

Determinants of health (Tier 2)

2.1 Environmental factors dimension

2.1.1 Fluoridated water

Proposed definition:	The percentage of 'localities' in which reticulated water supplies have a fluoride concentration within the NHMRC guidelines (see page 18).
Rationale:	Fluoride augmentation of domestic water supplies reduces the risk of dental caries in children and in later life. Opportunity for public health gain exists in any area where less than 100% of reticulated water supplies contain adequate fluoride.
Desired outcome:	That all reticulated water supplies contain adequate fluoride.
Numerator:	The number of areas (defined by postcode) which have reticulated water supplies with adequate fluoride concentration.
Denominator:	The number of postcodes.
Calculation method:	Simple percentage of postcode areas with adequate fluoride concentration.
Data source:	Fluoridated water database. Dental Statistics and Research Unit (DSRU), AIHW.
Presentation:	MC IR OR R VR Total Percentage of postcodes where reticulated water supplies have adequate fluoride concentration.
Data coverage:	This data set is national, with data for the various areas updated from time to time. Some data within this data set may be up to a decade old.
Data issues:	<p>This indicator describes only the concentration of reticulated water supplies; it reports nothing about private water supplies. Some water (e.g. some bore water) is naturally fluoridated, while tank (collected rain) water contains very little fluoride.</p> <p>This data set does not provide information about the percentage of water supplies that have adequate fluoride: it simply provides information about whether the fluoride in reticulated water supplies in any particular postcode is equal to or greater than the NHMRC target.</p>
Related indicators:	Oral health (1.1.4), Dental consultations (3.5.5).
Consultation with:	Dental Statistics and Research Unit, AIHW.

2.2 Socioeconomic factors dimension

2.2.1 Educational status of the adult population

Proposed definition: The percentage of persons aged 20–39, 40–59 and 60+ who have completed high school (i.e. to matriculation) or who have tertiary qualifications (see page 20).

Rationale: The indicator of adult educational status compares educational background of the adult population currently living in each area.

Desired outcome: To achieve a high level of education in the population of each area.

Numerator: The number of persons 20–39, 40–59 and 60+ years who left school when they were aged 17 years and older (or in Year 12 or equivalent), and the number who have completed some tertiary qualification (including level/type of qualification – TAFE certificate, bachelor degree or better, other (e.g. diploma).

Denominator: The number of people aged 20–39, 40–59 and 60+ years in each area.

Calculation method: Simple percentage for each age group.

Data source: ABS Census.

Presentation: MC IR OR R VR Total
For age groups: 20–39, 40–59, 60+ years.

Percentage adults left school:

- after turning 17 years (1991 and 1996 Census); and
- at Year 12 or equivalent (2001 Census).

Percentage of adults who completed some tertiary qualification. Indigenous, non-Indigenous and total population.

Data coverage: 5 yearly, national.

Data issues: In 1991 and 1996, data about the level of schooling achieved is not available; consequently, age left school can be used instead. However, in 2001, the Census collected information on level of schooling achieved, rather than age left school, and consequently there will be a break in the continuous reporting of this indicator.

Related indicators: Progression from school to university (2.2.3), High school retention rates (2.2.2).

Consultation with: Client Services, ABS.

2.2.2 High school retention rates

Proposed definition:	The percentage of 17 year olds enrolled in secondary school (see page 20).
Rationale:	The number of people enrolled in secondary schools is an indicator for measuring the potential for future employment and potential for health. This is also a measure of the opportunity afforded to children in each area.
Desired outcome:	To achieve a high and similar proportion of people at school when 17 years old in each area.
Numerator:	The number of 17-year-old males and females from each area enrolled in secondary school, by Indigenous status.
Denominator:	Population of Indigenous and non-Indigenous males and females aged 10–14 years in each area (5 years previously) divided by five. This population group of younger people 5 years previously has been selected to account for the fact that each cohort of 17 year olds in remote areas will have dwindled as people seek employment in less remote areas.
Calculation method:	The reported statistic is a simple percentage.
Data source:	ABS Census, ABS population estimate.
Presentation:	MC IR OR R VR Total Number enrolled. Percentage enrolled. For males and females. For Indigenous, non-Indigenous and total.
Data coverage:	5 yearly, national.
Data issues:	ABS Census data are available only for census years, but it is possible to obtain this information by postcode of the child's home address. Department of Education, Science and Technology (DEST) data for completions for secondary schools is not available so it is not possible to gain an accurate picture of persons who completed secondary school. Data for government and non-government schools is only available from 1998; prior to 1998, data are available for non-government schools only. DEST data are the count of the number of children at any age enrolled by postcode of the school. It is not possible to provide this data by postcode of the child's home address.
Related indicators:	Progression from school to university (2.2.3), Educational status of the adult population (2.2.1).
Consultation with:	Client Services, ABS.

2.2.3 Progression from school to university

Proposed definition:	The percentage of people aged 17–20 years who have commenced their first year of tertiary study (see page 20).
Rationale:	The number of people enrolled in tertiary education is an indicator for measuring the potential for future employment, higher socioeconomic status, and the greater potential for better health. This is also a measure of the opportunity afforded to children in each area.
Desired outcome:	To achieve a similar percentage of each cohort going on to commence at university in each area.
Numerator:	Number of male and female students aged 17–20 years from each area enrolled in first year of university.
Denominator:	Population of males and females aged 10–14 years (divided by five) in each area 5 years previously. This age group is chosen to ensure the population estimate for youth in rural and remote areas is not underestimated. A proportion of young adults leave rural and remote areas to seek employment or education in larger centres, therefore deflating the rural and remote population cohort aged 17–20 years.
Calculation method:	The reported statistic is a simple percentage.
Data source:	DEST university commencements, ABS population estimate.
Presentation:	MC IR OR R VR Total Percentage commenced university. Males and females. Indigenous, non-Indigenous and total population. Time trend.
Data coverage:	National, annual.
Data issues:	Rural/remote students may have already moved to the city prior to enrolling at university, thereby limiting the capture of rural/remote students. Although students can enrol at any age, this indicator reports only for those who enrol between the ages of 17 and 21 years of age. Data pertaining to university completions are not available for geographic areas. Data pertaining to enrolments at TAFE may be available from the National Centre for Vocational Education Research.
Related indicators:	High school retention rates (2.2.2).
Consultation with:	Statistics Unit, DEST.

2.2.4 Workforce and employment

Proposed definition:	Males and females aged 15–64 and 15–54 years: (a) in the labour force as a proportion of their populations (labour force participation rate); (b) unemployed as a proportion of the labour force (unemployment rate); and (c) employed as a proportion of the population (employment/population ratio). See page 21.
Rationale:	Unemployment reflects the level of social disadvantage experienced which is a risk factor for health. An improvement in employment level may translate into improvements in health.
Desired outcome:	To achieve low and similar levels of unemployment in each area, diminishing over time.
Numerator:	For each age group (15–64 or 15–54 years) and for each area: (a) number of people in the labour force; (b) number of unemployed people (i.e. without a job but in the labour force); and (c) number of employed people.
Denominator:	Estimated resident population of people aged (15–64 or 15–54 years) in each area in the same census year.
Calculation method:	Indirectly age standardised using national employment age-specific rates for the same period. Comparison between years requires standardisation to rates in a single year.
Data source:	ABS Census.
Presentation:	MC IR OR R VR Total For males and females: <ul style="list-style-type: none">• labour force participation rate;• unemployment rate; and• employment/population ratio. Indigenous, non-Indigenous and total population. Time trend.
Data coverage:	National, 5 yearly after the Census.
Data issues:	Community Development Employment Program (CDEP) has not been included because of concerns of data validity and quality (CDEP data available from ABS describes the number registered with/for CDEP, rather than the number who are actually working). This indicator does not describe whether employment is full-time or part-time.
Related indicators:	Indicators of income (2.2.5, 2.2.6 and 2.2.7).
Consultation with:	Client Services, ABS.

2.2.5 Household income

Proposed definition:	<p>Average equivalised 'after-tax' household income, adjusted for the number and age of those in the household.</p> <p>The gross household income and the number in each household (see page 22).</p>
Rationale:	<p>Income provides people with opportunities, control, access to housing, goods and services as well as mobility. Reporting average (adult) income and household income does not consider the larger number of children in more remote households. This indicator attempts to provide a measure of the after-tax income with which to support each individual in a household. The household is used as the unit of income because individuals in households generally share resources. Also while some households have large incomes, many will have small incomes and also many children.</p>
Desired outcome:	<p>High and similar levels of income in each area.</p>
Numerator:	<p>Household 'after-tax' income (from the ABS Survey of Income and Housing Costs (SIHC)).</p> <p>Gross household income (from Census).</p> <p>Number of adults (15+ years) and children (0-14 years) usually resident in each household (from Census).</p>
Denominator:	<p>Household age and sex structure and the number in the household (from SIHC).</p> <p>The number of households (from Census).</p>
Calculation method:	<p>The basis of the summary statistic is the after-tax income weighted by the number and age of individuals in the household. The new OECD summary measure (replacing the old OECD measure and the Henderson scales) is essentially the after-tax household income divided by the weighted number of people in the household (the first adult = 1, subsequent adults = 0.5, children = 0.3 each).</p> <p>Reported statistics would include the mean, median, 25th and 75th percentiles of the weighted after-tax household income.</p> <p>From the ABS Census, the mean, median, 25th and 75th percentile of:</p> <ul style="list-style-type: none">• the gross household income; and• the number of adults and children in each household.

Data source:	ABS Survey of Income and Housing Costs and ABS Census.
Presentation:	<p>From SIHC: MC IR OR</p> <ul style="list-style-type: none"> • equivalised after-tax household income, expressed as the mean, median, 25th percentile and 75th percentile. <p>From ABS Census: MC IR OR R VR Total</p> <ul style="list-style-type: none"> • gross household income; and • number usually resident in each household <ul style="list-style-type: none"> - adults - children - total. <p>Reporting against Indigenous and non-Indigenous is not possible from the ABS Survey of Income and Housing Costs, but is possible using Census data.</p>
Data coverage:	National and 2-3 yearly after each ABS Survey of Income and Housing Costs or 5 yearly for the Census.
Data issues:	<p>Data for the ABS Survey of Income and Housing Costs only exists from 1994-95 onwards; the sample size is approximately 10,000.</p> <p>The SIHC does not collect information in most of the remote areas. There would be very little information that could be provided with any accuracy for the remote areas, since they only account for a small part of the population, therefore any analysis would be largely confined to Major Cities, Inner Regional and other areas. Reliable estimates of change over time could not be provided because of the relatively brief period over which data has been collected.</p> <p>Data from the Census describes only gross household income (i.e. it is not possible to describe equivalised after-tax household income), but coverage is good in all areas.</p>
Related indicators:	Gap between rich and poor (2.2.6).
Consultation with:	<p>Living Conditions Section, ABS.</p> <p>Client Services, ABS.</p>

2.2.6 Gap between rich and poor

Proposed definition:	The ratio of the income earned by high income earners to the income earned by low income earners (see page 22).
Rationale:	Income inequality as well as income per se have been suggested as determinants of poor health. This indicator attempts to provide insight into the disparity in income between households in each area.
Desired outcome:	Small differences only between the incomes of the rich and those of the poor in all areas.
Numerator:	Not applicable.
Denominator:	Not applicable.
Calculation method:	Sort households in each area by equivalised 'after-tax' household income (see indicator 2.2.5 Household income). Weight for the number of people in each household. Determine the dollar value of equivalised after tax income for each decile. Divide the amount earned by the person at one decile by the amount earned by the person at another. The ratios describe how much more one group earns than the other group. P10 for example is the income earned by individuals who earn less than 90% of the individuals in the area, but are more affluent than 10% of individuals in the area. These deciles can also be expressed as a percentage of the Australian median after-tax household income.
Data source:	ABS Survey of Income and Housing Costs (SIHC).
Presentation:	MC IR OR & Total Ratios: <ul style="list-style-type: none">• P90:P10• P80:P20• P80:P50• P20:P50 P90 and P10 also to be compared to the Australian median. Time series (currently 1996 and 1999-2000).
Data coverage:	National, every 2 or 3 years.

Data issues: Data for the ABS Survey of Income and Housing Costs only available from 1994-95 onwards.

The SIHC does not collect information in most of the remote areas. There would be very little information that could be provided with any accuracy for the remote areas, since they only account for a small part of the population, therefore any analysis would be largely confined to Major Cities, Inner Regional and other areas. Reliable estimates of change over time can only be provided since 1996 (i.e. limited time series).

Reporting against Indigenous and non-Indigenous is not possible from the SIHC.

Related indicators: Household income (2.2.5).

Consultation with: Living Conditions Section, ABS.

2.2.7 Sources of income

Proposed definition:	The percentage of people reliant on each industry sector for their main source of income (see page 22).						
Rationale:	From this indicator it is possible to gauge the importance of a number of different sectors to the livelihoods of people in rural, regional and remote areas.						
Desired outcome:	To lower reliance on social security and increase reliance on public and private sector employment and on small business.						
Numerator:	The number of adults whose main source of income is in each sector in each area.						
Denominator:	The number of adults in each area.						
Calculation method:	The statistic is expressed as a simple proportion.						
Data source:	ABS Census.						
Presentation:	<table><thead><tr><th>MC</th><th>IR</th><th>OR</th><th>R</th><th>VR</th><th>Total</th></tr></thead></table> <p>The percentage and number of the adult population (15+) whose main source of income is in each of the following economic sectors:</p> <ul style="list-style-type: none">• agriculture, forestry and fishing;• mining;• manufacturing;• electricity, gas and water supply;• construction;• wholesale trade;• retail trade;• accommodation, cafes and restaurants;• transport and storage;• communication services;• finance and insurance;• property and business services;• government administration and defence;• education;• health and community services;• cultural and recreational services;• personal and other services;• non-classifiable economic units;• unemployed; and• not in the labour force. <p>Indigenous, non-Indigenous, total population. Time series (currently 1991, 1996 and 2001 available).</p>	MC	IR	OR	R	VR	Total
MC	IR	OR	R	VR	Total		
Data coverage:	National and 5 yearly.						

Data issues:	<p>The ABS Survey of Income and Housing Costs (SIHC) does not collect details of wages, salaries and business income classified by industry; rather it classifies income as 'salaries and wages', 'own incorporated business', 'investment returns' and 'government benefits'). SIHC data does not allow reporting for remote areas, and at this stage covers only a limited time period. Also, it is not possible to derive after-tax income for two or more industries from a whole income (i.e. where an individual is reliant for income on more than one industry, it is not possible state what amount was derived from each).</p> <p>Census data does not permit reporting of after-tax income, nor is it capable of allocating a dollar amount to income earned from each industry in which an individual works. It does, however, allow reporting over all geographic areas and over time.</p> <p>The financial contribution of each sector can only be described using de-identified Australian Tax Office (ATO) Individual Income Tax Return data from the ABS when it is possible to differentiate between areas of different remoteness.</p>
Related indicators:	Business activity (2.3.11).
Consultation with:	Rural and Regional Statistics National Centre, ABS. Client Services, ABS.

2.2.8 Socioeconomic Indicators for Areas (SEIFA)

Proposed definition:	<p>This indicator describes the percentage of the population in each area who live in census collectors districts (CDs) in each of four SEIFA quartiles (i.e. lowest to highest quartiles).</p> <p>The mean SEIFA score for CDs in each area is thought to be of limited value and will not be reported.</p> <p>The SEIFA index of disadvantage, of economic resources and of education and occupation could be reported (see page 24).</p>						
Rationale:	<p>SEIFA indexes are summary measures of socioeconomic wellbeing, which has strong links with health status.</p>						
Desired outcome:	<p>To achieve similar percentages of the population in each SEIFA quartile in each area.</p>						
Numerator:	<p>Not applicable.</p>						
Denominator:	<p>Not applicable.</p>						
Calculation method:	<p>Rank CDs in each area by SEIFA score. Report the percentage of the population of each area that lives in CDs for which the SEIFA score is in the lowest, 2nd, 3rd and highest national quartile.</p>						
Data source:	<p>ABS Census.</p>						
Presentation:	<table><thead><tr><th>MC</th><th>IR</th><th>OR</th><th>R</th><th>VR</th><th>Total</th></tr></thead></table> <p>Percentage of the population who live in CDs with SEIFA scores in the lowest, 2nd, 3rd and highest quartile.</p> <p>For the index of:</p> <ul style="list-style-type: none">• disadvantage;• economic resources and of education; and• occupation.	MC	IR	OR	R	VR	Total
MC	IR	OR	R	VR	Total		
Data coverage:	<p>National and 5 yearly after each Census.</p>						
Data issues:	<p>1991 SEIFA is not reported because of concerns regarding comparability with SEIFA in 1996 and 2001.</p>						
Related indicators:	<p>All socioeconomic indicators (2.2.1–2.2.7).</p>						
Consultation with:	<p>Statistical Consulting, ABS.</p>						

2.3 Community capacity dimension

2.3.1 Demography

Proposed definition:	Demographic characteristics of the population, including population size, growth rate, age and sex structure and proportion of the population who are Indigenous (see page 25).																
Rationale:	It is important for policy development to be able to visualise the population in the rural/remote setting. Issues like population growth, ageing, changes in sex ratios and in the proportion who are Indigenous have implications for health status, policy and allocation of resources.																
Desired outcome:	There is no desired outcome. This indicator is important for the interpretation of others.																
Numerator:	The population of males and females, population of people in each life-stage (0-14 years, 15-24 years, 25-44 years, 45-64 years, 65+ years), population and proportion of Indigenous persons for the most recent year of estimated resident population data for each area.																
Denominator:	The number of years being compared (i.e. five).																
Calculation method:	For population growth: subtract the 1991 population from the 1996 population (for males and females in each area), divide by the 1991 population and then divide by five. Adapt to subsequent years. For other components of this indicator (relative sizes of populations, numbers in each life-stage age group, percentage male and female, percentage Indigenous), presented statistics to be counts or simple percentages.																
Data source:	ABS population estimates.																
Presentation:	<table border="0" style="width: 100%;"> <tr> <td style="width: 10%;">MC</td> <td style="width: 10%;">IR</td> <td style="width: 10%;">OR</td> <td style="width: 10%;">R</td> <td style="width: 10%;">VR</td> <td style="width: 10%;">Total</td> </tr> </table> <p>Population. Percentage of the Australian population. Number of Indigenous persons. Indigenous persons as percentage of the population in each area. Indigenous persons in each area as percentage of the Australian Indigenous population. Percentage male. Age distribution.</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 10%;">Males</td> <td style="width: 90%;">0-14</td> </tr> <tr> <td></td> <td>15-24</td> </tr> <tr> <td></td> <td>25-44</td> </tr> <tr> <td></td> <td>45-64</td> </tr> <tr> <td></td> <td>65 +</td> </tr> </table>	MC	IR	OR	R	VR	Total	Males	0-14		15-24		25-44		45-64		65 +
MC	IR	OR	R	VR	Total												
Males	0-14																
	15-24																
	25-44																
	45-64																
	65 +																

Females 0-14
15-24
25-44
45-64
65 +

Population growth (number and percentage change).

Data coverage:

5 yearly and national.

Data issues:

Substantial differences in the propensity of people to identify as Indigenous prevents description of the change in the Indigenous and non-Indigenous populations. Description of changes in the population living in remote and very remote areas may be unreliable because of assumptions made in the allocation of remoteness category to population data.

Related indicators:

Dependency ratio (2.3.2).

Consultation with:

Health Registers and Cancer Monitoring Unit, AIHW.
Geography Section, ABS.

2.3.2 Dependency ratio

Proposed definition:	The ratio of people older than 65 years and of people 14 years or younger to people of working age (15–64 years). See page 25.
Rationale:	High levels of dependence require higher levels of support.
Desired outcome:	To achieve similar dependence ratios in each area.
Numerator:	The number of people 0–14 years and 65+ years in each area.
Denominator:	The number of people 15–64 years in each area.
Calculation method:	Divide the numerator by the denominator.
Data source:	ABS population estimates.
Presentation:	MC IR OR R VR Total The ratio. Time series.
Data coverage:	5 yearly and national.
Data issues:	The dependency ratio is a synthetic measure. There is no guarantee that the people of working age are working; however, they are a source of support and care for people of dependent age.
Related indicators:	Demography (2.3.1).
Consultation with:	Population Health Unit (AIHW).

2.3.3 Internal migration

Proposed definition:	The number and proportion of the population in each age group migrating between ASGC remoteness areas, and the direction of that migration (see page 25).						
Rationale:	It is unconfirmed, but appears likely, that older people or people with poor health tend to move from more remote areas to less remote areas, probably to access health or other facilities. An understanding of the migration of people living in these areas is essential for a valid interpretation of other indicators.						
Desired outcome:	There is no preferred outcome. The indicator has value in assisting interpretation of other indicators.						
Numerator:	The number who moved in the year prior to the Census.						
Denominator:	The number living in each area at the Census.						
Calculation method:	<p>Five-by-five table, showing the numbers of people resident in each area at the time of the Census, and where they lived 12 months previously.</p> <p>From the table, calculate the proportion from each area who moved to another area during the year.</p> <p>Repeat for each age group (15–24, 25–44, 45–64, 65–74 and 75+).</p> <p>Indigenous, non-Indigenous and the total population.</p>						
Data source:	ABS Census.						
Presentation:	<table><thead><tr><th>MC</th><th>IR</th><th>OR</th><th>R</th><th>VR</th><th>Total</th></tr></thead></table> <p>For each area, by age group:</p> <ul style="list-style-type: none">• the percentage of the population in an area, who move to or from more remote areas;• the percentage of the population in an area, who move to or from less remote areas; and• the net change in the population in each area as a result of internal migration. <p>Indigenous, non-Indigenous and total population.</p>	MC	IR	OR	R	VR	Total
MC	IR	OR	R	VR	Total		
Data coverage:	National, 5 yearly, after each Census.						
Data issues:	<p>An issue which this indicator does not examine is the work-related seasonal movement of people (e.g. the movement of seasonal farm workers, opal miners, holiday makers, etc.) to rural and remote areas. An influx of people into these areas can put pressure on health systems designed to cater for fewer permanent residents.</p> <p>Comparison of location of residence 1 year previously has been used, rather than at the previous Census, because of the lower opportunity for deaths to invalidate the comparison.</p>						
Related indicators:	Demography (2.3.1).						
Consultation with:	Demography Section, ABS.						

2.3.4 Fertility

Proposed definition:	Birth rates in each area for females overall and for females in each age group (see page 25).
Rationale:	Fertility has effects on health services and on poverty. Teenage fertility can impact adversely on life opportunities, while risks surrounding birth are greater for very young and old mothers. An understanding of how remoteness affects fertility for both Indigenous and non-Indigenous women and for different age groups would be useful.
Desired outcome:	To achieve low rates of birth among teenagers and older women.
Numerator:	The number of births in a calendar year for females in each age group and for all ages in each area.
Denominator:	The number of females in each 5-year age group.
Calculation method:	Rates indirectly age-standardised using Major Cities age-specific birth rates. Teenage fertility rate is the number of live births to mothers aged less than 20 years in a given year per 1,000 females aged 15–19 years.
Data source:	ABS Birth Registration data, ABS population estimates.
Presentation:	MC IR OR R VR Total Number of babies born. Birth rate (births per 1,000 women per year): <ul style="list-style-type: none">• 15–19 years;• 20–29 years;• 30–39 years; and• 40–44 years. Overall fertility (age-standardised). Total population (Indigenous and non-Indigenous). Comparison should be made between regional rates and overall Indigenous rates. Time trend for the total population.
Data coverage:	Annual, national.
Data issues:	Quality of the Indigenous identifier is poor. Changes in the likelihood of identifying as Indigenous over time prevent valid reporting of time trends for both Indigenous and non-Indigenous people.
Related indicators:	Demography (2.3.1), Birth outcomes (1.1.6), Perinatal mortality (1.4.2).
Consultation with:	National Perinatal Statistics Unit (NPSU), AIHW.

2.3.5 Community safety

Proposed definition:	Mortality due to interpersonal violence and mortality of children under 5 years due to interpersonal violence (see page 26).
Rationale:	Homicide, including the death of young children is an extreme indicator of community safety and function. As well as mortality, higher levels of violence also generate fear and reduce opportunities for social interaction, leading to a reduced quality of life.
Desired outcome:	To achieve low and similar levels of homicide in each area, diminishing over time.
Numerator:	Number of deaths of people and, as a subset, of children aged 0–4 years in each area, classified as non-accidental injury and neglect (ICD9 codes E960–E969; ICD10 T74 (maltreatment codes). This excludes late effects.
Denominator:	The number of people by 5-year age group and number of children aged 0–4 in each area.
Calculation method:	Indirect age standardisation using national age-specific homicide death rates. Comparison across time requires standardisation to a single period (e.g. for the period 1997–1999). Deaths of children expressed as crude rates.
Data source:	AIHW Mortality and Population Databases.
Presentation:	MC IR OR R VR Total Number of deaths. Age-standardised deaths per 100,000 population. Male and female adults. Children. Time trend for total population of males and females. Total and non-Indigenous populations. Comparisons made with overall Indigenous rates.
Data coverage:	National and yearly.
Data issues:	This indicator is a measure of an extreme outcome that is likely to be correlated to overall levels of violence and abuse within each community. Where violence, child abuse or neglect does not end in death, alternative data sources could include courts or police data. National child protection data (which might otherwise provide a good overview of child physical abuse) suffers from a number of problems. These include different case definitions in each state, unavailability of the geographic identifier in the national data set, different probability of notification to the system in more remote areas and a range of issues affecting the identification of Indigenous children that are likely to invalidate comparison. Small numbers of deaths may make comparison between some areas difficult.

Rate of hospital separation due to neglect and injury due to interpersonal violence has been considered as an alternative or supporting indicator. Different admission policies may, however, affect the validity of this (hospital) indicator. Use of the 'place of occurrence' field could allow reporting for interpersonal violence at home and interpersonal violence in the community. However, information on place of occurrence is available for only a proportion of records.

Related indicators: Alcohol (2.4.2), Illicit drugs (2.4.3).

Consultation with: Children Youth and Families Unit, AIHW.

2.3.6 Perception of risk

Proposed definition:	The percentage of the population who self-report engaging in risky behaviour while intoxicated with alcohol or an illicit drug (see page 27).
Rationale:	The perception of risk influences behaviour, which can influence the risk of accident or of chronic disease. Understanding of differences in the perception of risk (or the tendency to take risks) could be useful in examining rates of accident or chronic disease in non-metropolitan areas.
Desired outcome:	To achieve similar and low levels of risk taking behaviour in all areas.
Numerator:	While intoxicated with alcohol or an illicit drug, the number who self-reported working, swimming, boating, driving or operating hazardous machinery (personally risky), and the number who self-reported creating a public disturbance, damaging property, stealing or verbally or physically abusing someone (socially risky) in the past 12 months.
Denominator:	All respondents to the AIHW National Drug Household Survey.
Calculation method:	Indirect age-standardised rates using Major Cities age-specific rates as the standard. The reported statistic will be a ratio of observed to expected cases. Crude percentages, at least for major Cities would also be reported.
Data source:	AIHW National Drug Strategy Household Survey.
Presentation:	MC IR OR R/VR Total For males and females. Rate of reported behaviour that was: <ul style="list-style-type: none">• personally risky; and• socially risky.
Data coverage:	National, every 3 years.
Data issues:	This survey has a relatively small sample size (10,030 in 1998, but 26,744 in 2001). Prior to 2001, the survey methodology substantially reduced the opportunity for many remote populations to participate. There may be a need to aggregate responses from the two most remote areas due to small sample sizes.
Related indicators:	The sample will not support separate Indigenous analysis. Prevalence of chronic disease and injury (1.1.1 and 1.1.2).
Consultation with:	Population Health Data and Information Services Unit, AIHW.

2.3.7 Housing tenure

Proposed definition:	The proportion of households that: (a) are renting; (b) are purchasing; or (c) who own their dwelling (see page 28).
Rationale:	Home ownership provides families with a greater sense of control over their own lives and a greater sense of permanency. Renting can be a practical and economic alternative to purchasing.
Desired outcome:	To achieve similar percentages of households renting in each area.
Numerator:	The number of households in each tenure category (those still purchasing, those who own outright and those who rent) in each area.
Denominator:	The total number of households in each area.
Calculation method:	Percentages age standardised to the number of households in Australia in 2001, on the basis of the age of the reference person in each dwelling. Crude percentage to also be calculated. The standardised percentage seeks to describe the probability of renting, owning, etc. The crude percentage describes the actual percentage who are renting, owning, etc.
Data source:	ABS Census.
Presentation:	MC IR OR R VR Total Crude and age-standardised percentage of: <ul style="list-style-type: none">• households renting;• households purchasing dwelling; and• households that own dwelling. Time trend using data from each Census. Indigenous, non-Indigenous and total population.
Data coverage:	National and every 5 years after the ABS Census.
Data issues:	Age standardisation is necessary to compare the probability of renting between areas because the age structures of the populations are different and younger people are more likely to rent and less likely to own their dwelling.
Related indicators:	Overcrowding in households (2.3.8).
Consultation with:	Living Conditions Section, ABS. Statistical Consulting, ABS. Client Services, ABS.

2.3.8 Overcrowding in households

Proposed definition:	The percentage of dwellings that are considered overcrowded (Canadian National Occupancy Standard), based on the number of bedrooms, household size and composition (see page 28).						
Rationale:	There is evidence to suggest that overcrowded dwellings are associated with a greater risk of communicable diseases, accidents and poorer mental health. It is expected that overcrowding may occur in more remote areas due to larger families and cultural practices of Indigenous people.						
Desired outcome:	To achieve a low and similar level of crowding in each area.						
Numerator:	The total number of bedrooms in the dwelling.						
Denominator:	The number of bedrooms required (using the Canadian National Occupancy Standard).						
Calculation method:	<p>The number of bedrooms required = ceiling of ((1*single adults) + (1*adult couples) + (children under 5/2) + (boys 5-17/2) + (girls 5-17/2)).</p> <p>If the number of bedrooms is lower than the number required, then the dwelling is crowded.</p>						
Data source:	ABS Census.						
Presentation:	<table><thead><tr><th>MC</th><th>IR</th><th>OR</th><th>R</th><th>VR</th><th>Total</th></tr></thead></table> <p>The percentage of households crowded, just right and under utilised.</p> <p>Indigenous, non-Indigenous and total population.</p> <p>Time trend.</p>	MC	IR	OR	R	VR	Total
MC	IR	OR	R	VR	Total		
Data coverage:	National, every 5 years after the Census.						
Data issues:	<p>A complex relationship which may be influenced by time actually spent in the home, cultural differences and the condition of housing.</p> <p>While data are presented using one single model across Australia, it can be argued that some groups may have different requirements or may use dwellings differently.</p>						
Related indicators:	Housing tenure (2.3.7), Household income (2.2.5).						
Consultation with:	Client Services, ABS.						

2.3.9 Transport

Proposed definition:	The average number of registered motor vehicles garaged per household per adult and the percentage of households with at least one vehicle (see page 28).
Rationale:	Large distances to services and little or no public transport make access to car transport important for accessing services, day-to-day living and for empowerment. People living in rural and remote areas who do not have access to a car are particularly disadvantaged. People without access to a car in metropolitan areas are likely to be less disadvantaged.
Desired outcome:	To achieve high and similar ratios of cars to adults in each household, in each area.
Numerator:	The number of registered motor vehicles garaged at each household, in each area.
Denominator:	The number of adults aged 17 years and over who live in each household, in each area.
Calculation method:	Divide the numerator by the denominator. The ratio is the mean number of adults per car in each household. The proportion of households having at least one car.
Data source:	ABS Census.
Presentation:	MC IR OR R VR Total Household car to adult (17+ years) ratio. Proportion of households having at least one vehicle. For Indigenous, non-Indigenous and total households.
Data coverage:	National and 5 yearly, after the ABS Census.
Data issues:	People living in metropolitan areas may have less need for cars, as these areas are better serviced by public transport. This indicator does not take account of road quality or the number of kilometres travelled each year by residents of each area.
Related indicators:	Workforce and employment (2.2.4), Distance to medical services (3.5.1).
Consultation with:	Client Services, ABS. Labour Force and Rural Health Unit, AIHW.

2.3.10 Cost of living

Proposed definition:	In lieu of an overall cost of living statistic, prices of three fundamental groups of commodities are compared across areas: housing, food and petrol (see page 29).
Rationale:	It is not possible to report on consumer price index (CPI) or similar (but appropriate) summary measures comparing cost of living between areas. Comparison of the cost of food, petrol and housing provides some indication of the day-to-day cost of living experienced by rural populations. This indicator is recommended because poverty or affluence is at least as influenced by cost of living as by income.
Desired outcome:	To achieve low and similar costs for these three commodities in each area.
Numerator:	Not applicable.
Denominator:	Not applicable.
Calculation method:	The price of petrol and index of food prices to be reported as they are. Mean cost of rent and mortgage to be standardised on the basis of the number of bedrooms in the dwelling.
Data source:	Mortgages and rental: ABS Census. Food prices: ABS Indexes of relative retail prices of food, Australian cities and towns 1984–1990 (discontinued survey), as well as specific ‘one-off’ state surveys. Petrol prices: Informed Sources P/L.
Presentation:	MC IR OR R VR Total Report the mean, median, 25th and 75th percentiles of mortgages and rents. Where details of price are not available for all locations (food and petrol), cost to be (scatter) plotted against continuous ARIA score for SLAs.
Data coverage:	Costs of housing are available nationally and every 5 years. Cost of petrol is available nationally and several times yearly. Cost of food is available for some states only, and irregularly.
Data issues:	Data availability is restricted. Petrol prices are available for each location for the previous month or over the past years. Housing prices and rents are available for all areas. Indices of food prices are available for 1984–1990, and also periodically for some states. Housing costs, food and petrol prices reflect a proportion of the cost of living. There is no national ability to compare cost of living in metropolitan and other parts of Australia. Region-specific factors influencing people’s demands for these items (e.g. the need to drive greater distances and consume more petrol) need to be considered in interpreting this indicator.

Comparison with the indicator of income in this framework (which has been equivalised) is valid.

Related indicators: Household income (2.2.5).

Consultation with: Petrol: Informed Sources P/L.

Housing: Living Conditions Section, ABS.

Food: Consumer Price Index Section, ABS.

2.3.11 Business activity

Proposed definition:	The economic health of a region measured by business growth or decline (see page 29).
Rationale:	The opportunity for deriving a livelihood through paid employment, with its inherent health benefits, depends on the health of the business sector and opportunities for employment in the public sector. A buoyant economy is likely to foster a healthy population.
Desired outcome:	To achieve similar or increasing numbers of businesses (as expressed by counts of Australian Business Numbers (ABNs)) in each area from year to year.
Numerator:	Counts of single location ABNs registered for GST.
Denominator:	Counts of single location ABNs registered for GST.
Calculation method:	The statistic reports counts of single location ABNs registered for GST. Change in these from year to year.
Data source:	ABS ATO Australian Business Register (ABR).
Presentation:	MC IR OR R VR Total Number of ABNs registered for GST. For each year data exists.
Data coverage:	National, June 2001.
Data issues:	ABR series is not available annually. The annual turnover size is an estimate by the entity when it is registered and does not get updated as circumstances change. Data is not available for all postcodes as confidentiality restrictions apply. It is not possible to aggregate the postcode level data into larger areas.
Related indicators:	Workforce and employment (2.2.4), Sources of income (2.2.7).
Consultation with:	Rural and Regional Statistics National Centre, ABS.

2.4 Health behaviours dimension

2.4.1 Tobacco

Proposed definition:	The percentage of persons living in each area who are regular smokers (see page 30).
Rationale:	Smoking is a major risk factor for several important causes of morbidity, notably circulatory diseases, cancers and respiratory diseases.
Desired outcome:	To achieve low prevalence of smoking, similar in all areas and decreasing over time.
Numerator:	From the National Drug Strategy Household Survey; the number of males and females in each area, in each age group (14 years and older) who are regular smokers. From the ABS National Health Survey; the number of males and females in each area, in each age group (18 years and older) who are regular smokers.
Denominator:	Number of males and females in each age group in each area 14 years and older in the National Drug Strategy Household Survey, and 18 years and older in the National Health Survey.
Calculation method:	Indirect age-standardisation using Major Cities age-specific rates for males and females who are regular smokers. Comparison between years within areas will require standardisation to age-specific rates in each individual area for either the earlier year, or the year in which the largest sample was taken (e.g. 1995). The reported statistic will be a ratio of observed to expected cases. Confidence intervals calculated using Fieller's Theorem or similar method.
Data source:	National Drug Strategy Household Survey (NDSHS – currently 1998, 2001 available). Small sample size in 1995 prevents reporting by remoteness. The ABS National Health Survey (NHS – currently 1995 and 2001 available).
Presentation:	MC IR OR R/VR Total Indirect age-standardised prevalence of smoking (expressed as a ratio of observed to expected cases). For males and females, and for life-stage age groups. Total (Indigenous plus non-Indigenous) population. If inter-regional comparisons for non-Indigenous people are different from those for the total population, present for non-Indigenous also. In all cases make comparison with rate estimates for the total Indigenous population. For each year (e.g. 1995 and 2001 using Major Cities age-specific rates in each year as the standard).

	<p>Time series. Compare rate changes between years.</p> <p>Include 95% confidence intervals for all estimates.</p> <p>The NHS is not able to report for remote areas; the NDSHS can report for aggregated remote areas.</p>
Data coverage:	<p>National and 3 yearly for the NDSHS. National and approximately 5 yearly (prior to 2001), 2-3 yearly (from 2001) for the NHS.</p>
Data issues:	<p>The National Drug Strategy Household Survey has a relatively small sample size (10,030 in 1998, but 26,744 in 2001). Prior to 2001, the survey methodology substantially reduced the opportunity for many remote populations to participate. There may be a need to aggregate the remote areas due to small sample sizes.</p> <p>The NDSHS will not support separate Indigenous statistics.</p> <p>Other issues include those previously mentioned for indicators from national surveys.</p> <p>The ABS National Health Survey has a larger sample size and longer history (thereby time series is possible). The National Health Survey data has poor coverage in remote areas, has difficulty reporting for Indigenous people at the regional level, and may be biased in the more remote areas. See comments on page 62. Results from the two surveys will not be identical, but should show similar trends.</p> <p>Information about smoking rates of children that can be described by geographic area are not available nationally.</p>
Related indicators:	<p>Prevalence of chronic diseases (1.1.1), Leading causes of death and 'excess' death (1.4.4), SEIFA (2.2.8).</p>
Consultation with:	<p>Population Health Data and Information Services Unit, AIHW. Health Section, ABS.</p>

2.4.2 Alcohol

Proposed definition:	The prevalence of alcohol consumption capable of resulting in harm in the short and long-term as defined by the NHMRC Australian alcohol guidelines 2001. These supersede the previous guidelines (more than 4 glasses for males and 2 glasses for females per day being hazardous, greater quantities daily classified as harmful). See page 30.
Rationale:	Moderate alcohol intake is not harmful and may be associated with some health benefits. Higher levels of intake (hazardous and harmful alcohol consumption) is a risk factor for a number of diseases/conditions, both for the individual and for others.
Desired outcome:	To achieve low and similar levels of short- and long-term hazardous or harmful alcohol consumption in each area.
Numerator:	Number of males and females in each area, in each age group who have: <ul style="list-style-type: none">• alcohol consumption with potential for short- or long-term harm (new NHMRC definition); and• hazardous or harmful alcohol consumption (old NHMRC definition).
Denominator:	The total number of male and female respondents in the survey from each area and age group.
Calculation method:	Indirect age-standardisation using Major Cities age-specific rates for males and females who consume alcohol in harmful or hazardous quantities. Comparison between years within areas will require standardisation to age-specific rates in each individual area for either the earlier year, or the year in which the largest sample was taken (e.g. 1995). The reported statistic will be a ratio of observed to expected cases. Confidence intervals calculated using Fieller's Theorem or similar method.
Data source:	AIHW National Drug Strategy Household Survey (currently 1998 and 2001 available). Small sample size in 1995 prevents reporting by remoteness. ABS National Health Survey (currently 1995 and 2001 available).
Presentation:	MC IR OR R/VR Total Indirect age-standardised prevalence of consuming alcohol in such a way as to risk: <ul style="list-style-type: none">• harm in the short term; and• harm in the long term expressed as a ratio of observed to expected cases. For males and females, and for life-stage age groups. Total (Indigenous plus non-Indigenous) population. If inter-regional comparisons for non-Indigenous people are different from those for the total population, present for non-Indigenous also.

	<p>In all cases make comparison with rate estimates for the total Indigenous population.</p> <p>For each year (e.g. 1995 and 2001 using Major Cities age-specific rates in each year as the standard).</p> <p>Time series. Compare rate changes between years.</p> <p>Include 95% confidence intervals for all estimates.</p> <p>The NHS is not able to report for remote areas; the NDSHS can report for aggregated remote areas.</p>
Data coverage:	National and 3 yearly for the NDSHS; National and approximately 5 yearly (prior to 2001), 2-3 yearly (from 2001) for the NHS.
Data issues:	<p>Issues are the same as for the Tobacco indicator (2.4.1).</p> <p>Definition of hazardous and harmful alcohol consumption has been modified recently. Definition of harmful and hazardous alcohol consumption will follow the recent NHMRC Australian alcohol guidelines 2001 instead of the previous definition. This is possible only for the AIHW data. The NHS data can only be defined in terms of the older definition (and will be reported as such).</p>
Related indicators:	Illicit drug use (2.4.3), and Tobacco consumption (2.4.1).
Consultation with:	Population Health Data and Information Services Unit, AIHW. Health Section, ABS.

2.4.3 Illicit drugs

Proposed definition:	The proportion of people who had recently used an illicit drug (all illicit drugs, cannabis and all illicit drugs other than cannabis). See page 31.
Rationale:	Illicit drug use can constitute a substantial health risk and can elevate property and personal crime rates (reducing opportunities for others).
Desired outcome:	To achieve low and similar levels of illicit drug use in each area.
Numerator:	The number of respondents who had recently used cannabis and the number who had recently used other illicit drugs.
Denominator:	The total number of respondents in the survey.
Calculation method:	Indirect age-standardisation using Major Cities age-specific rates for males and females who have recently used cannabis or other illicit drugs. Comparison between years within areas will require standardisation to age-specific rates in each individual area for either the earlier year, or the year in which the largest sample was taken (e.g. 2001). The reported statistic will be a ratio of observed to expected cases. Confidence intervals calculated using Fieller's Theorem or similar method.
Data source:	AIHW National Drug Household Survey, 1998 and 2001. Small sample size in 1995 prevents reporting by remoteness.
Presentation:	<p>MC IR OR R/VR Total</p> <p>Indirect age-standardised prevalence of recent use of:</p> <ul style="list-style-type: none"> • cannabis; and • another illicit drug <p>expressed as a ratio of observed to expected cases.</p> <p>For males and females, and for life-stage age groups.</p> <p>Make comparison with rate estimates for the total Indigenous population (from other literature if possible).</p> <p>For each year (e.g. 1998 and 2001 using Major Cities age-specific rates in each year as the standard).</p> <p>Time series. Compare rate changes between years.</p> <p>Include 95% confidence intervals for all estimates.</p>
Data coverage:	National and 3 yearly.
Data issues:	<p>Issues are the same as for indicator 2.4.1 (regarding the NDSHS).</p> <p>Details of illicit drug use are not collected in the National Health Survey.</p> <p>Self-reporting may result in under-reporting of rates. Details of Indigenous status are not available.</p>
Related indicators:	Alcohol (2.4.2), and Tobacco (2.4.1).
Consultation with:	Population Health Data and Information Services Unit, AIHW.

2.4.4 Physical inactivity

Proposed definition:	The percentage of people aged 18 years and over not engaging in sufficient leisure-time physical activity. See page 31.
Rationale:	Physical inactivity is the second largest contributor to burden of disease in Australia (AIHW: Mathers et al. 1999).
Desired outcome:	To achieve low and similar levels of physical inactivity in all areas, decreasing over time.
Numerator:	The number who have performed insufficient levels of leisure time physical activity in the previous fortnight. Sufficient activity is defined as at least 30 minutes of moderate-intensity physical activity on most, preferably all, days.
Denominator:	Number of people in each area who responded to the survey.
Calculation method:	Indirect age-standardisation using Major Cities age-specific rates for males and females who perform insufficient levels of leisure time physical activity. Comparison between years within areas will require standardisation to age-specific rates in each individual area for either the earlier year, or the year in which the largest sample was taken (e.g. 2001). The reported statistic will be a ratio of observed to expected cases. Confidence intervals calculated using Fieller's Theorem or similar method.
Data source:	The ABS National Health Survey (NHS – currently 1995 and 2001 available).
Presentation:	<p>MC IR OR Total</p> <p>Indirect age-standardised prevalence of performing insufficient leisure time physical activity (expressed as a ratio of observed to expected cases).</p> <p>For males and females, and for life-stage age groups.</p> <p>Total (Indigenous plus non-Indigenous) population. If inter-regional comparisons for non-Indigenous people are different from those for the total population, present for non-Indigenous also.</p> <p>In all cases make comparison with rate estimates for the total Indigenous population.</p> <p>For each year (e.g. 1995 and 2001 using Major Cities age-specific rates in each year as the standard).</p> <p>Time series. Compare rate changes between years.</p> <p>Include 95% confidence intervals for all estimates.</p>

Data coverage:	National and approximately 5 yearly (prior to 2001), 2-3 yearly (from 2001).
Data issues:	<p>The National Health Survey data has poor coverage in remote areas, difficulty reporting for Indigenous people at regional level, and may be biased in the more remote areas.</p> <p>See comments on page 62.</p> <p>If there is an increase in sample size, particularly in areas outside Major Cities, the AIHW Physical Activity Survey would be a useful source of information. The 'physical activity' definition used in the 1998 Physical Activity Survey is more recent and appropriate than the definition used in the 1995 National Health Survey. However, the Physical Activity Survey was conducted by phone and currently has limited representation for people in rural and remote areas.</p>
Related indicators:	Prevalence of chronic disease (1.1.1), Leading causes of death and 'excess' death (1.4.4), Community safety (2.3.5).
Consultation with:	<p>Cardiovascular Disease, Diabetes and Risk Factor Monitoring Unit, AIHW.</p> <p>Health Section, ABS.</p>

2.4.5 Nutrition

Proposed definition:	Estimated dietary energy intake, and intake of saturated fat, fresh fruit and vegetables, and dietary fibre (see page 31).
Rationale:	<p>Energy is provided from particular food groups and aids in growth, movement, metabolism and physical activity. Intake of too little or too much energy has adverse health consequences.</p> <p>A high intake of saturated fats can contribute to high serum cholesterol levels, obesity and increased risk of cardiovascular disease.</p> <p>A high intake of fresh fruit and vegetables provides a wide range of general dietary needs. Fresh fruit and vegetable consumption can reduce risks of cardiovascular disease and cancer and is essential to general health and wellbeing.</p> <p>Some components of fibre assist in lowering blood cholesterol, maintaining blood glucose levels and providing protection against intestinal problems.</p>
Desired outcome:	To achieve energy intake similar in all areas; similar levels of low saturated fat and high dietary fibre intake in each area; high and similar percentages of people eating sufficient quantities of fresh fruit and vegetables; and all aspects of diet improving over time.
Numerator:	<p>The number of males and females in each age group with intake of 'sufficient' fruit (2 serves per day) and vegetables (4-5 serves per day) in each area. What constitutes 'sufficient' fruit and vegetables are defined in The Australian Guide to Healthy Eating (Smith et al. 1998)</p> <p>Direct age-standardised mean energy, saturated fat, and dietary fibre intake for males and females in each age group in each area.</p>
Denominator:	Number of males and females in each age group in each area in the National Nutrition Survey.
Calculation method:	<p>Indirect age standardisation using Major Cities age-specific rates of males and females who ate sufficient fruit and vegetables.</p> <p>Direct age-standardised mean energy, fat and dietary fibre intake. Review median and percentiles.</p> <p>Comparison between years within areas will require standardisation to age-specific rates in each individual area for either the earlier year, or the year in which the largest sample was taken (e.g. 2001). The reported statistic will be a ratio of observed to expected cases. Confidence intervals calculated using Fieller's Theorem or similar method.</p>

Data source:	ABS National Nutrition Survey (currently 1995 and 2001 available).
Presentation:	<p>MC IR OR Total</p> <p>Indirect age-standardised prevalence of 'sufficient' fruit and vegetable consumption (expressed as a ratio of observed to expected cases).</p> <p>Direct age-standardised mean energy, fat and dietary fibre intake.</p> <p>For males and females, and for life-stage age groups.</p> <p>Total (Indigenous plus non-Indigenous) population.</p> <p>In all cases make comparison with rate estimates for the total Indigenous population.</p> <p>For each year (e.g. 1995 and 2001 using Major Cities age-specific rates in each year as the standard).</p> <p>Time series. Compare rate changes between years.</p> <p>Include 95% confidence intervals for all estimates.</p>
Data coverage:	National and 5 yearly.
Data issues:	<p>This survey has a relatively small sample size (13,858 of which 8,339 are in capital cities). In the Northern Territory only one remote area was sampled. Data for remote and very remote areas will likely need to be aggregated because of small numbers.</p> <p>The sample will not support separate Indigenous or non-Indigenous statistics.</p> <p>It is common to most dietary surveys that due to their '24-hour recall' methodology, on average people under-report their consumption of food and beverages.</p> <p>Other issues include those previously mentioned for indicators from national surveys.</p> <p>Refined sugar intake would be useful, but it is not possible to differentiate between refined and unrefined sugars.</p> <p>If differences between males and females are not substantial, reporting for 'people' could increase power in the smaller areas.</p>
Related indicators:	Prevalence of chronic diseases (1.1.1), Leading causes of death and 'excess' death (1.4.4), Cost of living (2.3.10), Overweight/obesity (2.5.3), SEIFA (2.2.8).
Consultation with:	Cardiovascular Disease, Diabetes and Risk Factor Monitoring Unit, AIHW. Health Section, ABS.

2.4.6 Sexual practices

Proposed definition:	The age-standardised percentage of males and females who self-report non-safe sexual practices in each area (see page 31).
Rationale:	Notification of sexually transmitted infections can be high in some rural/remote communities, the health and social impact can be substantial and there is the opportunity for public health action based on understanding to improve the situation.
Desired outcome:	To achieve low and similar rates of non-safe sexual practice in all areas, decreasing over time.
Numerator:	Numbers of individuals in the Australian Study of Health and Relationships who self-report non-safe sexual practices.
Denominator:	The number of responses to the Australian Study of Health and Relationships.
Calculation method:	Indirect age-standardisation using Major Cities age-specific rates for males and females. Comparison between years within areas will require standardisation to age-specific rates in each individual area for either the earlier year, or the year in which the largest sample was taken (e.g. 1995). The reported statistic will be a ratio of observed to expected cases. Confidence intervals calculated using Fieller's Theorem or similar method.
Data source:	Australian Study of Health and Relationships, La Trobe University, 2002.
Presentation:	MC IR OR R/VR Total Indirect age-standardised prevalence of non-safe sexual practices (expressed as a ratio of observed to expected cases). For males and females, and for life-stage age groups. Total (Indigenous plus non-Indigenous) population. If inter-regional comparisons for non-Indigenous people are different from those for the total population, present for non-Indigenous also. Where possible, make comparison with rate estimates for the total Indigenous population.
Data coverage:	Data are national, but is likely to be a one-off study.
Data issues:	The survey is CATI; consequently coverage of poorer people especially in more remote areas may be low. Sample size is 19,307, with an augmented rural/remote sample. There is an option to report for Indigenous and non-Indigenous populations.
Related indicators:	Communicable diseases (1.1.5).
Consultation with:	Australian Research Centre in Sex, Health & Society, La Trobe University.

2.5 Person-related factors dimension

2.5.1 Genetically determined diseases

Proposed definition:	The number and rate of births with genetically determined diseases (including inherited genetic disease, somatic genetic disease (cancer), chromosomal aberrations (including specifically Down syndrome). See page 33.
Rationale:	Antenatal testing provides parents with information that can be used to reduce the prevalence of genetically determined disease in the population. Knowledge of higher rates in some areas may initiate action to improve availability of antenatal testing, options or attitudes to termination of pregnancy or other actions to reduce incidence.
Desired outcome:	To achieve low and similar rates in each area, decreasing over time.
Numerator:	The number of live and stillbirths with genetically determined diseases as specified.
Denominator:	The total number of live and stillbirths.
Calculation method:	Rates age-standardised to national rates by maternal age.
Data source:	ABS births data and NPSU perinatal data
Presentation:	MC IR OR R/VR Total Number and rate of babies born with genetically determined diseases (age-standardised by maternal age): <ul style="list-style-type: none">• inherited genetic diseases;• somatic genetic diseases;• chromosomal aberrations;• Down syndrome; and• all genetically determined diseases. Also time series (either individual years or rolling averages).
Data coverage:	National and annual (although reporting may require the aggregation of several years' data).
Data issues:	Numbers are likely to be too small to report for Indigenous and non-Indigenous by area. Reporting for time series may require the use of rolling averages because of small numbers. Current data issues prevent reporting against this indicator. These data issues should be reviewed periodically, and the indicator reported when issues are resolved.
Related indicators:	Specific birth defects (2.5.2).
Consultation with:	National Perinatal Statistics Unit (NPSU), AIHW.

2.5.2 Specific birth defects

Proposed definition:	The number and rate of births with specific birth defects caused by environmental factors (all defects and also neural tube defects). See page 34.
Rationale:	High rates can be preventable (for example, folic acid supplementation to reduce risk of spina bifida). Knowledge of higher rates in some areas may initiate action to reduce incidence.
Desired outcome:	To achieve rates that are low and similar in all areas, decreasing over time.
Numerator:	The number of live and stillbirths with specific birth defects.
Denominator:	The total number of live and stillbirths.
Calculation method:	Numbers and rates, age standardised to national rates by maternal age.
Data source:	ABS births data and NPSU perinatal data.
Presentation:	MC IR OR R/VR Total Rate of babies born with specific birth defects caused by environmental factors (age standardised by maternal age): <ul style="list-style-type: none">• all specific birth defects; and• neural tube defect. Also time series (either individual years or rolling averages).
Data coverage:	National and annual (although reporting may require the aggregation of several years data).
Data issues:	Numbers are likely to be too small to report for Indigenous and non-Indigenous by area. Reporting for time series may require the use of rolling averages. Current data issues prevent reporting against this indicator. These data issues should be reviewed periodically, and the indicator reported when issues are resolved.
Related indicators:	Genetically determined diseases (2.5.1).
Consultation with:	National Perinatal Statistics Unit (NPSU), AIHW.

2.5.3 Overweight/obesity

Proposed definition:	Proportion of persons aged 18 years and over with a body mass index (BMI) in the overweight and obese ranges (see page 35).				
Rationale:	The indicator estimates the prevalence of overweight and obesity in adults and reflects the risk of premature mortality, diabetes, and circulatory disease.				
Desired outcome:	To achieve low and similar rates of overweight and obesity in each area, decreasing over time.				
Numerator:	The number of males and females in the ABS National Health Survey (NHS) who are: <ul style="list-style-type: none"> • overweight (BMI 25 to 29 kg/m²); and • obese (BMI 30 kg/m² or greater). 				
Denominator:	Total number of males and females surveyed in the NHS for males and females in each area.				
Calculation method:	<p>Indirect age-standardisation using Major Cities age-specific rates for males and females who are overweight or obese.</p> <p>Comparison between years within areas will require standardisation to age-specific rates in each individual area for either the earlier year, or the year in which the largest sample was taken (e.g. 2001). The reported statistic will be a ratio of observed to expected cases. Confidence intervals calculated using Fieller's Theorem or similar method.</p> <p>BMI = weight (kg)/height (metres)² and then categorised as:</p> <ul style="list-style-type: none"> • not overweight or obese (BMI less than 25); • overweight (BMI 25 to 29); or • obese (BMI 30 or greater). 				
Data source:	ABS National Health Survey (currently 1995 and 2001 available).				
Presentation:	<table border="0" style="width: 100%;"> <tr> <td style="text-align: center;">MC</td> <td style="text-align: center;">IR</td> <td style="text-align: center;">OR</td> <td style="text-align: center;">Total</td> </tr> </table> <p>Indirect age-standardised prevalence of overweight and obese (expressed as a ratio of observed to expected cases).</p> <p>For males and females, and for life-stage age groups.</p> <p>Total (Indigenous plus non-Indigenous) population.</p> <p>In all cases make comparison with rate estimates for the total Indigenous population.</p> <p>For each year (e.g. 1995 and 2001 using Major Cities age-specific rates in each year as the standard).</p> <p>Time series. Compare rate changes between years.</p> <p>Include 95% confidence intervals for all estimates.</p>	MC	IR	OR	Total
MC	IR	OR	Total		
Data coverage:	National and approximately 5 yearly (prior to 2001), 2-3 yearly (from 2001).				

Data issues: The National Health Survey data has poor coverage in remote areas, has difficulty reporting for Indigenous people at regional level, and may be biased in the more remote areas.
See comments on page 62.

Related indicators: Nutrition (2.4.5), Physical inactivity (2.4.4), Prevalence of chronic diseases (1.1.1).

Consultation with: Health Section, ABS.