Suggested Reference


Copyright

Items in ResearchSpace are protected by copyright, with all rights reserved, unless otherwise indicated. Previously published items are made available in accordance with the copyright policy of the publisher.

https://researchspace.auckland.ac.nz/docs/uoa-docs/rights.htm
Sexual partnering and protective and testing practices among New Zealand gay and bisexual men

Dr Peter Saxton
Director, Gay Men’s Sexual Health research group

A/Prof Nigel Dickson (University of Otago)
Tony Hughes (NZAF)
Adrian Ludlam (University of Auckland)

HIV Treatments Update, Auckland 26th Sept 2014
Gay Auckland Periodic Sex Survey (GAPSS)

Recruitment at Big Gay Out, then bars and sex-on-site (SOS) venues simultaneously over subsequent week.

- 2002: n=812
- 2004: n=1220
- 2006: n=1228
- 2008: n=1527
- 2011: n=1320
- 2014: n=1421

Gay men’s Online Sex Survey (GOSS)

Recruitment starts after GAPSS on Internet dating sites.

2004: N=2141
2006: N=1917
2008: N=1477
2011: N=1793
2014: N=1793
Proportion known HIV positive

Source: Gay Auckland Periodic Sex Surveys (GAPSS); Gay men’s Online Sex Survey (GOSS) - Auckland respondents only. * preliminary data
Short gap length
No. of male sexual partners <6 months

GAPSS (n=7,286)

<table>
<thead>
<tr>
<th></th>
<th>None</th>
<th>One</th>
<th>2-5</th>
<th>6-10</th>
<th>11-20</th>
<th>21-50</th>
<th>&gt;50</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>10</td>
<td>20</td>
<td>30</td>
<td>20</td>
<td>10</td>
<td>10</td>
<td>5</td>
</tr>
</tbody>
</table>

GOSS (n=2,382)

<table>
<thead>
<tr>
<th></th>
<th>None</th>
<th>One</th>
<th>2-5</th>
<th>6-10</th>
<th>11-20</th>
<th>21-50</th>
<th>&gt;50</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>10</td>
<td>20</td>
<td>30</td>
<td>40</td>
<td>10</td>
<td>10</td>
<td>5</td>
</tr>
</tbody>
</table>

Sexual partnering is complex

GAPSS (n=7,013)

- No sex with a man
- 2+ regulars only
- One regular only
- One regular and casual sex
- Casual sex only

GOSS (n=2,308)

- No sex with a man
- One regular only
- 2+ regulars only
- One regular and casual sex
- Casual sex only

Concurrency is common

GAPSS (n=2940)  Sexual exclusivity among MSM who have a current regular partner (BF or FB)  GOSS (n=714)

Denominator is respondents with a current regular sex partner of at least 6 months duration.
Concurrency is common

GAPSS (n=2940) Sexual exclusivity among MSM who have a current regular partner (BF or FB)

GOSS (n=714)

Denominator is respondents with a current regular sex partner of at least 6 months duration.
Condom use
During anal intercourse with casual partner/s <6 months

Response options: “always”, “almost always”, “about half the time”, “very rarely”, “never”. Separately for insertive and receptive anal intercourse.

Source: GAPSS. * preliminary data
Condom use
During anal intercourse with casual partner/s <6 months

Response options: “always”, “almost always”, “about half the time”, “very rarely”, “never”. Separately for insertive and receptive anal intercourse.

Source: GAPSS. * preliminary data
Attitudes

“Condoms are OK as part of sex”

Response options: “strongly agree”, “agree”, “disagree”, “strongly disagree”.

“I would sometimes rather risk HIV than use a condom for anal sex”

Response options: “strongly agree”, “agree”, “disagree”, “strongly disagree”.
Attitudes

“I don’t like condoms because they reduce sensitivity”

Response options: “strongly agree”, “agree”, “disagree”, “strongly disagree”.

“I would never be willing to use condoms for anal sex”

Response options: “strongly agree”, “agree”, “disagree”, “strongly disagree”.
Attitudes

“HIV/AIDS is a less serious threat than it used to be because of new treatments”

Response options: “strongly agree”, “agree”, “disagree”, “strongly disagree”.

“A man who knows he has HIV would tell me he was positive before we had sex”

Response options: “strongly agree”, “agree”, “disagree”, “strongly disagree”.
Multi-partnering

Figure 3. Sexual contact networks over a one-year period. Visualization is done using the Pajek software system [9].
(a) Heterosexual network; (b) MSM network.

Source: Stott et al 2003
“Long tailed” MSM

**GAPSS**

- LTSM 1: >10 partners
- LTSM 2: >20 partners
- LTSM 3: >50 partners

**GOSS**

- LTSM 1: >10 partners
- LTSM 2: >20 partners
- LTSM 3: >50 partners

Graphs show trends over time with percentages of different categories.
### ≤20 vs >20 partners (GAPSS)

<table>
<thead>
<tr>
<th>Socio-demographics</th>
<th>% of ≤20 partners</th>
<th>% of &gt;20 partners</th>
<th>AOR (age)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recruited at sex-on-site / sauna</td>
<td>15</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>Aged &lt;30</td>
<td>35</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>Condom use with casual partner/s</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any UAI, total</td>
<td>14</td>
<td>38</td>
<td>3.8 (3.2-4.6)</td>
</tr>
<tr>
<td>Any UAI, those having AI</td>
<td>32</td>
<td>45</td>
<td>1.8 (1.5-2.2)</td>
</tr>
<tr>
<td>Condom use with regular partner</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any UAI, total</td>
<td>30</td>
<td>24</td>
<td>0.7 (.61-.89)</td>
</tr>
<tr>
<td>Any UAI, those having AI</td>
<td>67</td>
<td>55</td>
<td>0.6 (.46-.75)</td>
</tr>
<tr>
<td>HIV &amp; STI testing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ever tested for HIV</td>
<td>76</td>
<td>85</td>
<td>1.6 (1.3-2.0)</td>
</tr>
<tr>
<td>Tested for HIV &lt;6 months</td>
<td>25</td>
<td>35</td>
<td>1.8 (1.5-2.2)</td>
</tr>
<tr>
<td>Confirmed HIV positive</td>
<td>5</td>
<td>7</td>
<td>1.4 (.97-1.9)</td>
</tr>
<tr>
<td>STI checkup/treatment &lt;12 months</td>
<td>46</td>
<td>65</td>
<td>2.3 (1.6-3.3)</td>
</tr>
<tr>
<td>Diagnosed with STI &lt;12 months</td>
<td>7</td>
<td>16</td>
<td>2.4 (1.4-4.1)</td>
</tr>
<tr>
<td>Attitudes (strongly agree/agree)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“Condoms are ok as part of sex”</td>
<td>96</td>
<td>94</td>
<td>0.6 (.45-.9)</td>
</tr>
<tr>
<td>“Some times I’d rather risk HIV than use a condom”</td>
<td>10</td>
<td>18</td>
<td>2.0 (1.6-2.5)</td>
</tr>
<tr>
<td>“I don’t like condoms because they reduce sensitivity”</td>
<td>36</td>
<td>42</td>
<td>1.2 (1.1-1.5)</td>
</tr>
</tbody>
</table>
### ≤20 vs >20 partners (GAPSS)

<table>
<thead>
<tr>
<th>Socio-demographics</th>
<th>% of ≤20 partners</th>
<th>% of &gt;20 partners</th>
<th>AOR (age)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recruited at sex-on-site / sauna</td>
<td>15</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>Aged &lt;30</td>
<td>35</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>Condom use with casual partner/s</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any UAI, total</td>
<td>14</td>
<td>38</td>
<td>3.8 (3.2-4.6)</td>
</tr>
<tr>
<td>Any UAI, those having AI</td>
<td>32</td>
<td>45</td>
<td>1.8 (1.5-2.2)</td>
</tr>
<tr>
<td>Condom use with regular partner</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any UAI, total</td>
<td>30</td>
<td>24</td>
<td>0.7 (.61-.89)</td>
</tr>
<tr>
<td>Any UAI, those having AI</td>
<td>67</td>
<td>55</td>
<td>0.6 (.46-.75)</td>
</tr>
<tr>
<td>HIV &amp; STI testing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ever tested for HIV</td>
<td>76</td>
<td>85</td>
<td>1.6 (1.3-2.0)</td>
</tr>
<tr>
<td>Tested for HIV &lt;6 months</td>
<td>25</td>
<td>35</td>
<td>1.8 (1.5-2.2)</td>
</tr>
<tr>
<td>Confirmed HIV positive</td>
<td>5</td>
<td>7</td>
<td>1.4 (.97-1.9)</td>
</tr>
<tr>
<td>STI checkup/treatment &lt;12 months</td>
<td>46</td>
<td>65</td>
<td>2.3 (1.6-3.3)</td>
</tr>
<tr>
<td>Diagnosed with STI &lt;12 months</td>
<td>7</td>
<td>16</td>
<td>2.4 (1.4-4.1)</td>
</tr>
<tr>
<td>Attitudes (strongly agree/agree)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“Condoms are ok as part of sex”</td>
<td>96</td>
<td>94</td>
<td>0.6 (.45-.9)</td>
</tr>
<tr>
<td>“Some times I’d rather risk HIV than use a condom”</td>
<td>10</td>
<td>18</td>
<td>2.0 (1.6-2.5)</td>
</tr>
<tr>
<td>“I don’t like condoms because they reduce sensitivity”</td>
<td>36</td>
<td>42</td>
<td>1.2 (1.1-1.5)</td>
</tr>
</tbody>
</table>
**≤20 vs >20 partners (GAPSS)**

<table>
<thead>
<tr>
<th>Socio-demographics</th>
<th>% of ≤20 partners</th>
<th>% of &gt;20 partners</th>
<th>AOR (age)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recruited at sex-on-site / sauna</td>
<td>15</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>Aged &lt;30</td>
<td>35</td>
<td>23</td>
<td></td>
</tr>
</tbody>
</table>

**Condom use with casual partner/s**

<table>
<thead>
<tr>
<th></th>
<th>% of ≤20 partners</th>
<th>% of &gt;20 partners</th>
<th>AOR (age)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any UAI, total</td>
<td>14</td>
<td>38</td>
<td>3.8 (3.2-4.6)</td>
</tr>
<tr>
<td>Any UAI, those having AI</td>
<td>32</td>
<td>45</td>
<td>1.8 (1.5-2.2)</td>
</tr>
</tbody>
</table>

**Condom use with regular partner**

<table>
<thead>
<tr>
<th></th>
<th>% of ≤20 partners</th>
<th>% of &gt;20 partners</th>
<th>AOR (age)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any UAI, total</td>
<td>30</td>
<td>24</td>
<td>0.7 (.61-.89)</td>
</tr>
<tr>
<td>Any UAI, those having AI</td>
<td>67</td>
<td>55</td>
<td>0.6 (.46-.75)</td>
</tr>
</tbody>
</table>

**HIV & STI testing**

<table>
<thead>
<tr>
<th></th>
<th>% of ≤20 partners</th>
<th>% of &gt;20 partners</th>
<th>AOR (age)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ever tested for HIV</td>
<td>76</td>
<td>85</td>
<td>1.6 (1.3-2.0)</td>
</tr>
<tr>
<td>Tested for HIV &lt;6 months</td>
<td>25</td>
<td>35</td>
<td>1.8 (1.5-2.2)</td>
</tr>
<tr>
<td>Confirmed HIV positive</td>
<td>5</td>
<td>7</td>
<td>1.4 (.97-1.9)</td>
</tr>
<tr>
<td>STI checkup/treatment &lt;12 months</td>
<td>46</td>
<td>65</td>
<td>2.3 (1.6-3.3)</td>
</tr>
<tr>
<td>Diagnosed with STI &lt;12 months</td>
<td>7</td>
<td>16</td>
<td>2.4 (1.4-4.1)</td>
</tr>
</tbody>
</table>

**Attitudes (strongly agree/agree)**

<table>
<thead>
<tr>
<th></th>
<th>% of ≤20 partners</th>
<th>% of &gt;20 partners</th>
<th>AOR (age)</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Condoms are ok as part of sex”</td>
<td>96</td>
<td>94</td>
<td>0.6 (.45-.9)</td>
</tr>
<tr>
<td>“Some times I’d rather risk HIV than use a condom”</td>
<td>10</td>
<td>18</td>
<td>2.0 (1.6-2.5)</td>
</tr>
<tr>
<td>“I don’t like condoms because they reduce sensitivity”</td>
<td>36</td>
<td>42</td>
<td>1.2 (1.1-1.5)</td>
</tr>
</tbody>
</table>
LTMSM are strategically important prevention targets as they play a disproportionate role in facilitating (through non-condom use) or controlling (through condom use and testing) HIV spread.

Prevention goals include raising condom use, reinforcing the importance of HIV and STI testing, and shaping attitudes, while acknowledging the protective behaviours reported by these men.
“Testing gap”
HIV testing

Testing <12 months

Source: Gay Auckland Periodic Sex Surveys (GAPSS); Gay men’s Online Sex Survey (GOSS) - Auckland respondents only. * preliminary data
“Risky non-tester”

“risky testers”
- engaged in unprotected anal intercourse with a casual partner within six months prior to survey (UAIC)
- had their last negative test within the prior six months

“risky non-testers”
- engaged in unprotected anal intercourse with a casual partner within six months prior to survey (UAIC)
- had either (a) never tested for HIV, or (b) their last negative HIV test was more than six months ago
"Risky non-testers" 62% of offline & 72% of online respondents reporting any UAIC
10% of all offline & 21% of all online respondents
“Risky non-tester” over time

![Graph showing the percentage of risky non-testers over time for Location-based and Web-based methods with trend p-values of .251 and .244 respectively.](image-url)
“Risky non-tester” vs “risky tester”

- Fewer partners
- Less confident about their HIV negative status
- Slightly older
- More likely to identify as bisexual
- More likely to be of Asian or Pacific identity
- More likely to expect an HIV positive man to disclose status before sex
A considerable proportion of MSM engage in rates of UAIC that outpaces their HIV testing frequency.

This has implications for the likely effectiveness of TasP for MSM populations.

Underestimates the testing gap.

Testing services need to be more accessible to all MSM engaging in UAI and especially those overrepresented in “risky non-testing”
Sexually Transmitted Infections
8.2% reported at least one STI in the previous 12 months in 2011

Source: Dickson et al. "Self-reported STIs and sexual health checks in a cross-sectional study of gay and bisexual men in New Zealand." Sex Transm Infect, 2014
8.2% reported at least one STI in the previous 12 months in 2011

Source: Dickson et al. "Self-reported STIs and sexual health checks in a cross-sectional study of gay and bisexual men in New Zealand." Sex Transm Infect, 2014
Source: Dickson et al. "Self-reported STIs and sexual health checks in a cross-sectional study of gay and bisexual men in New Zealand." Sex Transm Infect, 2014
STIs have become a serious concern for the health of HIV positive MSM.

Increased STI screening required but also stress importance of condom use to reduce both personal risk but also community risk.

Need to break chains of STI transmission in sexual networks by active intervention.
Acknowledgements

HIV Treatments Update
Body Positive & Sponsors

GAPSS / GOSS behavioural surveillance study
A/Prof Nigel Dickson (AEG), Tony Hughes (NZAF), Adrian Ludlam (UA)
14,841 responses from participants 2002-2014

Funding
NZAF Fellowship
Ministry of Health
University of Auckland School of Population Health PBRF travel award
Health Research Council of NZ
University of Otago Division of Health Sciences Postdoctoral award

Permission for these preliminary GAPSS GOSS 2014 data to be presented has been granted by the New Zealand Ministry of Health who funded these surveys. The Ministry will be receiving a series of scheduled reports on GAPSS GOSS 2014 findings for review commencing in September 2014.

Photographs courtesy of NZAF, Charlie Hautono.

PAPERS, PRESENTATIONS & POSTERS

TUSA18 “HIV epidemiology and behavioural outcomes – towards control?” AIDS2014 Satellite
WEPE133 “Long tailed MSM”: MSM with frequent partner change in location-based surveillance
WEPE134 “Long tailed MSM”: MSM with frequent partner change in web-based surveillance
THPE155 “The testing gap” MSM who have not tested since their last episode of unprotected casual anal sex
Dickson et al. "Self-reported STIs and sexual health checks in a cross-sectional study of gay and bisexual men in New Zealand." Sex Transm Infect; 2014