The goal of HIV Incidence Surveillance is to provide population-based estimates of the number of new, diagnosed and undiagnosed HIV infections occurring per year in New Jersey.

In New Jersey, nearly two-fifths of new HIV diagnoses occur late – either as simultaneous HIV and AIDS diagnoses or progress to AIDS within one year of the first diagnosis with the HIV virus.

HIV INCIDENCE SURVEILLANCE provides the information needed to estimate the number of new diagnosed and undiagnosed HIV infections acquired each year in New Jersey.

HIV incidence surveillance requires remnant HIV+ serum along with information about frequency of HIV testing.

N.J.A.C. 8:57-2.10 was added to the HIV reporting regulations in April 2009. The rule requires laboratories to submit remnant HIV+ specimens to the Department of Health for incidence testing. It additionally amends the adult HIV case report form to include HIV testing and ARV use elements which are necessary to calculate incidence, thus fully integrating incidence with routine case surveillance.

All incidence data are maintained in a secure environment with other surveillance data to protect the security and confidentiality of the information.

WHY REPORT HIV INCIDENCE?
Not everyone with HIV gets tested. The Centers for Disease Control and Prevention estimates that of the 1.1 million Americans living with HIV, one in five remains undiagnosed.

WHY NOT SIMPLY COUNT THE NUMBER OF NEW POSITIVE HIV TESTS EACH YEAR?
A newly diagnosed infection could be from a person who was recently infected. On the other hand, it could be from a person who has had HIV for years but who had never been tested. To focus on public health interventions, it is important to know the difference.

HIV INCIDENCE ESTIMATES ARE USEFUL TO:
- Identify trends in HIV transmission.
- Inform funding agencies and the community about the HIV epidemic.
- Guide funding for HIV prevention and care services.
- Plan, implement, and evaluate HIV prevention programs.

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Trenton, NJ 08625-0363
(609) 884-5940
HOW IS INCIDENCE SURVEILLANCE CONDUCTED?

- The Serologic Testing Algorithm for Recent HIV Serocconversion (STARHS) tests remnant HIV+ specimens and classifies infections as recent or longstanding on a population level (i.e., occurring greater or less than 5 months from testing). The assay is used only for surveillance. Individual results cannot be returned or used for clinical purposes.

- Overall HIV incidence is estimated from people for whom STARHS results are available using patient HIV testing history to account for those for whom STARHS results are not available.

- Knowledge of ARV use is needed because ARV use may cause the STARHS results to appear "recent" when the infection is not recent.

WHAT HIV TESTING AND ARV USE INFORMATION IS NEEDED?

HIV Test History

First Positive HIV Test
- Ever had a positive HIV test before (Yes/No)
- Date of first positive HIV test (Month/Year)

Negative HIV Tests
- Ever had a negative HIV test (Yes/No)
- Date of last negative HIV test (Month/Year)
- Number of negative HIV tests in the 24 months before first positive HIV test (#___)

Treatment History

Antiretroviral (ARV) use
- Ever taken any ARVs (Yes/No)
- Earliest date of any ARV use (Month/Year)
- Last known date any ARV taken (Month/Year)
- Name of earliest ARV taken

HIV INCIDENCE IN NEW JERSEY 2008 TO 2010

WHAT DID WE FIND?

Approximately 1,500 to 1,800 persons were newly infected with HIV each year from 2008 to 2010 in New Jersey. This number includes both diagnosed and undiagnosed persons.

Only 1,300 to 1,400 persons were newly diagnosed with HIV each year from 2008 to 2010 in New Jersey.

- Incidence infections were highest among persons aged 25-34.
- African Americans accounted for half (49%) of incidence infections.
- Infections attributable to MSM accounted for more than half (53%) of incidence infections.
- Differences in transmission category and age at infection versus age at diagnosis were found when comparing incidence cases (which include both diagnosed and undiagnosed HIV-infected persons) and diagnosed cases.
- A higher percentage of incidence cases were among persons <35 years and among MSM compared with the percentage of diagnosed cases.

2008-2010

<table>
<thead>
<tr>
<th>HIV Incidence</th>
<th>2008-2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>70%</td>
</tr>
<tr>
<td>Female</td>
<td>30%</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>21%</td>
</tr>
<tr>
<td>Black</td>
<td>49%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>27%</td>
</tr>
<tr>
<td>Other</td>
<td>4%</td>
</tr>
<tr>
<td>Age at Infection</td>
<td></td>
</tr>
<tr>
<td>13-24</td>
<td>25%</td>
</tr>
<tr>
<td>25-34</td>
<td>29%</td>
</tr>
<tr>
<td>35-44</td>
<td>23%</td>
</tr>
<tr>
<td>45-54</td>
<td>16%</td>
</tr>
<tr>
<td>55+</td>
<td>6%</td>
</tr>
<tr>
<td>Transmission</td>
<td></td>
</tr>
<tr>
<td>MSM</td>
<td>53%</td>
</tr>
<tr>
<td>IDU</td>
<td>18%</td>
</tr>
<tr>
<td>Het/Other</td>
<td>29%</td>
</tr>
<tr>
<td>Unknown</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Younger persons, African Americans, Hispanics, and MSM remain the populations most affected by HIV in New Jersey.