HIV diagnoses amongst MSM in New Zealand in 2008: Summary and context of the most important epidemiological findings.

In 2008, 91 MSM were diagnosed with HIV in New Zealand through antibody testing (this includes 2 MSM/IDU). These numbers are the highest ever recorded for New Zealand, and are similar to the previous peak in 2005.

The ethnic breakdown of the 91 MSM diagnosed in New Zealand in 2008 was: European (67%), Maori (12%), Asian (8%), South American (3%), Pacific (2%), African (2%), “other” (4%) and unknown (1%).

Place of infection

Most of the 91 MSM diagnosed in New Zealand in 2008 were also infected in New Zealand - 63 men, or 69% of the total.

The number of locally-acquired HIV infections diagnosed in 2008 (n=63) is higher than in the previous two years (n=54 in 2007, and n=54 in 2006) but slightly lower than the peak in locally-acquired infections diagnosed in 2005 (n=66).

The number of MSM diagnosed here but infected overseas (n=25 MSM in 2008, with 3 MSM unknown) is consequently the highest ever recorded, being more than that identified in 2005 (n=23). From 2003, overseas infections have accounted for around 27% of the new HIV diagnoses amongst MSM recorded in New Zealand, meaning that a significant component of New Zealand’s MSM epidemic continues to be driven by infection trends overseas.
Locally-acquired HIV infections among MSM

Previous HIV negative tests
Of the 63 MSM diagnosed in 2008 and infected in New Zealand, 27 are known for certain to have been infected in the last five years because they received a negative HIV test in that time. Further, 17 are known for certain to have been infected in the previous two years, and 12 of those are known for certain to have been infected in the last 12 months.

Because previous (and especially recent) antibody testing in MSM who are newly diagnosed with HIV infection is an indicator of prevention failure within primary care, it is important to better understand the testing history of these men.

The most recent place of testing for the 17 MSM from 2008 who are known to have been infected in New Zealand in the previous 2 years was:

<table>
<thead>
<tr>
<th>Place</th>
<th>Number</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>GP</td>
<td>8</td>
<td>(7 in 2007)</td>
</tr>
<tr>
<td>STD clinic</td>
<td>7</td>
<td>(7 in 2007)</td>
</tr>
<tr>
<td>NZAF clinic</td>
<td>0</td>
<td>(1 in 2007)</td>
</tr>
<tr>
<td>Hospital specialist</td>
<td>2</td>
<td>(1 “other” in 2007)</td>
</tr>
</tbody>
</table>

The region of residence of the 17 MSM from 2008 who are known to have been infected in New Zealand in the previous 2 years was:

<table>
<thead>
<tr>
<th>Region</th>
<th>Number</th>
<th>Year</th>
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<tbody>
<tr>
<td>Northern</td>
<td>11</td>
<td>(10 in 2007)</td>
</tr>
<tr>
<td>Midland</td>
<td>1</td>
<td>(1 in 2007)</td>
</tr>
<tr>
<td>Central</td>
<td>2</td>
<td>(1 in 2007)</td>
</tr>
<tr>
<td>Southern</td>
<td>3</td>
<td>(4 in 2007)</td>
</tr>
</tbody>
</table>

In 2007, 10 of the 16 MSM who are known to have been infected in New Zealand in the previous two years lived in the Northern region. In 2006, this was true of 10 of the 18 MSM in this category, and in 2005, 21 of the 26 MSM who are known to have been infected in New Zealand in the previous two years lived in the Northern region.

Place of residence
Of the 63 MSM diagnosed in 2008 and infected in New Zealand, 33 (52%) lived in the Northern region, 9 (14%) lived in the Central region, 5 (8%) lived in the Midland region and 15 (24%) lived in the Southern Region, with 1 unknown.

Age
The average age of the 63 MSM infected in New Zealand in 2008 was 40 years. One (2%) was aged under 20, 12 (19%) were aged 20-29, 13 (21%) were aged 30-39, 23 (37%) were aged 40-49, 13 (21%) were aged 50-59 and 1 (2%) was aged 60 or over. The proportion of those diagnosed in 2008 who were aged 40-49 is the same as in 2007 (37%).

Ethnicity
The majority (71% or 45 individuals) of the 63 MSM diagnosed by antibody testing and infected in New Zealand in 2008 and were European, with 16% Maori (10
individuals), 6% Asian (4 individuals), 2% Pacific (1 individual), 3% “other” (2 individuals) and 1 unknown.

For comparison, the ethnic breakdown in 2007 was: 72% European, 19% Maori, 7% Asian, 2% African and no-one of a Pacific ethnicity.

The percentage of MSM of Maori ethnicity continues to fluctuate, and is likely to reflect the small number of total diagnoses. Of the MSM diagnosed with HIV where infection occurred in New Zealand, the proportion who were Maori was 19% in 2000, 15% in 2001, 10% in 2002, 21% in 2003, 10% in 2004, 14% in 2005, 11% in 2006, 19% in 2007, and 16% in 2008.

**MSM percentage of total HIV diagnoses infected in New Zealand**

In total, 76 people were infected in New Zealand in 2008: MSM (n=62) plus MSM/IDU (n=1), heterosexual (n=8), IDU (n=1), perinatal (n=1), “other” (n=2) and unknown (n=1).

In 2008, MSM (including MSM/IDU) accounted for 83% of the total HIV diagnoses recorded in this country by antibody testing where infection occurred in New Zealand (63 out of 76).

In previous years, the MSM percentage of total HIV diagnoses where infection occurred in New Zealand was 73% in 2007 (54 out of 74), 79% in 2006 (54 out of 68), 83% in 2005 (66 out of 80), 88% in 2004 (51 out of 58) and 72% in 2003 (47 out of 65).

Over the last five years, MSM have accounted for 81% of the total HIV diagnoses by antibody testing in this country where infection has occurred here.

**Attachments**

Attached below are three graphs that depict annual HIV diagnoses in New Zealand by antibody testing from 1985 to the present, MSM HIV diagnoses by place of infection from 1996 to the present, and, for comparison, heterosexual HIV diagnoses by place of infection from 1996 to the present.

**Acknowledgements**

All of the epidemiological data presented in this overview paper has been provided by the AIDS Epidemiology Group, Department of Preventive and Social Medicine, University of Otago. NZAF is extremely grateful for the ongoing support and assistance given by Sue McAllister and Dr Nigel Dickson from AEG.
Exposure category: Annual HIV diagnoses by Western blot antibody testing, 1985-2008
(Note: Does not distinguish between infections acquired in NZ and overseas)

Data provided by AIDS Epidemiology Group, Department of Preventive and Social Medicine, University of Otago
Graph produced by Research, Analysis and Information Unit, New Zealand AIDS Foundation 2009
Place of infection: Annual HIV diagnoses in homosexual/bisexual males* by Western blot antibody testing, 1996-2008

*Includes both homosexual/bisexual and homosexual/bisexual/IDU

Data provided by AIDS Epidemiology Group, Department of Preventive and Social Medicine University of Otago

Graph produced by Research, Analysis and Information Unit, New Zealand AIDS Foundation 2009
Place of infection: Annual heterosexual HIV diagnoses by Western blot antibody testing, 1996-2008

Data provided by AIDS Epidemiology Group, Department of Preventive and Social Medicine University of Otago
Graph produced by Research, Analysis and Information Unit, New Zealand AIDS Foundation 2009