

Technical Notes

Caution should be exercised when using either numbers or rates alone to measure outcomes in specific and different areas. Rates, for example, are sensitive to small populations. Both numbers and rates of reported outcomes have particular uses and should be presented together to give a clear and balanced picture of the level of the outcomes of interest.

Percentage changes are another type of rate that requires caution when interpreting. Small numbers of specific events can result in large percentage changes.

Mortality

Perinatal mortality

1. A perinatal death is either a still born baby of at least 20 weeks gestation or weighing at least 400 grams, or a live born baby dying within 28 days of birth.
2. These data are extracted by year of death, and represent perinatal deaths of babies of usual residents of Queensland.
3. Indigenous status shown is that of the mother, not the baby or baby's father.
4. Births and deaths where Indigenous status was not stated were aggregated with non-Indigenous births and deaths respectively.

Median age at death

1. These data are extracted by year of registration, not by year of death and represent deaths of usual residents of Queensland.
2. Deaths that are not yet registered are not included in these data.
3. Deaths where Indigenous status was not stated are aggregated with non-Indigenous deaths.
4. Two years data, 2005 and 2006 have been aggregated to provide sufficient counts for geographic areas with small populations.

The ABS estimates that the implied coverage of Indigenous deaths in Queensland is approximately 51 per cent over the period 2002-2006 (Deaths, Australia, 2006, ABS cat no. 3302.0).

Causes of death

1. These data are extracted by year of registration, not by year of death and represent deaths of usual residents of Queensland.
2. Deaths that are not yet registered are not included in these data.
3. Deaths where Indigenous status is not stated are aggregated with non-Indigenous deaths.
4. Excludes deaths where cause was not recorded.

The ABS estimates that the implied coverage of Indigenous deaths in Queensland is approximately 51 per cent over 2002-2006 (Deaths Australia, 2006, ABS cat no. 3302.0). It is likely that the rates and ratios stated in this report underestimate the true rates and ratios; however, it is not appropriate to apply an adjustment factor to cause of death categories as it is probable that there are variations in the likelihood of death registration between categories.

Health

Hospital separations

In this report, hospital separations are referred to as hospital admissions for ease of understanding.

1. These data are for hospital separations for usual residents of Queensland only and only count separations from Queensland hospitals.
2. These data do not represent prevalence of each condition in each area, rather the number of hospital admissions for each condition. As such, they are not a count of unique individuals. Some patients will have several hospitalisations for the same disease or injury episode.



3. Hospital transfers are excluded where possible to prevent double counting.
4. Admitted patients who receive same day procedures are included in these data, unless otherwise stated.
5. Where a patient's Indigenous status was not stated, they were aggregated with non-Indigenous patients.

It is likely that these data under-represent the actual level of Indigenous admissions. An audit of hospital separation data in 2007 showed that 88 per cent of Indigenous hospital inpatients were recorded as such in hospital records. There was considerable variation in estimated capture levels by remoteness area with lower rates in urban areas.

Specific condition codes:

Codes used for identifying potentially preventable hospitalisations presented in hospitals	
Source: Australian Hospital Statistics 2004/05	
Category	ICD-10-AM codes
Diabetes	E10–E14.9 as principal diagnoses
Chronic Obstructive Pulmonary Disease	J20, J41, J42, J43, J44, J47 as principal diagnosis only, J20 only with additional diagnoses of J41, J42, J43, J44, J47
Circulatory disease	I00 to I99 as principal diagnosis only
Pyelonephritis	N10, N11, N12, N13.6, N39.0 as principal diagnosis only
Cellulitis	L03, L04, L08, L88, L98.0, L98.3 as principal diagnosis only, exclude cases with any procedure except those in blocks 1820 to 2016 or if procedure is 30216-02, 30676-00, 30223-02, 30064-00, 34527-01, 34527-00, 90661-00 and this is the only listed procedure
Renal dialysis	Z49 as principal diagnosis only
Assault	X85 – Y09 and Y871 as principal diagnosis only

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Quarterly Report Hospital Separations Data

6. While every effort has been made to exclude cases where a patient was transferred to prevent double counting, it is likely that due to variations in data entry, not all patient transfers have been excluded, hence the burden of injury may be over-estimated by hospital admissions.
7. These data are based on place of usual residence of the admitted patient and thus may not reflect the actual number of admissions for assault occurring in any particular community.
8. Data show counts of admission to hospital and not counts of actual assault incidents. It is possible that one assault incident could require more than one admission to hospital.
9. An admission for assault in a particular period does not necessarily mean that an assault occurred in that period.
10. Variations in admissions may also occur as a result of variations in local behaviours and admission practices, for example, not all assaults result in admission to hospital.
11. In communities with a small population or where there are only a small number of hospital admissions, the reliability of rates may be low.
12. Given the above, comparisons across communities and between periods must be made with care.
13. Expected quarterly counts for each community are based on the 2006/07 Queensland rate.

Low birthweight

1. A low birthweight baby weighs less than 2,500 grams at birth.
2. These data are live born singleton births only (i.e. multiple births are excluded due to their increased propensity for lower birthweights).
3. These data are extracted by year of birth, and represent births of babies to women who were usual residents of Queensland.

4. Indigenous status shown is that of the mother, not the baby or baby's father.
5. Births to women whose Indigenous status was not stated are aggregated with non-Indigenous births.

Education

Quarterly Report average student attendance

1. Attendance Rate = (Total Attendance (FTE) / Total Possible Number of Enrolment Days) * 100
2. Data may only be used to indicate broad trends.
3. Includes full and part day absences.
4. Includes full-time students only.
5. Includes all year levels.
6. Information for Bamaga provides an integrated summary which includes students residing at Bamaga, Injinoo, New Mapoon, Seisia and Umagico since all students attend Northern Peninsula Area State College (previously Bamaga State School).
7. Data for the 'Average student attendance rate by community, semester 2, 2007 and semester 1, 2008' includes all students, Indigenous and non-Indigenous.
8. Mossman Gorge Community represents attendance of all students at Mossman State School and Mossman State High School who have Mossman Gorge Community as their home or mailing address.

National benchmarks in reading, writing and numeracy

1. Exempted student numbers are included in the 'below benchmark' category.
2. Absent students are excluded from the calculation of benchmark attainment.
3. Geographic locations reported in this report do not match the geographic locations used for national reporting purposes, thus are not comparable.



4. State-wide benchmarks statistics were sourced from the National Report on Schooling (Ministerial Council on Education, Employment, Training and Youth Affairs).
5. Data reported by remoteness location were sourced directly from the Queensland Studies Authority and were reported by school location. Statistical calculations were based directly on raw counts.
6. From 2008, the National Assessment Program – Literacy and Numeracy (NAPLAN) will replace the former State and Territory Literacy and Numeracy Testing program. NAPLAN encompasses Years 3, 5, 7 and 9 and reports student performance across ten achievement bands spanning these year levels. Six achievement bands apply to any one year level with a national minimum standard established on each scale.

Employment

Labour force status

1. Employed persons exclude CDEP participants.
2. Unemployment rate includes CDEP participants.
3. In the standard reporting from the 2006 Census of Population and Housing, CDEP participants were counted as employed persons.
4. Where Indigenous status is not stated, persons are aggregated with non-Indigenous persons.

Healthy homes

Overcrowding

1. Overcrowding is defined using the Canadian National Occupancy Standard. Please refer to the Glossary for a definition.

Safe communities

Youth justice

1. These data include youth having committed or allegedly committed an offence:

- when between the ages of 10 and 17 years, or
 - having committed or allegedly committed an offence at an age greater than 17 years, and who is treated as a juvenile due to his or her vulnerability or immaturity.
2. The findings in this report include rates of 10–17 year olds under juvenile justice supervision. These have been calculated at per 1,000 of the relevant population
 3. A child on more than one type of order is counted once for each type. A child on a linked order (e.g. Probation/CSO) is counted once for each order type (e.g. one Probation and one CSO). Order types include:
 - Unsupervised orders
 - Reprimand.
 - Good Behaviour Order
 - Fine
 - Orders supervised by the Department of Communities
 - Probation
 - Community Service Order
 - Intensive supervision orders
 - Conditional release orders
 - Detention orders
 - Combined orders
 - Other orders
 - Restitution and Compensation
 - Licence disqualification

Offender counting

1. Offender statistics are based on offence counts and do not and can not refer to individuals. The data refers to the number of offences cleared or solved through an action against an offender. As such, offender data does not equate to a unique offender count and nor does it equate to the number of offences cleared. For example,

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an offender charged with motor vehicle theft, unlawful entry, assault and other theft would be included four times in any offender breakdown by age and sex.

2. Only persons aged ten years and over are deemed to be offenders. Under Queensland law, children under ten years of age are not held criminally responsible, although they may be involved in the commission of an offence. Juvenile offenders are those aged between and including ten and sixteen years.
3. Offenders have not been included if their age and sex are not specified in QPS records. Approximately 0.3 per cent of offenders have been excluded for this reason.

Offence counting

1. Reported offences refer to all established offences reported to or becoming known to the police within the relevant reference period.
2. The counting rules used by the QPS in the collection and collation of crime statistics are based on the guidelines published in the National Crime Statistics Manual (ABS) and as amended from time to time by the National Crime Statistics Advisory Group.
3. The national counting rule is that for each victim within a distinct criminal incident, the Most Serious Offence (MSO) per ANCO subdivision is counted. The national data set does not include 'victimless' offences such as those detailed in the QPS division of Other Offences.
4. The QPS counting rule for Other Offences is to count each distinct criminal act per criminal incident.
5. Where the victim based rule applies, the description of a victim varies according to the type of offence. A victim may be an individual person, an organisation, a place/premise, or a motor vehicle. The application of the MSO rule has major implications for the recording of crime statistics. By applying the MSO rule a single criminal incident may result in a number of offences being recorded. For incidents where the same victim is subjected to multiple offences belonging to different subdivisions, one offence, the most

serious, is counted within each subdivision. For example, if a person is kidnapped and then raped by two offenders, one kidnapping/abduction/deprivation of liberty and one rape would be counted.

Exceptions to counting rules

The offence subdivision of Sexual Offences (which includes Rape and Attempted Rape and Other Sexual Offences) is an exception to the national counting rule. The counting rule applied by the QPS in respect of this group of offences is that for each victim the MSO per ANCO subdivision is counted on the basis of time and place.

Interpreting the Queensland Police Service offence data

Comparisons of crime rates over different areas should be interpreted with great caution due to the many factors which differ from community to community. The level of crime in any community is affected by the number and composition of its population, with particular reference to age, sex, ethnicity and employment. The climate and geographical features of the community are important as is the economic structure including the local industry and the level and distribution of income. The attitude of the public toward crime can also impact upon local crime levels. Crime statistics for low volume offence categories tend to fluctuate randomly and dramatically from one year to the next. This can cause difficulties in the identification of trends and patterns in the levels of offences. It is, therefore, important to approach these low volume offence categories with caution when looking at trends and even when making comparisons across geographical areas.

Moreover, while monitoring trends in Queensland Police offence data is a useful indicator of changes occurring in the discrete Aboriginal and Torres Strait Islander communities with the implementation of the Alcohol Management Plans, there are several factors to be considered when interpreting the information. The following factors may impact adversely on offence trend numbers:



- there is an increased number of available offence types with the implementation of Alcohol Management Plans in many communities, for example, alcohol carriage offences
- increased police presence in the communities
- special police operations e.g. drug squad operating in a community in a particular month
- there may be an increased propensity to report some types of offences if normative values of community members changes, for example, breaches of domestic violence orders
- the relatively small number of offences for an individual community may display considerable volatility, e.g. one or a few individuals may be charged with many different types of offences leading to elevated numbers for a particular month
- the reported offences against the person encompass a broad range of offences and for this reason may not indicate the level of alcohol related harm.

Quarterly report offences against the person data

1. Offences against the person describes the number of reported personal offences to police, such as homicide, assaults, sexual assaults etc. They do not count the number of victims or the number of offenders. Many things including where and when the offence occurred, the availability of police officers and the relationship between the offender and the victim, can impact the number of reported offences at any point in time. For example, offences may be reported many months after they have occurred. Offences that are 'not substantiated' or 'cancelled' are not counted/included in the offence count.
2. These data are not official Police Service data as they provide detail not normally published in official Service documents. Because these data are produced for small areas, caution should be used in their interpretation.
3. The data were provided by the Queensland Police Service.

Court appearances

1. The definition of a 'person' is based on the defendant records having the same surname, first name and date of birth. The data have been manually aggregated, small variances have been assessed and where applicable have resulted in the defendant records being aggregated.
2. People convicted of breaching alcohol carriage restrictions have been counted in the location where they have been convicted of committing the offence.

The 'Number of persons convicted' and 'Number of charges resulting in a conviction' include charges finalised where an order is made that no conviction be recorded on the defendant's criminal history.

For the 12 months to September 2008, the rate per 1,000 population was calculated using the average number of people convicted each year as the numerator and the 2007 Estimated Resident Population (10 years and older) as the denominator.

Appendix A

Proportion (%) of students above Year 3, 5 and 7 benchmarks for Reading, Writing and Numeracy, by Indigenous status, Queensland, 2007 (with 95% confidence interval).

Curriculum area	Year	Indigenous status	Proportion	95% confidence interval ²
Reading	Year 3	Indigenous	87.0	±3.6
		All	93.5	±1.5
	Year 5	Indigenous	59.3	±4.9
		All	80.5	±3.1
	Year 7	Indigenous	61.5	±2.5
		All	84.2	±0.9
Writing	Year 3	Indigenous	89.0	±2.0
		All	95.1	±0.6
	Year 5	Indigenous	91.4	±1.3
		All	96.3	±0.3
	Year 7	Indigenous	91.6	±1.3
		All	96.3	±0.3
Numeracy	Year 3	Indigenous	77.6	±4.3
		All	90.2	±2.1
	Year 5	Indigenous	62.3	±3.0
		All	83.7	±1.6
	Year 7	Indigenous	49.0	±2.2
		All	77.4	±0.9

Appendix B

Statistics in this report

Sources of data

The statistics in this report were compiled by the Office of Economic and Statistical Research (OESR), using government agency administrative data and Australian Bureau of Statistics (ABS) data.

Rates

Where appropriate, data are presented as a number per 1,000 or 100,000 population (i.e. as a rate) or as a proportion of a population. Rates enable the comparison of Indigenous and non-Indigenous people, and they enable comparisons to be made across geographic regions.

Data for causes of death, and hospital admissions for selected conditions are presented as age standardised rates.⁴ The Queensland Indigenous population is considerably younger than the non-Indigenous population and there is a close relationship between age and health-related issues. Age standardisation of rates enables a 'true' comparison by minimising the effects of differences in age composition.

Estimated Resident Population and Census population counts from the ABS are used to calculate rates in this report.

Statistical boundaries

This publication uses the categories: Major Cities, Inner Regional, Outer Regional and Remote to describe remoteness. These categories are based on the ABS Australian Standard Geographical Classification Remoteness Structure which uses the Accessibility/Remoteness Index of Australia (ARIA). Due to small numbers, data for Remote and Very Remote have been aggregated for most indicators.

The geographic category 'discrete communities' refers to the Indigenous communities of: Aurukun, Bamaga, Cherbourg, Doomadgee, Hope Vale, Injinoo, Kowanyama, Lockhart River, Mapoon, Mornington Island, Napranum, New Mapoon, Palm Island, Pormpuraaw, Seisia, Umagico, Woorabinda, Wujal Wujal and Yarrabah. These communities are commonly referred to as DOGITs (Deed of Grant in Trust communities).

⁴ Age standardised rates in this report are calculated using the direct method. For more information refer to Glossary.

The Torres Region refers to the communities within the Torres Strait Regional Council, and the Torres Shire.

Reliability

Each data source has strengths and weaknesses:

- the Census of Population and Housing is conducted by the Australian Bureau of Statistics every five years with the latest conducted in 2006. The Census is a rich source of information suited to detailed disaggregation
- administrative data are usually collected more frequently than the Census, but the completeness of Indigenous identification can vary considerably between and within collections.

In all data sources there is likely to be an under-identification of Indigenous people. The accuracy of data describing Indigenous people depends on both their willingness and the opportunities provided to identify themselves as Indigenous. This can vary both within and between data collections.⁵ Consequently, rates and numbers indicating levels of Indigenous disadvantage may be under-estimates.

Rates are considered to be estimates falling within a range. Confidence intervals show the rate range within which the actual rate is likely to lie. Confidence intervals, at 95% probability, are presented in the graphs for perinatal mortality, infant mortality, low birthweight, causes of death, hospital admissions, education benchmarks, and youth detention data.

⁵ SCRGSP (Steering Committee for the Review of Government Service Provision) 2007, *Overcoming Indigenous Disadvantage: Key Indicators 2007*, Productivity Commission, Canberra.