

**ESTIMATING THE SIZE OF PRIORITY POPULATIONS  
AND  
SETTING SERVICE ACCESS TARGETS  
FOR  
SEXUAL HEALTH SERVICES  
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**Background**

The *NSW STI Strategy 2006-2009* identifies that publicly funded sexual health clinics have finite capacity; therefore services need to be directed where most needed. The strategy requires that sexual health clinics establish goals and targets in relation to priority populations to assist with prioritising access. Establishing goals and targets is seen as useful way of encouraging services to articulate their priorities.

These guidelines are intended to assist services to establish goals and targets in relation to access by priority populations. Estimating the size of priority populations is an important first step. However, it is not always easy to do so. Some approaches to do this are described below, as well as the limitations in estimating the size of some priority population groups. In addition to providing guidance on how to estimate the size of priority populations a range of other information sources are identified which can then be used to inform decision-making when setting targets.

**Aboriginal people**

1. The number of Aboriginal people within a region can be obtained from census data.
2. The total number of Aboriginal people in an area health service can be calculated by adding the number of Aboriginal persons for each local government area.
3. Census data will frequently enable you to select detailed demographics for the Indigenous population within an area.

**Example:** Type 'Blacktown' into the search function on the census website and you will obtain the number of Indigenous people in Blacktown Local Government Area. There are 7,055 Indigenous persons, representing 2.6% of the local population. The large number of Indigenous residents compared to other suburbs would indicate Blacktown should be a high priority for services.

**Gay and other homosexually active men**

1. The number of males within in a selected region can be obtained from census data.
2. Online census data does not provide a breakdown by age. However, you can download 'Community Profiles' to obtain the age of males. This then enables children to be excluded from the total male population.
3. The Australian Study of Health and Relationships reported that 2.5% of the male population between 16 to 59 years identified as gay or bisexual. Same sex attraction or experience was reported by 8.6% of men.
4. Another figure that could be used from the study focuses on recent experience rather than identity or attraction. It found 1.9% of men reported homosexual experience in the past year.
5. A limitation in using the study is estimating the number of homosexuals in areas where there are higher concentrations of gay people (an estimate of gay population in inner Sydney is available – see reference three).

**Example:** Census data indicates there are 74,282 male residents in Parramatta Local Government Area. Excluding children aged between 0-14, there are 59,699 males. Using the Australian Study of Health and Relationships, assume 2.5% of these males are gay or bisexual and another 8.6% have same sex attraction or some same sex experience. This means there may be between 1,492 and 5,134 gay and other homosexually active men in Parramatta. And you could estimate 1.9%, 1,134 males, have had a homosexual experience in the previous year.

## Young people

1. The number of young people aged between 15-24 years within a selected region can be obtained from census data.
2. The total number of young people in an area health service can be calculated by adding the number of young people in each local government area.

**Example:** Census data provides the age of the population for each of the 28 local government areas covered by Greater Western Area Health Service. In total there are 35,950 young people aged 15-24 in the area health service.

## Sex workers

1. The Australian Study for Health and Relationships found that 0.9% of men and 0.5% of women had been paid for sex. In the past year it found that fewer than 0.1% of men and women had been paid for sex with men.
2. Using the survey to estimate the number of sex workers does not take account of locations that may have higher concentrations of sex workers. The investigators of the study believe that female sex workers were undersampled in the study.
3. Using the knowledge of staff and other service providers of the local sex industry can assist in estimating the number of sex workers.

**Example:** Wollongong has 184,212 residents. Using findings from the Australian Study for Health and Relationships you would estimate there are <184 people who have been paid for sex in the past year.

## People with HIV/AIDS

1. HIV notifications can be obtained from the area health service public health unit (residential postcodes are reported at notification).
2. The public health unit can provide you with total AIDS death notifications (check with the unit regarding the reliability of the data).
3. Estimate the number of people with HIV in the area by deducting the number of AIDS deaths from HIV notifications (be aware: this does not take account of population movements).
4. Alternatively, you may want to simply estimate numbers by assuming that approximately 29% of people with HIV are deceased (see example). Adopting this approach will depend on the accuracy you require for service planning.

### Example:

In 2006, the Annual Surveillance reported 12,986 total HIV diagnoses in NSW. It also reported 3,737 deaths following AIDS (approximately 29% of total diagnoses). This means you would expect around 9,249 people living with HIV in NSW (not taking account of population movements or deaths that were not reported).

## People who inject drugs

1. The National Drug Strategy Household Survey 2004 reported there were 85,300 people in NSW aged 14 years and over who have injected drugs at least once in a lifetime. It reported that 15,700 people aged 14 years and over had injected in the last 12 months.
2. Alternatively, the Hepatitis C Virus Projections Working Group has estimated that in Australia there are 80,000 regular and 120,000 occasional injecting drug users.\* As 33% of the Australian population lives in NSW, you could assume 26,400 regular and 39,600 occasional injecting drug users live in NSW.
3. The AIDS/Infectious Diseases Branch has developed a formula to estimate the proportion of injecting drug users within each area health service (see below).
4. The number of injecting drug users can be estimated by applying the formula to the findings from the National Drug Strategy Household Survey or Hepatitis C Virus Projections Working Group estimates.

**Example:** The injecting drug user score estimates that 12.76% of injecting drug users in NSW reside in North Sydney Central Coast Area Health Service. If you apply the score to findings from the National Drug Strategy Household Survey (i.e. 15,700 x 12.76%) you would estimate 2,003 have injected drugs in the last 12 months and a further 10,884 people who have ever injected drugs live within the area health service.

Applying the score to estimates from the Hepatitis C Virus Projections Working Group, there may be 3,368 regular and 5,052 occasional injecting drug users in North Sydney Central Coast Area

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### Heterosexuals with recent partner change

1. The number of adults within a selected region can be obtained from census data.
2. The Australian Study of Health and Relationships reported that 13% of men and 7% of women aged 16-59 had sex with two or more people of the opposite sex in the previous year. This was most common among those under 30.

**Example:** Census data indicates there are 1,392,270 men and 1,415,915 women aged 15-64 in Sydney. Using findings from the Australian Study of Health and Relationships you would estimate there are 180,995 men and 99,114 women who had recent partner change in the past year.

### Priority Culturally & linguistically diverse communities (CALD)

1. CALD population sizes can be most easily calculated using two indicators –‘country of birth’ and/or ‘language spoken at home’- which are available from census data by local government area.
2. Not all CALD communities are a priority for HIV/STI programs. The degree of risk may vary depending on a range of local and international factors (e.g. prevalence of HIV/STIs in countries of birth) and, importantly, their increased individual risk as a member of one of the other priority populations (e.g. gay man) within a cultural context that makes service access more difficult.
3. In NSW no markers for ethnicity are collected in STI surveillance but ‘country of birth’ and ‘language spoken at home’ are collected with HIV notifications and some specific CALD communities appear to have high rates of HIV.

**Example1:** Using ‘country of birth’: Census data indicate that there are 2,388 Vietnam-born residents in Marrickville LGA. Increased HIV/STI risks for this population may be related to travel and mobility to countries of higher HIV/STI prevalence in addition to local behaviours such as unsafe injecting and/or unprotected sex among gay men or heterosexual men and women.

**Example 2:** Using ‘language spoken at home’. There were 1,377 Spanish-speaking background residents in Botany Bay LGA. Little evidence of increased risk/needs in the general Spanish-speaking background community but Spanish-speaking background gay men are over-represented in HIV notifications in NSW.

### Setting service targets

Estimating the size of priority populations is one piece of the information required to assist services identify targets. Other data is required to inform decision-making.

Additional information	Key questions
Geographic boundaries of service provision	<ul style="list-style-type: none"> <li>• <i>What geographic area does the service cover?</i></li> <li>• <i>Are services being provided in towns/suburbs with large Indigenous populations or other priority populations?</i></li> </ul>
Sexual health service usage data	<ul style="list-style-type: none"> <li>• <i>What proportions of priority population groups are currently accessing the service?</i></li> <li>• <i>How are the targets set by the Area Health Service Strategy measured against the sexual health service data?</i></li> <li>• <i>How does service provision compare to other sexual health services?</i></li> <li>• <i>Has service provision changed over time?</i></li> <li>• <i>Do service users reflect state and local priorities?</i></li> <li>• <i>What is the service’s capacity to meet the needs of priority populations?</i></li> </ul>
Identification of other service providers	<ul style="list-style-type: none"> <li>• <i>Who else is providing services to priority populations?</i></li> <li>• <i>Are they meeting their sexual health needs?</i></li> <li>• <i>Can we build their capacity to address sexual health?</i></li> <li>• <i>How should we collaborate with them?</i></li> </ul>

Surveillance data	<ul style="list-style-type: none"> <li>• <i>What does surveillance data tell us about local priorities?</i></li> <li>• <i>What are the demographics of those most at risk?</i></li> <li>• <i>What trends are there in notifications?</i></li> </ul>
Professional knowledge and experience	<ul style="list-style-type: none"> <li>• <i>Have staff identified from their professional experience other factors that need to be considered?</i></li> <li>• <i>Are there local projects, evaluation and research that can provide further information on the priority populations?</i></li> </ul>
State-wide and area health service strategies and policies	<ul style="list-style-type: none"> <li>• <i>What are the state-wide and area health service priorities?</i></li> <li>• <i>Are these reflected in our local priorities?</i></li> <li>• <i>Have we ensured Aboriginal people are a priority for our sexual health service (the NSW STIs Strategy identifies improved access by Aboriginal people as a key priority for all sexual health services)?</i></li> </ul>
Consideration of local priority CALD communities, risks and service access.	<ul style="list-style-type: none"> <li>• <i>What are the local priority CALD communities (use census data) ?</i></li> <li>• <i>Which of these CALD communities are at increased risk for HIV (analyse local HIV notifications by reported 'country of birth' and/or 'language spoken at home')?</i></li> <li>• <i>Are these local CALD communities with high numbers of HIV notifications drawn from a country with a high prevalence of HIV and/or other STIs (use UNAIDS data or general knowledge)?</i></li> <li>• <i>Do these local CALD communities have high numbers of other priority populations e.g. gay men or people who inject drugs (use local knowledge)</i></li> <li>• <i>Which of these local priority CALD communities require prioritised access to publicly funded services (is there epidemiological or social research which indicates later presentation or anecdotal evidence that they poorly access general practice for HIV/STI-related health issues)?</i></li> </ul>

#### Census data

- Census data for 2006 can be accessed online at <http://www.censusdata.abs.gov.au/>.
- Access census data using the search function to find data for a region. The online site allows you to search by local government area, postcode, electoral division or suburb (however, not by area health service).
- Prior to searching census data, contact your local public health unit or planning unit to check if they have already collated this information, <http://www.health.nsw.gov.au/public-health/phus/phus.html>

#### Injecting drug user score

The injecting drug use score was developed by the AIDS and Infectious Diseases Branch of NSW Health taking into account overdose deaths, methadone clients, and hepatitis C notification.

The formula for this calculation is:

Regular users = 26,400 x AHS % and occasional users = 39,600 x AHS %

Greater Southern	3.51%	Northern Sydney/Central Coast	12.76%
Greater Western	3.61%	South East Sydney/Illawarra	21.29%
Hunter/New England	6.30%	Sydney South West	26.10%
North Coast	10.38%	Sydney West	16.04%

#### References

1. Australian Census data 2006, <http://www.censusdata.abs.gov.au/>.
2. Australian Study of Health and Relationships, <http://www.latrobe.edu.au/ashr/>.
3. Estimating population distribution and HIV prevalence among homosexual and bisexual men, <http://www.publish.csiro.au/?paper=SH05034>.
4. National Drug Strategy Household Survey 2004, <http://www.aihw.gov.au/publications/index.cfm/title/10122> .
5. Hepatitis C Virus Projections Working Group: Estimates and Projections of the Hepatitis C Virus Epidemic in Australia 2006, <http://www.health.gov.au/internet/main/publishing.nsf/Content/phd-hepc-estimates-project-06> .
6. HIV/AIDS, viral hepatitis and sexually transmissible infections in Australia Annual Surveillance Report 2008, <http://www.nchechr.unsw.edu.au/NCHECRweb.nsf/page/Annual%20Surveillance%20Reports>.

#### Additional notes

\* The figures given are for lower limit estimates. Upper limit estimates are 120,000 regular and 210,000 occasional users. A regular IDU injected for at least 12 months, an average of 10 times per month, with injecting in most months. An occasional IDU injected at least once in the last 12 months.