HIV Surveillance Data 2012

Prepared by: Communicable Diseases Branch
Health Protection NSW

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Methods

- Under the NSW Public Health Act, laboratories and doctors report all confirmed human immunodeficiency virus (HIV) infections to NSW Health.
- Epidemiological information (such as age, gender, likely risk exposure and testing history) is collected from the notifying doctor.
- HIV notification does not include the patient’s name or address.
- The annual count of people with ‘newly diagnosed HIV infection in NSW’ excludes those who:
  - have previously been diagnosed (in NSW, interstate or overseas), and/or
  - were not resident in NSW at the time of diagnosis.
In 2012, there were 409 new diagnoses of HIV, an increase of 27% compared with the previous 4 year average (323)
Trend in notifications of people with newly diagnosed HIV infection in NSW residents - NOTES

- Note that the decline in numbers in 2008 is partly due to changes in the surveillance methods used. Improvements in data collection and data cleaning that have occurred from 2008 onwards may have resulted in an overall reduction in the number of new notifications due to improved de-duplication of records and a reduction of cases categorised as ‘unknown’ risk exposure.
Demographics of people notified with newly diagnosed HIV infection, NSW residents, 2012

<table>
<thead>
<tr>
<th></th>
<th>Previous 4 yr average (2008-2011)</th>
<th>2012</th>
<th>Proportional change</th>
</tr>
</thead>
<tbody>
<tr>
<td>New diagnoses</td>
<td>N=323</td>
<td>N=409</td>
<td>+ 27%</td>
</tr>
<tr>
<td>Median age</td>
<td>36 yrs</td>
<td>35 yrs</td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>293 (91%)</td>
<td>372 (91%)</td>
<td>+ 27%</td>
</tr>
<tr>
<td>Women</td>
<td>29 (9%)</td>
<td>36 (9%)</td>
<td>+ 24%</td>
</tr>
<tr>
<td>Australian-born</td>
<td>180 (56%)</td>
<td>229 (56%)</td>
<td>+ 27%</td>
</tr>
<tr>
<td>Born overseas</td>
<td>132 (41%)</td>
<td>166 (41%)</td>
<td>+ 26%</td>
</tr>
<tr>
<td>Indigenous</td>
<td>7 (2.2%)</td>
<td>10 (2.4%)</td>
<td>+ 43%</td>
</tr>
<tr>
<td>Non-Indigenous</td>
<td>306 (95%)</td>
<td>387 (95%)</td>
<td>+ 26%</td>
</tr>
</tbody>
</table>

NB: ‘Other’ and ‘unknown’ categories not included
Increases of newly diagnosed HIV have occurred amongst both men and women, and amongst those born in Australia and overseas.

Of the 409 new diagnoses of HIV in 2012, 372 were in men and 36 were in women. The percentage of men (91%) and women (9%) of total new diagnoses in 2012 has remained the same as the previous 4 year average.

There were 229 (56%) people with newly diagnosed HIV in 2012 who were born in Australia, while 166 (41%) were born overseas.
Notifications of people with newly diagnosed HIV infection in NSW residents, by age group and year of diagnosis, 2003-2012
Notifications of people with newly diagnosed HIV infection in NSW residents by age group – NOTES

- All age groups had an increase in new diagnoses in 2012 compared to 2011.
- The highest number of new diagnoses of HIV in 2012 was amongst people in their thirties.
- There were relatively larger increases amongst people in their twenties and people over 50 years.
Notifications of people with newly diagnosed HIV infection in NSW residents by risk exposure category, 2008-2011 and 2012

<table>
<thead>
<tr>
<th>Risk exposure</th>
<th>Previous 4 year average (2008-11)</th>
<th>2012 n (%)</th>
<th>Proportional change in counts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homosexually acquired (excl MSM IDU)</td>
<td>237 (74%)</td>
<td>319 (78%)</td>
<td>+ 35%</td>
</tr>
<tr>
<td>Homosexually acquired – IDU</td>
<td>11 (3.5%)</td>
<td>12 (2.9%)</td>
<td>+ 9%</td>
</tr>
<tr>
<td>Heterosexually acq’d – high prev*</td>
<td>16 (4.8%)</td>
<td>11 (2.7%)</td>
<td>- 31%</td>
</tr>
<tr>
<td>Heterosexually acq’d – other#</td>
<td>43 (13%)</td>
<td>46 (11%)</td>
<td>+ 7%</td>
</tr>
<tr>
<td>IDU</td>
<td>10 (3.1%)</td>
<td>10 (2.4%)</td>
<td>-</td>
</tr>
<tr>
<td>Mother to child</td>
<td>1 (0.3%)</td>
<td>0 (0%)</td>
<td>- 100%</td>
</tr>
<tr>
<td>All others</td>
<td>1 (0.3%)</td>
<td>2 (0.5%)</td>
<td>-</td>
</tr>
<tr>
<td>Unknown</td>
<td>4 (1.3%)</td>
<td>9 (2.2%)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td><strong>323</strong></td>
<td><strong>409</strong></td>
<td>+ 27%</td>
</tr>
</tbody>
</table>

*Heterosexually acq’d – high prev: HIV infections in people born in countries with a high prevalence of HIV

# Heterosexually acq’d – other: HIV infections in people born in countries with low or medium prevalence of HIV, which includes Australia
Notifications of people with newly diagnosed HIV infection by risk exposure category – NOTES (1)

- Risk exposure is self-reported

- The most commonly reported risk exposures of people with newly diagnosed HIV infections in 2012 were homosexual contact (81%), heterosexual contact (14%) and injecting drug use (2.4%). Likely risk exposure was reported as ‘other’ (0.5%) or unknown (2.2%) for the remainder.

- There were no cases of mother to child transmission in 2012.
Notifications of people with newly diagnosed HIV infection by risk exposure category – NOTES (2)

Heterosexually acquired infections have been divided into two subcategories:

- those in people born in countries with a high prevalence of HIV infection (Heterosexually acquired – high prevalence countries). High prevalence countries are defined as those with an estimated number of adults aged 15-49 years living with HIV/AIDS greater than one percent. UNAIDS website, http://www.unaids.org

- those in people born in countries with low or medium prevalence of HIV infection, which includes Australia (Heterosexually acquired – other)
Demographic comparison of NSW residents notified with newly diagnosed HIV infection by risk exposure category, 2012

<table>
<thead>
<tr>
<th></th>
<th>Homosexually acquired</th>
<th>Hetero – high prev countries</th>
<th>Hetero – other (non HPC)</th>
<th>IDU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number (% of total)</td>
<td>331 (81%)</td>
<td>11 (2.7%)</td>
<td>46 (11%)</td>
<td>10 (2.4%)</td>
</tr>
<tr>
<td>Gender</td>
<td>330 men 1 transgender</td>
<td>3 men 8 women</td>
<td>22 men 24 women</td>
<td>8 men 2 women</td>
</tr>
<tr>
<td>Median age (range)</td>
<td>35 yrs (19-77)</td>
<td>34 yrs (19-45)</td>
<td>36 yrs (16-78)</td>
<td>33 yrs (26-63)</td>
</tr>
<tr>
<td>Australian-born (% of group)</td>
<td>196 (59%)</td>
<td>Not applicable</td>
<td>24 (52%)</td>
<td>7 (70%)</td>
</tr>
</tbody>
</table>

NB: ‘Other’ and ‘unknown’ categories not included
Demographic comparison of NSW residents notified with newly diagnosed HIV infection by risk exposure category – NOTES

- Of the 331 people with homosexually acquired HIV diagnosed in 2012, 196 (59%) were Australian-born. The median age at diagnosis was 35 years.

- The median age at diagnosis of the 11 people with heterosexually acquired HIV (high prevalence countries) diagnosed in 2012 was 34 years.

- Of the 46 people with heterosexually acquired HIV (other), 24 (52%) were Australian-born. The median age at diagnosis was 36 years.

- Of the 10 people who acquired infection through injecting drug use, 7 (70%) were Australian-born. The median age at diagnosis was 33 years.
Notifications of people with newly diagnosed HIV infection in NSW residents by risk exposure category, 2003-2012

- **TOTAL**
- Homosexually acquired
- Heterosexually acquired
- Unknown
- IDU
- Vertical, blood product and other

Graph showing the number of notifications of people with newly diagnosed HIV infection in NSW residents by risk exposure category from 2003 to 2012.
Notifications of people with newly diagnosed HIV infection in NSW residents by risk exposure category: trends - NOTES

- There were increases in the numbers of homosexually acquired HIV infections and heterosexually acquired HIV infections notified in 2012
- The numbers of infections acquired through injecting drug use (IDU) remained stable and low
Notifications of people with newly diagnosed, heterosexually acquired HIV infection in NSW residents, 2003-2012

- **TOTAL (HETERO)**
- **Hetero - Other**
- **Hetero - High prev**

Year of diagnosis: 2003 to 2012

Number of notifications:
- 0 to 80

*NSW Government Health*
Notifications of people with newly diagnosed, heterosexually acquired HIV infection in NSW residents - NOTES

- There were 57 (14%) notifications of HIV infection in 2012 in which the likely risk exposure was heterosexual contact. Of these, 11 were born in countries with high HIV prevalence, while 46 were born in other countries.

- There was a previous decline in heterosexually acquired infections from a peak of 76 notifications in 2009 to 42 in 2011, mostly due to fewer notifications amongst those born in countries with low or medium prevalence of HIV infection.
Key points

- The number of notifications of NSW residents with newly diagnosed HIV infection has increased by 27% in 2012 compared to the previous 4 year (2008-2011) average of 323.

- There has been a 33% increase in the number of homosexually acquired HIV diagnoses compared with the previous 4 year average.

- Heterosexually acquired diagnoses have risen after a 2 year decline.