Injection drug use and HIV in Oregon

Background
Injection drug use (IDU) is a risk factor for HIV and can be associated with high-risk sexual behaviors. People who inject drugs (PWID) accounted for 18.5% of all people living with HIV in the United States in 2015, and 17.2% (1,299/7,557) in Oregon in 2017. Nationally, Blacks and Hispanics reported disproportionately high rates of HIV infection due to injection drug use relative to Whites (Blacks 19%, Hispanics 20% of living cases vs. 16% among Whites in 2015). However, in Oregon, only 15% of Blacks, 12% of Hispanics and 18% of Whites reported injection drug use as an HIV risk as of 2017. It can be difficult for HIV-positive people who inject drugs to find consistent and quality medical care, including antiretroviral treatment.* This can contribute to increased morbidity and mortality from AIDS-related illnesses and other causes, including liver disease and drug overdose.

During 2008–2017, 16% (389/2,425) of cases diagnosed with HIV in Oregon acknowledged past injection drug use. This includes men who had sex with men and used injection drugs (9%; 217/2,425), men who did not have sex with men but used injection drugs (5%; 109/2,425), and women who

HIV infection and injection drug use (IDU) facts at a glance
- From 1981 to 2017, 19% (1,937/10,373) of Oregon residents diagnosed with HIV used injection drugs prior to becoming infected. An additional 2% (n=251) never used injection drugs before becoming infected but had a sex partner who did.
- The number of people with newly diagnosed HIV who reported past injection drug use remained stable during 2008–2017 with an average of 39 diagnoses a year.
- Males with HIV who used injection drugs were more likely than others to have advanced disease at the time of diagnosis.

* HIV cases that have used injection drugs were less likely to be virally suppressed. Viral suppression corresponds to low levels of virus detected in the blood, which causes HIV to be less easily transmitted. Among Oregon residents living with HIV at the end of 2017, 7% of men who have sex with men (MSM) were not suppressed compared to 16% of IDU-only and 15% of MSM/IDU. Twenty-three percent of female IDU were not suppressed compared to 9% of females whose risk of infection was heterosexual sex with a partner of unknown risk.

Figure 1 Probable route of infection among males diagnosed with HIV in Oregon, 2008–2017

<table>
<thead>
<tr>
<th>Probable Route of Infection</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men who have sex with men only (MSM)</td>
<td>69%</td>
</tr>
<tr>
<td>Unknown</td>
<td>12%</td>
</tr>
<tr>
<td>Men who have sex with men/injection drug use</td>
<td>10%</td>
</tr>
<tr>
<td>Injection drug use (IDU)</td>
<td>5%</td>
</tr>
<tr>
<td>Heterosexual</td>
<td>3%</td>
</tr>
<tr>
<td>Pediatric</td>
<td>1%</td>
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used injection drugs (3%; 63/2,425) (Figure 1 and Figure 2). An additional 2% (52/2,425; 23 men and 29 women) reported their risk of infection was heterosexual contact with someone who used injection drugs.

Injection drug use (MSM/IDU or IDU-only) was reported by 40% of American Indian/Alaska Natives (8/20), 19% of Whites (309/1,655), 12% of Blacks (22/184), 8% of Hispanics (33/431), 6% of Asians (5/82), and 0/13 of Pacific Islanders.

Among those newly diagnosed during this period who reported injection drug use, 79% were White (309/389), 8% were Hispanic (33/389) and 6% were Black (22/389). The average age at diagnosis among cases reporting injection drug use was 37.1 years.

The number of HIV diagnoses in Oregon declined over the last 10 years (from 291 to 200 cases). The overall decline relates to the decline in diagnoses among MSM-only (from 178 to 106 cases). Persons newly diagnosed with HIV who reported injection drug use (IDU or MSM/IDU) averaged 38.9 diagnoses per year without showing any real increase or decrease between 2008 and 2017 (Figure 3).

Survival after HIV/AIDS diagnosis is lower among people who report IDU. Oregon residents diagnosed with HIV/AIDS during 2008–2017 who likely acquired HIV through IDU were less likely to survive 10 years after diagnosis than MSM with HIV who had no history of drug use (83% vs. 90% probabilities of 10-year survival).
Role of IDU in HIV transmission in Oregon, 2017
From 1981 through 2017, 19% (1,937/10,373) of Oregon residents newly diagnosed with HIV infection reported a history of injection drug use. An additional 2% (251/10,373) of HIV/AIDS cases reported heterosexual contact with a person who injected drugs. Among HIV cases reported in Oregon, 22% (950/4,329) of deaths were cases who reported injection drug use and another 2% (103/4,329) reported heterosexual contact with an IDU.

Effect of delayed diagnosis
Many people who use or have used injection drugs and are diagnosed with HIV infection experience delayed diagnosis.* Males reporting as IDU-only were 1.8 times more likely than MSM-only males to be diagnosed with AIDS within 12 months (54% vs. 30%). Among MSM who also used injection drugs, 28% experienced delayed diagnosis, which was more consistent with MSM who did not report injection drug use. Among women, injection drug use was not associated with a greater likelihood of delayed diagnosis than women infected by other means. Delayed diagnosis and treatment contribute to further spread of HIV.

HIV, IDU and hepatitis C
Among cases diagnosed with HIV/AIDS in Oregon during 2008–2017 with a history of reported IDU, 37% (119/326) of men and 56% (35/63) of women also had chronic hepatitis C by the end of 2017. HIV-hepatitis C co-infection may limit treatment options for HIV and result in poorer outcomes.

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* Delayed diagnosis is determined from an AIDS-defining event at the time of their HIV infection diagnosis or within 12 months.

Epidemiologic resources:

Centers for Disease Control and Prevention: www.cdc.gov/hiv.

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