

## Health differentials

There are differences in health between young males and young females. Among young Australians, there are nearly 3 male deaths to every 1 female death (ABS 1999b:38). Across all ages, the difference in death rates between males and females is highest for the age group 20–24 years (ABS 1999b:29). Higher death rates for young males from accidents and suicide account for most of this difference. For some groups of males, the comparative situation is getting worse: the gap in death rates between the lowest and highest socioeconomic status groups widened between 1985–87 and 1995–97 for males but narrowed for females.

There are also some areas where females do worse than males; for example, rates of depressive disorders are three times higher for young females than for males. The female hospitalisation rate for parasuicide (self-harm not resulting in death) was greater at all ages, despite the higher suicide rate in males.

Among young people, some groups are comparatively worse off. Using data for the period 1995–97, death rates for young Aboriginal and Torres Strait Islander peoples were found to be 2.8 times higher for males and 2.0 times higher for females than their non-Indigenous counterparts (ABS & AIHW 1999:132). The 20% of males in the lowest socioeconomic group were 1.7 times more likely to die and 1.4 times more likely to be hospitalised than the 20% of males in the highest socioeconomic group; for females, these ratios were 1.4 and 1.2 respectively.

## 4.3 Men and women aged 25 and over

Aspects of the health of males and females are discussed throughout this report, in particular in reviewing the major disease areas (see chapter 2). Comparisons are made where appropriate. This section provides an overview of the health of adult males and females drawing on the results of the AIHW 1996 Australian Burden of Disease and Injury Study (AIHW: Mathers et al. 1999). Disease burden includes both premature mortality (years of life lost due to premature mortality: YLL) and the impact of disability (equivalent 'healthy' years of life lost due to disability: YLD). The sum of YLL and YLD equals the total disability-adjusted life years (DALYs), a measure of total burden. One DALY is the equivalent of one lost year of 'healthy' life (see section 2.2).

### Men

The overall disease and injury burden for men aged 25 years and over is largely attributable to mortality, with 61.6% of the total burden (DALYs) due to YLL (Table 4.3). The burden due to YLL increases with increasing age, from 47.1% for younger men (ages 25–44) to 70.8% for older men (aged 65 and over). Although most deaths occur at ages 65 and over, the total burden of disease at ages 25–64 is slightly higher than that at ages 65 and over.

#### Men aged 25–44 years

The disease and injury burden for men aged 25–44 years is dominated by mental disorders (Figure 4.10), which make up 27.3% of the total burden for this age group. Mental disorder is dominated by substance abuse disorders (alcohol and illicit drugs)

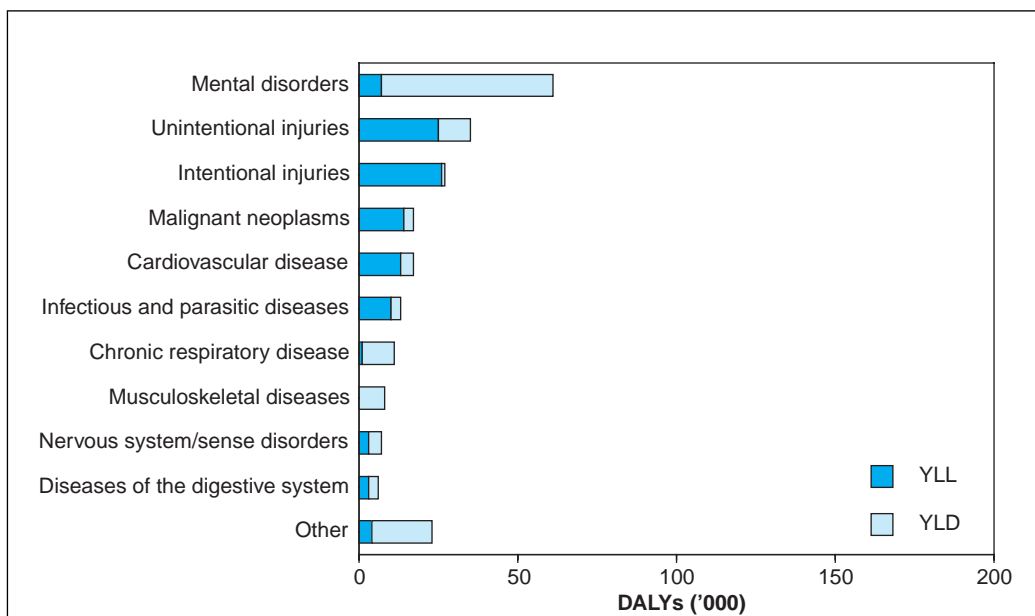
**Table 4.3: The total burden of disease and injury in men aged 25 years and over, 1996**

Age	YLD		YLL		DALYs
	Value	Per cent of DALYs	Value	Per cent of DALYs	
25–44	119,507	52.9	106,366	47.1	225,873
45–64	148,322	43.0	196,773	57.0	345,095
65 and over	152,995	29.2	370,779	70.8	523,774
<b>Total 25 and over</b>	<b>420,824</b>	<b>38.4</b>	<b>673,918</b>	<b>61.6</b>	<b>1,094,743</b>

Source: Australian Burden of Disease and Injury Study.

and depression, which make up 37.6% and 27.3% respectively of the burden of mental disorder. They contribute to the burden of disease mainly through disability rather than mortality.

Unintentional and intentional injuries are the second and third leading causes of disease and injury burden in this age group, accounting for 15.5% and 12.1% respectively of the total disease burden. Almost half of the unintentional injury burden comes from road traffic accidents (42.8%), and the majority of intentional injury burden comes from suicide and self-inflicted injury (85.2%). These conditions contribute mainly through mortality rather than disability.



Source: Australian Burden of Disease and Injury Study.

**Figure 4.10: Leading causes of burden of disease and injury in men aged 25–44 years, 1996**

The largest single cause of disease and injury burden in younger men is suicide and self-inflicted injury, which contributes 10.3% of the burden for this age group (Table 4.4). The other leading individual causes are depression (7.4%), road traffic accidents (6.6%), alcohol dependence and harmful use (5.8%), and HIV/AIDS (4.5%).

**Table 4.4: Leading single causes of burden of disease and injury in men by age, 1996**

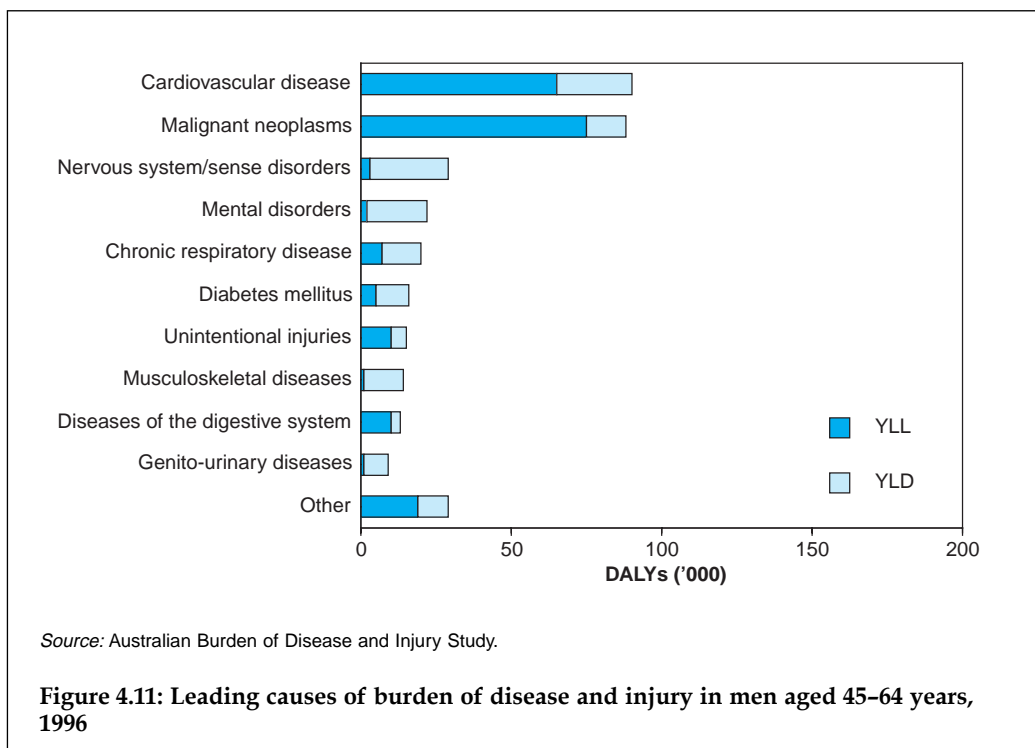
Condition	DALYs	Per cent of total
<b>25–44 years</b>		
Suicide and self-inflicted injuries	23,296	10.3
Depression	16,827	7.4
Road traffic accidents	14,929	6.6
Alcohol dependence and harmful use	13,026	5.8
HIV/AIDS	10,250	4.5
<b>All causes total</b>	<b>225,873</b>	
<b>45–64 years</b>		
Ischaemic heart disease	57,521	16.7
Lung cancer	22,509	6.5
Chronic obstructive pulmonary disease	16,999	4.9
Hearing loss	15,861	4.6
Diabetes mellitus	15,711	4.6
<b>All causes total</b>	<b>345,095</b>	
<b>65 years and over</b>		
Ischaemic heart disease	113,681	21.7
Stroke	45,111	8.6
Lung cancer	36,206	6.9
Chronic obstructive pulmonary disease	30,348	5.8
Alzheimer's disease and other dementias	27,804	5.3
<b>All causes total</b>	<b>523,774</b>	

Source: Australian Burden of Disease and Injury Study.

### Men aged 45–64 years

The two leading causes of disease and injury burden in men aged 45–64 are cardiovascular disease and cancer (malignant neoplasms) (Figure 4.11), which contribute 26.1% and 25.3% respectively of the total disease burden for this age group. The cardiovascular disease group is dominated by ischaemic heart disease (63.9%) and stroke (16.8%). The biggest contributors to the cancer group are lung cancer (25.8%) and colorectal cancer (16.0%). Both cardiovascular disease and cancer contribute mainly through mortality rather than disability.

The largest single cause of disease and injury burden in men aged 45–64 is ischaemic heart disease, which contributes 16.7% of the total disease burden for this age group (Table 4.4). The other leading individual causes of the disease burden are lung cancer (6.5%), chronic obstructive pulmonary disease (4.9%), hearing loss (4.6%) and diabetes (4.6%).



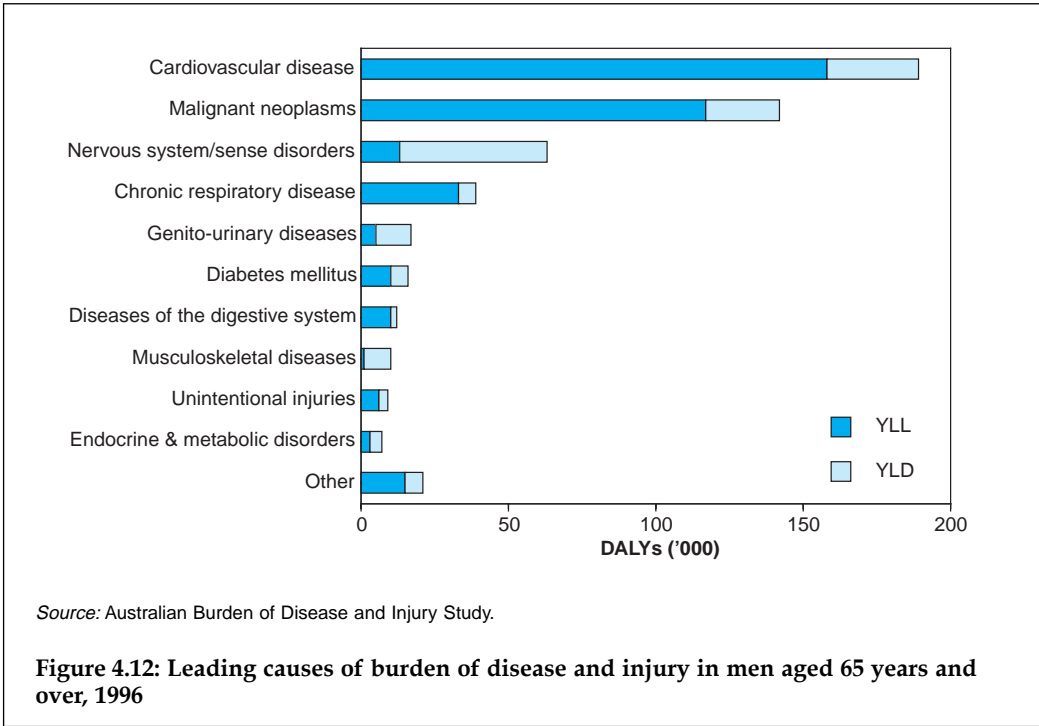
### Men aged 65 years and over

Cardiovascular disease and cancer are also the two leading causes of disease and injury burden in older men (Figure 4.12, page 196), contributing 36.1% and 27.1% respectively of the total burden for this age group. Once again, the cardiovascular disease group is dominated by ischaemic heart disease (60.2%) and stroke (23.9%). The cancer group is dominated by three cancers—lung cancer (25.5%), prostate cancer (18.8%) and colorectal cancer (14.0%). Again, the contribution of cardiovascular disease and cancer is mainly through mortality rather than disability.

The largest single cause of disease and injury burden in older men is ischaemic heart disease, which contributes 21.7% of the total disease burden for this age group (Table 4.4). The other leading individual causes are stroke (8.6%), lung cancer (6.9%), chronic obstructive pulmonary disease (5.8%), and Alzheimer’s disease and other dementias (5.3%).

### Women

Disability is a somewhat higher contributor to the overall disease and injury burden for adult women, with only 56.2% of the total disease burden due to YLL (Table 4.5). As with men, the burden due to YLL increases with increasing age, from 26.4% for younger women (ages 25-44) to 68.9% for older women (aged 65 and over).



### Women aged 25–44 years

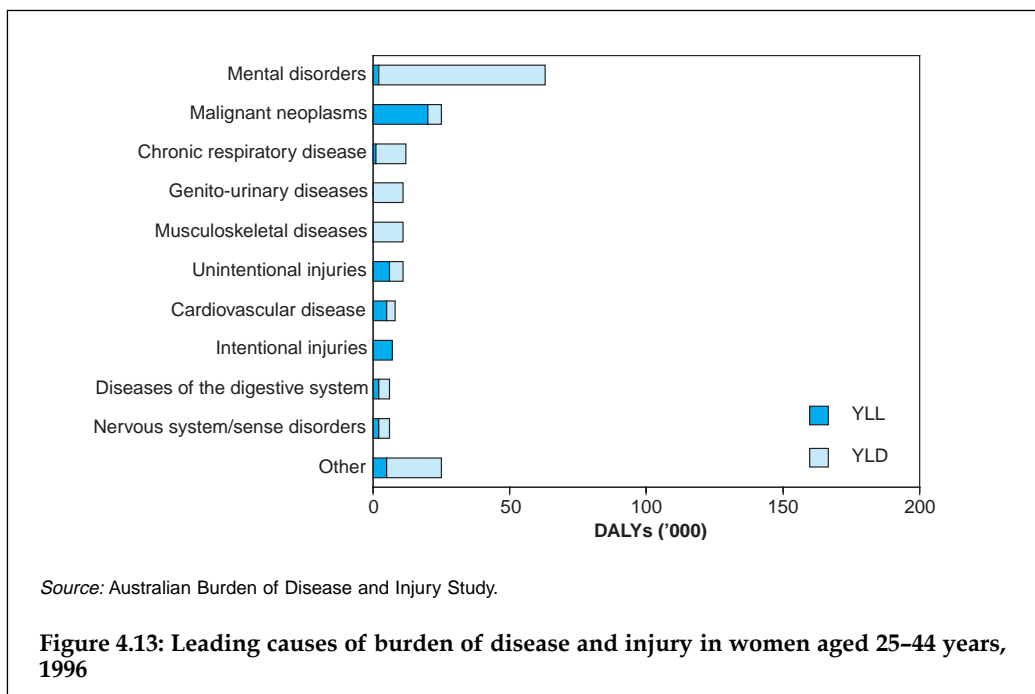
The disease and injury burden for younger women, as for younger men, is dominated by mental disorders (Figure 4.13), which make up 33.8% of the total burden for this age group. The principal mental disorders are depression and anxiety disorders, which make up 37.6% and 33.3% respectively of the burden of mental disorder. They contribute mainly through disability rather than mortality. Cancer is the second leading cause of disease and injury burden in this age group, accounting for 13.1% of the total burden. The biggest individual cancer is breast cancer, which makes up 37.1% of the cancer burden. Cancers contribute mainly through mortality rather than disability.

**Table 4.5: The total burden of disease and injury in women aged 25 years and over, 1996**

Age	YLD		YLL		DALYs
	Value	Per cent of DALYs	Value	Per cent of DALYs	
25–44	136,401	73.6	48,918	26.4	185,318
45–64	125,881	49.7	127,633	50.3	253,514
65 and over	170,730	31.1	378,498	68.9	549,228
<b>Total 25 and over</b>	<b>433,012</b>	<b>43.8</b>	<b>555,049</b>	<b>56.2</b>	<b>988,060</b>

Source: Australian Burden of Disease and Injury Study.

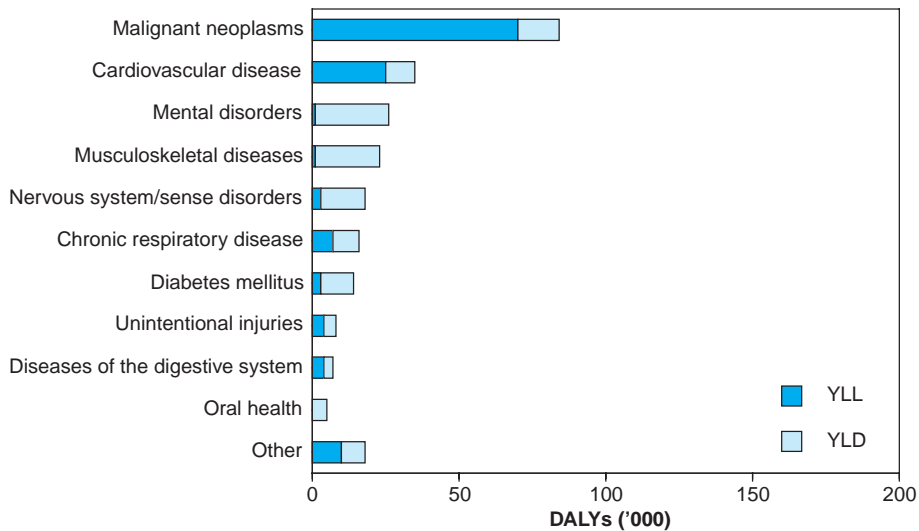
The largest single cause of disease and injury burden in younger women is depression, which contributes 12.7% of the total burden for this age group (Table 4.6, page 199). The other leading individual causes are generalised anxiety disorder (6.2%), breast cancer (4.9%), genito-urinary disease (4.2%) and asthma (3.5%).



### Women aged 45–64 years

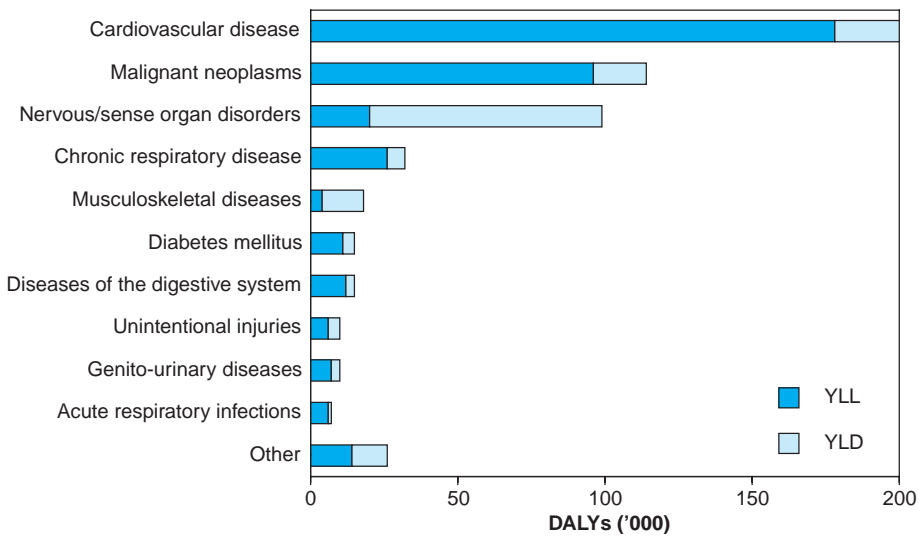
The leading cause of disease and injury burden in women aged 45–64 is cancer (Figure 4.14, page 198), which contributes 33.1% of the total disease burden for this age group. The three largest cancers in this age group are breast cancer, lung cancer and colorectal cancer, which contribute 30.3%, 14.3% and 13.0% respectively to the cancer burden. The second and third largest causes are cardiovascular disease and mental disorders, which account for 13.7% and 10.1% respectively of the total disease burden for this age group. Cardiovascular disease is dominated by ischaemic heart disease (47.0%) and stroke (28.7%) and mental disorders are dominated by depression (51.5%) and anxiety disorders (32.7%). Cancer and cardiovascular disease contribute mainly through mortality, and mental disorders contribute mainly through disability.

The largest single cause of disease and injury burden in women aged 45–64 is breast cancer, which contributes 10.0% of the total burden for this age group (Table 4.6). The other leading individual causes are osteoarthritis (6.6%), ischaemic heart disease (6.5%), diabetes (5.6%) and depression (5.2%).



Source: Australian Burden of Disease and Injury Study.

**Figure 4.14: Leading causes of burden of disease and injury in women aged 45-64 years, 1996**



Source: Australian Burden of Disease and Injury Study.

**Figure 4.15: Leading causes of burden of disease and injury in women aged 65 years and over, 1996**

**Table 4.6: Leading single causes of burden of disease and injury in women by age, 1996**

<b>Condition</b>	<b>DALYs</b>	<b>Per cent of total</b>
<b>25–44 years</b>		
Depression	23,546	12.7
Generalised anxiety disorder	11,529	6.2
Breast cancer	9,025	4.9
Other genito-urinary diseases	7,836	4.2
Asthma	6,548	3.5
<b>All causes total</b>	<b>185,318</b>	
<b>45–64 years</b>		
Breast cancer	25,451	10.0
Osteoarthritis	16,665	6.6
Ischaemic heart disease	16,381	6.5
Diabetes mellitus	14,232	5.6
Depression	13,237	5.2
<b>All causes total</b>	<b>253,514</b>	
<b>65 years and over</b>		
Ischaemic heart disease	111,267	20.3
Stroke	58,894	10.7
Alzheimer's disease and other dementias	48,946	8.9
Chronic obstructive pulmonary disease	21,838	4.0
Breast cancer	19,627	3.6
<b>All causes total</b>	<b>549,228</b>	

Source: Australian Burden of Disease and Injury Study.

### **Women aged 65 years and over**

The three leading causes of disease and injury burden in older women are cardiovascular disease, cancer, and nervous system and sense organ disorders (Figure 4.15), which contribute 37.2%, 20.8% and 17.9% respectively to the total burden for this age group. Cardiovascular disease is dominated by ischaemic heart disease (54.4%) and stroke (28.8%). The three largest cancers are breast cancer (15.1%), colorectal cancer (16.4%) and lung cancer (15.1%). In the nervous system and sense organ disorders group, the leading causes are Alzheimer's disease and other dementias (49.7%), hearing and vision disorders (32.1%) and Parkinson's disease (12.2%). Cardiovascular disease and cancer contribute mainly through mortality, and nervous system and sense organ disorders contribute mainly through disability.

The largest single cause of disease and injury burden in older women is ischaemic heart disease, which contributes 20.3% of the total burden for this age group (Table 4.6). The other leading individual causes are stroke (10.7%), Alzheimer's disease and other dementias (8.9%), chronic obstructive pulmonary disease (4.0%) and breast cancer (3.6%).