.

During 2015, 64 cases of HIV infection were reported to SOE, 22 (34%) of which were newly diagnosed in Alaska, yielding a statewide incidence rate of 3 cases per 100,000 persons. The remaining 42 (66%) reported cases were in persons with a previous out-of-state diagnosis. Of the 22 newly diagnosed cases:
• 6 (27%) also had a diagnosis of AIDS;
• 9 (41%) were in males; 17 (68%) were in non-whites, and 10 (45%) were in MSM; and
• the median age was 42.5 years (range: 17–60).

Among newly diagnosed persons, their reasons for being tested included: symptoms of HIV or AIDS (7, 32%); partner notification for HIV/STD (5, 23%); patient request (4, 18%); STD screening (3, 14%); and other (3, 14%). Of the 7 persons who were diagnosed due to symptoms, acute HIV was identified in 3 (43%). The most common symptoms of acute HIV infection were rash, fever, headache, malaise, and lymphadenopathy.

Risk Factors for HIV
While HIV is primarily transmitted through unprotected sex and sharing of drug injection equipment, other factors contribute to high-risk behaviors and may facilitate transmission and acquisition of HIV. In 2015, persons with a new diagnosis of HIV in Alaska were interviewed (n=21) also reported the following risk factors: drug and alcohol abuse (12, 57%), a history of incarceration (8, 38%), co-infection with a bacterial sexually transmitted disease (6, 29%), and homelessness (4, 19%). Among MSM, the most commonly reported venues to meet sexual partners were online and through mobile applications (8/10; 80%).

Linkage to and Retention in HIV Medical Care
Ensuring that persons with HIV receive appropriate medical care is an effective tool for preventing disease progression and reducing HIV transmission within the community. HIV surveillance data collected by SOE in eHARS are used to monitor linkage to and retention in care for persons living with HIV in Alaska through the HIV Care Continuum (Figure).

Linkage and retention services are provided to persons with HIV by health department staff, medical providers, and case management agencies throughout the course of the disease. Persons newly diagnosed with HIV receive support in engaging with an HIV medical provider and long-term case management services. Persons living with HIV who are not accessing medical care receive support in re-engaging with a medical provider and supportive services. Linkage to care is effective in ensuring persons diagnosed with HIV receive medical care. As of December 31, 2015, 87% of persons living with HIV in Alaska were engaged in medical care, and of those, 88% were virally suppressed (Figure). Nationally, only 40% of persons living with HIV are engaged in medical care and 30% are virally suppressed.

Figure. Alaska HIV Care Continuum as of December 31, 2015

For more information, please go to: http://www.cdc.gov/nchhstp/newsroom/2014/hiv-stages-of-care.html

References

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