

Avoidable mortality (AM) in Victoria from 1997 to 2003 due to *lung cancer*

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 *lung cancer*, 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.

Lung cancer is broadly categorised into two main types; non-small cell lung cancer and small cell lung cancer, depending on how the cells appear under a microscope. Each type behaves differently and is treated differently.

Key AM findings on *lung cancer*

Lung cancer was the second leading cause of avoidable mortality (AM) between 1997 and 2003.

Avoidable *lung cancer* deaths increased sharply among people aged between 30 and 39 years and was greatest in people aged between 70 and 74. See graph 1.

The avoidable *lung cancer* death rate was significantly higher in men than women. The rate in men significantly declined during the reported period and would be expected to further decline if the trend continues.

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

Disadvantage and location

The most socio-economically disadvantaged men had significantly higher avoidable *lung cancer* death rates in all but two (2000 and 2002) of the seven years.

Men from rural Victoria had a significantly higher avoidable *lung cancer* death rate than men from metropolitan areas in 2003. See table 1.

There were no significant differences in avoidable *lung cancer* death rates in women, as defined by socio-economic status.

Women from rural areas had significantly higher avoidable *lung cancer* death rates in 1998 than women from metropolitan areas. See table 2.

General information

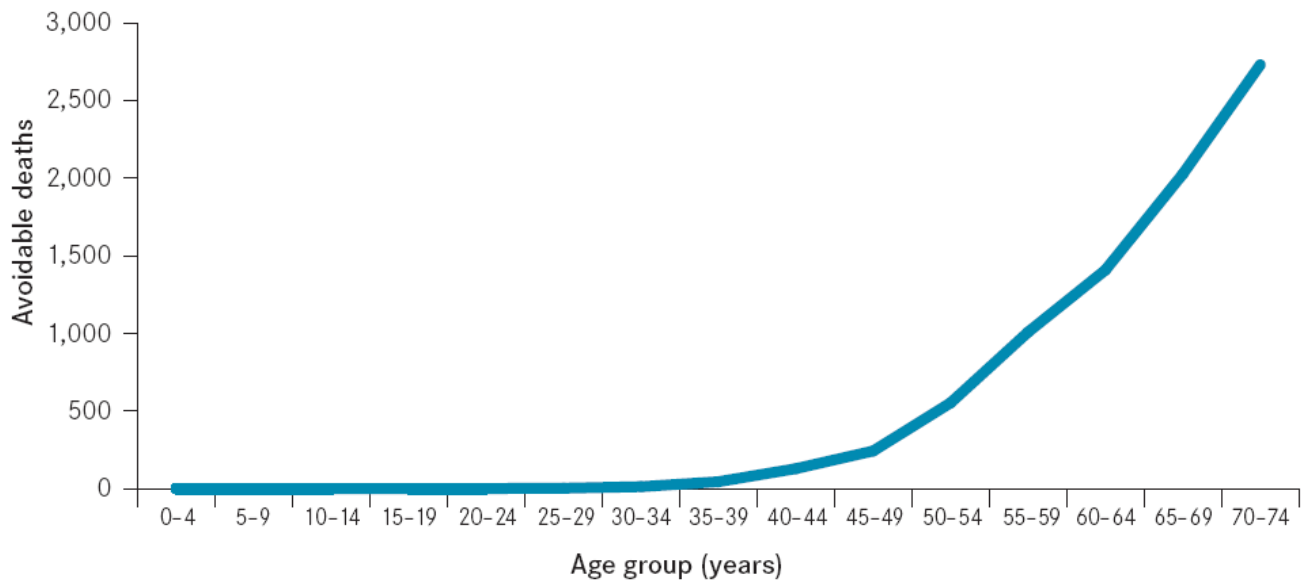
This fact sheet is an adjunct to *Avoidable Mortality in Victoria: Trends between 1997 and 2003*, the first comprehensive report on AM in Victoria which provides a detailed examination of the ten most common causes of AM, which together account for 50% of deaths in the state during this period.

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 lung cancer deaths by age from 1997 to 2003



Graph 2: AM rates in Victoria (1997 to 2003) due to lung cancer

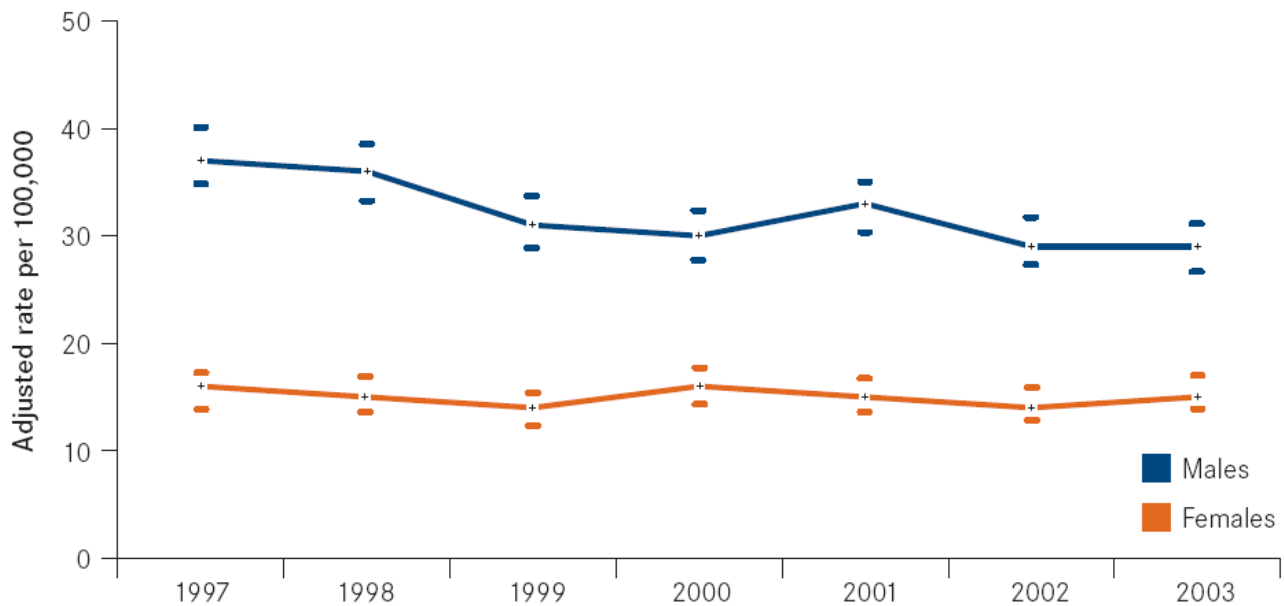


Table 1: Adjusted lung cancer AM rates (95% CI) in Victorian males (1997–2003)

Lung cancer	Males (rate per 100,000)																				
	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	37	35	40	36	33	39	31	29	34	30	28	32	33	30	35	29	27	32	29	27	31
Metropolitan	37	34	40	34	31	37	30	27	33	29	27	32	32	29	35	28	25	31	26	24	29
Rural	39	34	43	41	36	45	34	29	38	32	27	36	34	30	38	33	28	37	34	30	38
IRSED category:																					
Most disadvantaged	42	36	48	44	38	51	41	34	47	35	29	41	39	33	45	33	28	39	34	28	39
2	40	34	46	41	35	47	31	25	36	33	27	38	37	32	43	33	28	38	31	26	36
3	46	40	53	32	27	38	37	31	42	31	26	37	33	27	38	29	24	34	36	31	42
4	29	24	35	35	29	41	25	20	30	27	22	31	30	25	35	27	22	31	24	19	28
Least disadvantaged	30	25	35	27	22	32	23	18	28	24	20	29	24	19	29	25	20	30	19	15	23
ARIA category:																					
Accessible	48	37	58	36	27	46	34	26	43	34	25	42	28	20	35	30	22	38	37	28	46
Highly Accessible	37	34	39	36	33	39	31	28	33	30	28	32	33	30	36	29	27	32	27	25	30
Moderately accessible	36	23	50	36	22	49	32	20	45	25	13	36	38	25	52	28	17	40	46	31	61
Rate ratios:																					
Male:Female	2.41			2.38			2.27			1.88			2.16			2.09			1.88		
Rural:Metro	1.05			1.20			1.13			1.08			1.05			1.16			1.29		
Most:Least disadvantaged	1.40			1.62			1.77			1.44			1.64			1.32			1.80		
Least:Most accessible	0.99			0.99			1.05			0.82			1.16			0.95			1.68		

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 lung cancer AM rates (95% CI) in Victorian females (1997–2003)

Lung cancer	Females (rate per 100,000)																				
	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	17	15	14	17	14	12	15	16	14	18	15	14	17	14	13	16	15	14	17
Metropolitan	15	13	17	13	11	15	14	12	16	16	14	18	15	13	16	14	12	15	14	13	16
Rural	17	14	20	19	16	23	14	11	17	16	13	19	16	13	19	16	13	19	18	15	21
IRSED category:																					
Most disadvantaged	13	10	17	14	10	17	14	11	18	16	12	20	14	11	18	16	13	20	14	10	17
2	14	11	18	17	14	21	16	12	19	20	16	24	16	13	20	16	12	19	17	14	21
3	17	13	21	18	14	22	15	11	18	15	11	18	16	13	20	17	13	21	17	14	21
4	16	12	20	16	12	20	15	11	18	14	11	18	15	11	18	12	9	15	16	13	20
Least disadvantaged	17	13	21	10	7	13	9	6	12	15	11	18	14	11	18	10	7	13	12	9	15
ARIA category:																					
Accessible	18	11	24	17	11	23	9	5	14	11	6	16	12	7	17	19	12	25	16	10	22
Highly Accessible	15	14	17	14	13	16	14	13	16	17	15	18	15	13	17	14	12	15	15	13	17
Moderately accessible	15	6	23	29	17	41	14	5	22	10	3	17	21	11	31	12	4	19	24	13	35
Rate ratios:																					
Male:Female																					
Rural:Metro	1.13			1.47			1.01			0.99			1.10			1.15			1.22		
Most:Least disadvantaged	0.77			1.33			1.58			1.09			1.03			1.68			1.16		
Least:Most accessible	0.94			1.98			0.96			0.61			1.36			0.85			1.60		

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*.