

# Men's health and wellbeing strategy background paper

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## Ministers' foreword

The Victorian government has made a commitment to reducing health inequalities and improving the wellbeing of Victorians. As part of this work we are gaining a stronger understanding of the crucial role of gender in influencing health and wellbeing outcomes for both men and women.

Men in Victoria enjoy an excellent level of health compared with international benchmarks. However, in a range of areas such as life expectancy, avoidable mortality and health risk behaviours, research shows us that more attention is needed.

In the area of women's health, substantial work has already been undertaken, including the development of the *Women's health and wellbeing strategy 2006–10*. Work initiated by the government to develop our first Victorian *Men's health and wellbeing strategy* will help extend our understanding of important factors influencing men's health and ways in which health outcomes can be improved. The strategy will assist services to understand and meet the needs of men, support men to create healthier lifestyles and increase men's engagement with health services.

This background paper is the initial step in the strategy development and provides the first comprehensive picture of the health and wellbeing of Victorian men. It sets out a framework and principles for responding to health issues common to men and proposes a range of priority areas for action. The approach outlined recognises the importance of government and service providers understanding and responding to gender differences in health behaviours as well as the need to support men in improving their own health.

We encourage you to contribute your views on this background paper to assist in the development of Victoria's first men's health and wellbeing strategy. We look forward to working in partnership with all stakeholders to deliver healthier lives for Victorian men.



**Hon Daniel Andrews MP**  
Minister for Health



**Hon Lisa Neville MP**  
Minister for Mental Health  
Minister for Senior Victorians



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## 1. Introduction

The Victorian Government is focused on improving the health and wellbeing of Victorians and reducing health inequalities across the population.

We know more today about the factors that influence health and wellbeing, and in recent years there has been an increasing awareness and concern regarding the burden of illness experienced by men in Western countries. In Australia work is currently underway, at both Commonwealth and state levels, to develop men's health policies and strategies to address the major health issues faced by men.

Historically in Australia there has been a strong focus on women's health policies, which has highlighted the effects that gender roles and social expectations can have on a person's health. A growing understanding that men and women can have different health needs and experiences is driving current initiatives in men's health and wellbeing.

Although men continue to fare better than women on many economic indicators, such as earnings and employment progression, in health they face poorer outcomes than women across a range of key indicators. Health areas of concern for men include lower life expectancy, higher levels of avoidable mortality and higher mortality from almost all common causes of death. Some groups of men are particularly at risk of poorer health, for example, Indigenous men, men living in rural areas and those of a lower socioeconomic status. However, even men in the *highest* socioeconomic quintile have a lower life expectancy than women in the *lowest* socioeconomic quintile (Department of Human Services 2005c). In fact, health inequalities faced by Victorian males (in terms of avoidable and unavoidable mortality rates, and life expectancy) compared with females are greater than those due to socioeconomic status (see Appendix: Table 8.3). However, not all health outcomes are poorer among men. Chronic disease for example is more prevalent among females (particularly arthritis, asthma and depression) and levels of disability do not differ between men and women.

While biological factors may make some contribution to sex-based health inequalities facing men, a range of research suggests that these are primarily due to social factors, such as social circumstances, lifestyle and behaviour, and use of health and support services (Courtenay 2003; GCC 2005). Men are more likely to have unhealthy lifestyles in areas including diet, alcohol and tobacco use; physical inactivity over age 35; and greater participation in a range of high-risk activities. Men use health and community services less and at a later stage in their illness and tend to have smaller social networks and be particularly affected by non-participation in employment due to the key status of work in the male identity. In addition, typically masculine values such as stoicism, suppression of emotion and self-reliance, have been shown to negatively affect the health behaviours of some men. There are also opportunities to improve the way that services understand and meet the needs of men.

Victoria has a range of population-based health strategies that cover many areas in which men experience particularly poor health outcomes. However, evidence indicates that an additional gender focus through a dedicated strategy is required to reduce health disparities faced by men. The Victorian Government has committed to developing the first Victorian Men's Health and Wellbeing Strategy. It will be led through the Department of Health, and will focus broadly on the factors which shape men's health and wellbeing.

This report brings together a broad range of information to provide the first comprehensive picture of the health and wellbeing of Victorian men. The focus of the report is primarily on the health of men rather than boys, however some complementary information about boys is provided. Boys are also an important focus for interventions aiming to support positive health behaviours among (future) men.

The report is intended to be a resource for practice and policy as well as providing the background and direction for the development of the men's health strategy. In addition to identifying health issues facing men (chapter three), it also highlights significant factors influencing men's health (chapter four) and what we know about the kinds of interventions that work (chapter six). A framework and specific areas for attention in the strategy are proposed (chapter five). After consultation and feedback, the strategy will be developed and released later in 2010.

This report focuses specifically on the health and wellbeing of Victorian men and a range of socioeconomic factors that influence it. The report is intended to engage with men and the services or groups they connect with men. While it is beyond the scope of the report to examine particular health issues facing women across these areas, it is acknowledged that in many areas they will face similar and different challenges that will affect their health.

## 2. Background

### Why focus on men's health and wellbeing?

One of the priorities in *A Fairer Victoria 2009* is to reduce health inequalities and improve the wellbeing of more Victorians. We already have a long standing Victorian Women's Health and Wellbeing Strategy. The *Victorian Women's Policy Framework 2008–2011* seeks to improve women's physical, mental and social wellbeing and focus on the health of women experiencing social or economic disadvantage.

Men's health and wellbeing is also an important issue for the wider community. From an equity perspective, there is an imperative to improve health outcomes for all people facing higher levels of avoidable ill health and premature death. Men currently experience major health inequalities in terms of life expectancy, and mortality from almost all leading causes of death.

There are also strong economic and social arguments for improving men's health. Men make a substantial contribution to Victoria's productivity and economic wellbeing that is significantly reduced as a result of poor health or premature death.

Medical and other costs associated with men's ill health are also substantial. For example, the lifetime costs (direct and indirect) of injury to men in Victoria have been estimated to be 1.7 times that of women, and for two of the largest injury categories, motor vehicle accidents and suicide/self-harm, the lifetime costs are twice that of women (Watson & Ozanne-Smith 1997). Similarly, the cost of men's work-related injury and illness in Victoria in 2005–6 is estimated to be more than twice that of women, \$7.7 billion compared with \$3.7 billion<sup>1</sup> (Commonwealth of Australia 2009).

Substantial economic impacts are also felt by men's partners and children through the reduction in income or increased costs of medical care. Family impacts include a reduced ability of men to fulfil their roles as partners, fathers and carers with a potentially profound impact on the welfare and quality of life of women, children and other men (Richardson 2004). Improving the health of men will have direct benefits for women, and children. In addition to paid employment and family, men also make an important contribution to local communities through the economic contribution they provide as well as through volunteering and care giving.

### Causes of men's health differentials

Men have a lower life expectancy across developed countries, and it is often suggested that biological differences may contribute to this difference. For example, there are a greater number of male than female deaths in-utero; males have a greater likelihood of congenital abnormalities across the life course; and males exhibit greater psychophysiological responses during acute behavioural stress, and are slower to recover from stress (Courtenay 2003).

However, a range of research indicates that the contribution of biological factors to differences in morbidity and mortality is comparatively small (Courtenay 2003; GCC 2005). Rather, it is social and structural causes that explain most of the health gender gap (GCC 2005), with tobacco use a significant factor (Bobak 2003). In Europe, for example a large study comparing monks and nuns (living in the same conditions without lifestyle excesses) with the general population between 1950 and 2000 found almost no difference in life expectancy (Allianz 2009).

Evidence that a large proportion of men's health problems could be avoided through changes in modifiable lifestyle factors suggests that an increased focus on, and understanding of, men's health and wellbeing could lead to improved outcomes for men, as well as stronger families and communities.

### Policy context

#### Men's health issues

Despite the poor health outcomes experienced by Australian men, historically men's health has received a low level of attention, with men considered to be in a privileged position relative to women, which is still the case on many measures. The focus on men's health has either focused on particular groups of men, for example, gay men; or particular issues, such as prostate cancer. However, overall there has been a lack of representation or recognition of men's needs. There is also a lack of awareness about male-specific health issues (for example, male sexual and reproductive health) as well as non-gendered health issues (such as heart disease and cancer) where males are over represented.

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<sup>1</sup> Based on Australian gender splits for total Victorian cost of workplace injury and illness in 2005–06 (\$11.4 billion)

An increasing interest in men's health and wellbeing from both biomedical and social perspectives has led to a growing body of research into lay perspectives on health and wellbeing and men's use of services. Other academic work has explored the influence of men's beliefs about health and wellbeing and of 'what it means to be a man' (the complex issues of gender, gender relations, gender identity and masculinity) on men's health-related behaviours (Hoyt 2007; Mahalik et al. 2007b; Sloan et al. 2009).

The challenge now in developing a Victorian men's health policy is to attempt to synthesise a broad range of disciplinary ideas into a meaningful framework, which can easily translate into practice and policy contexts.

### Victorian policy context

One of the four key priorities of *A Fairer Victoria* is to improve health and wellbeing and reduce health inequalities. This includes:

- reducing health inequalities across the population
- promoting health for all by ensuring disease prevention and health promotion reaches all Victorians
- providing quality services and supporting people to live in the community (with a particular focus on improving outcomes for people with a disability).

The Department of Human Services has already undertaken work to better understand the mechanisms that drive inequalities in health relating to:

- the distribution of material and social resources
- exposure to disease risk factors and unhealthy places
- times of greater vulnerability over the life course
- unequal access and use of quality health and related services.

It is argued that men's health and wellbeing activities have generally been fragmented rather than part of an integrated or comprehensive approach to men's health policy (Hardy 2007). While in the main these activities have been ad hoc and short term without secure resources, there are some examples of successful and sustained initiatives where health and wellbeing needs of men have been recognised at the local level and integrated into local planning processes.

The development of a Victorian Men's Health and Wellbeing Strategy presents an opportunity to build on existing Department of Health activities related to men's health and wellbeing such as:

- data collection – with the Victorian Population Health Survey an important annual report describing issues for men's health
- men's health promotion initiatives including health education sessions
- drought counselling
- men's sheds
- support for community health centres to provide men's health clinics – for example Whitehorse Community Health Service
- programs for young fathers, men's carer groups, population-based initiatives for Indigenous men, rural men, gay men, older and younger men.

### National Preventative Health Strategy

In September 2009 the Australian Government released the National Preventative Health Strategy. This is particularly relevant for improving men's health outcomes given the substantially higher levels of avoidable mortality overall and higher health risks due to both tobacco and alcohol.

The strategy's conceptual framework is based on four rationales: influencing markets; reducing inequities in health; developing effective policies; and, investing for maximum benefit. From this, seven strategic directions have been proposed:

1. Shared responsibility – developing strategic partnerships
2. Act early and throughout life
3. Engage communities
4. Influence markets and develop connected and coherent policies

5. Reduce health inequity through targeting disadvantage groups (especially low socioeconomic status)
6. Indigenous Australians – contribute to 'Close the Gap'
7. Refocus primary healthcare towards prevention (National Preventative Health Taskforce 2009)

These directions are broadly consistent with the approach to improving men's health and wellbeing outlined in this paper.

## Approach

### A focus on gender

Service planning and delivery, health promotion and disease prevention strategies are often 'gender neutral' and based on an assumption that interventions will be equally successful for men and women. This is compounded by the use of research where the sex of subjects is not made clear (Ostlin et al. 2006; Payne 2009). By contrast, a gender perspective recognises that men and women can have different health risks, needs, attitudes and behaviours due to biological, social, economic and psychological differences (WHO 2009).

A gender perspective is important in understanding the influence of different factors on health and wellbeing, as well as how interventions can be best designed to improve outcomes for both men and women (Keleher 2004).

The United Nations has recommended the mainstreaming of a gender perspective in the design, implementation, monitoring and evaluation of policies and programs across social policy areas (UN Economic and Social Council 2006). Similarly, the World Health Organization (WHO) has called on member states to incorporate a gender perspective in all levels of health care delivery and services, including those for young people.

In order to ensure that women and men of all ages have equal access to opportunities for achieving their full health potential and health equity, the health sector needs to recognize that they differ in terms of both sex and gender. Because of social (gender) and biological (sex) differences, women and men face different health risks, experience different responses from health systems, and their health-seeking behaviour, and health outcomes differ (WHO 2008, p.6).

WHO recommendations include:

- analysis of sex-disaggregated health data
- investigation of observed differences between men and women
- formulation of policy positions and advice, norms, standards, tools and guidelines to respond to avoidable differences
- incorporation of gender analysis and planning in strategic and operational planning
- formulation of national strategies for addressing gender issues in health policies, programmes and research
- identification of effective interventions (WHO 2008).

Gender analysis should aim to improve understanding of differences in:

- health risks and protective factors
- access to resources for protecting health
- the manifestation, severity and frequency of disease and health outcomes
- health-seeking behaviour
- social, economic and cultural contributing factors
- the consequences of ill health and disease (WHO 2008).

Within the Department of Health, work has been undertaken to support gender analysis through the development of the Gender and Diversity Lens. The lens was a key action from the second stage of the Victorian Women's Health and Wellbeing Strategy (2006–2010). It aims to assist departmental programs and funded agencies to proactively consider the interaction between gender, diversity and disadvantage during the planning cycle and service delivery.

## Sex, gender and health

Where sex refers to biologically determined differences between men and women, gender refers to those that are socially constructed and can capture the inter-related dimensions of biological differences, psychological difference and social and cultural roles (Keleher 2004). Gender can be thought of as expressing the social and cultural ideas about what it is to be a man or woman.

Although biological differences are the origin of those health issues traditionally considered as men's or women's health issues such as reproductive and sexual health, gender roles have a crucial influence on men's and women's health more broadly by impacting on a range of factors such as:

- exposure to health risk factors
- access to and understanding of information about disease management, prevention and control
- experience of illness
- attitudes towards one's own health and the health of family members
- patterns of service usage
- barriers faced in accessing services
- perceptions of quality of care (Commonwealth of Australia 2008a; WHV 2009)

Further interactions between gender and other social attributes such as low socioeconomic status can lead to poorer outcomes for particular groups of men and women. A recent report from the UK Department of Health reported that 'gender remains both an extremely important determinant of health outcomes **independently** of economic status and the most significant of the other factors **interacting** with economic status to compound health inequalities (Wilkins et al. 2008, p.102)'. Among men there is evidence that gender norms can impact on health by assigning them roles that promote risk taking behaviour and place less emphasis on maintaining health (WHO 2008).

Where in the past gender has been used to denote an increased focus on women's health, a more complete approach views gender as an equally important concept for the analysis of *both* men's and women's health.

## A focus on health and wellbeing

The understanding of health used in the men's health and wellbeing strategy will be holistic, going beyond ill health to include both health creation and health promotion. This approach is consistent with the World Health Organization definition of health as 'the state of complete physical, mental and social wellbeing and not merely the absence of disease and infirmity' (WHO 1948). This definition is being used by the Commonwealth government in the development of the Australian men's health policy. Such a holistic approach is also in line with the National Health and Hospitals Reform Commission (NHHRC) call for a greater emphasis on prevention and wellness:

...our health system also needs greater emphasis on helping people stay healthy through stronger investment in wellness, prevention and early detection and appropriate intervention to maintain people in as optimal health as possible (NHHRC 2009, p.2).

## A social model of health

A social model of health moves beyond a narrow focus on illness and disease to recognise a range of additional factors that influence health such as family relationships, environmental factors, social and economic policies as well as individuals' behavioural patterns and personality structure (Smedley & Syme 2000).

Issues impacting upon health range from broad factors described as 'upstream' to more individually specific 'downstream' factors (AIHW 2008b; Dahlgren & Whitehead 2006).

**Table 2.1 Factors impacting on health (from upstream to downstream factors)**

Upstream	→	→	Downstream
<i>Broad features of society</i>	<i>Socioeconomic characteristics</i>	<i>Health behaviours</i>	<i>Biomedical factors</i>
<ul style="list-style-type: none"> <li>• Culture</li> <li>• Social cohesion</li> <li>• Economic policies</li> <li>• Environment</li> </ul>	<ul style="list-style-type: none"> <li>• Employment</li> <li>• Income</li> <li>• Housing</li> <li>• Knowledge/attitudes</li> </ul>	<ul style="list-style-type: none"> <li>• Tobacco use</li> <li>• Physical activity</li> <li>• Sexual behaviours</li> <li>• Psychological factors</li> </ul>	<ul style="list-style-type: none"> <li>• Blood pressure</li> <li>• Blood cholesterol</li> <li>• Body weight</li> <li>• Immune status</li> </ul>

(AIHW 2008b)

A comprehensive health strategy would address both downstream and upstream determinants of health and the relationships between them. In many cases unhealthy upstream factors will be connected with downstream causes of disease or illness. Factors such as knowledge and attitudes can include the social acceptability of the use of tobacco, alcohol and other drugs, and the social and cultural constructs of 'masculinity' (Dahlgren & Whitehead 2006). An integrated range of initiatives would be used to influence health at a range of levels including individual, interpersonal, institutional/organisational, community and broader public.

Factors influencing health can be *positive health factors* that contribute to the maintenance of health; *protective factors* that eliminate risk or facilitate resistance to disease; and *risk factors* or *risk conditions* that cause preventable health problems and diseases (Dahlgren & Whitehead 2006).

Different factors are also likely to interact and produce patterns of health or illness within different sub-groups, for example the interaction between race and socioeconomic status among Indigenous men (Leonard 2003).

### A focus across the life course

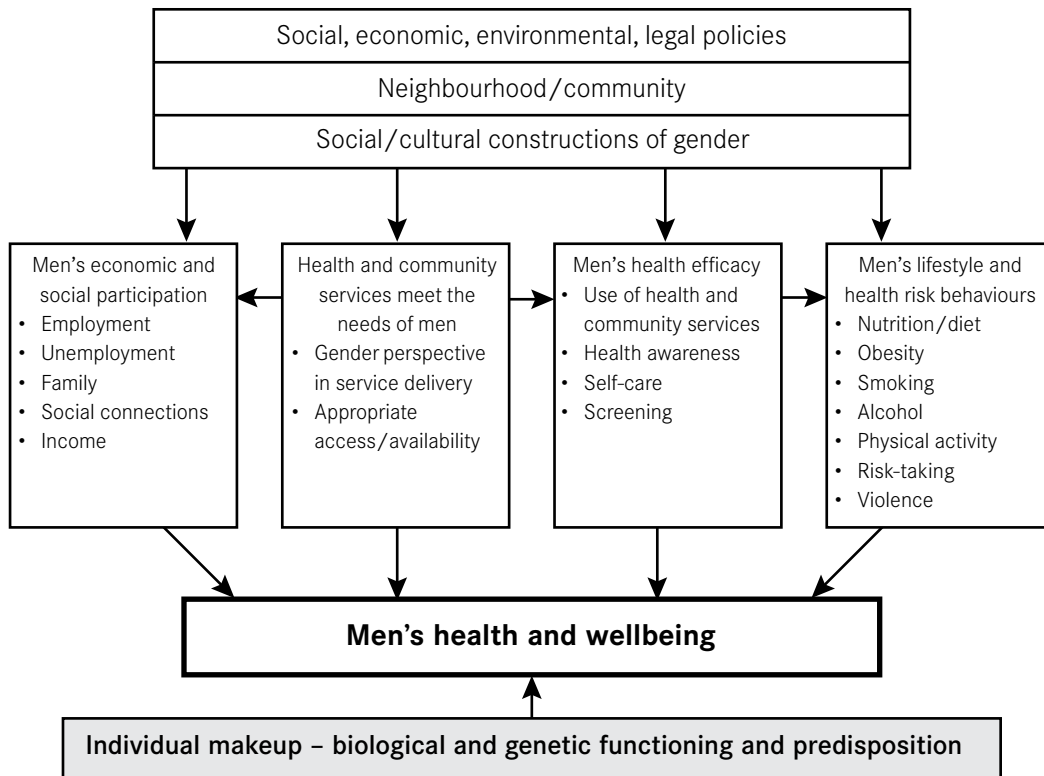
A life course approach recognises that men's experience of health and wellbeing, health-related attitudes and behaviours and service usage will change substantially over the life course as a result of both the biological process of Ageing and men's exposure to different roles: in relationships, family and work. Effective interventions will need to take account of and respond to these differences. The life course approach also enables the identification of critical transition points that may present opportunities and barriers for interventions, such as school to paid work, becoming a parent, and retirement (MHIRC 2009).

### Framework

The conceptual framework presented in Figure 2.1 will be used to examine factors impacting negatively on men's health and wellbeing outcomes in chapter 4. Chapter 3 provides a summary of the status of men's health in Victoria.



Figure 2.1 Men's health key intervention points



### 3. State of men's health and wellbeing in Victoria

This chapter provides an overview of the current state of men's health in Victoria and includes an examination of key health indicators, groups of men with poorer health outcomes, and specific conditions with a large impact on men.

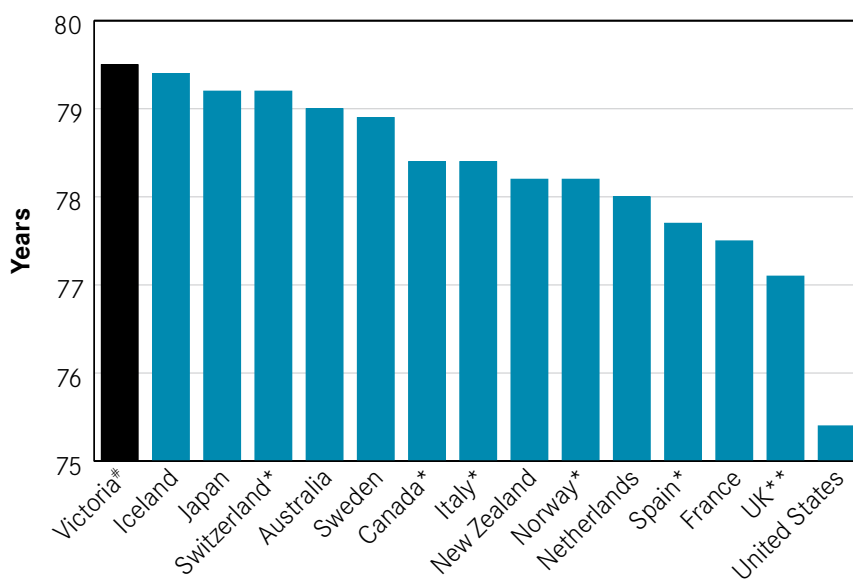
#### Health outcomes

##### Life expectancy

Life expectancy is an important indicator of health and wellbeing and health inequalities. In 2007 males born in Victoria had a life expectancy at birth of 79.5 years, compared with a female life expectancy of 83.8 years. Since 1997 male life expectancy has increased from 75.8 years and the gender gap has reduced from 5.6 to 4.3 years. However, the inequality in life expectancy due to gender remains substantial and is more than 50 per cent *greater* than that due to socioeconomic status<sup>2</sup> (Department of Human Services 2005c). In 2007, Australian men also recorded a lower healthy life expectancy (the estimate of how many years they might live in 'good health') than women, 72 compared with 75 years (WHO 2009).

Men in Victoria have the second highest life expectancy in Australia, after the ACT where men have a life expectancy at birth of 80.3 years (ABS 2008a). Internationally, Victorian men have among the highest life expectancy in the world, and in 2007 recorded a life expectancy higher than men in all other OECD countries.

**Figure 3.1 Victorian male life expectancy comparison with selected OECD countries in 2007**



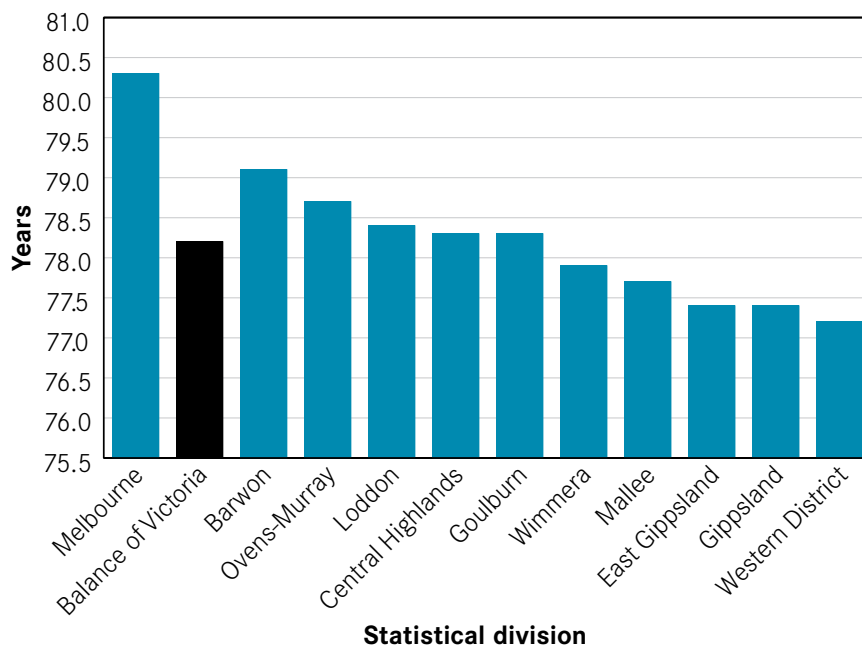
(OECD 2009) \* 2006 figures; \*\*2005 figure; # ABS 2008a

However, life expectancy varies considerably between different groups of men and men living in different areas. For men in the lowest socioeconomic quintile in 2006 life expectancy was around 3.6 years shorter than for those in the highest socioeconomic quintile. Moreover, although life expectancy for men in both the highest and lowest quintiles increased between 1996 and 2006 (see Appendix Figure 8.1) the gap in life expectancy has not reduced (Department of Human Services 2006a).

In 2007 life expectancy by statistical division ranged from a high of 80.3 in Melbourne to a low of 77.2 for men living in the Western District. The average life expectancy for areas outside of Melbourne was 78.2 years, 2.1 years lower than for men living in Melbourne.

<sup>2</sup> The gap in life expectancy of males and females in the highest socioeconomic quintile with those in the lowest socioeconomic quintile

Figure 3.2 Life expectancy of Victorian men by statistical division in 2007



(ABS 2008b)

Life expectancy also varies significantly between different local government areas (LGAs). Between 2002 and 2006 the average male life expectancy across Victorian LGAs was 79.3 years: the highest in Nillumbik (82.8), Melbourne (82.0) and Boorondara (81.5) and the lowest in Loddon (74.4), Indigo (75.5) and Moia (75.8) (see Appendix Table 8.1). The difference between the highest and lowest male life expectancy among LGAs (8.4 years) is greater than that between the highest and lowest female life expectancy (6.4 years) suggesting a greater impact of location on males. Of concern is the increase in the gap between male life expectancy in the highest and lowest LGAs by almost 50 per cent since the period 1997–2001 (Department of Human Services 2006b).

Indigenous men record the lowest life expectancy of any group in Victoria. Although reliable data is difficult to obtain, the estimated life expectancy for Indigenous men born in between 2005 and 2007 was 67.2 years, which was 12.3 years less than for all males born in Victoria over this period.

## Mortality

Very substantial health inequalities exist in mortality rates of men and women. Between 2001 and 2005 total rates of male mortality (avoidable and unavoidable) were 1.6 times those of females. This difference is *larger* than that due to socioeconomic status, where the rate of mortality of those in the lowest economic quintile (male and females) is 1.3 times that of those in the highest economic quintile (see Appendix Table 8.3) (Department of Human Services 2005c). In 2007, the rate of adult mortality (deaths between the age of 15 and 60) was over 70 per cent higher among Australian males than females (WHO 2009).

The leading single cause of death for Victorian males in 2007 was ischaemic heart disease (also known as coronary heart disease). This was responsible for 2916 deaths, which was 17.2 per cent of all male deaths. This was followed by lung cancer (1165 deaths), stroke (1041), chronic lower respiratory diseases (842), and prostate cancer (796) deaths (see Table 3.1). Cancers as a group were responsible for 5569 deaths (32.9 per cent of all male deaths); and cardiovascular disease for 4281 deaths (25.3 per cent of all male deaths) (ABS 2008a; Becker et al. 2006). As Table 3.1 shows, male standardised death rates were substantially higher than those for females for all of the 25 most common causes of death other than dementia and Alzheimer's. The greatest difference was for suicide where the male standardised mortality rate was three times that of females.

**Table 3.1 Leading 25 causes of death for Victorian males in 2007**

Rank	Underlying cause of death	Number of deaths	Percentage of all male deaths	Ratio of male to female standardised death rates
1	Ischaemic heart disease	2,916	17.2	1.8
2	Lung cancer	1,165	6.9	1.9
3	Stroke	1,041	6.1	1.1
4	Chronic lower respiratory diseases	842	5.0	1.8
5	Prostate cancer	796	4.7	–
6	Dementia and Alzheimer's disease	654	3.9	0.9
7	Blood and lymph cancer	527	3.1	1.7
8	Cancer of the colon and rectum	521	3.1	1.4
9	Diabetes mellitus	500	3.0	1.3
10	Diseases of urinary system	343	2.0	1.3
11	Intentional self-harm (suicide)	333	2.0	3.4
12	Pancreatic cancer	322	1.9	1.5
13	Heart failure and complications	296	1.7	1.1
14	Influenza and pneumonia	266	1.6	1.3
15	Cirrhosis and other liver diseases	219	1.3	2.6
16	Melanoma and other skin cancers	219	1.3	2.2
17	Liver cancer	207	1.2	2.5
18	Stomach cancer	198	1.2	1.8
19	Land transport accidents	196	1.2	2.8
20	Oesophageal cancer	187	1.1	2.6
21	Parkinson's disease	181	1.1	2.3
22	Aortic aneurysm and dissection	174	1.0	1.9
23	Bladder cancer	167	1.0	3.0
24	Brain cancer	162	1.0	1.6
25	Accidental falls	158	0.9	1.5

(ABS 2008a; Becker et al. 2006)

Looking at causes of death by leading causes of years of potential life lost (YPLL) is useful in taking account of the average age at which males die from particular causes, and subsequent burden on families and society. Years of potential life lost are the difference between the actual age of death and age 78 (the median age of death in 2001). Hence causes of death that affect men at younger ages will have a greater impact in terms of YPLL. Men's higher level of YPLL suggests that in addition to having a greater likelihood of death from most common causes they are also likely to die from these at a younger age.

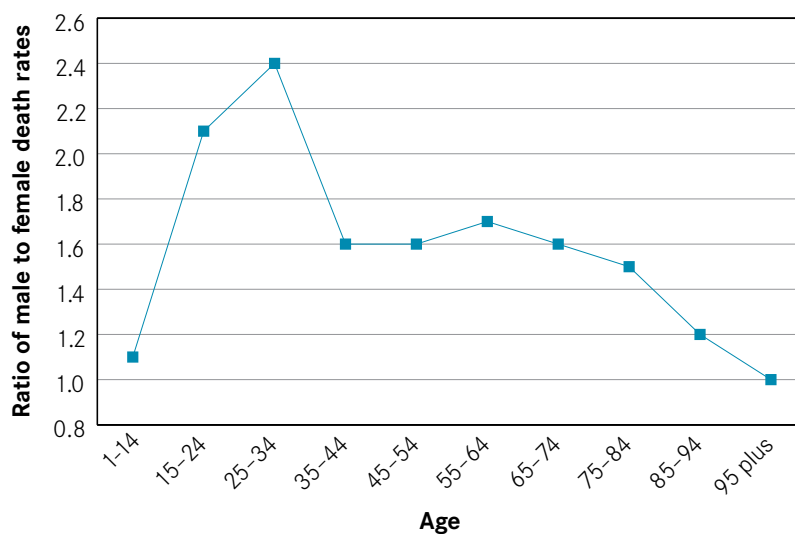
As Table 3.2 shows, the five leading causes of potential life years lost differ noticeably from causes of death identified in Table 3.1. Ischaemic heart disease remains the greatest cause, accounting for 11.4 per cent of all male YPLL. However, the second greatest cause is intentional-self harm, which accounts for 8.9 per cent of all YPLL, compared to two per cent of all deaths. Similarly, land transport accidents cause 5.9 per cent of all male YPLL compared with 1.2 per cent of all deaths. This highlights the young age of many males dying from these two causes. Conversely, prostate cancer is the fifth greatest cause of death accounting for 4.7 per cent of all deaths, but the fifteenth greatest cause of YPLL (1.7). Males also face a substantially greater number of YPLL from all these conditions than women.

**Table 3.2 Leading causes of years of potential life lost (to age 78) for Victorian males in 2007**

Rank	Underlying cause of death	YPLL	Percentage of all male YPLL	Ratio of male to female YPLL
1	Ischaemic heart disease	14998	11.4	4.3
2	Intentional self-harm (suicide)	11742	8.9	3.2
3	Lung cancer	8720	6.6	1.6
4	Land transport accidents	7727	5.9	2.9
5	Blood and lymph cancer	4507	3.4	1.5
6	Stroke	4150	3.1	1.3
7	Cancer of the colon and rectum	4019	3.0	1.2
8	Cirrhosis and other liver diseases	3578	2.7	3.3
9	Brain cancer	2994	2.3	1.7
10	Pancreatic cancer	2867	2.2	1.9
11	Diabetes mellitus	2788	2.1	1.7
12	Chronic lower respiratory diseases	2634	2.0	1.1
13	Liver cancer	2396	1.8	3.6
14	Melanoma and other skin cancers	2312	1.8	1.5
15	Prostate cancer	2303	1.7	-
16	Oesophageal cancer	1910	1.4	5.3
17	Stomach cancer	1812	1.4	1.5
18	Kidney cancer (except renal pelvis)	1412	1.1	2.7
19	Cardiomyopathy	1359	1.0	2.5
20	Heart failure and complications	1315	1.0	2.2
21	Congenital malformations, deformations and chromosomal abnormalities	1284	1.0	1.6
22	Mental/behavioural disorders due to substance use	1136	0.9	5.9
23	Accidental falls	1093	0.8	4.7
24	Aortic aneurysm and dissection	1082	0.8	4.0
25	Diseases of urinary system	749	0.6	1.1

(ABS 2008a; Becker et al. 2006)

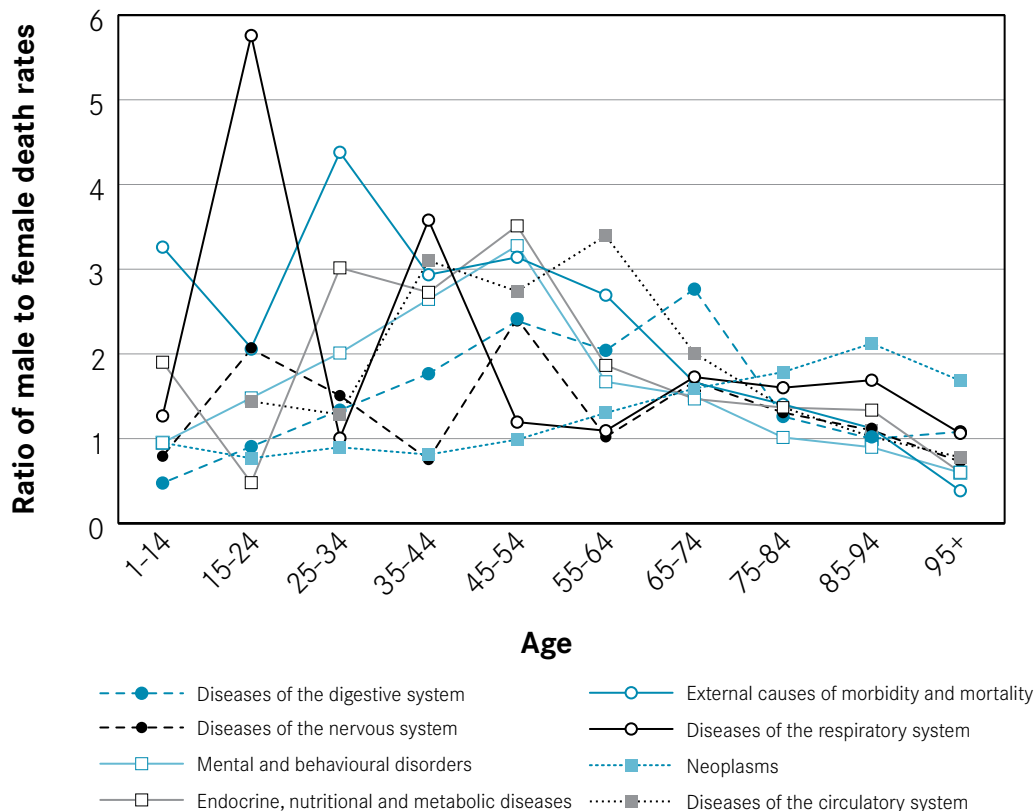
As has been found in other countries, males in Victoria have a higher rate of death across all age groups and from all major disease groups than females. As noted elsewhere, this difference and particularly the scale of difference represents a fundamental health inequality (Richardson 2004). Figure 3.3 shows that the number of male deaths for each female death is at its highest in the 25–35 year age group where there are 2.4 male deaths for each female death. In the 15–24 age group there are 2.1 male deaths for each female death and between 35 and 74 there are around 1.6 male deaths for each female death.

**Figure 3.3 Ratio of male to female standardised death rates per 100,000 by age group in Victoria (2007)**

(ABS 2008a)

Looking at the ratio of male to female deaths for the major disease groups across the life cycle again highlights the substantially higher rates of mortality faced by males. As Figure 3.4 shows, at all ages other than the 95 plus age group males are more likely to die from most major conditions. For example in the 25–34 age group there are more than four male deaths for each female death due to external causes of mortality (suicide, poisoning, injuries etc.). Neoplasms (primarily cancer) are one disease group where men aged 15–44 are less likely to die than women, however over the age of 54 (when numbers of cancer deaths are much higher) men have a greater likelihood of death due to cancer.

**Figure 3.4 Ratio of male to female deaths per 100,000 by leading causes of death and age group in Victoria in 2006**



(ABS 2007a)

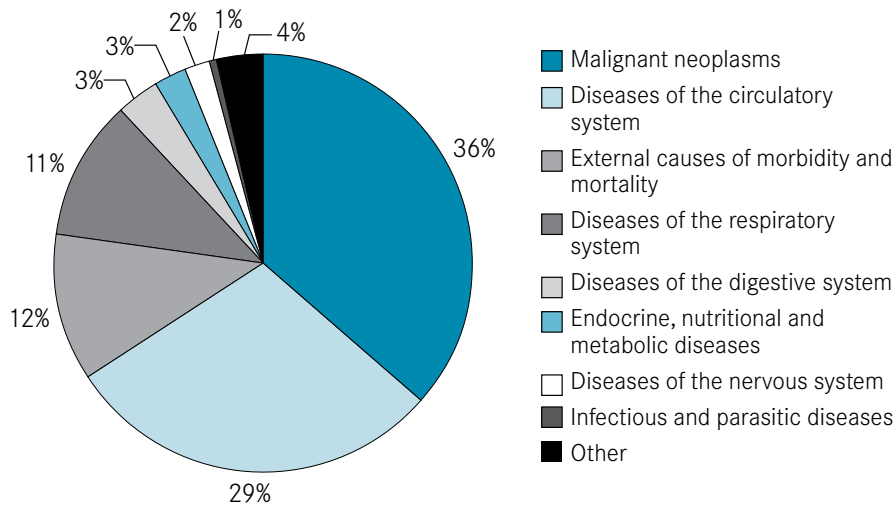
The overall ratio of male to female standardised mortality rates is greatest for external causes of mortality and morbidity, with male mortality 2.3 times that for females. This is followed by diseases of the respiratory system (1.7 times greater for males), neoplasms (1.6) and diseases of the digestive and circulatory systems (both 1.4 times greater for males) (see Appendix Table 8.2).

### Causes of the male-female mortality gap

Overall, the standardised male mortality rate was almost 50 per cent greater than that for females in 2007: 659.9 deaths per 100,000 compared with 475.8 deaths per 100,000. Understanding the causes of this gap (an additional 220.1 male deaths per 100,000) is important in effectively responding to the current health inequalities faced by men.

In terms of individual causes of mortality, additional male mortality (above the rate experienced by females) due to ischaemic heart disease is by far the greatest contributor being responsible for the highest percentage of the gap in standardised mortality rates at 24 per cent; followed by lung cancer (10 per cent), chronic lower respiratory disease (seven per cent), and suicide and blood/lymph cancer, both responsible for four per cent of the gap (ABS 2008a). However, when looking at the mortality gap by broad disease grouping (see Figure 3.5) cancer (36 per cent) and cardiovascular disease (29 per cent) together account for around two-thirds of the mortality gap. Other significant contributors are external causes of mortality (12) and diseases of the respiratory system (11 per cent).

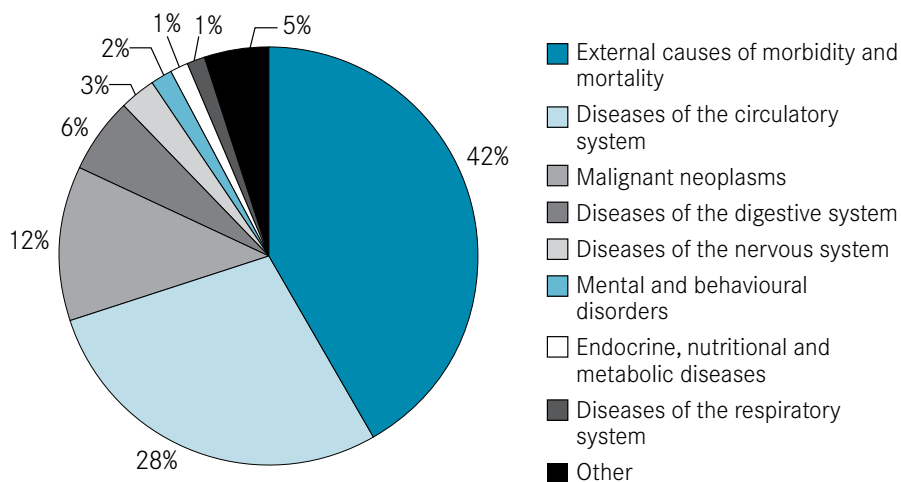
**Figure 3.5 Causes of the gap in male and female standardised mortality rates in Victoria in 2007**



(ABS 2008a)

In 2007, male life years lost were around 70 per cent greater than those lost by females: 132,018 compared with 78,372. This resulted in a male-female gap of 53,646 life years lost. As with the gap in standardised death rates, men's additional YPLL due to ischaemic heart disease was the condition that contributed most to this gap (22%). However, suicide and land transport accidents were both much greater contributors to the YPLL (15 and 10 per cent respectively) than standardised mortality rate gap, highlighting the impact of these conditions on younger males. Lung cancer made up six per cent, cirrhosis and liver diseases five, and liver, esophageal and blood/lymph cancers, each accounted for three per cent of the YPLL gap. In terms of broad disease groupings external causes of morbidity was by far the greatest cause of men's additional YPLL, responsible for 42 per cent of the gender gap. This was followed by diseases of the circulatory system (28 per cent) and cancer (malignant neoplasms) (12 per cent).

**Figure 3.6 Causes of the gap in male and female years of potential life lost (YPLL) in Victoria in 2007**



(ABS 2008a)

Overall, these data indicate that efforts to reduce inequalities in mortality experienced by men (and subsequent shorter life expectancy) need to address three core areas:

1. Cardiovascular diseases (particularly ischaemic heart disease)
2. External causes of accidents and injury (particularly suicide)
3. Cancer (particularly lung cancer and possibly blood/lymph cancer).

Together these causes contribute to almost 80 per cent of the gender gap in both standardised death rates and years of potential life lost. Importantly, deaths from these causes (with the exception of some cancers) are also highly preventable. Focusing on suicide, land transport accidents and other accidents and injuries is particularly important in reducing mortality among young men.

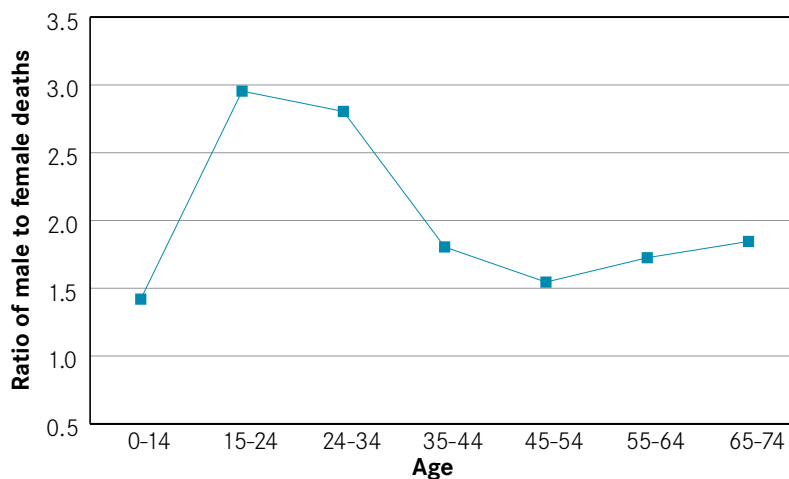
### Avoidable mortality

Avoidable mortality measures early deaths in men and women who are under 75 years of age caused by selected conditions for which effective preventative or medical interventions are available. It is also likely to reflect different levels of engagement with the primary health system. Avoidable mortality figures are useful in highlighting health inequalities and identifying areas for intervention in terms of age groups, population sub-groups and specific conditions.

As with total mortality rates, substantial health inequalities exist between males and females for avoidable mortality rates, which again are substantially *greater* than those due to socioeconomic status (See Appendix Table 8.3).

Overall, men face a level of avoidable mortality 74 per cent higher than women (197.6 compared with 113.85 per 100,000). The highest rates of male avoidable mortality, relative to women, are in the 15–24 and 25–34 year age groups where there are almost three avoidable male deaths for every female death. Avoidable deaths among males aged 35–74 remain far above those experienced by females with between 1.5 and 1.8 avoidable male deaths for each avoidable female death.

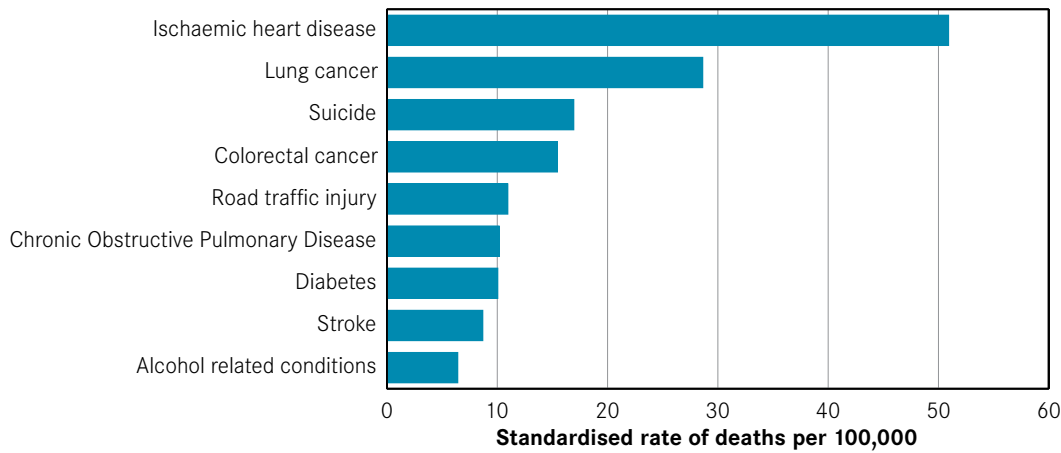
**Figure 3.7 Ratio of male to female avoidable mortality rates by age group in Victoria (2001–05)**



(Department of Human Services 2006b)

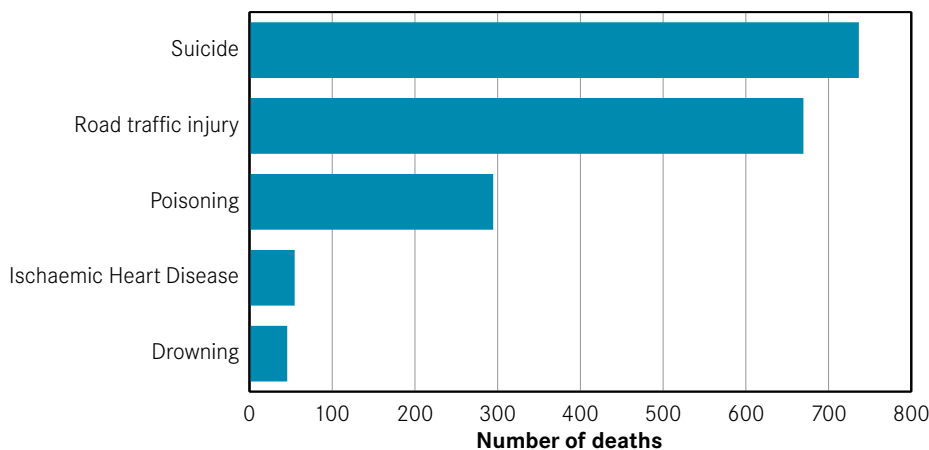
As Figure 3.8 shows the leading cause of avoidable mortality for Victorian men is ischaemic heart disease which resulted in 51 avoidable deaths per 100,000 males annually between 2001 and 2005. This is followed by lung cancer, suicide and colorectal cancer. Road traffic injuries were the fifth greatest cause of avoidable deaths over this period.



**Figure 3.8 Leading causes of avoidable mortality for males up to age 74 in Victoria (2001–05)**

(Department of Human Services 2006b)

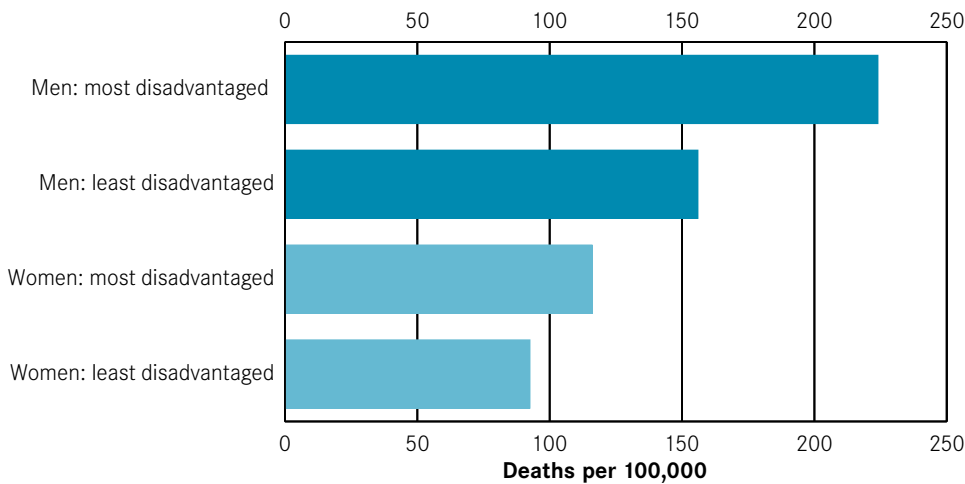
Among 15 to 34 year olds, where the greatest differences in male and female avoidable mortality exist, suicide is the greatest cause of avoidable deaths, followed by road traffic injuries and poisoning.

**Figure 3.9 Five leading causes of avoidable mortality for men aged 15 to 34 in Victoria (2001–05)**

(Department of Human Services 2006b)

While men overall face substantially higher rates of avoidable mortality than women, large differences also exist in rates of avoidable mortality between groups of men. As Figure 3.10 shows, the rate of avoidable deaths for men in the most disadvantaged quintile is around 1.45 times that of men in the least disadvantage quintile. However, even among men in the *least* disadvantaged quintile the rate of avoidable deaths is still substantially higher (1.35 times greater) than among women in the most disadvantaged quintile. The data indicates that socioeconomic status has almost double the effect in increasing men's levels of avoidable mortality compared with women's.

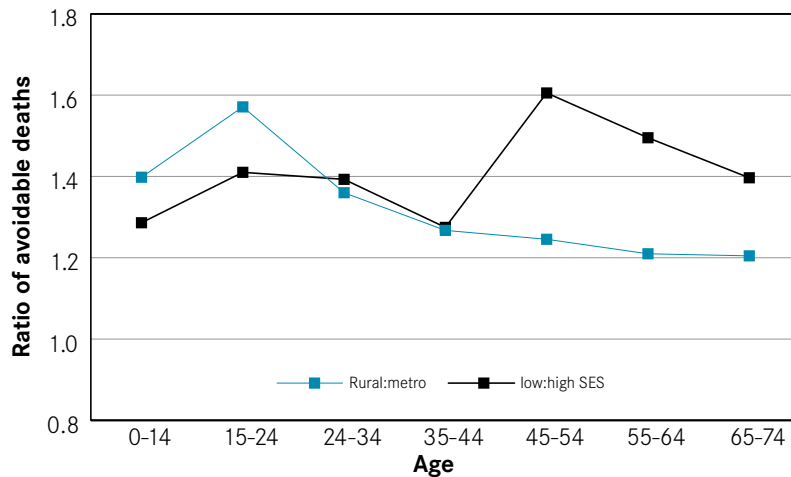
**Figure 3.10 Rates of avoidable mortality by least and most disadvantaged quintiles in Victoria (2001–05)**



(Department of Human Services 2006b)

Men from the lowest socioeconomic quintile have higher levels of avoidable mortality across the life course (see Figure 3.11). However, the greatest difference is among men in the 45–64 age group where around 1.6 men from the lowest socioeconomic quintile die for each man in the highest socioeconomic quintile. Men in rural areas also face higher levels of avoidable mortality than those in metropolitan areas. The greatest difference is for the 15–24 age group where there are around 1.6 deaths of rural males for each metropolitan male death.

**Figure 3.11 Avoidable mortality rates: ratio of rural to metropolitan and low to high socioeconomic status (quintiles) in Victoria by age group (2001–05)**



(Department of Human Services 2006b)

### Morbidity

In 2001, the disease group responsible for the greatest disability burden to Victorian males was mental disorders, which accounted for around 27 per cent of male years of life disabled. This was also the greatest cause among females, accounting for 26 per cent of all life years disabled. The next greatest cause of disability burden among men was neurological and sense disorders (18 per cent), chronic respiratory disease and cancer (both nine per cent), and cardiovascular diseases (seven per cent). The greatest single cause of disability for men in 2001 was depression, followed by diabetes, hearing loss and Alzheimer’s and dementia (see Table 3.3).

**Table 3.3 Top 10 causes of years of life disabled among Victorian men in 2001**

Cause	Percentage of total years of life disabled
Depression	8.2
Diabetes	6.3
Hearing loss	5.4
Alzheimer's and dementia	5.0
Asthma	4.1
Prostate cancer	3.4
Stroke	3.3
Chronic obstructive pulmonary disease	2.9
Osteoarthritis	2.9
Ischaemic heart disease	2.5

(Department of Human Services 2005a)

## Differences in health outcomes among groups of men

Although men as a group face poorer health outcomes than women on many indicators, some groups of men face particularly poor health outcomes or have specific health issues.

### Aboriginal men

The National Closing the Gap Strategy recognises that although many Indigenous Australians have access to life opportunities and a good standard of living, too many Indigenous Australians experience unacceptable levels of disadvantage in living standards, life expectancy, education, health and employment. The ongoing effects of dispossession, dislocation, grief and loss impact on the physical and mental health of many Indigenous people.

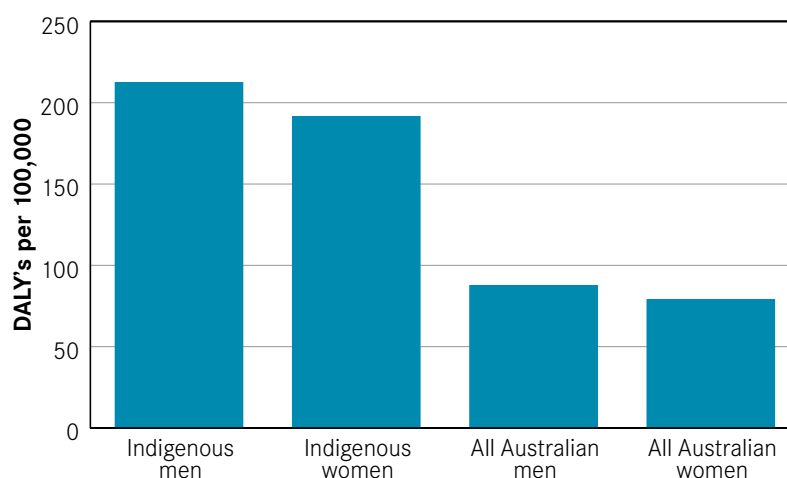
Indigenous people experience poorer health outcomes than non-Aboriginal people on almost every measure of health, and are at greater risk of disadvantage for many socioeconomic factors that influence health (Commonwealth of Australia 2008b; Department of Human Services 2008d). Aboriginal men and women differ in health outcomes and their experience of health. However, as in the broader population Aboriginal men generally report poorer health outcomes than women.

In 2006, the proportion of Victorian males that were either Aboriginal and/or Torres Strait Islander was 0.6 per cent, or 14,745 men and boys. Due to the small size of this population it is difficult to obtain good quality data regarding Aboriginal health outcomes. However, data from the National Aboriginal and Torres Strait Islander Health Survey conducted by the ABS in 2004–06 indicate that health outcomes of Aboriginal people in Victoria are similar to the average for Australia.

### Health outcomes

Between 2005 and 2007, the life expectancy of Indigenous males born in Victoria was estimated to be 67.2 years, 5.7 years less than Indigenous women and 12.3 years less than non-Indigenous Victorian men over this period (ABS 2009a).

The Aboriginal and Torres Strait Islander burden of disease study estimated that Indigenous men suffered the highest burden of disease of any group in 2003 (see Figure 3.12). The measure used—disability adjusted life years (DALYs)—takes into account both the fatal and non-fatal disease burden.

**Figure 3.12 Burden of disease in Australia in 2003: rate of disability adjusted life years (DALYs)**

(Vos et al. 2007)

Ischaemic heart disease was by far the greatest cause of disease burden for Indigenous men in 2003, accounting for 11.8 per cent of all DALYs (see Appendix Table 8.7). This was followed by diabetes, anxiety and depression, then suicide, which each accounted for between 5.3 and seven per cent of the total disease burden. Suicide and road traffic accidents accounted for far greater proportions of the disease burden among Indigenous males than for all Australian males, being the fourth and fifth greatest cause of disease burden respectively for Indigenous males compared with the thirteenth and seventh greatest proportions for non-Indigenous males.

The total burden of disease to Indigenous males in 2003 was 2.4 times that for all Australian males, and 1.1 times that affecting Indigenous women. All of the leading causes of burden of disease resulted in a significantly greater impact on Indigenous males than for all Australian males (see Table 3.4). Health conditions that had a substantially greater impact (3 to 5 times greater) on Indigenous males included ischaemic heart disease, diabetes, suicide, chronic obstructive pulmonary disease, alcohol dependence and homicide and violence. The greatest difference compared with Indigenous females was in alcohol dependence and harmful use (1.7 times greater impact).

**Table 3.4 Ratio of burden of disease (DALYs) in 2003: Indigenous males to all males and Indigenous females**

	Ratio to all males	Ratio to Indigenous females
All causes	2.4	1.1
Ischaemic heart disease	5.1	1.3
Type 2 diabetes	4.6	0.8
Anxiety & depression	1.7	0.7
Suicide	3.3	1.4
Road traffic accidents	2.5	1.2
Chronic obstructive pulmonary disease	4.3	1.4
Alcohol dependence & harmful use	3.7	1.7
Asthma	1.2	1.4
Stroke	2.7	1.4
Homicide & violence	6.8	1.3
Low birth weight	2.5	1.2
Lung cancer	2.4	1.3

(Vos et al. 2007)

In Victoria, the 2004 National Aboriginal and Torres Strait Islander Health Survey identified the incidence of long-term health conditions reported by Aboriginal males to be higher than non-Aboriginal males across most common conditions. Conditions with the greatest difference in incidence include kidney disease (40 times more common), diabetes (2.4 times more common), blindness (2.1 times more common), diseases of the nervous system (1.6 times more common) and diseases of the heart and circulatory system (1.5 times more common) (ABS 2006b). Aboriginal males also had a higher likelihood of being a victim of physical or threatened violence, with around 30 per cent of males in 2002 reporting

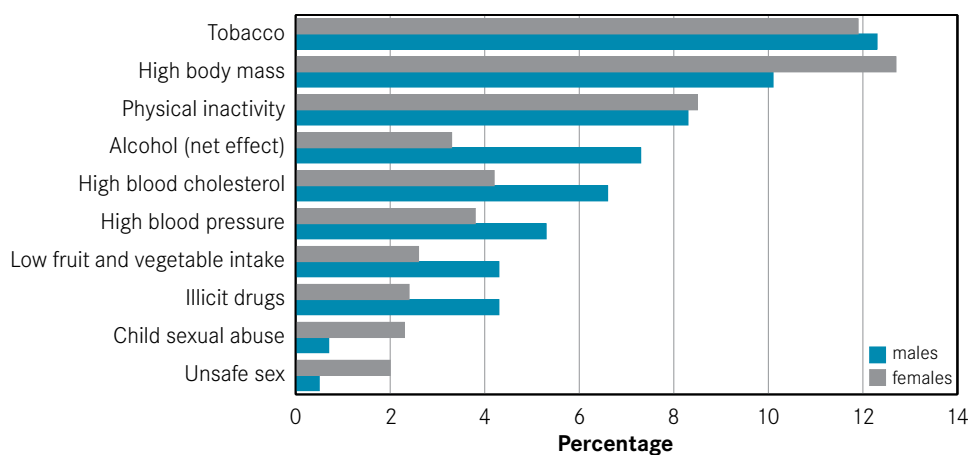
this in the previous 12 months (ABS 2004).

Aboriginal males in Victoria have poorer self-reported health with 21.8 per cent describing their health as fair or poor in 2004 compared with 17.3 per cent of all males in Victoria (ABS 2006b; Department of Human Services 2008c). Housing problems are common with around 40 per cent reporting that their dwelling had major structural problems, 15 per cent needing additional bedroom(s) and around 35 per cent reporting that they had moved in the previous 12 months. There is a high level of contact with the criminal justice system and around 23 per cent of Indigenous males have been arrested and 11 per cent in prison in the last five years.

### Health risks impacting on Indigenous health

Understanding the contribution of modifiable risk factors to poor health outcomes allows policy interventions to target areas with the greatest potential to provide benefits. The Australian Indigenous burden of disease study examined the impact of 10 health risks to Indigenous men and women. As Figure 3.13 shows the greatest contribution to the burden of disease in Indigenous men is caused by tobacco (12.3 per cent), high body mass (10.1), physical inactivity (8.3) and alcohol (7.3 per cent). Compared with Indigenous women, high body mass contributes less to men's disease burden, however alcohol, high cholesterol, high blood pressure, illicit drugs and low fruit and vegetable intake all contribute substantially more (Vos et al. 2007).

**Figure 3.13 Contribution of ten lifestyle risk factors to the Indigenous male and female burden of disease in Australia in 2003**



(Vos et al. 2007)

Across the life cycle the contribution of the eight greatest risk factors impacting on Indigenous men's health varies by age group. In the 0 to 14 age group tobacco has the greatest impact; in the 15 to 34 age group alcohol and illicit drugs and in the 35 to 54 and 55 plus ages groups tobacco and high body mass are the greatest risk factors (see Appendix Figure 8.7). Compared to Indigenous women, Indigenous men have been found to generally start drinking at an earlier age and consume alcohol at more hazardous levels more frequently (NSW Health 2003).

In Victoria, Indigenous men have higher rates of smoking, risky alcohol consumption and substance use than Aboriginal women and all Victorian men (see Table 8.9). For example, the smoking rate is more than 2.5 times than for all Victorian men. Around 48 per cent of Indigenous people in Victoria were classified as overweight or obese in 2004; similar to the rate for the whole Victorian population (ABS 2006b; Department of Human Services 2008d).

Participation in employment and education are also important factors influencing the health status of Indigenous men. Education is a strong predictor of mortality and Aboriginal men generally have lower levels of education and fewer formal qualifications than other men (ABS 2004). Similarly the employment rate for Indigenous men in 2006 was 59 per cent compared to 80 per cent for non-Indigenous males (Brotherhood of St Laurence 2007).

## Service usage

Aboriginal people generally have a greater reliance on public health services, particularly public hospitals (inpatient and outpatient care), community health services, including Aboriginal Community Controlled Health Services (ACCHSs) and patient transport (Department of Human Services 2008d). In Victoria in 2004, Aboriginal people were 1.3 times more likely to be admitted to hospital, and 1.5 times more likely to have visited casualty/outpatient, but less likely to have consulted a dentist (ABS 2006b).

Hospital admissions of Indigenous men for ambulatory care sensitive conditions (those for which hospitalisation is thought to be avoidable if preventive care and early disease management are applied) is around 3.7 times higher than for non-Indigenous men, indicating a substantial burden of illness that could be potentially avoided through better engagement with the primary health system (ABS 2006b).

There is some evidence that Indigenous men are resistant to seeking treatment and less comfortable talking about their health with female doctors and other health professionals (Senate Select Committee on Men's Health 2009) and that many continue to see the health delivery system as untrustworthy and part of an authoritarian and threatening complex (Malcher 2009).

## Young men

Differences in rates of mortality and avoidable mortality of men and women are greater among those aged 15-34 than all other age groups, with between 2-3 male deaths for each female death. In many areas including, use of tobacco, illicit drugs, risky consumption of alcohol, and consumption of insufficient fruit and vegetables men in this age group fare worse than men of all other ages (Department of Human Services 2008b). Men of this age group have high rates of suicide and young men aged 20-24 are the group most likely to be injured at work (ABS 2006e).

Young men also report low awareness of, and participation in, proactive health behaviours (Richardson 2004) and a greater desire to take on a traditionally masculine identity and present a 'macho image' (Brown & Bond 2008) that can impede help seeking behaviours. In 2008, men aged 16-24 were the least likely of all men and women with a mental disorder to access services for assistance (ABS 2008c).

An important factor influencing young men's rates of mortality and injury is the higher propensity for risk taking behaviour (ABS 2009d; Thom 2003). This is apparent in young men across a wide range areas including being more likely than other men or women to consume illicit drugs, drink alcohol at risky levels, undertake dangerous activities (including driving) while under the influence of illicit drugs or alcohol (AIHW 2008a) and to be charged with dangerous or negligent driving (ABS 2009d). Young men are also more likely to participate in extreme sports and take risks in physical activities such as diving head first into water before checking the depth (Moran 2008). Such risk taking even extends to every day situations such as taking greater risks crossing roads (Atwal & Pawlowski 2008) and reporting more frequent sunburn (Rogers et al. 2009).

## Men in rural areas

Men in rural areas face particular issues in relation to health service availability and access, higher levels of occupational risk, and a greater risk of social isolation. Rates of depression, suicide and mortality due to transport accidents and chronic disease are higher in rural areas (Commonwealth of Australia 2008a; Department of Human Services 2008c; RACP 2009) and overall life expectancy for Victorian males born outside of metropolitan Melbourne in 2007 was around two years lower (80.3 compared with 78.2) than those born in Melbourne (ABS 2008a).

There appear to be some cultural and social differences impacting on the health outcomes of men in rural areas; for example some research indicates that older men in rural areas are less likely to go to a doctor than those in urban areas, and when they do they are less likely to discuss issues such as depression or erectile dysfunction (COTA 2008).

However, the difference in health outcomes for rural men is the result of a range of economic, physical, environmental and socio-cultural factors. For example, higher rates of mortality from cardiovascular mortality in rural men seem to be due to lower socioeconomic status, while higher injury rates appear more connected with rurality (RACGP 2006a).

## Men with lower socioeconomic status

There is substantial evidence indicating that lower socioeconomic status is associated with reduced life expectancy, higher levels of injury and disease, and increased prevalence of health risk behaviours. This fact has been recognised in the National Preventative Health Strategy (National Preventative Health Taskforce 2009).

People with the lowest socioeconomic status experience poorer health outcomes; however the effect is present across the population with those at each 'rung' of the social gradient experiencing better health outcomes than those below them and poorer health than those above (Department of Human Services 2008a). Interestingly, men appear to experience a steeper social gradient than women with a greater differential between those in the highest and lowest quintile.

The impact of socioeconomic status on health can come about through a range of factors such as reduced financial ability to access health, community and recreation services, lower levels of information and knowledge of health-related issues, higher occupational risks, and higher levels of disease risk factors such as the consumption of high fat processed foods. Social context plays an important role in driving behaviours such as smoking amongst low socioeconomic groups as well as contributing to a 'pattern of difficulties and disadvantage' that reduces the capacity to adapt to more healthy behaviours (Smedley & Syme 2000).

Socioeconomic inequalities in health account for a significant burden of disease among men. This was estimated to contribute to 19 per cent of the mortality burden among Australian men in 2008 (Commonwealth of Australia 2008b). Men in the lowest quintile experienced a mortality rate of around 1.75 times that of men in the highest quintile in 1998–2000. Mortality due to cancer was around 1.5 times higher and mortality due to circulatory diseases around 2.1 times higher (RACGP 2006a). Men from lower socioeconomic households have also been found to be at greater risk of diabetes (Martin et al. 2008), while poorer older men have a higher prevalence of social isolation and diminished social support (Commonwealth of Australia 2008b).

An Irish men's health study found that those from lower socioeconomic backgrounds were more likely to engage in 'negative' self-care practices, to have a low level of knowledge/awareness of health, to report having neglected or paid little attention to their health over the course of their lives, and to report weekly binge-drinking and more sedentary lifestyles (Richardson 2004).

In terms of service usage those from lower socioeconomic groups have been found to have a lower use of preventive care services (screening, early detection and intervention for risk factors), longer delays in seeking treatment, more difficulty in meeting the costs of treatment, and to receive lower quality treatments (RACGP 2006a).

## Gay, bisexual, transgender and intersex (GBTI) men

The Australian Study of Health and Relationships found that 2.5 per cent of men report a gay or bisexual identity and that six per cent have had a same sex experience (Smith et al. 2003a). Although less data is available than for other sub-groups of men, numerous studies indicate that gay and bisexual men, as well as other men that have sex with men, have poorer health outcomes in a number of areas. Gay men have been found to have higher rates of depression, anxiety and suicide; they are the group in Victoria most affected by AIDS and HIV; they experience anal cancer at 80 times the rate of other men; and are more likely to have a negative body image and experience an eating disorder (Leonard 2003; Pitts et al. 2006; RACP 2009). Younger same sex attracted men are less likely than other men to rate their health as good or excellent (Leonard 2003).

Major effects on health and wellbeing have also been recorded due to homophobia against gay and bisexual men. This includes high levels of violence and the ongoing threat of violence, discrimination, social marginalisation and isolation (Leonard 2003).

Men that have sex with men but do not identify as gay or bisexual have a greater risk of gonorrhoea or syphilis than other men, and some subcultures within this group report higher levels of alcohol, injecting and other illegal drug use (Pitts et al. 2006).

At the same time, gay and bisexual men have some lifestyle characteristics that may reduce their health risk. They are less likely to be overweight or obese (National LGBT Health Alliance 2009), have higher levels of education, are more likely to be in white collar or managerial professions than other men (Smith et al. 2003b) and report higher levels of knowledge about sexually transmitted infections (Grulich et al. 2003b).

Overall, gay men have higher levels of certain health risk behaviours including smoking, alcohol and illicit drug dependency (Pitts et al. 2006), as well using health services less than the general population (Leonard 2003). General practice and hospitals are often not considered gay friendly due to perceived discrimination, and a concern about lack of privacy (especially in smaller communities) (Senate Select Committee on Men's Health 2009).

Concerns about discrimination are substantiated by findings that 23 per cent of Victorian gay, lesbian, bisexual and transgender people have experienced discrimination in relation to medical care (Department of Human Services 2002). The way that some services are configured, such as domestic violence support, also means that they find it difficult to meet the needs of same sex male couples (Leonard et al. 2008).

## Prisoners

In June 2008, there were 3,985 male prisoners in Victoria compared to only 238 female prisoners (ABS 2008d). The rate of imprisonment for Victorian Aboriginal men was around 12 times higher than non-Indigenous men (Corrections Victoria 2009). The prison population is also disproportionately young; 18–24 year olds account for 19.4 per cent of all male prisoners, but only make up 10.6 per cent of the total Australian male population (ABS 2008d).

The Victorian Prisoner Health Study identified the prison population as being at the very high risk end of the health spectrum. Prisoners are 'exposed to or susceptible to those diseases and lifestyle factors that contribute most significantly to the burden of disease' (Department of Justice 2003).

The survey found considerably higher rates of many health conditions among the prisoner population compared with the general population, including asthma, dental problems, self-inflicted harm, sexually transmitted infections other than HIV/AIDS, hepatitis A, B and C.

Furthermore, rates of hospitalisation far exceed that of the general population, with more than 25 per cent of prisoners reporting hospitalisation in the 12 months preceding the survey (Department of Justice 2003).

Hepatitis was the most commonly reported disease among Victorian prisoners in 2002, with hepatitis C the most common stream of hepatitis diagnosed (although many prisoners reported infection with multiple streams). The prevalence of hepatitis C among male prisoners was 52 per cent (Department of Justice 2003). This is vastly higher than the infection rate of approximately one per cent for the Australian population (National Centre in HIV Epidemiology and Clinical Research 2009).

Hepatitis C among prisoners is strongly correlated with injecting drug use, which is consistent with patterns of infection in the wider population. A 2002 study of hepatitis C prevalence among Victorian prisoners found that of the 57.5 per cent of prisoners surveyed who tested positive for hepatitis C antibodies, 93.9 per cent had a history of injecting drugs (Department of Justice 2004).

Other health risk behaviours that are common among prisoners include tattooing, high alcohol and drug consumption, heavy tobacco use, overconsumption of prescription medications, and unsafe sex. However, the Victorian Prisoner Health Study notes that while many of the surveyed prisoners reported engaging in particular high risk behaviours such as excessive alcohol consumption and unsafe sex prior to their incarceration, the self-reported data indicated that these practices were not common within prison itself (Department of Justice 2003).

The overall prevalence of all major mental illnesses is higher among the prisoner population than the general population. Around 26 per cent of male prisoners report having ever been diagnosed with a mental illness, with depression the most common diagnosis. Almost half of prisoners had experienced suicidal thoughts, and 60 per cent of those had attempted suicide. Approximately one-quarter of the suicide attempts had occurred in prison (Department of Justice 2003).

The poor health of prisoners results from both the health risk practices that exist within the prison environment, and socioeconomic, psychological and behavioural factors that affect many prisoners prior to their incarceration. The disadvantage experienced by most prisoners may be a significant factor in their poor health outcomes. Prisoners surveyed in the Victorian Prisoner Health Study reported poor education levels, with a mean school leaving age of approximately 15 years. Prior to entering prison, 74 per cent of male prisoners were in receipt of a pension, and 10 per cent were either without a fixed abode or in unsettled housing (Department of Justice 2003).

Unsurprisingly, the negative health outcomes for prisoners appear to extend beyond the period of incarceration. The results of one major Australian study showing the overall death rate for men with a prison history was four times that of



men in the general community. Most of these extra deaths resulted from suicide, drug and alcohol abuse and homicide, and occurred within the first few weeks of release from prison (Commonwealth of Australia 2008b).

### Men from culturally and linguistically diverse (CALD) backgrounds

The Victorian population has a high level of cultural diversity with around 248 separate cultures represented. Men and women who have migrated to Australia generally enjoy health that is as good or better than that of the Australian-born population—with lower overall rates of death, hospitalisation, disability and disease risk factors (AIHW 2008b). Victorian men born outside Australia also rate 'their health' as being more important to their lives compared with men born in Australia, and this difference is greater than among females born outside Australia.

Among males born outside Australia, mortality rates from most causes are lower than those of Australian born males<sup>3</sup>, with those born in Asia experiencing the lowest overall mortality rates compared with Australian males (see Table 3.5). The main exception to this was diabetes mellitus, from which males born in 'other Europe' and Asia experienced standardised mortality ratios of 1.28 and 1.36 respectively. Males born in the UK/Ireland had lower mortality rates from diabetes than Australian born males but significantly higher mortality rates due to lung cancer (1.17).

Males born outside Australia also have lower standardised hospitalisation rates and lower disability prevalence, with the greatest difference evident among males born in Asia. Data relating to core activity restrictions is less clear and none of the differences are statistically significant (Singh & de Looper 2002). Females born outside Australia experience similar mortality, hospitalisation and disability ratios (compared with Australian females).

**Table 3.5 Australian male mortality, hospitalisation and disability ratios, by birthplace (1999)**

	UK/Ireland	Other Europe	Asia	Other
Standardised mortality ratios (all causes)	0.89*	0.83*	0.72*	0.86*
Standardised hospitalisation ratios	0.73*	0.83*	0.73*	0.71*
Disability prevalence	0.84	0.90	0.59*	0.86
Core activity restriction	0.99	1.02	0.88	1.14

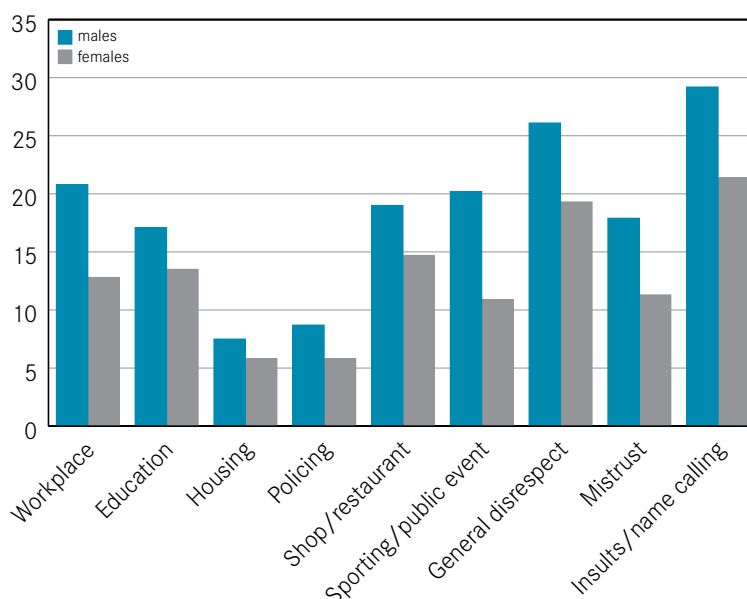
\* Significantly different from 1.00 (Australian-born) at the five per cent level. (Singh & de Looper 2002)

Victorian hospital data suggest that, compared within the Victorian population, people born in refugee source countries had lower rates of surgical admission, total days in hospital and admission due to mental and behavioural disorders. However over a six-year period admissions increased towards Australian averages (Correa-Velez et al. 2007). Other research has found that the 'health migrant effect' wanes over time (AIHW 2008b). Research looking at refugee men found that they report a subjective health status comparable to that of the overall Australian population, but that psychological distress is higher than among the broader population. Barriers for refugee men accessing services included lack of transport, inadequate interpreting services, and lack of healthcare professionals from their own cultural background (Correa-Velez 2009).

The 'healthy migrant effect' is present for males and females and is believed to be partly attributable to self-selection (whereby people who have economic resources are able to migrate and those who are sick or disabled are less able to migrate) and partly to government selection process (whereby people are selected according to certain eligibility criteria based on health, education, language and job skills).

A particular issue faced by some people from CALD backgrounds is the experience of racism and marginalisation, which has demonstrated negative impacts on both mental and physical health. Discrimination has direct effects, in terms of provoking stress and other psychological conditions, and indirect effects, through influencing health-compromising behaviours in response to stress (VicHealth 2007). Evidence suggests that males are substantially more likely to report racism in both institutional and community contexts (see Figure 3.14). The greatest gender differences exist for discrimination at a sporting/public event, which males were almost twice as likely to have experienced as females (20.2 compared with 10.9 per cent). This is followed by discrimination at the workplace and by way of mistrust that were both experienced 60 per cent more commonly by males (Dunn 2007).

3 See Appendix Table 8.12 for mortality ratio by cause of death

**Figure 3.14 Experience of discrimination due to ethnic origin by gender and location in Australia in 2001**

(Dunn 2007)

Other factors migrants face during settlement can include an inability to speak English, a lack of recognition of qualifications and unemployment. In June 2009 Victorian men born outside Australia (who had arrived in Australia between 1996 and 2009) had an unemployment rate that was around double that of men born in Australia, and somewhat higher than women born outside Australia (arriving during this period) (ABS 2009b) (see Table 4.8). In addition, the unemployment rate for men born outside Australia does not decrease as quickly after arrival as that for women, indicating greater difficulties in attaining full economic participation and inclusion (see Table 8.11).

The age that a person migrates can also contribute to particular challenges during settlement. For example, a younger man is more likely to face challenges in terms of reconciling expectations of family and his new social circles, while an older man may feel less valued than in his country of origin. For some men, the role of women and men in family and society is very different in Australia, and they struggle with new expectations and different freedoms than they are accustomed to (Foundation House 2007). Issues of identity are also relevant to 'second generation young people', the children (and grandchildren) of migrants. It is not clear to what extent these issues differ for males.

### Men with a disability

In 2003, around one in five male and female Victorians experienced some level of disability. Men had a slightly higher prevalence of disability overall, and this was around 14 per cent greater than among women in the under 65 age group (15.5 compared with 13.6 per cent). Among those over 65, males had a slightly lower prevalence of disability than females (55.7 compared with 57.9 per cent) (ABS 2003).

Around 5.5 per cent of males have a profound/severe core activity limitation, with an additional three per cent having moderate and 5.6 mild core activity restrictions. Core activities are defined as communication, mobility and self care (ABS 2003), all of which have major implications for the health needs. Across Australia, physical disability is the most common disability type among men under and over 65 (see Table 3.6). Males are around 40 per cent more likely than females to have a head injury/stroke/brain damage disability, and 30 per cent more likely to have either an intellectual or sensory/speech disability.

**Table 3.6 Disability prevalence among Australian men by disability type**

	Sensory and speech	Intellectual	Physical	Psychological	Head injury, stroke or brain damage	All with a disability
0-64	4.4	3.2	9.9	2.2	1.2	15.4
65+	31.1	5.2	39.7	5.2	6.4	55.1
<b>Total</b>	<b>7.4</b>	<b>3.4</b>	<b>13.2</b>	<b>2.5</b>	<b>1.8</b>	<b>19.8</b>

(ABS 2003)

Although there is a growing focus on the specific health needs and issues of people with a disability there is currently a dearth of research taking a gendered approach and looking specifically at the experiences and needs of men or women with a disability. However, it is clear that people with a disability do have particularly poor health outcomes.

For example, people with an intellectual disability have far higher levels of premature mortality and twice as many health problems as people without an intellectual disability. They are more likely to have undiagnosed health problems, develop secondary health conditions and have health needs that go unrecognised and unmet (van Schrojenstein Lantman-de Valk & Walsh 2008). A West Australian study of children with an intellectual disability found that they are more likely to be admitted to hospital, for longer periods, and for a larger range of conditions (Williams et al. 2005).

In Victoria in 2007, males with an intellectual disability were around 35 per cent more likely than females to be subject to a restrictive intervention (including chemical, mechanical, and seclusion interventions). Overseas studies have found males with an intellectual disability to have rates of sexually transmitted disease several times higher than among the broader population (Connick et al. 2001; Jansen et al. 2004).

However, some research suggests that gender differences are a less significant factor in health and wellbeing of people with intellectual disability. For example, a European study found that differences in living conditions amongst people with an intellectual disability were related to level of disability rather than gender. Similarly, another study found that gender related differences in participation in recreational and cultural activities seen in the general population were not present among those with an intellectual disability (Umb-Carlsson & Sonnander 2006). However, the authors question how much of this was due to a generic support system and people with an intellectual disability being treated as gender-neutral.

Long-stay patients in Australian psychiatric institutions (who are predominantly male) have been found to have significant health problems from their psychiatric illnesses, as well as co-occurring physical illnesses and disabilities. Smoking rates are high (over 70 per cent) and many patients are physically inactive, sometimes due to the side effects of medications (Cormac et al. 2004).

The specific health needs of people with a disability can be related to a range of factors including: a reliance on others for having their health needs met; difficulties with communication; masking of symptoms; limited or absent verbal and reading skills; a lack of understandable health promotion material; a lack of awareness/understanding of physical symptoms; and difficulties exercising or lack of exercise facilities (Cormac et al. 2004; Lennox et al. 2007; van Schrojenstein Lantman-de Valk & Walsh 2008).

## Specific conditions

The following sections provide a brief overview of selected conditions that are major causes of ill-health among Victorian males, in terms of levels of mortality, years of potential life lost or disability. Some of these conditions, such as cancer and cardiovascular disease are not traditionally thought of as 'men's conditions' but have a substantially greater impact on men than women.

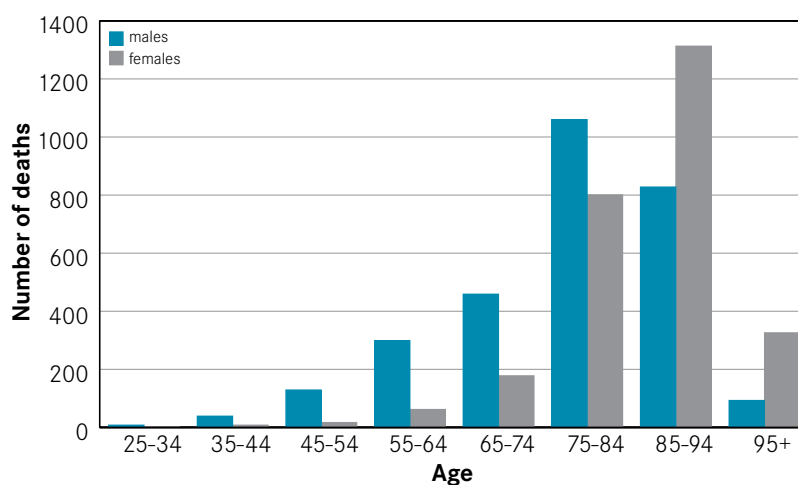
### Cardiovascular disease

Cardiovascular disease was responsible for the deaths of 4281 Victorian men in 2007. Among men, the age standardised death rate from cardiovascular disease was 179.7 per 100,000, around 50 per cent higher than the rate among females (121.3 per 100,000). A further important difference is the younger age at which men are likely to die, reflected in substantially higher (200%) years of potential life lost by men (21,395) compared with women (7156).

Within cardiovascular diseases the greatest number of deaths among both males and females is caused by ischaemic heart disease. Ischaemic heart disease is the leading single cause of death among Victorian men; it has the greatest impact in terms of years of potential life lost and causes the greatest number of avoidable male deaths. Males face major health inequalities compared with females, with an overall rate of avoidable mortality due to ischaemic heart disease around three times that of females. This health inequality is substantially greater than that due to socioeconomic status where those in the lowest quintile have a rate of avoidable mortality due to ischaemic heart disease around 1.5 times that of people in the highest quintile (see Appendix Table 8.5).

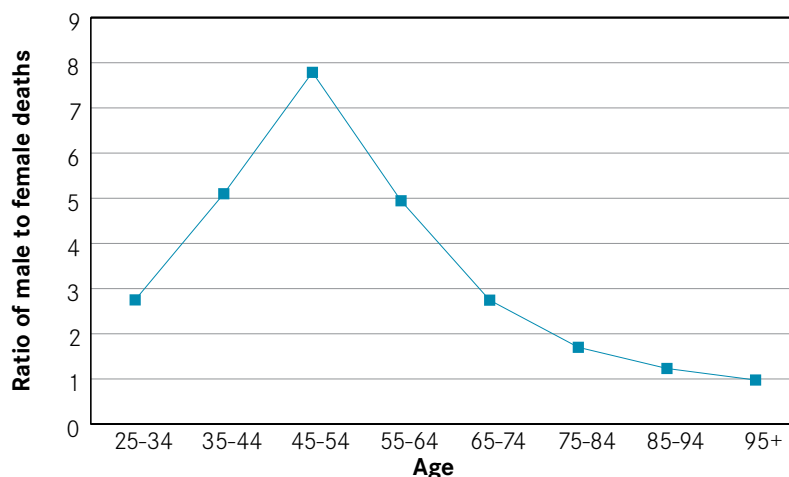
As Figure 3.15 shows, in 2007 the greatest number of male deaths from ischaemic heart disease was in the 75–84 age group. However, relative to other causes ischaemic heart disease results in a high number of deaths in males from their 30s onwards.

**Figure 3.15** Number of deaths due to ischaemic heart diseases in Victoria by age and sex in 2007



Across the life cycle men experience substantially higher death rates from ischaemic heart disease than women (other than in the 95 plus age group). Among those aged 25–34 around 2.8 men die for each woman, and this increases to reach a peak of 7.8 men dying for every woman in the 45–54 age group, this then drops each decade to a rate of 1.2 male deaths for each female among those aged 85–94. These figures highlight the substantial impact of ischaemic heart disease on men, particularly through the high rates of mortality experienced by younger men (see Figure 3.16).

**Figure 3.16** Ratio of male to female standardised deaths rates due to ischaemic heart diseases in Victoria by age in 2007



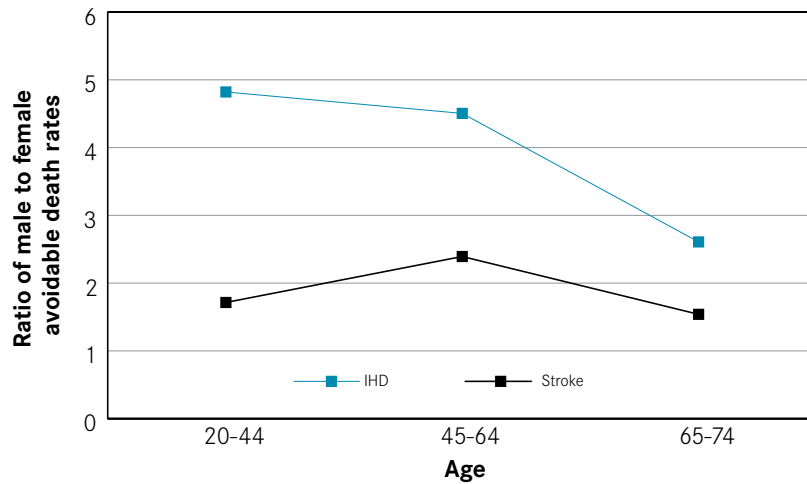
(ABS 2008a)

In 2007, stroke was the second greatest cause of cardiovascular death among Victorian men, resulting in 807 deaths. The male standardised death rate was slightly above that of females (34.1 compared with 32.6 per 100,000); however the younger average age of death resulted in a 29 percent greater loss in years of potential life lost by males (See Appendix Table 8.4 above).

Rates of avoidable mortality due to ischaemic heart disease and stroke were substantially higher among males than females in between 2001 and 2005 (see Appendix Table 8.5). This was the case across age groups and overall. For ischaemic heart disease, males had an avoidable mortality rate more than three times that of women. The rate of male avoidable deaths from strokes was around 1.6 times higher than among females.

Although males suffer from substantially higher levels of avoidable mortality than females from both ischaemic heart disease and stroke, the scale of this difference is far greater in the case of ischaemic heart disease. As Figure 3.17 shows the rate of male avoidable deaths is over 4.8 times higher among the 20–44 year old age group, 4.5 times higher among those aged 45–64, and 2.6 times higher among the 65–74 year old age group.

**Figure 3.17 Ratio of male to female avoidable deaths due to ischaemic heart disease and stroke by age group in Victoria (2001–05)**



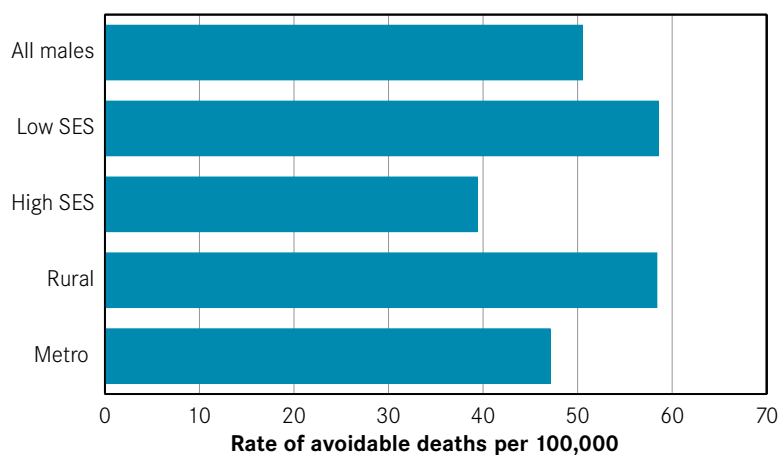
(Department of Human Services 2005c)

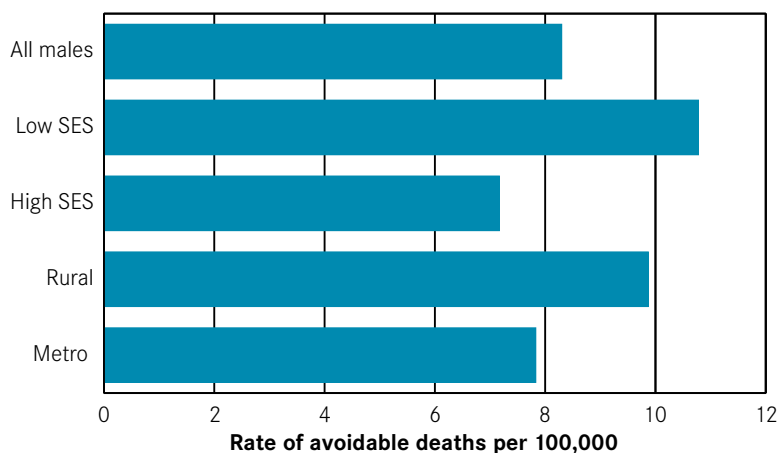
#### **Avoidable cardiovascular mortality among sub-groups of men**

As with other health conditions some groups of men have particularly poor outcomes in terms of avoidable deaths due to ischaemic heart disease and stroke. Indigenous men have particularly poor outcomes in relation to ischaemic heart disease and in the 35–54 year age group have been estimated to have a standardised death rate seven times higher than non-Indigenous men across Australia (AIHW 2008d).

Men from the lowest socioeconomic quintile have around a 50 per cent higher rate of avoidable mortality from both ischaemic heart disease and stroke than those in the highest socioeconomic quintile. The difference is less but still substantial between men living in metropolitan and rural areas, with rural men having around a 25 per cent higher rate than men in metropolitan areas (see Figure 3.18 and Figure 3.19).

**Figure 3.18 Rate of avoidable male deaths due to ischaemic heart disease among different groups of men in Victoria (2001–05)**



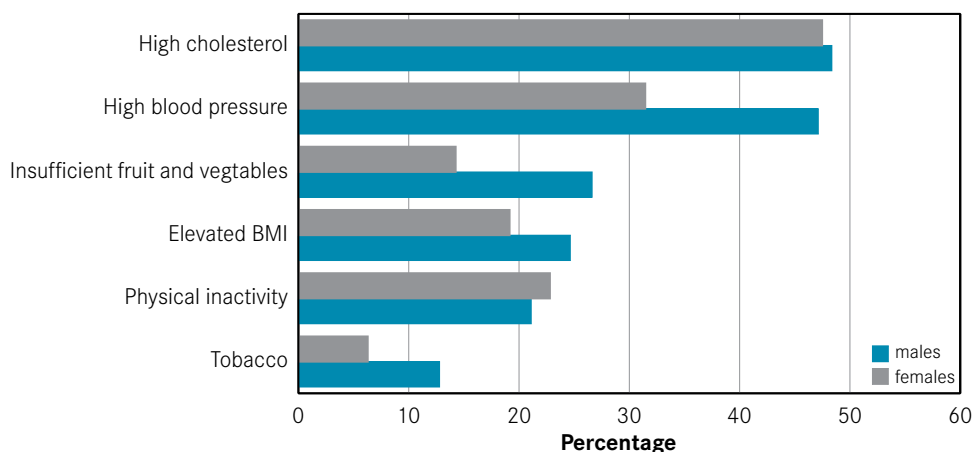
**Figure 3.19 Rate of avoidable male deaths due to stroke among different groups of men in Victoria (2001–05)**

In addition to its impact through mortality, cardiovascular disease also impacts on men's health and wellbeing by reducing quality of life. In 2006, around 29 per cent of men aged 65 plus and 13 per cent of men aged 55–64 reported having some form of heart disease. Figures for strokes were lower with eight per cent of men over 65 and four per cent of men 44–64 reporting having had a stroke. Men were more likely than women to report both these diseases across all age groups, other than stroke among those aged 18–54 age where there was a higher prevalence among women (see Appendix Figure 8.2).

### Risk factors

Analysis of the contribution of six risk factors to the ischaemic heart disease and stroke disease burdens identifies some important gender differences that have possible implications for lifestyle modification campaigns.

Looking at ischaemic heart disease the risk factors of high blood pressure, insufficient fruit and vegetable intake and tobacco are all responsible for a substantially greater proportion of this disease burden among men than women. Elevated BMI is also responsible for a greater proportion of the male burden than female, but the difference is less marked (see Figure 3.20).

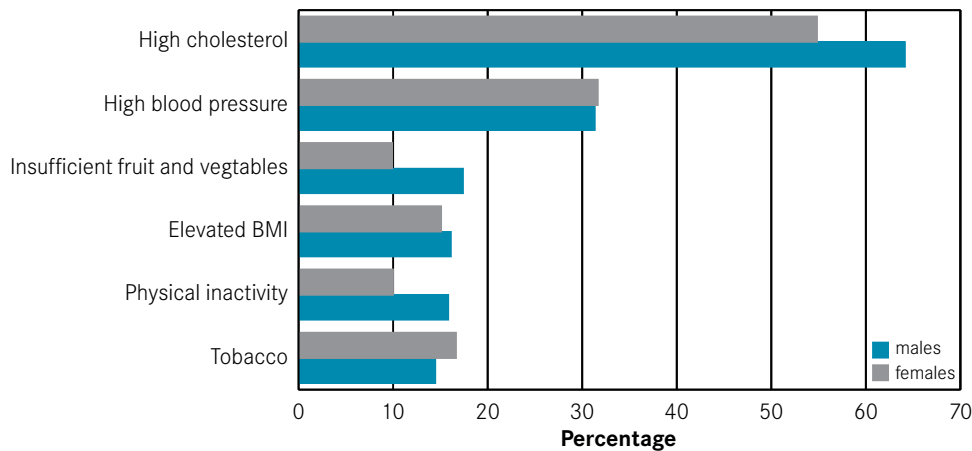
**Figure 3.20 Proportion of the male and female ischaemic heart disease burden attributable to six risk factors\* in Victoria in 2001**

\* Percentages do not add to 100 per cent due to joint effects between these risk factors. After joint effects have been corrected for, these six factors account for 78 per cent of the disease burden.

(Department of Human Services 2005b)

A similar picture is evident for stroke where again high blood pressure, insufficient fruit and vegetable intake and tobacco (and elevated body mass index (BMI) to a lesser degree) are responsible for a substantially greater proportion of the male than female disease burden (see Figure 3.21).

**Figure 3.21 Proportion of the male and female stroke disease burden attributable to six risk factors\* in Victoria in 2001**



\* Percentages do not add to 100% due to joint effects between these risk factors.

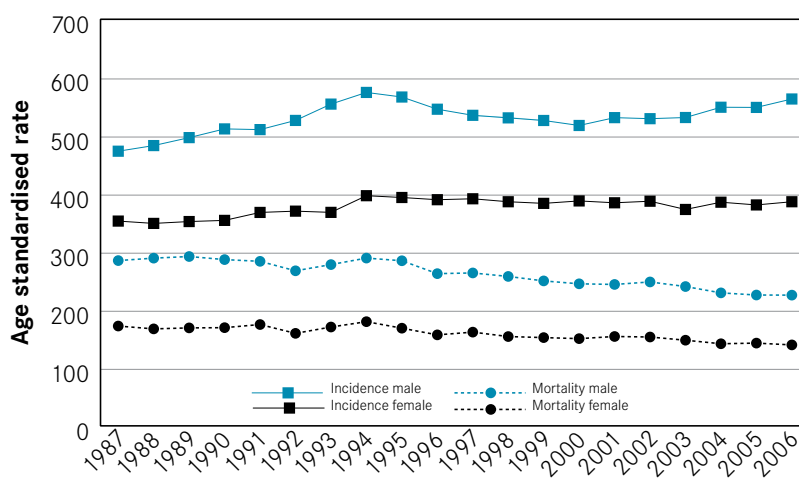
(Department of Human Services 2005b)

## Cancer

Cancers as a group were the greatest cause of death among Victorian males in 2007, and resulted in 5,569 male deaths (32.9 per cent of total male deaths). Major gender inequalities exist in both incidence and mortality due to cancer.

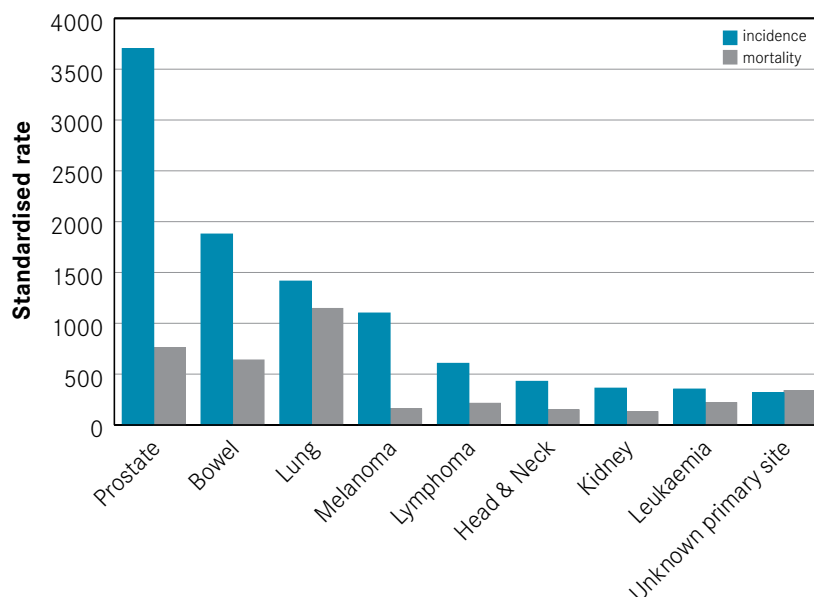
Between 1987 and 2006 the standardised incidence of cancer in males increased by 18.9 per cent to 565.5 per 100,000. This rate of increase is double that seen in females (nine per cent) over the same period. Male incidence of cancer in 2006 was 45 per cent higher than in females (see Figure 3.22). An even greater gender difference exists in standardised death rates, where male mortality was 60 per cent higher than that experienced by females in 2006 (230.4 compared with 143.6 per 100,000).

**Figure 3.22 Male and female standardised incidence/mortality due to cancer in Victoria between 1987 and 2006**



(Cancer Council Victoria 2009b)

The most commonly diagnosed cancer among Victorian males in 2006 was prostate cancer (3703), this was followed by bowel cancer (1878), lung cancer (1415) and, melanoma (1101) (see Figure 3.23). However, the cancer responsible for the greatest number of male deaths was lung cancer (1146); followed by prostate cancer then bowel cancer.

**Figure 3.23 Standardised\* male incidence and mortality due to specified types of cancer in Victoria (2002–2006)**

\* Standardised to the 2001 World Standard Population (Segi)  
(Cancer Council Victoria 2009b)

As Table 3.7 shows, males had a substantially higher incidence and mortality than females from seven leading cancers in 2006. The greatest difference was for head and neck cancer; for which the male incidence was 3.4 times that of females, and mortality 4.4 times that of females. Other cancers with a particularly high incidence among men included kidney, lung, bowel and leukaemia. Importantly, for all cancers other than kidney cancer, the male-female mortality ratio was higher than the male-female incidence ratio, indicating that males also have a lower level of survival once diagnosed. This is likely to be related to men's lower levels of self examination, poorer knowledge of cancer symptoms and greater delays in seeking treatment (Evans et al. 2005).

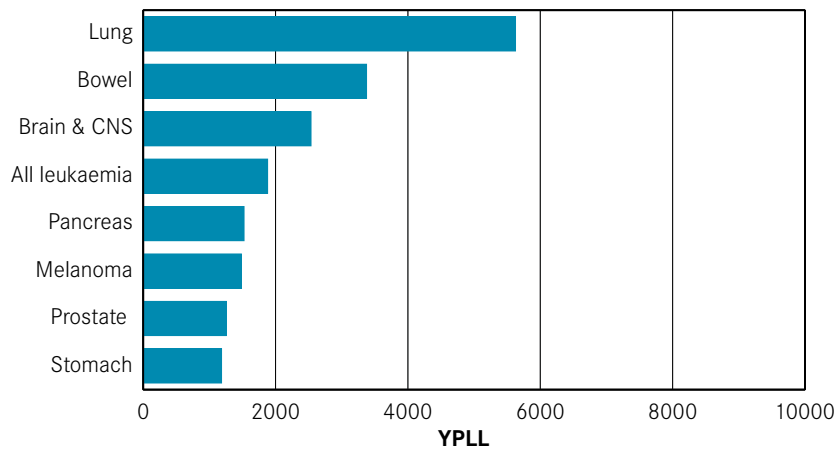
**Table 3.7 Male and female standardised\* incidence and mortality rates (per 100,000) and sex ratios**

Cancer	Incidence male	Mortality male	Incidence female	Mortality female	Ratio m:f incidence	Ratio m:f mortality
Bowel	47.4	13.6	32.2	8	1.5	1.7
Lung	34.3	26.9	18.7	13.6	1.8	2.0
Melanoma	32.6	4	24.5	2.2	1.3	1.8
Lymphoma	18.2	5	12.9	2.6	1.4	1.9
Head & Neck	11	3.1	3.2	0.7	3.4	4.4
Leukaemia	10.6	5	7.1	3.1	1.5	1.6
Kidney	10.5	2.9	4.8	1.4	2.2	2.1

\* Standardised to the 2001 World Standard Population (Segi)  
(Cancer Council Victoria 2009a)

Looking at types of cancer by YPLL provides a somewhat different picture. As with number of deaths, lung cancer is the greatest cause and bowel cancer the third greatest cause. However, blood and lymph, brain, pancreatic and liver cancer all have a greater impact in terms of YPLL indicating a younger age of death of those dying from these compared with other cancers (see Figure 3.24).



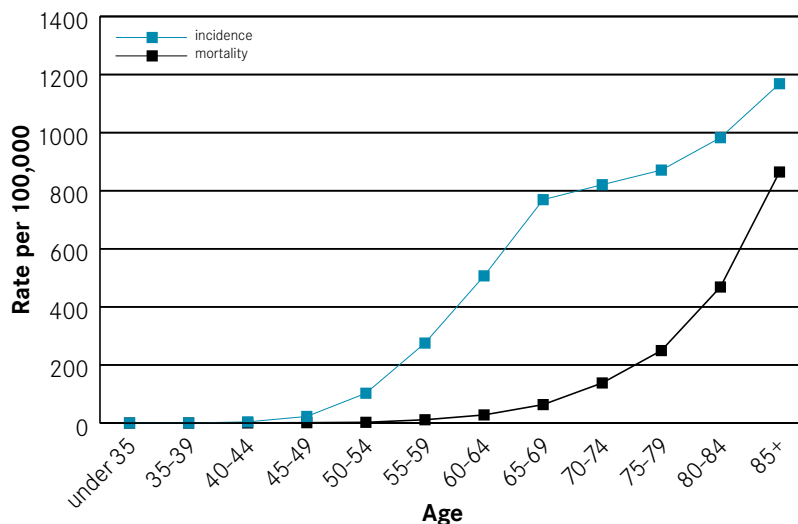
**Figure 3.24 Years of potential life lost due to cancer in Victorian men in 2007**

(ABS 2008a; Becker et al. 2006)

Males have a greater likelihood of experiencing a number of risk factors associated with cancer including tobacco use, higher alcohol and red meat consumption, lower consumption of fruit and vegetables and lower use of sunscreen.

### Prostate cancer

The age standardised incidence of prostate cancer in Victoria has more than doubled over the last 20 years (Cancer Council Victoria 2009a) and in 2007 prostate cancer was the fifth greatest cause of male deaths (ABS 2008a). Prostate cancer is uncommon in men under the age of 50 but has a rapidly increasing incidence over this age to a rate of 1168 cases per 100,000 in men aged 85 and over. Mortality also peaks in this age group at a rate of 864 cases per 100,000 men (see Figure 3.25).

**Figure 3.25 Average prostate cancer age specific rates/100,000 males in Victoria 2002–06**

(Cancer Council Victoria 2009b)

However, because prostate cancer affects predominantly older men the years of potential life years lost (difference between the age of death and age 78) are lower than a number of other forms of cancer (see Figure 3.24). Overall prostate cancer was the fifteenth greatest cause of years of potential life lost by Victorian men in 2007.

The causes of prostate cancer are not well understood, although a family history of prostate cancer does lead to an increased risk of developing the disease. Prostate cancer is often slow growing with no noticeable health impacts, and it is estimated that for one in four men it will not spread outside the prostate. However, in other cases the cancer can be aggressive and grow quickly (Andrology Australia 2009a). Five year survival rates from prostate cancer in Victoria have increased substantially from 60 per cent in 1990 to 84 per cent in 2004 (Cancer Council Victoria 2009a). However, those in rural and regional areas and on low incomes have significantly higher levels of mortality (Senate Select Committee on Men's Health 2009).

### Prostate cancer testing and screening

The detection and management of prostate cancer is a complex issue. Often in the early stages prostate cancer will cause no symptoms, and by the time symptoms do occur the cancer may have spread outside the prostate (National Cancer Institute 2009). However, knowledge of prostate cancer symptoms is important in facilitating testing and early treatment of symptomatic men.

The two common tests for prostate cancer are the prostate specific antigen (PSA) blood test and a digital rectal examination (DRE) test. It is estimated that currently around 52 per cent of Australian men aged 50 to 75 have participated in voluntary prostate screening using a PSA test (Andrology Australia 2009a). PSA and DRE tests play an important role in testing for prostate cancer in men with clinical symptoms or an increased risk of developing the disease. However, current evidence does not support the use of these tools for population-based screening, and such screening has not been adopted in the USA, UK and most European countries (Barry 2009; Cancer Research UK 2009; Ilic et al. 2006).

Issues that have been identified with PSA testing include:

- an inability to accurately distinguish between aggressive cancers requiring treatment and those that can be safely left alone
- that some men with prostate cancer will not have raised PSA levels and subsequently be told they do not have the disease when they do (false negatives)
- that two out of three with raised PSA levels will not have prostate cancer (false positives) and will undergo unnecessary biopsies with a range of potential side effects (Cancer Research UK 2009; Ilic et al. 2006).

The potentially serious side effects of prostate cancer treatment are an important factor in gauging the balance between potential benefits and harms of population screening. These include erectile dysfunction, urinary incontinence, bowel dysfunction, and death (U.S. Preventive Services Task Force 2008). Even the initial biopsy carries a risk of serious infective complications (Bowden et al. 2008). Psychological impacts can include depression and suicide (Senate Select Committee on Men's Health 2009), as well as increased anxiety and reduced relationship satisfaction amongst partners (Couper et al. 2006). Those with elevated PSA levels found not to have cancer after a biopsy have reported increased cancer-related worry and worse sexual function.

Examining this range of evidence a 2008 review by the United States Preventative Services Task Force actually concluded that for men over 75 there is moderate certainty that the harms of screening for prostate cancer outweigh the benefits. For men under 75 the evidence was inconclusive (U.S. Preventive Services Task Force 2008).

In Australia there is a general consensus among medical scientists and organisations including the Cancer Councils, Andrology Australia and the Urological Society of Australia and New Zealand that there is insufficient evidence to justify the introduction of population-based PSA screening (Senate Select Committee on Men's Health 2009; The Cancer Council Australia 2005).

Priority areas for prostate cancer research identified by the Senate Select Committee on Men's Health included the development of new predictive and diagnostic tools; prognostic markers to distinguish aggressive and non-aggressive cancers; and new therapeutic options (Senate Select Committee on Men's Health 2009).

## Bowel cancer

In 2006, bowel cancer was the second most commonly diagnosed cancer and third leading cause of cancer deaths among Victorian men. It was responsible for the deaths of around 37 men each week (Cancer Council Victoria 2009a).

Victorian men in 2006 faced a one in 18 lifetime risk of being diagnosed with bowel cancer by the age of 75 years (compared to a one in 27 risk for women) (Cancer Council Victoria 2009a) and males had a 47 per cent higher standardised incidence and 67 per cent higher standardised mortality rate. This gender gap in mortality rates has almost doubled from 34 per cent in 1982 (Cancer Council Victoria 2009b).

Importantly, however, there is strong evidence that the incidence of bowel cancer can be reduced through changes in lifestyle and healthy behaviours; and the disease is highly treatable if detected in its early stages (Payne 2007). Currently fewer than 40 per cent of bowel cancers are detected early. Men have a lower level of knowledge of bowel cancer symptoms (Cockburn et al. 2003) and lower participation in the national bowel cancer screening program (see Box section 'Bowel cancer and screening' p.37 for further discussion).

## Mental disorders

Mental disorders are the greatest cause of non-fatal disease (disability) burden facing Victorian men, with depression the single greatest cause. Mental disorders accounted for 27 per cent of the total disability burden in 2001 (Department of Human Services 2005a). Unlike other disease categories the bulk of the disease burden caused by mental disorders is due to disability rather than deaths. The total disease burden (deaths and disability) caused by mental disorders in Victoria is roughly the same between males and females. However, around six per cent of the male disease burden is due to deaths compared to only around two per cent for females.

Within the mental disorders category males have a high prevalence of substance abuse disorders and childhood conditions and females have higher prevalence of affective and anxiety disorders (Department of Human Services 2005a) In 2007, 18 per cent of Australian males aged 16 to 85 reported at least one mental disorder. This included 11 per cent of males reporting an anxiety disorder, 5.3 an affective disorder and seven per cent a substance use disorder (ABS 2008c).

The age group of men most affected are those 15 to 34 where mental disorders make up 51 per cent of the total disease burden (see Table 3.8). As in all other age groups depression is the greatest cause of disease burden of all mental disorders, this is followed by psychoses and heroin or poly drug use. Mental disorders that cause a greater disease burden to males include alcohol dependence and harmful use, cannabis dependence and harmful use and heroin or poly drug use, which all have more than three times the impact on males than females.

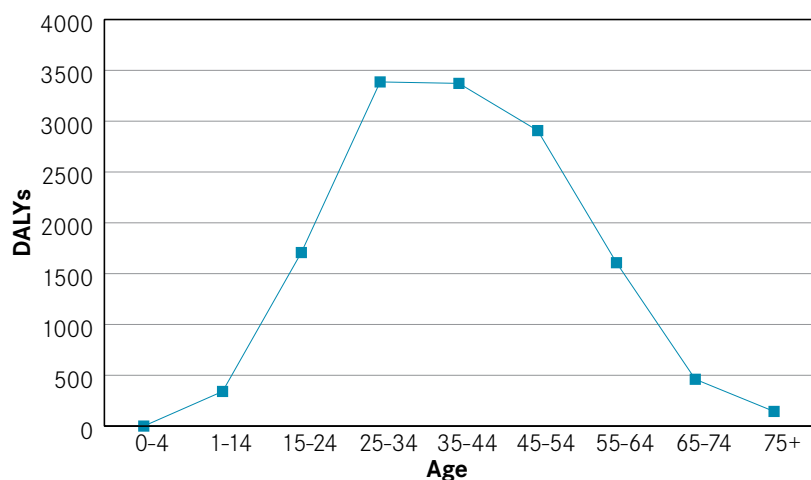
**Table 3.8 Mental disorders: leading causes of disability adjusted life years (DALYs) in Victorian men by age (2001)**

	DALYs	% of total DALYs	Ranking in total DALYs	Ratio of male to female DALYs
Depression	5094	9.6	1	0.8
Psychoses	3917	7.4	4	1.2
Heroin or poly drug use	2981	5.6	5	3.3
Borderline personality disorder	1959	3.7	6	0.9
Alcohol dependence and harmful use	1901	3.6	7	3.9
Generalised anxiety disorder	1861	3.5	8	0.5
Bipolar affective disorder	1703	3.2	9	0.9
Cannabis dependence and harmful use	1683	3.2	10	3.5

(Department of Human Services 2005a)

## Depression

Depression causes a high burden of disease across men from the ages of 25 until 54. Rates of depression have been found to be higher in men who have early onset anxiety disorders, are single, socially isolated, medically ill, and those who suffer from alcohol or substance abuse disorders. More generally depression has also been associated with being unemployed and socially disadvantaged (Wilhelm 2009).

**Figure 3.26 Depression: burden of disease in Victorian men by age (2001)**

Data from the Victorian population health survey indicates that high/very high levels of psychological distress in males is strongly (negatively) related to level of education and household income. These associations are stronger for males than females. Among men, the age group with the highest proportion reporting high/very high levels of psychological distress was 25–34, and those reporting the lowest levels of psychological distress were aged 65 plus (see Appendix Table 8.6). Being in a rural or metro area was not related to high/very high levels of psychological distress.

Studies have consistently found that men have lower rates of anxiety and depressive disorders than women. But, paradoxically have a greater likelihood of committing suicide, being homeless, being dependent on alcohol and many other risk behaviours (Branney & White 2007; Wilkins 2007). A number of authors suggest that the lower recorded rate of depression in men is the result of the recognised depression symptomology emphasising a ‘feminine’ presentation. For example, behaviours such as anger attacks, acting out, and irritability are more common in men, but outside the standard diagnostic criteria (Wilhelm 2009; Wilkins 2007).

A recent NSW study identified a range of maladaptive behaviours in men dealing with depression that are not covered in the standard diagnostic criteria. In some men, these formed a trajectory starting with ‘acting in’ behaviours described as ‘avoiding it’ or ‘numbing it’ and progressing to ‘acting out’ behaviours such as risk taking, violence, and eventual self harm or suicide (see Table 3.9) (Brownhill et al. 2005). This process was labelled the ‘big build’ and could make it more difficult to detect or measure depression in men.

**Table 3.9 The big build: stages of emotional**

Stage	Depressive equivalents
Stepping over the line	Deliberate self-harm, suicide
Hating me, hurting you [aggression toward self and others]	Violence aggression and crime
Escaping ‘it’ [escape behaviour]	Risk-taking; dangerous drugs and excessive limits of alcohol, gambling
Numbing ‘it’ [self-medication]	Drugs and alcohol
Avoiding ‘it’ [avoidant behaviour]	Overwork and distraction

(Brownhill et al. 2005)

The research suggested men are more likely to decrease reporting their symptoms of depression to avoid signalling distress or displaying weakness or vulnerability, while women are more inclined to release emotions through crying and seeking help from others. The result of this is that depression is observed and understood more in terms of women’s experience, while men’s is likely to be hidden and misunderstood. Interestingly, in communities where alcohol and drug use are culturally prohibited there is less difference in male and female reporting of depression (Brownhill et al. 2005).

Other suggested reasons for the lower reported rates of depression in men include, men failing to seek help, not recognising they need help, failing to report or forgetting symptoms, and difficulties accessing services during working hours. Men are thought to have greater difficulties verbally expressing emotions, and are sometimes described as inexpressive or hypoemotional (Brownhill et al. 2005). Alexithymia, which is a deficiency in understanding, processing, or describing emotions, has been found to be 70 per cent more common in men, and also associated with advanced age, low educational level, and low socioeconomic status (Salminen et al. 1999).

Men have a greater likelihood of depression leading to increased morbidity and mortality from cardiovascular disease, and men's response to emotional difficulties generally is likely to result in a range of further health problems. For example emotional repression is more common among men and increases the likelihood of alcohol and substance abuse as well as being associated with a range of illnesses such as heart disease, sudden cardiac death and hypertension (Wilhelm 2009).

Men are less likely to seek help or access services when experiencing a mental health problem, and use avoidant coping strategies such as denying their emotional distress or trying to conceal the effects of their illness (Courtenay 2003). Men also tend to have less access to day-to-day informal support through friendships and family relationships and have lower levels of social contact and social support (Wilkins 2007). In addition, they are less likely to use social networks they do have, instead relying on themselves and withdrawing socially (Courtenay 2003).

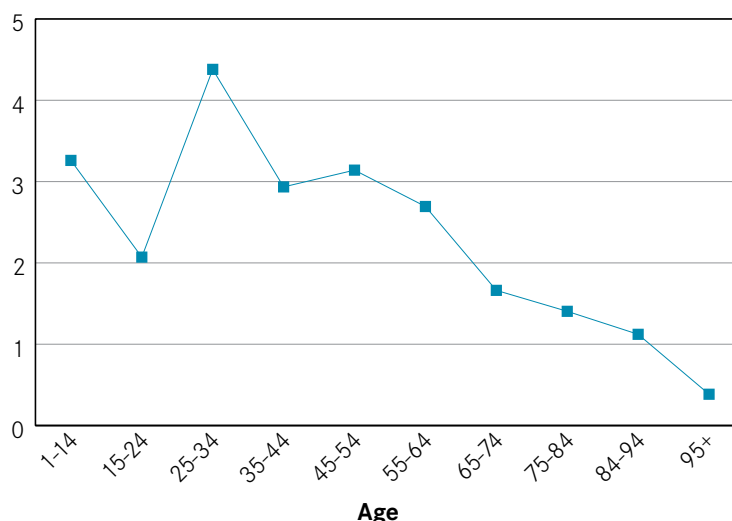
Part of the reason for men's lower level of health service usage is suggested to be the conflict between aspects of masculinity including resistance to admitting weakness, seeking help and talking openly about emotional issues (Senate Select Committee on Men's Health 2009). For example, when suffering from depression men commonly label this as being stressed, not depressed, as depression can be seen to question male gender identity (Kiss 2004). However, in addition there is a perception among some men that GPs are not supportive in dealing with depression or would not take it seriously (Beyond Blue 2009).

## External causes of ill health and mortality

### Mortality

In 2007 external causes of mortality such as suicide accidents and injuries accounted for almost twice the number deaths of Victorian males (1139) as females (620), and represented 6.7 and 3.6 per cent of total deaths among males and females respectively. As Figure 3.27 shows males have a substantially higher rate of mortality due to external causes across the life course, with a peak of 4.4 males dying from external causes for every female death in the 25–34 age group. The 95 plus age group is the only category where females have a greater rate of death from external causes, primarily due to falls.

**Figure 3.27 Ratio of male to female deaths (per 100,000) due to external causes by age group in Victoria in 2006**



(ABS 2007a)

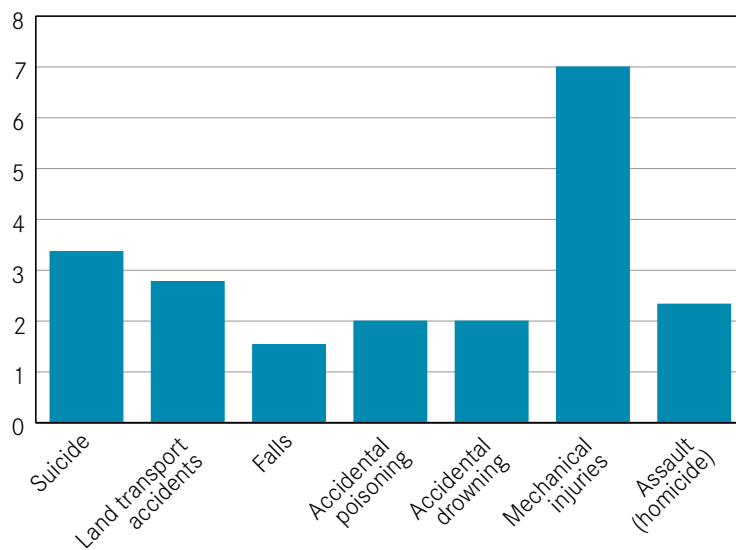
The single greatest external cause of mortality in 2007 was suicide. This was followed by land transport accidents (196 male deaths) falls (158 male deaths) and accidental poisoning (91 male deaths). Although falls caused a higher number and rate of deaths than poisonings, the YPLL through poisonings was around three times higher, indicating a substantially lower average age of death due to poisonings (see Table 3.10). In the same way the YPLL by males dying from falls is roughly four times that lost by females again indicating a substantially younger average age of death.

**Table 3.10 Deaths and YPLL due to accidents and injury in Victoria in 2007**

Selected causes of death	Age standardised death rates (per 100,00)		Years of potential life lost	
	Males	Females	Males	Females
Suicide	12.8	3.8	11,742	3,619
Land transport accidents	7.5	2.7	7,727	2,647
Falls	6.6	4.3	1,093	234
Accidental poisoning	3.2	1.6	3,385	1,479
Accidental drowning	0.8	0.4	872	463
Exposure to inanimate mechanical forces	0.7	0.1	539	52
Assault (homicide)	0.7	0.3	682	296

(ABS 2008a)

Across all external causes of mortality listed in Table 3.10 the standardised male death rate is far higher than that experienced by females. The greatest difference is for deaths due to mechanical injuries where there are seven male deaths for each female death. This is followed by land transport accidents and homicide where there are 2.8 and 2.3 male deaths respectively for each female death. The smallest difference in death rates is for falls where the rate of male mortality is 1.5 times that of women (see Figure 3.28). However, as discussed above, males dying from falls are of a significantly lower average age than females.

**Figure 3.28 Ratio of male to female standardised death rates due to external causes in Victoria in 2007**

(ABS 2008a)

### Suicide

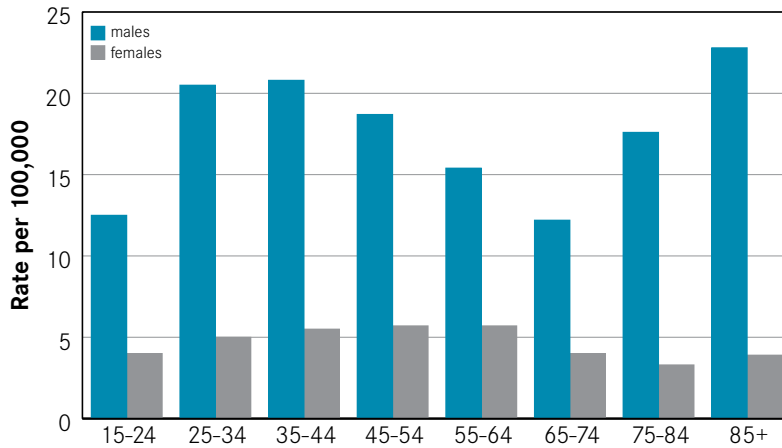
Suicide is a major cause of premature deaths among Victorian males and is indicative of underlying issues with poor mental and emotional health. Although official statistics show a fall in the rate of suicides of around 25 per cent since 1998, a number of groups have recently argued that that this is due to changed reporting methods leading to under-reporting of between 20–30 per cent. In response to identified problems the ABS will be releasing revised figures in March 2010 (Pollard 2009).

In 2007 suicide was the eleventh leading cause of death among Victorian men, however notably, it was the second greatest cause of YPLL after ischaemic heart disease (see Table 3.1 and Table 3.2), highlighting the young average age of those dying and major cost to the community in both economic and social terms. The male standardised mortality rate due to suicide was 3.4 times that of females in 2007 (ABS 2008a).

Suicide is the highest cause of death among Victorian males aged between 15 and 44, accounting for around one-fifth of all male deaths in this age group (see Appendix Figure 8.3). This then steadily drops to a figure of 0.2 per cent of male deaths in the 85 plus age group. However, the *rate* of suicides is actually highest among the 85 plus age group, (22.8 per 100,000). Men in this age group are 5.8 time more likely to die from suicide than women. The 35–44 and 25–24 age

groups have the next highest suicide rates (20.8 and 20.5 per 100,000 respectively), with approximately four male for every female suicide death (see Figure 3.29).

**Figure 3.29 Australian age standardised deaths rates due to suicide by age and sex in 2007**

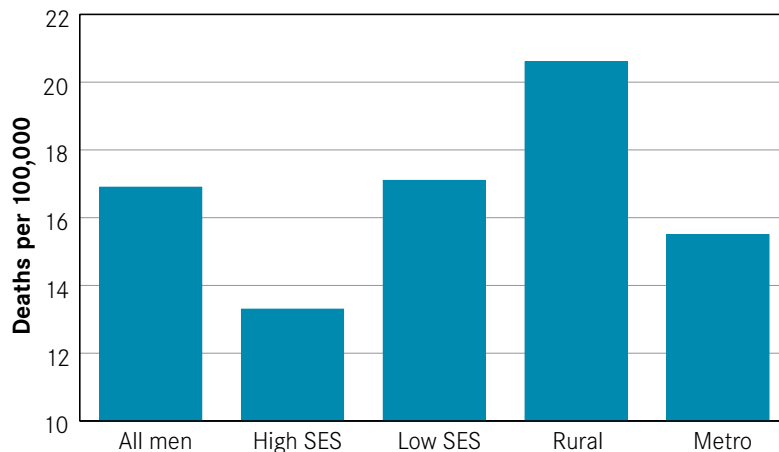


(ABS 2008a)

Indigenous males experience particularly high suicide rates, estimated at two to three times the rate of non-Indigenous males across the life course. In 2007, suicides accounted for 5.4 per cent of Indigenous male deaths (Australia wide) compared to two per cent non-Indigenous male deaths (ABS 2008a).

Between 2001 and 2005 males in the highest socioeconomic quintile and those in metropolitan areas had lower suicide rates (13.3 and 15.5 respectively) than all Victorian men (16.9). Conversely men in rural areas had a substantially higher suicide rate (20.6) (see Figure 3.30).

**Figure 3.30 Suicide rates (per 100,000) among groups of Victorian men, 2001–05**

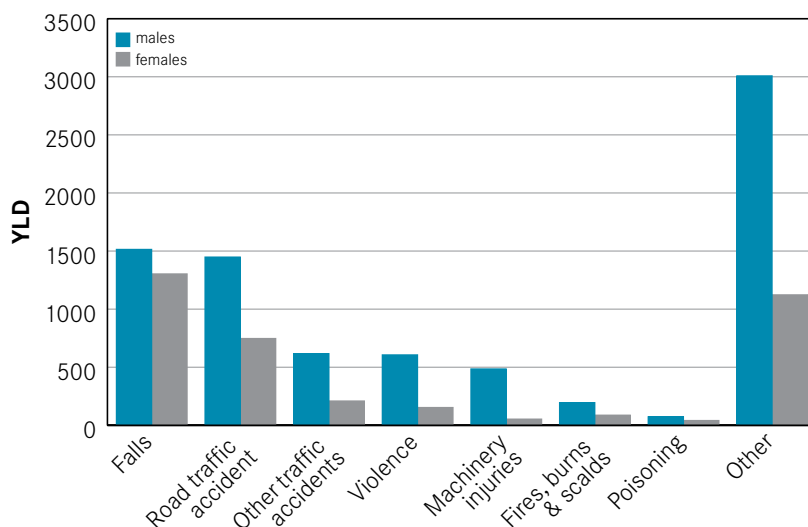


(Department of Human Services 2005c)

## Morbidity

In addition to mortality, accidents and injuries also make a substantial contribution to the disability burden of Victorian males. Within this category the greatest single cause of disability burden is falls, closely followed by road traffic accidents, then other traffic accidents, violence and machinery injuries. Across all categories males have a significantly higher rate of disability burden than females (see Figure 3.31).

Figure 3.31 Years of life disabled (YLD) due to accidents/injuries, by sex in Victoria in 2001

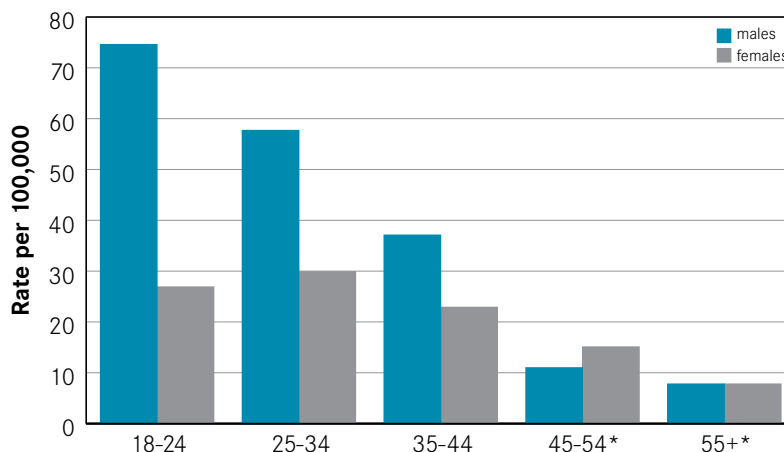


(Department of Human Services 2005a)

### Violence

There is extensive evidence that males are more likely to be victims of violence and physical abuse than females (Courtenay 2003). In Victoria in 2005, men were around 90 per cent more likely than women to have experienced violence in the previous 12-months (6.4 per cent compared with 3.4 per cent), and more than 120 per cent more likely to have experienced a physical threat since the age of 15 (19.8 per cent compared with 8.8 per cent) (ABS 2006d). Victorian men aged 18–24 are more likely than men or women in any other age group to have experienced violence in the last 12 months, and are almost three times more likely than women of this age to have experienced violence (see Figure 3.32). The likelihood of experiencing violence reduces with age and men aged 55 and over are roughly 10 times less likely to have experienced violence than those aged 18–24.

Figure 3.32 Experience of violence during the previous 12 months reported by Victorian men and women in 2005



\* Estimate has a relative standard error of 25 to 50 per cent, and should be used with caution (Department of Human Services 2008d)

Official Victorian crimes statistics identified 40% more assaults against men than women in 2008–09 (ABS 2006d), although this is likely to be an underestimate given men’s substantially lower rate of reporting violence to police. Men were also almost four times more likely to be victims of robbery and twice as likely to be victims of homicide over this period. Although crime rates overall have fallen by around 25 per cent since 1999–2000 increasing numbers of assaults is a concerning trend: these increased by 5.4 per cent across Victoria and by 8.7 per cent in the Melbourne CBD between 2007–08 and 2008–09 (Victoria Police 2009).



ABS surveys suggest that around 80 per cent of perpetrators of violence against males are other males, and the remaining 20% females. Roughly the same gender split applies to perpetrators of violence against females (ABS 2006d).

Other important gender differences exist in men's and women's experience of violence (see Table 3.11). Alcohol or drugs are far more likely to contribute to men's violence against men, than women's violence against men, or men/women's violence against women. This is consistent with much other research linking alcohol with an increased likelihood of men engaging in violent behaviour (Richardson 2004).

The location of violence against men varies substantially by sex of the perpetrator, with violence due to male perpetrators generally taking place in the open or licensed premises and usually caused by a stranger. By contrast women's violence against men takes place in the home in around two-thirds of cases and is most commonly perpetrated by a current or recent partner (ABS 2006d).

Importantly, as the table below shows, similar proportions of males and females (although slightly fewer males) state that their experience of violence left them physically injured. However, males are less likely than females to see violence perpetrated against them by other males as a crime and even less likely to view violence perpetrated by females as a crime (see Table 3.11). Similarly, males are less than half as likely as females to report violence by male or female perpetrators to the police. The data suggest an implicit tolerance for the experience of violence as a male.

**Table 3.11 Characteristics of violence (most recent incident) experienced by Victorian males and females since age 15 by sex of perpetrator (2005)**

	Male perpetrator %*	Female perpetrator %*
<b>Males</b>		
Alcohol or drugs contributed	70.2	47.1
Location – at home	13.9	63.8
Location – in the open	34.0	11.7
Location – licensed premises	31.5	13.1*
Physically injured	52.6	46.4
Perpetrator– stranger	66.7	27.3
Perpetrator– current/previous partner	–	44.9
Violence perceived as a crime (by victim)	35.2	19.8#
Police told	30.3	27.4
<b>Females</b>		
Alcohol or drugs contributed	44.6	45.5
Location – at home	74.1	39.9
Location – in the open	11.3	11.7*
Location – licensed premises	2.9	18.7
Physically injured	54.2	52.4
Perpetrator– stranger	15.5	31.2
Perpetrator– current/previous partner	46.2	–
Violence perceived as a crime (by victim)	41.9	36.3
Police told	70.0	56.0

\* Percentage of total male/female violence; # relative standard error of 25 to 50 per cent and should be used with caution (ABS 2006d)

Recognising men's role in perpetrating violence against women and other men is essential. At the same time, the downplaying or silence about men as victims of violence plays into conventional notions of masculinity suggesting that men should be strong or stoic and that the experience of violence is an integral part of manhood. A social acceptance of men experiencing violence also implicitly validates this as a method of interaction.

### Sexual violence

Males experience a lower rate of sexual violence/assault than females, but this still affects a considerable number of men and boys and causes severe impacts including psychiatric and behavioural disturbances, relationship difficulties, personality disorders, self-harm and drug abuse.

ABS figures indicated that in 2005, around 17,200 Victorian adult men had experienced sexual violence in the previous 12 months compared with 40,900 women (ABS 2006d). Victoria Police figures for rape and sexual assault in 2005

identified 945 males (25 per cent of the female figure), of which 785 were under 17 and 160 over 17 years of age. However, it is suggested that males are less likely than females to disclose sexual assault leading to an under estimate in male figures (Crome 2006).

Sexual assault and sexual assault reporting can be problematic for males due to: masculine notions of strength and self reliance being damaged; questions being raised about sexuality and self identity; and, struggles with issues of homophobia. In addition, limited options in terms of services, skills and policies addressing male sexual assault and most treatment options being within female oriented services further discourage male disclosure (Crome 2006).

### **Intimate partner violence**

In the area of intimate partner violence the burden of disease experienced by Victorian women is considerable. This disease burden includes a range of physical and mental health impacts including depression and anxiety (65 per cent of total intimate partner violence burden), suicide (12.7), alcohol and drug use (8.4), sexually transmissible infections (STIs) (1.1), physical injuries (0.5) and eating disorders (0.4 per cent) (Department of Human Services 2005a). In addition to impacts on women intimate partner violence is also likely to have a significant impact on children, both boys and girls. Over half of those reporting violence from a current or previous partner had children in their care, and over half of these people reported the violence being witnessed by their children (ABS 2006c).

Fewer men than women report having experienced physical violence from a current/previous partner. However, in 2005, a substantial 76,500 Victorian men reported having experienced intimate partner violence since age 15 (this compares with 226,500 women) (ABS 2006d). Another issue related to intimate partner violence for men, which is starting to receive recognition, is abuse within same sex relationships, where abuse has been found to occur at a similar level to in heterosexual relationships (Leonard et al. 2008).

Research currently being undertaken by Edith Cowan University has identified males as suffering from all types of intimate partner abuse including physical, verbal, psychological/emotional, financial, sexual, and legal/administrative (use of institutions to inflict abuse). The identified impacts of intimate partner abuse on males include: emotional issues (most common), loss of contact with children, suicide ideation, use of alcohol or drugs, physical injuries, loss of work, loss of home and physical illness. Barriers to disclosure identified by men included a perception of not being listened to, shame, perceptions regarding masculinity, perceived gender bias in services, perceived societal bias, protection of spouse, protection of the family unit, and uncertainty about seeking help (Tilbrook 2009).

### **Childhood experience of violence**

Prior to the age of 15 males and females report experiencing violence at a similar rate, but gender differences exist in the relationship to the perpetrator. Males are around half as likely as females to report a mother or step mother as the perpetrator of violence and roughly 2.5 times more likely to report an 'other known person' as the perpetrator (ABS 2006d). This childhood experience of violence has an important link to later aggression and mental and physical health outcomes in males. European research suggests that the level of risk behaviour, aggression, depression, anxiety and other mental symptoms is around twice as high among those who have experienced childhood violence as those who have not (Holter 2009).

### **Sexual health**

Sexual health is a vital component of overall health and wellbeing. The World Health Organization defines sexual health as 'a state of physical, emotional, mental and social well-being in relation to sexuality;...not merely the absence of disease, dysfunction or infirmity' (WHO 2006).

Sexual health may be influenced positively or negatively by complex set of factors related to sexual behaviours and experiences, physical and mental health issues, social and economic factors, and societal attitudes. These factors may have greater or lesser impact at different life stages, and for different population groups.

### Men's sexual experiences

Sexuality is not easily categorised for many individuals. This is evident from the findings of the 2002 Australian Study of Health and Relationships (ASHR), which found that while 97.4 per cent of Australian men identified as heterosexual, only 92.9 per cent were exclusively attracted to men, and even fewer (90.7) reported exclusively heterosexual experience. Similarly, although 1.6 per cent of men identified as homosexual, smaller proportions reported being solely attracted to men, or having only homosexual experience (0.6 per cent for both) (Smith et al. 2003b). The survey found similar differences among females.

The ASHR found that men were somewhat more likely than women (88.2 and 79.5 per cent respectively) to believe that an active sex life is important to a sense of wellbeing (Rissel et al. 2003). However, a significant proportion of sexually active men also reported experiencing sexual difficulties, but these were less common than among women. The difficulty experienced most commonly by men was lacking interest in sex (24.9 per cent), which was also the most common difficulty for women (54.8). Other reported difficulties included coming to orgasm too quickly (23.8 per cent), feeling anxious about sexual performance (16), worry about appearance during sex (14.2) and trouble keeping an erection (9.5) (Richters et al. 2003).

Among men, reporting a sexual difficulty was not significantly related to age, but the types of difficulties reported differed between age groups. Anxiety about performance and appearance was most common among 16–19 year olds; coming to orgasm too quickly was most common among 30–39 and 50–59 year olds; and lack of interest in sex and trouble keeping an erection was most common in those aged 50–59 years, affecting 19.2 per cent of men in this age group (Richters et al. 2003).

In general, men are far less likely to report negative sexual experiences. Only a small proportion of men (5.6 per cent) found sex not physically pleasurable, compared to 27.3 per cent of women (Richters et al. 2003). Furthermore, a much lower number of men report ever being coerced into sexual activity (Visser et al. 2003a). Male secondary students are also less likely than females to have experienced unwanted sex (Smith et al. 2009).

According to the ASHR, young men and women engage in sexual activity earlier than previous generations. However, a recent survey of secondary students indicates that in 2008 young men were slightly less likely to have sexual intercourse while still at school than in 2002 (34 compared to 36.4 per cent). Conversely, the proportion of female students surveyed who had had intercourse rose significantly during the same period, from 33.3 in 2002 to 43.1 per cent in 2008 (Smith et al. 2009).

### Experience of sexually transmissible infections

Men are more likely to have been diagnosed with an STI at some point in their life than women (20.2 compared with 16.9 per cent), however, a similar proportion of men and women (2.0 and 2.2 per cent respectively) had been diagnosed with an STI in the preceding year. Recent diagnosis was significantly more common among men who reported having more than one sexual partner in the past year (4.9 compared with 1.6 per cent of men who had one partner only). STIs are also much more common among homosexual and bisexual men (Grulich et al. 2003a).

Overall, the most common STIs in Australia are believed to be human papilloma virus and genital herpes, but as these diseases are not notifiable their prevalence is unknown (AIHW 2006). According to the ASHR, the most commonly diagnosed STIs for men in the 12 months preceding the survey were candida (thrush), genital warts, pubic lice and genital herpes (Grulich et al. 2003a).

The most commonly notified STIs in Victoria are chlamydia, gonorrhoea and syphilis; notifications of these three diseases have increased significantly over the past decade (see Appendix Figure 8.4, Figure 8.5 and Figure 8.6) (Department of Human Services 2009b). In 2008, males were somewhat less likely than females to be diagnosed with Chlamydia, around five times more likely to be diagnosed with gonorrhoea and almost 20 times more likely to be diagnosed with syphilis (see Table 3.12).

**Table 3.12 Rate of Victorian male and female STI notifications (per 100,000) in 2008**

	Males	Females	Ratio of male to female notifications
Chlamydia	197.0	275.1	0.7
Gonorrhoea	29.2	6.2	4.7
Syphilis	14.1	0.7	19.1

(Department of Human Services 2009b)

In 2008, there were 256 new diagnoses of HIV, slightly lower than the previous two years, but higher than any other years in the preceding decade (Department of Human Services 2009d). Men made up around 88 per cent of new HIV cases in 2008 and 78 per cent of cases involved men who had sex with men (MSM). A majority of reported gonorrhoea and infectious syphilis cases are also among MSM (56 and 80 per cent respectively), while chlamydia transmission occurs most commonly through heterosexual sex (approximately 70 per cent) (Department of Human Services 2009b).

Aboriginal people are over-represented among notified cases of STIs. Syphilis is particularly prevalent, with Aboriginal people accounting for four per cent of the notified cases (nine out of 231 for which Indigenous status was recorded). However, poor data collection on Aboriginal and Torres Strait Islander status means this is likely to be a significant underestimate (Department of Human Services 2006c).

### Knowledge of STIs

Male secondary students have significantly lower knowledge about transmission of sexually transmissible infections (STIs) and blood borne viruses (BBVs) apart from HIV than women (see table below) (Smith et al. 2009).

**Table 3.13 Year 10 and year 12 students' average knowledge score about STIs and BBVs, in Australia in 2008 (scored out of 11)**

	HIV	STIs	Hepatitis	Human Papilloma Virus
Males	9.3	6.7	4.4	2.8
Females	9.4	7.5	4.7	5.3

(Smith et al. 2009)

Among adults, knowledge about transmission and health consequences of STIs and BBVs (not including HIV) is poor overall, but is significantly poorer among men, across all age groups (Grulich et al. 2003b).

**Table 3.14 Average knowledge score about STIs and BBVs (not including HIV), by age and sex in Australia in 2002**

	16–19	20–29	30–39	40–49	50–59
Males	4.5	6.0	6.0	5.8	5.4
Females	5.8	6.6	6.5	6.3	5.8

(Grulich et al. 2003b)

Among men, knowledge was lowest among 16–19 year olds, and highest among 20–39 year olds (Grulich et al. 2003b). Higher knowledge among men in this age group may in part result from individual experiences of an STI, as men aged 20–49 were most likely to have had an STI diagnosis in the previous year (Grulich et al. 2003c).

### Erectile dysfunction

Erectile dysfunction is not a disease in itself but rather a symptom of other physical or psychological problems. It is estimated that around 20 per cent of men over 40 often experience erectile problems and about 10 per cent are completely unable to have erections. The likelihood of having erectile problems increases with age (Andrology Australia 2009b).

Erectile dysfunction can have detrimental impacts on men's sexual wellbeing, mental health and relationships. However, erectile dysfunction can also be an important indicator of other health problems such as cardiovascular disease, diabetes, high blood pressure, and high cholesterol. Research indicates that the level of risk for a cardiovascular event after developing erectile dysfunction is similar to being a current smoker or having a family history of heart attack.

Around two per cent of men will have a stroke or heart attack within a year of developing erectile dysfunction and 11 per cent within five years. Similarly, erectile dysfunction has also been identified as an early warning sign of diabetes and between 34 and 89 per cent of men with diabetes will have erectile problems (Andrology Australia 2009b; McLachlan 2009).

These associations suggest that with greater awareness among men and health professionals, erectile dysfunction has the potential to be used as an important early warning sign for other conditions. In addition, there is the need for attention to potential erectile dysfunction among men with these conditions.

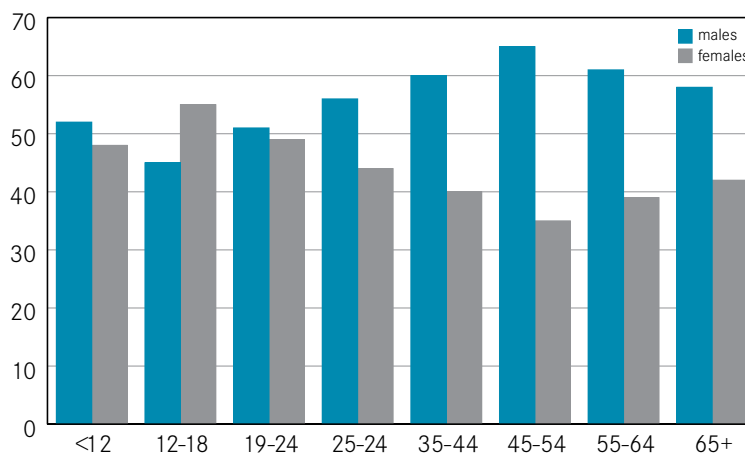
## Homelessness

Homelessness is both a measure of wellbeing in itself and a risk factor for other health issues, being associated with poor health outcomes across a range of physical and mental health indicators. A 1998 study of the health of homeless people in Melbourne (Kermode et al. 1998b) found that the prevalence of a number of major medical conditions, including respiratory illness, heart disease, diabetes, cancer and epilepsy, was higher among the homeless population than the general population.

Homelessness is also associated with mental health issues such as depression, and health risk factors, such as poor nutrition and substance use. Research suggests that physical and/or mental health problems may be both a cause and consequence of homelessness, and that homelessness may complicate the treatment of health care problems due to issues of access to necessary health services (Sainsbury and Nutbeam cited in HREOC 2008; Institute of Medicine (U.S.) & Committee on Health Care for Homeless People 1988, p.39)

In 2006, homeless males were estimated to outnumber females in Victoria 55 to 45 per cent (11,281 to 9230) (Chamberlain & MacKenzie 2009). However, as Figure 3.33 shows, the gender distribution varies significantly across different age groups, with males making up the greatest proportion of the homeless population (65 per cent) in the 45–64 year age group.

**Figure 3.33 Proportion of homeless people in Victoria that are male and female**



(Chamberlain & MacKenzie 2009)

Despite higher numbers of homeless men in Victoria, they represent a minority (34.8 per cent) of clients accessing Supported Accommodation and Assistance Program (SAAP) services. Men are significantly more likely than women to live in boarding house accommodation, or in improvised dwellings or be sleeping rough (AIHW 2007). Those without shelter, who sleep in streets or parks for example, have been found to have significantly poorer health and engage in more risk behaviours than those who are sheltered (in crisis accommodation, boarding house, or other government supported accommodation) (Kermode et al. 1998a). This finding suggests that homeless men are particularly at risk of poor health, given their overrepresentation in the rough sleeping category.

Where men do access SAAP services, it appears that they generally have a more restricted experience than women, in terms of the length of support and accommodation provided to them. The Australian Institute of Health and Welfare (AIHW) reports that over 97 per cent of support periods for men aged 25 years and older were in two of the sectors providing the shortest lengths of support and accommodation: cross-target agencies and those targeting only single

men (AIHW 2007). Moreover, a 2002 survey by the NSW Ombudsman suggests that men may be more at risk of being excluded from service provision (AIHW 2007). Single, older men with problematic alcohol and substance use and mental health issues were thought to face more obstacles than other client groups (AIHW 2007).

In 2006–2007, the reasons for men seeking SAAP assistance (which may or may not have been the primary cause of their homelessness) varied significantly, depending on the age of clients and whether they presented alone or with a partner and/or children. However, overall, men were most likely to identify health-related issues (including problematic substance use and mental health issues) and financial issues as their primary reason for seeking assistance. For women the most commonly cited reasons were those related to relationship issues, and in particular domestic violence (AIHW 2008e).

The new *Family Violence Protection Act 2008* contains provisions for the use of 'exclusion conditions' in family violence intervention orders, which require the exclusion of perpetrators of family violence from the home where necessary. This will play an important role in reducing homelessness among victims of domestic violence (predominantly women) and children who may previously have been forced to leave the family home. However, given the gender profile of family violence perpetrators, and more limited access to emergency housing for males, this may also lead to higher levels of homelessness among men where they are not able to find alternative housing.

## Chronic disease

In 2007, 52.8 per cent of Victorians reported 'ever having been diagnosed with a chronic disease' (see Table 3.15). Overall, men reported a lower level of chronic disease than women, 47.9 compared with 57.5 per cent (Department of Human Services 2008c). Diseases that were more common among men were heart disease and stroke.

Arthritis is the chronic diseases most likely to affect women and accounts for a significant portion of the gender gap, followed by depression and asthma. Around 30.8 per cent of males report having one chronic disease and an additional 17.2 two or more chronic diseases (Department of Human Services 2008c).

**Table 3.15 Prevalence of chronic disease among Victorian men and women (2007)**

	Heart	Stroke	Cancer	Osteoporosis	Arthritis	Depression	Asthma	Total
Males	8.6	2.4	6.3	1.8	15.8	13.4	19.3	47.9
Females	5.7	1.7	6.8	6.8	24.1	22.4	22.4	57.5

Groups (not split by gender) with higher rates of chronic disease include people:

- in non-metropolitan areas
- born in Australia
- not in the labour force
- living on low incomes
- in rented accommodation.

Conversely, lower levels of chronic disease was found for people in professional occupations, employed, and living in households with incomes over \$60,000 (Department of Human Services 2008c).

## Diabetes

In 2007, 5.1 per cent of people in Victoria reported having been diagnosed with type 1 or type 2 diabetes by a doctor. The rate for males was somewhat higher than that for females, 5.5 compared with 4.8 per cent. Men in the 65 plus age group have the highest rates of diabetes, 14.3 per cent and Indigenous men suffer from diabetes at almost five times the rate of other men.

In 2007, men had a higher standardised death rate from diabetes than women (20.5 compared with 15.7) and higher rates of hospitalisation (ABS 2008a; AIHW 2008c). Males with diabetes were also more likely than women to face a range of lifestyle risk factors including being overweight, eating insufficient fruit and vegetables, and being a current smoker (Department of Human Services 2008c; Department of Human Services 2008d).

Type 1 diabetes is due to the pancreas failing to produce insulin, and occurs more frequently in those under 30. Type 2 diabetes is more common and often develops in adults that are overweight (Department of Human Services 2008c).

Diabetes has the potential to cause other serious health complications including:

- heart disease, strokes and circulation problems in the legs
- kidney damage (nephropathy)
- eye damage (retinopathy)
- nerve damage to the feet and other parts of the body (neuropathy)
- sexual difficulties
- foot ulcers or infections resulting from circulation problems and nerve damage.

Diabetes was the second greatest cause of mortality and disability among Victorian men in 2003 (Department of Human Services 2005a). Data for Australia shows that the impact of diabetes, largely related to obesity, increased dramatically between 1993 and 2003 and based on current trends is expected to increase by a further 50 per cent by 2023.

## 4. Factors influencing men's health

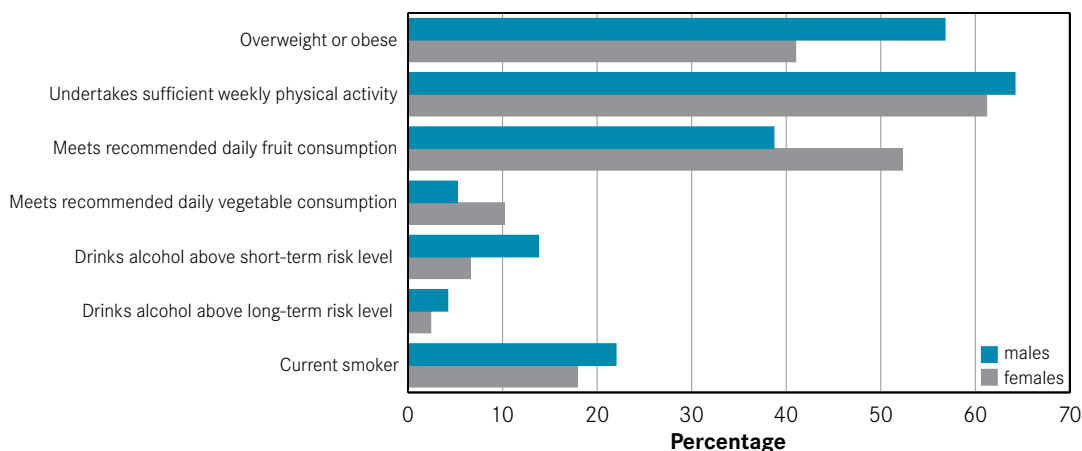
Men's health is impacted by a wide range of individual and socioeconomic factors. The chapter outlines key influences on men's health across the following areas:

- Lifestyle factors
- Men's health efficacy
- Health service delivery
- Men's economic and social participation
- Broader social, legal and economic policies

### Lifestyle

Lifestyle factors and behaviours can affect health by influencing the onset, severity and prognosis of a variety of health conditions. Lifestyle factors are broadly divided into two categories of behaviour: health-promoting (such as physical activity, healthy eating, getting sufficient sleep and wearing seatbelts) and risk-taking (such as tobacco use, playing dangerous sports, unsafe sex and driving recklessly). According to a 2003 review of US men's health literature, men in general adopt far fewer health promoting activities than women, but engage more frequently in risk-taking behaviours, thus compounding their lifestyle-related health risks (Courtenay 2003). This finding is consistent with the results of the 2007 Victorian Health Population Survey, which reveals that men more commonly have behaviours associated with poor health outcomes. While men are slightly more likely than women to undertake adequate weekly physical activity, they are also more likely than women to smoke, be overweight or obese, and drink alcohol at risky levels, and less likely to consume the recommended daily amounts of fruit and vegetables (Department of Human Services 2008c), as shown in Figure 4.1 below.

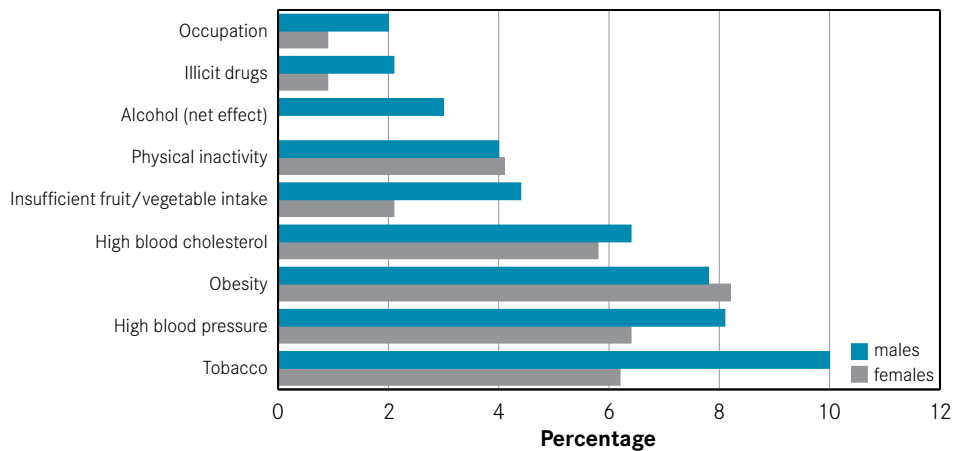
**Figure 4.1 Prevalence of lifestyle factors in Victoria by sex in 2007**



(Department of Human Services 2008c)

The report of the Senate Select Committee on Men's Health identified that a 'significant proportion of the relatively poorer outcomes for men's health when compared to women's health in Australia can be attributed to lifestyle factors' (Senate Select Committee on Men's Health 2009, p. 20). In Victoria, lifestyle factors are responsible for a high burden of disease for men, with tobacco the leading risk factor for ill-health, followed by high blood pressure and obesity. Disability accounts for a high proportion of the disease burden due to obesity, alcohol, illicit drugs and occupation; whereas mortality is the main contributor to the disease burden arising from smoking, inactivity and nutritional risk factors. Figure 1.14 shows the burden of disease from the ten leading lifestyle risk factors for men.



**Figure 4.2 Burden of disease attributable to 10 lifestyle factors by sex in Victoria in 2001**

(Department of Human Services 2005a)

It is important to note that the risks associated with most lifestyle factors transcend particular diseases, as these factors often co-occur in what has been referred to as ‘organised constellations of behaviour’, thereby heightening the risk of multiple, co-morbid conditions (Courtenay 2000) (Richardson 2004; Smedley & Syme 2000). For example, analysis of the 2007 HILDA survey shows that among Victorian men tobacco use is associated with a number of other poor health behaviours, while higher fruit consumption is associated with other health promoting behaviours.

- Tobacco use is associated with an increased likelihood of risky alcohol consumption, higher salt and red meat consumption, higher BMI, lower daily consumption of fruit, and higher psychological distress.
- A higher daily consumption of fruit is associated with a lower likelihood of tobacco or risky alcohol use; lower consumption of snack foods; lower salt usage; higher consumption of vegetables and legumes/pulses; higher levels of physical activity; and lower psychological distress.
- Higher psychological distress is associated with an increased likelihood of tobacco and risky alcohol use; lower consumption of vegetables, fruit and legume/pulses; higher consumption of snack foods; and lower participation in physical activity.

Some health risk behaviours such as smoking, harmful alcohol use and obesity are associated with a further range of social determinants. Those highlighted in the recently released National Preventative Health Strategy as being particularly relevant (National Preventative Health Taskforce 2009) are:

- the physical and social experiences in early life
- access to and quality of education
- the nature of urbanisation – how cities are planned and designed – along with the liveability and sustainability of rural locations
- transport options
- distribution mechanisms and consumer price of food, alcohol and tobacco
- exposure to marketing of energy dense nutrient poor (EDNP) foods, alcohol and tobacco
- the financial, psychosocial and physical conditions of working life
- the degree of social protection provided.

### Alcohol and drug use

Alcohol consumption is linked with short-term health risks of injury or accidents occurring immediately after drinking, and long-term risks of health conditions. Alcohol is associated with a range of adverse health outcomes including several forms of cancers, chronic liver disease, heart disease, damage to the central and peripheral nervous systems and alcohol-induced unintentional injuries such as those from road traffic accidents, drowning, suicides, and sports and leisure injuries. It is also associated with violence by an intimate partner especially for women (WHO 2005).

The leading causes of alcohol-related deaths in Victoria are road trauma, cancer and liver cirrhosis, all of which are experienced by a higher proportion of men than women (Department of Human Services 2005b). In Victoria in 2007 there were 197 male deaths due to alcohol-caused mental/behavioural disorders, liver disease, and poisonings; roughly four times the number of female deaths from these causes (ABS 2008a).

**Table 4.1 Deaths directly caused by alcohol in Victoria in 2007**

Underlying cause of death	Males	Females
Mental/behavioural disorders due to alcohol	55	9
Alcoholic liver disease	125	36
Accidental/intentional alcohol poisoning	17	8

(ABS 2008a)

The Victorian Population Health Survey found that, in 2007, the proportion of Victorian men who drank weekly at levels above the threshold for short-term harm (14 per cent) was double that of women (6.6), and that more men than women drank at levels above the threshold for long-term harm (see Appendix Table 8.15 and Table 8.16) (Department of Human Services 2008c). Another Victorian study undertaken in 2007 found men to be more than five times more likely than women to consume alcohol at the highest levels (14 or more drinks on a single occasion in the last 12 months or, six or more drinks in the same occasion weekly or more).

**Table 4.2 Alcohol consumption among Victorian men and women in 2007**

	Male %	Female %
<b>Maximum standard drinks in a single day in past 12 months</b>		
14 & above	18.8	3.4
10 to 13	13.1	3.4
6 to 9	20.5	12.7
4 to 5	12.7	13.7
1 to 3	22.2	41.2
Did not drink in the last 12 months	12.7	22.6
<b>Six standard drinks on one occasion</b>		
Weekly or more	15.1	3.0
Monthly	14.2	5.5
Less than monthly	17.8	10.7
Not in the last 12 months	52.9	80.8

(Matthews 2008)

Characteristics predictive of high alcohol consumption included being male, adult (under 55 years), living in households with incomes above \$50000, being in a defacto relationship, divorced, separated or never married. Interestingly, socioeconomic status (other than income) was not predictive of higher alcohol consumption (Matthews 2008).

The threshold levels used in the Victorian Population Health Survey were based on the 2001 National Health and Medical Research Council's (NHMRC) *Australian Alcohol Guidelines: Health Risks and Benefits*. In the 2009 revised edition of the guidelines, the NHMRC has reduced the levels of drinking which are considered low-risk for both short-term and long-term harm. Of particular interest is the fact that the NHMRC has reduced the threshold level for short-term harm for men from six to four standard drinks, bringing it in line with the guideline for women. This guideline was revised on the basis that although women reach a given blood alcohol concentration with a lower amount of alcohol, on average, men are more likely to experience harm from risk-taking behaviour while under the influence of alcohol (NHMRC).

There is evidence that alcohol consumption for men is entwined with their social identity and behaviour; according to a report by the UK Mental Health Foundation, men are more likely than women to use alcohol to fit in socially (Mental Health Foundation 2006). Other research indicates a strong link between alcohol consumption and masculinity, with one US report suggesting that 'alcohol may be used to avoid stigmatisation and to conform to specific gender norms' (Peralta 2007 p. 174). Among young men, public alcohol use has been found to symbolise the embodiment of traditional masculinity constructed through drinking stories, the body's ability to tolerate alcohol, and the relevance of drinking too little or not at all, which symbolized weakness, homosexuality, or femininity. In addition, where young women saw drinking as secondary to socialising and meeting people, men were more likely to see this as the primary goal of public gatherings (Peralta 2007).

The health benefits of low to moderate alcohol consumption, particularly on cardiovascular health, have been widely researched and reported. However, recent studies have questioned the extent of these benefits (Lauer & Sorlie 2009). In addition, there is greater awareness of the links between alcohol consumption, even at low levels, and an increased risk of several common cancers. Alcohol has been classified as a Group 1 carcinogen by the World Health Organization, the highest classification available (Victoria 2008). In its 2009 guidelines, NHMRC states that while certain ages groups may experience cardiovascular benefits from low to moderate drinking, 'any level of drinking increases the risk of ill-health and injury' (NHMRC p. 13).

### Drug use

Men use illicit drugs at significantly higher levels than women. The 2007 National Drug Strategy Household Survey found that the proportion of men aged 14 years and older who had used illicit drugs in the preceding 12 months was higher than women across all illicit drug types, except prescription drugs used for non-medical purposes, which men and women had used at equal levels (AIHW). Overall, the survey found that 15.8 per cent of men had used an illicit drug in the previous 12 months, compared with 11 per cent of women. Marijuana is the most commonly used illicit drug by both men and women. In 2007, 11.6 per cent of men aged 14 years and over had used marijuana in the previous 12 months; of these, 16.4 per cent used it every day. People aged 20–29 years were most likely to have used an illicit drug within the preceding 12 months (27.7 per cent).

In 2001, illicit drug use accounted for 2.1 per cent of the burden of disease for Victorian men, compared with only 0.9 per cent for women (Department of Human Services 2005a). As well as being a direct cause of death, illicit drugs are also risk factors for conditions such as HIV/AIDS, hepatitis, low birth weight, inflammatory heart disease, poisoning, suicide and self-inflicted injuries.

Data from the 2007 National Drug Strategy survey shows that men are more likely than women to undertake potentially dangerous activities while under the influence of illicit drugs. For example, 25.6 per cent of male recent users had, in the previous 12 months, driven a car while under the influence of illicit drugs, compared with only 14.4 per cent of women (AIHW).

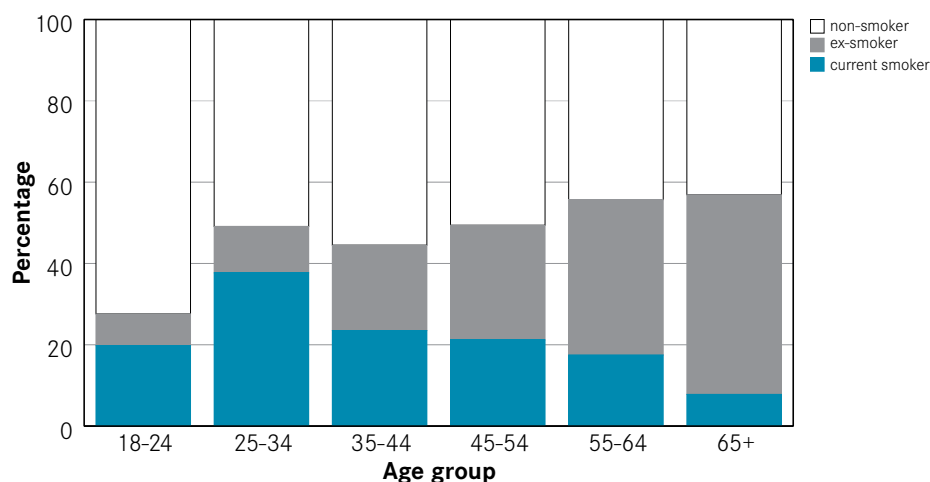
Illicit drug use is much higher among Indigenous men than the general population. According to the 2004–05 National Aboriginal and Torres Strait Islander Health Survey, 32.4 per cent of Indigenous men used illicit drugs in the previous 12 months (ABS). As this figure only includes Indigenous males over 18 years, and those from non-remote areas, it is suggested that the real rates of illicit drug use among Indigenous men are likely to be significantly higher.

### Tobacco use

The Victorian Population Health Survey identified a decrease in the prevalence of smoking in Victoria, for both men and women, over the period 2001 to 2007. In 2007, the prevalence of smoking among men was 22 per cent, compared with 17.9 of women. In 2001, the figures were 28.3 and 22.1 per cent respectively (Department of Human Services 2008c).

Smoking rates vary significantly across different age groups, with men in the 25–34 year age group having the highest prevalence of current smoking (37.7 per cent), followed by males in the 35–44 year age group (23.5). Smoking rates almost double for men age 25–34 compared with those aged 18–24, indicating that this is an important intervention point. Smoking prevalence decreases with age, with only 7.8 per cent of men 65 years and older identifying as current smokers.

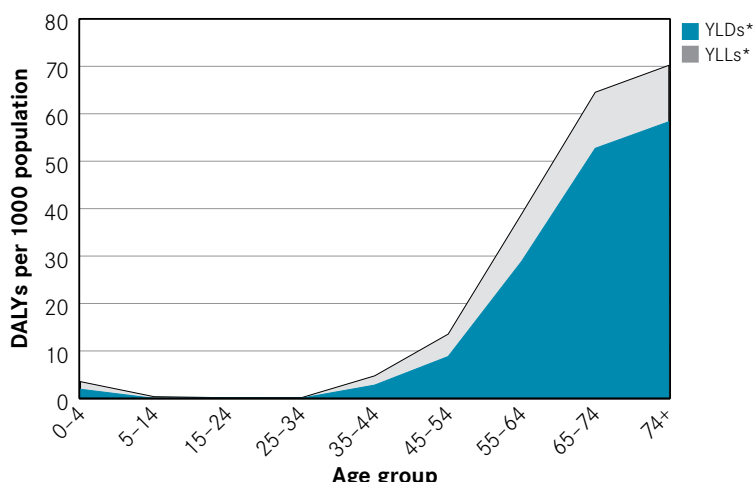
Figure 4.3 Smoking status among Victorian men by age group, 2007



(Department of Human Services 2008c)

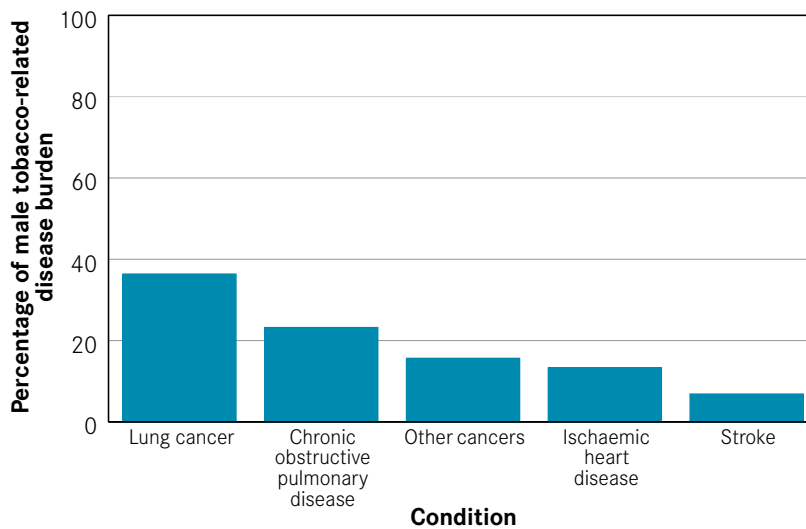
Although there are fewer current smokers aged 65 years and older, the prevalence of tobacco-related health problems is high in this age group, due to the high proportion (49.1 per cent) of ex-smokers. Figure 1.24 shows the disease burden attributable to tobacco across the life span.

Figure 4.4 Victorian male disease burden (DALYs) attributable to tobacco in 2001



YLD = years of life disabled; YLL = years of life lost  
(Department of Human Services 2005b)

Tobacco smoking is the risk factor responsible for the greatest burden of disease in Victoria, most of which is due to premature mortality. In 2001, smoking accounted for 10 per cent (33,918 DALYs) of total burden of disease for men, and 6.2 per cent (19,499 DALYs) for women. Cancer accounts for about half the tobacco-related disease burden for Victorian men, with lung cancer alone responsible for over one-third of the burden. Other major conditions contributing to the burden are chronic obstructive pulmonary disease, ischaemic heart disease and stroke (see Figure 1.25 below) (Department of Human Services 2005b).

**Figure 4.5 Major conditions contributing to male tobacco-related burden of disease in Victoria in 2001**

(Department of Human Services 2005b)

While age is the most significant predictor of an individual's smoking behaviour, socioeconomic factors such as lower education level, lower income and unemployment are strongly associated with higher smoking prevalence (Migliorini & Siahpush 2006) (Siahpush et al. 2006).

Victoria men whose highest level of education is primary school have a smoking rate of almost 40 per cent, compared with 23.2 and 16.4 for those whose highest levels of education are secondary and tertiary respectively. Household income is also associated with smoking levels, with men living in households with an annual income less than \$20,000 having smoking rates almost 70 per cent higher than those with annual incomes over \$60,000 (see Appendix Table 8.15).

Smoking prevalence is also far higher among Indigenous Victorians than the general population, with 48.1 per cent of Indigenous men and 55.1 per cent of Indigenous women identifying as current smokers in 2002 (Department of Human Services 2008d, p.369)

## Physical activity

Regular physical activity is a protective factor against multiple health conditions, especially cardiovascular disease. Physical activity reduces the risk of cardiovascular disease by preventing and counteracting the risk factors of being overweight, high blood pressure and high cholesterol levels. Regular exercise can also reduce the risk of osteoporosis and falls and fractures, and may have a positive effect on mental wellbeing by reducing feelings of stress, anxiety and depression (AIHW 2008b). In Victoria, a majority of men and women report that they undertake sufficient physical activity (64.2 and 61.2 per cent respectively), where 'sufficient' is defined as the amount of time and number of sessions of activity necessary to generate a health benefit. Among men, 18–24 year olds and 55–64 year olds are those most likely to be undertaking sufficient activity (Department of Human Services 2008c).

The proportions of Victorian men and women reporting sedentary lifestyles are similar; 4.5 and five per cent respectively. Among men, the prevalence of sedentary behaviour is uneven across different age groups, with men over 35 far more likely than younger men to not be doing any physical activity. Sedentary behaviour or insufficient physical activity is also more common among men who earn less than \$20,000 and those from metropolitan areas (see Appendix Table 8.154). The prevalence of physical inactivity among older men correlates strongly with prevalence of being overweight and obesity, which rises sharply from 49.5 per cent of 25–34 year olds to 69.7 per cent of 35–44 year olds.

According to research by the AIHW, rates of physical activity are lower for rural Australian men than for men living in metropolitan centres, whereas the rates for women are similar in rural and metropolitan areas. Furthermore, while the overall level of sedentary behaviour of men has decreased in major cities, it has not changed, or in some cases increased, in areas outside major cities (AIHW 2008b).

When men do take part in physical activity they are also more like to take part in high risk or extreme sports, and to take more risks during physical activities generally. A New Zealand study of diving attitudes and behaviours among young men and women found profound gender differences in risk behaviours and unsafe attitudes such as whether a person had ever dived head first into water of unknown depth/that was shallow (Moran 2008).

## Diet and nutrition

Consuming a diet high in fruit and vegetables offers protective health benefits against several common health conditions, including cancer and cardiovascular disease (Morgan 2009), which disproportionately affect men. Insufficient consumption of fruit and vegetables was responsible for more than double the proportion of men's compared with women's burden of disease in 2001 and had the greatest effect on ischaemic heart disease followed by stroke; lung cancer; and gastric, bowel and oesophageal cancers (Department of Human Services 2005a).

The 2007 Victorian Population Health Survey showed that a majority of all Victorians do not eat the recommended daily amounts of fruit (two serves) and vegetables (five serves). Men are less likely than women to consume the recommended intake, with only 38.7 per cent of men eating enough fruit, and 5.2 eating enough vegetables, compared with 52.3 and 10.2 of women, respectively. Lower consumption of fruit and vegetables among men is associated with lower levels of education, lower household income, and being younger, particularly the 18 to 34 year old age group (Appendix: Table 8.16 and Table 8.17). Recent Australian research indicates that men's low fruit and vegetable consumption is the result of a number of barriers, including lack of knowledge about how to prepare vegetables, beliefs about the cost and convenience of fruit and vegetables compared with other foods, and a lack of concern about the long-term risks associated with poor nutrition (Dumbrell & Mathai 2008).

Victorian men are also more likely to have other poor dietary habits such as being almost 40 per cent more likely to usually add salt to food after cooking, being around twice as likely to consume snack foods five or more times per week, having higher consumption of red meat and lower consumption of legumes/pulses (see Appendix Figure 8.8).

These figures indicate that Victorian women are making healthier food choices than men, a situation which is consistent with the findings of international research into gender differences in diet. Women have been found to have greater awareness than men of the link between nutrition and health that is apparent even in adolescence (Kiefer et al. 2005). A 2004 study into food choice in 23 countries found that women were more likely than men to make healthier food selections (Wardle et al. 2004).

These differences are thought to be attributable to psychological and socio-cultural factors. Men's relationship with food is often more pleasure-oriented and uncomplicated than that of women, who are significantly more likely to be dissatisfied with their weight, to control their diet in the pursuit of weight loss, and to suffer from an eating disorder (Kiefer et al. 2005).

## High BMI

The more carefree approach toward nutrition taken by men may be a factor in their higher rates of obesity and being overweight. In Victoria, 56 per cent of men are overweight or obese, compared with 41 per cent of women. The rate of obesity and overweight increases sharply with age; 68.9 per cent of men aged 55 to 64 are overweight or obese, while the figure for 18–24 year old men is 27.6 (see Appendix: Table 8.18) (Department of Human Services 2008b).

For both men and women, being overweight or obese is a risk factor for a wide range of serious health conditions, including cardiovascular disease, type 2 diabetes, hypertension, metabolic disorders, stroke and musculoskeletal disorders and impaired psychosocial functioning (AMA 2008). However, men have a heightened risk of obesity-related health problems, due to the fact that their body fat is typically carried around the abdomen. Excess abdominal fat, and in particular excess visceral fat stored around internal organs, is considered to be more damaging to health than fat stored on the hips and posterior, as is most common for women (Kiefer et al. 2005; MHF 2005). Moreover, recent research suggests that for men aged 50 to 64 each extra point on the BMI scale increases a man's risk of suffering an acute coronary event by seven per cent (Jensen et al. 2008).

In addition to affecting physical health, being overweight or obese is associated with mental health issues that differ between men and women. Men are less likely to be concerned about becoming overweight; less likely to notice that they have gained weight; and more likely to deny that they have a problem once they are overweight (MHF 2005). It has been suggested that this may be due to the difference in prevailing social and cultural norms of what is considered an 'ideal' body type for men and women; while for women 'slimness' is generally privileged as the beauty ideal, for men good health and physical attractiveness is more often associated with being 'big' (Kiefer et al. 2005; MHF 2005).

While at an individual level, being overweight or obese is attributable to energy intake that is higher than energy expenditure, at a population level it can be seen to be linked with various social and cultural factors (AMA 2008; MHF 2005). Obesity is more prevalent among men from lower socioeconomic groups, and among rural and regional populations. In Victoria, being overweight or obese is more prevalent in rural than metropolitan regions; Gippsland has the highest rate of overweight and obesity (56.1 per cent) while Southern Metropolitan Region has the lowest (45.8) (Department of Human Services 2008c).

## Sexual risk behaviours

In 2001, unsafe sex accounted for 0.4 per cent of the total burden of disease for Victorians. The burden of disease from unsafe sex was higher for women than men, largely due to the high female mortality associated with cervical cancer. Among men, 90 per cent of the unsafe sex burden was due to HIV/AIDS, seven per cent due to Hepatitis B, and three due to STIs (2005a).

Grulich et al report that risk behaviours for sexual ill-health commonly identified in the literature include number of recent partners, concurrent sexual partnerships, failure to use condoms all the time and at most recent intercourse, and sex with sex workers (Grulich et al. 2003c). The ASHR found that men are more likely than women to report some risk-behaviours for sexual ill-health including having had multiple recent partners or concurrent sexual partners in the past 12 months, and significantly more likely to have ever paid for sex with a sex worker (15.6 compared to 0.1 per cent) (Grulich et al. 2003c). Among men, having paid for sex was correlated with a higher likelihood of other risk behaviours, including drinking alcohol in excess of NHMRC guidelines, having a history of injecting drug use, and reporting elevated psychosocial distress (Grulich et al. 2003c).

However, failure to use condoms (another risk-behaviour) is less common among men than women, although this varied depending on the status of their partner (see Appendix Table 8.8). Failure to use condoms was least common among homosexually active men (Visser et al. 2003b).

This gender difference in number of partners and condom use is also evident in sexually active adolescents. Although sexually active male students were more likely than females to report not having had sex in the past year, they were also more likely to report having had sex with three or more people (37.2 to 26.5 per cent) (Smith et al. 2009).

Year 10 and year 12 male students were more likely than their female counterparts to have always used condoms during sex in the past year (60.8 to 46.1 per cent), less likely to have used the withdrawal method at their last sexual encounter (6.6 compared with 10.8 per cent) and less likely to report that they had had sex that ended in pregnancy (3.9 per cent of males and 4.9 of females) (Smith et al. 2009). Males were far more likely than females to have been drunk or affected by drugs during their most recent sexual encounter (33.7 to 20.2 per cent).

## Men's health efficacy

### Health service usage

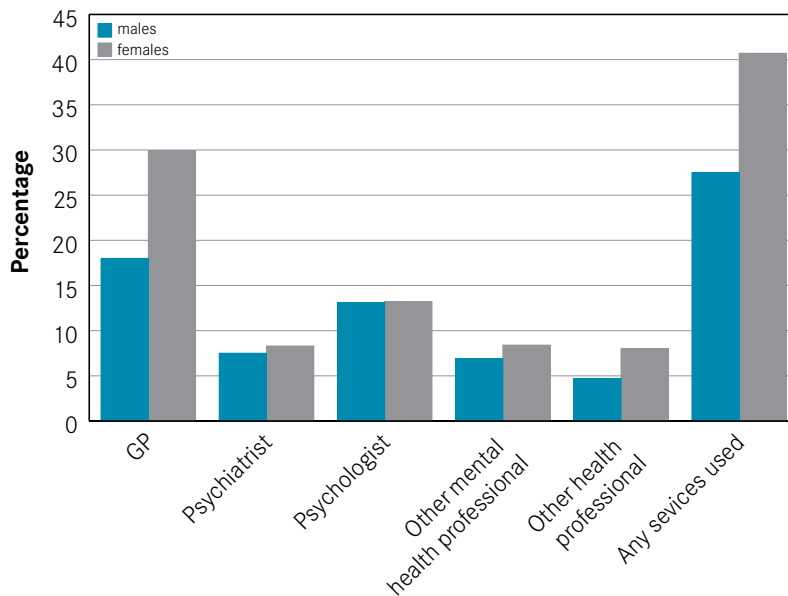
Overall, men visit health professionals less frequently and do so at a later stage of a condition than women (Brown & Bond 2008; Robertson et al. 2008). Cancer in men, for example, is usually detected at a later point in the progression of the disease and consequently more difficult to treat (NSW Health 2009).

Men's use of GPs is lower than that of women. In 2007–08 men's visits to GPs made up 42.9 per cent of all visits, and men are more likely than women not to have been to a GP in the last 12 months (25 and 10 per cent respectively) (Commonwealth of Australia 2008b). Men also tend to have shorter consultations and are more likely to raise only one issue per consultation (RACP 2009). Men are more likely than women to be seen by GPs for schizophrenia, drug abuse, tobacco abuse, chronic alcohol abuse and post-traumatic stress disorder; and significantly less likely to be seen for depression, anxiety and acute stress reaction (Bayram et al. 2009).

Men with mental health problems use mental health services less than females. ABS figures show that in 2007 around 28 per cent of men with a mental disorder in the previous 12-months had accessed services compared with over 40 per cent of women in the same category (see Figure 4.6). However, this difference is most substantial in relation to the use of GPs, where only 18 per cent of men used GPs compared with 30 per cent of women, suggesting that significant improvements could be made in this area (ABS 2008c). The length of GP visits for psychological issues is also shorter for males than females (Bayram et al. 2009).

Smaller differences existed in men and women's use of psychologists and psychiatrists for mental disorders. The proportion of men with a mental disorder in the previous 12-months accessing any service varied significantly by age group from a low of 13 per cent of those aged 16 to 24, increasing to a peak of 39 per cent of those aged 45 to 54 and then decreasing to 19 per cent of those aged 75 to 85 (ABS 2008c).

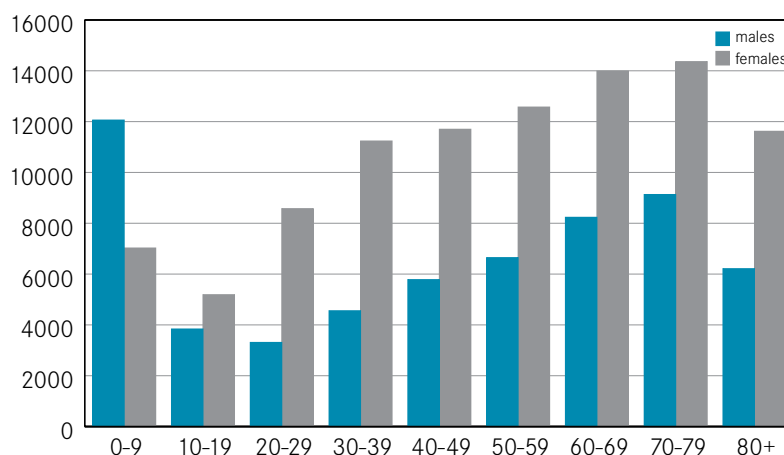
**Figure 4.6 Use of mental health services by Australian males and females with a mental disorder in the previous 12 months (2007)**



(ABS 2008c)

In Victoria in 2007–08 the proportion of male clients accessing community health services was only 38.3 per cent. As Figure 4.7 shows, males were less likely to access services across all age groups other than 0–9 (Department of Human Services 2009c).

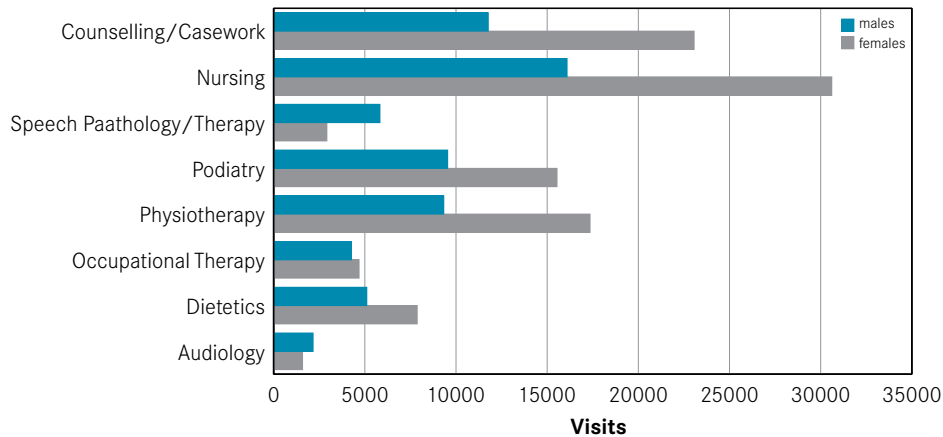
**Figure 4.7 Community health registered users in Victoria in 2007–08 by age group and sex**



The breakdown by service type shows that males were also less likely to access all service types (see Figure 4.8) other than audiology and speech therapy where they made up 67 and 58 per cent of clients respectively.

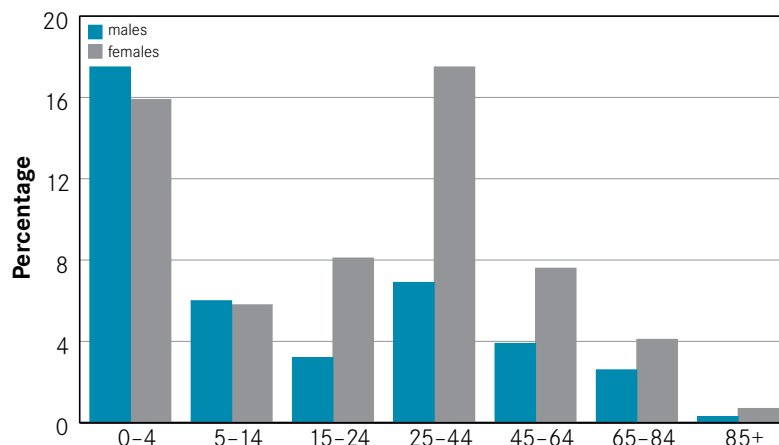


**Figure 4.8 Service use in Victoria by sex and service type in 2007–08**



The Victorian Government's Nurse-on-Call service provided telephone medical advice to 263,499 patients in 2007–08, of which 40 per cent were males. Females made up the majority of patients across all age groups other than for those aged 0 to 15 where the majority of patients were male (see Figure 4.9). Interestingly, the proportion of male *callers* was only 24 per cent, indicating that 40 per cent of male *patients* had females ringing on their behalf (Department of Human Services 2009c).

**Figure 4.9 Nurse-on-Call patients by sex and age in 2007–08**



Department of Human Services 2009c

There is also a gender difference in the number of callers to the Victorian (tobacco) Quitline run by the Cancer Council of Victoria. Despite men being 23 per cent more likely to smoke than women, they made up 18 per cent fewer callers in 2008 (45.8 compared with 54.2 per cent). Men were also around six per cent less likely to be registered on the Quitline counselling database in 2008 (Cancer Council of Victoria unpublished).

One area where males have a higher service use is access to emergency departments. In 2004, boys in Australia aged 0 to 18 made up 55 per cent of emergency department presentations (Acworth et al. 2009), and men have a higher presentation to emergency departments across all ages groups other than the over 75s (Commonwealth of Australia 2008b).

### Diabetes service use and self-care

Diabetes is associated with a wide range of further health problems and males in Victoria suffer a higher incidence and mortality due to diabetes than females. However, data suggests that men have a lower use of services and undertake lower levels of self care. In 2007, males had a lower use of a wide range of health services, with the greatest differences being for the use of podiatrists/chiropracist, diabetes nurse/educator, and nutritionist/dietician, which were all around 25 per cent lower among males than females (see Table 4.3). Moreover, males were almost three times more likely to have not used any health services in the previous 12 months.

**Table 4.3 Proportion of Victorian males and females with diabetes visiting health professionals for diabetes related issues in the previous 12 months (2007)**

	Males	Females
General practitioner/doctor	86.5	89.6
Podiatrist or chiropodist	35.8	49.1
Diabetes educator or nurse	40.3	54.1
Optometrist or ophthalmologist	62.5	64.7
Nutritionist or dietician	30.7	40.9
Specialist	29.7	25.2
None of the above	6.4	2.2

“(Department of Human Services 2008c)

Males were less likely than females to care for their own feet once every two weeks or more and more likely to care for their feet once a month or less (see Table 4.4); thus increasing the risk of infection and nerve damage, delaying healing, and potentially leading to amputations.

**Table 4.4 Victorians with diabetes: frequency of caring for own feet, by sex in 2007**

	Males	Females
Once a week or more	44.2	48.7
Once every two weeks	4.0	5.4
Once a month	10.4	9.9
Less than once a month	16.0	13.9

“(Department of Human Services 2008c)

### Factors influencing men's service usage

Men's lower use of health services is thought to be related to both attitudinal and practical factors. It is suggested that men have a more functional view of their bodies and are less inclined to attend a health services until their work, social or sexual functioning is directly affected (COTA 2008; White & Johnson 2000). Going to the doctor or using other health services is considered to be at odds with men's notions of being strong and independent and putting up with discomfort, as well as reflecting feminine vulnerability or weakness (Noone & Stephens 2008). Seeking help for mental health problems is particularly challenging to the male idea of being emotionally strong and tendency to not talk about emotional issues (Noone & Stephens 2008).

Using health services and their association with potential illness provokes fear and anxiety in some men about losing control and being vulnerable (Wilhelm 2009). An Irish study found the top three reasons for men having fear or anxiety about going to the doctor to be a concern about having a serious condition diagnosed (32.6 per cent); being admitted to a hospital as a result of the visit (25.3 per cent); and the prospect of having private parts examined (20 per cent) (Richardson 2004).

An Australian study of men's health practices carried out by Foundation 49 found that the main reasons for men not having regular check-ups were not getting round to it or having the time, believing it was not necessary because of good health or age, not having a GP or just not having thought of it (see Table 4.5).

**Table 4.5 Reasons given by Australian men for not having a regular health check (2008)**

Reason	Percentage
Just never get around to it	44.7
I am healthy – don't think I need to	37.2
Lack of time	32.0
Don't have a GP	20.8
Never really thought of it	20.4
At my age not necessary	18.3
Laziness	16.2
Cost	13.9
Don't want to hear bad news	9.4
Don't want to have any invasive checks	9.2
Don't like doctors	7.9
Other	6.5
Concerned about the results	6.0
It's not important to me	5.3
Can't get to a doctor	3.9

(Foundation 49 2008)

Other factors that have been suggested to impact men's use of health services include a reduced opportunity to attend due to a lack of out-of-hours or weekend appointments, a lack of transport, services not being available in some areas and previous bad experiences. There is also evidence that men dislike long waiting times, feel uncomfortable in waiting rooms with women's magazines, and see primary care as a service predominantly for women and children (Commonwealth of Australia 2008b; Malcher 2009; WHO 2009; Wilkins & Baker 2004).

The willingness of men to use services that are relevant to them is highlighted by the success of services that have specifically met the needs of men. Examples include the Mensline counselling service that receives around 65,000 calls per year, and the Bendigo Community Health Service that has developed a model integrating men's health promotion, workplace health checks and a men's health clinic (Commonwealth of Australia 2008b; Strange 2009).

## Men's health behaviours

Significant gender differences exist in health related behaviours. Men are considered to be less informed about health-related issues than women, less likely to take a preventative approach to health, to acknowledge health problems or seek help, and more likely to delay when they do seek help for a condition (Richardson 2004; Senate Select Committee on Men's Health 2009).

Men have been found to have a lower level of knowledge about health in general, about specific diseases (such as cancer, STIs and heart disease) and their risk factors, as well as about nutrition and diet (Cockburn et al. 2003; Courtenay 2003; Grulich et al. 2003b; Kiefer et al. 2005). These knowledge deficits have been linked with delays in seeking treatment due to not recognising symptoms (Department of Health and Children 2008). Men also approach some health issues differently, for example being more likely to control body weight through exercise rather than the use of diets (Kiefer et al. 2005).

## Screening

The Victorian population health survey found that men in Victoria were less likely to have had a blood pressure test or a test for diabetes or high blood pressure in the previous two years. Similar proportions of men and women had had cholesterol tests (Department of Human Services 2008c). Among men, those with lower levels of education and on lower incomes were less likely to have had a blood pressure and cholesterol test in the previous two years. Among women there was little difference in the likelihood of having undergone blood pressure/cholesterol testing based on their level of education, and lower household income was related only to a lower rate of blood pressure testing (see Appendix Table 8.20 and Table 8.21).

**Table 4.6 Health checks of Victorian men and women in the past two years by sex (2007)**

Type of screening	Males	Females
Blood pressure check	74.6	82.7
Blood test for cholesterol	53.6	52.5
Blood test for diabetes or high sugar levels	46.3	52.0

(Department of Human Services 2008c)

Men's lower level of blood pressure testing is particularly concerning given the high contribution of this factor to the male burden of disease, which is substantially greater than for women. High blood pressure and high cholesterol are also major contributors to the male disease burden due to ischaemic heart disease (see Figure 3.20).

Men have also been found to have lower levels of bowel cancer screening (see Box section 'Bowel cancer and screening') and be less aware of common symptoms. However, a NSW study found no gender difference in level of delay in seeking help after noticing symptoms; with around one-third of both men and women delaying seeking medical advice for three months or more, or not seeking medical advice at all (Cockburn et al. 2003).

### Bowel cancer screening

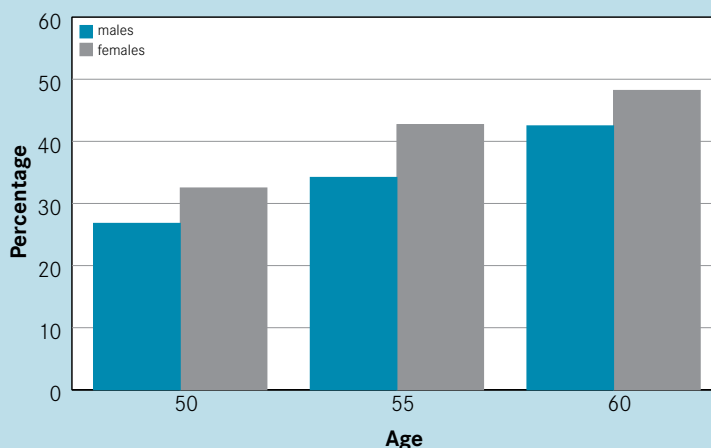
The colon and rectum together are known as the large bowel. Bowel cancer usually affects the large bowel. Cancer of the large bowel is also known as colorectal cancer. As people get older, little lumps called polyps may grow inside the colon or rectum that can become cancerous. If polyps are removed, the risk of bowel cancer is reduced. If untreated, it can spread deeper into the wall of the bowel. From there, the cancer can spread to lymph nodes in the area and on to other organs (Ingham 2008).

The development of bowel cancer generally takes many years and in the early stages bowel cancer does not always cause symptoms. However, often very small amounts of blood, which may not be visible, are leaked from these cancers long before any symptoms develop. This blood is then passed into the faeces.

The use of a faecal occult blood test (FOBT) can detect blood in the faeces and signal the need for further testing and the removal of polyps. The National Health and Medical Research Council recommends that faecal occult blood test (FOBT) screening of average risk people should commence at 50 years of age.

Following the success of a pilot program to test FOBT screening in 2003–2004, phase one of a National Bowel Cancer Screening Program (NBCSP) was introduced in Victoria in 2007 offering screening by a FOBT to 55 and 65 year olds. On 1 July 2008 phase two commenced and extended screening to include people turning 50.

While men have a significantly higher risk of developing bowel cancer and are 40 per cent more likely to record a positive FOBT result, NBCSP data for 2008 showed participation rates for Victorian men were 17 per cent lower than among women (33.7 compared with 40.5 per cent). This difference was seen across all age groups but was greatest (20 per cent difference) among those aged 55 (see Figure 4.10). Men also reported a lower rate of follow up with a medical practitioner after receiving a positive test result and lower colonoscopy follow-up (AIHW 2009).

**Figure 4.10 Participation of Victorian men and women in bowel cancer screening by age in 2008**

(AIHW 2009)

**(Bowel cancer screening continued)**

Some groups of men were less likely to participate in the screening program. These include men in remote/very remote areas, those in lower socioeconomic groups, Indigenous men, and men who spoke a language other than English at home. Interestingly all these groups (other than men who speak a language other than English at home) were also more likely to record positive FOBT test results (see Table 4.7). Men with a severe or profound activity limitation had higher levels of participation in the screening program and higher rates of positive FOBT test results (AIHW 2009).

**Table 4.7 Participation in FOBT screening and positive results by sub-groups of Australian men in 2008**

	Participation %	Positive FOBT %
Very remote	23.9	9.7
Lowest socioeconomic status	31.7	9.2
Indigenous	10.2	9.6
Language other than English spoken at home	13.4	7.5
Severe/profound core activity limitation	38.4	11.4
<b>All men</b>	<b>33.4</b>	<b>7.7</b>

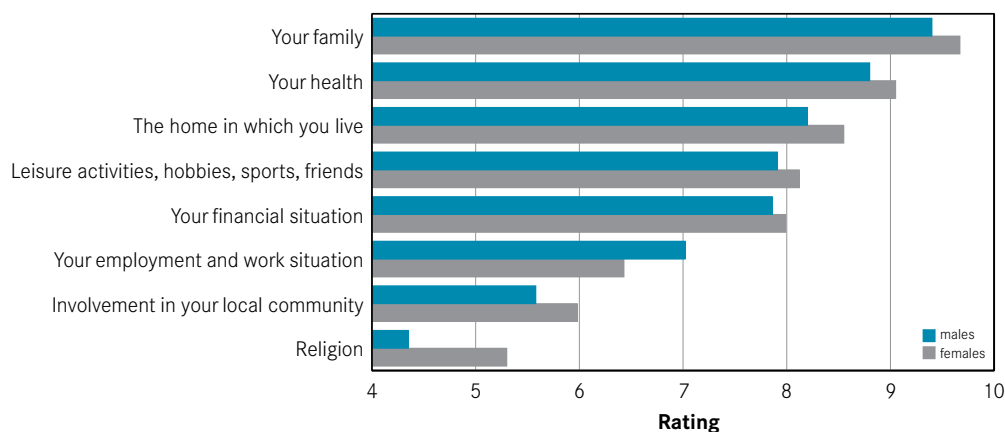
(AIHW 2009)

One of the factors associated with not participating in bowel screening identified in the pilot program was being a male with a 'ruggedly independent' persona, who had greater reliance on their female partner to manage their health (Commonwealth of Australia 2005).

**Men's interest in health**

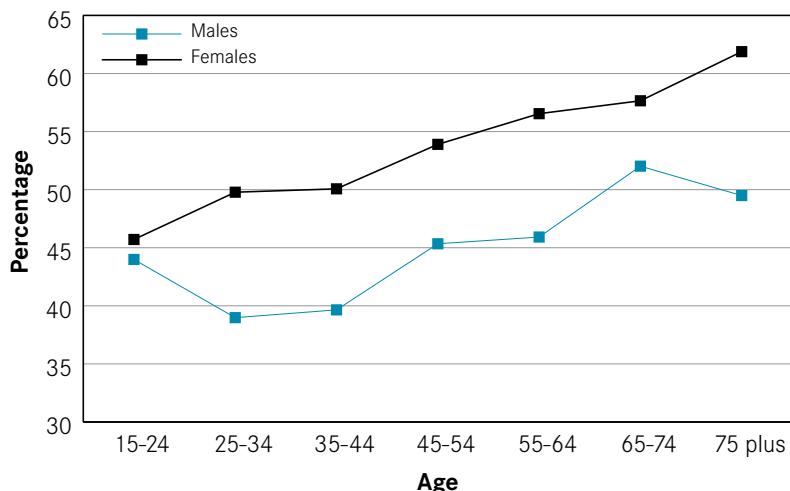
Although men appear to be *relatively* less aware of and interested in health issues than women, this does not mean that men do not have an interest in their health, and most evidence suggests that men have a strong interest. A study in South Australia found little evidence that men were disinterested in their health and instead reported that many of those surveyed carefully self-monitor their health (Malcher 2009).

Similarly, in line with studies overseas (GeNet 2009), data for Victorian men indicates that they consider 'their health' to be one of the most important aspects of their lives (see Figure 4.11). Men rate their own health as being of greater importance than most other aspects of their lives such as work, hobbies, friends and their financial situation. Only family was rated of greater importance. Compared with females however, men's average rating of the importance of their health is slightly lower, and around 20 per cent fewer men than women (52.2 of women and 43.8 of men) rated their health at the highest level of importance (10 = the most important thing in my life) .

**Figure 4.11 Importance of different factors in the lives of Victorian men and women: mean ratings from 0 (no importance at all) to 10 (the most important thing in my life) (HILDA Wave 1 2001)**

Among women in Victoria a clear upward trend exists in the proportion considering their health as one of the most important things in their life, over the life course (see Figure 4.12). However, among men there is not such a clear trend with fewer men aged 25–44 viewing their health as the most important thing compared with men aged 15–24; although fewer men in all the 15–44 age groups consider their health as the most important thing than men in the over 45 age groups.

**Figure 4.12** The proportion of Victorian men and women rating their health as 'the most important thing' (a rating of 10 on a 0 to 10 scale) by age, HILDA Wave 1, 2001



Interestingly, men's view of the importance of their health was not clearly related to socioeconomic status. More men in the lowest decile rated their health as the most important thing than any other decile and the lowest proportion of men rating health as the most important thing were in the second highest decile (see Appendix Figure 8.9).

Men born outside Australia were around 30 per cent more likely than men born in Australia to view their health as one of the most important things in their lives (53.0 compared with 39.9 per cent). This difference was around double that seen between Australian born and overseas born women.

The Commonwealth Senate select committee on men's health reported a range of evidence indicating that men have an interest in, and desire for, health information if this is provided appropriately. For example:

- The Men in Australia Telephone Survey (MATeS) interviewed 5990 men about health issues and had a response rate of almost 80 per cent.
- A Foundation 49 men's survey reported a similar response rate and found that 82 per cent of men would take part in an annual health check if it was organised through their workplace.
- Beyondblue reported high levels of participation in and satisfaction with its men's depression awareness training 'Beat about the Bush', as well as good attendance by men at public meetings to raise awareness of depression.
- The Mensline telephone counselling service receives around 65,000 calls annually from men seeking support for relationship and family issues.
- Andrology Australia has around 50,000 visitors a month to its website and 30,000 downloads (Senate Select Committee on Men's Health 2009).

### Factors influencing health behaviours

Young men often report little awareness of, or participation in, proactive health behaviours (Richardson 2004) and a greater desire to take on a traditionally masculine identity and present a 'macho image' (Brown & Bond 2008). This includes associated risk taking behaviours such as substance use, unsafe sex and unsafe driving (Barker et al. 2007).

Other research has also highlighted the importance of the male peer group, with men found to be more likely to adopt health behaviours perceived to be common among other men, and in some studies to avoid behaviours seen to be the norm for women due to a fear of being seen as feminine (Harvard Health Letter 2008; Mahalik et al. 2007a).

## Health and community services

In addition to men's own health behaviours, the orientation of health and community services also has an impact on men's health and wellbeing outcomes. It is suggested that many health and community services do not provide a male friendly environment and fail to recognise and respond to important differences in men's health-seeking behaviours, attitudes and needs (Malcher 2009; MHIRC 2009; Plantin 2007; Wilkins et al. 2008). This can result in disengagement from health services and contribute to men's lower levels of service usage.

### Men's health initiatives

To help support men's health and wellbeing and increase access to services, a range of initiatives have been adopted across Australia. These aim to meet the particular needs of men or sub-groups of men.

Men's sheds have been in existence since the mid-90s and there are currently around 300 sheds operating around Australia, with the greatest number per capita operating in South Australia and Tasmania. The sheds have a focus on providing a place for men to meet and socialise, participate in activities and learn skills (Golding et al. 2007; Hardy 2007). Sheds vary substantially in activities offered and Hayes (2005) has identified five broad types:

- Work (Occupational): workshop, plant, rehab
- Clinical: therapeutic, coordinated, behavioural
- Educational: study group, learning centre, circuit
- Recreational: residential, social club, select club
- Communal: service club, healing

An increasing number of sheds are also participating in formal work for the dole programs where they run work experience or skill development activities for long-term unemployed people (Misan & Sergeant 2009).

Men's shed participants are primarily older retired men with little post-secondary education, and about half are also involved with other community organisations. After retired men, the next largest group are working aged men that are unemployed or have a disability. Sheds in metropolitan areas tend to be larger and have younger members than those in rural areas. There are also dedicated men's sheds for groups including Indigenous, multicultural, acquired brain injury sufferers, and men with disabilities (Hardy 2007; Misan & Sergeant 2009).

The Bendigo Community Health Service is a notable example of an integrated approach drawing on existing evidence of what is effective in working with men. The service uses a three-pronged strategy based on:

1. men's health promotion
2. men's workplace health checks
3. a male-friendly health clinic.

The model uses a grassroots approach, based in the community and driven by men. It has aims to overcome the stoic nature of many rural men and consequent reluctance to engage with health services. Outreach has been an important component of the model in engaging men that may not attend services in conventional health settings, and has included sporting clubs, isolated towns/areas, large manufacturing/factory organisations and sale yards. The clinic also employs Australia's first men's health nurse practitioner and operates outside normal working hours to allow men working full-time time to attend.

Other examples of men's health initiatives include:

- The Men's Wellbeing Matters is a local men's health group based on the Mornington Peninsula that was established in 2007 and aims to encourage men to take greater responsibility for their health and wellbeing, primarily through the use of men's health events with men's health experts and advocates. This group also aims to assist other local groups interested in men's health and wellbeing with advice on how to conduct successful events (MWM 2007).
- The Epworth Freemason's hospital in Melbourne operates a men's health clinic with three part-time staff specialising in men's health and aims to assist men to better understand their own health and avoid common health problems such as high blood pressure, heart conditions and weight management. However, this is not a stand alone men's clinic and operates as a specialist service within the Epworth Hospital (Epworth Freemasons 2009). Dr Paul Arduca established the Epworth men's clinic in 1995, and is also currently involved in establishing an online men's health clinic that will use a three-stage approach: a preliminary questionnaire to examine symptoms; private online consultation with a doctor; and recommendations and possible solutions (Men's Health Clinic 2009).

- In South Australia, Southern Adelaide Primary Health provides men's counselling and has established a number of short group programs such as:
  - Relieving Depression, Anxiety and Chronic Stress
  - Men Make a Come-Back After Redundancy Illness and Other Setbacks
  - Mechanics for Men – A Self Care Toolkit
  - Confident Fathering – Positive Parenting for Men
  - You Can Do It – Motivation for Men
  - Ordinary Blokes, Extra-Ordinary Lives – Changing Your Direction and Your Life
  - Boosting Your EQ – Emotional Intelligence for Calm, Clarity and Caring (Bentley 2007)
- The Pit-stop initiative developed in Western Australia was created to be culturally accessible to men and stimulate their personal health interest. Delivered in non-health environments such as an agricultural show, it aimed to attract men that did not usually access health service programs. The program used the analogy of the body being like a car and provides a range of tests relating to physical health, mental health and lifestyle risk factors in allowing men to measure their 'roadworthiness' (health status). Evaluations have found the program to be effective in reaching men at high risk, stimulating behaviour change (in around 50 per cent) and encouraging follow up with other services (Chambers 2005; Russell et al. 2006). However, the concept will not appeal to all men.
- In NSW the OM:NI (Older Men:New Ideas) groups are growing in popularity. Discussion groups for men over 50, they focus on issues relating to older men with the aim of enhancing physical, emotional, psychological and spiritual health (COTA 2008).

## Men's health information

A needs assessment of men's education resources in Australia commissioned by the men's health education organisation Foundation 49 concluded that there is currently 'very little literature on chronic disease, physical activity, heart health and healthy eating is specifically directed at men' and that generally 'Language is generic, impersonal and not man-friendly'(Hardy 2007, p.5). Of the information that is available the vast majority is focused on relationships and parenting or prostate cancer. The dedicated men's health resource judged the most valuable was the Men's Health Information and Resource Centre website hosted by the University of Sydney in NSW. Although Andrology Australia, and the Victorian Government's Better Health Channel were also identified as producing a range of useful men's health information. Surprisingly, although ischaemic heart disease is the greatest single cause of male mortality and disproportionately affects men, the Heart Foundation was found to not produce any gender specific resources (Hardy 2007).

In Victoria the review noted the following:

- There are nine women's statewide health services funded by the State Government, but no funded men's health services.
- Most services identified that the local education focus was on violence/anger management/relationships and parenting.
- City of Casey (Berwick) was the only city council identified in Australia to employ a dedicated men's programs officer.
- Manningham Community Health Centre runs one of the the longest running men's shed in Victoria, including an Italian men's shed, acquired brain injury men's shed, and men's shed for men with disabilities.
- Family Planning Victoria does not produce any resources or conduct any men's health specific programs.
- The Cancer Council Victoria has several active men's health programs for community and health professionals. All courses and information sessions focus on prostate, bowel and testicular cancer.

## Economic participation

### Employment

Despite changes in gender roles over the past few decades, work status and being the family provider remain key markers of male identity and men still have fewer positive ways of defining themselves outside the workplace between leaving school and retirement (MHF 2009; Wilkins 2007). For this reason men's work status and success at work are likely to have a greater impact on their wellbeing. For example, men in Victoria view employment as being more important in their lives than women (see Figure 4.11). Similarly, a large UK survey found that men were 50 per cent more likely than women to view employment as important to their quality of life (GeNet 2009).



For men, impacts on health and wellbeing can come about due to difficulties achieving an appropriate work family/life balance, the characteristics of the job itself affecting satisfaction or causing stress and through direct dangers in the workplace.

Men are less likely to achieve a good balance between work, family and recreation due to an increased likelihood of working full-time and of working very long hours. They are also less likely to have family-friendly work entitlements than women when working full-time (50.4 of men and 64.3 per cent of women) or part-time (seven per cent of men and 24.5 of women) (MHIRC 2009). A recent report looking at unpaid overtime in Australia found that men do more overtime than women (63 minutes per day compared with 36) and that men with young children work *more* than the average for men overall (71 minutes), while the opposite is true for women (30 minutes) (Fear & Denniss 2009).

The Human Rights and Equal Opportunity Commission has voiced a concern about men working full-time not being able to fully participate in family life due to workplace barriers and historical and cultural stereotypes. This is despite a growing desire among men to share the care of children (Productivity Commission 2009). Such barriers may also have impacts on future generations of men by reducing the level of fathers' involvement with their sons (Wilkins 2007).

The key place of work in men's lives and identities means that high satisfaction at work can support positive mental health overall. However, low job satisfaction can have flow on effects to other areas of men's lives and has been linked to an increased likelihood of anxiety and depression. Men are also more likely to experience factors predisposing workers to work-related stress, such as lower levels of support from peers and managers, higher levels of demand, and a lack of understanding of their role (Wilkins 2007). The growing incidence of casual work also has implications for men's health. Male casual employees of prime age have been found to be the least satisfied of all employees on a number of job satisfaction measures and another study found full-time casual work to have a negative impact on Australian men's mental health, but not women's (Zhang & Richardson 2009).

Men are also more likely to work in dangerous occupations and experience an injury or fatality at work. Around 41 per cent of Australian males report working in dangerous conditions sometimes, often or always, compared to only 18 per cent of women. In 2005–06 the rate of injury for those who had worked the previous 12 months was 35 per cent higher for men than women. Men's rate of injury was higher across all age groups, with young men aged 20–24 the most likely to be injured. Moreover, the industries with the highest levels of work related injury or illness (Agriculture, forestry and fishing; Manufacturing; Construction; Mining), all disproportionately employed males (ABS 2006e). Similarly, the ten most dangerous industries for exposure to carcinogens are all areas of traditional male employment (MHIRC 2009). In Victoria, Workcover data shows that in 2007–08 more than twice as many claims were made by men than women (WorkSafe 2008).

The gender difference in workplace injuries is even greater when looking at fatalities where men made up 95 per cent of total Australian workplace deaths in 2005–06. It is also notable that men from lower socioeconomic backgrounds are more likely to experience workplace injuries or fatalities than men from higher socioeconomic groups (MHIRC 2009).

## Unemployment

The strong connection between work and masculine status means that unemployment can have a particularly negative impacts on men's wellbeing and undermine the traditional breadwinner role (Ostlin et al. 2006). Although men often put on a braver face, job insecurity can lead to more symptoms of anxiety and depression than in women (MHF 2009).

Unemployment has been linked with a range of negative health outcomes such as poor mental health and higher rates of suicidal thoughts, and there is some evidence that these are greater for men (Flatau et al. 2000; Wilkins 2007). In young people for example, unemployment has been associated with increased alcohol and tobacco use, illicit drug use, suicide and unintentional injuries, particularly for males (Courtenay 2003). Unemployment has also been associated with a range of other outcomes likely to affect the health and wellbeing of men and their families. These include poverty; homelessness and housing stress; boredom, alienation, shame and stigma; increased social isolation; erosion of confidence and self-esteem; and separation, divorce and family conflict (Perkins & Angley 2003).

The strong link between unemployment and poverty is important, and in 2002 unemployment was found to be the single biggest cause of poverty among Australian families (Saunders 2002). Similarly data from 2004 indicated that almost a third of families with no earners were living in poverty (31 per cent) compared with seven per cent of one-earner households and only two per cent of dual-earner households (Saunders et al. 2008).

Recent European research has found that the movement of unemployed welfare recipients back in to work significantly improves mental health, and that these effects mainly relate to males, with females' health 'relatively inert' with respect to their participation in employment. Moreover, the greatest improvements in mental health were found for men with initial bad health. Interestingly, participation in welfare to work activities (such as Work for the Dole or job search training) did not have the same benefits for mental health (Huber et al. 2009).

### Levels of employment participation

In July 2009 an estimated 6.6 per cent of Victorian working age males were unemployed, around 35 per cent higher than the rate among females (4.9) (ABS 2009c).

However, some groups of men have a substantially greater risk of being unemployed. This includes men with lower levels of education, Indigenous men, and those with mental health problems (Brotherhood of St Laurence 2007; Perkins 2008b). Men that face personal barriers such as physical/mental health problems, drug and alcohol abuse, family breakdown, homelessness, social isolation and criminal records, unsurprisingly have higher rates of non-participation in employment, and the likelihood of being out of work increases with the number of barriers faced (Perkins 2007).

Young males in Victoria face unemployment rates two to three times higher than the average for all men. In June 2009 for example the unemployment rates for males aged 15–19 and 20–24 were 16.5 and 11.5 per cent respectively (ABS 2009b).

The transition into employment can also be problematic for people migrating to Australia, with the greatest potential barriers experienced by those coming from culturally and linguistically diverse backgrounds. As Table 4.8 shows the rate of unemployment of Victorian men born outside Australia (arriving between 1996 and 2009) was around double that for men born in Australia, and somewhat higher than that of females born outside Australia arriving during this period. The highest rate of unemployment (36.7 per cent) was experienced by males from North Africa and the Middle East.

**Table 4.8 Unemployment rates of Victorian males and females born outside Australia (arriving between 1996 and 2009) by birthplace and sex (2009)**

	Males	Females
Oceania	15.9	2.3
North West Europe	6.4	5.6
Southern & Eastern Europe	7.7	5.2
North Africa & the Middle East	36.7	n/a
South East Asia	11	8.9
North East Asia	2	11.1
Southern & Central Asia	11.4	22.1
Americas	9.1	n/a
Sub-Saharan Africa	17.1	6.2
All non-Australia	10.9	10.1
Born in Australia	5.5	4.6

(ABS 2009b)

While unemployment rates for women were highest (16.4 per cent) among the most recently arrived (2006 to 2009), these then trended downwards to an unemployment rate of 1.6 per cent for those that had arrived in Australia prior to 1971 (see appendix Table 8.11). Among men there was no clear downward trend in unemployment rates, with those arriving between 1976 and 1980 having a similar level of unemployment (13.9 per cent) as those arriving between 2006 and 2009 (13.2). However, those arriving prior to 1971 have an unemployment rate of five per cent, slightly lower than the rate for males born in Australia (5.5) (ABS 2009b).

In addition to individual factors, local labour market and social factors are also likely to impact on levels of employment participation. In December 2008, some areas of Victoria recorded unemployment rates far higher than the state average (4.4 per cent) (see Table 4.9).

**Table 4.9 Selected Victorian unemployment rates in 2008**

Area	Unemployment rate %
Sunshine	9.3
Broadmeadows	9.3
Ballarat – Central	8.1
Ballarat – Inner North	7.3
Ballarat South	8.8
Maryborough	8.8
Dandenong	8.6
Bendigo – Eaglehawk	8.1
Bendigo – Central	7.0
Benalla	7.0
Horsham (Central)	7.7
Hepburn (East)	7.6
Moe	7.4
Morwell	7.7

(DEEWR 2008)

## Social participation

Social contact and networks have an important influence on men's health and wellbeing. Social relationships and support are strongly associated with longevity and those with the lowest levels of social support have been found to be two to three times more likely to die than those with the highest levels of support, even after controlling for health and other factors (Courtenay 2003). The measurable effect of social isolation on mortality and morbidity is suggested to be comparable to other major risk factors such as smoking, blood pressure and obesity (Kiecolt-Glaser & Newton 2001).

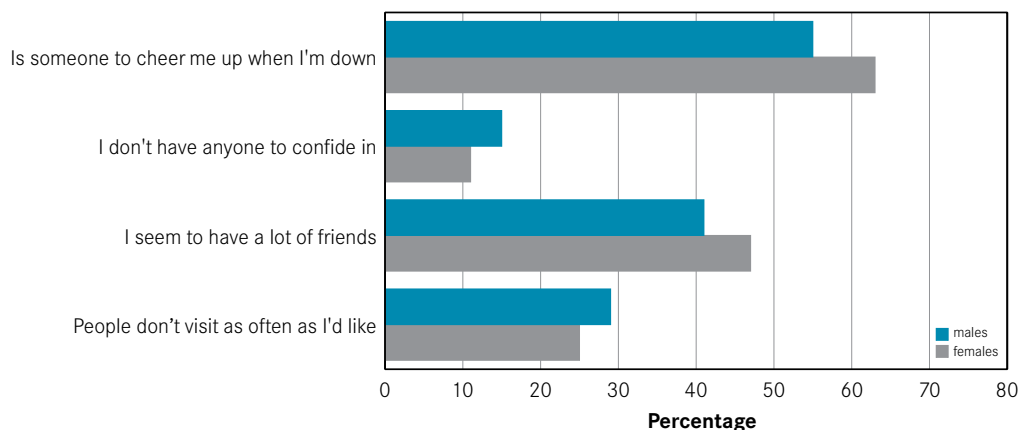
Amongst older men a robust friendship network is one of the strongest predictors of longevity (COTA 2008; Courtenay 2000). A study of heart disease patients found that after five years 50 per cent of those without a spouse or confidant were dead compared with only 17 per cent of those with a spouse or confidant (Courtenay 2000). Social isolation also significantly reduces survival rates from conditions including cancer and stroke, and low social support has been linked with less positive health practices (Courtenay 2003). Barriers to social participation have been identified as a major cause of poor health (MHIRC 2009).

Not being in a relationship also increases men's health risks and likelihood of engaging in poor health behaviours. In the US unmarried men drink and smoke more, eat fewer fruits and vegetables, use medical services less often, are less likely to have had a blood pressure test and more likely to commit suicide (Courtenay 2003). Marriage per se also has a significant protective impact for men (and to a lesser degree for women) and this increases with duration (Dupre et al. 2009; Kiecolt-Glaser & Newton 2001).

## Men's social networks

Men often have smaller social networks, including fewer and less intimate friends, than women and are less likely to have a close confidant other than a spouse (Courtenay 2003; Flood 2005). Men's social networks are also less multifaceted and supportive than women's (Courtenay 2000).

In Australia, 25.3 per cent of men report poor social networks compared with 21.5 per cent of women (Wilkins et al. 2009). Men have lower levels of social support than women from early adulthood until their seventies, with the lowest level of social support experienced by men aged 35 to 44. As Figure 4.13 shows men aged 25 to 44 are more likely to agree that people did not visit them as often as they would like and that they did not have anyone to confide in; and less likely to agree that they seem to have a lot of friends and have someone to cheer them up when they are down.

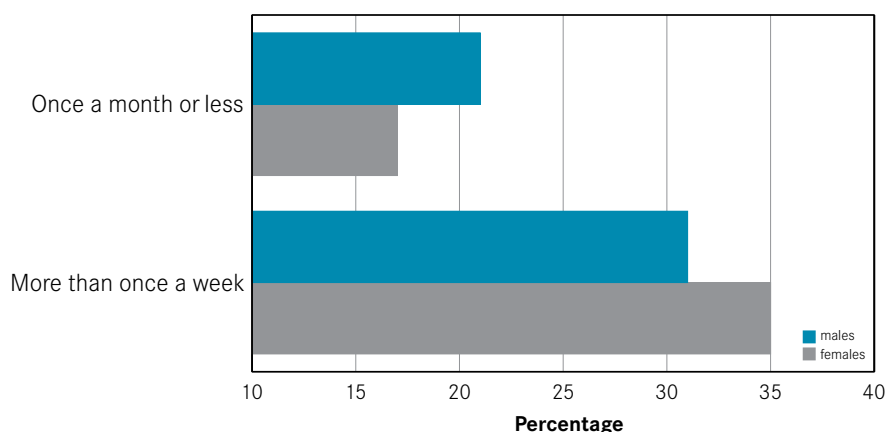
**Figure 4.13 Australian men and women aged 25–44 agreement with four statements**

(Flood 2005)

Men across all living situations report lower social support than women, however, men in couple households without children report higher levels of social support than other men. Men living alone (without other adults) report the lowest social support, and within this group single fathers report particularly poor health outcomes in terms of poorer physical functioning and general health. Single fathers with young children report the lowest levels of support and friendship of men and women in any household situation (Flood 2005).

Older men (75+) report levels of friendship higher than all younger age groups, other than those aged 15 to 24 (Flood 2005), and also report lower levels of anxiety and depression (ABS 2008c). However, they are vulnerable to decreased social participation due to frailty, an increased likelihood of living alone (compared with young men), and discriminatory attitudes that reduce opportunities for participation of older people (COTA 2008).

In Victoria, men are more likely to report very low levels of social contact and less likely to report high levels of social support (see Figure 4.14).

**Figure 4.14 Frequency of social contact with family and friends (not co-residing) among Victorian males and females (HILDA wave 3, 2003)**

## Fatherhood

There is some evidence that the transition to fatherhood can have positive effects on men's health through a greater desire to be healthy in order to care for their families. This can include taking fewer health risks and more positive lifestyle behaviours (Brown & Bond 2008; Richardson 2004). Involvement in parenting generally seems to have positive effects on men's health, and fathers more equally involved in domestic activities and with their children show fewer negative health behaviours. Other potential health benefits of fatherhood include increased emotional wellbeing, increased awareness of the importance of relationships, greater empathetic abilities, and improved self-confidence. However, negative effects of fatherhood have also been documented in some cases. This has been linked to increased workload and stress, relationship and financial pressures and reduced social networks, particularly for men (Plantin 2007).

Men's involvement in fatherhood can also provide health benefits to their partners and children. Early childhood involvement of fathers has been linked to improved psychological wellbeing of the mother, as well as the child's later emotional, cognitive and social wellbeing (Plantin 2007; Productivity Commission 2009). Men can also provide important psychological and emotional support during pregnancy and labour that has been linked to an improved birth process. It is suggested that men's support in these ways is particularly important for disadvantaged groups where men and women have poorer health outcomes (Plantin 2007).

Paternity leave, enabling fathers to spend time with children, appears to increase the potential health benefits of fatherhood for men as well as their children and partners. This can include increased wellbeing and the development of new, more care-oriented definitions of masculinity. In Europe men taking longer parental leave reported closer relationships with their children, and their partners reported higher relationship satisfaction (Holter 2009).

### Relationship breakdown

As being in a relationship can have a positive impact on men's health and wellbeing, relationship breakdown can have a negative impact. However, where women are often financially worse off than men after a separation or divorce, in terms of emotional wellbeing marital disruption appears to be more detrimental for men (Kiecolt-Glaser & Newton 2001). Relationship breakdown is a major contributor to men's mental health problems in Australia (Beyond Blue 2009) and is associated with lower levels of support and friendship among men in the following 12 months. Interestingly women's levels of support and friendship remain unchanged in the 12 months following a relationship ending. Relationship breakdown has also been associated with increased levels of smoking, depression, asthma and diabetes (Russell 2009). Men's aversion to the use of professional services to support relationships experiencing difficulty may largely stem from the lack of focus on men's needs in service delivery, with men often being placed in a peripheral position (Holter 2009).

### Child and family services

Services to support men's engagement with young children are currently underdeveloped and often fail to recognise the needs of men. For example, male perinatal depression is gaining increased recognition and estimated to occur in up to 10 per cent of fathers, but usually goes untreated (Malcher 2009; MHIRC 2009). Barriers to service usage include embedded cultural attitudes within child and family services, limited hours of operation and a lack of ante-natal programs for fathers (Commonwealth of Australia 2008b; Malcher 2009). A report from the World Health Organization describes the situation as follows:

A significant number of studies show that mother and child welfare services have considerable difficulties in their work in reaching out to men. This... results in fewer men seeking information and advice on questions relating to sexual and reproductive health and taking part in parent training (Plantin 2007, p.38).

The report suggests that fathers that do use support services tend to be from the academic middle classes, rather than disadvantage groups with poorer health status. Services not only neglect the needs of fathers themselves but also their potential to be an important resource for their children and partners (Plantin 2007).

### Social and cultural constructions of gender (masculinity)

Socially constructed ideas about being a man have a large impact on men's health behaviours. This includes the impact of traditional male values including stoicism, emotional suppression, independence and self-reliance. These may affect men's health behaviours in various ways including:

- making it less acceptable to seek help
- creating a reluctance to talk about health problems
- seeking help at a later stage of an illness
- emphasising putting up with discomfort
- making it more difficult to establish good relationships with GPs and other health professionals (Parsons 2009; Senate Select Committee on Men's Health 2009; White & Johnson 2000; Wilhelm 2009).

The importance of social influences and gender roles on men's health behaviours has been recognised by the World Health Organization:

Evidence is increasing that gender norms – social expectations of appropriate roles and behaviour for men (and boys) as well as the social reproduction of these norms in institutions and cultural practices are directly related to much of men's health-related behaviour, with health implications for themselves, their partners, their families and their children (Barker et al. 2007, p.6)

Examples of aspects of traditional notions of masculinity impacting on men's health behaviours include: men delaying seeking help for cardiac symptoms to demonstrate self-control (Shepherd et al. 2003); men with cancer feeling that admissions of illness are not masculine and should only be made under extreme circumstances (Woolcock 2008); and men using strategies of avoidance or silence in dealing with emotional issues (Richardson 2004). An Australian study of young men with testicular cancer found that most approached the illness using a traditional notion of masculinity emphasising stoicism and avoidance (Singleton 2008).

Stronger identification with traditional notions of masculinity generally have been found to restrict the range of health behaviours open to some men and be correlated with lower levels of positive health behaviours (Shepherd et al. 2003). However, an Australian study found that although higher masculinity scores did have a modest impact (which was stronger when peer pressure was experienced) on men's likelihood of engaging in healthy eating habits and regular cancer checks; age and current health status had a greater influence (Brown & Bond 2008). Looking at health risk behaviours another Australian study found traditional notions of masculinity to be moderately related to a range of health risk behaviours (Mahalik et al. 2007b).

Masculinity has also been identified as a risk factor for specific health outcomes. Men with less identification with feminine characteristics and greater identification with stereotypical masculinity have been found to have a greater risk of dying from coronary heart disease (Emslie & Hunt 2009). Traditional notions of masculinity have been linked with an increased risk of experiencing violence, using violence against a partner, having had a sexually transmitted infection, being arrested and using illicit drugs (Barker et al. 2007; Luoluo 2000; Richardson 2004). Men's higher levels of risk taking behaviour and subsequent injuries, including higher mortality and morbidity from road traffic accidents, have also been linked to social meanings of being a man (Barker et al. 2007).

Although traditional notions of masculinity have been linked to poor health outcomes, alternative health-enhancing versions of masculinity can also be adopted by men, and traditional notions of masculinity can be interpreted in ways that can support health. Men's personal conception of masculinity is also likely to contain disparate elements that will not always reflect a harmonised traditional notion of masculinity (Kalmuss & Austrian 2009). For example, a study of fire fighters found that some men positioned themselves as knowledgeable and masterful users of health services and interpreted this as supporting the masculine ideals of power and control. Other men that did not use health services were described as ignorant and weak (Noone & Stephens 2008).

## Social, political, legal and economic policies

In addition to the factors discussed above, men's health is also affected by broader public policies including social, legal and economic policies and markets more generally. These factors are particularly relevant to men's health given the substantially higher levels of mortality and morbidity due to accidents and injuries; higher levels of risk taking behaviour; greater likelihood of using tobacco, alcohol and illegal drugs; poorer dietary habits; and lower levels of knowledge about health more generally.

- Public policies in non-health areas can affect health outcomes, for example through:
- encouraging car use over active transport
- leading to urban design and land use that discourages activity and social connection
- an educational curriculum that pays insufficient attention to health and physical information (National Preventative Health Taskforce 2009).

Given the strong links between unemployment and health and wellbeing for men, inadequate labour market programs or economic policies that fail to generate sufficient employment can both have substantial negative health impacts. For men in work, labour market regulation can have an important impact on health through reducing occupational injuries, supporting work-life balance, and providing decent wages and conditions.

Some policies can also have direct negative impacts on men's health and wellbeing. The most extreme being active military service where men face substantial risks of death and injury, as well as longer-term psychological and re-adjustment problems (Hoge et al. 2004).

## Markets

A number of issues have also been identified in the operation of markets that have implications for men's health. These effects can be due to information problems or health impacts of market transactions/activity (for example, the sale and advertising of cigarettes) that lead to suboptimal outcomes from an individual or societal point of view. These issues can include:

- Imperfect information: under provision of information consumers need to make healthy choices and lack of consumer awareness of the potential health impacts of lifestyle choices (this applies particularly to men given their lower knowledge about health and nutrition).
- Negative externalities: costs of market transactions that extend beyond and are not accounted for in market pricing (for example, the effects of men's smoking and alcohol use on themselves, partners and family members and the wider community).
- Asymmetric information: between producers and consumers due to the huge advertising budgets of many fast food companies dwarfing the health promotion budgets of government agencies.
- Absence of rational decision making: consumers often do not act rationally in evaluating behaviour choices and consequences as assumed in economic theory (National Preventative Health Taskforce 2009; Smedley & Syme 2000).

## 5. Framework for action

The goal of improving men's health should form part of a broader gender-based approach to supporting health and wellbeing. This recognition of the importance of gender as a factor influencing health needs and outcomes should improve outcomes for both men and women. For men this requires a multifaceted effort from government, medical and health promotion organisations and the health and community services system generally. This section outlines proposed principles, key intervention points and priority areas.

### Principles

The following principles are proposed to guide the future strategy:

- **Gender perspective:** men's health will be viewed as part of a broader gender perspective recognising the differing health needs, attitudes and experiences of both men and women.
- **Social model of health:** recognising the range of socioeconomic and environmental influences on men's health.
- **A health promotion, preventative approach:** a holistic view of health emphasising creating health and preventing illness in addition to treating ill health.
- **Life course approach:** recognising that interventions need to take account of, and respond to, men's changing experience of health and wellbeing over the life course and in different roles.
- **Address the needs of men with poorer health outcomes:** although the strategy will focus on men broadly, interventions should also aim to reduce health disparities between groups of men.
- **Multilevel interventions:** that focus on individuals, communities, organisations/workplaces, and broader social policies as appropriate and in a coordinated way.
- **A strong evidence base:** interventions based on the best available evidence and subject to rigorous evaluation to ensure cost effectiveness and sustainability of outcomes.

### Key intervention points

Specific areas of activity may be located across a number of domains, reflecting the range of factors that influence health. The following key intervention areas are proposed:

1. **Health and community service delivery:** build the capacity of health and community services to understand (gender differences in health behaviours and attitudes) and better meet the needs of all men.
2. **Healthy living:** undertake health promotion activity focused on men and boys, at a population, sub-group and individual level, to promote healthy lifestyle behaviours and reduce risky behaviours.
3. **Men's health efficacy:** build men's knowledge and awareness of health issues, increase engagement with services and capacity for self-care.
4. **Economic and social participation:** support men's participation in employment and education and strong social connections.
5. **Health-promoting society:** support community and government activity to promote a healthier society through interventions that focus on issues such as: creating positive notions of masculinity, reducing tobacco use, promoting road safety, reducing disadvantage, tackling discrimination and marginalisation and creating health promoting physical environments.

### Priority areas

The analysis presented in earlier chapters points to a number of areas that are particularly important for improving the health of men. This includes particular health conditions and sub-groups of men with poor health outcomes or particular issues. It also identifies key lifestyle risk factors.

Much work is already being undertaken across these areas and in most cases the emphasis should be on building in an appropriate gender focus on men, rather than developing new approaches or strategies specifically targeting men and individual issues.



## Health conditions

The conditions listed in Table 5.1 have a major impact on Victorian men's health. These conditions affect large numbers of men overall but have even greater impacts on some sub-groups of men, as outlined below.

**Table 5.1 Priority conditions affecting men's health**

Condition	Risk factors	Men particularly impacted
<b>Ischaemic heart disease</b> was the condition responsible for the greatest number of male deaths and life years lost in Victoria in 2007. Victorian men have a far greater risk of dying from ischaemic heart disease than women and also die at a substantially younger age.	High cholesterol, high blood pressure, insufficient fruit and vegetable intake, elevated BMI, tobacco use, mental health problems, lack of cholesterol/ blood pressure checks, lack of medical check ups	Young men, Indigenous men, low socioeconomic status men, rural men
<b>Cancers</b> as a group were responsible for more male deaths than any other disease group in 2007, and contributed most to the male-female mortality rate differential. Men have a substantially higher incidence and mortality due to cancer.	Tobacco, insufficient fruit and vegetable intake, high intake of red meat and saturated fats, insufficient physical activity, alcohol, occupational risks, delays seeking medical attention	Low socioeconomic status men
<b>Mental health problems</b> (including drug and alcohol abuse) are the greatest cause of non-fatal disease burden among Victorian men, with depression the single greatest cause. Poor mental health can also contribute to suicide, poor physical health and other health risk behaviours.	Age, low education, low income, alcohol and drug use, smaller social/support networks, lack of service use, unemployment, poor quality work, traditional notions of masculinity, lack of recognition of symptoms of male depression, discrimination and homophobic abuse	Men in low income households, young men, same sex attracted men
<b>Suicide</b> in men occurs at around three times the rate of females and is the leading cause of death among men aged 15 to 44. Older men aged 85+ also have high rates of suicide.	Poor mental or emotional health, drug and alcohol use, unemployment, traditional notions of masculinity	Young men, older men, Indigenous men, men from rural areas, same sex attracted young men
<b>Accidents and injuries</b> affect men at a far greater rate than women and as a group are responsible for a greater proportion of the male-female life years lost differential than any other disease group.	Drug and alcohol use, traditional notions of masculinity, occupation,	Young men, Indigenous men, low socioeconomic status men, men from rural areas

## Groups of men

The goal of the strategy will be to improve outcomes for all men, and measurable improvements in outcomes at a population level will require this broad focus. However, additional attention is required for some groups of men with the poorest health outcomes: in particular young men and Indigenous men. In many cases this would involve ensuring that responses currently being used or developed adequately reach and reduce health inequalities faced by these groups.

**Table 5.2 Priority groups of men**

	Key focus areas	Risk factors
<b>Indigenous men</b> have poorer health outcomes than all other groups of men and women on almost all health measures.	Suicide, violence, accidents and injuries, depression, ischaemic heart disease	Tobacco, alcohol and drug use, low fruit and vegetable intake, high cholesterol, low income, unemployment, poor mental health
<b>Young men (15–34)</b> die at two to three times the rate of young women, with the majority of this mortality difference being due to avoidable factors.	Suicide, accidents and injuries, depression, violence, ischaemic heart disease	Tobacco, alcohol and drug use, low fruit and vegetable intake, high cholesterol, low income, unemployment, poor mental health, traditional notions of masculinity

## Key risk factors

A focus is also required on a range of up and downstream risk factors that impact on men's health. While risk factors will vary significantly between groups of men and for particular conditions, a number of factors have a particularly large impact (see Table 5.3).

**Table 5.3 Key risk factors affecting men's health**

Risk factors	Potential health effects	Men particularly affected
<b>Tobacco</b> is the greatest single contributing factor to Victorian men's burden of disease, and men's smoking rates remain 23 per cent higher than women's	Lung cancer, chronic obstructive pulmonary disease, other cancers, ischaemic heart disease, stroke	Low socioeconomic status men, young men, Indigenous men
<b>Obesity</b> or being overweight is around a third more common among Victorian men than women and becoming more prevalent.	Cardiovascular disease, type 2 diabetes, hypertension, metabolic disorders	Older men, low socioeconomic status men, rural men, men with low education
<b>Low fruit and vegetable consumption</b> has a major impact on men's health, and contributes to around double the burden of disease to men compared with females.	Ischaemic heart disease stroke, lung cancer, gastric, bowel and oesophageal cancers	Younger men, men with lower education or lower income, younger men
<b>Excessive alcohol consumption</b> can increase the potential for short-term and long-term health problems and is far more common among Victorian men than women	Increased risk of injury or accidents and long-term health effects including cancers, liver disease and heart disease	Non-tertiary education income above \$50k, being in a defacto relationship, divorced, separated or never married
<b>Low health service usage</b> men, for example, have less frequent check-ups with a GP, lower use of mental health services, less frequent blood pressure testing and lower participation in bowel cancer screening.	Delayed diagnosis and treatment for a wide range of physical and mental health problems, suicide	Rural men, men strongly identifying with traditional notions of masculinity

## Population approaches

Examples of some existing key population health strategies across these areas that the men's health strategy will connect with include:

### The Victorian Cancer Action Plan

The Victorian Government has committed \$150 million over four years to implement Victoria's Cancer Action Plan 2008–2011. It outlines a medium-term vision for cancer reform that will offer standardised and high-quality cancer care to all Victorians. Through the implementation of the Cancer Action Plan, the Government aims to increase survival rates by 10 per cent by 2015. The Cancer Action Plan outlines four action areas:

1. Reducing major cancer risk factors in the population and maximising effective screening
2. Ensuring rapid translation of research into effective treatments and clinical care
3. Investing in innovative treatments and technologies and sustainable integrated care systems
4. Supporting and empowering patients and their carers throughout their cancer journey

### Victorian Mental Health Reform Strategy

*Because mental health matters: Victorian mental health reform strategy 2009–2019* is the Victorian Government's agenda for change and improvement in the way we address mental health in this state. Through action across a range of sectors, it aims to achieve better long-term outcomes for all those affected by mental illness and wider benefits for the whole community. It will make a difference to Victorians by:

- helping people with mental health problems earlier, thereby avoiding harmful individual and social impacts
- providing easier access to the most effective treatments, be it in a public mental health service or elsewhere, for a greater range of people, before they become acutely unwell or go into crisis
- offering longer-term, holistic support to sustain people in the community, drawing seamlessly on all relevant health and community services
- fostering a culture of service delivery and community support that is based on acceptance, respect and the chance to achieve individual wellbeing and personal goals.

## Closing the Gap in Indigenous health initiative

The Closing the gap in Indigenous health initiative will involve an investment of \$57.9 million over four years to fund the largest and most significant package of health reforms to overcome Indigenous health disadvantage in Victoria's history.

The program will feature a strong focus on improving health outcomes for Indigenous Victorians through targeted initiatives in areas known to have a detrimental impact on quality and length of life. This includes smoking, obesity and lack of exercise, which are key contributors to poor health and reduced life expectancy, and better management of chronic disease in both hospital and primary health care settings.

## Victorian Tobacco Control Strategy

In December 2008 the Victorian Government released the Victorian Tobacco Control Strategy 2009–2013 which continues the government's commitment to reducing the harms caused by tobacco. With a series of legislative reforms and programs, this strategy aims to:

- reduce smoking among adults by 20 per cent
- reduce smoking among pregnant women by 50 per cent
- reduce smoking among Aboriginal and other high prevalence groups by at least 20 per cent.

The five years of this strategy will see continued investment in anti-smoking social marketing and intensive efforts to assist pregnant women and groups with high rates of smoking to quit and stay quit.

## Restoring the Balance: Victoria's Alcohol Action Plan 2008–2013

Restoring the Balance: Victoria's Alcohol Action Plan 2008–2013 aims to

- Reduce risky drinking and its impact on families and young people
- Reduce the consequences of risky drinking on health, productivity and public safety
- Reduce the impact of alcohol-fuelled violence and anti-social behaviour on public safety

The Government has committed more than \$37 million over four years to implement the plan. Initiatives include helping people to reduce their drinking early, providing better quality care for more serious alcohol use problems, supporting changes in community attitudes and encouraging a safe and sensible approach to alcohol use. There is also a focus on preventing and reducing the consequences of excessive alcohol use, such as alcohol-fuelled violence.

## 6. What works to improve men's health

### General evidence

Overall, there is limited evaluation data regarding the effectiveness of men's health and wellbeing programs and services. However, evidence that does exist from men's and broader health interventions points to a range of factors likely to increase effectiveness. These include:

- involving men as partners in the design, implementation and evaluation of interventions (Smedley & Syme 2000)
- identifying sources of men's health strengths and resilience as well as health risks (Nahon & Lander 2008; Smedley & Syme 2000)
- using intensive programs targeted at those facing the highest risk. These can be reactive, working with men ready to change behaviours; or proactive in actively recruiting from a specified target group (Emmons 2000)
- identifying key 'leverage points' (behaviours/social roles/situational conditions) that exert a disproportionate influence over men's health and wellbeing. For example targeting social isolation if that is leading to stress and excess alcohol consumption (Jamner & Stokols 2001; Stokols 2000)
- focusing on the social environment in which men are embedded as well as the individual when addressing lifestyle factors (Jamner & Stokols 2001; Ostlin et al. 2006; Smedley & Syme 2000; Stokols 2000)
- going beyond just giving information, instead being supported by a policy/strategic framework (Hardy 2007)
- using a stepped care approach providing increasingly intensive interventions if a man (or boys) are unsuccessful with less intensive interventions (Stokols 2000)
- involving cost effectiveness analyses that consider alternative strategies and how to provide the greatest benefit to the target population with limited funds (Smedley & Syme 2000)
- including critical discussions of gender norms and masculinity in programs working with men and boys (Barker et al. 2007)
- making good, high quality gender disaggregated data available (WHO 2009)
- providing financial and human resources that are committed over the long-term and not likely to change (WHO 2009)
- ensuring political commitment and ownership of the approach used (WHO 2009)
- going beyond awareness raising, which alone is unlikely to result in significant behaviour change (Commonwealth of Australia 2008b; Emmons 2000; MHIRC 2009).

### Multi-level approach

Given that men across all social groups report high levels of avoidable mortality and morbidity there is a need to move beyond ad-hoc single focus initiatives. Instead, an overall approach should aim to work at multiple levels and address various men's health and wellbeing issues in an integrated way (as advocated by approaches such as social ecology). This approach is important in addressing upstream and downstream factors in a coordinated way (Ostlin et al. 2006) and has been shown to enhance the population effects of interventions used (Barker et al. 2007; Smedley & Syme 2000). It can include initiatives to address:

- individual factors: motivational interventions, skills building opportunities, tailored intervention materials
- interpersonal processes: interventions addressing men's social and gender norms and social networks
- institutional or organisational factors: interventions in the health care system, workplaces and schools
- community factors: networking with community resources, social service advocacy, structural/environmental interventions in communities, community-based interventions
- public policies: regulations and laws directed at reducing men's health risks and improved connections with other State and federal agencies.

### Health and community services delivery

Improving the ability of health and community services to recognise and meet the needs of men is one of the key approaches to improving men's health and wellbeing. This should occur in tandem to work with men to increase their awareness of health issues and use of existing services.

### Gender analysis and mainstreaming

There is growing evidence that the integration of gender considerations into health and community services and health promotion initiatives can have a positive effect on health outcomes. This can include issues such as sexual health, nutrition, smoking and gender-based violence, and needs to include an understanding of how men differ in disease causes, manifestations and consequences (Ostlin et al. 2006).

To make services more responsive to the needs of both men and women, programs and policies should take gender differences into account in areas including:

- disease incidence and severity
- health risks and protective factors
- biological causes
- service usage patterns and barriers
- knowledge and understanding of health issues
- health-related behaviours and attitudes
- gender roles and attitudes affecting health behaviours
- lifestyle and occupational risk factors
- experience of illness.

The World Health Organization recommends programs be given responsibility for analysing the role of sex and gender in areas of their work and for developing gender-specific responses, where appropriate. Performance management should also include monitoring and evaluation of gender mainstreaming (WHO 2008).

- Gender analysis undertaken by program/policy areas should involve:
  - collection and analysis of sex-disaggregated health data
  - investigation of observed differences with respect to men and women
  - formulations of policy positions and advice, norms, standards, tools and guidelines to respond to any unfair or avoidable differences
  - inclusion of gender analysis and planning in joint strategic, and operational planning, and budget planning as appropriate (Barker et al. 2002; WHO 2008)

A recent World Health Organization report identified three sets of approaches that can be used to support a gender perspective in health systems:

1. Regulatory approaches: address patients' rights or create a duty for public-sector organisations to address gender equality.
2. Organisational approaches: focus on the use of various tools in health systems to highlight gender inequalities and pinpoint solutions.
3. Informational approaches: focus on the role of data in providing knowledge about gender inequities. For example, gender-sensitive health indicators that can identify key differences between women and men in relation to health and in the social determinants of health (WHO 2009).

### Improving service orientation

It is suggested that many generic health and community services do not provide a male friendly environment and can often alienate men, thus leading to further disengagement (MHIRC 2009). However, evidence in Australia and overseas points to a number of strategies that can make services more 'man friendly'. These include:

- reduced waiting times for consultations
- being conveniently located close to places men frequent
- flexible appointment times including, out of hours and evenings appointments
- creating a more male-friendly waiting room using posters and displays of information relating to men's health and wellbeing
- providing a broad range of services
- inviting men to attend for health check's or other services
- marketing services specifically to men
- developing a consultation style that supports male specific communication
- being aware of differences in men's cultural and sexual identities
- health and community service workers becoming more attuned to men's attitudes and aware of masculine hang-ups (Harvard Health Letter 2008; RACGP 2006b; Richardson 2004; Wilkins et al. 2008)

Services need to recognise that the ability to seek help, and accept it when offered, is a social skill that is not possessed by some men. Hence the importance of developing ways of working with men that minimise this discomfort (Wilkins & Baker 2004).

The Foundation 49 men's health survey suggests that one of the most important factors in encouraging men to have regular health checks is having a relationship with a doctor. Other things that would encourage health checks include after hours and weekend appointment times and receiving a reminder or having someone contact them to make the appointment (see Table 6.1).

**Table 6.1 Things that would encourage men to have an annual health check**

Activity	Percentage
Having a good doctor that I can trust	51.6
Staying healthy for my wife / partner	35.4
Staying healthy for my children	29.0
Being able to go on weekends / after hours	26.7
If someone emails me a reminder	17.7
Having it in my diary so I remember	16.8
If someone books it for me	14.3
If someone mails me a reminder	12.4
If someone SMSs me a reminder	10.7
Reminders on the radio / TV / newspaper	6.3
Nothing, I won't have one	2.0

(Foundation 49 2008)

In some areas such as child and parent services where men are particularly excluded, additional changes may be required. Strategies identified by a 2007 World Health Organization report in this area included ensuring services are named to be inclusive to both male and female parents; using alternative communication mechanisms to reach soon-to-be fathers; clearly identifying and encouraging fathers participation; providing parent training to men over the internet; and greater individual support for fathers, particularly those from disadvantaged backgrounds. However, the report stressed the need for different types of parent training for fathers from different backgrounds (Plantin 2007).

In relation to mental health services, where men can have considerable reluctance to engage with services, initiatives identified to improve service engagement include:

- creating an atmosphere that men find supportive and welcoming
- giving greater recognition to male specific indicators of emotional distress
- taking account of how traditional notions of masculinity affect help-seeking behaviour and treatment preferences for psychological issues
- normalising help-seeking and emphasising men's strengths in the therapeutic process
- assisting men to reconstruct a valued sense of themselves and their own masculinity as part of their recovery (MHF 2006; Nahon & Lander 2008; Wilhelm 2009; Wilkins 2007).

An additional means to improve service orientation is to build capacity of staff to understand and respond to men's health seeking behaviours. For example, in community health centres this may include provision of training emphasising effective communication approaches with men (Smith et al. 2008).

## Communicating with men

Communicating with men in a manner that resonates with the male 'world view' has been identified as valuable in supporting service engagement with primary health services (Wilkins 2007). Qualities that men have been found to value in communication include:

- a concise, matter of fact communication style
- stating facts clearly during consultations
- GPs being confident and knowledgeable, including conveying latest developments to the patient
- use of appropriate humour to reduce tension and facilitate communication
- the ability to communicate at the same level as the patient
- communication based on trust and respect with the sharing of power and responsibility
- the ability to listen and understand the patients perspective and respond with empathy
- prompt resolution of health issues (directly or by referral) (Parsons 2009; Smith et al. 2008).

These communication styles are also likely to be valued by men in interactions with other health and community services. However, it is also important not to treat men as a homogenous group and recognise differing communication preferences that may exist among sub-groups of men. This will be affected by the type of masculine identity adopted. Among Indigenous men, for example, eye-to-eye contact can be threatening, and some may prefer side-by-side communication with opportunities for silence and reflection (Kiss 2004; Malcher 2009).

In general communication programs should not position men as ignorant about health and wellbeing, instead emphasising strengths and supporting ongoing health education and awareness. Program names and descriptions can be important and should emphasise attributes such as self-help and problem solving (Nahon & Lander 2008; Noone & Stephens 2008).

In lifestyle programs a message about the value of fitness has been found to be better than one about the need for weight loss. Awareness campaigns about STIs have found that fear-based messages may have limited effectiveness and that men are more likely to respond to campaigns that normalise and diffuse anxieties about common STIs. Similarly, evaluations of depression brochures have found men respond well to testimonials that normalise depression and the help-seeking process (COTA 2008; Kalmuss & Austrian 2009; Nahon & Lander 2008). Messages that reposition health activities viewed as feminine can also be useful; for example a man may be less likely to eat fruit and vegetables if this is seen as eating like a woman, but more likely if this is positioned as helping him succeed at work and giving him more endurance and energy (Harvard Health Letter 2008).

## Outreach services

A strategy that has been identified as having considerable potential to improve men's use of health and wellbeing services, particularly for those most disengaged from services, is the offering of services in non-traditional settings. This approach aims to develop activities or provide services within men's comfort zone and is of particular relevance for men due to their lower use of most other forms of primary health care and lower participation in health improvement programs.

There is growing evidence from Australia and overseas that providing services in places that men already meet and feel comfortable, such as social and sporting clubs, pubs, sports venues and the workplace, can be a highly effective means to reach a wide range of men (Malcher 2009; Millan 2009; Wilkins et al. 2008). A meeting of the European Men's Health Forum in 2008 recommended that: 'The role of traditional primary care services must be complemented by outreach interventions following key examples of good practice in the workplace and sports grounds' (EMHF 2008, p.2)

## Workplace

The provision of health improvement initiatives at the workplace holds particular promise for men. Men spend a greater proportion of their lives in the workplace, are more likely to work full time, do more overtime and retire later. It is suggested that men often feel more comfortable in the workplace than health-oriented settings and that workplace initiatives are not only effective but also valued by men (Malcher 2009; MHF 2008). A recent Australian men's health survey found that over 80 per cent of men said they would be very likely (60 per cent) or likely (22 per cent) to participate in a workplace health check (Foundation 49 2008). Evidence suggests that well-designed workplace initiatives can improve employees health and productivity with a \$6 benefit for every \$1 invested (Bellew 2008; Goetzel & Ozminkowski 2008).

A review of workplace initiatives carried out for the Department of Human Services (Bellew 2008) found good evidence for the effectiveness of workplace interventions targeting areas including tobacco control, physical activity, nutrition, stress, and comprehensive or multi-component programs. Only indicative evidence was found for workplace interventions targeting alcohol. There was indicative support for the effectiveness of workplace interventions incorporating the following cross-cutting approaches:

- use of the transtheoretical model (stages of change)
- individual tailoring of interventions
- internet-provided health information
- benefits-linked financial incentives
- telephone-based high-risk intervention coaching
- self-directed goal-setting for change
- annual morbidity-based health risk appraisals (HRAs) used for individual targeting of interventions.

The review found that there was insufficient evidence to determine whether specific programs may be more effective with particular social groups and that there is generally a lack of well-designed Australian studies. Factors associated with successful programs included:

- senior management involvement
- participatory planning
- simultaneously addressing individual, environmental, policy, and cultural factors affecting health and productivity
- targeting several health issues
- recognising that a person's health is determined by an interdependent set of factors
- focusing primarily on employees' needs
- tailoring programs to address specific needs
- optimising the use of on-site resources
- ensuring long-term commitment to the program
- rigorously evaluating programs
- disseminating successful outcomes/promising practices to key stakeholders
- using multiple methods to attract participants.

An example of this approach in the Victorian context is the State Government's new WorkHealth initiative. This aims to provide the opportunity for all workplaces in Victoria to provide workplace health programs for employees over the next five years. This can include on-site health checks, information, advice and screening for chronic disease and will be delivered by external providers or through establishing in-house wellbeing programs. (WorkSafe Victoria 2008).

## Men's health programs

In addition to making existing services more man friendly there is some evidence that the development of men's specific programs can improve engagement. However, there is currently a lack of good evaluations to determine what is effective in this area. There is not strong evidence to support the establishment of stand alone men's health services (Robertson et al. 2008). However, the use of complementary men's health programs has proven effective.

Although not formally evaluated, the Bendigo Community Health Service is a notable example of an integrated approach drawing on existing evidence of what is effective in working with men. The service uses a three pronged strategy based on: men's health promotion, workplace health checks, and a male-friendly health clinic.

Men's health and wellbeing programs using themes attractive to men have also shown some success in attracting men that may be unlikely to attend regular health services. For example, the Pit-stop men's health check program (using a car analogy) was found to be effective in reaching men at high risk, stimulating behaviour change (in around 50 per cent) and encouraging follow up with other services (Chambers 2005; Russell et al. 2006). However, this concept is will only appeal to a particular group of men.

The development of a men's depression group labelled 'tool for depression' was undertaken by Ranges Community Health Service in Melbourne's east in 2000 after observations that males were more likely to drop out of groups containing both men and women. The program was successful in reducing both depression and anxiety levels over an eight-week period and had a high retention rate with 75 per cent of men attending all eight sessions. Participant feedback revealed that what they found most helpful in the group experience was the support of other men who were experiencing similar struggles. (Norton & Horan Smith 2005)

For Indigenous men there is some evidence that gender attitudes may provide greater weight for the provision of separate men's health clinics. For example, at Gapuwiyak in the Northern Territory, the number of men utilising the health service increased six-fold following the establishment of a separate men's clinic 25 meters from the local health service (Malcher 2009).

## Building men's health efficacy and supporting healthy living

Initiatives to increase men's health efficacy and support healthy living should recognise men's strong level of interest in their health but sometimes lower levels of knowledge and awareness of health-related issues. They should aim to empower men in terms of health-related knowledge, self-care abilities and practices; support engagement with primary health services; and encourage health-promoting lifestyle behaviours. In this regard, a focus on boys is also important to support positive health behaviours as men.



Providing health and wellbeing information or education in a form that meets men's preferences and needs can play an important role in improving health outcomes. This can include improving awareness of health and wellbeing issues, changing health risk behaviours and increasing engagement with services.

Evidence suggests that men have a preference for accessing information through non-formal avenues. Confidential and anonymous sources of information such as telephone help lines and web sites are well used by men and can act as 'stepping stones' to the use of primary care services (Department of Health and Children 2008; Wilkins & Baker 2004). However, in Victoria men have a lower level of use of the Victorian Government's generic health information line 'Nurse-on-Call', and lower use of the smoking Quitline. The internet has also been suggested to be a useful resource for men that may be less mobile, such as older men (COTA 2008).

However, others have urged caution in relying on the internet and suggested that this is indicative of the lack of connection with broader health and community services. In Europe, it was found that professionals aged 45 to 54 were the most likely to use the internet for health information and to purchase medicines online, but these medications often lacked any active ingredients. Online access to erectile dysfunction products has also been identified as a problem, as it decreases the opportunity for diagnosis of underlying health issues such as diabetes and cardiovascular disease (EMHF 2008). The establishment of a well-promoted government men's health and wellbeing website that provides maximum opportunity for connection with services would help to reduce such dangers.

Printed information can be mailed to men at their request, or be proactively targeted at particular sub-groups of men and can also provide links to other information and services. Such self-help materials generally have small intervention effects, but can have high reach and relatively low cost (Emmons 2000). Men that have first received some health education information that is relevant to them have been found to be more likely to attend a GP (Hardy 2007). The provision of information to women, who often influence men's health behaviours, has also been identified as another potentially effective avenue to reach men (Robertson et al. 2008).

Social marketing approaches are described as the use of commercial marketing techniques in the planning, development, implementation and evaluation of programs intended to influence a particular target audience to improve their health or wellbeing. Despite clear applicability to men, due to greater lifestyle risk factors and lower levels of health knowledge, there have been few social marketing campaigns targeting men (Rumm 2005). A Scottish review of social marketing approaches to improve health outcomes identified the following learnings from past interventions:

- Have a clear strategic direction and clear understanding of the problem
- Short-term tactical campaigns have less value than generational approaches
- Move from one-off approaches to building ongoing relationships
- Clearly identify target groups and messages
- Research is critical to success in both development and evaluation
- Recognise the potential and limitations of advertising and use it as part of a wider strategy including local activities
- Build relationships with key stakeholders and complementary services
- Recognise the potential of public health branding (Stead et al. 2007).

The 'Life be in it' social marketing campaign ran in Victoria from the mid-70s till early 80s and included a cartoon character 'Norm' who had a prominent beer belly and was supposed to represent the typical Australian man. However, this character was removed after follow-up research found that Norm was becoming a hero to those who were originally intended to see him as an anti-hero (Life be in it 2009).

Individual counselling approaches generally have high effectiveness in bringing about behavioural change, but are costly and often limited in their reach. These can be combined with less costly interventions such as mail, email or telephone. Group sessions for some health behaviours, such as smoking and obesity, have been found to outperform self-help materials but may also have limited reach and not be as effective as individual counselling (Emmons 2000).

Education training programs have been found to be one of the most effective ways to enhance health behaviours (Stokols 2000) and have an important role in providing men with health and wellbeing information. For men these appear to be most effective when delivered onsite at workplaces and in male dominated environments (pubs, clubs, and sporting facilities) (EMHF 2008; Hardy 2007). This has the particular benefit of reaching men that may not normally have an interest in attending such sessions. Other factors identified as supporting the effectiveness of men's education programs include making these available outside of normal working hours and involving more men in program delivery

(Hardy 2007). Education programs should also recognise and cater to the needs of sub-groups of men when thinking about content (including language options) and delivery location.

Beyondblue and other organisations have successfully used sporting clubs as a means of disseminating information and found these particularly useful in providing access to young men and those in rural areas where they often have an important place in community life (Senate Select Committee on Men's Health 2009).

Community men's nights have also been widely used and are likely to be most effective when they are formally linked with men's health and wellbeing programs and services (Malcher 2009). However, evaluations suggest that these are generally attended by older men from a professional background, with large segments of the male population such as young men, the unemployed and those from lower skill occupations underrepresented (Verrinder & Denner 2000).

Men's breakfasts, dinners and other events using high-profile men to promote men's health have been undertaken by groups such as Men's Wellbeing Matters based on the Mornington Peninsula (MWM 2007). Other men's events have been held during the annual international men's health week, and been organised by local communities such as the Man Alive festival held in SA in 2008. However, there is not good evidence about the relative effectiveness of this approach, the risk profile of men likely to attend, and impacts on health behaviours.

The success or failure of information or education interventions will also be dependent on appropriateness of the design and targeting. In this regard systematic evaluation is required to gain greater insight into what approaches are most effective (Senate Select Committee on Men's Health 2009). An important question is the extent to which information is reaching men at risk and disengaged from services, and actually resulting in improved health behaviours. Resources should be developed to be inclusive of different male sub-groups and not rely solely on the use of stereotypical male imagery and language that will appeal to some men but also deter others from attending.

## Gender and masculinities

A 2007 report from the World Health Organization found strong evidence that relatively short-term programs with a focus on the impact of gender roles were able to change men's health behaviours and attitudes in areas including sexual and reproductive health, child health, violence against women and other men, and health-seeking behaviours (Barker et al. 2007). The report categorised programs as follows:

- *Gender neutral* programs did not distinguish between the needs of men and women or question gender roles.
- *Gender sensitive* programs recognise the differing needs and realities of men and women based on the social construction of gender roles but place little emphasis on changing these social-constructed behaviours.
- *Gender transformative* programs sought to transform gender roles and critically reflect, question and change institutional practices and broader social norms that create and reinforce gendered health inequalities and vulnerability.

Programs rated as being gender transformative (involving deliberate discussions of gender and masculinity) had a higher likelihood of being effective in changing behaviours than those rated as gender sensitive or gender neutral. However, these programs typically worked with relatively small groups of men or boys. Evidence of behaviour change was found across all program intervention types (group education, service-based, community outreach, mobilisation and mass-media campaigns, and integrated), but integrated programs that used group education in combination with other strategies targeting the social context were found to be most effective. A limitation identified was that few go beyond the pilot phase or a short-term timeframe (Barker et al. 2007).

In Australia, a review of men's health education and resources found a common view among academics that ideas of masculinity need to be considered in the planning, development and implementation of men's health programs, particularly for marginalised and disadvantaged groups. In doing this however, the need was noted to account for multiple masculinities, and not using a one size fits all approach (Hardy 2007). As part of this, an attempt should be made to reverse the paradigm that seeking help represents a personal failure and weakness in men. Instead healthcare can be presented as supporting contemporary constructions of masculinity by helping men reach their maximum productivity, vitality, strength, virility, stamina and attractiveness (Richardson 2004).

Cognitive therapy style interventions have also been suggested to have the potential to help men modify masculine-related beliefs that impede healthy behaviours. This could, for example, be applied to beliefs such as 'I believe a person should not admit being sick to others' with the aim of changing such a belief. This could allow men or boys to feel less restricted in choosing a male gender identity (Mahalik et al. 2007b; Wilkins & Baker 2004).

Initiation or rite of passage programs for boys and young men have been found to have some success promoting positive versions of masculinity and positive health behaviours. The Australian Pathways to Manhood program uses a six-day bush camp for young men and their fathers or mentors and aims to develop positive ways for them to express their masculinity. Evaluations indicate that boys who have participated have more confident communication and social skills; stronger, more supportive father-son relationships; increased respect for women; more motivation to set goals and finish school, and more motivation to give back to the community (Malcher 2009). The use of such programs in schools could meaningfully expand students' concepts of masculinity and manhood and reduce the likelihood of them engaging in violent behaviours (Luoluo 2000).

## Social participation and health

Community and men's groups are considered to offer good potential to support the improvement of men's health and promote social participation. This can include established community groups such as churches, Rotary, Apex and Lions as well as the recent men's sheds movement. The range of benefits that such groups can provide include: increased social connections and participation, opportunities for health promotion, and the provision of sporting and other physical activities (Senate Select Committee on Men's Health 2009). They should not, however, be considered a substitute for improved engagement of men with mainstream health and community services.

### Men's sheds

The growing numbers of men's sheds have the potential to support health and wellbeing through the creation of a non-threatening informal environment for the provision of health information or health checks. However, not all sheds include a focus on health-related activities or programs.

Evidence is reasonably clear that sheds can provide access to specific groups of men that may be at risk of poorer health. However, there is limited evidence about the extent to which sheds actually improve the health and wellbeing outcomes of men attending (Ballinger et al. 2009); including whether or not sheds have proven to be an effective avenue for health promotion campaigns and can lead to changes in health-related behaviours. There is stronger evidence around the ability of sheds to support social connections and participation, although much of this evidence is qualitative and the scale of such impacts has not been measured. Reported benefits to participants include:

- gaining/regaining a sense of purpose
- enhanced self-esteem
- decreased social isolation
- sharing of health experiences
- ability to contribute to the community.

(Ballinger et al. 2009; Misan & Sergeant 2009)

No studies have looked at levels of social support or mental health of men entering sheds and whether this changes over time. Interestingly, although depression has been identified as a risk factor in the transition to retirement (Golding et al. 2007), overall mental disorders are less common among men 65+ than all other age groups (ABS 2008c) and levels of social support and friendship also peak in the 75+ age group after increasing each decade after age 35–44 (Flood 2005). Suicide rates are also lowest among those aged 55–74 but these do increase somewhat in the 75+ age group (ABS 2007b).

Additional benefits identified for Indigenous men include providing a comfortable and culturally-safe male space, helping to re-establish connection with Aboriginal tradition and culture and reconnection with old ones and restoring respect (Misan & Sergeant 2009).

For those men unemployed or involuntarily retired, sheds are likely to provide some substitute for the paid work that they desire, but are unlikely to have the resources or structure to be effective in supporting these men to make the transition back into the workforce. However, men's sheds with a focus on skill development may be able to support this goal if courses have the appropriate vocational focus.

Factors that have been identified as important for the success of men's shed include:

- ensuring local support
- learning from others, including affiliation with a men's shed support organisation from the outset
- having multiple partners and supporters
- a suitable location
- secure funding
- a skilled manager and management group
- a good business plan together with a sound marketing, recruitment, and communication strategy
- a wide range of activities for men to take part in
- extended opening hours
- links with a larger organisation, including a health service that can provide support for health programs (Misan & Sergeant 2009).

The creation of formal links with health and community services (possibly including the provision of outreach services), providing health related information, and the running of health and wellbeing sessions and programs, is particularly important in supporting health outcomes.

## Increasing economic participation

Often unrecognised by health and community services is the strong desire of many long-term unemployed men facing barriers such as mental health problems and homelessness to undertake competitive employment. In Victoria a study of long-term unemployed people facing multiple personal barriers such as mental health problems, homelessness, and drug and alcohol problems, found that 74 per cent identified work or education as the activity they would most like to be doing immediately (Perkins 2007). In the UK a study of homeless people (over three-quarters of which were male) found that 77 per cent wanted to work immediately and 97 per cent in the future (Singh 2005). Similarly a review of research with people with mental health problems reported an 'overwhelming consensus from surveys, cases studies and personal accounts that users want to work' (Evans & Repper 2000, p.15). A substantial proportion of people with mental health problems (even serious mental illness) report wanting to work, see employment as feasible, important to their recovery, and as an often unmet need (Bond 2004; Waghorn & Lloyd 2005).

Amongst health and community services such as substance abuse programmes, mental health services, and housing support there is often a failure to recognise the significance of work, a tendency to focus on impairments (Evans & Repper 2000; Marrone & Golowka 1999), a lack of awareness of labour market opportunities (Richards & Morrison 2001); or vocational assistance that is absent, poorly defined or of variable quality (Blankertz & Magura 2004). A further problem can be attitudes of professionals and support staff that participants should not be encouraged to work, a misplaced desire to 'protect' the vulnerable clients (Evans & Repper 2000), and an unsubstantiated belief that employment is not realistic and could have an adverse impact on the participants' mental health or wellbeing (Waghorn & Lloyd 2005).

A range of studies confirm the potential positive effects of appropriate competitive employment including improved self-esteem, improved mental and physical health outcomes, creating a sense of purpose, the development of new competencies and social networks, and realistic rather than negative appraisals of the future (Perkins 2008a; Singh 2005). A recent European study, for example, found significant improvements in mental health for welfare recipients moving back into work, and that the greatest benefits were for males with poorer health initially. Other welfare to work activities did not provide mental health benefits (Huber et al. 2009). However, careful choice of employment that matches an individual's preferences and capacities and ongoing support is essential.

Research has identified that the most effective approach for supporting individuals facing personal barriers into employment is to provide health or community services that are closely integrated with the employment support delivered (Perkins 2008a). The best and most well-studied example of this approach is known as the individual placement and support (IPS) model of assistance, which works with people facing mental health and other barriers to employment and has been found to achieve a doubling of employment outcomes (compared to other approaches) in most randomised control trials (Lawlor & Perkins 2009). In Queensland an innovative trial of this approach is bringing together Queensland Health and the Federal Department of Education, Employment and Workplace Relations, and is integrating employment specialists employed through the Disability Employment Network within state-funded community mental health teams (Waghorn et al. 2007).

The Victorian Mental Health Reform Strategy has also committed to using the IPS model to 'create clear linkages between specialist employment services and specialist mental health services' and support employment participation of people with mental health problems (Department of Human Services 2009a) and the approach has further applicability across a range of other health and community services. This could be put in place through collaborative working arrangements with agencies funded in the Federal Government's new Job Services Australia employment assistance system that commenced in July this year. These agencies now have considerably higher levels of brokerage funding for assisting individuals facing severe personal barriers move towards employment.

## Health-promoting society

Individual-level initiatives in isolation have been found to have more limited potential to bring about behaviour change compared to initiatives that also target interpersonal and societal factors that influence men's health behaviours (Emmons 2000). In many cases, aspects of the social, cultural and/or physical environment can work against individual-level behaviour change. These broader influences often also have an important role in shaping individual health behaviours.

Social or community interventions can be particularly important for changing attitudes that affect health behaviours. This can include a range of issues such as views on the acceptance of smoking, alcohol use or violence, or aspects of traditional masculinity that restrict health behaviours. This approach is important given significant gender differences in health-related attitudes. Examples of this approach in Victoria include the Active Places program that works with disadvantaged communities to promote the benefits of leading a healthy and active lifestyle and the Active in Parks project that will support community participation and activity in metropolitan and national parks.

Community-level interventions have been found to have potential to yield significant benefits for individuals, however, there is a need to measure the penetration within the population in considering the overall effect. By comparison, broad interventions resulting in small changes at the population level may result in large effects on disease risk. Community interventions focusing on the physical environment have some evidence of success and can include things such as provision of sporting facilities, extending hours of sporting centres or installation of bike paths.

Approaches working at the organisational/institutional-level can sometimes be successful by influencing intermediaries whose actions affect large numbers of men or boys: for example providing education about reducing workplace health risks to managers (Smedley & Syme 2000; Stokols 2000).

## Legal and regulatory interventions

Legal and regulatory interventions can play an important role in improving poor health and are particularly relevant for men given their higher levels of risk taking and greater participation in activities such as illicit drugs, tobacco use, and heavy alcohol consumption. This can include approaches such as:

- promoting public health by prohibiting unhealthy behaviours (such as, prohibiting smoking in workplaces and public venues, and the use of mood-altering drugs)
- mandating health protective behaviours (such as the use of seat belts and bike helmets, driver blood-alcohol limits)
- penalising harmful activities through the imposition of civil and criminal penalties
- regulating advertising and product labelling to ensure that the public receives accurate information about food, drugs, and other products
- enacting consumer product safety regulations, occupational health and safety laws, environmental regulations, and building codes to reduce the likelihood of harm from hazardous products or environments
- requiring/encouraging urban planners and local governments to create towns and public spaces that promote health (National Preventative Health Taskforce 2009; Smedley & Syme 2000).

Evaluations indicate that legal and regulatory interventions can be highly effective in reducing the incidence of injury and disease, although there is also a need to balance the benefits and costs of regulation. Costs can include loss of personal freedom, market distortions and other unintended consequences (Smedley & Syme 2000). Some have proposed the 'responsive regulation model' that begins with 'soft' mechanisms such as voluntary change, self-regulation, co-design, public reporting or positive incentives before escalating to 'harder' forms of regulation, enforcement or fiscal sanctions (National Preventative Health Taskforce 2009).

Labour market regulation, ensuring the provision of jobs with reasonable conditions and wages, safe work places, and family friendly conditions is another regulatory intervention that plays a crucial role in supporting men's health and wellbeing.

A new regulatory approach has been adopted in Europe by the UK and Norway, where legislation has been passed placing a duty on all public authorities to promote gender equity (WHO 2009). The UK Equality Act (2006) has attempted to mainstream a gender perspective across all levels of government. The Act places a 'gender equality duty' on most public institutions and agencies to promote equality of men and women when carrying out public functions, including service delivery and policy development. The code of practice identifies men disadvantaged through practices such as health services not recognising their needs, family services assuming men have little or no role in parenting, and workplace cultures not supporting men's family or childcare responsibilities. Men's lower use of primary health services is given as an example of where promoting equality of opportunity may require separate service provision (Equal Opportunities Commission 2007; WHO 2009).

To reduce unintended negative impacts on health from public policies in other areas the National Preventative Health Taskforce has suggested the use of 'health impact assessments' and the 'Health in All Policies' approach, in which health and wellbeing are taken into consideration in the policies of other government sectors. A focus on differential impacts between men and women would be crucial in this approach (National Preventative Health Taskforce 2009).

## Markets

Government interventions to influence markets can play an important role in preventative health and were named as one of the four components of the conceptual framework for the recently released National Preventative Health Strategy.

Interventions in markets can aim to improve information, take account of negative externalities affecting health, or provide incentives for individuals or producers to change behaviours. Evidence suggests that market interventions such as taxation policies to raise/lower the consumption of healthy/unhealthy goods can be highly effective (Smedley & Syme 2000).

## 7. Next steps

The issues and framework outlined in this background paper form a starting point for the development of the Victorian Men's health and wellbeing strategy. As part of this process, the Victorian Government is now seeking feedback to assist in the development of the strategy.

Feedback is sought under the following six themes:

### 1. Service delivery and orientation

- a. In what ways can health services ensure that they better understand and meet the health needs of men? This may include areas such as:
  - flexible service delivery and outreach
  - marketing of services to men
  - provision of health information directed towards men
  - staff training and development.
- b. How can the Department of Health encourage the use of a gender perspective and gender analysis in the delivery of health services?

### 2. Supporting healthy living

- a. What approaches are most effective in supporting healthy lifestyle behaviours among men, particularly in relation to tobacco, obesity, fruit and vegetable consumption, physical activity and alcohol consumption?
- b. What approaches to working with boys to develop positive health behaviours among future men are most effective?

### 3. Men's health efficacy

- a. In what ways can men best be supported to:
  - increase their connections with primary care services
  - undertake regular check-ups with a GP
  - build their knowledge and awareness of health issues
  - participate in screening programs such as the National bowel cancer screening program
  - align positive health behaviours with common notions of masculinity?

### 4. Supporting men's economic and social participation

- a. How can stronger connections be developed between health services and employment services?
- b. How can community, club and social groups have the greatest effect in supporting positive health outcomes among men?

### 5. Health-promoting society

- a. What approaches are most effective for encouraging health promoting notions of masculinity in schools, sporting clubs, and other social and cultural environments?
- b. Are there regulatory, fiscal or planning policies that are particularly relevant for supporting men's health?
- c. How can the creation of men's health modules within health and allied health courses be encouraged?
- d. What are the greatest knowledge or research gaps relating to men's health?

### 6. Conditions and sub-groups of men

- a. What factors are most important for the Department of Health to focus on in improving men's outcomes across the following areas?
  - Ischaemic heart disease
  - Cancer
  - Mental health problems
  - Suicide
  - Accidents and injuries
- b. What approaches are most effective for responding to the health issues faced by the following sub-groups of men?
  - Young men
  - Indigenous men

The closing date for submissions and a submission template are available at [www.health.vic.gov.au/mhws/](http://www.health.vic.gov.au/mhws/)

Written submissions can be emailed to: [diversity@health.vic.gov.au](mailto:diversity@health.vic.gov.au)

Or sent by post to:

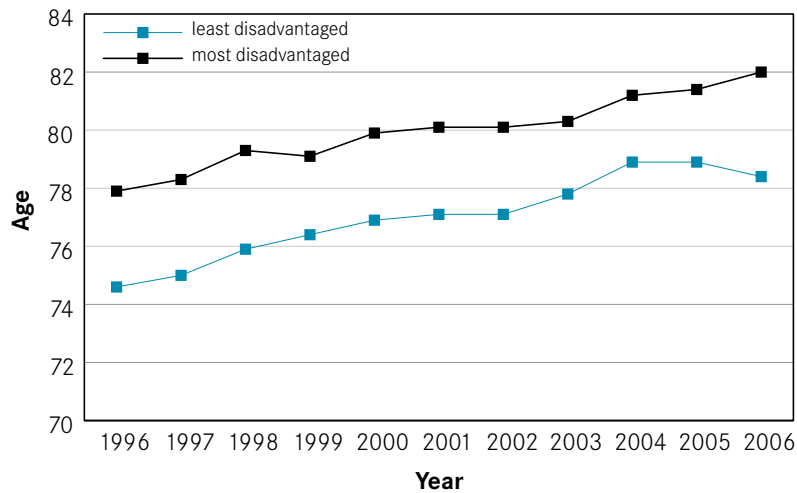
Daniel Perkins  
Policy Coordination and Projects Branch  
Department of Health  
GPO Box 4057  
MELBOURNE VICTORIA 3001

Please include an electronic copy of the submission on CD if submitting by post.



## 8. Appendix: Additional tables and figures

Figure 8.1 Life expectancy for Victorian men in the most and least disadvantaged socioeconomic quintiles (ISRED) between 1996 and 2006



(Department of Human Services 2006a)

Table 8.1 Male life expectancy at birth by Victorian local government area (LGA) 2002–2006

LGA	Life expectancy	LGA	Life expectancy
Alpine	79.1	Mansfield	78.8
Ararat	77.6*	Maribyrnong	77.0*
Ballarat	76.9*	Maroondah	79.7
Banyule	80.2#	Melbourne	82.0#
Bass Coast	79.4	Melton	78.1*
Baw Baw	78.4	Mildura	77.0*
Bayside	80.7#	Mitchell	79.0
Benalla	78.5	Moira	75.8*
Boroondara	81.5#	Monash	81.2#
Brimbank	78.9	Moonee Valley	79.5
Buloke	77.4	Moorabool	78.8
Campaspe	78.7	Moreland	78.6*
Cardinia	80.3#	Mornington Peninsula	79.5
Casey	80.1*	Mount Alexander	78.0
Central Goldfields	77.8	Moyne	78.3
Colac-Otway	78.6	Murrindindi	79.0
Corangamite	76.8*	Nillumbik	82.8#
Darebin	78.2*	Northern Grampians	75.9*
East Gippsland	78.0*	Port Phillip	78.6*
Frankston	78.7	Pyrenees	77.8
Gannawarra	78.4	Queenscliff	79.9
Glen Eira	80.2#	South Gippsland	78.6
Glenelg	76.6*	Southern Grampians	76.6*
Golden Plains	79.4	Stonnington	81.3#
Greater Bendigo	78.6*	Strathbogie	78.2
Greater Dandenong	78.6*	Surf Coast	81.0#
Greater Geelong	78.7*	Swan Hill	77.5*
Greater Shepparton	77.9*	Towong	77.0
Hepburn	78.3	Wangaratta	79.1*
Hindmarsh	77.4	Warrnambool	77.4*
Hobsons Bay	78.6	Wellington	77.2*
Horsham	77.6*	West Wimmera	75.8
Hume	79.2	Whitehorse	81.1#
Indigo	75.5*	Whittlesea	80.1#
Kingston	79.5	Wodonga	79.0
Knox	79.2	Wyndham	80.1#
Latrobe	76.4*	Yarra	78.8
Loddon	74.4*	Yarra Ranges	79.7
Macedon Ranges	79.6	Yarriambiack	78.0
Manningham	81.4#	All LGAs	79.3

(Department of Human Services 2006b)

# Statistically significantly above the average for all LGAs

\* Statistically significantly below the average for all LGAs

**Table 8.2 Ratio of male to female standardised mortality rates by disease group in Victoria in 2007**

Disease group	Male mortality rate	Female mortality rate	Ratio
External causes of morbidity and mortality	44.9	19.4	2.31
Diseases of the respiratory system	60.8	36.9	1.65
Neoplasms	226.4	143.7	1.58
Diseases of the digestive system	23.5	16.3	1.44
Diseases of the circulatory system	219.7	155.4	1.41
Diseases of the genitourinary system	16.0	12.3	1.30
Endocrine, nutritional and metabolic diseases	28.4	23.1	1.23
Certain infectious and parasitic diseases	7.4	6.1	1.21
Diseases of the nervous system	26.6	22.5	1.18
Mental and behavioural disorders	23.9	23.7	1.01

(ABS 2008a)

**Table 8.3 Avoidable, unavoidable and total mortality by socioeconomic quintile and sex in Victoria (2001–05)**

	Avoidable	Unavoidable	Total
Lowest socioeconomic quintile**	107.62	172.01	279.63
Highest socioeconomic quintile**	86.9	125.68	212.58
Females#	66.8	96.13	162.93
Males#	106.93	155.1	262.03
<i>Ratio of lowest to highest quintile</i>	<i>1.24</i>	<i>1.37</i>	<i>1.32</i>
<i>Ratio of male to female</i>	<i>1.60</i>	<i>1.61</i>	<i>1.61</i>

(Department of Human Services 2006b)

\* Includes males and females

# Rate per 100,000

**Table 8.4 Cardiovascular disease deaths in Victoria in 2007**

	Number of deaths		Standardised death rate per 100,000		Years of potential life lost	
	Males	Females	Males	Females	Males	Females
Ischaemic heart diseases	2,916	2,707	122.0	69.5	14,998	3,486
Stroke	807	1243	34.1	32.6	3651.2	2836
Peripheral vascular disease	266	264	11	7	1360.9	441.4
Heart failure	243	420	10.8	10.1	581	294
Congenital heart diseases	26	19	1.0	0.7	726	359
Acute rheumatic fever/chronic rheumatic heart disease	20	43	1	1	78	99
Transient ischaemic attack	3	7	0.1	0.2	0	0
<b>Total: Cardiovascular disease</b>	<b>4,281</b>	<b>4,703</b>	<b>179.7</b>	<b>121.3</b>	<b>21,395</b>	<b>7,516</b>

(ABS 2008a)

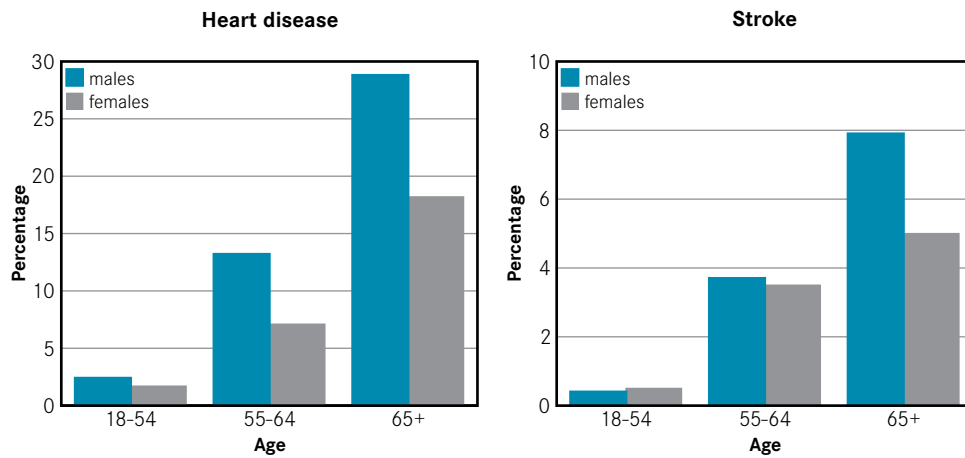
**Table 8.5 Rate of annual avoidable deaths (per 100,000) due to ischaemic heart disease and stroke by gender, age group and socioeconomic status in Victoria (2001–05)**

	20–44	45–64	65–74	Total
<b>ischaemic heart disease</b>				
Males	6.46	82.97	374.53	50.54
Females	1.34	18.42	143.61	16.34
<i>Ratio of male to female mortality rates</i>	<i>4.82</i>	<i>4.50</i>	<i>2.61</i>	<i>3.09</i>
Most disadvantaged*				38.99
Least disadvantaged*				25.66
<b>Stroke</b>				
Males	0.72	10.48	76.28	8.46
Females	0.42	4.38	49.55	5.13

\* Includes males and females in the highest/lowest quintile

(Department of Human Services 2006b)

Figure 8.2 Self-reported prevalence of stroke and heart disease among Victorian men and women in 2006



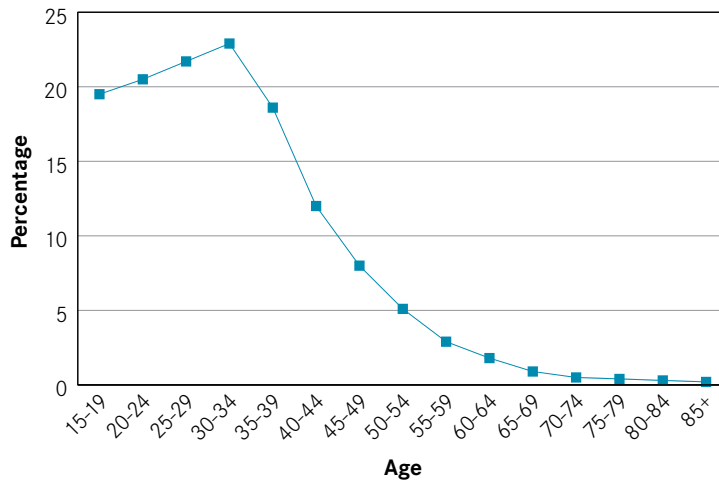
(Department of Human Services 2008d)

Table 8.6 Proportion of Victorian men and women reporting high/very high psychological distress by selected characteristics in 2007

	Males	Females
<b>Education level</b>		
Primary	14	19.8
Secondary	10.1	12.2
Tertiary	7.2	14
<b>Household income</b>		
>\$60,000	5.7	8.5
\$40,000-\$60,000	6.7	10.2
\$20,000-\$40,000	13.4	16.8
<\$20,000	25.7	23.9
<b>Area of State</b>		
Metro	8.4	12.5
Rural	8.6	12.6
<b>Age</b>		
18-24	11.8	15.4
25-34	13	14.1
35-44	8.4	13.3
45-54	5.7	13.4
55-64	9	11.3
65+	3.4	8.3

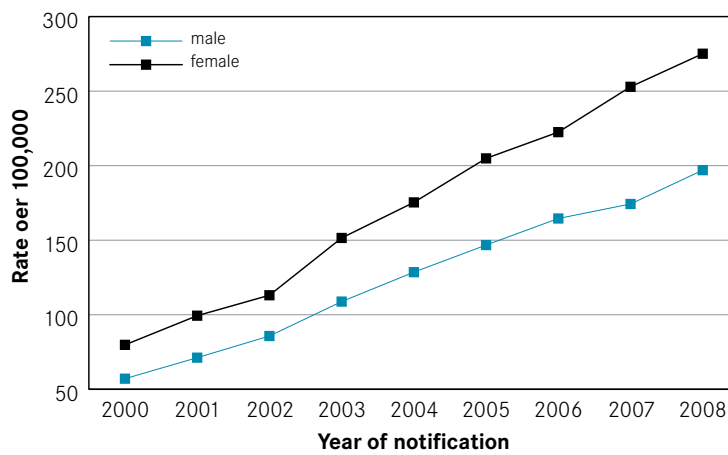
(Department of Human Services 2008b)

Figure 8.3 Suicide as a proportion of male deaths by age group in Australia in 2007



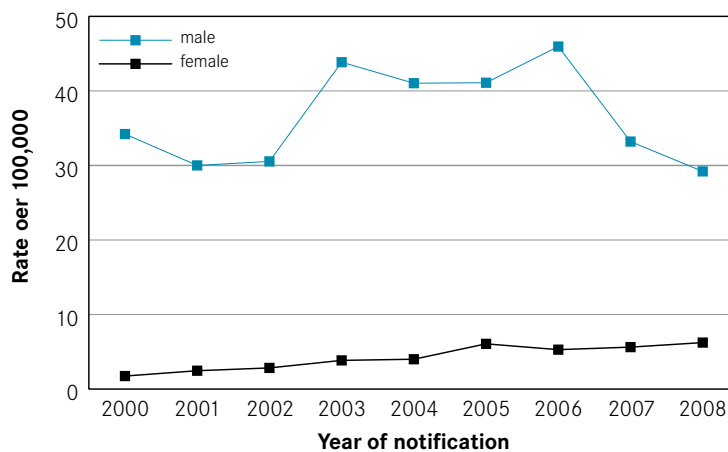
(ABS 2008a)

Figure 8.4 Notification rate of chlamydia, by sex and year, Victoria, 2000–2008



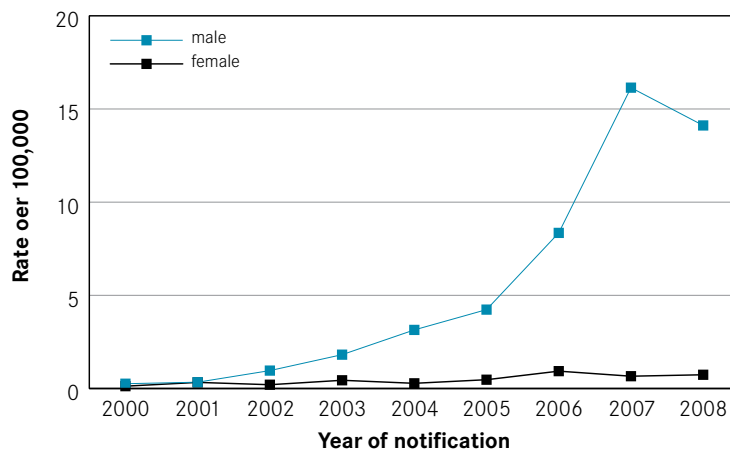
(Department of Human Services 2009b)

Figure 8.5 Notification rate of gonorrhoea by sex and year, Victoria, 2000–2008



(Department of Human Services 2009b)

Figure 8.6 Notification rate of infectious syphilis by sex and year, Victoria, 2000–2008



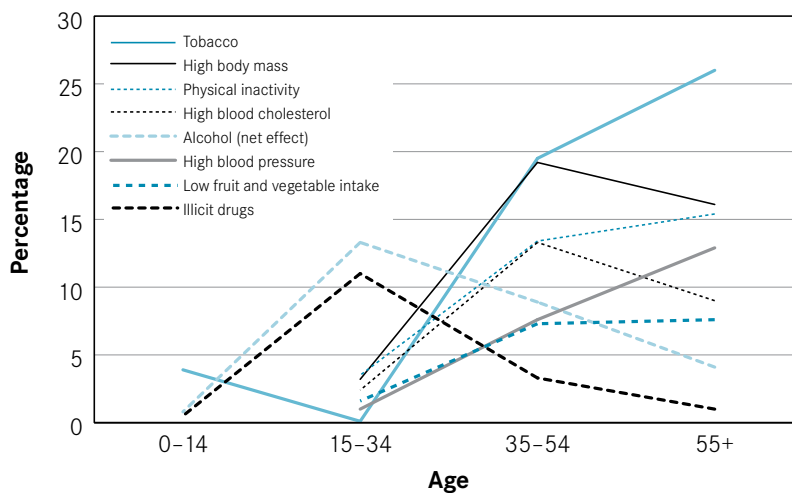
(Department of Human Services 2009b)

Table 8.7 Leading causes of burden of disease in Indigenous males in Australia (2003)

DALYs	Rank	% of total DALYs	All Australian males rank	Indigenous female rank
<b>All causes</b>				
Ischaemic heart disease	1	11.8	1	3
Type 2 diabetes	2	7.0	2	2
Anxiety & depression	3	5.7	3	1
Suicide	4	5.3	8	13
Road traffic accidents	5	3.9	12	7
Chronic obstructive pulmonary disease	6	3.9	6	5
Alcohol dependence and harmful use	7	2.8	14	8
Asthma	8	2.6	13	4
Stroke	9	2.2	5	6
Homicide and violence	10	2.2	46	10
Low birth weight	11	2.0	37	11
Lung cancer	12	2.0	4	9

(Vos et al. 2007)

Figure 8.7 Contribution of eight risk factors to Indigenous men's burden of disease (DALYs) in Australia by age group\* (2003)



\* Percentages are the proportion of the total disease burden for the specified age group (Vos et al. 2007)

**Table 8.8 Heterosexual men's condom use by partner status, Australia, 2002**

Partner status	Percentage of time always use condoms
Casual	44.6
Regular: non-live in	28.5
Regular: live in	8.2

(Visser et al, 2003b)

**Table 8.9 Smoking, alcohol and substance use among Indigenous men and women in Victoria in 2004**

	Indigenous males	Indigenous females
Current smoker	57.0	46.7
Risky/high risk alcohol consumption	20.0	12.5
Used substances in last 12 months	28.5	19.1

(ABS 2006b)

**Table 8.10 Victorian unemployment rates by birthplace and sex in 2009**

	Males	Females
Oceania	15.9	2.3
North West Europe	6.4	5.6
Southern and Eastern Europe	7.7	5.2
North Africa and the Middle East	36.7	n/a
South East Asia	11	8.9
North East Asia	2	11.1
Southern and Central Asia	11.4	22.1
Americas	9.1	n/a
Sub-Saharan Africa	17.1	6.2
All non-Australia	10.9	10.1
Born in Australia	5.5	4.6

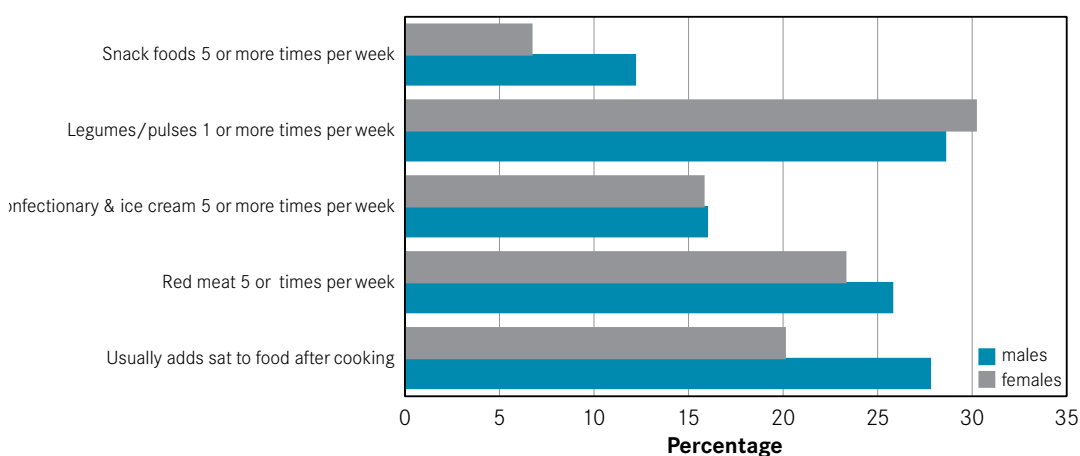
(ABS 2009b)

**Table 8.11 Unemployment rates of Victorians born outside Australia by year of arrival and sex (2009)**

	Males	Females
2006-09	13.2	16.4
2001-05	5.7	11.5
1996-2000	15.4	
1991-95	10.5	6.2
1986-90	13.4	9.2
1981-85	7	4.1
1976-80	13.9	2
1971-75	1.4	2.2
Before 1971	5	1.6
Born in Australia	5.5	4.6

(ABS 2009b)

**Figure 8.8 Consumption of specified foods by Victorian men and women: HILDA wave 7 (2007)**



**Table 8.12 Standardised Australian male mortality ratios by cause of death and birthplace (1999)**

	UK/Ireland	Other Europe	Asia	Other
Cancers	0.95*	0.88*	0.69*	0.85*
Colorectal	0.84*	0.76*	0.54*	0.77*
Lung	1.17*	1.02	0.79*	0.87*
Breast	-	-	-	-
Prostate	0.82*	0.64*	0.45*	0.76*
Diabetes mellitus	0.84*	1.28*	1.36*	0.92
Cardiovascular	0.87*	0.85*	0.75*	0.86*
Coronary heart disease	0.89*	0.86*	0.75*	0.86*
Stroke	0.83*	0.83*	0.81*	0.87*
Respiratory	0.93*	0.62*	0.6*	0.75*
Digestive	0.87*	0.85*	0.74*	0.64*
Injury and poisoning	0.91*	0.8*	0.56*	1.05
Motor vehicle	0.86	0.69*	0.61*	1.02
Suicide	0.91	0.77*	0.41*	1.02
All causes	0.89*	0.83*	0.72*	0.86*

\* Significantly different from 1.00 (Australian-born) at the five per cent level.  
(Department of Human Services 2008d)

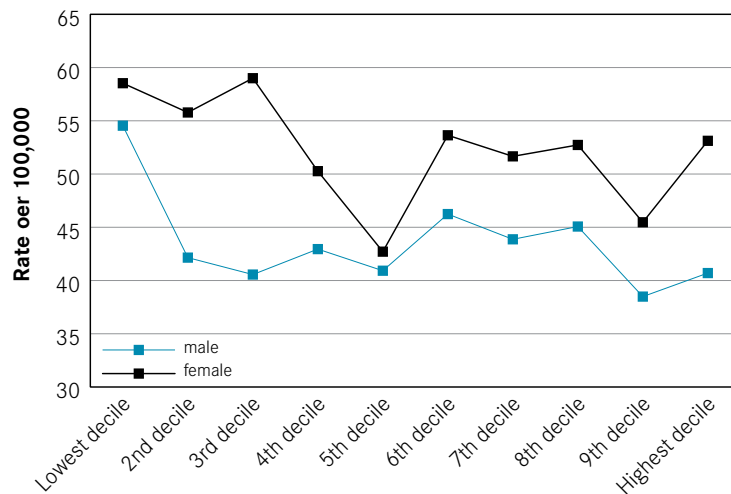
**Table 8.13 Proportion of Victorian men and women who drank weekly at short-term risk levels, by selected characteristics (2007)**

	Males	Females
<b>Education level</b>		
Primary	20.1	6.0
Secondary	17.7	4.9
Tertiary	9.7	7.6
<b>Household income</b>		
>\$60,000	14.3	7.2
\$40,000-\$60,000	12.0	7.4
\$20,000-\$40,000	16.2	7.7
<\$20,000	12.0*	3.7*
<b>Area of State</b>		
Metro	12.4	6.7
Rural	16.9	6.5
<b>Age</b>		
18-24	22.0	17.4
25-34	17.5	8.2
35-44	13.8	6.6
45-54	13.8	5.6
55-64	11.7	3.9
65+	4.1	0.9

(Department of Human Services 2008b)

\* estimate has a relative standard error between 25-50 per cent and should be interpreted with caution

**Figure 8.9 The proportion of Victorian men and women rating their health as one of the most important things (a rating of 10 on a 0 to 10 scale) by socioeconomic decile, HILDA Wave 1, 2001**



**Table 8.14 Proportion of Victorian men and women who drank at risky or high risk levels for long term harm, by selected characteristics (2007)**

	Males	Females
<b>Education level</b>		
Primary	6.9	3.0
Secondary	6.1*	2.1*
Tertiary	2.8	2.3
<b>Household income</b>		
>\$60,000	5.0	3.4
\$40,000-\$60,000	5.5*	2.0*
\$20,000-\$40,000	3.2*	3.1*
<\$20,000	2.5*	1.8*
<b>Area of State</b>		
Metro	4.3	2.1
Rural	4.0	3.2
<b>Age</b>		
18-24	3.8	1.1
25-34	3.9	0.8
35-44	6.0	3.5
45-54	3.8	3.0
55-64	4.6	3.1
65+	3.2	2.4

(Department of Human Services 2008b)

\* estimate has a relative standard error between 25-50 per cent and should be interpreted with caution

**Table 8.15 Proportion of Victorian men and women who are current smokers by selected characteristics (2007)**

	Males	Females
<b>Education level</b>		
Primary	39.6	31.8
Secondary	23.2	20.3
Tertiary	16.4	15.3
<b>Household income</b>		
>\$60,000	18.7	14.1
\$40,000-\$60,000	23.7	14.9
\$20,000-\$40,000	29.8	23.8
<\$20,000	31.3	33.4
<b>Area of State</b>		
Metro	22.1	17.5
Rural	20.5	19.8
<b>Age</b>		
18-24	19.7	16.8
25-34	37.7	23.3
35-44	23.5	23.1
45-54	21.5	21.2
55-64	17.5	14.1
65+	7.5	7.6

(Department of Human Services 2008b)

**Table 8.16 Proportion of Victorian men and women who consume three or more serves of vegetables per day by selected characteristics (2007)**

	Males	Females
<b>Education level</b>		
Primary	23.7	38.3
Secondary	25.4	43.0
Tertiary	29.1	49.2
<b>Household income</b>		
>\$60,000	29.1	51.3
\$40,000-\$60,000	27.9	45.9
\$20,000-\$40,000	26.9	43.3
<\$20,000	19.4	33.8
<b>Area of State</b>		
Metro	26.0	42.0
Rural	29.3	49.8
<b>Age</b>		
18-24	21.5	26.0
25-34	18.2	36.1
35-44	27.2	40.2
45-54	28.9	53.3
55-64	32.6	56.0
65+	33.4	51.6

(Department of Human Services 2008b)

**Table 8.17 Proportion of Victorian men and women who consume two or more serves of fruit per day by selected characteristics (2007)**

	Males	Females
<b>Education level</b>		
Primary	32.2	43.5
Secondary	38.6	54.4
Tertiary	41.9	56.9
<b>Household income</b>		
>\$60,000	40.0	55.2
\$40,000-\$60,000	44.3	49.0
\$20,000-\$40,000	37.7	51.6
<\$20,000	27.1	41.9
<b>Area of State</b>		
Metro	40.5	52.3
Rural	34.3	51.4
<b>Age</b>		
18-24	30.7	43.0
25-34	35.9	44.3
35-44	38.7	48.9
45-54	41.8	56.3
55-64	41.2	63.0
65+	43.9	57.5

(Department of Human Services 2008b)



**Table 8.18 Proportion of Victorian men and women who are overweight or obese, by selected characteristics (2007)**

	Males	Females
<b>Education level</b>		
Primary	61.4	45.9
Secondary	56.2	41.2
Tertiary	55.0	35.5
<b>Household income</b>		
>\$60,000	56.6	38.7
\$40,000-\$60,000	52.1	41.5
\$20,000-\$40,000	57.0	48.0
<\$20,000	45.6	38.0
<b>Area of State</b>		
Metro	55.3	38.2
Rural	60.6	46.0
<b>Age</b>		
18-24	27.6	24.6
25-34	49.5	32.3
35-44	65.6	35.6
45-54	63.3	47.3
55-64	68.9	53.7
65+	59.2	46.4

(Department of Human Services 2008b)

**Table 8.20 Proportion of Victorian men and women who have had a blood pressure check in the past two years, by selected characteristics (2007)**

	Males	Females
<b>Education level</b>		
Primary	72.1	83.1
Secondary	74.9	83.9
Tertiary	77.6	82.3
<b>Household income</b>		
>\$60,000	78.5	83.7
\$40,000-\$60,000	72.3	84.8
\$20,000-\$40,000	71.2	82.8
<\$20,000	67.6	75.6
<b>Area of State</b>		
Metro	74.6	81.7
Rural	76.8	83.7
<b>Age</b>		
18-24	45.3	63.2
25-34	54.9	75.8
35-44	73.5	76.6
45-54	84.0	86.4
55-64	93.2	91.7
65+	96.8	97.0

(Department of Human Services 2008b)

**Table 8.19 Proportion of Victorian men and women who are sedentary or undertake insufficient physical activity, by selected characteristics (2007)**

	Males	Females
<b>Education level</b>		
Primary	31.3	38.8
Secondary	29.8	30.9
Tertiary	33.7	32.4
<b>Household income</b>		
>\$60,000	30.4	32.3
\$40,000-\$60,000	33.7	33.4
\$20,000-\$40,000	30.9	36.5
<\$20,000	42.2	38.8
<b>Area of State</b>		
Metro	33.9	35.2
Rural	29.9	33.2
<b>Age</b>		
18-24	24.5	29.0
25-34	29.5	35.4
35-44	34.6	31.3
45-54	34.6	29.6
55-64	31.0	35.0
65+	41.1	47.8

(Department of Human Services 2008b)

**Table 8.21 Proportion of Victorian men and women who have had a cholesterol check in the past two years, by selected characteristics (2007)**

	Males	Females
<b>Education level</b>		
Primary	48.4	52.7
Secondary	51.2	54.0
Tertiary	56.5	48.8
<b>Household income</b>		
>\$60,000	55.0	49.6
\$40,000-\$60,000	52.5	51.7
\$20,000-\$40,000	52.4	49.9
<\$20,000	47.9	48.7
<b>Area of State</b>		
Metro	55.4	53.3
Rural	49.7	45.6
<b>Age</b>		
18-24	17.3	13.9
25-34	25.3	29.9
35-44	49.1	42.3
45-54	65.4	64.3
55-64	84.8	75.1
65+	81.6	79.8

(Department of Human Services 2008b)

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