Sheryl B. Lyss1; Tianchi Zhang2; Alexandra M. Oster2
1. Division of HIV/AIDS Prevention, Centers for Disease Control and Prevention, Atlanta, GA. 2. ICF, Atlanta, GA.

BACKGROUND
• The annual number of HIV diagnoses among people who inject drugs (PWID) in the United States declined for many years. Decreases then increased slightly in 2015, the year of a large HIV outbreak among PWID in Scott County, Indiana. Changes in patterns require changes in response: • Linked to injection of the opioid, oxymorphone • Demonstrated the rapidity with which HIV can spread when introduced into a community of PWID • Reinforced concern about increased spread of HIV amidst: • National opioid epidemic • Increases in viral hepatitis seen in conjunction with opioid epidemic

OBJECTIVE
• To describe trends in HIV diagnoses among PWID in the United States

METHODS
• National HIV Surveillance System
• HIV diagnoses occurring during 2010–2016 in the United States
• Reported to CDC through December 2017
• Data on transmission category statistically adjusted with standard methods to account for missing values.
• Analyses restricted to: • Persons aged ≥13 years • Diagnoses attributed to injection drug use (IDU) only (Those attributed to male-to-male sexual contact and IDU were not included.) • County of residence classified according to the National Center for Health Statistics 2013 Urban-Rural Classification Scheme.

RESULTS
HIV Diagnoses Among PWID—United States, 2010–2016

HIV Diagnoses Among PWID, by Demographic Characteristics — United States, 2010–2016

<table>
<thead>
<tr>
<th>Year</th>
<th>Sex at birth</th>
<th>Male</th>
<th>Female</th>
<th>Differential change*</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>Male</td>
<td>1,973</td>
<td>1,649</td>
<td>-35%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>1,455</td>
<td>1,289</td>
<td>-34%</td>
</tr>
<tr>
<td>2011</td>
<td>Male</td>
<td>1,717</td>
<td>1,357</td>
<td>-36%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>703</td>
<td>557</td>
<td>-37%</td>
</tr>
<tr>
<td>2012</td>
<td>Male</td>
<td>817</td>
<td>781</td>
<td>-41%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>191</td>
<td>164</td>
<td>-45%</td>
</tr>
<tr>
<td>2013</td>
<td>Male</td>
<td>804</td>
<td>815</td>
<td>-8%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>1,431</td>
<td>1,191</td>
<td>-24%</td>
</tr>
<tr>
<td>2014</td>
<td>Male</td>
<td>1,103</td>
<td>931</td>
<td>-40%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>1,356</td>
<td>1,235</td>
<td>-17%</td>
</tr>
<tr>
<td>2015</td>
<td>Male</td>
<td>1,289</td>
<td>1,281</td>
<td>-6%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>1,717</td>
<td>1,702</td>
<td>-8%</td>
</tr>
</tbody>
</table>

Patterns of decreases and increases are consistent even if all Indiana diagnoses are excluded.

LIMITATIONS
• These groups had the smallest declines during 2010–2016.
• Case counts are subject to reporting and surveillance lag.

RECOMMENDATIONS
• Changes in patterns require changes in response: • Careful monitoring • Including for increases in HIV diagnoses among PWID in small geographic areas • Outbreak planning • Rapid, multi-modal interventions

SUMMARY & CONCLUSIONS
The longstanding decline in HIV diagnoses among PWID has slowed — and perhaps even stalled. Although the total number of HIV diagnoses among PWID nationally were about equal in 2014 and 2016, diagnoses were greater in 2016 than 2014 among: • Whites • Those aged 13–34 years • Those in the Midwest and West • Those living outside of large, central metropolitan areas These groups had the smallest declines during 2010–2016.

Differential changes across demographic groups have led to changes in patterns of HIV diagnoses among PWID.
• Reasons are likely multi-factorial.
• Patterns suggest that the opioid epidemic is a contributing factor.

Data on transmission category statistically adjusted with standard methods to account for missing values.

Sheryl Lyss, MD, MPH
SLyss@cdc.gov

SLyss@cdc.gov

Contact Information
Sheryl Lyss, MD, MPH
SLyss@cdc.gov

Acknowledgements
Staff at state and local health departments

National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
Division of HIV/AIDS Prevention