The State of Men’s Health in Europe
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Country codes

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Denmark  DK  Latvia  LV  Turkey  TR
Estonia  EE  Malta  MT  Iceland  IS
Spain  ES  Netherlands  NL  Liechtenstein  LI
Finland  FI  Poland  PL  Norway  NO
France  FR  Portugal  PT  Switzerland  CH
Dear Reader,

This report provides a comprehensive overview of the state of men’s health across the 27 Member States of the European Union, the 4 states of the European Free Trade Association (Norway, Iceland, Switzerland and Lichtenstein) and the 3 candidate countries (Croatia, Turkey, Former Yugoslav Republic of Macedonia). It highlights the broad range of mortality and morbidity data arising from the many different health conditions which affect men in Europe.

Gender equity is a high priority for the European Commission and this report will help to close the information gap on men’s health.

The first European men’s health report provides information on various topics such as cancer, alcohol and tobacco. Improving men’s health also has both direct and indirect benefits for women and children.

This report concentrates on data and information and is available in three documents. If you wish to have a short overview of the situation of men’s health in Europe, a leaflet with the main findings is available in English and French; the report at hand provides you with a more detailed version, while the extended report is available should you be interested in obtaining in-depth information.

Paola Testori Coggi

Director General DG Health and Consumers
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Executive Summary

This report provides a comprehensive overview of the state of men's health across the 27 Member States of the European Union, the 4 states of the European Free Trade Association (Norway, Iceland, Switzerland and Liechtenstein) and the 3 candidate countries (Croatia, Turkey, Former Yugoslav Republic of Macedonia). It highlights the broad range of mortality and morbidity data arising from the many different health conditions that affect men in Europe, and does so through the contextual lens of men's lives.

We see patterns emerging from the data that show marked differences between the health of men and women, and at the same time large disparities in health outcomes between men in different countries and within male populations in each Member State. This variability demonstrates that men's health disadvantage is not biological inevitability.

What is apparent is that although there is a large volume of sex disaggregated data collected across Member States, there is little analysis or consideration of the broader socio-cultural factors underpinning the data, and even fewer attempts to translate this into gender-proofed policy and practice in ways that enable men's perspectives to become visible.

A main message from this report is that there is a high level of preventable premature morbidity and mortality in men, which will only be addressed by targeted activity across the lifespan.

The male population

The changing demographic picture across the EU highlights the increasing longevity of much of the male population. Based on current projections, there will be nearly 24 million fewer working age men (aged 15-64 years) than now across the EU27 by 2060 and an increase in the number of men over 65 by some 32 million.

Lifestyle & Preventable risk factors

Poor lifestyles and preventable risk factors account for a high proportion of premature death and morbidity in men. There is a strong gendered dimension to lifestyle choices and risky behaviours that place men at higher risk of ill health than women, yet these need to be considered within the context of economic, social, environmental and cultural factors. In all Member States we see that men who live in poorer material and social conditions are likely to eat less healthily, take less exercise, be overweight/obese, consume more alcohol, be more likely to smoke, engage in substance misuse, and have more risky sexual behaviour.

Although there has been a steady reduction in smoking across Europe, the levels are still highest amongst poorer men and in the Eastern European countries. Alcohol consumption overall is higher in men than in women and men are considerably more likely to binge drink and to be exposed to alcohol-related harm. Though men have higher levels of physical activity than women generally, the majority of men in the EU do not meet recommended levels. Men tend to have less nutritionally balanced diets than women, with high levels of dietary cholesterol and saturated fatty acids and lower levels of polyunsaturated fat, carbohydrate, and fibre. These are exacerbated by high salt consumption. Obesity is increasing across Europe and the male form of overweight, with central fat deposition, increases the risk of many health problems.

Accessing Health Services

We can learn much about health systems from how men use them, and how they impact on the health of men. Infrequent use of and late presentation to health services lead to higher levels of potentially preventable health problems among men and fewer treatment options. The overall rate of admission to hospital is higher for men than for women for all of the principal diseases and health problems. Men's poorer knowledge and awareness of health also points towards the need for targeted health information to be delivered to men.

Health Status

Although men’s overall life expectancy in Europe as a whole is increasing, some countries have seen a reversal of this trend in the past decade. Life expectancy is lower for men than for women across the EU, a difference that ranges from 11.3 years for Latvia to 3.3 years in Iceland. This variation can also be seen within countries, where significant differences in life expectancy between regions and within localities are closely tied to socio-economic factors. For the EU27, the death rate is higher for men in all age ranges, with a 24% higher rate in the 0-14 year age range, 236% higher rate in the 15-44 age range, 210% higher rate in the 45-64 age range and a 50% higher death rate in the over 65 age range. This situation persists across the majority of conditions that should, on biological grounds, affect men and women equally. Over 630,000 male deaths occur in working age men (15-64 years) as compared to 300,000 for women.

Cardio-Vascular Disease and Cancer

Two of the main causes of premature death are cardiovascular disease (CVD) and cancer. These are
the focus of more detailed analysis in light of the large differences in the rates of premature death between men and women and between men from different countries. With CVD accounting for 36% of all deaths among men, the differences across Europe are striking with CVD mortality ranging from 61% of total male deaths in Bulgaria to 25% in France. Ischemic Heart Disease is responsible for 360,000 deaths among men in the EU27, about 15% of all mortality. Male cancer patterns are changing; lung cancer is declining but prostate cancer has become the most diagnosed cancer, affecting around a million European men. Testicular cancer, despite effective treatment, still remains the first cause of cancer death among young males (20-35 years) and, for non-gender specific cancers mortality rates in men are significantly higher than those seen in women. Tobacco remains the largest single preventive cause of cardio-vascular and cancer death.

Other health conditions affecting men

Type 2 Diabetes is increasing in men due to the rising tide of male form obesity and the metabolic syndrome, causing high levels of premature mortality. Osteoporosis is traditionally seen as a problem of older women. There are however problems of low bone density in young male athletes and men with specific health problems and hereditary disorders. A growing number of men also develop the condition as a result of hormone ablation therapy for prostate cancer. Across Europe there are higher levels of chronic lower respiratory diseases men with over 4% of total male deaths across EU27 as a result of a condition that is mainly caused by smoking.

Conclusion

This report provides the foundation for a wealth of activity in and around the emerging field of ‘men’s health’ and sheds light into the challenges men face at the start the second decade of the 21st Century.
Introduction

A better understanding of the health of men is essential for two main reasons. The first relates to the need for our male population to be as fit and able as possible. The second is tied to the fundamental values of equality and equity, as we are seeing many men whose lives are blighted through a collective lack of awareness and action on the problems they are facing. This has a huge impact not only on men themselves, but also their families and the wider society.

This report helps create the baseline understanding of the state of men’s health across the 27 Member States of European Union, the 4 states of the European Free Trade Association (Norway, Iceland, Switzerland and Liechtenstein) and the 3 candidate countries (Croatia, Turkey, Former Yugoslav Republic of Macedonia)

The report provides analysis of a broad range of health and social issues that affect the health of men and attempts to give an insight into why men seem so vulnerable to premature death and so challenging with regard to many aspects of their lifestyles.

Using routinely collected statistics on morbidity and mortality and data from academic literature, as comprehensive a picture as possible has been compiled on the state of men’s health across Europe. The purpose of this report is to inform policy makers, health professionals, academics and the wider population of the health challenges men face.

Putting the spotlight on men and men’s health

Throughout European history, men have maintained a central and prominent place in society and have traditionally been the major holders of political and religious office and of economic resources. Nevertheless, the categories of ‘men’ and ‘masculinity’ have remained largely taken for granted, as the gender spotlight focused on women. It was not until the latter part of the last century that we began to witness an increased gender focus on men, including men’s health. This included two important landmark events within the EU: the Men and Gender Equality Conference through the Finnish Presidency in 2006 and the Men’s Health Conference as part of the Portuguese Presidency in 2007.

This report is particularly timely against a backdrop of unprecedented political, economic and social change that has occurred across Europe over the past 30 years. There have been significant economic changes with an overall decline of primary industry and, more recently, increased labour market vulnerability associated with economic recession. This is coupled with a changing demographic picture within Europe: with a declining younger population and an expanding older population, the workforce implications and pressure on resources are becoming more intense.

We need to acknowledge that currently we are losing a significant proportion of our working age men through premature mortality. This affects not only our industry and commerce, but also can alter the social and financial positions of families. The marked effect of poor socio-economic conditions on the health of men means not just an issue of gender equality, but a more fundamental equity concern, which relates to the right of all men to be able to live a long and fulfilling life.

Social determinants of health

Men are not a homogenous group - as demonstrated in this report, there is much variation in health and life expectancy between men living in different contexts (e.g. different countries within Europe) and between men living in the same context (e.g. age-related or socioeconomic differences within the same country). Men’s health status is therefore more than simply a consequence of biological, physiological or genetic factors; it is affected by much broader economic, social, cultural and environmental elements.

Men’s health as an investment

Many of the solutions of addressing the social determinants of men’s health rely on the ability of professionals to recognize that men have significant potential to be a health resource rather than just a consumer of health services. Such a policy calls for a departure from the traditional focus on the ‘deficiencies’ of men with respect to their health. Public debate on men’s health tends to be dominated by negative portrayals of men and masculinity, whereby...
men are blamed for failing the health services by not attending, for being violent and for taking risks. This report supports a positive and holistic approach to men’s health, one that addresses the underlying causal factors that can be attributed to men’s poorer health outcomes and that create health-enhancing environments for boys and men.

Improving the health of men can also have both direct and indirect benefits for women and children. In the case of single-income, lower socio-economic group families, absenteeism from work due to a father’s ill-health is likely to have significant material repercussions for the family as a whole.

This report adopts a broad, social determinants approach to defining men’s health. It seeks to move beyond an approach that focuses only on differences between men and women to examine the many and varied differences between men and the many and varied ways of being a man in Europe. It recognizes, in particular, that social and economic factors, including poverty, are key determinants of the health status of men across the EU.
Chapter 1

The male population
To be healthy is not just about the absence of disease; it is also dependent on being part of society, having an education, a job, a family and to be able to live a reasonably safe and secure life. Examination of these broader determinants of men’s health and wellbeing and an exploration of the way men live their lives creates a useful backdrop to understand the context for the health challenges men are facing.

There has been a steady and continual change in the male population structure across Europe. A falling birth rate and longer life expectancy are creating a growing mismatch between the young and the old. There have also been major changes in the social roles of the population and in many cases these have been extremely beneficial and have improved the lives of both men and women.

There are emerging issues, however, that are seeing men in more vulnerable positions, such as the shrinking economy putting a strain on jobs leaving many men in transient part-time work or unemployed.

It is also recognised that men are not a homogenous group, with marked differences existing as a result of their social position within society.
Over the past couple of decades there have been marked changes for many countries in the structure of their male population; for most this has seen an increasingly aged population, with a quite rapid reduction in the number of young as compared to the old. Few countries have seen an increase in their 0-14 age group, with the Eastern European countries showing the biggest decreases.

By 2060 EU 27 is expected to see 23.8m fewer men in the 15-64 working age bracket and an increase of 32m in those men aged over 65 years.

### Total male population

<table>
<thead>
<tr>
<th>Percentage change in male population from 2010 to projected numbers in 2060</th>
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<tbody>
<tr>
<td>Source Eurostat: proj_08c2150p</td>
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</table>

### Population trends from 2010 to projected numbers in 2060

Source Eurostat: proj_08c2150p
Birth rate

There is a ratio of 105 boys for every 100 girls born, with the rate of live births varying between countries.

Ireland and Iceland have male live birth rates above 15 per 1,000 population as compared to Germany with 8 per 1000 population and the EU27 average of 10 per 1000 population. A falling birth rate has been noted (EC 2007) and highlights changing trends in the age of having children, and the numbers of children being born, rather than the survival of children at birth.

Live births per 1,000 population, by sex and country, 2008

Source merged data from Eurostat: demo_magec and WHO Health for all database.
Chapter 2

Lifestyle & Preventable risk factors
• Poor lifestyles and preventable risk factors are still some of the principal causes of premature death and morbidity in men, with over 50% of premature deaths being avoidable.

• There are strong links between the socioeconomic and educational background of men and their available health choices, which impact on their wellbeing.

• A gender element exists with regards to men’s lifestyle choices, with social pressure increasing the likelihood of adopting risky behaviour.

Lifestyle and health behaviours play a critical role in influencing health, illness, and mortality. Epidemiological studies implicate particular lifestyle patterns as a major factor in premature death rates, particularly among men. This has been confirmed by a growing shift in health care policy towards the importance of health behaviours, disease prevention and lifestyle. At both EU and individual Member State level, policy statements clearly implicate cigarette smoking, excess alcohol consumption, physical inactivity and poor diet in the aetiology of many of the principal causes of mortality and morbidity, including cardiovascular and respiratory diseases, and some cancers. It is, however, crucially important to understand that lifestyles are not simply the product of individual choice. They are influenced by economic, social, environmental and cultural factors. Across and within Member States those who are in poorer material and social conditions eat less healthily, exercise less, consume more alcohol, and are more likely to smoke or misuse drugs. In the context of addressing premature mortality among men, there is a growing awareness of the need for lifestyle modification early in life among men engaged in damaging health behaviours.
Tobacco Smoking

Tobacco use is the major causes of preventable death in Europe. It has been estimated that 15% of all deaths in the European Union - including 25% of all cancer deaths - could be attributed to smoking. Every year, over half a million Europeans die prematurely because of tobacco use or exposure to tobacco smoke. In addition to the loss of life, smoking-related deaths and illnesses impose enormous economic burdens - over €100 billion per year. Across Europe, men are more likely than women to have ever smoked tobacco: 63% of men have smoked tobacco at some point in their lives, compared to 45% of women.

Men are also more likely to be current smokers (32% vs 21%). However, some countries have seen a reduction in the sex gap in smoking over recent years due to decreases in the number of male smokers and increases in the number of female smokers. Although men are more likely than women to smoke, there is variability in smoking prevalence between men in different countries and among men within the same country. The proportion of male daily smokers ranges from a low of 17% in Sweden to a high of 51% in Latvia. In some countries half of the population smoke; in others only 1 in 6 men do so.
Smoking prevalence varies with education level. In nearly all countries, men with post-secondary education and men in higher socioeconomic groups are least likely to smoke.\(^9\)

Among young people there is less clear evidence of sex differences. In the majority of countries, girls are more likely to be smokers, but the sex differences are moderate in most. As observed among adults, there is wide variation in the prevalence of smoking among boys across Europe: the proportion of 16 year old male smokers ranges from 15% in Iceland to 44% in Latvia. Although there are no definitive patterns, rates of smoking among young men tend to be higher in Central and Eastern Europe, and lower in northern Europe.

Other European surveys reveal that boys and young men perceive significantly less risk associated with smoking tobacco.\(^9\) In addition to being more likely to smoke, men - particularly manual workers - are more likely than women to be exposed to tobacco smoke at their place of work (ibid). Furthermore, there is wide variation between countries within Europe in terms of the presence and comprehensiveness of restrictions on smoking in workplaces. Among people who work in enclosed workplaces, men are less likely than women to be employed in smoke-free workplaces (ibid).

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Alcohol consumption

Alcohol-related harm is a major public health concern in the EU, accounting for over 7% of all ill health and early deaths.\(^11\) Excessive alcohol consumption is the third most important cause of morbidity and mortality in Europe.\(^12\)

Episodic heavy drinking increases the risk of accidental injury or death, and the risk of being the perpetrator or victim of violence. It is often implicated in antisocial behaviour. Excessive alcohol consumption may also lead to negative outcomes for relationships, family, friendships, employment, and finances.

Per capita alcohol consumption in Europe is the highest in the world.\(^13\) Although sex differences in alcohol consumption are decreasing in some parts of Europe, men are more likely to drink and to drink in harmful ways. Men are more likely to be dependent on alcohol, and alcohol related injury and mortality rates are significantly greater among men. Across Europe, deaths due to chronic liver disease are more common among men: in 23 out of 31 countries the male death rate is at least double that for women.

The proportion of men who have drunk alcohol in the last 12 months ranges from a low of 68% in Romania to a high of 94% in Lithuania. Furthermore, the male to female ratio of drinkers ranges from just over 1 to nearly 2. In countries with high prevalence the male to female ratio is practically constant and close to 1:1, increasing as the prevalence decreases.

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Male to female ratio of proportion of drinking alcohol in past year

Age standardised death rates for Chronic liver disease, by sex and country, all ages, latest year

Per 100,000

Country

The proportion of drinkers increases with increasing education. This pattern is found for all men in Europe, and is observed within different age bands and across countries.

Among men, alcohol consumption also varies according to age. The 2007 ESPAD survey of over 100,000 16-year olds revealed lower levels of alcohol use than among adults, but did also find clear sex differences for most measures for alcohol use, particularly excessive and unhealthy levels of consumption. In all countries, the majority of 16 year old boys had consumed alcohol in the last year (ranging from a low of 52% in Iceland to a high of 96% in Denmark).

**Illicit drug use**

Parity of drug use in men and women is only found in young people, and only in some countries: in general drug use is considerably more common among men. However, it is important to note that male to female use ratios vary for different drugs and that across Europe, there is wide variation in men’s patterns of illicit drug use.

Men are more likely to have ever used cannabis and to have used cannabis within the last year. In no country were women more likely to have ever used cannabis, and in only one country (Ireland) were women more likely to have used cannabis in the last year.

Men are also more likely than women to have ever used ecstasy, with the exception being Latvia where equal proportions of men and women had used this drug. Among young people, there is less clear evidence that boys are more likely than girls to have ever used ecstasy. Large sex differences also occur in the use of cocaine, with about 2:1 more men using this drug.

The 2007 ESPAD survey of over 100,000 16-year olds in 35 European countries revealed that boys were approximately twice as likely as girls to have used steroids (ibid). However, the proportion of young men who had used anabolic steroids ranged from 1% or less in 9 countries to 7% of boys in the Czech Republic. A clear exception to the general finding of higher levels of drug use among boys was the finding that girls were markedly more likely than boys to have used tranquillisers or sedatives without a prescription.

Sex differences in patterns of illicit drug use correspond to sex differences in attitudes and beliefs about drugs. A survey of 15-24 year olds revealed that although there were no sex differences in the perceived health risks of heroin and cocaine - the two drugs with the highest risk ratings - boys and young men perceived significantly less risk associated with use of ecstasy and cannabis.
Drug-related harm

Reflecting the fact that men are more likely than women to use illicit drugs, there are clear sex differences in negative outcomes associated with illicit drug use. For example 82% of heroin overdose deaths occur in men, with men in their 30s most likely to die from heroin overdoses. In all European countries, drug-induced mortality rates are higher among younger people (15-39) than in the rest of the population.

Furthermore, among younger people, drug-induced mortality rates and the proportion of all deaths attributable to drug use are greater among men. However, among young men there is enormous variation between countries in terms of absolute mortality rates and the proportion of all deaths due to drug use.

Age specific death rates for Drug dependence, toxicomania, by sex, EU27, 2007

Age standardised death rates for Drug dependence, toxicomania, by sex and country, all ages, latest year

Physical Activity

There is a long established positive relationship between physical activity and health. Physical activity helps to prevent a range of chronic diseases, including cardiovascular disease, type 2 diabetes, some cancers, and obesity. It has a positive effect on musculoskeletal health and psychological wellbeing.

Physical activity also modifies other risk factors such as hypertension, total cholesterol and high-density lipoproteins and is associated with other healthy behaviours such as healthy diet and non-smoking.

Physical inactivity, on the other hand, is recognised as a major independent risk factor for chronic non-communicable diseases, accounting for 3.5% of the disease burden and up to 10% of deaths in the European Region.

In the 21st century, there are fewer opportunities for physical activity in everyday life, with the result that sedentary lifestyles have increased: Over half of men in the European Union do not reach recommended levels of activity, whilst approximately one in three are sedentary. This has been paralleled by a fivefold increase in obesity between the beginning and end of the last century. A study focusing on physical activity prevalence in 20 countries (including 7 countries from the EU), reported that age-related declines in physical activity were much more frequently observed among men than among women.

A recent study found that men in the EU were found to exercise or play sports more than women; nevertheless, 56% of men in the EU were found not to engage in exercise/sport weekly.

How often do you exercise or play sport, by sex and age, EU27, 2010

Source Eurobarometer 2010
Unhealthy diets and physical inactivity are among the leading causes of the major non-communicable diseases including cardiovascular disease, type 2 diabetes and certain types of cancer, and contribute substantially to the burden of disease, death and disability within the EU. Men’s diets are generally less healthy and less nutritiously balanced than women’s diets.

Despite the high prevalence of overweight/obesity within the EU, daily energy intake for men is below reference values in most of the participating countries. The share of protein in total energy intake is within or slightly above the recommended range of the WHO. Only men from Norway are within the recommended range for carbohydrate intake.

Their findings also suggest women are motivated to exercise more for health reasons, to improve physical appearance and to lose weight; the motivating factors for men are to have fun, to improve physical performance and to be with friends.
Likewise, the Eurobarometer\textsuperscript{28} report shows only German, Norwegian and Polish men meet the recommended daily dietary fibre intake. The majority of European countries are above the recommended range of the WHO share of fat in total energy intake and saturated fatty acids (SFA) for males, with the share of polyunsaturated fatty acids (PUFA) below the recommended intake range in most of the participating countries. Intake of cholesterol is higher in men and above recommended levels in most countries.

There are a number of instances of vitamin deficiencies among men in the EU and the intake of certain minerals is at odds with recommended levels.

Men tend to be less likely than women to associate a healthy diet with eating more fruit and vegetables or with not eating too much fatty foods (ibid). Whilst the vast majority of EU citizens report having a healthy diet, there are quite striking east/west differences between Member States. For example, whilst almost all citizens in the Netherlands (95\%) and Denmark (91\%) consider that they have healthy eating habits, this is much lower among citizens in Latvia (58\%) and Lithuania (55\%).

The Eurobarometer report (ibid) also highlights that, with the notable exception of having attempted to reduce alcohol consumption, men were less likely than women to have attempted to change their diet over the past 12 months. Motivation for making dietary changes was prompted more by the desire to lose weight for women (39\% v 26\% for men) compared to staying healthy for men (34\% v 27\% for women).

Men’s nutritional knowledge tends to be more limited than women’s\textsuperscript{29}, and men are less likely than women to read food labels\textsuperscript{30}. This may have particular negative consequences for the dietary habits of single men living alone\textsuperscript{31}. Men also tend to lack control over their diet, as the purchasing and the preparing of food have traditionally been women’s responsibility\textsuperscript{32}. This may reinforce more traditional gendered norms for men, depicting them as naïve about healthy food choices. Dietary habits are also influenced by working hours, in particular for those working shift hours, and commuting long distances, which tend to be associated with an increased reliance on convenience foods, snacking and eating out\textsuperscript{33}.

What do you think eating a healthy diet involves?

<table>
<thead>
<tr>
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<th>Percentage</th>
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<tbody>
<tr>
<td>Avoid/ not eating too much fatty food</td>
<td>Male 52%</td>
</tr>
<tr>
<td></td>
<td>Female 58%</td>
</tr>
<tr>
<td>Eating more fruit and vegetables</td>
<td>Male 70%</td>
</tr>
<tr>
<td></td>
<td>Female 67%</td>
</tr>
<tr>
<td>Eating a variety of different foods</td>
<td>Male 66%</td>
</tr>
<tr>
<td></td>
<td>Female 63%</td>
</tr>
</tbody>
</table>

Source Eurobarometer 2006
The relevance of weight to men is that they tend to deposit fat intra-abdominally leading to the apple-shaped android form of obesity, compared to pear-shaped gynoid form of obesity in women, whose fat tends to be deposited in their hips and thighs. However, this position is changing with more women developing central obesity, especially from premenopause.

This visceral fat is not an inert substance. It has its own endocrine function, with the creation of fat toxins that can lead to the fat related cancers, such as prostate, testis, bowel, liver, kidney or oesophagus. It also leads to a higher risk of hypertension, hyperlipidaemia and diabetes as a result of the metabolic syndrome. Other consequences of excess weight include an increased risk of dementia and sleep apnoea.

The growing number of overweight men across Europe is partially attributed to societal changes such as:

- Increasingly sedentary lifestyle
- Decline in manual labour
- Reduction in walking
- Reduced opportunity for exercise
- Changes in eating patterns
- Alcohol consumption
- Long working hours

Men’s weight tends to be accumulated at a faster rate than women; there are already more men overweight by age 15-24 than women, with a mean of 22% over a BMI of 25 in men and 14% in women. The rate of increase in overweight in men is also noticeable, with an increase to 46% over BMI25 in the 25-34 age range in men compared to 25% in women.

Across Europe, the burden of overweight varies. In Germany, UK, and Malta over 65% of men have a BMI greater than 25. In Norway, Estonia, Latvia and France, fewer than 45% of men are overweight or

**Weight status by age and sex, 2004**

![Weight status by age (Male)](image1)

![Weight status by age (Female)](image2)

Source Eurostat: hlth_ls_bmia
It appears that the level of educational attainment seems to have a different relationship with levels of obesity and overweight in men as compared to women. With regard to overweight (BMI 25-30) it appears that the higher the educational attainment in men the greater the proportion who are overweight, and the converse for women.

These seemingly anomalous trends may be due to men in lower socioeconomic situations being engaged in more manual work and therefore having greater energy expenditure, or due to lifestyle factors, including higher smoking levels. There may also be issues in relation to greater social acceptance of overweight in men than overweight women.

Persistent obesity is not been associated with any adverse adult social outcomes in men, though in women it is associated with a higher risk of never having been gainfully employed and not having a current partner. There is also a strong cultural component, with being big being seen as a sign of strength and prosperity.

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**Weight status for males, by country, 2004**

Source Eurostat: hlth_is_bmia

**Median percentage of population overweight (BMI 25-30), by sex and educational attainment, 2004**

Source Eurostat: hlth_is_bmie
Chapter 3
Accessing health services
Analysis of men’s use of health services offers insight into the relation of health systems to the overall health status of men. It also allows the effect of men’s health promotion and disease prevention strategies to be compared across countries (especially those with more sophisticated measures in place).

Men are less likely than women to report a long-standing illness or health problem (26% v 31%) or to be undergoing long-term medical treatment (22% v 28%)\(^1\).

Hypertension (35% for men, 37% for women) and muscle, bone and joint problems (17% for men, 28% for women) are cited as the most common reasons for medical long-term treatment. There is a higher incidence of all reported health problems in women than in men. Hypertension is more of a problem in East-Central Europe and the Mediterranean, whilst muscle, bone and joint problems are more prevalent in East-Central Europe.

Are you undergoing a medical long-term treatment?

Not surprisingly, men are less likely to report long-term disruption of activities due to health problems (26% v 31%); to report pain in the past week that affected their daily living (27% v 37%), or to report chronic restrictive pain (22% v 28%)(ibid).
Despite reporting less ill-health and less disruption to normal activities due to ill-health, the overall rate of admission to hospital is higher for men than for women for all of the principal diseases and health problems.

Diseases of the circulatory system (16%), injuries, poisoning and external causes (11%), digestive system (10%), respiratory system (10%), neoplasms (9%) and mental and behavioural disorders (4%) account for the highest proportion of hospital admissions for men.

There is considerable variability between countries, with differences in age standardised admission rates per 1,000 population for the six main health categories for men ranging from 10.7 (Cyprus and Portugal) to 40.6 (Lithuania) for Circulatory Diseases; 7.2 (Portugal) to 31 (Austria) for Injuries, Poisoning and External Causes; 9 (Netherlands and Cyprus) to 24 (Austria) for Digestive Diseases; 8 (Netherlands) to 33.6 (Lithuania) for respiratory problems; 5.3 (Cyprus) to 26 (Hungary) for neoplasms; and 1 (Poland, Cyprus, Netherlands) to 17.5 for mental and behavioural disorders.

There are some notable male/female differences in admission rates within countries. For example, the age standardised admission rates for neoplasms are considerably higher in Hungary for men (26/21), whilst a reversal of this pattern is seen in Latvia (15/20). Mental and behavioural disorders are notably higher for men in both Latvia (18/10) and Lithuania (14/8). These same countries have the highest rate of admissions and the largest male/female differences in rate of admissions for respiratory diseases (34/24 for Lithuania and 32/25 for Latvia). Whilst admission rates for injuries poisoning and external causes are higher for males than for females across all countries, the gap is particularly pronounced in Austria, Latvia and Lithuania.

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Different patterns emerge between men and women in terms of engaging in other health checks (scans, heart tests and cancer checks). Men are more likely to have had a heart check-up (29% vs 26% of women), but less likely to avail themselves of x-ray or other scans (34% vs 41% of women). Whilst colorectal cancer testing is similar between men and women at 8%, men are far less likely to undertake other tests for cancer (6% vs 16% of women).

Men are less likely than women to have had their blood pressure checked in the past year (55% vs 62% of women) or to have had a cholesterol screening test (35% vs 39% of women). Overall, the testing rates for blood pressure range from 70% or above in Luxembourg, Estonia and Portugal to 46% in Ireland, with just over half of blood pressure checks being carried out upon doctors’ initiatives. Among those with hypertension, similar proportions of men (48%) and women (50%) had recently made lifestyle adjustments with the aim of reducing their blood pressure.

**Preventative Health**

Age standardised admission rates per 1000 population for Diseases of the circulatory system, by sex, and country, latest year

![Chart showing age standardised admission rates per 1000 population for Diseases of the circulatory system, by sex, and country, latest year.](source)

**Percentage of male inpatient hospitalisations in past 12 months, by level of education and country, 2004**

![Chart showing percentage of male inpatient hospitalisations in past 12 months, by level of education and country, 2004.](source)


Source Eurostat: hlth_co_inpe
Across Europe, men access primary care services less frequently than women do, with this sex-differences gap ranging from approximately 5 percentage points in the Czech Republic and Austria to approximately 18 percentage points in Cyprus and Greece. There are also considerable variations between men in different countries, with the percentage of men attending a doctor within the past 12 months ranging from 89.2% in the Czech Republic to just 32.6% in Romania.

A Danish study that was based on 35.8 million GP contacts and 1.2 million hospitalisations in 2005 demonstrated an overall pattern among men of lower contact rates with GPs but higher hospitalisation and mortality rates. This, in the authors’ view, is consistent with the hypothesis that men react later in seeking help for severe symptoms, resulting in higher rates of hospitalisations among men for the causative condition.

The proportionally greater use of primary care services by women in the early years reflects the provision of antenatal care and screening services that are more likely to habituate women into regular contact with health services. The general absence of male-targeted health care programmes hinders the surveillance capability for men’s health problems and men’s ability to identify as participants in health care.

### Have you received any of the following tests in the last 12 months? EU25, by sex and test type

<table>
<thead>
<tr>
<th>Test</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other test for cancer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colorectal cancer testing (FOBT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSA Test</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heart check-up</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X-ray or other scan</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Eurobarometer 2007

### Men’s usage of primary health services

Across Europe, men access primary care services less frequently than women do, with this sex-differences gap ranging from approximately 5 percentage points in the Czech Republic and Austria to approximately 18 percentage points in Cyprus and Greece.

The proportionally greater use of primary care services by women in the early years reflects the provision of antenatal care and screening services that are more likely to habituate women into regular contact with health services. The general absence of male-targeted health care programmes hinders the surveillance capability for men’s health problems and men’s ability to identify as participants in health care.
Barriers within health services

A range of factors have been identified at a service level that can be described as barriers to men's more frequent or more prompt use of health services, particularly primary care services, such as weight loss groups, smoking cessation services, anger management groups, etc. as well as access to family doctors. The reasons for such difficulties for men include cost of services, services only being available during traditional working hours, lack of flexibility in many men's working days, excessive delays for appointments, rushed consultations, a perception that GP waiting rooms and other services are designed around the needs of women, a lack of understanding of the process of making appointments and negotiating with female receptionists, and lacking the vocabulary required to discuss sensitive issues. Conversely, the provision of services that have been found to be more effective are those that offer flexible opening hours, longer consultation times, individualized and male-specific health assessments and the provision of lifestyle and behaviour modification programmes. The importance of doctor-male patient communication has also been highlighted.

Well man clinics and community-based health initiatives for men

The more successful well man clinics have been those that offer flexible opening hours, longer consultation times, at sites that are separate from primary care, and offer individualized and male-specific health assessments. Other characteristics of successful clinics include the use of targeted advertising, the provision of personalized letters of invitation to prospective male patients, the provision of lifestyle and behaviour modification programmes, and the inclusion of a comprehensive referral system.

In response to the reluctance of some men to access more conventional health services, there have been increasing attempts to develop community based services that specifically target men. In this context of bringing health services to men, pubs, sports clubs, schools and other settings (e.g. work environments, youth centres, places of worship and barber shops) have been identified as settings in which to target those men who may be less likely to use more conventional services.

Targeting men's health in leisure time has been successfully achieved through associations with professional sports teams. The Premier Football League Health initiative for example is a £1.68m programme funded by the UK New Football Pools, in which Premier League football clubs help to improve the state of men's health in deprived areas. The Leeds Rhinos Rugby League club in partnership with the Centre for Men's Health, Leeds Metropolitan University and the Regional Department of Health ran a season long campaign at the ground on match days offering free health checks and a weight loss group.
Chapter 4

Health Status
• **Men generally identify themselves as having better health than women, though this may not accurately reflect their actual level of health and wellbeing.**

• **Life expectancy is lower for men than for women across all the EU Member States, ranging from 66.3 yrs for men in Latvia (77.6 yrs for women) to 80 yrs for men in Iceland (82.2 yrs for women). However, there are more variations found between men’s life expectancy between different countries and regions than between men’s and women’s life expectancy.**

• **The rate of premature death in men still far exceeds that for women, and is evident across the majority of disease states.**

• **Over 630,000 male deaths occur in working age men (15-64 years) as compared to 300,000 female deaths.**

• **Cardiovascular disease is the biggest cause of premature death, but this is rapidly being replaced by cancer.**

An analysis of morbidity and mortality data gives an indication of those conditions where men seem to be particularly vulnerable and a key observation is that the majority seem to fall within what could be classified as avoidable or deaths that are amenable to health interventions\(^2\). These are conditions where an alteration in either the risk factors that cause the problem or in the way the disease is managed would see a marked reduction in the mortality rates.

With age and socioeconomic circumstances being such an important component in men’s increased vulnerability it would appear that more concerted efforts to reduce men’s preventable risk factors in their early life would have considerable effect on their overall health and wellbeing.
Despite high levels of premature mortality among men, it is surprising that many have high levels of satisfaction with their own health. The reasons for this apparent anomaly may reflect how questions are worded and the meaning of health being different between men and women\(^5\). A further possibility is that men may have a poorer perception of their own health status\(^5\). It is also likely that although women live longer than men, the quality of life and well-being they experience may not be always satisfactory\(^5\). Women suffer from a raft of conditions that do not necessarily become life threatening in their early years. This can lead to a clustering of health conditions and multi-morbidities that contribute to their poorer self perceptions of health.

### Self reported chronic morbidity

For all ages, 33% of women and 29% of men classify themselves as having a long term condition. The number of men reporting a long-term condition increases with age, rising from 9.6% of 15-24 year old men, to 43% of 55-64 year old men, and 64% of 75-84 year old men reporting having a long term condition.

For young men, Norway stands out with nearly a fifth of their 15-24 year old men reporting a long standing condition as compared to 2% of young men in Greece.

### Self perceived chronic health problems, by sex and age, EU27, 2008

![Graph showing self perceived chronic health problems by sex and age in EU27, 2008](Source Eurostat: hith_silc_05)
For the majority of countries, men and women have very similar life expectancy without activity limitation. However, women have a longer life expectancy with severe activity limitation, meaning that they can expect to live more of their lives with chronic health difficulties as compared to men.

**Life expectancy for 50 year olds without activity limitation, by sex and country, 2008**

![Graph showing life expectancy for 50 year olds without activity limitation by sex and country.](http://www.healthy-life-years.eu)

Source: [http://www.healthy-life-years.eu/](http://www.healthy-life-years.eu/) (a) estimated value

Differences exist for men between countries with life expectancy without activity limitation having a similar pattern to overall life expectancy. There are five countries where men of 50 can enjoy over 20 more years of life without activity limitation, but in 5 countries men cannot expect to live more than 12 years past their 50th birthday before experiencing limitations.

**Life expectancy for 50 year olds with severe activity limitation, by sex and country, 2008**

![Graph showing life expectancy for 50 year olds with severe activity limitation by sex and country.](http://www.healthy-life-years.eu/)

Source: [http://www.healthy-life-years.eu/](http://www.healthy-life-years.eu/) (a)Estimated value
The average life expectancy for men in the EU is 76.1 years as compared to 82.2 years for women (6.1 years difference). Life expectancy across Europe as a whole is increasing.

It is increasing at a slightly faster rate for men (2.1%) than for women (1.6%) over the period 2002 to 2007.

There are marked differences in life expectancy between countries, with Latvia having the lowest life expectancy for men at 66.3 years (and also the biggest gap between the male and female population (11.3 years). Liechtenstein and Iceland have the greatest average male life expectancy at 80 years.

Iceland has the lowest gap between men and women with 3.3 years. It is noticeable that the difference between the highest and lowest life expectancy for men (13.7 years) is considerably more than the corresponding figure for women (7.8 years).
With each passing year of life there is a change in the estimated life expectancy as each successful year of survival means that a longer life can be expected. At the age of 60 the pattern is similar in that Eastern European men have the lowest life expectancy (Latvia 15.6 years, Lithuania 16 years) and the biggest gap between the sexes (6.1 years and 6 years respectively), whilst Switzerland, Lichtenstein, Iceland, France, Sweden and Italy can all expect to have another 22 years of life or more. At age 60 a man in Latvia could expect to live to 76 years as compared to a similar aged man in Switzerland living to 82 years – a 6 year difference.

These aggregations of data do not do justice to the large intra-country variations that exist. Averages can mask inequalities that paint a quite different picture of the problems some men face. At the NUTS2 (regional data) level, we can see that in the Itä-Suomi region of Finland the average life expectancy is 75 years as compared to 81.8 years in Åland, which has the distinction of being the only region in the EU that has a higher average life expectancy than women\(^6\) (80.8 years).

It is notable that the difference in life expectancy between the highest and lowest regions is 10.3 years for women and 15.5 years for men, offering a far greater challenge than tackling any differences between the sexes\(^7\).

**Male mortality across the lifespan**

In order to explore the impact of mortality across the lifespan a numerical analysis of the number of deaths occurring at each age was undertaken. This revealed that the higher burden of death in men appears to occur at every age until the age of 80. What is noticeable is the high number of deaths that occur in the working age population of 15-64 years, with nearly 630,000 men dying across the EU27 in these years, as compared to 300,000 deaths for women.
For the working age population the number of deaths occurring in the age range 15-64 years was compared to the overall total number of deaths for men to show the percentage that occur in this age range. For some countries, over 40% of male deaths occur at an age when men should be at their peak of activity.

Even across the majority of the Western European countries over a fifth of male deaths are occurring within this age range.

The ratio of deaths suggests that the biggest differences between men and women are found in the younger age ranges, with over 3 times more men than women aged 20-29 dying, but the excess extends right up until age 75-79.

Source: Eurostat: hlth_cd_anr
Rates of death between men and women were calculated for 5 age groups: 0-14 years, 15-44 years, 45-64 years, 65+ years and all ages. For the EU27, it can be seen that overall men have a 64% higher rate of death for all ages than women, with that rate ranging from 24% higher rate in the 0-14 year age range, 2.36 time higher rate in the 15-44 age range and just over twice as high a rate in the 45-64 age range.

In the over 65 age range there is now a 50% higher rate of death in men, such that though numerically there are fewer male deaths in this older age group, the lower number of men in this age group means that the rate is greater for men.

In the 0-14 year age range, Luxembourg stands out as having over twice as many male than female deaths. Malta and Iceland both have over 60% more deaths among boys. There are more marked differences between countries in the 15-44 years age range. Lithuania and Estonia both have over 60% more deaths among boys. There are more marked differences between countries in the 15-44 years age range.

In the 45-64 year age range, Estonia has over 3 times more male deaths. In the over 65 age range Lithuania, Latvia and France have nearly 70% higher male death rates.
Sex ratio of rates of death, for all conditions, by age and country

Source: rates calculated from Eurostat: hlth_cd_anr
There is a marked age effect on mortality data for men when compared to women. Across all the classification groups males have a higher ratio of rates of death in the 0-14 age range and a similar, but more marked picture is seen for the 15-44 and the 45-64 age ranges (the exceptions being deaths as a result of Diseases of the musculoskeletal system and connective tissue and Certain conditions originating in the perinatal period for the 15-44 age group).

A further exception is in relation to Neoplasms, where there is an excess of female deaths in the 15-44 age range, though it must be noted that the majority of the sex specific cancers only affect women in this age range and for the other cancers there is a male excess. In the over 65 age group the higher rate of death persists across the majority of the classification groups.

**Overall burden of disease**

**Sex rate ratio of death rates, main classification groups**, by age, EU27, 2007

Source calculated from Eurostat: hlhs_cd_anr

*Excluding Pregnancy, childbirth and the puerperium as this only relates to female mortality.*
Following on from a previous study, an analysis was undertaken for the EU27, with the same selection of causes of death but over the 15-49 age range. What can be seen is that Transport Accidents are the main cause of death in men in the 15-29 age range, with suicide having the highest rate of death in the 30-39 age range. Large increases are seen in the deaths as a result of ischaemic heart disease and cancer between the ages of 30-34 years and 45-49 years (over 11 fold increase and 9 fold increase respectively).

Liver disease is also seen to be increasing (a 6 fold increase). Assault is not a major contributor to men’s high death rates.

The impact of cancer on women’s premature death is noticeable, but it is also important to note that suicide remains the second highest cause of death from 25-39 years of age across the EU27 for women, with more deaths from liver disease than ischaemic heart disease.

**Age specific death rates, for selected causes, 15-49 years, EU27, 2007**

Breaking down the causes of death for men within each country shows that different diseases take on a greater or lesser impact on the total deaths. For example, deaths as a result of cardiovascular disease account for a greater proportion of deaths in Eastern European countries than in Western Europe (i.e. 62% in Bulgaria vs 26% in France).

Deaths as a result of neoplasms are more common in the West (e.g., 35% in Italy and the Netherlands). It is notable that nearly 12% of male deaths in Portugal are assigned to the classification ‘Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified’.
Male mortality from underlying causes of death as a proportion of total deaths, by country

Chapter 5

Cardio-Vascular Disease
Although there have been great improvements in cardiovascular health, marked differences exist between different parts of the EU. In some countries cardiovascular disease (CVD) accounts for half of all premature male deaths. In the most vulnerable regions, such as the Baltic States, CVD premature mortality is almost 6 times higher than in those countries with the lowest risk rates such as Switzerland, Iceland and Italy. These inequalities are found not just at the national level: a significant degree of social stratification with regard to CVD is also seen within countries across Europe. 

- There have been marked reductions in cardiovascular morbidity and mortality. Nevertheless, Cardio-Vascular Disease (CVD) is still one of the biggest risks to men’s health and in the older population it is the principal cause of death.

- Whilst CVD accounts for a mortality rate of 36% of all deaths for men, the differences across Europe are marked ranging from 61% of total male deaths in Bulgaria to just 25% in France.

- Ischemic Heart Disease, (IHD) is responsible for 360,000 deaths among men in the EU27, about 15% of all mortality.

- Cerebro-Vascular Disease (stroke) constitutes 8% of all male deaths or nearly 200,000 lives lost.
Cardiovascular disease

There has been a decline in CVD mortality in both sexes and all age groups in most countries of Western Europe since the beginning of the 1970s and in Eastern Europe since the 1990s. This has reduced the influence of CVD on premature mortality. Among women, CVD has ceased to be the number one cause of premature mortality (before age 65). A similar phenomenon is occurring with a time delay for men. This is leading to a more concentrated CVD mortality in the oldest age groups.

CVD constitutes 36% of all mortality among men (900,000 deaths) and 44% among women (1 million deaths). The percentage of male deaths resulting from CVD is very different across the EU27; it is the highest for Bulgaria (61%) and the lowest for France (25%). Generally, in the countries of the Eastern part of the EU, CVD constitutes around 50% of all death causes, while in the Western part of the EU they amount to about one-third. Similarly, age-standardised mortality rates from CVD by country are much higher in Eastern Europe.

There is, however, a marked age effect. In 2008, CVD caused 160,000 deaths among men and 60,000 deaths among women before 65 years of age. It accounted for around 1/4 of all male deaths in this age group in Eastern Europe, and around 1/5 of all male deaths in Western Europe.
Ischemic Heart Diseases (IHD)

Ischemic Heart Diseases (IHD) was responsible for 360,000 deaths among men in the EU27 in 2008. This amounts to almost 15% of all mortality (among women IHD accounted for 330,000 deaths, equivalent to 14% of all mortality). In 2008, IHD caused almost 80,000 deaths before age 65 in the EU, constituting 12% of all mortality (among women the figures are respectively 20,000 and 6%).

There are wide variations between countries broadly reflecting an east–west disparity across Europe. The highest mortality rates are in the Baltic States of Lithuania, Latvia and Estonia together with Slovakia and Hungary.

The historical trend of low IHD mortality in the Mediterranean region is today much less apparent.
Stroke leads to the death of almost 200,000 men in the EU every year, accounting for 8% of all deaths (among women the rate is 270,000 deaths, constituting 11% of all mortality). Stroke accounts for about 28,000 deaths among men under age 65, which constitutes 4% of all premature mortality (among women the figures are 16,000 and 5%).

The Balkan regions of Bulgaria, Macedonia and Romania have the highest rates of stroke mortality. Greece and Portugal exhibit the highest stroke mortality in Western Europe.
Age standardised mortality for Stroke, by sex and country, all ages, latest year


Age standardised mortality for Stroke, by sex and country, ages 0-64 years, latest year

Chapter 6

Cancer
• Cancer kills around 700,000 men in the EU27 each year which accounts for a 1/3 of all male deaths, with premature mortality affecting some 198,000 males under the age of 65 years.

• Men develop and die sooner from those cancers that should affect men and women equally.

• Male cancer patterns are changing; lung cancer is declining but prostate cancer has become the most diagnosed among European males affecting around one million men.

• Lung cancer will remain a major cause of premature mortality.

• Colorectal cancer is a leading cause of cancer death in Europe and requires population-based screening.

• Testicular cancer, despite effective treatment, still remains the first cause of cancer death among young males (20-35 years).

With an ageing European population and advances in both the prevention and management of cardiovascular disease, cancer is becoming the most significant cause of premature death in men. Around 700,000 men and over 540,000 women die every year, which account for 29% and 22% respectively of all male and female deaths across the EU27. In those aged under 65, some 198,000 men and 143,000 women die every year from cancer, 31% and 45% respectively of total deaths from all causes. Given that there are no significant sex-specific cancers for men during the early adult years (in contrast to the situation for women), male deaths are from cancers that should affect men and women equally. Men are more likely to develop and also more likely to die prematurely from these cancers.

There are many causes of cancer. Some originate through inherited factors, but most are as a result of lifestyle or the environment in which men live and work: smoking, alcohol, diet, lack of physical activity and exposure to industrial chemicals especially in factories and on farms. In addition, there is growing awareness of the risks the male form of overweight and obesity play in the development of fat-related cancers. There may also be issues relating to delay in presentation with symptoms, which reduces the treatment options.

Another relevant factor when considering cancer mortality data is that men and women’s ability to survive cancer differs across Europe. During the period 2000-2002, the average survival rate in Europe is 47% among men and 56% among women. The same study found that women have significantly higher survival rates than men for all cancers combined in each age class. Age at diagnosis is a major determinant of women’s advantage. A strong link to sex hormone patterns is implicated: with increasing age, differences between men and women almost disappear.
Male cancer mortality rates in the EU27 are showing a twofold difference. The highest mortality rates are observed mainly in the eastern part of the EU (Hungary, Latvia and Slovakia). The lowest mortality rates are observed in Sweden, Finland, Malta and Luxembourg.

The male to female profile of cancer deaths changes with age: more young men and boys dying (mainly of cancers related to congenital problems); more women dying in the middle years; more men than women die in older age.

If the sex specific cancers are removed from the data, the profile shows a far higher proportion of men dying from other cancers. The male excess of cancer death rates for non-sex specific cancers persists across the age range.
This high level of premature mortality is mirrored in incidence rates for all the major cancers that are not sex-specific. As many of these are not directly associated with tobacco consumption, this higher incidence suggests that the problems of men and cancer are influenced by other lifestyle factors.

It also compounds problems men may have with accessing services: they are not just more likely to die from the cancer but more likely to develop them as well.
Lung cancer

The current incidence rate for lung cancer is 47.6/100,000 for men and 15.6/100,000 for women. Lung cancer death rates in some Eastern European countries are 3 or 4 times greater compared to the lowest incidence rate in Sweden. It is noticeable that in some countries the female incidence rate is approaching that of males (e.g., Denmark, Iceland and Sweden). In 2008 around 180,000 males died from lung cancer in the EU27, with around 60,000 of these deaths being in men under the age of 65 years, which constitutes circa 10% of all deaths for all age groups before 65 years of age. Lung cancer deaths for women in the same year amounted to 70,000 for the entire female population and 23,000 for women under 65 years of age. This constitutes circa 7% of all deaths. Lung cancer male/female ratio is 3.3:1. The sex ratio ranges from 8-10:1 in Latvia, Lithuania and Spain; while it amounts to 0.9 in Iceland.

Large differences in death rates between men and women are evident across the life span.
Age standardised death rates for Lung cancer, by sex and country, all ages, latest year

Per 100,000

Country


Male to female ratio of standardized death rates of malignant neoplasm of lung

Age specific death rates for Lung cancer, by sex, EU27, 2008

Per 100,000

Age

Source: WHO Morticd10
Cancers of the colon and rectum (colorectal cancer) constitute a significant proportion of the male burden of cancer morbidity and mortality. Annually in the European Union 183,000 men and 150,000 women are diagnosed with colorectal cancer: 78,000 men and 67,000 women die from this disease. This constitutes around 11% of all cancer mortality (12% for women). There is a marked age effect for men.

Generally, colorectal cancer rates have fallen since the early 1980s in Western European countries. In Eastern Europe, mortality rates were generally higher until the early 2000s, when the rate of increase started to fall. The prevalence and preventable nature of colorectal cancer make it one of the primary focal points of cancer control.

The average age-standardised colorectal mortality rate for the EU27 in 2008 was 25/100,000. However, the mortality rates range from around 48/100,000 in Hungary, Slovakia and the Czech Republic to 16/100,000 observed in Greece and Finland.

The higher rate of death mirrors the incidence data at being about 5-10 years ahead of women, which has implications for the age screening programmes begin.

Age specific death rates for Colorectal cancer, by sex, EU27, 2008

Source: WHO Morticd10
Despite significant advances in the treatment of prostate cancer, it remains a growing problem for men’s health. In 2008 around 70,000 men died of this disease. This constitutes about 10% of all male cancer deaths and 3% of all male deaths. Over 92% of these deaths occurred in the oldest age group (65+).

Mortality rates vary across the EU27, ranging from over 35/100,000 in Estonia and Latvia to 15/100,000, in Malta and Romania. Of the Western European states Sweden and Denmark are noticeable at both having a rate of over 33/100,000, nearly a ¼ higher than the nearest other Western state.
Currently, around 3 million European men are living with prostate cancer and this number will grow due to population ageing. There were 350,000 new cases of prostate cancer diagnosed in the EU27 in 2008, which amounts to about 70 new cases per 100,000 men across the EU27 each year. However, this varies considerably between states, ranging from 14 per 100,000 in Turkey to over 123 per 100,000 in Ireland. Prostate cancer has a higher incidence in certain ethnic groups, most prominently African-Caribbean men. The incidence is also higher in first degree relatives of men with prostate cancer: such men have up to 5 times higher risk of developing the disease.

From the beginning of 1960s there has been a slight growth of prostate cancer incidence (but not mortality). The reason for this apparent discrepancy is that the majority of prostate cancer cases are slow growing and do not pose an immediate threat to the individual. Many men die with the disease rather than of it. There is, however, a type of prostate cancer that can occur in younger and older men which is more aggressive and leads to a more rapid death if not detected early enough. These ‘tiger tumours’ are very different from the majority of slow growing tumours that affect the majority of men.

The increased use of Prostate Specific Antigen (PSA) screening during the last decade resulted in a problem of too many non-life threatening prostate cancer cases being identified. This led to unnecessary treatment with long term side effects. Although large-scale US and UK epidemiological interventions are available, some governments have decided against national screening programmes for prostate cancer.

**Age standardised incidence rate for Prostate cancer, by country, 2008**

<table>
<thead>
<tr>
<th>Country</th>
<th>Incidence Rate (per 100,000)</th>
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<tbody>
<tr>
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Source: Globoscan

**Male standardized death rates of malignant neoplasm of prostate**
Testicular cancer (TC)

Testicular cancer (TC) is the most common malignancy amongst young adult men (20-44 age group) in Europe. On a population scale, testicular cancer deaths are, however, quite rare: fewer than 1000 deaths out of over 15,500 new cases annually in Europe and constitutes 1%-1.5% of all male cancer deaths.

Comprehensive treatment - including chemotherapy, radiotherapy and surgery - is characterised by excellent cure rates: 95% cure for early stages of TC, and slightly less in more advanced stages of the disease. It is the best example of a controllable human cancer. The availability of specialist centres is of paramount importance for successful testicular cancer treatment.

Because the causes of testicular cancer are still unknown, the only effective control is through early diagnosis and treatment.

Testicular cancer incidence and mortality/age curves display a bimodal pattern, which is different to other cancers. The frequency increases after the age of about 15 years to reach the first peak at the age 25-30, after which it declines to about age 60, when it increases again.

Over the last 60 years there has been a steady increase in testicular cancer morbidity in almost all countries. Testicular cancer incidence in Europe oscillates around 3 to 6/100,000, with the highest rates in Denmark and Norway (over 11/100,000). The reasons for this difference are not clear.

In 2008 mortality rates for the EU27 amounted to 0.4/100,000. The highest levels were observed in Bulgaria, Estonia and Latvia. The lowest mortality rates were observed in Spain and in the UK (Malta had no reported deaths).

Age standardised death rates for Testicular cancer, by country, all ages, latest year

Per 100,000

Country

Chapter 7

Accidents
Throughout the EU, there is a clear and consistent pattern of higher mortality rates among men compared to women from accident and violence-related injuries.

Accidents account for the biggest proportion of deaths within this classification group (some 36,000 male deaths in EU27) with death rates from road traffic accidents being 3 times higher in men than women. Men account for 95% of fatal workplace accidents.

Road injuries and suicide are the principal causes of accidental fatality among all male age groups.

Deaths as a result of Injury/External causes of morbidity and mortality accounted for over 156,000 male deaths (6.5% of all deaths) and 79,000 female deaths (3.3% of all deaths) for EU27 in 2007. Injury/External causes of morbidity and mortality is the leading cause of death in all age groups below 60, and the fourth most common cause of death in the EU after CVD, cancer and respiratory disease. This broad category comprises accidents (unintentional injuries, including road traffic accidents, workplace accidents, home and leisure accidents) and violence (intentional injuries, including interpersonal violence and self-harm). The biggest cause of death within this classification group is accidents accounting for 63% of male deaths (73% female deaths).

Despite improved surveillance systems and prevention strategies, accident and violence-related injuries continue to be a public health problem in the EU. As well as being a major cause of death, accidents and injury cause a huge drain on health and societal resources, resulting in an estimated seven million hospital admissions and 60 million medical consultations annually. The burden of healthcare costs associated with accident and injury in the EU is estimated at approximately €15 billion per year.

Boys and men are over represented in most fatal and non-fatal accident and injury categories. The burden of accident and injury varies widely between and within Member States. The prevalence of accident and injury-related mortality and morbidity is generally higher in Eastern European countries and higher among lower socio-economic groups within countries.
There are considerable differences between countries with the standardised injury death rate being almost 7 times higher in Latvia (where 16% of all deaths result from accidents) than in the Netherlands.

This is indicative of an overall pattern of much higher standardised injury death rates in Eastern Europe than Western Europe.
It is estimated that 100,000 lives could be saved each year if every country in the EU27 reduced its injury mortality rate to the level of the Netherlands. If we were able to bring the male mortality rate down to that of females, then we would see over 82,000 male lives saved across the EU27. This equates to a potential decrease in overall mortality of 35 per 100,000 population across the EU27.

Unintentional injuries are responsible for about two-thirds (68%) of injury fatalities and intentional injuries represent one third (32%) of injury fatalities. The vast majority of injury fatality is attributable to suicide (24%), road traffic accidents (21%) and falls (19%).

Injuries affect men and women disproportionately throughout the lifespan, with overall risk of injury being approximately twice as high in men (72 injury deaths per 100,000) than women (35 injury deaths per 100,000) (ibid). Fatal injury rates rise sharply up to the age of 15-19, are higher for boys/young men than girls/young women, and are much higher in older men than older women.
Road traffic accidents (48%) and suicide (20%) account for over two-thirds of all fatal injuries among adolescents and young adults (15-24 years) (ibid). In both cases, the death rates are approximately 3-4 times higher for men (transport: 24, suicide: 10) than women (transport: 6, suicide: 2). The result is a relative injury mortality rate of 70% in men aged 20-24 years (ibid). There are large differences between countries in injury fatality rates for young people.

For example, injury accounts for 54% of all adolescent deaths in the Netherlands compared to 76% in Estonia. Each year, 8.4 million people aged 15-24 years require hospital treatment for an injury. This represents 20% of all hospital injury related treatments, even though this age group represents only 13% of the total EU population.

Mortality rates from accidents are consistently higher for men than for women across Member States, with the gap being most pronounced in Eastern European countries.

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Deaths from road traffic accidents account for 23% of all deaths due to External causes within the EU27, with 36,166 men (11,118 women) killed in the EU27 in 2007. Death rates are 3 times higher for men than for women\textsuperscript{80}. An estimated 4.3 million road injuries per year are treated in EU hospitals, with approximately two-thirds of these being vulnerable road users. Considerable differences exist between countries, with higher rates in Eastern European countries.

Although the disparity in road death rates across the EU has decreased since 2001, there is still a fourfold difference between the lowest (Malta) and the highest countries (Lithuania).

### Age standardised death rates for Transport accidents, by sex and country, all ages, latest year\textsuperscript{1}

![Age standardised death rates for Transport accidents, by sex and country, all ages, latest year]


### Workplace Accidents

In 2005, 141 million work days were lost due to accidents at work (EU15), with an average 35 days of absence per accident (ibid). Although a large proportion of accidents entailed fewer than 14 days of absence (46%), the number of accidents leading to more than one month of absence accounted for a quarter of overall absence (ibid).

Estimated Member State costs due to work accidents range from 1% to 3% of gross national product (ibid).

Men account for 95% of fatal accidents and 76% of non-fatal accidents in the workplace.
There are considerable variations between countries, with the highest number of fatal accidents occurring in Italy and Germany. It is acknowledged that such differences are, to a large extent, the result of methodological differences in surveillance of workplace accidents.

Construction, manufacturing and transport, storage and communication account for the highest proportion of fatal accidents.

**Number of fatal accidents (NACE A_D_TO_K), by country, Male, 2007**

Source Eurostat: Hsw_aw_nnasx

**Number of fatal accidents, Male, EU27, 2007**

Source Eurostat: Hsw_aw_nnasx
Construction and manufacturing also account for the majority of non-fatal accidents in men. Approximately two-thirds (68%) of non-fatal accidents occur among craft and related trade workers, machine operators, or workers employed in an elementary occupation.\(^{84}\)

Incidence rates for non-fatal accidents are highest among labourers in mining, construction, manufacturing, transport; stationary and mobile plant operators; and extraction and building trade workers. Over 70% of injuries arising from non-fatal accidents are sustained as wounds, superficial injuries, dislocations, sprains and strains.

**Distribution of non-fatal accidents by sex and by sector for victims of shock, fright, violence and aggression, 2005, EU27**

Advances in occupational health and safety have resulted in reductions in the rate of accidents at work. Between 1997 and 2007, there has been a decline in the standardised incidence rate of fatal accidents at work, with Ireland having achieved the most notable reduction.

### Leisure Accidents and Injuries

Sport makes an important contribution to the health and physical fitness of society and to the EU’s overall strategic objective of solidarity and prosperity.\(^{85}\) Many sports, however, carry inherent risks. It is estimated that approximately 6 in 1000 unintentional fatal injuries are attributable to sports such as rock climbing, boating, or horse-related sports.\(^{86}\) This equates to approximately 1,000 fatalities per year in the EU27. When drowning (in natural water and swimming pools) and non-traffic bicycle accidents are included, 36 in 1,000 unintentional injuries can be attributed to sporting activities. This equates to an estimated 7,000 fatalities per year.

Adolescents/young people are over-represented in most categories of sports-related injuries. For example, in an audit of sports injuries in children attending an Accident & Emergency department in Scotland, the incidence of injury was much higher in boys (71%) than in girls, with football (39%) and rollerblading (14%) accounting for the highest proportion of injuries.\(^{87}\)

The overall incidence of sports-related injuries is higher in men (67%) than in women, reflecting, in part, men’s higher participation levels in sport. Men tend to engage in sports that are physically dangerous such as scuba diving, parachuting, hang-gliding and body contact sports, and take greater risks in sport than women.\(^{88}\) For men, taking risks and foregoing safety through sport, have long been regarded as masculine, and are practices that are valorised and sustained through wider gendered systems and structures within sporting organisations.\(^{91,92}\)
Chapter 8

Mental Health
Men’s depression and other mental health problems are under detected and under treated in all European countries. This is due to men’s difficulty in seeking help, health services’ limited capacity to reach out to men, and men’s different presentation of symptoms to women with higher levels of substance abuse and challenging behaviours.

Sex differences between EU countries regarding incidence, occurrence and admission to treatment for bipolar disease are evident, but difficult to explain.

Schizophrenia onset is earlier in men than women. Men have poorer long term outcomes, longer inpatient stays and extended periods of impaired functioning.

Mental ill-health in European men is under-diagnosed and under-treated. Many men seem to find it challenging to seek help when it comes to mental or emotional health problems. It may be difficult for health professionals themselves as well as individual men to identify changes in health behaviour as signs of mental disturbances. There is a lack of adequate assessment tools suitable to diagnose men’s symptoms, and a lack of suitable ways of referral for gender specific treatment.

In order to address mental health issues more effectively in men, there is a need to address gendered patterns in the upbringing of boys, and to improve our understanding of gendered dimensions to mental health disorders, mental health service delivery and in the behaviours of men themselves.
Men and Mental Health

Mental ill health includes mental health problems and strain, impaired functioning associated with distress symptoms, and diagnosable mental disorders such as schizophrenia and depression. The mental health and wellbeing of people is determined by a multiplicity of factors, including biology (e.g., genetics, sex differences), individual differences (e.g., personal experiences), family and social factors (e.g., social support) and economic and environmental factors (e.g., social status and living conditions). Data from the WHO-5 mental well-being score show that in all countries, men report better mental well-being than women. However, although more women are diagnosed with depression and anxiety (or internalizing disorders) men commit suicide more often, and men have higher levels of substance abuse and antisocial disorders (or externalizing disorders).

Analysis of health service usage demonstrates that men have less contact with health services in general and even less with mental health services.

When men do contact health services, they tend to be less likely to discuss psychological problems. This is reflected by fewer men being known to the health care system prior to suicide, and often not being regarded as depressive or suicidal. Men may be compelled to use other coping strategies such as acting aggressively, being uncooperative with health professionals, rejecting help that is offered to them and, in some cases, reverting to alcohol abuse. However, men with such behaviour often suffer feelings of powerlessness, desperation and depression. In men these feelings are more often combined with aggressive ‘acting out’ behavior and a lack of impulse control.

When asked about feeling well or distressed numerous studies show that men report higher levels of well-being and much less distress: across the EU, one in five women compared to one in ten men report psychological distress. However, the findings of two other European Reports revealed that men report work-related stress more frequently than women. Mental stress symptoms, such as overall fatigue and irritability, were also slightly more frequently reported by men. Anxiety and sleeping problems were reported by similar numbers of men and women. Their findings, however, revealed great differences among EU countries. Large differences were also seen from country to country with the highest level reported in Greece (55%), and in Slovenia, Sweden, and Latvia (all around 38%). Lowest stress levels were reported in the UK, Germany, Ireland, and the Netherlands (all around 15%).

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Depression

Depression (mood affective disorder) is one of the most prevalent health problems in many European countries and there are marked gender differences, with hospital admission rates and attendance at a general practice showing women outweighing men by a ratio of 2:1. The reason for these large differences between European countries with regard to admission rates is not explained by current research.

Sex differences in the prevalence of depression have been shown to be much smaller than the figures from hospital admission and general practice attendance. The study showed that particularly among men, depression is under treated. This partly reflects known sex differences in help-seeking behaviour.

Bipolar affective disorder

When looking exclusively at Bipolar Affective Disorder more women are treated and there are large variations among the European countries for hospital admission rates, despite this being an inherited genetic disorder. The gender differences are explainable but it is surprising that there is a 5- to 10-fold greater occurrence of the affective gene leading to this disease in Austrian, Finnish, and Icelandic populations, as compared to the populations of Denmark, Cyprus, Norway, and Poland. Alternatively, such differences may be explained by social, economic and cultural factors, which will only be determined through future research.
Anxiety disorders are the largest diagnostic group of Neurotic, stress-related and somatoform disorders (ICD-10 F40 & F41). There are marked sex differences in their occurrence: 12 month prevalence in men is around 8%, but around 17% in women\textsuperscript{100}. Although there are differences between anxiety and depression, many of the reflections written above about gender differences in depression are also relevant for the data on anxiety.

Men and women have similar occurrences of schizophrenia and other psychotic disorders: 12 month prevalence is 2.6% in men and 2.5% in women\textsuperscript{101}. There are large differences between countries in hospital admissions. This is probably caused by differences in treatment policies, where some countries prefer social and district psychiatry than hospital treatment.
Average age of onset is earlier for men than for women. Women also tend to have better functioning, more periods of recovery, fewer long-term adverse outcomes, and fewer and shorter stays in hospital. This might be due to social or biological differences as well as to gender differences that have been discussed previously.
• Men have a higher risk of dying prematurely from the major infections as a result of reduced immunity and their greater likelihood being exposed to a lifestyle or social circumstances that makes them more susceptible.

• Pneumonia kills more men than women across the lifespan up until age 80 years. Its strong association with alcohol abuse, smoking, pre-existing lung disease and HIV/AIDS makes men more likely to develop and die from this disease.

• Tuberculosis was in decline, but it is increasing in sub-populations of men. Drug-resistant hamper the management (and containment) of this disease.

• Across Europe there are about 2 HIV cases in men for every 1 case in women, and 3 AIDS cases in men for every 1 case in women. Differing patterns of incidence are found across Europe.

• Viral Hepatitis affects more men than women by a ratio of about 4:1.

Within countries undergoing major social upheaval, communicable diseases are an important cause of premature death. The risks to men in all Member States with regard to pneumonia, tuberculosis, sexually transmitted diseases and HIV continue to be a challenge.
**Pneumonia**

Pneumonia is the biggest cause of death from a communicable cause. In 2007, it accounted for some 59,414 deaths in men across the EU27 (66,197 deaths in women). Pneumonia is responsible for some 2.5% of male deaths across the EU27 (2.8% female deaths). Despite the higher absolute number of deaths among women, men have a higher standardised death rate: more deaths in women occur among those over age 80 years (77% compared to 55% for men).

The causes of pneumonia include a number of different infecting agents. It can result from external causes which have specific importance to men’s increased vulnerability. The risk of developing pneumonia is greater in people with general ill-health or with pre-existing lung disease. It is also greater in smokers, users of immunosuppressant drugs, and users of intravenous drugs. A further significant factor is alcohol abuse, which results in a diminished immune response and increases the risk of developing the disease and of its severity. The most common AIDS associated disease in 2008 was Pneumocystis pneumonia (22%).

There has been an overall steady decline in the age-standardised death rate for pneumonia, with the rate of decline similar for both men and women.

**Time trends of Pneumonia mortality, by sex, all ages, EU27, 2000-2007**

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Source Eurostat: hlth_cd_asdr

**Tuberculosis**

In the majority of the populations across the countries covered by this report, the number of cases of Tuberculosis (TB) is declining. However, this trend is not true for all countries or for all groups within individual countries: TB is now seen as an increasing public health risk.

TB thrives in populations which have difficulty in accessing public health services. The European Region has the highest number of drug resistant cases in the world. Across 30 of the 34 countries covered by this report for which data are currently available, there were 53,424 new cases of TB in men and 29,108 cases in women in 2008.

Although the median number of cases is relatively small in relation to total population in the majority of countries, some States have far higher numbers: Romania had 17,293 male cases in 2008 (a considerably reduction from the 21,331 cases seen in 2004), and Poland, Spain and the UK all had over 4,000 cases.
Sexually Transmitted Infections

In the absence of vaccines or effective cures for many STIs, safer sexual behaviour is an important aspect of epidemiological control. It is also important to monitor risk behaviour. Although surveys of representative samples have been conducted in many European countries, it is often difficult to make comparisons because of variations in sampling, data collection and measurement. Comparisons of STI rates between EU nations are hampered by substantial differences in national systems of STI surveillance and behavioural monitoring. European STI surveillance data reveal important sex differences in STIs. Although less than half (45%) of all diagnoses of chlamydia occur in men, in four of the 13 countries with valid data men comprise the majority of chlamydia diagnoses. Furthermore, the age distribution among men is different to that for women, with a greater proportion of diagnoses in men occurring in those aged over 25 than is the case for women.

The sex distribution of gonorrhoea and syphilis is markedly different to that for chlamydia. Across the 18 countries with valid comparable data, 71% of all diagnoses of gonorrhoea infection occurred in men. Although direct comparisons are confounded by differences in definitions, men are also more likely than women to have been diagnosed with syphilis: in 14 of the 18 countries, the majority of syphilis diagnoses occurred in men, and in 8 countries over 80% of diagnoses occurred in men.

Male:female ratios do not appear to be affected by the stage of infection used in different countries’ surveillance data.
HIV/AIDS

Within Europe, there are more men than women infected with HIV, and men continue to be more likely than women to become infected with HIV. Across Europe there is wide variation in the rate of new HIV diagnoses among men, with Estonia standing out as carrying a particularly high burden of the disease.

The data show that in all but 4 of the 26 countries there was an overall increase in the rate of new cases of HIV in men over the last decade. In the Netherlands and several Central and Eastern European countries (Slovenia, Turkey, Slovakia, Bulgaria, Hungary, Czech Republic, Croatia), there was at least a doubling in the rate of new HIV diagnoses in men over the last decade. Only Portugal, Romania, and Latvia observed declines in HIV cases among men. The largest change is in small countries reporting small numbers at the start of the AIDS epidemic. All other negative changes are due to anti-retroviral (ARV) drugs, underreporting and under diagnosis.

The overall increase in HIV cases over the last decade was greater among men than women. In 17 of the 26 countries, changes in HIV cases were less positive among men than among women. HIV infections have increased in most countries despite substantial health promotion activities in many countries. For several countries, changes in surveillance system may have contributed to variations. For several other countries there was a peak of the HIV epidemic in 2000-2002, therefore it is most likely in subsequent years the change would be less pronounced (Lithuania, Estonia) or even negative (Latvia). Some countries have important reporting delays.
Comparison of the data highlights the importance of not relying too heavily on simple AIDS diagnosis figures when making between-country comparisons. It is important to consider the size of the population in which the incident cases are found, and the link between diagnosis and deaths. For example, in terms of simple numbers, the UK has the fourth highest number of AIDS diagnoses each year, but only the 18th highest AIDS death rate. There are clear age trends with men in their forties seeing the highest death rates for HIV.

Viral Hepatitis

There are a number of forms of hepatitis, namely those as a result of liver damage due to alcohol abuse, autoimmune diseases, as a result of damage caused by drug overdose or through bacterial or viral infection. These diseases cause inflammation of the liver and have varying degrees of impact on the health of the individual, from acute to chronic and from mild to life threatening. Hepatitis A is transmitted through infected stools or contaminated food, Hepatitis B is transmitted through contact with an infected individual’s blood or through direct contact with an infectious person and is common in migrants from countries where the condition is more commonplace (such as Asia and South East Asia). Hepatitis C is spread by contact with contaminated blood and is most common in injecting drug users (IDUs).

Standardised death rates for viral hepatitis, by sex and country, all ages, latest year

Chapter 11

Dental and oral health
Dental and oral ill-health problems cause many systemic diseases as well as being the source of marked discomfort to the individual.

Dental caries and missing teeth are a bigger problem for women than men.

Periodontal disease affects a significant proportion of the population and has a greater prevalence in men.

Older generations are most at risk, but obese young men are emerging as another at risk group.

Strong links are evident between periodontal disease and cardio-vascular disease.

Oral disease is the fourth most expensive disease to treat in the industrialised world. Men are more at risk of cancer of the lip, oral cavity and pharynx (C00-C14), and in addition there are some conditions that can both occur in the mouth and aggravate or be caused by other serious health conditions in men. The WHO identify the most important risk factors for oral health problems as tobacco use, excessive alcohol consumption, stress, and diabetes mellitus. Many of these aggravating factors are more prevalent in men. Careful and regular oral hygiene can make significant differences in oral health and consequent systemic health, but evidence suggests that men are less effective in this regard than women and are less likely to use preventative dental services.
Dental Caries

Within the WHO Oral Health Country/Area Profile Programme database\textsuperscript{110} it is evident that dental caries are more prevalent in women than in men\textsuperscript{111}. This appears to be a multifactorial issue with no one definitive answer but it is possible that different salivary composition and flow rate, hormonal fluctuations, dietary habits, genetic variations, and particular social roles among families are associated with the increased risk for women\textsuperscript{112}. Due to this increased risk women are more likely to wear a removable denture and to have lost more natural teeth\textsuperscript{113}.

Periodontal disease

Periodontal disease is a broad term encompassing several different conditions that can affect the mouth, but are separate from conditions affecting the teeth themselves. Most often oral diseases are related to infections with many factors influencing their ability to take hold and progress to advanced chronic conditions. These risk factors include both the local environment within the mouth and any disease which compromises the immune system, repair system (e.g., poor diet), or alters the mouth environment (e.g., diabetes) can have significant impact on oral health. In addition there are a number of other important associated conditions that also have relevance to the higher prevalence this disease has in men.

Periodontal disease tends to be more prevalent in men than women\textsuperscript{114}. The recent fourth German Dental Health Survey identified a high prevalence of periodontal disease in adults aged 35–44 years and 65–74 years\textsuperscript{115}. Men and those from East Germany had significantly higher prevalence.

A study exploring the relationship between socioeconomic disadvantage and periodontal disease found lower income and lower educational attainment to be related to worse periodontal disease\textsuperscript{116}. Age is an important factor, with older men having more oral health problems than younger men. However, younger men and boys have more signs of poor oral hygiene than girls\textsuperscript{117}. There is also an increasing number of younger people affected due to obesity\textsuperscript{118}.

Health implications of periodontal disease

Periodontal disease has been implicated in the development of atherosclerosis\textsuperscript{119}. A study in Sweden found that increasing periodontal disease was also significantly associated with hypertension and in the middle aged with myocardial infarction\textsuperscript{120}. It has been suggested that the identification of periodontal disease may be used as a marker of the metabolic syndrome, and that improved oral health care in those with the metabolic syndrome may help to reduce the incidence of various systemic diseases\textsuperscript{121}.

A number of oral conditions are linked to HIV/AIDS. A study in Spain found that oral candidosis was highly predictive of immune failure in those receiving highly active antiretroviral therapy (91% for men who have sex with men, 96% for heterosexuals, and 96% for intravenous drug users)\textsuperscript{122}. It may also be an important sign of non-adherence to therapy\textsuperscript{123}. However, studies are not yet available to show if this is more prevalent in male patients.
Oral health care

In a Swedish study on oral health girls scored more favourably on behavioural measures, showed more interest in oral health, and perceived their own oral health to be better than did boys. Studies of the Danish and German adult populations found that women were more likely to clean their teeth, use toothpicks, and have regular dental check-ups and take better care of dentures.

The strongest predictor of poor oral health behaviour is being male. Women tend to see good oral health as having a greater impact on their quality of life, mood, appearance, and general well-being. Women are more likely than men to visit a dentist. The median proportion of men who had made a consultation with a dentist in the previous year was 45% as compared to 55% for women. There are marked differences between countries with only 13% of Romanian men having had a visit to the dentist as compared to 78% of men in Sweden.

The association between education and consultation with a dentist varies markedly between countries. For example, only 27% of the most educated men (33% of women) in Romania access dental services. For men who have only the most basic education this level drops to 4% of men and 5% of women. The main reason given for not visiting the dentist was cost, but this was not the case in all the countries, with some countries such as the UK, the Czech Republic, Austria and Luxembourg having this as a minority issue. Fear of treatment is an issue in a number of countries as, is does having no time to attend for consultation.

When the data are broken down by age, across all the income groups expense and a feeling of lack of time predominates in the younger age band (18-44 years). In the older age bracket cost is still one of the main problems, with lack of time becoming a less relevant reason for delayed use of services. Comparisons between the highest and lowest income quartiles for having unmet dental needs suggest that in some countries there are no barriers to services. In others a more marked inequality exists, with Bulgaria having a 20% difference between the rich and the poor.
Chapter 12

Other health conditions affecting men
• **Type 2 diabetes is increasing in men as a result of obesity.** The death rate in men is twice that of women in those under the age of 65 years, and across Europe men have higher admission rates for diabetes.

• **Obese diabetics have a 40–60% higher risk of cardiovascular mortality.**

• **Across Europe there are higher levels of chronic lower respiratory diseases in men.** Around 4% of all male deaths result from this condition, which is mainly caused by smoking.

• **Osteoporosis is traditionally seen as a problem of older women.** There are however problems of low bone density in young male athletes, men with specific health problems and hereditary factors. A growing number of men develop the condition as a result of hormone ablation therapy for prostate cancer.

A number of health conditions can be seen to have a gendered component, through men being more liable to die prematurely (e.g. diabetes), lifestyle factors making men more likely to contract the disease (e.g. chronic lower respiratory disease), or conditions that are often thought to specifically affect one sex despite while having a marked effect on the other (e.g. osteoporosis). Within this section a sample of these conditions will be considered, with the implication being that there will be other health conditions that may also be influenced by the sex and gender of the individual and that we should include an analysis of any potential sex or gender effects.
Diabetes Mellitus Type II

Diabetes Mellitus Type II is associated with an inability to keep up with the body’s demands for insulin. Although there is a genetic link associated with diabetes, the majority of cases are due to amendable/avoidable causes, the most important of which is central (or visceral) obesity and development of the metabolic syndrome. This complex condition has insulin resistance as a principal component. With the obese, the incidence of diabetes rises alongside the risk of developing the metabolic syndrome. This then significantly increases the risk of cardiovascular mortality.

Estimates of the prevalence of diabetes are complicated by a significant number of people (estimated at over 50%) being unaware that they have the condition\(^\text{130}\). The current estimate by the International Diabetes Federation\(^\text{31}\) is that 285 million people worldwide have diabetes, with a projected rise to 438 million cases within 20 years. Current prevalence estimates for the EU are 9% of the population, with a 10% increase expected over the next 20 years (ibid). There is a suggestion that men are more likely to remain undiagnosed for longer as a result of less frequent use of health services (see section on health service usage)\(^\text{132}\).

Although there are marked and important impacts of diabetes on women’s health\(^\text{133}\), men have a higher rate of mortality from this condition. There has been little change in the overall rate of death from diabetes since 2000, with men consistently at about 15 deaths per 100,000 population and women at about 11-12 deaths per 100,000 population.
Proportion of total male deaths as a result of Diabetes mellitus, by country, latest year.

The broad category of chronic lower respiratory diseases (CLRD) - consisting of bronchitis, emphysema, asthma, bronchiectasis, and other chronic obstructive pulmonary diseases - accounts for a significant degree of morbidity and mortality across Europe. Currently this condition causes more deaths in men than women, but it is likely that there will be increases in morbidity and premature mortality among women due to the increasing number of women smoking.

CLRD death rates are just over 29 per 100,000 for men and 12 per 100,000 for women. There has been a small but steady decline in the death rate from CLRD since 2000 across the EU27 as a whole (17% for men), but this decrease is not seen in all countries. Slovakia stands out as having a greater than 50% reduction in the rate of CLRD deaths, while Bulgaria saw a decrease from 2000-2004, but a subsequent 20% increase on their 2000-2004 rate.

Chronic lower respiratory diseases

Percentage change in age standardised death rates for Chronic lower respiratory diseases, 2000 to latest year.

The highest rates of death are found in Hungary (age standardised mortality of 55 per 100,000) and Belgium (48 per 100,000). These are a long way above the EU27 average of 29 per 100,000 and the 13 per 100,000 found in France.

Overall CLRD accounts for just under 4% of all male deaths across the EU27, with a high of just over 6% of all male deaths in Belgium. It is noticeable that the Eastern European countries have a lower percentage of their total deaths as a result of CLRD than many of the Western European countries, despite their higher levels of smoking. This may be due to their higher levels of cardio-vascular deaths.
Some conditions are more associated with a particular sex than others. Osteoporosis has commonly been seen as a problem of post-menopausal women and rarely thought of as an issue for men. It is now acknowledged that men have a significant risk of developing osteoporosis, with some 20% of men over the age of 50 suffering fractures and disability as a result of this disease. Maximum bone density has to be attained by the age of 40 years and this is influenced both by sex and gender. The age of puberty is known to occur earlier in girls than in boys, such that the rate of bone deposition is higher in females, who reach peak bone mass faster than males.

Young men’s increased bone density is partly explained by the extent of their participation in manual labour. However this may be affected by current demographic trends in which men are now more likely to be in similar jobs to women and have more sedentary lives.

Men’s heavier bone structure puts them at advantage with regard to bone loss as a result of ageing, such that they tend to develop osteoporotic fractures some 10 years later than women. At this point, however, their clinical condition has usually also deteriorated, such that the morbidity and mortality associated with fractures and their (surgical) treatment is considerably greater than in women. The one year mortality rate for men following hip fracture is twice that of women. Following a first fracture, the risk of having a second is the same in men as it is in women. Even though more older women than men experience falls, men have a higher mortality as a result of falls.

The most significant predictors of risk in men developing osteoporosis are increasing age and low body mass. The role of androgen deficiency (hypogonadism) and androgen ablation therapy for the treatment of prostate cancer (which affects oestrogen levels in men) are also major contributors to developing this condition. There are a number of other factors associated with the development of the disease in men, including heredity, low body mass, weight loss, smoking, physical inactivity and chronic alcoholism.

A further important factor is that with women having increased screening opportunities, they more frequently come into contact with health professionals who can pick up emerging problems at an earlier stage. Health literature, and indeed general health messages about bone health, are often focused onto women, and may contribute to men’s lack of awareness of the problem.
Men's health is complex and multifaceted, and it moves well beyond those male specific conditions resulting from men's differing biology with women.

Looking at the mortality and morbidity data through a ‘gendered lens’ has allowed fresh insights to be gained on key physical and mental health issues. A major observation from the report relates to the patterns emerging from the data that show marked differences between the health of men and women, and at the same time large disparities in health outcomes between men in different countries and within male populations in each Member State.

The extent and depth of the problem of premature mortality is one of the most striking and worrying findings, especially as it involves nearly the whole spectrum of health conditions. Men’s greater risk of developing and dying from nearly all the cancers that, biologically, should affect men and women equally; the high rate of premature deaths from cardio-vascular disease; the increased risk from the major communicable diseases; and the vulnerability of men to accidents, both in the workplace and at leisure are but some of the life-limiting factors impacting on men which lead to such a high number of early deaths.

The marked rise in the number of overweight and obese men, especially when linked to the reduced physical activity levels seen in most men’s lives, are also creating significant increases in life-limiting disease. Other lifestyle related factors such as a high alcohol intake, dietary deficiencies, and various forms of risk-taking continue to increase the likelihood of premature death and disability.

The report also demonstrates, however, that men’s health encompasses much more than simply disease related mortality; there are significant issues relating to men's overall health and well-being that have emerged through the analysis. As we move from an industrial base to a post industrial society, it would seem that many men are struggling to cope with problems relating to their mental and emotional well-being as well as their physical health. Many of the indicators relating to social exclusion can be seen to be an issue for men i.e. there are worsening opportunities for men with regard to work and full time employment and men are less likely to have post secondary level education.

An increasingly aged population is also starting to create new challenges for men with regard to their physical and mental health; with more chronic problems emerging.

Academic development of men’s health

The literature search for the completion of this report has highlighted that there is only a relatively recent focus on men and their health, with a short time frame of activity to really develop a good understanding of men and their relationship to their physical and mental health and wellbeing. There are many unanswered questions, for instance, how does ‘masculinity’ and the heritage of male socialisation processes over the generations influence men’s health behaviour, and how are men’s changing roles in a post industrial society influencing their health patterns? These are tied in closely with the question of how the social determinants of health impact on men and whether these differ from their effect on women.

It would appear from the scope and complexity of the data covered in this report that a field of practice and academic endeavour around the emerging field of men’s health is warranted, in a similar way to that seen around the field of ‘women’s health’. There would also seem to be scope for much more deconstruction of men’s physical and mental health before we can fully begin to understand what is happening.

Research

This academic development is closely tied to our observations relating to the relative lack of a research base for men’s health. Many of the key research studies that we hoped to be able to use for this report were found to be redundant as they lacked a breakdown by sex of their data.

We also see in reports that children are grouped into one category, rather than exploring the differing influences of the biological and social development of boys and girls.

There is still much data that is not disaggregated according to sex differences within the main databases. Where there is data broken down by sex there is also a tendency for the data to be presented as age standardised and, judging from much of the findings within this report, there is a need for a much clearer focus on age specific analysis as the large differences that exist between the physical and mental health of men and women is most obvious in the early years of life.
There have been calls for more research into men’s personal experiences of health and ill-health so that we can learn from their own perspective what influences their lives.

**Policy**

Successes are being seen, with the most significant being smoking legislation, which is starting to bring down the tobacco related health conditions.

Other key legislation relates to health and safety in the workplace, and transport related legislation which is seeing major improvements in those countries where it is more strictly enforced.

The policy documents explored through this report were notable in their lack of comment on the male specific issues. It would appear from our analysis that, although individual countries have developed health policies and strategies aimed at improving their population’s health a ‘one size fits all’ approach is evident, which would seem to be to the detriment of both men and women.

**Practice**

There appeared to be few initiatives that were directly focused onto the needs of men, either in a form that men would use or in places that men would more easily access. Most of the targeted activity appear to be small local initiatives. While it is acknowledged that male socialisation tends not to lead men to be as aware of health and wellbeing issues as women, men are seldom the focus of specific or targeted health education or health promotion initiatives.

It would seem that current configuration of health services makes it difficult for many men to utilise them as effectively as they should do. This moves beyond direct access to family practitioners, as it also extends into weight loss groups, counselling services and health promoting activities. Where a male focused approach has been adopted there have been marked improvements in up-take and success of health initiatives.

**Concluding comments**

This report highlights that:

- The lives of both men and women can be severely affected by the health challenges men face and how they respond to them.
- Consensus is starting to emerge on what constitutes a ‘men’s health’ issue.
- Men are dying from heavy impact diseases that are strongly related to their biology, their lifestyle and other social determinants of health.
- Key health policies are indirectly affecting men’s health in a positive way, such as smoking bans, road safety legislation, health and safety in the workplace.
- Gender equality initiatives will have a positive impact on the way men’s needs are taken into account within government health strategies and at the more local practitioner level.
References


16 Physical activity may consist of planned and structured movements or competitive sports, but also more routine activity associated with household tasks, work, leisure and commuting (WHO, 2009)


20 Helmchen L (2001) Can structural change explain the rise in obesity? A look at the past 100 years. Discussion paper for the population research centre at NORC and the University of Chicago


22 Eurobarometer (2010) Sport and Physical Activity. Special Eurobarometer 334/Wave 72.3 – TNS Opinion and Social European Commission


25 This may partly be due to under-reporting of food intake and may also be explained by the fact that a majority of EU males do not meet recommended guidelines for physical activity.


28 Eurobarometer (2006) health and Food Special Eurobarometer 246/ Wave 64.3 - TNS Opinion and Social. European Commission


38 It is not possible to isolate respondents with high cholesterol from the survey data


41 Richardson N (2004) Getting Inside Men's Health. Kilkenny, Health Promotion Department, South Eastern Health Board, Ireland


56 though it must be noted that this may be an artefact of their small population as in 2007 the life expectancy at birth was 85.6 years for females
57 Men – Latvia 66.3 years compared to Åland, Finland 81.8 years. Women- Североизточен / Severoiztochen in Bulgaria 76.3 years compared to Ticino, Switzerland 86.6 years.
69 Mackie A (2010) Screening for Prostate Cancer: review against programme appraisal criteria for the UK National Screening Committee (UK NSC). UK National Screening Committee: http://www.screening.nhs.uk/prostatecancer
72 http://www.thcc.or.th/ICD-10TM/kv01.htm
Concerns have been expressed with regard to intercountry comparisons because of different coding practices of injury deaths among EU countries.


Accidents refers to all accidents (transport, workplace, home and leisure; ICD V01-X59)

Bauer & Steiner (2009) highlight a problem of underreporting of traffic injuries within the EU.


The term ‘shock, fright, violence, aggression’ refers to (i) company employees being subjected to the employer’s authority; (ii) company employees being subjected to an external threat; (iii) company employees being struck by or in collision with an object in motion, being drowned, buried, trapped, crushed, bitten, kicked (by animal or human), among others.


Eurobarometer (2010) Sport and Physical Activity. Special Eurobarometer 334/Wave 72.3 – TNS Opinion and Social European Commission


107 It is important to note that simple incidence data may be affected by the availability and uptake of HIV screening. Such data also provide no information about the timing of HIV testing relative to the onset of AIDS or AIDS-related illnesses.
110 http://www.whocollab.od.mah.se/countriesalphab.html
118 Al-Zahrani MS, Bissada NF, Borawski EA (2003) Obesity and Periodontal Disease in Young, Middle-Aged, and Older Adults. Journal of Periodontology, 74(5):610-615


129 Data from the European Statistics of Income and Living Condition (EU-SILC) database


131 http://www.idf.org/


