

# Avoidable mortality (AM) in Victoria

## from 1997 to 2003 due to *chronic obstructive pulmonary disease (COPD)*

### Definitions

*Avoidable mortality (AM)* refers to deaths classed as untimely and unnecessary – deaths from diseases for which effective public health and/or medical interventions currently exist – in those aged under 75 years.

Fifty-six conditions, including *COPD*, currently meet these requirements. All other deaths in people aged less than 75 years are considered unavoidable. Deaths in those aged 75 years and over are also considered unavoidable and not included in the analyses.

*Chronic obstructive pulmonary disease (COPD)* is a lung disease in which the lung airways (the tubes that carry air in and out of the lungs) are partly obstructed, making it hard to breathe.

### Key AM findings on *COPD*

*Chronic obstructive pulmonary disease (COPD)* was the sixth leading cause of avoidable mortality (AM) between 1997 and 2003.

Avoidable *COPD deaths* increased sharply among people aged between 45 and 49 years and was greatest in the 70 to 74 year age group. See graph 1.

The avoidable *COPD* death rate was significantly higher in men than women between 1997 and 2003. Avoidable *COPD* death rate significantly declined in men and if this trend continues, would be expected to further decline.

By contrast, avoidable *COPD* death rate in women did not change significantly during the reported period and is expected to remain the same in 2008. See graph 2.

### Disadvantage and location

Men in the most disadvantaged socio-economic group had significantly higher avoidable *COPD* death rates in 2000 and 2001, two of the seven years.

Men from rural Victoria experienced a significantly higher avoidable *COPD* death rate than men from metropolitan areas in four of the seven reported years; 1998, 1999, 2002 and 2003. See table 1.

Women in the most disadvantaged socio-economic group had a significantly higher avoidable *COPD* death rate in 1999 only.

There were no significant differences in avoidable *COPD* death rates in women in rural compared to metropolitan areas. See table 2.

### General information

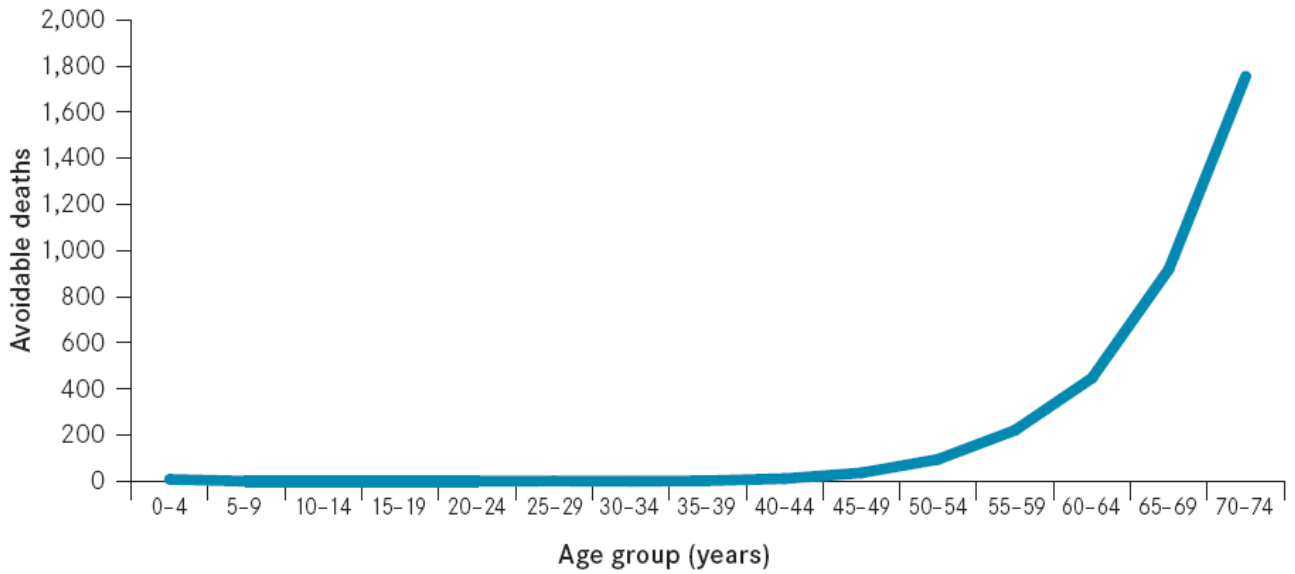
This fact sheet is an adjunct to *Avoidable Mortality in Victoria: Trends between 1997 and 2003*, the first comprehensive report on AM in Victoria which provides a detailed examination of the 10 most common causes of AM, which together account for 50% of deaths in the state during this period.

The report is compiled via a simple and practical Victoria-wide, population-based method of counting AM rates.

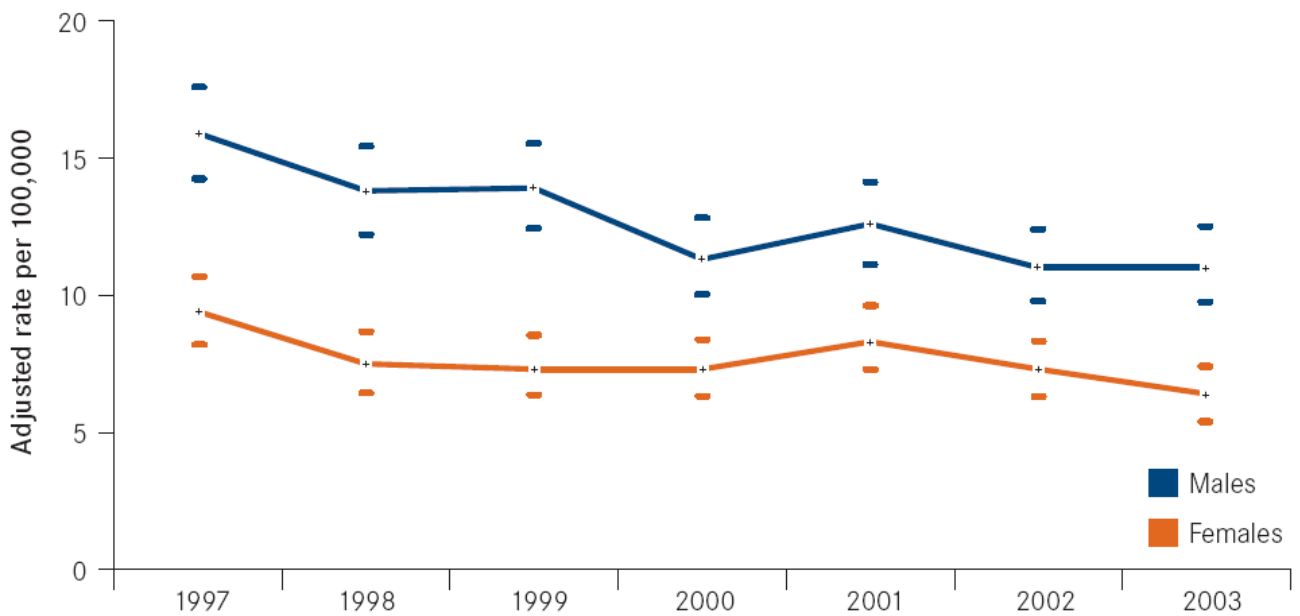
*Declining trends in AM* may indicate improvements in the healthcare system.

*Increasing trends in AM* may indicate shortcomings in the healthcare system, such as a lack of use of effective interventions.

**Graph 1: Avoidable COPD deaths by age from 1997 to 2003**



**Graph 2: AM rates in Victoria (1997 to 2003) due to COPD**



**Table 1: Adjusted COPD AM rates (95% CI) in Victorian males (1997–2003)**

		Males (rate per 100,000)																				
Chronic obstructive respiratory diseases		1997			1998			1999			2000			2001			2002			2003		
		Adjusted	95%CI		Adjusted	95%CI		Adjusted	95%CI		Adjusted	95%CI		Adjusted	95%CI		Adjusted	95%CI		Adjusted	95%CI	
Victoria		16	14	18	14	12	15	14	12	16	11	10	13	13	11	14	11	10	12	11	10	13
	Metropolitan	15	13	17	12	10	14	12	10	14	11	9	12	12	10	13	10	8	11	9	8	11
	Rural	19	15	22	17	14	21	18	15	21	13	10	16	15	12	18	14	11	17	15	12	18
IRSED category:																						
	Most disadvantaged	19	15	24	17	13	21	14	10	18	14	11	18	14	11	18	11	8	14	12	9	15
	2	19	15	23	14	11	18	16	12	19	12	9	15	13	10	17	14	10	17	15	11	18
	3	15	12	19	17	13	21	17	13	21	14	10	17	14	11	18	12	9	15	12	9	16
	4	13	10	17	11	8	14	14	11	18	11	8	14	14	10	17	12	8	15	8	6	11
	Least disadvantaged	13	9	16	10	7	13	8	5	11	6	3	8	7	4	9	7	4	10	8	5	10
ARIA category:																						
	Accessible	15	9	21	18	12	24	23	16	30	15	9	20	16	10	22	14	9	20	20	13	26
	Highly Accessible	16	14	18	13	12	15	13	11	14	11	9	12	12	11	14	11	9	12	10	9	12
	Moderately accessible	23	13	34	15	6	23	22	12	32	14	6	23	15	6	23	16	7	24	10	3	16
Rate ratios:																						
	Male:Female	1.69			1.84			1.88			1.56			1.50			1.52			1.73		
	Rural:Metro	1.28			1.42			1.51			1.20			1.29			1.47			1.57		
	Most:Least disadvantaged	1.52			1.70			1.76			2.62			2.18			1.56			1.55		
	Least:Most accessible	1.48			1.10			1.71			1.32			1.20			1.47			0.92		

Note: Adjusted rates are significantly different (P<0.05) when their 95% confidence intervals do not overlap  
 Adjusted rates and rate ratios in **RED** are significantly greater (P<0.05) than the corresponding rate for Victoria or 1, respectively  
 Adjusted rates and rate ratios in **GREEN** are significantly lower (P<0.05) than the corresponding rate for Victoria or 1, respectively

**Table 2: Adjusted COPD AM rates (95% CI) in Victorian females (1997–2003)**

		Females (rate per 100,000)																				
Chronic obstructive respiratory diseases		1997			1998			1999			2000			2001			2002			2003		
		Adjusted	95%CI		Adjusted	95%CI		Adjusted	95%CI		Adjusted	95%CI		Adjusted	95%CI		Adjusted	95%CI		Adjusted	95%CI	
Victoria		9	8	11	8	6	9	7	6	9	7	6	8	8	7	10	7	6	8	6	5	7
	Metropolitan	9	7	10	7	5	8	7	6	8	7	5	8	8	7	10	7	6	8	5	4	7
	Rural	11	9	13	10	7	12	9	6	11	9	7	12	9	7	12	8	6	10	9	6	11
IRSED category:																						
	Most disadvantaged	10	7	14	8	6	11	11	8	14	7	4	9	8	5	10	8	5	10	7	4	9
	2	14	11	17	9	6	11	8	5	10	10	7	12	9	6	12	9	6	11	8	6	10
	3	10	7	12	9	6	12	9	6	12	7	5	10	11	8	14	9	7	12	7	5	10
	4	7	5	9	7	5	9	5	3	6	8	5	10	10	7	13	6	4	8	6	4	9
	Least disadvantaged	6	4	8	4	2	6	5	3	7	6	4	8	5	3	7	5	3	7	3	2	5
ARIA category:																						
	Accessible	11	6	16	9	5	14	11	6	16	12	7	17	11	6	16	7	3	11	7	3	11
	Highly Accessible	9	8	11	7	6	8	7	6	8	7	6	8	8	7	9	7	6	9	6	5	8
	Moderately accessible	5	0	9	12	4	20	10	3	17	9	2	15	11	4	18	6	1	12	5	0	11
Rate ratios:																						
	Male:Female																					
	Rural:Metro	1.28			1.49			1.25			1.43			1.15			1.14			1.57		
	Most:Least disadvantaged	1.82			1.95			2.20			1.14			1.44			1.64			1.91		
	Least:Most accessible	0.50			1.67			1.48			1.26			1.36			0.86			0.83		

Note: Adjusted rates are significantly different (P<0.05) when their 95% confidence intervals do not overlap  
 Adjusted rates and rate ratios in **RED** are significantly greater (P<0.05) than the corresponding rate for Victoria or 1, respectively  
 Adjusted rates and rate ratios in **GREEN** are significantly lower (P<0.05) than the corresponding rate for Victoria or 1, respectively

Information in this fact sheet is taken from the report, *Avoidable Mortality in Victoria: Trends between 1997 and 2003*.