State of Alaska Epidemiology Bulletin

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Bulletin No. 2 April 16, 2018

HIV Update — Alaska, 2017

Background

More than one million persons in the United States are estimated to be living with human immunodeficiency virus (HIV) infection, and approximately one in seven of them are not aware that they are infected.[1] According to the Centers for Disease Control and Prevention (CDC), undiagnosed persons account for approximately 40% of transmissions in the United States.[2] Alaska is considered by CDC to be a low incidence state for HIV. Persons at greatest risk for acquiring HIV in Alaska are gay, bisexual, and other men who have sex with men (MSM), particularly young MSM and high-risk heterosexuals. We describe here a summary of HIV cases reported during 1982–2017, a summary of the epidemiology of HIV in 2017, and a discussion of strategies that can be implemented to prevent HIV transmission and improve health outcomes for persons living with HIV. A comprehensive HIV surveillance report is available at: http://dhss.alaska.gov/dph/Epi/hivstd/Pages/hivdata.aspx

Methods

HIV and acquired immune deficiency syndrome (AIDS) are reportable conditions in Alaska. The 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 secure SOE databases. A t-test was performed using SPSS (v22) to compare mean CD4 counts of newly diagnosed HIV cases in rural vs. urban communities; one patient was removed from the analysis due to just having moved to Alaska 1 week prior to diagnosis.

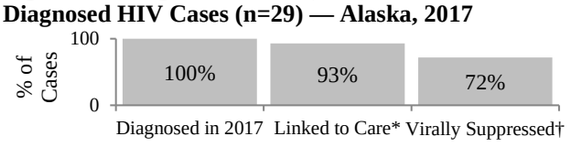
Summary of HIV Cases

From January 1, 1982 through December 31, 2017, 1,832 cases of HIV were reported to SOE. Of these reported cases:

- 1,225 (67%) were initially diagnosed in Alaska;
- 1,188 (65%) are not known to have died, 710 (60%) of whom are currently living in Alaska; and
- 1,186 (65%) ever had a diagnosis of AIDS.

During 2017, 75 cases of HIV infection were reported to SOE; of which, 29 (39%) were newly diagnosed in Alaska, yielding a statewide incidence of 4 cases per 100,000 persons. The remaining 46 (61%) reported cases were in persons with a prior out-of-state diagnosis. Of the 29 newly diagnosed HIV patients in Alaska, the median age at diagnosis was 29 years (range: 19–63), 21 (72%) were male, 20 (69%) were non-whites, 18 (62%) were MSM, 8 (28%) were diagnosed with AIDS at the time of their initial diagnosis, and none are known to have died. Of the 29 newly diagnosed cases, 27 (93%) were linked to medical care within 90 days of their HIV diagnosis, and 21 (72%) achieved viral suppression (Figure).

Figure. Linkage to Care (L2C) Outcomes for Newly Diagnosed HIV Cases (n=29) — Alaska, 2017



**Received a CD4/Viral Load within 90 days of diagnosis in 2017.*
†Viral Load ≤200 copies/mL as of March 31, 2018 (delays in viral suppression for persons diagnosed in late 2017 may be due to initiation of antiretroviral therapy shortly before the evaluation period).

Risk Factors

There are many factors that contribute to high-risk behaviors that facilitate transmission and acquisition of HIV and create barriers to accessing HIV medical care. The following risk factors were identified among the 29 persons who were newly diagnosed with HIV in 2017: a history of incarceration (13, 45%); co-infection with a bacterial sexually transmitted disease (10, 34%); homelessness (5, 17%); and drug and alcohol abuse (18, 62%), including injection drug use (IDU; 5, 17%). All five IDU patients also reported high-risk sexual behavior. Among the 18 newly-diagnosed MSM in 2017, the most commonly reported venues to meet sexual partners were online and through mobile applications (11; 61%).

Testing

Of the 29 persons who were newly-diagnosed with HIV in 2017, their reasons for being tested include the following: 8 (28%) had symptoms of HIV or AIDS, 7 (24%) were tested as part of a sexually transmitted disease (STD) visit, 6 (21%) were tested due to risk factors, 4 (14%) were named during a partner services investigation, and 4 (14%) received routine screening for HIV. Eight (28%) persons had tested negative for HIV within the 12 months prior to testing positive; of these, seven had known risk factors for HIV.[5] Six (75%) of the eight persons tested for HIV due to symptoms were diagnosed with AIDS.

HIV in Rural Alaska Communities

In 2017, HIV disproportionately impacted rural Alaska communities (i.e., those with a population of <50,000 people), as rural residents comprised 28% of the Alaska population, but 38% (11/29) of new HIV diagnoses. Delays in diagnosis were also disproportionately observed in rural communities; among the newly diagnosed cases, the mean initial absolute CD4 count was significantly lower in rural vs. urban cases at 260 cells/mm^3 (range: 4–524) vs. 533 cells/mm^3 (range: 35–1567), respectively (p=0.03). Moreover, 50% (4/8) of concurrent AIDS cases were diagnosed in rural communities. The majority of rural cases (64%, 7/11) had never had a prior HIV test. Delays in HIV diagnosis prevent timely entry into care, result in poorer health outcomes, and substantially increase the risk of transmission.[2] Persons living in rural communities may be less likely to seek testing and disclose HIV risk factors.[3]

Recommendations

1. Routinely screen all patients aged 13–64 years, including those living in rural communities, for HIV at least once. Screen patients with HIV risk factors *at least annually* and those at highest risk every 3–6 months.[4]
2. Screen all pregnant women early in every pregnancy. A second test in the 3rd trimester is also warranted for women who are known to be at high risk for infection.[4]
3. Include HIV testing as part of routine STD screening.
4. Offer pre-exposure prophylaxis (PrEP) to high-risk persons and partners of persons living with HIV.[5]
5. Link HIV-infected patients to medical care. SOE staff are available to assist with linkage support at (907) 269-8000.
6. Report confirmed and suspected cases of HIV and AIDS to SOE within 5 working days via fax (907) 561-4239 or telephone (907) 269-8000; reports should include HIV-positivity in persons with a previous diagnosis out-of-state and new pregnancy in all HIV-positive women.

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