



# Mortality inequalities in Australia

## Aim

To describe the nature and size of inequalities in overall mortality, leading causes of death and potentially avoidable deaths in relation to sex, remoteness of residence, socioeconomic disadvantage, country of birth and Indigenous status.

## Methods

Deaths data come from the AIHW National Mortality Database and are based on deaths registered from 2009 to 2011. All mortality rates are directly age-standardised to the 2001 Australian standard population. To calculate measures of inequality, each population group is compared to the group that has the lowest mortality rates. The measures used in the full publication to quantify inequalities are: rate difference (**absolute inequality**), rate ratio (**relative inequality**) and **excess deaths** (total number of deaths in the population that would not have occurred if the mortality rate for the group of interest was the same as the rate for the reference group). **Potentially avoidable deaths** are deaths that might have been avoided through prevention or treatment, and are classified using nationally agreed definitions based on cause of death for people aged under 75.

## Results

- There would have been **71,400** fewer male deaths over the 2009–2011 period if males had the same mortality rate as females (**excess deaths**).
- The 5 leading causes of death by age group are similar for males and females. However, for many causes, the rates differ substantially. Males fare worse than females for most leading causes of death (**Figure 1**).
- People living in Remote and Very remote areas have mortality rates **1.4** times as high as those for people living in Major cities, and higher rates of death due to diabetes, land transport accidents and suicide.
- People living in the lowest socioeconomic status (SES) areas have a mortality rate **1.3** times as high as the rate among people living in the highest SES areas, and higher rates of death due to diabetes and chronic obstructive pulmonary disease (COPD).
- Asian-born Australian residents have a mortality rate **36%** lower than the rate for Australian-born residents.
- Australians that fare the worst in terms of mortality rates tend to do so for causes of death that in many cases can be considered either preventable or treatable—these are often referred to as **potentially avoidable deaths**.

**Figure 1: Leading causes of death by age group, with male–female mortality rates comparison, 2009–2011**

		Rate ratio						
		1.5	1.0	1.5	2.0	3.0	4.0	5.0
		(female rate higher)	(no difference)					(male rate higher)
	All ages	0–14	15–24	25–44	45–64	65–84	85+	
1	Coronary heart disease	Perinatal and congenital conditions	Land transport accidents	Suicide	Coronary heart disease	Coronary heart disease	Coronary heart disease	
2	Cerebrovascular diseases	SIDS	Suicide	Accidental poisoning	Lung cancer	Lung cancer	Cerebrovascular diseases	
3	Dementia and Alzheimer	Land transport accidents	Accidental poisoning	Land transport accidents	Breast cancer	Cerebrovascular diseases	Dementia and Alzheimer	
4	Lung cancer	Other ill-defined causes	Event of undetermined intent	Coronary heart disease	Colorectal cancer	COPD	Heart failure	
5	COPD	Accidental drowning	Assault	Breast cancer	Suicide	Dementia and Alzheimer	COPD	

Note: This figure presents leading causes of death by age group. The colour of the boxes represents a comparison of the age-standardised rates for males and females. The comparison is presented as 'times higher' for either males or females. A rate ratio is not presented for breast cancer. COPD=Chronic obstructive pulmonary disease, SIDS=Sudden infant death syndrome.

Source: AIHW National Mortality Database, see supplementary tables online.

## Conclusions

Despite relatively high standards of health and health care in Australia, not all Australians fare equally well in their health and longevity. Substantial mortality inequalities exist in the Australian population, for overall mortality, and for most leading causes of death, and these inequalities are long-standing.

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## Sex

The death rate for males is 1.5 times as high as the rate for females.

The suicide rate for men aged 25–44 is 3.5 times the rate for women.

Men aged 25–64 die of coronary heart disease at more than 4 times the rate of women.

Women aged 85+ die of dementia and Alzheimer disease at 1.4 times the rate of men.

## Remoteness

Death rates are higher among people living in more remote areas.



## Socioeconomic disadvantage

Death rates are higher among people living in lower socioeconomic status areas.



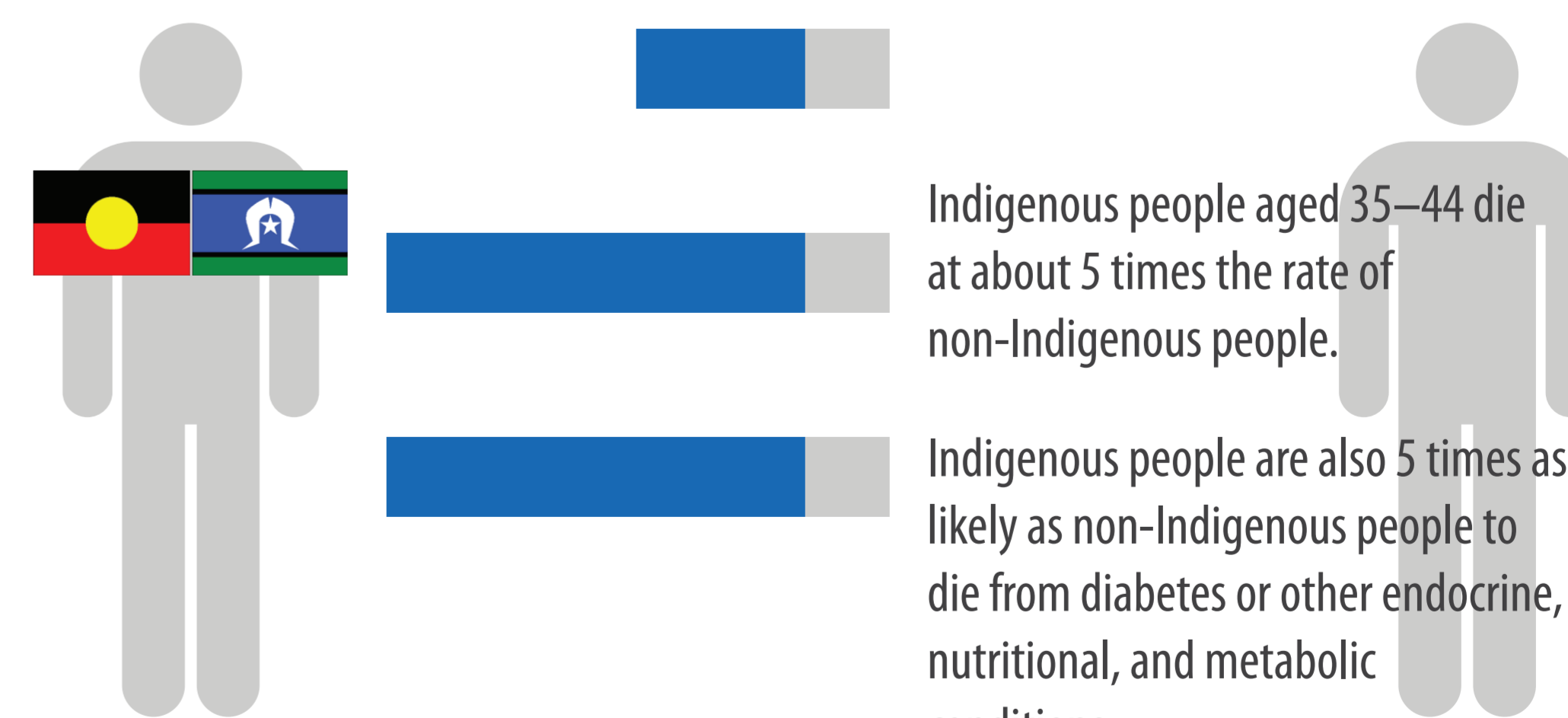
## Country of birth

Overseas-born Australian residents have lower death rates than those who were born in Australia.



## Indigenous Australians

The death rate among Indigenous Australians is nearly twice that of non-Indigenous Australians.



## Find out more

AIHW 2014. *Mortality inequalities in Australia 2009–2011*. Bulletin no. 124. Cat. no. AUS 184. Canberra: AIHW.

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