

Indicator 2.06 Risky alcohol consumption

Indicator definition

Description: Proportion of the population aged 18 years and over at risk of long term harm from alcohol.

Numerator: People classified to a health risk level (low-risk, risky or high-risk), based on their estimated average daily consumption of alcohol during the previous week.

Denominator: People aged 18 years and over.

Presentation: Proportion age-standardised to the 2001 Australian population in scope for the National Health Survey.

Rationale and evidence

- Excessive alcohol consumption increases the risk over time of chronic ill health and premature death (NHMRC 2001).
- Road traffic accidents and liver cirrhosis are the main causes of deaths associated with alcohol, while alcohol dependence is the leading cause of alcohol-related disability (AIHW: Mathers et al. 1999).
- 'Low-risk' levels of drinking are associated with only a minimal risk of harm, and may provide health benefits for some people (particularly by reducing the risk of heart disease from middle age). 'Risky' levels of drinking are those at which the risk of harm exceeds any possible benefits, while 'high-risk' levels of drinking are those at which there is a substantial risk of serious harm (NHMRC 2001) (see Table 2.06 for amounts of alcohol that define 'risky' and 'high risk').

What the data show

- In 2001, the majority of Australians aged 18 years and over (62%) had consumed alcohol in the previous week (71% of males and 52% of females). 12% of males and 22% of females had never consumed alcohol, or had last consumed alcohol 12 months or more previously (ABS 2002e).
- The majority of those who drank alcohol did so at a level which would pose a low risk to health (87% of males and 92% of females) (ABS 2002e).
- Just over one in ten (10.8%) adults reported that they drank alcohol at risky or high-risk levels. Males (13.2%) were more likely than females (8.5%) to report risky or high-risk levels of drinking.
- Among both sexes, the proportion reporting risky or high-risk levels of drinking in 2001 was higher than in 1995. In females, the 2001 level (8.5%) also exceeded that recorded in 1989–90 (7.4%), but in males the 2001 level (13.2%) was slightly lower than that recorded in 1989–90 (14.2%).
- Overall consumption of alcohol per head of population reached a peak of 9.8 litres of alcohol per person per year in 1981–82. It declined to 7.8 litres of alcohol per person per year in 1999–00, and has been relatively constant since (AIHW 2003f).

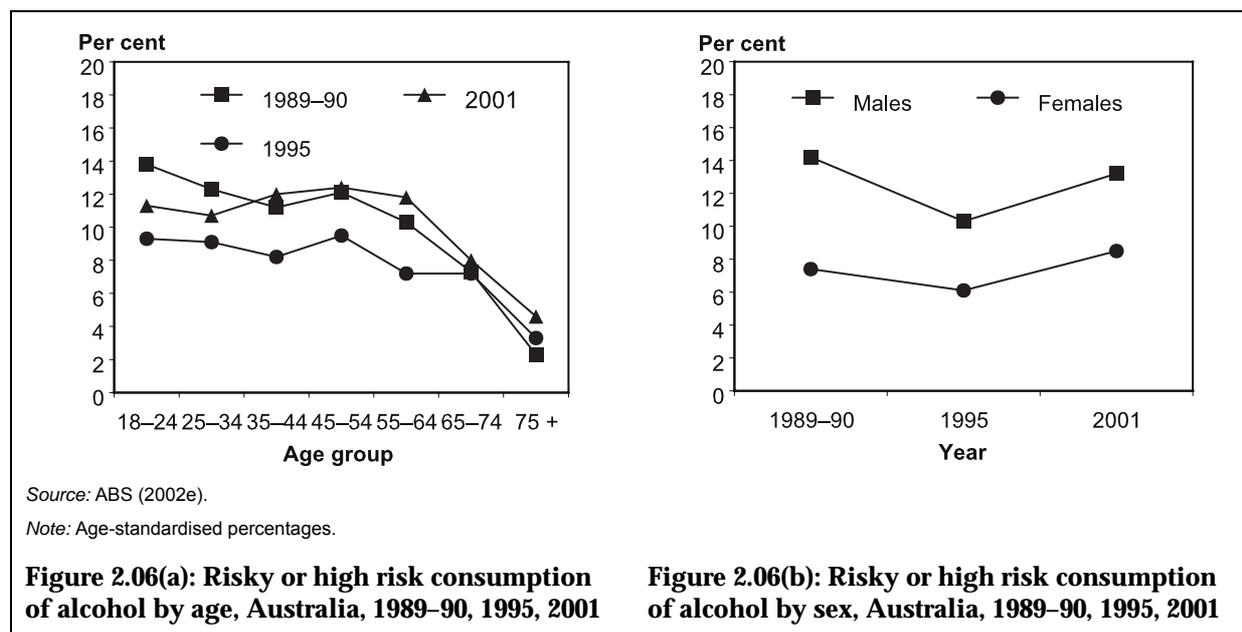
- Aboriginal and Torres Strait Islander adults were less likely (42%) than non-Indigenous adults (62%) to have consumed alcohol in the week prior to the interview. Of those that did consume alcohol, Indigenous Australians were more likely to consume at risky or high-risk levels (29%) compared with non-Indigenous Australians (17%) (ABS 2002f).
- Males aged 55–64 years (15.1%) and females aged 45–54 years (10.1%) were most likely to report risky or high-risk levels of drinking. Males were more likely than females to report risky or high-risk levels of drinking across all age groups up to age 74 years. Few people aged 75 years and over (4.6%) reported risky or high-risk levels of drinking, but males and females in this age group were equally likely to do so (ABS 2002e).

Table 2.06: Alcohol risk level by estimated average daily consumption of alcohol during the previous week

	No. of standard drinks per day	
	Males	Females
Low-risk	0–4	0–2
Risky	5–6	3–4
High-risk	≥ 7	≥ 5

Notes

1. Risk levels were based on National Health and Medical Research Council (NHMRC) levels for long-term harm (NHMRC 2001), and assume that the reported level of alcohol consumption for the previous week was typical.
2. 1 standard drink = 12.5 ml of alcohol.



Indicator related to:

- 1.06 Potentially avoidable deaths
- 1.08 Mortality from National Health Priority Area diseases and conditions

Indicator 2.07 Fruit and vegetable intake

Indicator definition

Description: Proportion of people eating sufficient daily serves of fruit and vegetables.

Numerator: Self-reported intake of at least four serves of vegetables per day and at least two serves of fruit per day.

Denominator: Australian population, 12 years and over, living in private dwellings and non-sparsely settled areas.

Presentation: Age-standardised proportion of population, standardised to the 2001 Australian population.

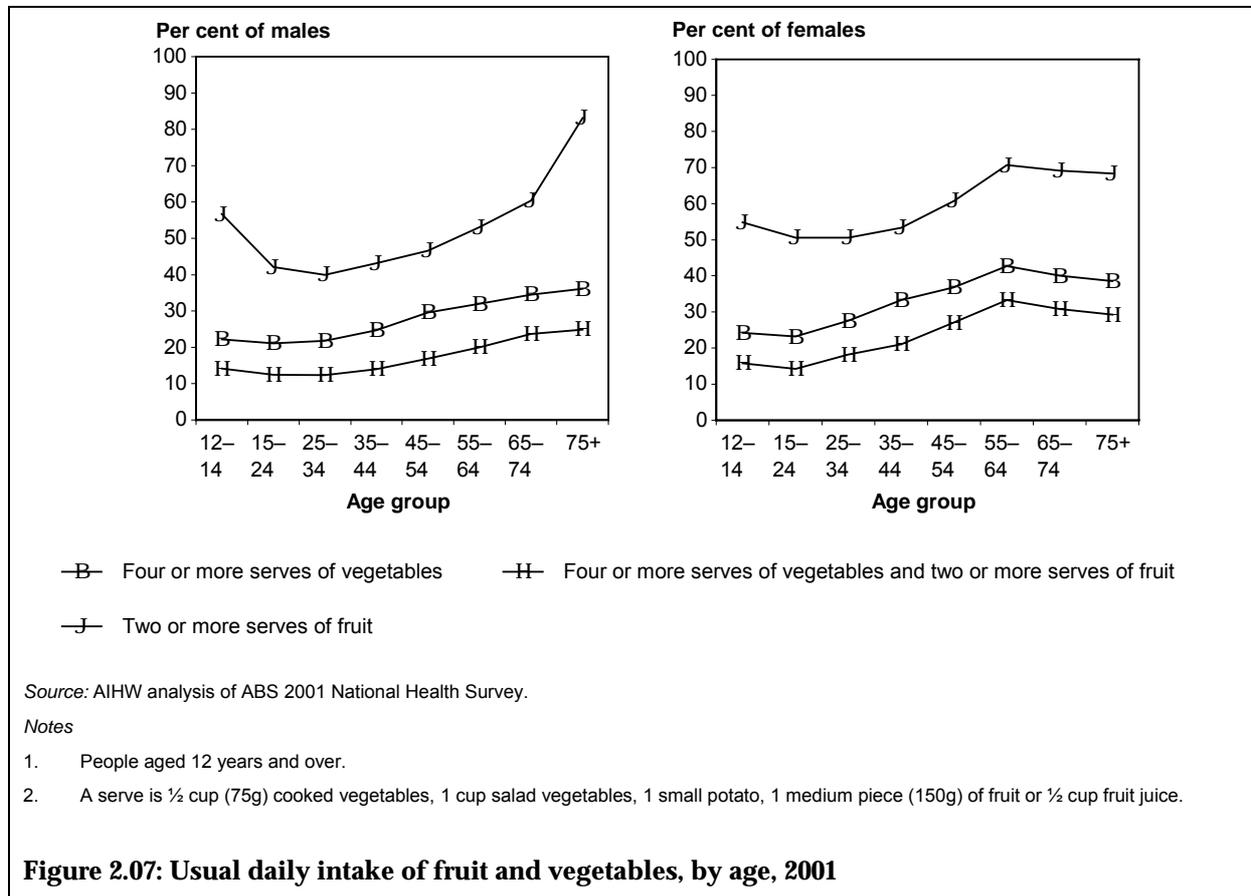
Rationale and evidence

- Fruit and vegetable intake is an important determinant of health. An intake of less than five serves of fruit and vegetables per day was estimated to be responsible for 2.7% of the burden of disease in 1996 (AIHW: Mathers et al. 1999).
- It is estimated that if everyone had eaten at least five serves of fruit and vegetables a day, then 4,000 deaths would have been avoided in 1996. Of these 4,000 avoidable deaths, 3,143 were cancer-related deaths and 734 were heart disease-related (AIHW: Mathers et al. 1999).
- Fruit and vegetables enhance health because of their high fibre content and their micronutrient content, and because a high intake of fruit and vegetables displaces substances like saturated fat. Consumption of fruit and vegetables is protective against coronary heart disease, hypertension, stroke and some cancers (NHMRC 2003).
- The NHMRC suggests that women eat 4–7 serves of vegetables and legumes per day, and 2–3 serves of fruit; for men the recommendation is 5–8 serves of vegetables and legumes per day and 2–4 serves of fruit (NHMRC 2003). *The Australian Guide to Healthy Eating* recommends consuming 4–8 serves of vegetables and 2–4 serves of fruit each day for adults (Children’s Health Development Foundation SA 1998). The World Health Organization (WHO) recommends a different amount again, and does not include potatoes in its list of recommended vegetables. Despite the differences in the number of serves recommended, all authorities agree that most people should eat more fruit and vegetables.
- This indicator measures whether people report having had 4 serves or more of vegetables per day and 2 serves or more of fruit per day. This can be monitored using the National Health Survey.

What the data show

- In 2001, 26% of males and 33% of females reported usually consuming four or more serves of vegetables per day (AIHW analysis of ABS 2001 National Health Survey).
- In 2001, 47% of males and 58% of females reported usually consuming two or more serves of fruit per day.

- Overall in 2001, 16% of males and 33% of females reported usually consuming four or more serves of vegetables and also two or more serves of fruit daily.
- Younger people generally reported consuming less fruit and vegetables than older people (Figure 2.07). Thus, 22% of men aged 25 to 34 consumed four or more serves of vegetables per day, compared with 36% of men aged 75 and over.



Indicator related to:

1.06 Potentially avoidable deaths

2.09 Overweight and obesity

Indicator 2.08 Physical inactivity

Indicator definition

Description: Proportion of adults insufficiently physically active to obtain a health benefit.

Numerator: Adults 18–75 years old who were active in walking, moderate activity or vigorous activity for less than 150 minutes per week and/or who did less than five sessions of activity per week.

Denominator: Australian adults 18–75 years old.

Presentation: Age-standardised proportions, standardised to the June 2001 Australian population.

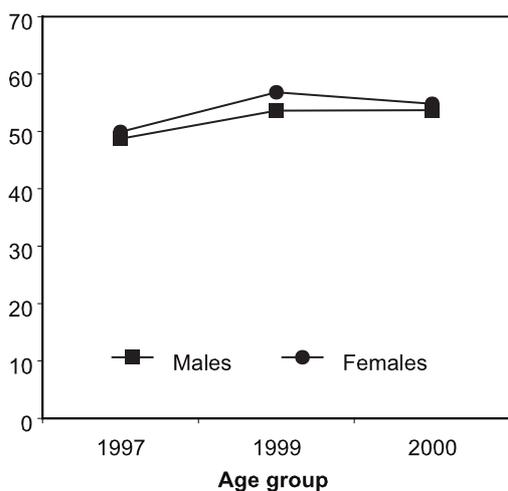
Rationale and evidence

- Participation in physical activity has benefits for physical and mental health. It is associated with reduced risk of chronic disease, improved psychological wellbeing and reduced death rates (AIHW: Armstrong et al. 2000). Physical inactivity was responsible for an estimated 13,000 deaths in 1996 and about 7% of the total burden of disease in Australia in 1996, ranking second only to tobacco as a causative factor of disease (AIHW: Mathers et al. 1999).
- Physical inactivity is associated with high direct health costs, with a conservative estimate of around \$400 million each year (based on health cost data for 1993–94) (Stephenson et al. 2000). An estimated gross saving of up to \$3.6 million in health care costs might be achieved for every 1 percentage point gain in the proportion of the population that is sufficiently active.

What the data show

- In 2000, 54.2% of Australians were insufficiently active to achieve a health benefit. Physical inactivity has increased from 1997 to 2000. The percentage of those insufficiently active increased by 4.9 percentage points, from 49.4% in 1997.
- The percentage of women who were insufficiently active (54.8%) was higher than the percentage of men (53.7%). This was consistently the case between 1997 and 2000.
- The percentage of people who were insufficiently active increased with age from 42.2% for those aged 18–29 years to 58.7% for those aged 45–59 years. The percentage decreased slightly to 56.3% for those aged 60–75 years.

Per cent of population 18–75 years



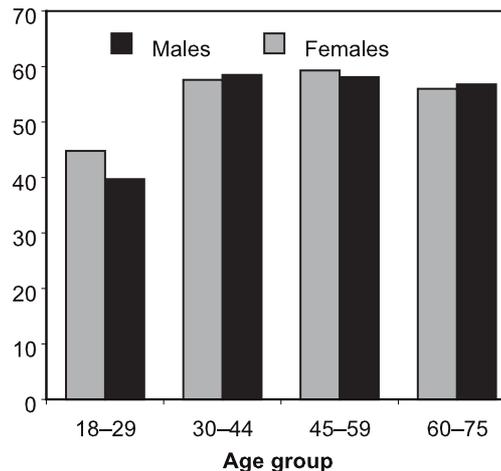
Sources: AIHW: Armstrong et al. (2000) and AIHW analysis of the 1997, 1999 and 2000 National Physical Activity Surveys.

Notes

1. Age-standardised to the June 2001 Australian population.
2. Sufficient time and sessions is defined as 150 minutes (using the sum of walking, moderate activity and vigorous activity (where vigorous activity is weighted by two)) and five sessions of activity per week.

Figure 2.08(a): Proportion of people 18–75 years insufficiently physically active to obtain a health benefits, by sex, Australia, 1997, 1999, 2000

Per cent of population



Source: AIHW: Armstrong et al. (2000).

Figure 2.08(b): Proportion of people 18–75 years insufficiently physically active to obtain a health benefits, by sex, by age, Australia, 2000

Indicator related to:

- 1.01 Incidence of heart attacks
- 1.06 Potentially avoidable deaths
- 2.09 Overweight and obesity

Indicator 2.09 Overweight and obesity

Indicator definition

Description: Proportion of adults overweight or obese.

Numerator: People aged 18 years and over who are overweight or obese.

Denominator: People aged 18 years and over.

Presentation: Age-standardised proportion of population, standardised to the June 2001 Australian population in scope for the National Health Survey.

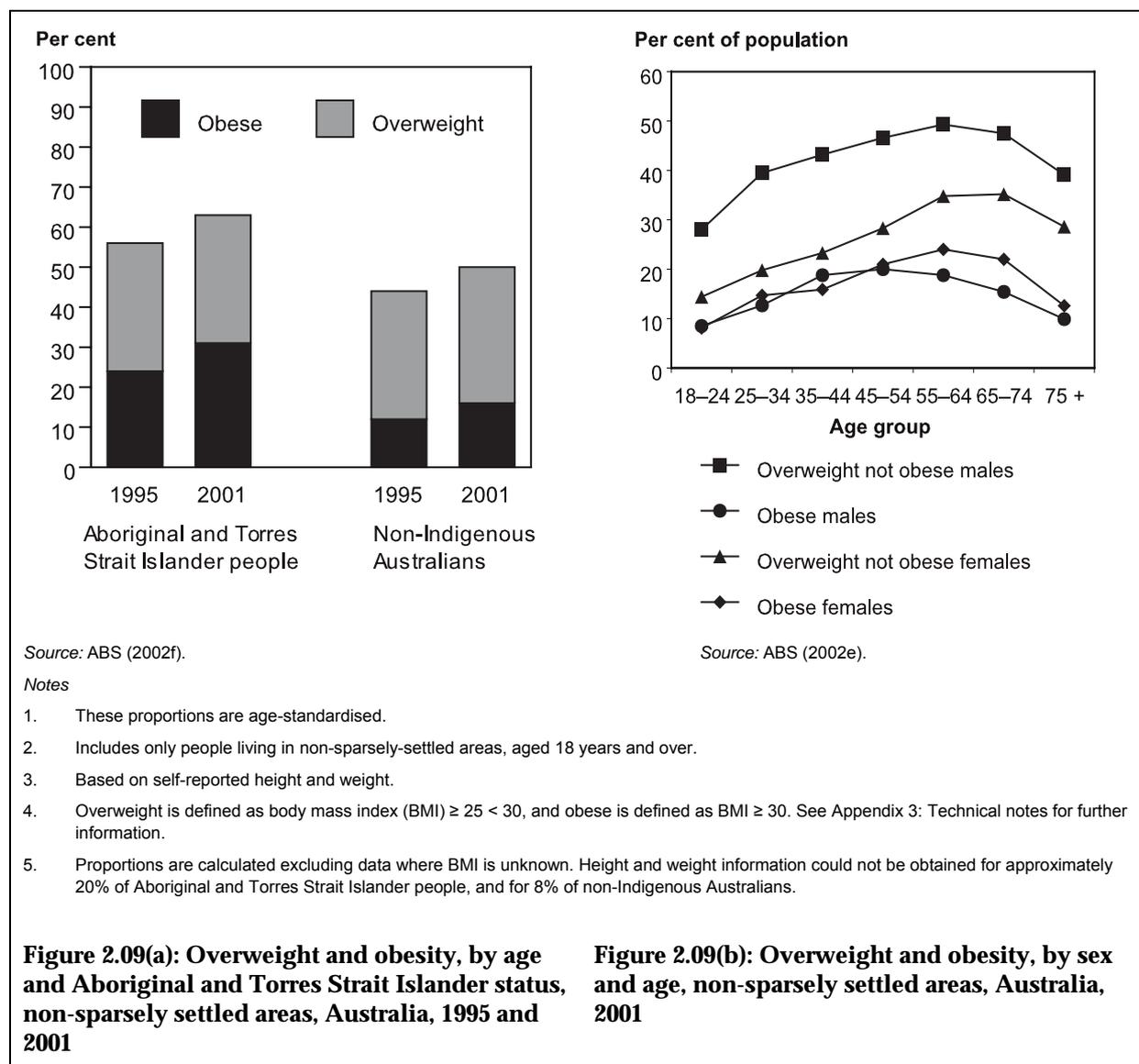
Rationale and evidence

- Obesity is epidemic in Australia, and the WHO has identified the increasing prevalence of obesity as a major public health problem for developed countries and an increasing number of developing countries.
- Overweight and obesity are key risk factors for preventable morbidity and mortality due to many diseases, particularly hypertension, cardiovascular disease, and non-insulin-dependent diabetes mellitus (NHMRC 1997a). Males under 65 who are overweight (but not obese) have a 35% greater chance of dying from heart disease than those who are not overweight. Males under 65 who are obese have an 80% greater chance of dying from heart disease than those who are not obese or overweight (AIHW: Mathers et al. 1999).
- In 1996, overweight and obesity accounted for over 4% of the total burden of premature death and disability in Australia (AIHW: Mathers et al. 1999).

What the data show

- In 2001, 25% of the female adult population and 42% of the male adult population were overweight (but not obese); and 17% of the female adult population and 16% of the male population were obese.
- The prevalence of overweight and obesity among Australians aged 18 and over increased between 1989 and 2001 (from 32% to 42% among women and from 46% to 58% among men).
- From 1989 to 2001, reported rates of overweight or obesity among males were consistently higher (about 1.4 times) than those for females.
- Aboriginal and Torres Strait Islander peoples were more likely to be overweight or obese than non-Indigenous Australians. In 2001, 63% of Aboriginal and Torres Strait Islander people were overweight or obese, compared with 50% of non-Indigenous Australians (ABS 2002f).
- While reported rates of overweight were higher for males than for females, reported rates of obesity were similar for males and females. Reported rates of overweight and obesity tended to be highest for males and females in the 55–64 year age group (ABS 2002e).

- There is some evidence that people are gaining weight as they get older. Men aged 30–34 in 1980 gained over 8 kg as they aged to 50–54 in 2000 and women aged 30–34 gained over 12 kg during the 20-year period (AIHW: Bennett et al. 2004).
- The results presented here will underestimate the true prevalence of overweight and obesity, as they rely on self-reported height and weight which has been shown to generally underestimate overweight and obesity (AIHW: Waters 1993).



Indicator related to:

- | | |
|-----------------------------------|---------------------------------|
| 1.01 Incidence of heart attacks | 2.07 Fruit and vegetable intake |
| 1.06 Potentially avoidable deaths | 2.08 Physical inactivity |

Indicator 2.10 Low birthweight babies

Indicator definition

Description: Proportion of babies who are low birthweight.

Numerator: Number of low birthweight babies (excluding multiple births).

Denominator: Total number of babies born (excluding multiple births).

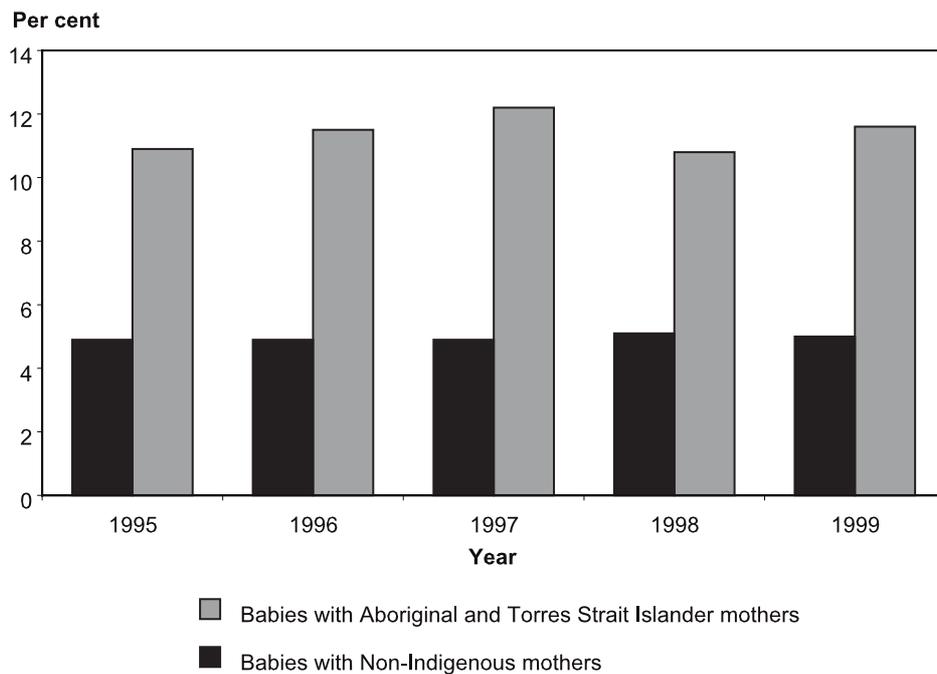
Presentation: Proportion of babies born with low birthweight.

Rationale and evidence

- Low birthweight babies (< 2500 g) are more prone to ill health during childhood and adult life, and this indicator is correlated with the level of development of a society.
- The factors contributing to low birthweight and to trends in the proportion of low birthweight babies are complex, so trends are not easy to interpret.
- Apart from multiple pregnancies, which are not counted in the indicator, the factors contributing to low birthweight include duration of pregnancy, maternal disease (particularly pre-eclampsia or genital tract infections), maternal smoking, number of previous children born to the mother, sex of the baby, maternal height, fetal chromosomal and birth defects, socioeconomic status and mother's nutritional status.
- Low birthweight may occur in babies born prematurely, or in babies with intra-uterine growth retardation who are born at or near full-term. It would be useful to be able to examine birthweight by duration of pregnancy, but accurate figures for duration of pregnancy are not currently available.

What the data show

- Rates of low birthweight have been fairly steady in recent years, both in babies born to Aboriginal and Torres Strait Islander mothers and babies born to non-Indigenous Australian mothers. In 1999, 6.7% of all Australian babies were of low birthweight, compared with 6.4% in 1995.
- From 1995–1999, babies born to Aboriginal and Torres Strait Islander mothers were twice as likely to be of low birthweight as babies born to non-Indigenous mothers (Figure 2.10).
- In 1999, 11.6% of babies of Aboriginal and Torres Strait Islander mothers were of low birthweight, compared to 5.0% of babies of non-Indigenous Australian mothers.



Source: AIHW National Perinatal Data Collection 2003.

Notes

1. Low birthweight babies are those weighing < 2500 g.
2. Multiple births excluded.
3. Data not available for Tasmania for 1999, data from 1998 used as a proxy for 1999.

Figure 2.10: Low birthweight babies by Aboriginal and Torres Strait Islander status of mother, Australia, 1995–1999

Indicator related to:

- | | |
|-----------------------------|---------------------------------|
| 1.07 Infant mortality rates | 2.05 Adult smoking |
| | 2.06 Risky alcohol consumption |
| | 2.07 Fruit and vegetable intake |

Indicator 2.11 High blood pressure

Indicator definition

- Description:** Proportion of persons with high blood pressure.
- Numerator 1:** People with high blood pressure.
- Denominator 1:** Population aged 25–64 living in capital cities or urban areas.
- Numerator 2:** People reporting having hypertension.
- Denominator 2:** Population aged 18 years and over.
- Presentation:** Age-standardised proportion, standardised to the June 2001 Australian population.

Rationale and evidence

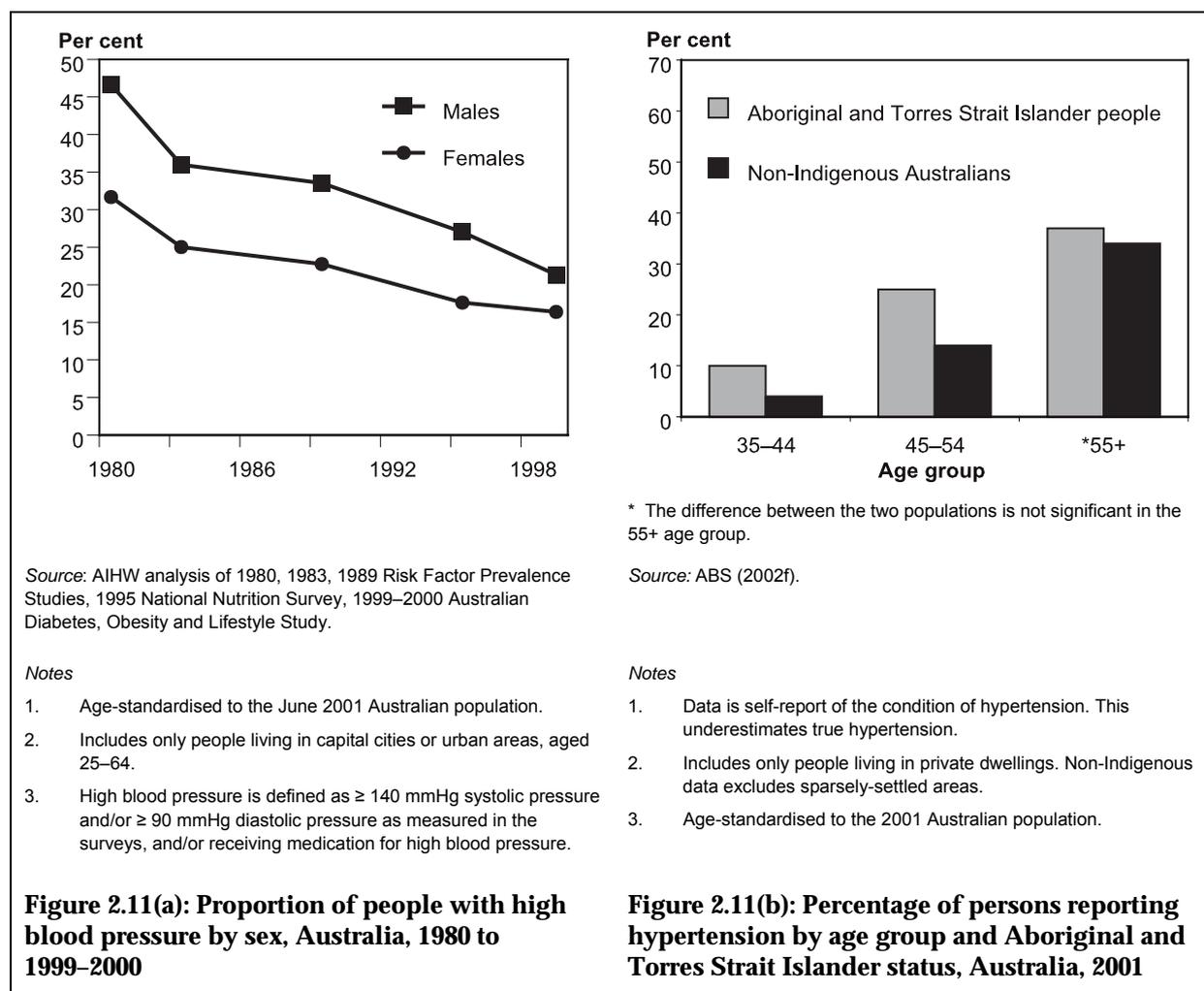
- High blood pressure is a major risk factor for heart disease, stroke and renal failure and accounted for about 5% of all premature death and disability in Australia in 1996 (AIHW: Mathers et al. 1999). High blood pressure is also one of the most common problems managed by GPs, affecting an estimated 15% of the general practice patient population (AIHW: Henderson et al. 2002).
- The factors contributing to high blood pressure include obesity, alcohol misuse, physical inactivity, high dietary salt intake and nutritional patterns that involve a low intake of fruit and vegetables and a high intake of saturated fat. Stress raises blood pressure transiently, but may contribute to high blood pressure in the longer term by influencing eating, drinking, smoking and physical activity patterns. Tobacco smoking increases the risk of heart attack and stroke threefold in people with high blood pressure (AIHW 2001b).
- High blood pressure is defined as ≥ 140 mmHg systolic pressure and/or ≥ 90 mmHg diastolic pressure, and/or receiving medication for high blood pressure.

What the data show

- Over the period 1980 to 1999–2000, the prevalence of high blood pressure declined steadily. In males, prevalence halved, from 46.7% to 21.3%. In females, prevalence dropped by almost half, from 31.7% to 16.4%.
- The prevalence of high blood pressure increases with age. In 1999–2000, prevalence ranged from 6.7% of males aged 25–34 years to 80.0% of males aged 75 years and over, and from 2.4% of females aged 25–34 years to 75.8% of females aged 75 years and over.
- The national health surveys record hypertension reported by individuals. These surveys produce lower estimates than those which actually measure blood pressure, because some people have not had their high blood pressure diagnosed. The national health survey data is used as it is the only source of information about Aboriginal and Torres Strait Islander hypertension. In 2001, the percentage of people reporting hypertension was higher among Aboriginal and Torres Strait Islander people than non-Indigenous Australians, particularly in the younger age groups. Aboriginal and Torres Strait Islander people aged 35–44 years were 2.5 times more likely to report hypertension than

their non-Indigenous Australian counterparts, while Aboriginal and Torres Strait Islander people aged 45–54 years were 1.8 times more likely than their non-Indigenous Australian counterparts to report hypertension. The prevalence of self-reported hypertension among Aboriginal and Torres Strait Islander people aged 55 years and over was not significantly different to that for non-Indigenous Australian people of this age group (Figure 2.11 (b)).

- The proportion of Aboriginal and Torres Strait Islander females reporting high blood pressure (16%) was higher than the proportion of Aboriginal and Torres Strait Islander males (12%) (ABS 2002f).



Indicator related to:

- | | |
|--|---------------------------------|
| 1.08 Mortality for National Health Priority Area diseases and conditions | 2.05 Adult smoking |
| | 2.06 Risky alcohol consumption |
| | 2.07 Fruit and vegetable intake |
| | 2.08 Physical inactivity |
| | 2.09 Overweight and obesity |