Healthy Work
Challenges and Opportunities to 2030

Helen Vaughan-Jones and Leela Barham

The Oxford Health Alliance
Confronting the Epidemic of Chronic Disease

the work foundation

RAND EUROPE

Bupa

ISBN 978-0-9554425-1-3

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Introduction

The project that led to the production of this report was initiated in 2007 by Bupa as part of its drive to understand the potential impact of changes in the demography, economy and the burden of disease in the UK on the future health of the workforce.

Bupa has an interest in health at work both as an employer and as a provider of interventions to employers and employees to help them support the health of their workforce in the UK and abroad.

Bupa has drawn together a project team from across a variety of organisations to consider health at work both now and to 2030 in the UK. The team has undertaken a review of existing research on trends that are likely to have the biggest influence on the health needs of the UK workforce including changes in demography and the economy, the nature of work and the likely future burden of disease.

This report brings together their analysis on the range of opportunities and challenges for individuals, employers and Government in managing and preventing ill-health in the UK workforce. A second report to be published later in 2009 will set out recommendations on how these stakeholders can respond to the challenges. The aim is to understand the challenges and also to ensure that they are seen as real opportunities to bring benefits to individuals, employers, the health care system and UK plc.

In developing their conclusions the project team has been mindful of recent changes in the global economy and the potential impact of a tougher economic climate on employer investment. It is the project team's view that in the context of an increasingly well established link between health and wealth, workplace health has the potential to be more important than ever before. Given the global nature of many of the issues considered in this report, the conclusions are likely to be as relevant to other developed countries as they are to the UK. In this respect the report is relevant to an international audience.

Throughout this report, the term 'workplace health interventions' is used to refer to the whole range of interventions available to employers looking to support the health of their workforce, as set out in Appendix 1. This includes those that can be delivered in-house as well as those provided by external providers. They range from traditional occupational health measures to those that help employers manage and reduce levels of absence, promote wellness (such as health promotion and employee assistance programmes) and insurance-based products such as private medical insurance and income protection. They also include interventions that address aspects of job design, working practice and organisational culture that can affect health. The term 'workplace health' refers to a range of workplace settings, not just the traditional office or factory floor. As the nature of work changes, so too does the nature of the workplace, and this report is as relevant to the lorry driver or home worker as it is to those who work in more traditional settings.

In recent months, the role that workplace health can play in supporting the health of the workforce has been a focus of discussion and research among policymakers and other stakeholders. In 2007, the Government commissioned Dame Carol Black, National Director for Health, Work and Wellbeing, to carry out a review of the health of the working population. In her report, Dame Carol estimated the annual costs of sickness absence and worklessness* associated with working age ill-health to be over £100 billion, equivalent to the entire GDP of Portugal. So improved workplace health has the potential

* Worklessness tends to refer to people who are not in work. This includes people who are on benefits or unemployed.

to make a significant contribution to the UK economy, to public finances and to reducing levels of disease and illness in the UK. In publishing this report on the opportunities and challenges for workplace health to 2030 Bupa hopes to contribute to the current debate on how best to take this agenda forward.

This report includes summaries, key questions and findings at the end of each chapter to help ensure that the conclusions are accessible.

This report seeks to represent the consensus of views held by the members of the project team. It does not represent the formal views of Bupa, The Oxford Alliance, RAND Europe, The Work Foundation or those of the independent consultants involved in this work. The project team comprises:

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The principal authors of this report were Helen Vaughan-Jones and Leela Barham, with significant contributions from Edward Bramley-Harker to Chapter 2.

Forewords

Stephen Bevan, Managing Director, The Work Foundation

The health of the working-age population will be a critical factor in the UK's competitiveness as we emerge from recession. This important report highlights the need to see modern workplaces as the focus for efforts to improve the physical and psychological wellbeing of workers and makes a vital contribution to a very current debate. By taking a long-term view, and by emphasising the role that 'Good Work' can play in enhancing employee health, this report shows that we need to attend to both the symptoms and the underlying causes of ill-health in the UK workforce. One of the most noteworthy findings is that the burden of chronic disease in the UK is set to grow in significance. This represents both an economic and social challenge of severe proportions – yet the UK's workplaces can play a major role in mitigating the risks this trend poses.

The Work Foundation is an independent research consultancy advising organisations and policymakers about the changing world of work and corporate performance.

Christine Hancock, Director, The Oxford Health Alliance

Most of the 29 million working people in the UK spend a considerable proportion of their waking hours at the workplace, making it a venue that can make a real difference to health and healthy living. The three risk factors that are largely responsible for an escalating epidemic of chronic disease: poor diet, smoking and lack of physical activity – can all be easily and effectively tackled in the workplace. This report provides a comprehensive review of the evidence upon which action can be based. By encouraging and facilitating small changes in the environment at work, employers can begin to address the long-term health of their employees and, by extension, the health of their own companies.

The Oxford Health Alliance is a charity dedicated to preventing and reducing the global impact of chronic disease.

Dr Evi Hatziandreu, Former Director of Health and Healthcare, RAND Europe

The way in which we work and the nature of disease are changing in ways that are creating both challenges and opportunities for employers, employees, providers of workplace health and policymakers. Increases in life expectancy will also bring increases in progressive incurable, chronic diseases. The workplace offers a unique and under-exploited setting for preventative healthcare and an efficient way for companies to invest in their greatest asset and a decisive competitive factor: their employees' health and wellbeing.

RAND Europe is an independent not-for-profit research institute which aims to help improve policy and decision-making through research and analysis.

Executive summary

This report analyses future opportunities and challenges for workplace health interventions to 2030. It considers whether the way that we live and work affects how we manage and prevent ill-health in the workplace.

The health of the UK workforce is vital to the economy. The Confederation of British Industry estimates that every year days lost due to sickness absence alone cost the economy nearly £14 billion. The costs to society are even greater. In her review of the health of the working age population, Dame Carol Black, National Director for Health and Work, found that the annual costs of sickness absence and worklessness associated with working age ill-health are over £100 billion.

And the situation is likely to get worse. The UK workforce of the future will be older and sicker, and the nature of illness will change so more people will be living and working in ill-health. At the same time, interventions in the workplace will become increasingly important for productivity and public health; and changes in the society and culture of the UK are likely to mean that more people will be engaging in lifestyle behaviours that increase their risk of disease.

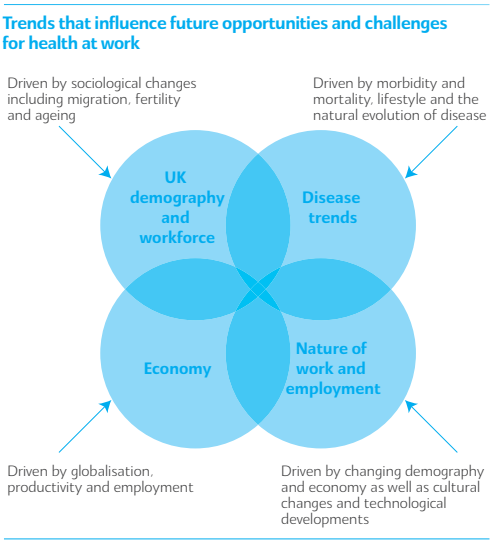
The workplace is an effective location to address these challenges, not least because the average person spends over a third of their waking hours for up to 40 years of their life at work. Employers are well placed to support UK workers to exercise more, smoke less and eat more healthily, because they can make the kind of physical changes to the working environment that help people sustain behaviour changes and integrate them into their daily life. The workplace also offers the opportunity to target those in society at risk of disease, and those who would otherwise be unlikely to access health services in the community. And it can do this whilst delivering value for money to employers, through improved employee productivity and wellbeing.

A greater focus on workplace health over the coming decades has the potential to deliver benefits for all. By investing in workplace health employers can play a fundamental role in supporting people in poor health, preventing future ill-health and promoting good health through high quality work.

Continued overleaf

Structure of the report

The major trends that are most likely to affect the health of the workforce in the period to 2030 include the changing demography and economy of the UK, developments in work and employment and the evolution of disease. These trends are interlinked, overlap and are driven by a diverse range of factors:



Chapters 1 - 3 look at changes in UK demography, the economy and the nature of work respectively. Chapters 4 and 5 focus on disease trends.

Chapter 1: UK demography and workforce

Trends in migration, fertility and ageing shape the demography of the workforce and can affect the kind of workplace health interventions likely to be needed by employers over the next 20 years. In this chapter we find that:

- The average age of the workforce will rise from 39 to nearly 43 by 2030. Ageing is linked to many common diseases so the amount of ill-health in the UK workforce will rise. (Section 1.2, p11).

- There will be a rise in the number of employees with long-term conditions that require ongoing management over a period of years. 40 percent of workers with one long-term condition say it affects the amount or type of work they do. So employers will need to put in place better support to help employees manage their condition in the workplace. (Section 1.5, p16).

- In future, more workers will be caring for older people. By 2032 there will be 2.9 workers to every pensioner, down from 3.3 in 2007. The health of UK workers will be increasingly important to society as the workforce will have the added burden of supporting a growing retired population. (Section 1.3, p14).

Chapter 2: UK economy

The strength and direction of the economy and the health of the workforce are closely linked; not only are healthy workers more productive, but changes in the economy can have a significant effect on employee health and wellbeing. We find that:

- The UK has in recent years enjoyed a period of economic growth. But recent developments in the global economy and in the financial sector will lead to a downturn in the short to medium-term. (Sections 2.2 and 2.3, p22, 23).
- The downturn could lead to increased levels of ill-health among UK workers and those who are unemployed, as levels of job insecurity increase and people engage in unhealthy lifestyle behaviours such as drinking and smoking to try to cope. (Section 2.10, p30).
- The downturn could restrict available resources for employers to invest in workplace health. But by continuing to support employee health, UK employers can give themselves a competitive edge as healthy employees can be up to three times more productive than those in poor health. (Section 2.11, p31).
- Over the longer-term to 2030, the economy is expected to recover. (Section 2.3, p23).
- More workers in future will be employed in the public sector and in services. In general UK workers are more likely to be in the kind of work that is more likely to affect their psychological health than their physical health. (Section 2.6, p26).
- The economy will become more focused on the use of knowledge to produce economic benefits and value will lie increasingly in new ideas, software and relationships. This could lead to changes to the way that people work, including changes to job design and working practices that are likely to mean that more employers adopt flexible working practices. (Section 2.8, p28).
- In future, there will be more demand for highly skilled workers, but UK workers may not have the necessary level of skills to meet this demand. This could lead to increased levels of ill-health in the workforce because employees in jobs that do not match their level of skill (whether they are over-skilled or under-skilled) tend to report lower levels of job satisfaction and general wellbeing. (Section 2.9, p29).

Chapter 3: Changing nature of work

If they are to be effective, workplace health interventions will need to adapt to changing trends in the way that work is organised and the role that it plays in people's day to day lives. This chapter considers the way in which work is organised and its impact on health. Key findings include:

- Employers looking to reduce absence and promote productivity need to consider aspects of organisational culture, working practices and job design that have been shown to play a role in employee health and wellbeing. (Section 3.1, p35).
- 'Good quality work' optimises the positive impact of work on health and is associated with higher levels of wellbeing among employees and lower incidence of physical or mental illness. It has a number of features including jobs that are not characterised by monotony and repetition but offer employees autonomy, control and task discretion. (Sections 3.1 and 3.2, p35, 36).

- The number of organisations that promote 'good quality work' in the UK is increasing. This creates opportunities for workplace health because interventions have been shown to be more effective in organisations that promote good quality work. (Sections 3.3 and 3.4, p37).

Chapter 4: Disease trends and the costs of ill-health

This chapter highlights which diseases and conditions are likely to have the biggest impact on the workforce over the coming 20 years and where available their likely costs to employers, Government, the healthcare system and society. The scale of these costs will either incentivise or constrain the ability of stakeholders to respond to the opportunities and challenges set out in this report. We find that:

- Based on available data, musculoskeletal disorders are the most prevalent of the major diseases in the UK working population, followed by mental illness. These two conditions are among the largest causes of short and long-term absence. (Sections 4.4 and 4.8 p48, 52).

- The costs of disease and ill-health fall to the Government, the NHS, employers and society. The full costs of ill-health to employers are poorly recognised as few employers measure the hidden or indirect costs of absence or the costs of 'presenteeism', that is, employees who are in work but not working productively due to ill-health. The costs of presenteeism could be up to 1.5 times the cost of absence. (Sections 4.7 and 4.8, p50, 52).

- Of the major diseases where information on the costs to employers is available, coronary heart disease may be one of the most expensive, costing employers nearly £4 billion a year. The major diseases most costly to the NHS are likely to be mental illness, coronary heart disease and cancer. (Section 4.9, p53).

Chapter 5: Disease trends and impact of lifestyle

This chapter highlights the likely impact of lifestyle on the scale and nature of disease in the UK. We find that:

- Nearly a third of the total burden of disease and disability in the UK is linked to people's lifestyle behaviours, such as levels of smoking, alcohol consumption and obesity. In future an even larger portion of the burden of disease in the UK will be linked to lifestyle. (Section 5.2, p60).

- Cancer, coronary heart disease, stroke and diabetes could see big increases in prevalence over the next 20 years. This is because they are closely linked to obesity which is projected to become more common. (Section 5.2, p60).

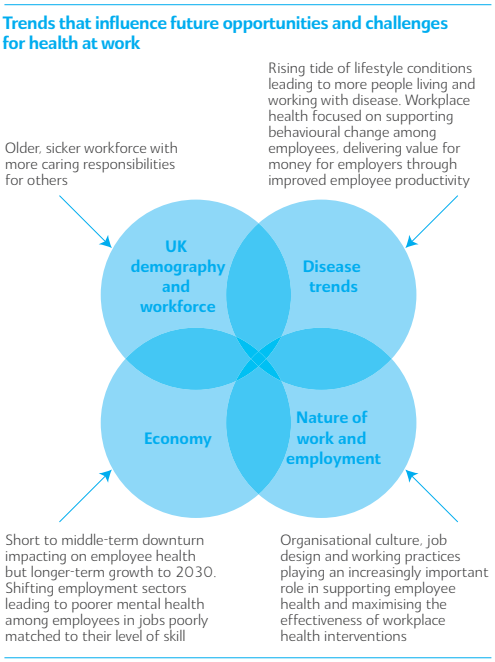
- Interventions in the workplace can be effective at changing people's lifestyle behaviours. The workplace offers an opportunity to target 'hard to reach' groups of people and some of those most at risk of disease in society. (Sections 5.6 and 5.7, p67, 68).

- Interventions in the workplace to help employees lead healthier lives can reduce their long-term risk of disease and improve their health and wellbeing in the short-term. So even employers with high levels of employee turnover are likely to see improved employee productivity and reduced levels of absence as a result. (Section 5.8, p69).

- Despite a number of economic, social and cultural barriers that can act as a deterrent to employers looking to invest in workplace health, there is evidence to suggest that it may be becoming more socially acceptable for employers to take a keen interest in the health of their employees. (Section 5.9, p74).

Summary of key findings

The diagram below sets out the key findings in this report in relation to the changing demography and economy of the UK, developments in work and employment and the evolution of disease:



Recognising the challenges and opportunities

This is the first report of Bupa's workplace health project. A second report to be published later in 2009 will set out recommendations on how individuals, employers and Government can respond to the challenges and opportunities highlighted in this report. In addition, it will:

- Consider the existing evidence for the effectiveness and cost-effectiveness of a range of health at work interventions, and combinations of interventions.

- Suggest ways to increase the quantity and quality of workplace health interventions for individuals, employers, the NHS, Government and other organisations.


Service

UK demography and workforce 1

This chapter finds that:

- The average age of the workforce will increase from 39 to nearly 43 by 2030. Ageing is linked to many common diseases, so the amount of ill-health in the UK workforce will rise in the future. (Section 1.2, p11).
- There will be a rise in the number of employees with long-term conditions that require ongoing management over a period of years. Employers will need to put in place better support to help employees manage their condition in the workplace and reduce their level of absence. (Section 1.5, p16).
- In future more workers will be caring for older people. By 2032 there will be 2.9 workers to every pensioner, down from 3.3 in 2007. The health of UK workers will be increasingly important to society as the workforce will have the added burden of supporting a growing retired population. (Section 1.3, p14).

1.1 Link between demography and workplace health

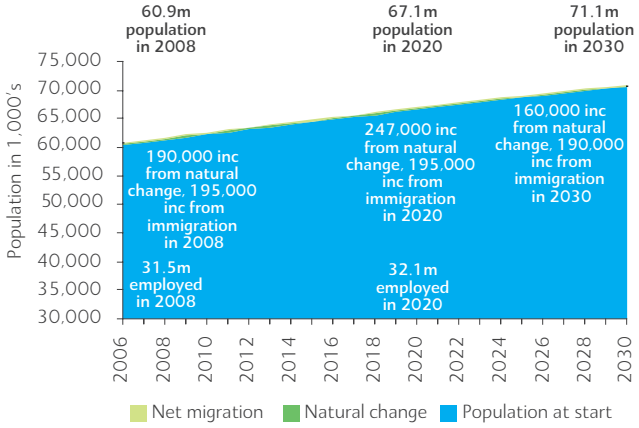
To understand the future challenges and opportunities for workplace health, it is important to consider how the demography of the workforce will change. Trends in migration, fertility and ageing determine the size of the UK population, which, in turn, determines the number of people available to work. These trends also shape the profile of the workforce including the balance between young and old, male and female and their health status. All of these factors have a knock-on effect on the kind of workplace health interventions likely to be needed by employers over the next 20 years.

1.2 A growing and ageing workforce

The UK's population is growing. This is due to both natural increase (more births than deaths) and trends in migration. It is predicted (see Figure 1) that the UK population will increase from just over 60 million people in 2006 to over 71 million by 2030.

The size of the UK workforce will also grow, although not at the same rate, with a marginal increase from 31.5 million employed currently, reaching 32.1 million in 2020.[1]

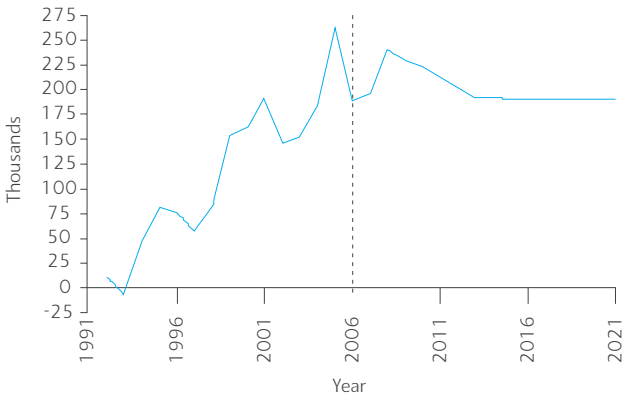
Figure 1: Projected UK population, 2006-30



Source: Madouros V (2006). 'Projections of the UK labour force, 2006 to 2020'. Office for National Statistics

In recent years migration into the UK has been a key source of population growth[2] but this is set to change in future. By 2012 it is expected that the number of migrants arriving into the UK will be of a similar size to the number of people who emigrate abroad and this will remain the case until 2021 and beyond (Figure 2).

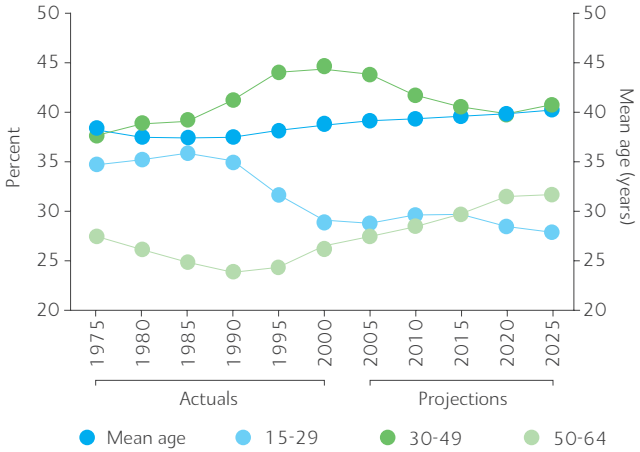
Figure 2: Projected net migration, UK, 1991-92 to 2020-21



Source: Government Actuary's Department (2006), in the 'Projections Database.'

In line with the ageing seen across the general population in the UK, the workforce is also predicted to age (Figure 3). The mean age of the workforce is expected to increase from 39 in 2007 to 42.6 by 2025.[3] There has also been an increase in the number of those in older age groups (50 to 64) working, with 59 percent of women in this age group working in 1993 compared to 67 percent in 2003-4, and corresponding proportions for men of 65 percent to 72 percent over the same time period.[4]

Figure 3: Actual and projected age structure of workforce in UK



Source: Dixon S (2003). 'Implications of population ageing for the labour market'. Labour Market Trends, February 2003, p.68

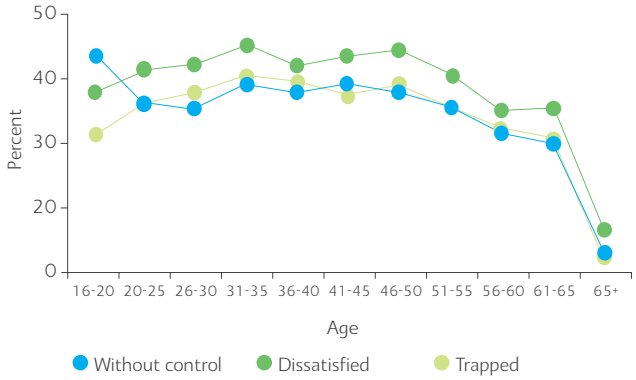
Until recently average retirement ages had been falling, with most people retiring at the age of 64, but this trend has begun to reverse.[5] There are now around 1 million people in the workforce who are working beyond retirement age.[6] In 2006 the Age Discrimination Act[7] made it illegal for an employer to force an employee to take compulsory retirement below the age of 65 and gave workers approaching the age of 65 the 'right to request' continued employment beyond this age. It also made provision for changes to the State Pension age. From 2020, the State Pension age for women will go from 60 to 65, in line with the retirement age for men. Between 2024 and 2046, the state pension age for both men and women will increase from 65 to 68. With these changes, it is expected that by 2050, the average age of retirement will be 68.

Ageing is linked to many common diseases, especially those that tend to involve either frequent episodes of absence, such as musculoskeletal diseases, or long episodes of absence, such as cancers. Older workers experience the highest number of illnesses caused or made worse by work and the average number of days lost per worker are highest for older employees.[8] So in an ageing workforce there is likely to be more ill-health and higher levels of absence.

But there is also evidence to suggest that older workers can be more productive than their younger counterparts because they are generally more satisfied in their work, tend to feel less trapped and have a greater sense of control within their job (Figure 4). This is important because research has shown that employees tend to experience worse health if they feel their work is monotonous and repetitive and that they have little or no autonomy, control and task discretion.[9] Conversely, employees who feel their work satisfies them and gives them a sense of autonomy, are likely to be more productive and have a greater sense of wellbeing.

So while older workers are likely to experience worse health and longer and more frequent episodes of absence, they may be among the employees who work most productively when in work.

Figure 4: Job satisfaction by age, UK, 2008



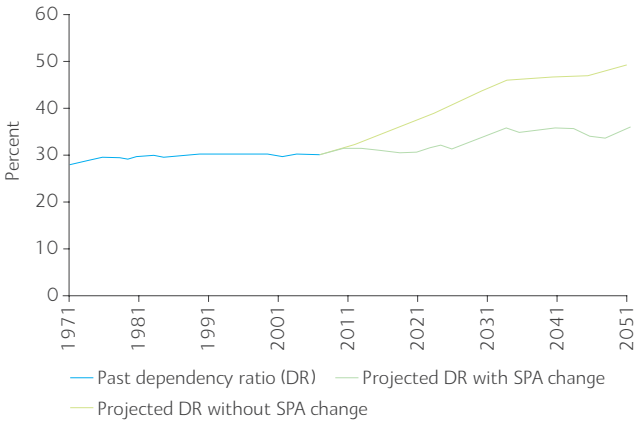
Source: Vodafone 'The Nature of Work, Working Nations.' Available at: www.vodafone.co.uk/workingnation[10]

1.3 Caring responsibilities

In future, more people will be dependent on those in work, so the health of the workforce will be more important than ever. Workers will have more caring and financial responsibilities for others, and may well be caring for both young children and older relatives at the same time.

The ratio of workers to pensioners is expected to decline over the coming decades. There were 3.3 UK workers for every pensioner in 2007. By 2032, this is forecast to fall to 2.9 workers, putting pressure on health and social services.[11] The old age dependency ratio – the number of people of state pension age (SPA) and over as a percentage of the working age population – is projected to rise as people born during the 'baby boom' reach state pension age against a backdrop of low fertility. With the increases in state pension age taking place between 2010 and 2046 the old age dependency ratio is expected to be 34 percent in 2051 (Figure 5).[12]

Figure 5: Actual and projected old age dependency ratio, UK



Source: Office for National Statistics, Pension Trends (2008).[13]
Note: SPA means 'State Pension Age'.

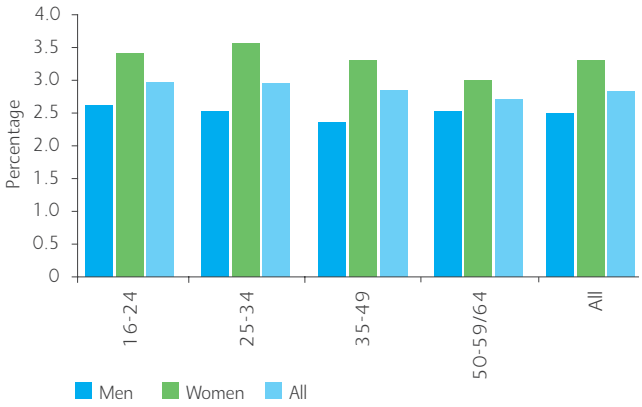
Employees with caring responsibilities tend to have higher levels of absence.[14] They are also likely to demand more flexible working from employers to enable them to balance the demands of their work and their responsibilities outside work.

So far there is little evidence that employers are very supportive of flexible working arrangements for employees with caring responsibilities; only 1 percent of small to medium sized enterprises and 8 percent of large companies currently provide leave for employees with caring responsibilities for dependents.[15] But this could change; as more and more employees become responsible for dependents, employers may need to update their policies on flexible working in order to recruit and retain employees. This will mean that workplace health interventions will need to be delivered more flexibly to keep pace.

1.4 Women in the workforce

The number of economically active* women in the UK is predicted to rise to 15 million by 2020. This is equivalent to 46.7 percent of the total number of economically active people, up from 45.8 percent in 2005.[16] Women tend to have higher levels of absence than men, despite little or no differences in overall levels of health (Figure 6).

Figure 6: Sickness absence from work among men and women of different age groups as a percentage of overall sickness absence, United Kingdom, 2007-08



Source: Leaker D (2008). 'Sickness absence from work in the UK'. Economic and Labour Market Review, Office for National Statistics[17]

The higher rate of sickness absence among women is commonly associated with the presence of dependent children. Culturally it remains the case that women tend to take a greater share of the childcare arrangements.[18] So, for example, a female worker may be recorded absent for illness even though she is absent due to the illness of her child.[19]

But this is not the case for all female workers. A comparison of sickness absence data shows that only if their youngest child is 5-10 years old are women with children more likely to take sickness absence than other employees. In fact, the opposite is true for women aged 35-49, as women in this age bracket with dependent children are less likely to take sickness absence than other workers.[20] And it is in fact lone parents (both male and female) who have some of the highest rates of sickness absence overall.[21]

So as more women enter the workforce, it is tempting to suggest that levels of sickness absence will increase. But the picture is far from clear. Fewer women are having children and the average number of children per woman is decreasing. The total fertility rate in 2007 was 1.90 children per woman, and although this rate has been rising since 2001 (when it was at its lowest of 1.63 children per woman) it remains low compared to the peak in the baby boom of 2.95 in 1964.[22]

* A person is described as 'economically active' if they are aged 16 or over and are either in employment or registered unemployed.

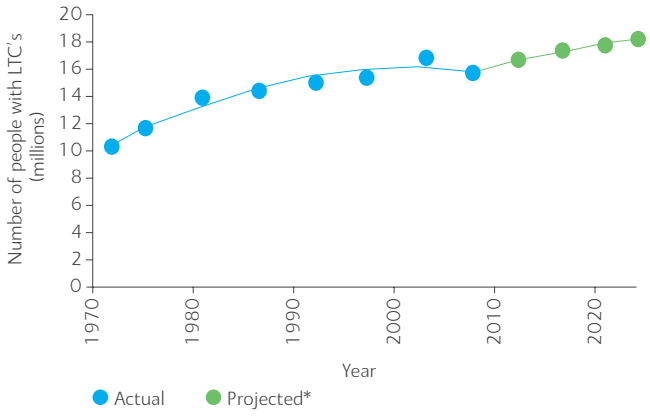
What is likely to happen is that more employers will recognise the need to take a more strategic approach to monitoring absence to allow them to better distinguish between absence due to sickness and absence due to domestic pressures. And given that all UK workers, not just women, are likely to have more caring responsibilities for others in future, it is likely that more employers will see the business case for investment in flexible working arrangements.

1.5 Long-term conditions

Around 17 million people in the UK are currently living with a long-term condition,* such as diabetes and arthritis.[23] The number of people with at least one long-term condition is expected to increase steadily over the next couple of decades, driven in part by ageing and lifestyle (Figures 7 and 8. For information on how trends in lifestyle behaviours are driving changes in disease see chapter 5).

This is likely to have a significant impact on health and social services. For example, around 21,000 people with diabetes currently claim incapacity benefits,[24] and people with long-term conditions account for 52 percent of all GP appointments, 65 percent of all outpatient appointments and 72 percent of all inpatient hospital stays.[25]

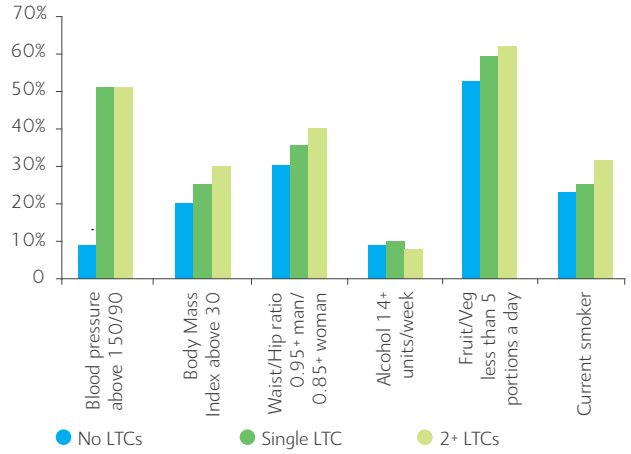
Figure 7: Actual and projected number of people with at least one long-term condition in England, 2005



Source: Department of Health (2008). 'Raising the profile of long-term conditions care, a compendium of information' p.13, taken from the General Household Survey 2005, ONS.[26]
Note: The projected figures take account of the ageing of the population, but not the increases in risk factors such as obesity

* A long-term condition is a health problem that requires ongoing management over a period of years or decades

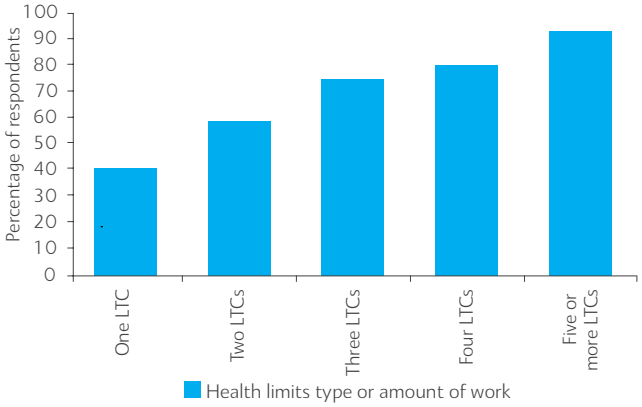
Figure 8: Lifestyle behaviours of people with long-term conditions (LTCs), England, 2005



Source: Department of Health (2008). 'Raising the profile of long-term conditions care, a compendium of information' p.14, taken from the General Household Survey 2005, ONS[27]

It is also likely to affect employers. For example, nearly 40 percent of people with a long-term condition say it affects their work (Figure 9).

Figure 9: Percentage of workers who say their long-term condition affects the amount or type of work they undertake, England, 2005



Source: Department of Health (2008). 'Raising the profile of long-term conditions care, a compendium of information' p.20, taken from the General Household Survey 2005, ONS[28]

In addition, some people with long-term conditions tend to have higher levels of absence than others. For example, some people with diabetes have 2-3 times the rate of sickness absence as other workers.[29]

In part the rates of absence among people with long term conditions is likely to be due to a lack of understanding among employers of how to support employees to manage their condition in the workplace, and in some cases a lack of facilities to enable them to do so. For example, employees with angina may be unable to work alone for long periods of time; those with diabetes may need regular meal breaks and first aiders who are trained in how to treat low blood sugar. And line managers need training on how to manage teams of people with long-term conditions, especially those that come and go in their level of severity, such as multiple sclerosis. Employers may need support to develop their understanding of the functional impact of a condition on a person's capacity for work and to make appropriate adjustments to job roles to help employees with long-term conditions remain in work.

So as the number of people with long-term conditions increases, employers are likely to see the benefit of putting in place interventions to help employees manage their condition. In doing so, they can play a part in helping individuals to manage their condition on a day-to-day basis to prevent early long-term conditions from becoming debilitating long-term conditions which mean they have to go onto incapacity benefits.[30]

Key question: What will be the effect of the UK's changing demography on workplace health?

With more people dependent on the working population, the health of the UK workforce will be more important than ever. Changes in UK demography will mean that employers need new workplace health interventions. This could include interventions designed to support the specific health needs of older people, such as screening programmes and advice on keeping mentally and physically active. They may also look for advice on how to design jobs that enable people with long-term conditions to manage their condition in the workplace. This could include advice on how to support employees who need to take regular medication or require specific equipment to help manage their condition.

Given that UK workers in future will have more responsibilities to care for others outside work, there could be increased demand for flexible working practices. Flexible working may help employees to maintain a healthy work-life balance, and in this respect is likely to have a positive affect mental health. But it presents challenges for workplace health because interventions will need to be designed and delivered more flexibly to keep pace with a more flexible workforce.

Summary of key findings in Chapter 1: Demography

Ageing

Ill-health and age are closely linked for a number of diseases. So an ageing workforce is likely to mean increased levels of absence and employers are likely to require workplace health interventions that target the specific needs of older people. But there is also evidence to suggest that when older workers are in work they are more satisfied in their jobs and work more productively as a result.

Caring responsibilities of UK workers

With more people than before dependent on those in the workforce to support them, the health of UK workers is likely to be more important than ever. Workers of the future are more likely to have caring responsibilities for others outside work and are likely to demand more opportunities for flexible working. Employers may see the benefits of meeting these demands because employees with more caring responsibilities tend to have higher levels of absence.

Women in the workforce

The number of women in the UK workforce is set to increase. Women tend to have higher levels of sickness absence than men despite little or no differences in health. This could be linked to caring responsibilities for young children.

Long-term conditions

The number of workers with long-term conditions is expected to increase over the next couple of decades, driven partly by ageing and lifestyle. People with long-term conditions may report higher levels of absence. So employers may look to workplace health interventions to help employees better manage their condition in the workplace and prevent it from reaching the stage where they need to take time off.

UK economy

2

This chapter finds that:

- The UK has enjoyed a period of economic growth in recent years, in part due to the openness of the economy. But recent developments in the global economy and in the financial sector will lead to a downturn in the short to medium-term. (Sections 2.2 and 2.3, p22, 23).
- The downturn may lead to increased levels of ill-health among UK workers and those who are unemployed as levels of job insecurity increase and people engage in unhealthy lifestyle behaviours such as drinking and smoking to try to cope. (Section 2.10, p30).
- The downturn may restrict available resources for employers to invest in workplace health. But by continuing to support employee health, UK employers can give themselves a competitive edge as healthy employees can be up to three times more productive than those in poor health. (Section 2.11, p31).
- Looking to 2030, the economy is expected to recover as evidence suggests the underlying drivers of growth should not be significantly affected over the long-term. (Section 2.3, p23).
- More workers in future will be employed in the public sector and in services. In general UK workers are more likely to be in the kind of work that is more likely to affect their psychological health than their physical health. (Section 2.6, p26).
- The economy will become more focused on the use of knowledge to produce economic benefits and value will lie increasingly in new ideas, software, and relationships. This could lead to changes to the way that people work, including changes to job design and working practices that could mean that more employers adopt flexible working practices. (Section 2.8, p28).
- In future there will be more demand for highly skilled workers, but UK workers may not have the necessary level of skills to meet this demand. This could lead to increased levels of ill-health in the workforce because employees in jobs that do not match their level of skill (whether they are over-skilled or under-skilled) tend to report lower levels of job satisfaction and general wellbeing. (Section 2.9, p29).

2.1 Link between health and economic growth

Evidence shows a strong association between the wealth of a country and the health of its population. The wealth of a country affords greater investment in basic healthcare and infrastructure, which in turn improves the health of the population. A number of studies analyse how improved health can be a driver for economic growth.[31,32,33] This could occur in a number of ways. For example:

- Improved health may drive improvements in educational attainment and vice versa.

- Improved health, leading to a healthier workforce, will have a direct impact on labour force participation and productivity (see section 2.11), and

- Improved health may lead individuals to stay in the labour force longer, delaying retirement, increasing the potential supply of labour and potentially reducing staff turnover costs.

The importance of health as a driver of economic success is widely recognised among EU governments.[34] The Lisbon Agenda[35] sets out a package of measures to improve the EU's competitiveness, highlighting health as a vital part of growth, competitiveness and employment. In a speech in 2007, the EU's Director General for Health Consumer Protection commented that "a healthy population is a necessary condition for a productive workforce, for a high labour supply and for keeping older people in work".[36] As a consequence of the Lisbon Agenda, Healthy Life Years* is now an indicator used in the EU's competitiveness assessment, suggesting that investment in health is regarded as an important contributor to competitiveness.

2.2 Track record

Economic growth

Prior to 2008, the UK experienced a period of sustained economic growth. Gross Domestic Product (GDP) growth averaged around 2.3 percent between 2000 and 2004 (slightly above long-term trends).[37] Relative to countries in the Eurozone, the UK performed strongly and between 2000 and 2005 UK growth in aggregate largely matched growth in the US economy.[38]

Prior to the UK feeling the impact of rising energy prices and the credit crunch in 2008, the Treasury expected growth to hover around this level in the near future (based on Treasury forecasts).[39] However, economic growth in the UK came to a halt in the middle of 2008, with economy contracting in the third quarter, driven by:

- A drop in consumer confidence, driven by slowing growth in disposable income, tightening credit conditions and a weakening housing market.

- Declining growth in the financial and services sectors, which hitherto have been a key driver of economic growth. These sectors have been particularly hard-hit by the impact of the global financial crisis; and

- Retailing has struggled, and manufacturing has been hit by a decline in the strength of key export markets, despite a weaker pound.

In the current climate, the UK economy is expected to shrink in 2009. Views differ on how much the economy will shrink and how long a slow-down might last. The average of independent forecasts for the UK economy suggests GDP growth will drop by almost 1 percent in 2009, recovering in 2010 with growth reaching around 2.5 percent in 2011 and 2012.[40] The Treasury is more confident, forecasting a stronger recovery in 2010 onwards.[41]

* Health Life Years measures the number of remaining years that a person of a certain age is expected to live without disability.

It is important to point out that at the time of publication of this report, it is unclear whether the UK economic slow-down is part of a cycle, or whether it is likely to result in some more fundamental changes to the economy. The project team is aware that some of the information contained in this chapter may well be out of date almost as soon as the report is published. As far as possible this chapter aims to summarise existing evidence available to the project team at the time of publication, and does not attempt to draw new conclusions or make new predictions on the likely scale or impact of the current slow-down.

Productivity

Productivity is an important determinant of economic welfare, and productivity growth can be regarded as an important indicator of the general performance and direction of the economy. At the broadest level, UK productivity growth has been poor relative to comparable economies. For instance, the UK lags well behind the US and some parts of Europe; GDP per hour worked is close to 20 percent less in the UK than it is in either France or the US.[42] However, it is important to recognise that the measurement of productivity is complex, particularly as economies evolve and the impact of intangible assets on productivity becomes more important. The total factor measure of productivity, which builds in the effect of intangibles on productivity, should give a more accurate representation of productivity growth in the UK.

In this regard, there is some good news for the UK. Its productivity growth has been higher than that seen in other countries in high-tech sectors.[43] However, these sectors are relatively small in the UK. The UK also has a strong position in terms of basic research, but does less well in translating this research and developing ideas.

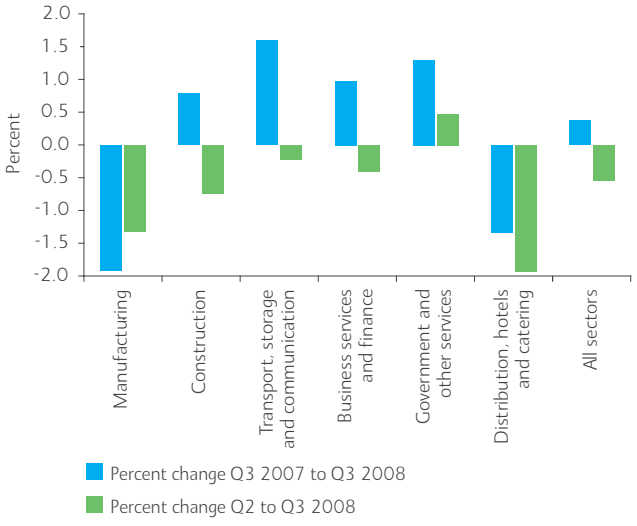
Globalisation

The UK economy is influenced by the success of the global economy. The UK is considered relatively well placed to benefit from global economic growth compared to international counterparts. This stems from the UK's proactive response to international economic forces. For example, the UK supports free trade, is open to foreign direct investment, and has been willing to open its labour markets to new entrants to the European Union. Thus the UK has benefited from globalisation. The implication is that the UK will be heavily impacted by global economic trends.

2.3 Future prospects

According to data from the Office of National Statistics, the short-term future for the economy is likely to be a decline in output across most sectors of the economy, with recovery thereafter. Figure 10 summarises recent trends in economic growth by sector.[44] It shows that while a number of sectors have enjoyed growth in the year to date, the most recent trend is downwards, with construction, transport and communication and business services and finance particularly affected.

Figure 10: Change in Gross Value Added-Selected Sectors of the Economy, 2007-08



Source: Office for National Statistics

The fall in GDP growth and a consequent reduction in tax receipts have reduced the Chancellor's ability to fund large increases in public expenditure. The Chancellor has announced a temporary suspension of public spending rules, allowing greater borrowing to support public spending in the economy over the short-term. The 2008 Pre-Budget Report announced a front-loading of some public investment programmes and some tax cuts, but with a strong signal that the tax burden would need to rise in the future to fund borrowing now. In the short-term, this may provide some stimulus for the economy, but longer-term the need to address a fiscal deficit is likely to mean slower future public spending growth and a higher tax burden. So commentators suggest that the current slow-down poses a significant challenge to public spending moving forward. Even prior to these announcements, the International Monetary Fund noted fiscal restraint is essential given the sizeable overall deficit.[45]

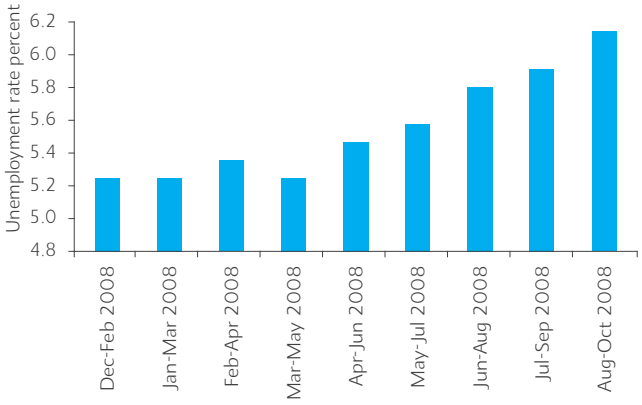
Consumer spending is expected to slow in the short-term. The UK has comparatively high levels of consumer debt, and growth in disposable income has been relatively small (it grew by only 1.1 percent in 2006). Moving forward, there is likely to be a squeeze in consumer spending driven by credit constraints, falling house prices and relatively high inflation (although the expectation is that this will fall).

In summary, most independent forecasters suggest that the immediate macroeconomic outlook for the UK economy is one of continuing recession in 2009. All sectors of the economy are likely to be affected, with construction and the service sectors predicted to be most impacted. Most independent economic forecasters predict GDP growth will recover by 2012 (the Treasury is more confident of an earlier recovery), although a prolonged downturn cannot be ruled out. Longer-term, the direction of the UK economy will be heavily influenced by changes in the global economy, which we discuss below. The UK economy has historically benefited from its openness, but in turn this means that it will need to adjust in response to competition from other economies. UK manufacturing has been particularly hard hit by this, and the UK economy has responded to this by a shift to the service sectors.

2.4 Unemployment

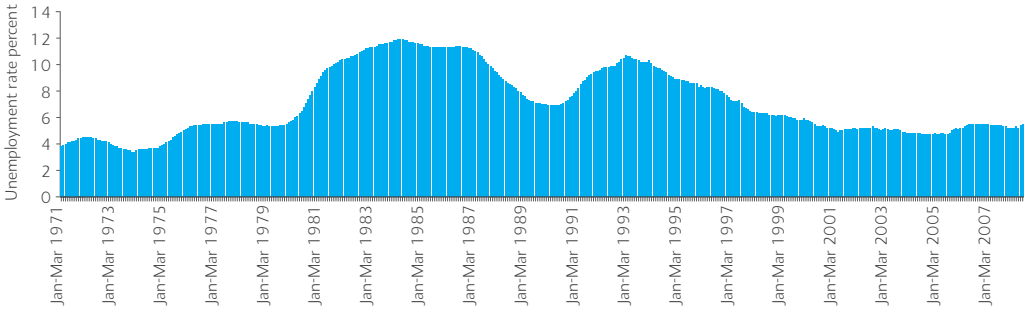
Unemployment* in the UK has increased in recent months (Figure 11).[46] When seen as part of the historical trend it remains low (Figure 12),[47] but most independent commentators expect unemployment to rise sharply in the next couple of years. The Treasury's most recent† summary of independent forecasts suggests the total number of people unemployed (measured by claimant count) will rise from 0.88 million in 2008 to a peak of nearly 1.4 million in 2010, dropping back to 1.2 million in 2012. These rates would still be below the high rates seen in recent history.[48]

Figure 11: Unemployment rate (percent, aged 16+), UK 3 month rolling average, Dec- Feb 2008 to Aug-Oct 2008



Source: Office for National Statistics (2008). Dataset: Labour Force Survey: Unemployment Rates byAge (SA), 1971-2008

Figure 12: Unemployment rate (percent, aged 16+), UK 3 month rolling average, Jan-Mar 1971 to May-Jul 2008



Source: Leaker D (2009). 'Unemployment trends since the 1970s'. Economic & Labour Market Review, volume 3.2, p.38. London: ONS

At the macro level, therefore, the UK has a good track record. There are however still around three million workless households, representing 15.8 percent of all working age households.[49] There also remains a considerable flow of people, including men of working age, on to disability benefits.[50]

2.5 Changing sectors of employment

The nature of the work completed by employees in the UK is shifting. The most obvious shift in the economy has been a clear trend away from manufacturing output and towards services. This is likely to have been driven by three factors:

* Note: this report focuses on the International Labour Organization measure of unemployment, which measures jobless people who are available to work. Claimant count is sometimes quoted as a measure of unemployment, although this measure can understate the level of unemployment in the economy as it only includes individuals claiming unemployment-related benefits.
† As of January 2009

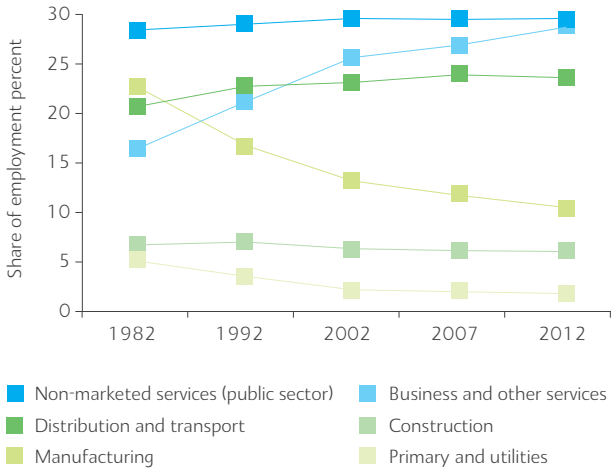
- As economies develop, demand shifts away from goods and towards services. UK consumer spending is moving away from manufacturing, hence demand for manufacturing falls.

- Productivity performance in the UK manufacturing sector has been poor; and

- The UK's relative competitiveness has suffered. The UK's decline in manufacturing has partly been driven by the UK's exchange rate performance, but the underlying driver of change has been the UK losing its comparative advantage in many areas of manufacturing in response to competition from South and East Asia.

Figure 13 illustrates how the sectoral focus of the UK economy has changed in recent years, with projections to 2012. Employment in manufacturing is predicted to fall from over 20 percent in 1982 to just over 10 percent in 2012. This shift in focus changes the type of work that people do, which in turn impacts both on the likely burden of ill-health in the workplace and the nature of ill-health.

Figure 13: Actual and projected share of employment by sector, 1982-2012, UK



Source: Wilson RA, Homenidou K, Dickerson A (2006). 'Working Futures 2004-2014: National Report,' Sector Skills Development Agency: Wath on Dearne

2.6 Impact of sectoral change on health

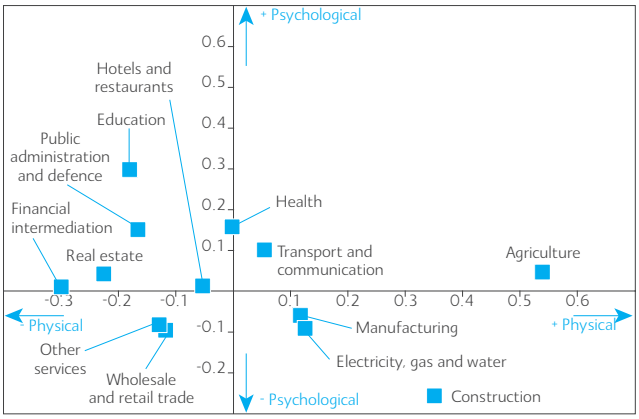
The impact of different types of work on health is explored more fully in Chapter 3. But if changes in the economy lead to a shift in sectors of employment, there is likely to be a knock-on effect on the health of the workforce. This is because research suggests that jobs in some sectors are more likely to affect employees' physical or mental health than those in others.

A European survey asked employees to identify symptoms that affect them.[51] It then segmented symptoms between physical and psychological and developed an index showing whether working in particular industries lowered or raised the probability of work leading to physical or psychological symptoms. Figure 14 shows the findings by sector.

The sectors that are more likely to take a bigger share of employment in future are clustered towards the top left quadrant of Figure 14. Self-reported data of the kind used in this survey is far from precise, not least because it measures an employee's

perception of their health, rather than their actual health status. But at a very general level this research sets out how work can impact on health and implies that the workplace of the future will have less impact on physical health but a greater impact on psychological health.

Figure 14: Physical and psychological health symptoms by sector, EU-27



Source: © European Foundation for the Improvement of Living and Working Conditions, Fourth European Working Conditions Survey, 2008, Wyattville Road, Loughlinstown, Dublin 18, Ireland. P.63

2.7 Impact of sectoral change on absence

The changing sectoral focus of the economy and changes in the way individuals work and their job roles will affect the type of health issues seen in the workplace and in the workforce. Levels of sickness absence vary from industry to industry. If there is a shift in sectors of employment it is possible that there could be a corresponding shift in patterns of sickness absence (although causation between job type and implied health problems needs to be considered carefully).

Figure 15 suggests that in future there are likely to be more people employed in those job roles and industries which currently have lower rates of sickness absence. This does not necessarily mean, however, that levels of sickness absence will naturally decline as sectors of employment change. But it does suggest that in future, more people are likely to be employed in those sectors of work traditionally associated with lower levels of absence.

Figure 15: Sickness absence rates by job role, 2005, UK

Source: Project team calculations based on: the Labour Force Survey 2004, based on Barham C, Begum N (2005). 'Sickness absence from work in the UK'. Labour Market Trends, London: ONS. p.154.
Note: The data shows the proportion of the workforce absent from work during the reference week used in the survey.

2.8 The knowledge economy

The UK, like some other OECD countries, is experiencing a shift towards a knowledge economy.[52] The knowledge economy is described by the Work Foundation as the result of the "interaction between technological change, workplace innovation and a highly skilled workforce".[53] It refers to the use of knowledge to produce economic benefits, where value lies increasingly in new ideas, software, services and relationships.

By 2014 it is predicted that 45 percent of UK workers will be knowledge workers. Knowledge workers are considered to be all those that work in the top three occupational classifications, that is the occupations considered to require the highest level of skill; managers, professionals and associate professionals. Current and projected trends in the number of knowledge workers compared to other types of worker in the UK are as follows:

Figure 16: Actual and projected knowledge workers in the UK economy

Occupations	1984	1994	2004	2014
Knowledge workers	31%	36%	41%	45%
Personal services/sales/admin clerical	25%	28%	28%	28%
Skilled/semi-skilled, manual	28%	23%	19%	18%
Unskilled jobs	16%	14%	11%	9%

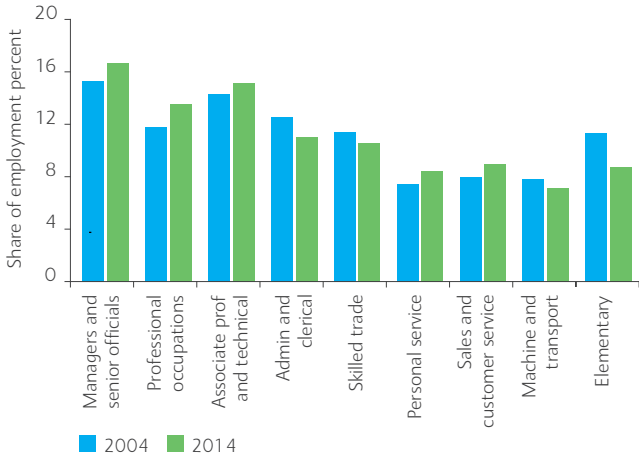
Source: from Ian Brinkley (2006) 'Defining the knowledge economy: knowledge economy programme report'. London: The Work Foundation, p.19

The knowledge economy may bring positive benefits in terms of productivity gains.[54] But it could also have a detrimental effect on employee health. For example, there is evidence to suggest that employees, such as knowledge workers, who are required to apply their skills flexibly to new tasks at a moment's notice and be accessible around the clock have a poorer sense of wellbeing and quality of life.[55] And it could also lead to different ways of working, with greater potential for more workers to become portfolio workers, freelancers or self-employed.[56]

2.9 Skills

Changes in sectors of employment are likely to affect the types of jobs carried out by workers in the UK. Figure 17 shows a predicted rise in the number of occupations that require a relatively high level of skill to 2014, and a decline in less skilled occupations such as elementary occupations.

Figure 17: Actual and projected employment trends by type of occupation, 2004-14, UK



Source: Wilson RA, Homenidou K, Dickerson A (2006). 'Working Futures 2004-2014: National Report,' Sector Skills Development Agency: Wath-upon-Dearne

The UK may not have sufficient numbers of skilled workers to fill these roles. In fact, research suggests that the UK has the highest level of skills and job mismatch in the European Union.[57] In 2006 Lord Leitch published a report which highlighted the lack of skills in the UK workforce. It said that over a third of adults in the UK do not have a basic school-leaving qualification – double the proportion of Canada and Germany – and called for more ambitious skills targets to be set to increase the proportion of adults holding a degree.[58]

Since the Leitch Review, the Government has launched a range of initiatives to improve skill levels in the UK workforce, including plans to require young people to stay in education until the age of 17 by 2013 and 18 by 2015.[59] But it is nevertheless likely that a significant proportion of UK workers in future will be working in jobs ill-matched to their level of skill.

This could be significant for workplace health because research shows that workers in jobs that are ill-matched to their level of skill are likely to experience worse health and wellbeing than those in roles well-matched to their skills.[60]

Given the changing demands for skills and the likely effect on employee wellbeing, employers may increasingly in future see the case for investment in skills and training and for closer integration of workplace health with other HR practices. They may also see the role that workplace health can play in supporting a broader approach to employee engagement, encompassing job design, training, recruitment and retention.

2.10 Impact of changes in the economy on health

The UK is facing a challenging economic period in the short to medium-term, which could affect levels of disease and illness in the UK. For example, the economic downturn is likely to mean that more people become unemployed (see section 2.4). Unemployment has been shown to affect both physical and mental health (Figure 18), which can in turn affect an individual's chance of regaining employment.

Figure 18: Impact of unemployment on health

Physical Health	Mental health
Workers who become unemployed are likely to experience worse health and may engage in health damaging behaviours as a coping mechanism, including smoking and drinking.[61] They are more likely to experience chronic illness, especially cardiovascular disease,[62] and research has shown that among people who are made redundant, health service use, including hospital admissions, doctor visits and outpatient visits, can increase for up to six years subsequent to redundancy.[63]	There is a clear link between unemployment, attempted suicide and suicide.[64,65] In fact, people who become unemployed tend to have higher levels of anxiety and depression in general.[66] Those with a more negative outlook on life tend to be more damaged by unemployment, while those who are unemployed but have more positive and goal-oriented outlooks fare better.

Source: from Ian Brinkley (2006) 'Defining the knowledge economy: knowledge economy programme report'. London: The Work Foundation, p.19

An economic downturn in the short to medium-term is also likely to affect the health of those who remain in the workforce.

Economic uncertainty can force organisations to downsize and restructure in order to compete, producing high levels of job insecurity. Job insecurity can create chronic stress for workers, with symptoms including an elevated level of distress, depression and anxiety.[67] These symptoms increase with the length of exposure.[68] A review of workplace closure studies found that nearly all of them reported adverse effects (both physical and psychological) on workers during both anticipation of redundancy and actual termination phases.[69] In fact, studies have shown that workers who retain their jobs during downsizing can experience feelings of fear, insecurity, frustration, anger and sadness for up to five years afterwards.[70]

Economic uncertainty can also put managers under stress, which increases the likelihood of negative managerial behaviour. Poor quality management may lead to reduced mental wellbeing of employees, including feelings of helplessness and alienation,[71] stress and distress,[72] burnout[73] and anxiety and depression. In fact both 'minor' leadership mistakes such as criticism, and major mistakes such as extreme behaviour and abusive management can result in low levels of job and life satisfaction, lower levels of commitment, increased work-family conflict and increased psychological distress, such as depression and burnout.[74]

In addition to the pressures of work, more employees will struggle financially, putting pressure on relationships and family life. They are more likely to engage in health damaging behaviours to try to cope: a survey for the Ministry of Justice found that money worries made 43 percent of people smoke more, 35 percent of people put on weight and 26 percent drink more alcohol.[75] Indeed, the Organisation for Economic Cooperation and Development has said that changes in working conditions such as decreased physical activity at work, increased levels of stress and job insecurity and longer working hours was one of the three major factors that have contributed to recent rises in chronic conditions, mainly through their effect on lifestyle choices.[76]

2.11 Link between health and employee productivity

An economic downturn in the UK in the short to medium-term is likely to lead to higher levels of disease and illness (see section 2.10 above). At the same time, it is likely to restrict the level of resources employers have available for investment in workplace health.

But continuing investment – and even increasing investment – in workplace health during times of economic downturn makes sense because employees who are healthy and well are likely to have lower levels of sickness absence, and are likely to be more productive while in work.

Employee productivity can be difficult to measure without relying on self-reported data. But a number of studies have looked at the impact of health and wellbeing on productivity:

- An Australian study has suggested that employees who are healthy can be nearly three times more productive than employees in poor health.[77]
- A Canadian study examining the link between an employee's emotional wellbeing and their work productivity found that a 20 percent drop in an employee's level of wellbeing leads to a 10 percent drop in their performance.[78]
- An American study has suggested that employees considered to have a medium to high risk of disease as a result of their lifestyle behaviours (their smoking, eating, exercise habits etc) can be 6-12 percent less productive than those with low health risks. It also suggested that every additional risky lifestyle behaviour an employee has results in a 2.4 percent reduction in their productivity.[79]
- Another American study found that employees who improved their health risk status (by reducing their body mass index, or their blood pressure etc) experienced a measurable improvement in their work productivity. Individuals who reduced one health risk improved their productivity by 9 percent and reduced their levels of absence by 2 percent.[80]

There are a number of other reasons why it makes sense for employers to invest in workplace health during a downturn. Investing in workplace health can:

- send a powerful message to employees that the organisation values them and their contribution, helping to improve employee engagement and motivation.
- improve employees' emotional resilience and their ability to cope with stress caused by job insecurity and changing job demands (see section 2.10).
- help ensure the organisation is fitter for purpose and better placed to weather changing economic conditions over the long-term.

Given the economic downturn predicted in the UK in the short to medium-term, employers are increasingly likely to see that investment in workplace health can give them a competitive edge by improving employee productivity, motivation and loyalty. By investing in workplace health UK employers can position themselves well for the eventual upturn in the economy and play a role in helping to reduce the impact of a global recession on the health of the UK.

Key question: What impact will changes in the UK economy have on workplace health?

The UK has enjoyed a period of economic growth but recent developments in the financial sector will bring a period of economic difficulty in the short to medium-term. In these circumstances some employers might be tempted to cut investment in perceived non-core activities such as workplace health. Others will recognise that the health of their workforce is even more important when times are hard.

Economic uncertainty is likely to increase levels of stress because more people will struggle financially, putting pressure on relationships and family life. As people try to cope they may drink more alcohol, smoke more and binge on unhealthy food. This will have a knock-on effect on their health, putting them at greater risk of disease and making them less fit to cope with the pressures of work.

To add to this, changes in the economy will mean that more workers will be employed in sectors and job roles that are more likely to affect their mental health. Levels of stress-related illness caused by work are likely to increase. And the shift towards the knowledge economy, coupled with sectoral changes that are likely to see increasing demand for skilled workers, could mean that employers see rising levels of absence and reduced productivity as workers in jobs poorly matched to their abilities experience worse health and wellbeing.

In these circumstances employers may increasingly see it as their responsibility to support employees to cope with the psychological demands of work. They will need workplace health interventions that can offer support to employees to cope with a range of issues both in and outside work, including advice on coping with stress, dealing with debt and maintaining family relationships.

Summary of key findings in Chapter 2: Economy

Economic prospects

The immediate outlook for the UK economy is one of declining growth in 2009. All sectors of the economy will be affected, with construction and the service sectors likely to be most affected. Most independent economic forecasters predict GDP growth will recover by 2012 (the Treasury is more confident of an earlier recovery), although a prolonged downturn cannot be ruled out. Longer-term, the direction of the UK economy will be heavily influenced by changes in the global economy. The UK economy has historically benefited from its openness, but in turn this means that it will need to adjust in response to competition from other economies. UK manufacturing has been particularly hard hit by this, and the UK economy has responded to this by a shift to the service sectors.

Changes to sectors of employment and job types

In future UK workers are more likely to be employed in the public sector, business and the service sector. There will be more jobs for managers, senior officials and professional occupations at the expense of skilled trades, administration and clerical roles. Workers currently employed in the kinds of sectors of employment and jobs that are likely to take an increasing share of the workforce in future report that their work has less of an impact on their physical health than other kinds of work and more of an impact on their psychological health. So it is likely that work in future will have more of an impact on mental, rather than physical health.

The knowledge economy and levels of skills

The shift to knowledge work could lead to different ways of working, with the potential for more workers to become portfolio workers, freelancers or self-employed. It is also likely to mean that demand for highly skilled workers increases. There is evidence to suggest that skill levels of UK workers may not be sufficient to meet this demand. This could lead to increased levels of ill-health in the workforce because employees in jobs ill-matched to their level of skill tend to report lower levels of job satisfaction and general wellbeing.

Changing nature of work

3

This chapter finds that:

- The way in which work is organised affects physical and mental health. Employers looking to reduce absence and promote productivity need to consider aspects of organisational culture, working practices and job design that have been shown to play a role in employee health and wellbeing. (Section 3.1, p35).
- 'Good quality work' optimises the positive impact of work on health and is associated with higher levels of wellbeing among employees and lower incidence of physical or mental illness. It has a number of features including employment security and jobs that are not characterised by monotony and repetition but offer employees autonomy, control and task discretion. (Sections 3.1 and 3.2, p35, 36).
- The amount of good quality work in the UK has been increasing since the late 1990s, but compared to other countries, the UK is trailing. (Sections 3.3 p37).
- This poses both challenges and opportunities for workplace health interventions because they have been shown to be more effective in organisations that promote good quality work. (Section 3.4, p37).
- The workplace of the future is likely to play an increasingly important role in people's lives, as individuals seek to define themselves more by the kind of work they do and less by the community they live in. (Section 3.5, p38).
- As a result, the Government may see more opportunities for the workplace to play a role in promoting public health and reducing health inequalities.

3.1 The link between work and health

Trends in the way that work is organised and the role that it plays in our day-to-day lives are driven by changes in demography and the economy as well as cultural changes and technological developments. The link between work and health is well-established. We know, for example, that the kind of job in which an individual is employed can affect their mental and physical health. And we also know that employees in poor health are likely to be less productive and more absent from work (see section 2.11).

There is evidence to show that work can have a positive impact on health and wellbeing, and some studies have begun to consider the complex nature of the interaction between the way in which work is organised and its impact on health. The following box outlines some relevant findings:

Positive impact of work on health

- A study commissioned by the Department for Work and Pensions reviewed more than 400 pieces of scientific evidence and concluded that being in work is good for your physical and mental health, boosting self esteem and quality of life.[81]
- Studies have also demonstrated that unemployment, job loss and inactivity are bad for both physical and psychological wellbeing.[82, 83]

Negative impact of work on health

- In 2007, 299,000 non-fatal reportable workplace injuries occurred.[84]
- In 2004 an estimated 2.2 million people suffered from ill-health which they believed was caused or made worse by their current or past work,[85] with musculoskeletal disorders the most common followed by stress, depression and anxiety.[85]

Link between the way in which work is organised and health

- Jobs that require poor quality work are associated with low levels of wellbeing and a higher incidence of physical or mental illness.[86]
- Employees will experience worse health if their employment is insecure, their work is monotonous and repetitive and they have little or no autonomy, control and task discretion.[87]
- Unskilled workers are more than four times more likely to experience accidents, both in and out of the working environment, than managers and professionals.[88]
- Workers with low levels of control over their work experience more stress than senior managers.[89]

3.2 Importance of 'Good Work'

The Work Foundation describes 'Good Work' as work that is organised so as to promote the positive effects of work on health whilst minimising the negative ones. 'Good Work' has a number of features relating to the way in which work is organised, including:[90]

- Employment security.
- Work that is not characterised by monotony and repetition.
- Work that offers employees autonomy, control and task discretion.
- A balance between the efforts workers make and the rewards that they receive.
- Work that offers employees the skills they need to cope with periods of intense pressure.
- Observance of the basic principles of procedural justice.
- Strong workplace relationships.

3.3 Levels of 'Good Work' in the UK

The Department of Trade and Industry (now the Department for Business, Enterprise and Regulatory Reform) carried out research on trends in a variety of elements that relate to 'quality' work, including job satisfaction, stress and effort, employee influence over their work, job security, the quality of employer-employee relations, and wages. The research found that the amount of 'Good Work' in the UK has increased in recent years, after a trend of increasingly poor quality work during the 1990s.[91] But there is likely to be considerable variation across industry sectors and from organisation to organisation. In fact, the UK has a mixed approach to job quality compared to other countries:[92]

- There have been falling levels of autonomy and control in the way that jobs are designed, although the UK is in line with the EU average.
- More workers in the UK tend to work more than 48 hours a week than workers in most other countries.
- Work in the UK is considered to be harder in the 2000s than it was in the 1990s.[93]
- The UK may have effort-reward imbalances. A high proportion of UK workers are dissatisfied with their pay (although workers report that they are well paid for the work that they do).
- UK workers may also be undertaking more monotonous tasks than their fellow workers in the Nordic countries and Germany. Over 26.5 percent of UK employees say they have little or no control over the tasks they do at work, and 15.7 percent have little or no control over how their work is done.[94]
- A high proportion of workers in the UK report good or very good employment relations. However, this is counter to research by the Chartered Institute of Personnel and Development which suggests that many workplaces are characterised by low trust between employers and employees.[95]
- Only 50 percent of UK employers offer flexitime compared to 90 percent of Swedish and German companies.[96]

There are also concerns that in the UK there is a 'job content' problem, given that close to 55 percent of UK workers report boredom in their job, and close to 40 percent report little job control.[97]

3.4 Implications of 'Good Work' for workplace health

The UK may have further to go to increase levels of 'Good Work' in the future. This presents a challenge for workplace health interventions because there is evidence to show that they are more effective in companies where the organisational culture is such that the qualities associated with 'Good Work' matter. For example, only through a sense of personal empowerment can individuals make sustainable changes to their wellbeing. People in jobs where they are allowed little autonomy are unlikely to feel empowered, especially if they happen to be in jobs that are too demanding, poorly supported and offer few chances for advancement.[98]

A 2007 report for the World Economic Forum concluded that for workplace health interventions to be effective they need to be embedded in organisational culture, well-

aligned with the business strategy and that senior management needs to be actively involved in promoting them.[99] So for workplace health to be more effective in supporting the health of employees, it is important that employers of the future give greater consideration to issues of job design, working practices and organisational culture.

3.5 The changing role work plays in our lives

UK society and culture are changing in relation to the way we live, communicate and our expectations from life and work. To be effective, workplace health interventions need to anticipate the changing role that work plays in people's lives. Key trends include:

Figure 19: Trends in the role that work plays in people's lives

Work and identity	Work is increasingly playing a role in the way that we shape our sense of self. Asking someone what they do for a living is a way of determining not only their personal interests and abilities but also their economic and social position. More than half of UK employees say their job gives them a sense of achievement and over a third say their job makes them feel content most of the time.[100] With more and more people deriving their sense of self-esteem from work, employers may in turn recognise an increasing duty of care towards their employees. They may be more inclined to invest in workplace health interventions and in supporting their employees' personal development.
Work and community	People are living increasingly isolated lives, having less and less contact with the community in which they live. Some 13 percent of the UK's population now lives in single person households. And 20 percent of the UK population say that they have neither a satisfactory friendship network nor network of relatives, and 2 percent say that they would have no-one to turn to in a serious personal crisis.[101] Research on how to bring about behavioural change shows that it is important that people have the support of those around them to sustain that change. Given the increasingly isolated conditions in which we are living, it may make sense for public health programmes to help people live healthier lives to focus more on the workplace.
Attitudes and values	People are placing an increasing emphasis on quality of life and not just wealth, and a belief in individual self expression, creativity, and individual value systems.[102] This may be linked to changing views on work-life balance. Only 17 percent of UK employees are completely satisfied with their work-life balance, and four in 10 UK workers said they often thought about taking a break from their jobs – the highest in Europe[103] – despite the fact that in recent years the number of people working long hours has decreased.[104] This suggests that in future there may be opportunities for workplace health to play a role in helping employees manage the demands of their job so that they are better equipped to sustain a healthy and productive balance between their life inside work and their life outside it.

Key question: What impact will the changing nature of work have on workplace health?

The changing nature of work will mean that employers will become increasingly aware of the need to give consideration to aspects of organisational culture, working practices and job design have been shown to play a role in employee health and wellbeing. Employers may look to workplace health providers to offer support and advice on how to do this, especially in relation to how to embed workplace health and wellbeing interventions within the culture of the organisation.

This could offer a win-win for workplace health as interventions are generally more effective in organisations where there is a culture that promotes good quality work. So there will be more opportunity to demonstrate the value of workplace health and the business case for investment.

The workplace of the future is likely to play an increasingly important role in people's lives, as people seek to define themselves more by the kind of work they do and less by the community in which they live. This could mean that increasingly, employers recognise that part of their duty of care to their employees is to help support their health in the workplace.

Summary of key findings in Chapter 3: Changing nature of work

Trends the quality of work

Working practices, job design and the way in which work is organised can affect employee health. Employers who look to make changes to working practices to minimise the negative impact and promote health and wellbeing are likely to see reduced absence and improved productivity. The amount of good quality work has been increasing since the late 1990s, but UK companies have not been as quick as those in other countries to recognise the link between work and health.

Impact of social and cultural changes

To be effective, health at work interventions need to keep pace with changes in the way people live, communicate and their expectations from life and work. The workplace of the future is likely to play an increasingly important role in people's lives, as people seek to define themselves more by the kind of work they do and less by the community in which they live. As traditional community activities become less common, work will play an increasingly important role in helping individuals connect with other people. It is likely to become increasingly important to Government as a locus for delivering public health messages and as a way of encouraging large numbers of people to lead healthier and more productive lives.

Disease trends and costs of ill-health

4

This chapter finds that:

- Based on available data, musculoskeletal disorders are the most prevalent of the major diseases in the UK working population, followed by mental illness. These two conditions are among the largest causes of short and long-term absence. (Sections 4.4 and 4.8 p48, 52).
- The costs of disease and ill-health fall to the Government, the NHS, employers and society. (Section 4.5, p49).
- There is a lack of data on the costs of ill-health to employers for major diseases. Some employers do not collect data on sickness absence and few measure the hidden or indirect costs of illness and absence. For example, the costs of 'presenteeism' could be up to 1.5 times the cost of absence. (Sections 4.7 and 4.8, p50, 52).
- Based on available data, coronary heart disease is likely to be one of the most costly of diseases to employers, costing them nearly £4 billion a year. The major diseases most costly to the NHS are likely to be mental illness, coronary heart disease and cancer. (Section 4.9, p53).
- From a cost perspective alone, the priorities of employers and the Government may not always be fully aligned. Just as the costs of different diseases fall disproportionately on some stakeholders more than others, the benefits of tackling these diseases are likely to fall disproportionately as well.

4.1 Link between disease trends, costs of ill-health and workplace health

The likely future scale of disease in the UK will affect trends in ability to work and levels of sickness absence. Changes in epidemiology and the evolution of disease are linked to changes in morbidity and mortality, and lifestyle. Disease patterns are also more likely in future to be influenced by the rise of communicable diseases; globalisation has made it easier for large proportions of the world's population to travel, increasing the likelihood of a global pandemic such as influenza.

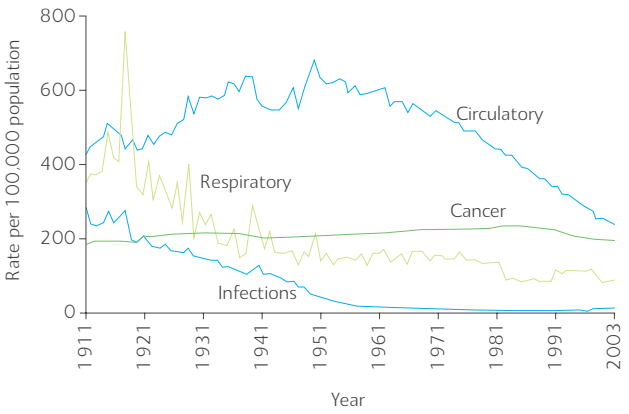
In addition, future disease trends are increasingly likely to be influenced by climate change. An increase in global temperatures, for example, could lead to an increase in infectious diseases as well as other diseases such as malaria, encephalitis and dengue fever.[105] New water and food-borne diseases may develop, and there could be a rise in the number of people with asthma and other allergies due to changes in pollen caused by higher levels of carbon dioxide.[106]

As the UK approaches a period of economic slowdown in the short to medium-term it is especially important to consider the economic costs of ill-health and disease. This is because these costs will either incentivise or constrain the ability of stakeholders to respond to the opportunities and challenges set out in this report. This chapter highlights the scale of costs of disease in general and major diseases in particular. But these costs also represent the potential scale of the benefits if ill-health and sickness absence from work could be reduced.

4.2 Recent trends in major diseases

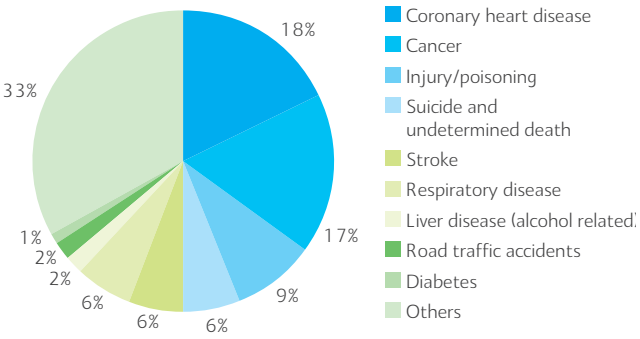
Despite falls in death rates from major diseases in recent years (see Figure 20), research suggests that a significant number of deaths in the UK are avoidable. For example, in 2004 avoidable mortality from circulatory disease stood at 72.6 deaths per 100,000 of the population in England and Wales, compared with just 31.7 in France and 44.5 in Spain.[107] The biggest causes of potential years of life lost (PYLL)* in the UK are coronary heart disease and stroke (see Figure 21).

Figure 20: Age-standardised mortality rates for selected broad disease groups, 1911-2003, England and Wales



Source: The Office for National Statistics, 'Mortality Circulatory diseases-leading cause group'

Figure 21: Top Causes of potential years of life lost up to age 75, England, 1999



Source: This pie chart was created from the public health common dataset, found in Wanless D (2003). 'Securing good health for the whole population'. Department of Health.[108]

* PYLL is a metric that calculates the average time a person would have lived had he or she not died prematurely.
† Prevalence is the proportion of a population that are cases of a specific condition at any time within a stated period (usually a year).
† † Incidence is the rate at which new cases occur in a population during a specified period (usually a year).

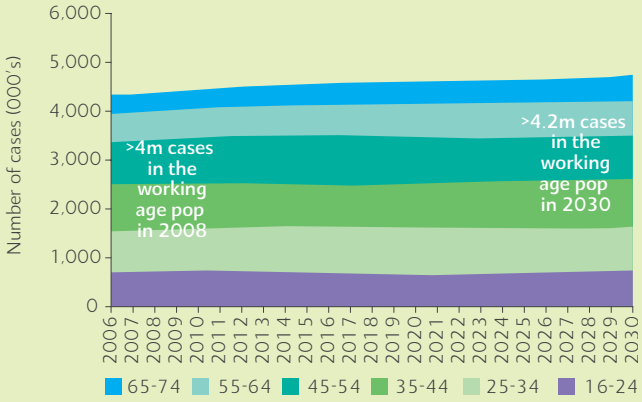
4.3 Future trends in major diseases

To understand the likely future scale of ill-health in the workforce it is important to look at prevalence† and incidence†† data for different age groups for a range of diseases that are common among the working population and the population as a whole. This is because it is important to understand the rate of new cases as well as the prevailing scale of the disease. Comprehensive prevalence and incidence data broken down across consistent age bands, geographies and timescales for a full range of major diseases were not readily available to the project team. However, the project team combined available data with population predictions in order to project the impact of population ageing and growth on future disease trends. The following boxes set out our findings.

Mental illness

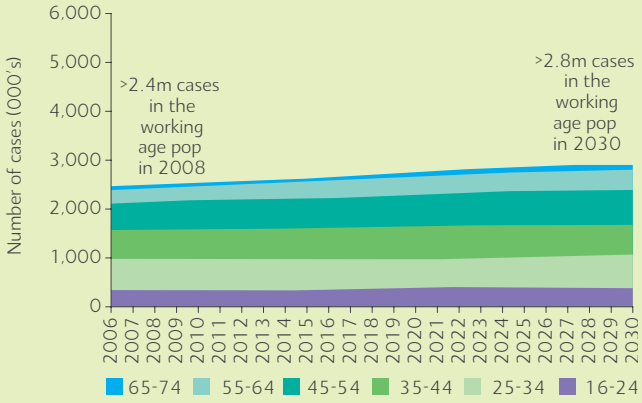
Mental illness is likely to grow in significance in terms of sickness absence and costs, not simply due to increased prevalence, but also due to the shifts occurring in the UK economy described in chapter 2. The graphs below show the projected number of cases in the total population. The text inside the graphs shows the projected number of cases in the working age population.

Figure 22: Projected cases of mental illness in women, UK 2006-30



Source: Project team calculations based on: GAD UK population projections and the Office for National Statistics (2000). 'Psychiatric morbidity among adults living in private households'. (This graph has been produced by the project team and is an estimate of what these figures might look like in the future, based on the above sources)

Figure 23: Projected cases of mental illness in men, UK 2006-30

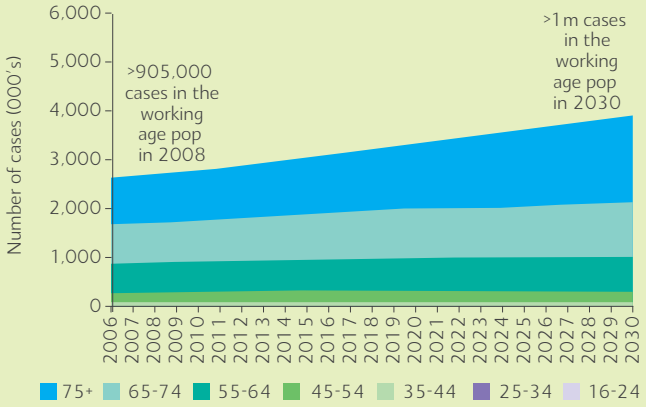


Source: Project team calculations based on: GAD UK population projections and the Office for National Statistics (2000). 'Psychiatric morbidity among adults living in private households'. (This graph has been produced by the project team and is an estimate of what these figures might look like in the future, based on the above sources)

Coronary heart disease (CHD) and stroke

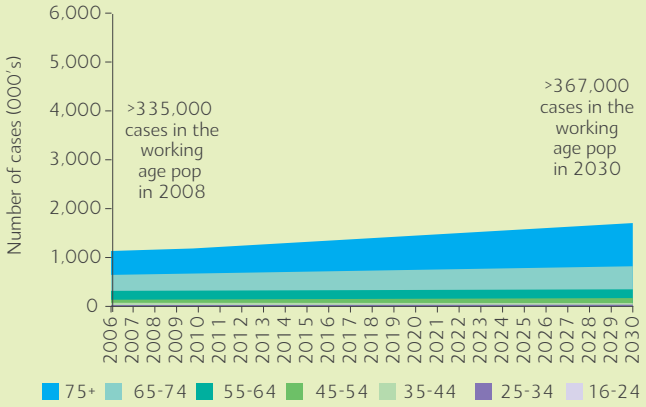
CHD and stroke are both forms of cardiovascular disease that are more likely to occur in men than women and in middle and old age than in the young. CHD is linked to lifestyle behaviours such as obesity and smoking. Given these are modifiable, the Department of Health describes CHD is a preventable disease.[109] The graphs below show the projected number of cases in the total population. The text inside the graphs shows the projected number of cases in the working age population.

Figure 24: Projected cases of CHD, UK 2006-30



Source: Project team calculations based on: GAD UK population projections and the Office for National Statistics 'Survey for England 2003'. (This graph has been produced by the project team and is an estimate of what these figures might look like in the future, based on the above sources).*

Figure 25: Projected cases of stroke, UK 2006-30

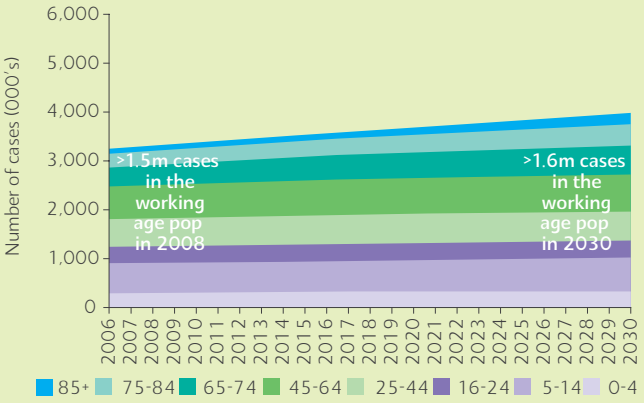


Source: Project team calculations based on: GAD UK population projections and the Office for National Statistics 'Survey for England 2003'. (This graph has been produced by the project team and is an estimate of what these figures might look like in the future, based on the above sources)

Chronic obstructive pulmonary disease (COPD) and Asthma

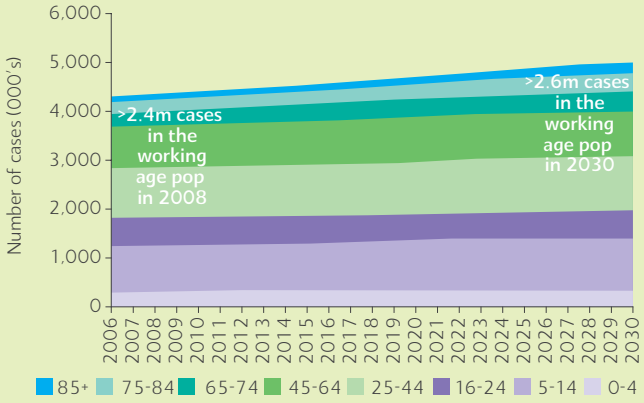
COPD and asthma are forms of respiratory disease and are affected by lifestyle behaviours such as smoking. They can also be linked to occupation and the environment. The graphs below show the projected number of cases in the total population. The text inside the graphs shows the projected number of cases in the working age population.

Figure 26: Projected cases of COPD, UK 2006-30



Source: Project team calculations based on: GAD UK population projections and Office for National Statistics data. (This graph has been produced by the project team and is an estimate of what these figures might look like in the future, based on the above sources)

Figure 27: Projected cases of asthma, UK 2006-30

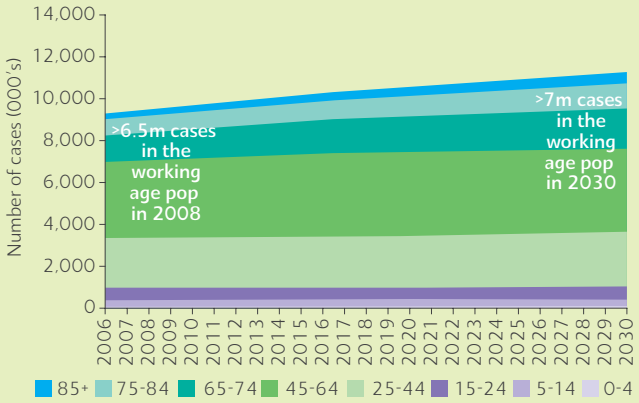


Source: Project team calculations based on: GAD UK population projections and Office for National Statistics data. (This graph has been produced by the project team and is an estimate of what these figures might look like in the future, based on the above sources)

Musculoskeletal diseases (MSDs)

MSDs are likely to increase, just by ageing alone. MSD prevalence increases with age, peaking for the 45 to 65 age group and can be affected by obesity, as this places the limbs and joints under additional strain.[110] MSDs are often linked to mental ill-health, affecting both job retention and the success of return to work interventions.[111] The graph below shows the projected number of cases in the total population. The text inside the graph shows the projected number of cases in the working age population.

Figure 28: Projected cases of MSDs, UK 2006-30

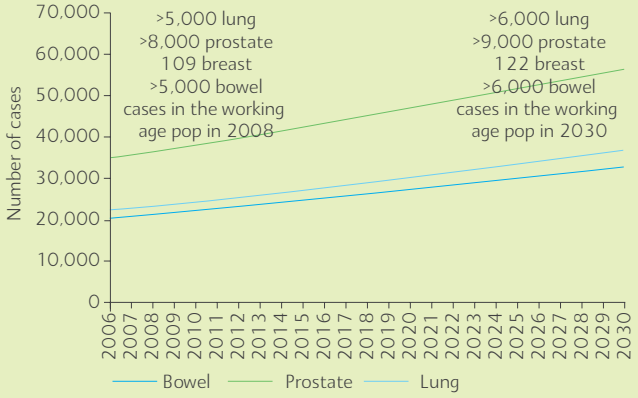


Source: Project team calculations based on: GAD UK population projections and the Office for National Statistics 'Prevalence for England and Wales'.
Note: data relates to all MSDs, not just those caused or made worse by work. (This graph has been produced by the project team and is an estimate of what these figures might look like in the future, based on the above sources)

Selected cancers

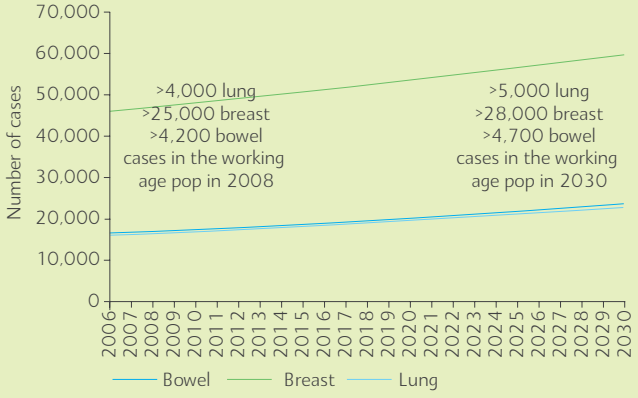
Cancer is related to ageing as well as lifestyle behaviours. For example, smoking is a risk factor for lung cancer. Breast cancer is more likely in those who are overweight and who don't take regular exercise and those who drink alcohol.[112] Bowel cancer is linked to diet.[113] Prostate cancer is also linked to diet and alcohol consumption.[114] Cancer is the second leading cause of deaths in the UK.[115] Although there are uncertainties in projections (for example the Scottish Executive suggest that lung cancer cases will fall over time[116]) it is still likely that the number of cases overall will increase. Some cancers are also becoming more of a long-term manageable disease because of improvements in treatment.[117] The graphs below show the projected number of cases in the total population. The text inside the graphs shows the projected number of cases in the working age population.

Figure 29: Projected new cases of prostate, bowel and lung cancer in men, UK 2006-30



Source: Project team calculations based on: GAD UK population projections and CancerResearch UK data. (This graph has been produced by the project team and is an estimate of what these figures might look like in the future, based on the above sources)

Figure 30: Projected new cases of breast, bowel and lung cancer in women, UK 2006-30

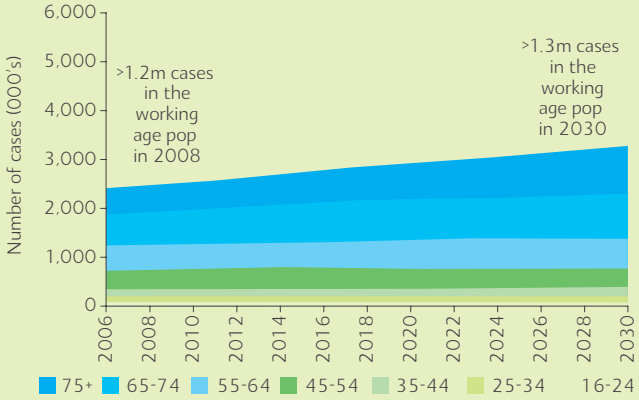


Source: Project team calculations based on: GAD UK population projections' and CancerResearch UK data. (This graph has been produced by the project team and is an estimate of what these figures might look like in the future, based on the above sources)

Diabetes

Diabetes is a long-term condition and is also a risk factor for coronary heart disease. It is closely linked to a number of lifestyle factors[118] including obesity, blood pressure and cholesterol.[119] Although the absolute predictions of cases of diabetes in the working population are smaller than for other diseases, there is a lack of data about the impact of diabetes in the workplace and it is likely that the implications are not fully understood. The graph below shows the projected number of cases in the total population. The text inside the graph shows the projected number of cases in the working age population.

Figure 31: Projected cases of diabetes, UK 2006-30

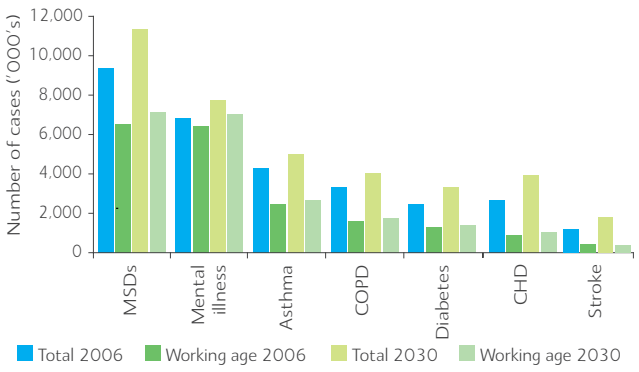


Source: Project team calculations based on: GAD UK population projections and British Heart Foundation data. (This graph has been produced by the project team and is an estimate of what these figures might look like in the future, based on the above sources)

4.4 Implications of future trends in major diseases

Based on the analysis above and bearing in mind the limitations of available data, the likely future order of selected diseases is set out below (Figure 32). These projections account for the increasing likelihood of ill-health based on ageing and population growth. They do not take into account the potential impact of lifestyle and other factors likely to influence future trends (see chapter 5).

Figure 32: Projected cases of selected diseases, UK population and working population, 2006-30



Source: Project team calculations. Note cancer is not included in this chart because incidence has been used in calculating future cases of cancer, whereas for all other disease areas prevalence has been used. (This graph has been produced by the project team and is an estimate of what these figures might look like in the future, based on the above sources)*

* Prevalence is the proportion of a population that are cases of a specific condition at any time within a stated period. Incidence is the rate at which new cases occur in a population during a specified period.

Based on this analysis it can be concluded that:

- Musculoskeletal disorders (MSDs) are a high priority for society as a whole and for employers now and in the future. MSDs appear more often in the working age population than the other diseases and are one of the biggest causes of sickness absence in the UK. As such, they are already a priority for employers looking to support the health of their employees, and these projections suggest it is likely that this will remain the case in future.

- Levels of mental illness are likely to remain high over the coming years and it is likely that increasing number of employees will be living and working with reduced quality of life as a result. Both mental illness and MSDs are likely to remain a priority for employers, because they are conditions where job quality and work can cause or exacerbate the problem.

- Cancer has not been included in Figure 32 (above) because incidence data was used for cancer projections, whereas prevalence data was used for all other disease areas. For cancer, the absolute number of cases is much smaller, however since cancer is the cause of sickness absence that typically requires the longest period of absence (35 days on average),[120] cancer is also a key area which may lead to increased sickness absence over time.

4.5 Different costs of ill-health

The economic costs of ill-health include both the costs of those who are at work and have periods of sickness absence, but also the costs to the economy of those who cannot work due to ill-health and those who die early. The costs therefore fall on employers, the healthcare system and the whole of society. They can be broken down as follows:

- the costs to individuals themselves and their informal carers.*

- the costs of treating ill-health (whether this is through the NHS or the independent sector which may be funded via private insurance, self pay or by employers).

- the costs to employers (which stem from productivity losses from those who are ill but in work, levels of short-term sickness absence and the cost of replacing employees on longer term sickness absence).

- the cost to Government (via benefits payments and expenditure on the healthcare system); and

- the economy which suffers from lower productivity, due to the loss of workers, sickness absence and time taken off work by their carers.

4.6 Difficulties of assessing costs

It can be difficult to make an accurate assessment of the costs of disease to each stakeholder. This is because:

- some costs are inherently difficult to quantify. Some costs are intangible and therefore hard to measure (such as pain and suffering).

* According to Carers UK there are six million unpaid carers in the UK

- some costs are 'hidden'. It may not always be obvious where costs lie; for example the informal costs to carers of relatives and dependents.

- there are a variety of approaches to costing disease. This makes comparing across existing studies and aggregating estimates difficult. Different studies define the costs in different ways. For example, in the costs to society, some studies include the costs to the NHS, others do not.

- there is a risk of double-counting. Some studies include the costs of sickness absence due to a particular disease or illness in their assessment of the overall costs to society. Others include the cost of lost working days in the costs to the Government (as lost working days can affect company profits, which are subject to tax). This means that individual costs can sometimes be counted many times over.

In addition, the relationship between the costs of ill-health and the potential benefits of intervention is not straightforward. The benefits of taking action to improve health will not necessarily flow back proportionately to each stakeholder. Neither will they necessarily be proportionate to the scale of the intervention. This is because:

- the benefits are likely to be dispersed across different stakeholders. The benefits of reducing the scale of ill-health are likely to be spread across a range of stakeholders. This could mean that no individual stakeholder would be able to demonstrate that a particular intervention had had a significant impact.

- the benefits may be indirect. There may be unexpected or unintended knock-on effects of a particular intervention, which could be derived over a period of years or even decades.

- the benefits may be to reduce hidden or intangible costs. The benefits of a particular intervention may be to reduce the hidden or intangible costs of ill-health. As these costs are difficult to measure, this will limit the extent to which the effectiveness of the intervention can be demonstrated.

With these limitations in mind, this chapter aims to set out the likely order of magnitude of the costs to different stakeholders of ill-health in major disease areas. Alternatively, these costs can be thought of as the likely scale of the benefits if interventions could prevent them occurring.

4.7 General costs

Key statistics for costs to the NHS include:

- Treating smokers costs the NHS £2.7 billion a year, compared with £1.7 billion a decade ago.[121]

- Alcohol misuse is thought to cost the NHS around £2.7 billion per year.[122] Alcohol misuse also has wider costs for society, such as crime and disorder, social and family breakdown, and absenteeism. In total, alcohol-related ill-health and crime and disorder are estimated to cost around £20 billion each year.[123]

- The cost of treating obesity was approximately £4.2 billion in 2007.[124]

- In 2004 a report for the Government by Sir Derek Wanless said the rising cost of lifestyle behaviours could make the NHS itself unsustainable.[125]

Key statistics for costs to the Government in terms of benefit payments include:

- In August 2007, 2.66 million people were on incapacity benefits (equivalent to 7 percent of the working age population). The 2005-6 estimated total expenditure on incapacity benefits was £13 billion.[126]

- 40 percent of all incapacity benefit payments are for people with mental disorders, 18 percent for people with musculoskeletal disorders, 6 percent for people who have injuries or poisoning, 8 percent for people with disorders of the circulatory and respiratory system and 22 percent for people with a range of other conditions.[127]

Key statistics for costs to the economy include:

- Lost working days due to sickness absence are estimated to have cost the UK economy £13.4 billion in 2006. Long-term absence of 20 days or more accounts for 43 percent of all working time lost, costing £5.8 billion.[128]

- The Confederation of British Industry estimates that if the worst performing organisations reduced their sickness absence to levels to that of the best performers, it would lead to 54 million fewer days lost and cost savings of £5.4 billion for the UK economy.[129]

Key statistics for sickness absence in the UK for 2007 include:[130]

- Sickness absence is estimated to have cost businesses on average £666 per employee.

- The total number of days lost to sickness absence was 172 million.

- Forty percent of the 172 million lost working days were due to long-term sickness.

These high level statistics hide significant variations within the UK:

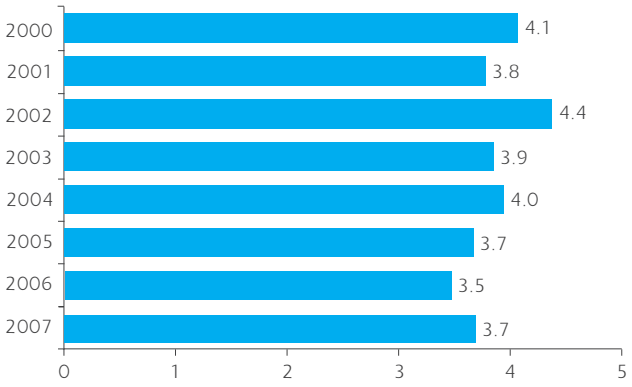
- The public sector in particular has the highest average absence rate; 9.8 days vs 7.2 days in the private sector.

- Smaller employers (>99 staff) tend to have lower absence; 6.1 days vs 9.9 days (>2,000 staff).

- Employees in the North West tend to have more days absent than elsewhere in the UK; 9.3 days vs the lowest of 6 days in London.[131]

Trends in sickness absence suggests that the level of sickness absence in the UK has been relatively stable (Figure 33) and in this respect the UK is not out of step with other parts of the world. For example, in a survey of European Working Conditions, fewer than 25 percent of UK workers had taken sickness absence leave in the last 12 months, which is consistent with the average across the EU.[132]

Figure 33: Trends in average working time lost from absence, UK



Source: Chartered Institute of Personnel Development (2008). 'Annual Survey Report 2008: Absence Management'[133]

4.8 Hidden costs to employers

The costs to employers of ill-health and disease in the UK workforce are likely to be higher in reality than the costs reflected in this analysis. This is because they bear a number of 'hidden costs' that it are difficult to capture, including indirect costs and the cost of reduced productivity, which can be described as follows:

Figure 34: Breakdown of the type of sickness absence costs incurred by employers

Direct costs	Salary costs, annual salary, employers National Insurance contribution, employer's contribution to pension, bonus payments, contracted overtime
Indirect costs	Internal replacement worker (overtime/'acting up' allowance)/external replacement worker (daily agency costs)
Absence management costs	Line manager costs (arranging cover, return-to-work interviews, supervising replacements, absence administration), HR department time (collating and reporting data, administration)
Training	Line manager training, trainer employment costs
Productivity	Productivity can be lost through the use of replacement workers and among co-workers both while the vacancy remains unfilled and also while the new or temporary post-holder is being inducted and trained.

Source: The Work Foundation

Several studies in the UK have shown that, if these indirect and hidden costs are included, employers are spending the equivalent of about 9 percent of their annual paybill on absence.[134]

In addition, there is the hidden cost of lost productivity due to workers who are present in work, but not working as effectively as they could due to illness. This is often called 'presenteeism'. Levels of presenteeism are difficult to determine, however a poll for the TUC found that 57 percent of working adults said they had been to work in the last year when really they were too ill.[135] And the costs are likely to be substantial; it has been estimated that the costs of 'presenteeism' to UK businesses from mental illness - predominantly depression and anxiety - are 1.5 times the cost of sickness absence and cost the UK over £15 billion annually.[136]

Another cost that is excluded from our analysis is that of minor illnesses. Our analysis focuses on the cost of major diseases and conditions, but most short-term sickness absence is driven by minor illness such as food poisoning, colds and flu (see Figure 35 below) and as such this is likely to be a significant additional cost to employers.

Figure 35: Causes of sickness absence (percentage of respondents citing this cause as a leading cause)

	Short-term		Long-term	
Rank	**Manual work**	**Non-manual work**	**Manual work**	**Non-manual work**
1	Minor illnesses (98%)	Minor illnesses (99%)	Acute medical conditions (such as stroke/heart attack and cancer) (62%)	Stress (66%)
2	Back pain (57%)	Stress (54%)	Back pain (55%)	Acute medical conditions (60%)
3	Musculo-skeletal injuries (57%)	Musculo-skeletal injuries (49%)	Musculo-skeletal injuries (54%)	Mental ill-health (51%)
4	Stress (43%)	Back pain (45%)	Stress (51%)	Musculo-skeletal injuries (42%)
5	Home and family responsibilities (40%)	Home and family responsibilities (41%)	Mental ill-health (43%)	Back pain (42%)
6	Recurring medical conditions (31%)	Recurring medical conditions (38%)	Recurring medical conditions (33%)	Recurring medical conditions (35%)

Source: Chartered Institute of Personnel and Development (2008). 'Annual Survey Report 2008: Absence Management'.

4.9 Current costs of major diseases

The boxes below set out data on the costs of ill-health to the NHS and to employers. They also set out, where known, other costs of each disease. Caution should be used when comparing the costs of one disease with another. This is because each study is likely to have taken a different approach to the way in which they have defined and counted the costs of a particular disease.

Mental illness *

Figure 36: Costs of mental illness and stress, UK (£2007 prices)

	Cost of mental illness and stress	Sources and notes
Estimated cost to the NHS (£bn)	8.7	Sainsbury Centre for Mental Health, 2002/3 estimate uprated to 2007/8[137]
Annual working days lost	13.5m	Health and Safety Executive (HSE) 2007/8 quoting the Labour Force Survey[138]
Average days of absence in 12 month period	30.5 days	HSE 2007/8 quoting the Labour Force Survey
Cost to employers (£m)	477	HSE 2000 estimate up-rated to 2007/8 prices
No. of people claiming incapacity benefit	925,700	Department for Work and Pensions (DWP) estimate for 2005
No. of people receiving capacity benefit	460,900	DWP estimate for 2005
Cost to society (£bn)	4.6	HSE 2000 estimate up-rated to 2007/8 prices

* The costs of mental illness are taken from various sources. Each source defines what constitutes mental illness in a different way. For definitions see individual sources.

Coronary heart disease (CHD) and stroke

The costs of CHD have been estimated for the UK healthcare system, and separately in terms of the mortality and morbidity related production costs, and the costs to informal carers. These are shown below. The costs are significant, and higher than the costs seen for the other diseases considered in this report. For stroke, the costs are less well known, but for the NHS it is estimated that stroke costs £2.8 billion.[139]

Figure 37: Costs of CHD, UK (£2003 value)

	CHD (£m, 2003)	% total
Healthcare	3,527	44.6%
Production losses due to mortality	2,173	27.5%
Production losses due to morbidity	961	12.2%
Informal carer costs	1,249	15.8%
Total	7,910	100%

Source: Petersen S, Peto V, Rayner M, Leal J, Luengo-Fernandez R, Gray A (2005). European Cardiovascular Disease Statistics. London: British Heart Foundation

Chronic Obstructive Pulmonary Disease (COPD)

Figure 38: Costs of COPD

Cost to the NHS	£491 million in 2001/2.[140]
Annual working days lost in the UK	24 million (COPD is responsible for 9% of certified sickness absence) [141]
Social security costs	£600 million per year [142]
Cost of lost productivity	£1.5 billion per year (1998 estimate) [143]

Asthma

Figure 39: Costs of Asthma

Cost to the NHS	£0.9 billion
Social security costs	£260 million
Cost of lost output	£1.2 billion (2002 estimates)

Source: Asthma UK (2003) . 'Where do we stand?. Asthma in the UK today' [144]

Musculoskeletal diseases (MSDs)

Figure 40: Costs of work-related MSDs, UK (£2007 prices)

	Cost of MSDs	Sources and notes
Estimated cost to the NHS (£bn)	1.4	2001/2 estimate up-rated to 2007/8 prices
Annual working days lost	8.8 million	Health and Safety Executive (HSE) 2007/8 quoting Labour Force Survey [145]
Average days of absence in 12 month period	16.4 days	HSE 2007/8 quoting Labour Force Survey
Cost to employers (£m)	820	1995/6 HSE est. up-rated to 2007/8 prices
No. of people claiming incapacity benefit	481,800	Department for Work and Pensions (DWP) estimate for 2005
No. of people receiving capacity benefit	337,300	DWP estimate for 2005
Cost to society (£bn)	7.7	1995/6 HSE est. up-rated to 2007/8 prices

Cancer

The costs of cancer are not well understood. Estimates suggest that the total cost of all cancers per year to the UK health system is £3.9 billion (2004 value).[146]

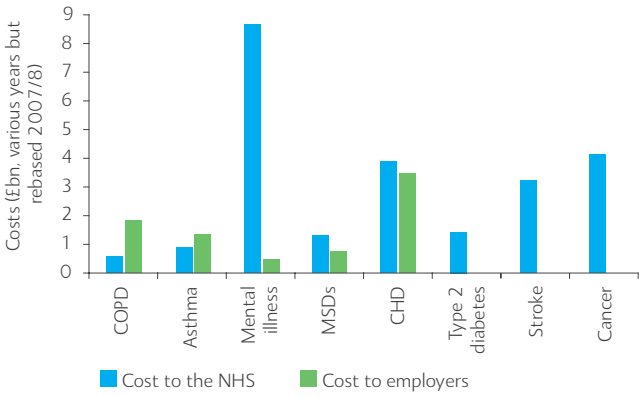
Diabetes

In comparison to MSDs and mental illness, relatively little is known about the costs of diabetes. The costs to the NHS have been estimated to be £1.5 billion.[147] There are however some suggestive statistics on the other costs of diabetes:[148]

- Those with diabetes have a sickness absence rate 2 to 3 times the rate of the general population.
- The cost to social services of people with diabetes is £2,450 per person a year. Only 1 in 20 of those with diabetes use social services.

Based on the data in the preceding boxes, the costs of major diseases to the NHS and employers are set out in Figure 41 below. It is important to note that the costs of musculoskeletal disorders (MSDs) relate to work-related disorders only, due to a lack of available data. So it is likely that the costs of all MSDs to each stakeholder are significantly higher than those set out below. All costs have been uprated to 2007/8 prices:

Figure 41: Costs of major diseases to the NHS and employers



Source: Project team calculations, uprated to 2007/8 prices.
Note: studies tend to 'allocate' costs to different categories in a number of ways, so these studies should be viewed with some caution. For some disease areas, we could not identify any studies that estimated the full cost of a disease to employers. (This graph has been produced by the project team and is an estimate of what these figures might look like in the future, based on the above sources)

Bearing in mind the limitations of the data, this suggests that:

- The largest cost to the NHS is mental illness, which is the smallest cost to employers. But given that stress is one of the biggest causes of sickness absence, and that changes in sectors of employment are likely to mean that more of the UK workforce will be in roles that could affect their mental health (see chapter 2), tackling this disease is likely to be a shared priority for both employers and the NHS.

- Coronary heart disease is one of the most costly diseases to both employers and the NHS. This is significant because coronary heart disease is so strongly linked to lifestyle. Helping individuals to change their behaviour so as to make them less at risk of developing coronary heart disease is likely to deliver significant cost savings for both employers and the NHS.

- Respiratory diseases such as chronic obstructive pulmonary disorder and asthma come out as surprisingly high costs to employers. This could be because of the crossover between these conditions, which could lead to some double-counting. However, asthma in particular is being increasingly diagnosed[149] so it is important not to discount the likely impact of these conditions on different stakeholders.

- This analysis suggests that from a cost perspective alone, the priorities of employers and Government (in the form of the NHS) may not always be fully aligned. Just as the costs of different diseases fall disproportionately on some stakeholders more than others, the benefits of tackling these diseases are likely to fall disproportionately as well.

- Based on the above, there may be a case for the Government to look more closely at incentives for employers who invest in tackling the diseases that are the biggest cost to the NHS, but less of a cost to employers.

Key question: What impact will future trends in disease and the costs of ill-health have on workplace health?

The costs of ill-health and disease to the healthcare system, employers and society are substantial, but the potential to deliver cost savings through concerted action to tackle ill-health is also large. Partnership working among stakeholders could offer a 'win-win' all round; as fewer people suffer ill-health there will be fewer costs to the NHS and the welfare state, reduced absence for employers and improved productivity for the economy.

But from a cost perspective alone, aligning the priorities of different stakeholders is likely to be a challenge. The biggest opportunity for workplace health to address shared priorities is in relation to coronary heart disease, which is the largest cost to employers, and one of the largest costs to the NHS. Levels of coronary heart disease are also likely to increase significantly over the next 20 years (see chapter 5) so there will be added benefits from intervening now to reduce the likelihood of further costs down the line.

Introducing workplace health interventions to support employees with mental illness may also deliver shared goals. Mental illness is one of the largest costs to the NHS, and stress is one of the leading causes of sickness absence. Changes in the economy and the nature of work could mean that levels of stress and mental ill-health increase in future (see chapter 2). These factors combined could mean that supporting people with mental ill-health becomes one of the top priorities for employers and the Government alike.

Given what we know about the costs to different stakeholders, there may be a case for the Government to consider offering financial incentives to employers who invest in tackling the diseases that are the biggest cost to Government, but less of an immediate cost to employers.

Summary of key findings in Chapter 4: Disease trends and costs of ill-health

Prevalence of major diseases

The UK population is both growing and ageing and this is likely to affect the future prevalence of a range of diseases and conditions common in both the population as a whole and in the workforce. Based on available data, musculoskeletal disorders and mental illness are the largest causes of illness among workers in the UK.

Costs of ill-health to employers

Based on available data, the major disease that is most costly to employers is coronary heart disease. Research on the cost of disease and ill-health to employers focuses on the costs of sickness absence. But the actual costs are likely to be even greater because sickness absence is only one element of the direct and indirect costs employers bear. Other costs of ill-health to employers that are rarely measured by businesses (and therefore not included in this analysis) include: productivity loss while the vacancy remains unfilled and also while the new or temporary post-holder is being inducted and trained; line manager costs (arranging cover, return-to-work interviews, supervising replacements, absence administration) and HR department time.

Costs of ill-health to the NHS

In many ways all the costs of disease and ill-health to the NHS are also costs to society because it is funded through general taxation. In purely economic terms, the biggest priority would appear to be the need to reduce levels of mental illness, cancer and coronary heart disease.

Disease trends and impact of lifestyle 5

This chapter finds that:

- Nearly a third of the total burden of disease and disability in the UK is linked to people's lifestyle behaviours, such as levels of smoking, alcohol consumption and obesity. In future an even larger portion of the burden of disease in the UK will be linked to lifestyle. (Section 5.2, p60).
- Cancer, coronary heart disease, stroke and diabetes could see big increases in prevalence over the next 20 years. This is because they are closely linked to obesity and other lifestyle behaviours which are projected to become more common. (Section 5.2, p 60).
- Interventions in the workplace can be effective at changing people's lifestyle behaviours. The workplace offers an opportunity to target hard to reach groups of people and those at risk of disease in society. (Sections 5.6 and 5.7, p67, 68).
- Interventions in the workplace to help employees lead healthier lives can reduce their long-term risk of disease and improve their health and wellbeing in the short-term. So even employers with high levels of employee turnover are likely to see improved employee productivity and reduced levels of absence as a result. (Section 5.8, p69).
- Despite a number of economic, social and cultural barriers that can act as a deterrent to employers looking to invest in workplace health, there is evidence to suggest maybe becoming more socially acceptable for employers to take a keen interest in the health of their employees. (Section 5.9, p74).

5.1 Link between disease trends, lifestyle and workplace health

The projections of future levels of disease made so far in this report (see chapter 4) are based on a simple application of prevalence* (incidence† in the case of cancer) rates to UK population projections by age. In considering opportunities and challenges for workplace health it is important to consider the potential impact of lifestyle. This is because many of the diseases considered in this report are closely linked to lifestyle and changes in people's lifestyle behaviours will affect the scale and nature of disease in the period to 2030.

A number of workplace health interventions help employees to make changes to their lifestyle. They include health promotion campaigns, counselling services, health assessments and on-site nurse and GP services. These exist alongside interventions delivered in the community such as support groups and community health services. This chapter sets out some of the available evidence on the effectiveness of these interventions, and the scope for the workplace to play an increasing role in supporting the drive to help people in the UK to lead healthier lives.

* Prevalence is the proportion of a population that are cases of a specific condition at any time within a stated period.
† Incidence is the rate at which new cases occur in a population during a specified period.

The second report of the project, to be published later in 2009, will provide more detail on the evidence of the effectiveness and, where available, the cost-effectiveness of workplace health interventions.

5.2 Current trends in lifestyle behaviours

People in the UK exercise too little,[150] drink alcohol and smoke too much,[151,152] and eat insufficient amounts of fruit and vegetables.[153] The following table is based on World Health Organization data on the population 'attributable fraction'* of various lifestyle behaviours to a range of diseases.[154] It also highlights the proportion of total Disability Adjusted Life Years (DALYs) that can be directly linked to a particular lifestyle behaviour. DALYs are a measure of the disease burden developed by the World Health Organization, which combine mortality and morbidity into one single metric. They are used to measure the impact of disease on premature death and on the number of years lived with disability and can be seen as a way of assessing the societal burden of a disease on a country.

Figure 42: Link between lifestyle and disease in developed countries

Lifestyle behaviour	Link with disease area	Strength of link to behaviour ('attributable fraction')†	Proportion of UK DALYs
Smoking	COPD	50%+	12.2%
	Lung cancer	50%+	
	Heart disease	1-24%	
	Cerebrovascular disease††	1-24%	
Blood pressure	Heart disease	50%+	10.9%
	Cerebrovascular disease	50%+	
Alcohol	Alcohol use disorders	50%+	9.2%
	Road traffic injury	25-49%	
	Depressive disorders	1-24%	
Cholesterol	Heart disease	50%+	7.6%
	Cerebrovascular disease	25-49%	
Being overweight	Heart disease	25-49%	7.4%
	Cerebrovascular disease	1-24%	
Low fruit and vegetable intake	Heart disease	25-49%	3.9%
	Cerebrovascular disease	1-24%	
	Lung cancers	1-24%	
Physical inactivity	Heart disease	1-24%	3.3%
	Cerebrovascular disease	1-24%	

Source: 'European health for all database [online database], Copenhagen, WHO Regional Office for Europe, 2008 (http://www.euro.who.int.hfadb)

Together, smoking, alcohol and obesity are linked to nearly a third (28 percent) of the total burden of disease and disability in the UK. So it is clear that supporting individuals to reduce the amount they smoke, drink alcohol and helping them to maintain a healthy weight represents a big opportunity to reduce future levels of disease and illness.

* The 'attributable fraction' is the portion of disease in a particular population that attributes to the behaviour
† The 'attributable fraction' is the portion of disease in a particular population that attributes to the behaviour
†† Cerebrovascular disease is a cause of stroke

5.3 Future trends in lifestyle behaviours

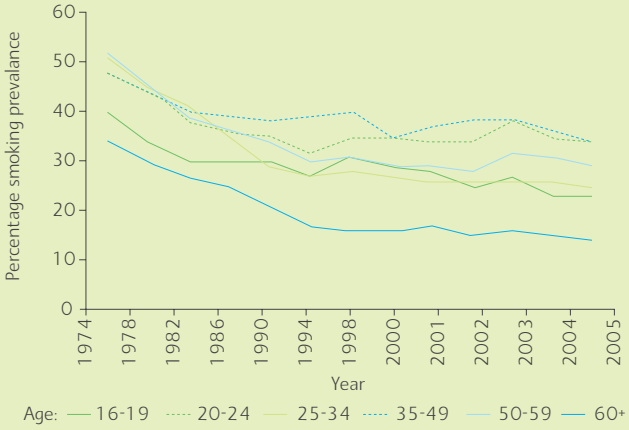
It is important to understand likely future trends in people's lifestyle behaviours because they will have a significant influence on the amount and type of disease in the UK in the coming decades and subsequently on the health of the UK workforce. It is difficult to forecast future trends in levels of smoking, drinking alcohol and obesity among the UK population because attitudes to behaviour and lifestyle are heavily influenced by social and economic change. The boxes below set out the available evidence.

Smoking

Current trends

Smoking is the biggest cause of preventable deaths in England. In 2007, 18 percent of all deaths were smoking-related. Currently around one in four people in the UK smoke (see Figure 45). It is estimated that this will drop to around 20 percent by 2020 and 8 percent by 2050.[155] Trends in smoking are heavily influenced by levels of disposable income, the degree of awareness of the health risks, legal changes (such as the introduction of the smoking ban) and technical advances in smoking cessation products.

Figure 43: Smoking prevalance by age, 1974 to 2005, Great Britain



*Source: 'West Midlands Key Health Data 2006-07', University of Birmingham.**

Future trends

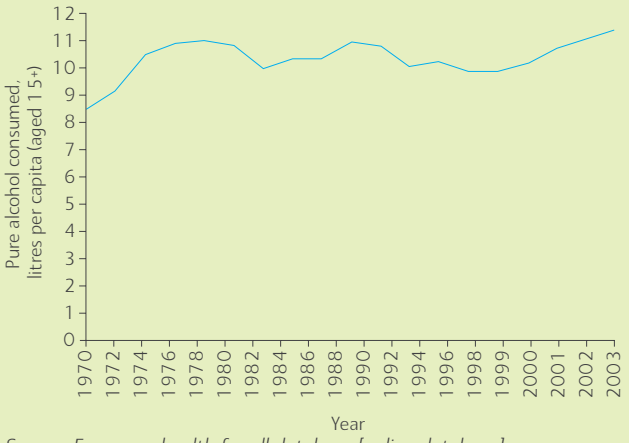
Despite the predicted decline in the number of people who smoke, it is likely that deaths from smoking-related diseases will continue to rise until 2010 and then level off or decline slowly in the period to 2030.[156] This is because of the time lag associated with the onset of smoking-related diseases; smokers who quit in later life may still be at greater risk of disease in old age.

Alcohol

Current trends

Alcohol consumption in the UK has been increasing steadily since the late 1990s (Figure 44). Around 14 percent of women and 18 percent of men exceed the recommended 14 and 21 units of alcohol per week respectively[157] and death rates from alcohol-related causes have almost doubled since 1991.[158]

Figure 44: Alcohol consumption, 1970-2003, UK



Source: European health for all database [online database], Copenhagen, WHO Regional Office for Europe, 2008 (http://www.euro.who.int.hfadb)

Future trends

It is difficult to predict whether levels of alcohol consumption will increase or decrease in future. This is because past trends have been so heavily influenced by social and cultural changes that are difficult to predict. But in the short-term at least it is likely that the downturn in the economy could mean that more people drink alcohol as they try to cope with job insecurity (see section 2.10).

Obesity

Current and future trends

People with a body mass index of 30-35 are considered obese. More than one in five adults in the UK are classified as obese, and this is predicted to rise to approximately 47 percent for men and 36 percent for women by 2035. The predictions for children are similar; one in five boys and one in three girls are expected to be obese by 2020.[159]

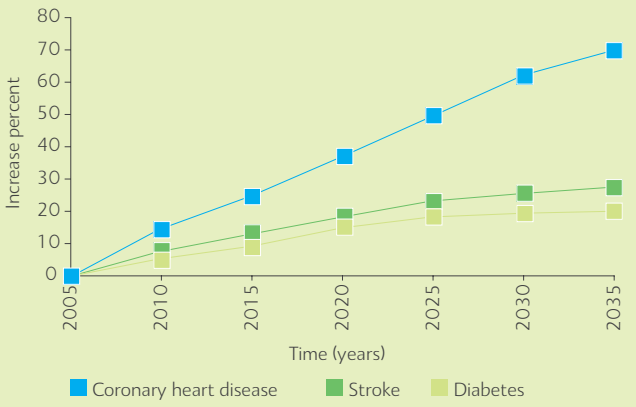
Figure 45: Percentage of age-specific population obese at 2007-50

Age	Male (%) 2007	Male (%) 2050	Female (%) 2007	Female (%) 2050
1-20 (IOTF)	7	26	10	26
21-30	15	42	13	30
31-40	28	65	22	47
41-50	26	55	23	52
51-60	32	65	27	49
61-70	31	64	32	59
71-80	28	63	27	44

Source: Butland B, Jebb S, Kopelman P, McPherson K, Thomas J, Mardell J, Parry V (2007). 'Tackling obesities: Future choices-project report, 2nd edition'. Foresight

The obesity epidemic is likely to increase levels of stroke, diabetes and coronary heart disease, with the largest increase predicted in diabetes.[160]

Figure 46: Expected increase in coronary heart disease, stroke and diabetes due to rising obesity levels, 2005-35, UK



Source: Butland B, Jebb S, Kopelman P, McPherson K, Thomas J, Mardell J, Parry V (2007). 'Tackling obesities: Future choices project report, 2nd edition'. Foresight

5.4 The disease dashboard: trends in common diseases

In order to capture the relative impact of ageing, population growth and changing lifestyle behaviours on future levels of disease and illness among UK employees, we have developed a 'disease dashboard' setting out key trends. The aim is to provide a rapid indicator of the priorities for different stakeholders and to act as a reminder of the importance of lifestyle behaviours as risk factors for the diseases covered in this report.

The dashboard is built up in the following way:

- Column 1: UK disability adjusted life years (DALYs).

DALYs are a measure of disease burden developed by the World Health Organization, which combine mortality and morbidity into one single metric. They are used to measure the impact of disease on premature death and on the number of years lived with disability. They can be seen as a way of assessing the societal burden of a disease on a country. The World Health Organization's most recent estimates are for 2002. The dashboard includes the proportion of total DALYs accounted for by each disease.

- Columns 2 and 3: Estimates of the number of cases in the UK working age population of each disease now and in the future (as set out in chapter 4 of this report).

These are based upon available prevalence (or incidence) by age for each of the diseases in this report, which are then applied to population estimates. The prevalence and incidence data come from either the Office for National Statistics, Department of Health or from Cancer Research UK in the case of cancer. The population estimates are from the UK from the Government Actuary Department. These estimates provide an indicator of the likely scale of ill-health, and how it may evolve to 2030 based on ageing alone.

- Columns 4 to 6: Indicators for three risk factors.

We have selected smoking, obesity and drinking alcohol as summary indicators for risky lifestyle behaviours. Obesity reflects other risk factors, such as diet and levels of physical activity. The dashboard includes an arrow where there is evidence that this factor is linked to the disease, although we've been unable to illustrate on the dashboard the strength of that link, which will vary from disease to disease. If the arrow goes up, this implies trends in this behaviour are predicted to increase. If the arrow goes down, this implies trends in this behaviour are predicted to decrease.

The disease dashboard is shown below:

Figure 47: The disease dashboard

	Current situation			Future situation		
				Likely impact of lifestyle behaviours on number of cases in 2030[††]:		
Column Number	**1**	**2**	**3**	**4**	**5**	**6**
Disease Area	UK DALYs* 2002	Est cases 2006 (working age pop)	Est cases 2030 (working age pop)	Smoking	Obesity	Drinking
Mental illness	26.1%	4.0m	4.2m			▲
Coronary heart disease	12.3%	888k	1.0m	▼	▲	
Chronic obstructive pulmonary disease	4.9%	1.5m	1.6m	▼		
Stroke	4.8%	331k	368k	▼	▲	
Musculoskeletal diseases	4.1%	6.5m	7.1m		▲	
Lung cancer (incidence)	3.0%	10k	12k	▼		
Asthma	2.1%	2.4m	2.6m	▼		
Breast cancer (incidence)	2.0%	25k	28k		▲	▲
Bowel cancer (incidence)	1.9%	10k	11k		▲	
Diabetes	1.3%	1.2m	1.3m		▲	
Prostate cancer (incidence)	0.8%	8k	10k		▲	▲

Source: Project team calculations. Note: estimate of number of cases are prevalence, except where stated. The change in number of cases in 2030 is based only on population changes, not changes in expected incidence. (This graph has been produced by the project team and is an estimate of what these figures might look like in the future).

* *2002 is the latest year for which the World Health Organization published DALYs for developed countries. percentages in the DALYs column stand for the percentage of the total DALYs in the UK that the particular disease area represents. They do not sum to 100% because other diseases account for the remaining proportion of UK DALYs.*

† *Smoking will still have an adverse impact at an individual level but this is offset over the period by the decline in the number of people smoking.*

†† *If the arrow goes up, this implies a negative health impact on the total cases of disease. If the arrow goes down, trends in this behaviour imply a positive health impact on the total cases of disease.*

Based on this dashboard, the project team concludes:

- That tackling the causes of coronary heart disease and mental illness should be a high priority for the UK. This is because there is such a high societal burden (as a percentage of UK DALYs) from both diseases and because they are so strongly linked to lifestyle behaviours that are set to increase.

- The disease areas where there is unknown potential for a significant increase in growth are breast and prostate cancer. This is because they are linked to obesity and levels of alcohol consumption, both of which are likely to increase in future.

- Given that there are more upward than downward arrows on the dashboard, it's clear that people are more likely to be engaging in lifestyle behaviours that have a negative impact on health.

- This shows there is a sizeable opportunity to modify the scale of illness and disease in the UK by helping people to change their lifestyle. One option is to make use of workplace health interventions which can help to modify these behaviours. In this way the workplace can help to make a significant contribution to reducing potential levels of illness and disease in the UK.

5.5 Encouraging lifestyle change: different techniques

It is clear from the disease dashboard that helping people to change their lifestyle behaviours offers the biggest opportunity for workplace health to play an increased role in supporting health in the UK. But encouraging people to make changes to their lifestyle can be difficult.

Different types of lifestyle behaviour have different characteristics so it is unlikely that approaches that work for one behaviour will be easily transferable to another.[161] But in general, an individual's capacity to change their behaviour depends on their:

- values, attitudes and knowledge.

- habits and behavioural norms.

- self-perception and capacity for sustaining change of behaviour.

- expectations of success or failure in making the change.

- and a range of external environmental factors such as their socioeconomic status, their level of exposure to media and advertising campaigns, the community in which they live and the expectations of their peers.[162]

Figure 48 sets out a range of approaches that can be used in the community and in the workplace to encourage people to improve their smoking, eating, exercise and alcohol habits, as well as evidence on their effectiveness.[163,164]

Figure 48: Interventions to help people make lifestyle changes to improve their health

Intervention	Description	Community-based examples	Workplace-based examples	Evidence
Financial incentives	Using financial payments to incentivise people to lead healthier lives.	In 2007, NHS Tayside set up a scheme to help pregnant women give up smoking offering them £50 a month to spend at the local ASDA store if they passed a weekly carbon monoxide breath test. 50 out of the 55 women registered with the scheme stopped smoking.	There is little evidence to suggest that financial incentives are being widely used by employers in the UK. However, in the US, where most states require companies to provide health insurance for their full-time employees, employers use a combination of financial rewards and penalties to persuade employees to lead healthier lives.[165]	Financial incentives are effective in changing certain types of behaviours more than others. The most successful incentives schemes are those that target 'simple', one-off behaviours such as keeping appointments. Incentives can help people achieve to their personal behaviour change goals, but people tend to fall back into their former behaviour patterns when the incentive is removed. And it is unlikely that incentives schemes alone are sufficient to counteract the wider pulls of social context, personal habit or psychological dependency.[166]
Information based programmes	Campaigns to encourage people to lead healthier lives, for example by quitting smoking or exercising more.	In 2007-8 the Department of Health spent more than £50 million on information-based programmes to promote healthy lifestyles, including the 5-a-day fruit and veg campaign and alcohol awareness campaigns.	As part of a drive to improve employee health and wellbeing, meat manufacturer Foyle Food Group provided numerous health awareness and lifestyle advice leaflets to employees, as well as offering them annual medicals. As a result of the campaign, the company saw a 15 percent reduction in absence due to illness.*	Health behaviour is complex and is determined by more than just an individual's level of knowledge. So the role of information alone in effecting behaviour change is likely to be limited. Information based programmes are likely to be most effective when they run alongside other interventions.[167,168,169] For example, media campaigns encouraging people not to smoke have been shown to be effective when coupled with tobacco control programmes.[170]
Providing individual support	Examples of interventions based on individual support include: coaching, counselling, and buddying schemes, all of which are designed to increase an individual's motivation and confidence.	Under an initiative launched by the Government in 2005, Health trainers offer one-to-one advice to people with particular health needs, visiting them for six one-hour sessions. There are more than 1,200 Health Trainers working with 65,000 people across England.	Pharmaceutical company AstraZeneca plc offered employees counselling and one on one support as part of a broader package of health and wellbeing activities, including healthy eating options in the canteen, access to sports facilities and advice on musculoskeletal disorders. The programme led to an 8.5 percent reduction in absence rates and a saving of £1.2 million in absence costs.*	There is evidence that providing individual support works. For example, the Health Development Agency's review of interventions designed to reduce levels of smoking found that contact with a clinician as well as certain counselling and behavioural therapies including problem solving, skills training, relapse prevention and stress management were effective. A separate review in the British Medical Journal supported these findings, and said that both individual counselling and group therapy increased people's chances of quitting smoking.[171]
Health coaching	Health coaching encourages individuals to take control of their own health. Nurses coach people over the telephone, helping them to identify the behaviours they want to change, and how they should go about changing them. The aim is to motivate people and give them confidence .	In 2006, Norfolk Primary Care Trust put in place a health coaching programme for people with long-term conditions. 43 percent of users reported that they had made changes in how they manage their health as a result of the service. The service also led to cost savings for the Trust through reduced use of health interventions by people receiving health coaching.	There is little evidence that health coaching is being widely used by UK employers. However, in 2005 British Gas introduced back care workshops for employees in physically demanding parts of the business. The workshops involved a self-management programme which helped employees manage back pain and take responsibility for their health and fitness. Almost 300 employees participated, and the company saw a reduction in back pain-related absence of 43 percent, creating a business benefit of £1660 per participating employee. In fact, for every £1 invested in the workshop, the company got a return of £31.*	A review of evidence on the effectiveness of health coaching for people with long-term conditions found that it is well received by patients and can improve health outcomes. In particular it can help people with diabetes, hypertension, COPD and the elderly to manage their conditions. It has been found to improve clinical outcomes and has been shown to be effective in helping patients adhere to their medication.[172]

Source: Table adapted from information included in Boyce T, Robertson R, Dixon A (2008). 'Commissioning and behaviour change: kicking bad habits final report'. London: The King's Fund. p.16,[173] unless otherwise indicated.
** Taken from Business in the Community, see www.bitc.org.uk.*

5.6 Encouraging lifestyle change: advantages of the workplace as a location

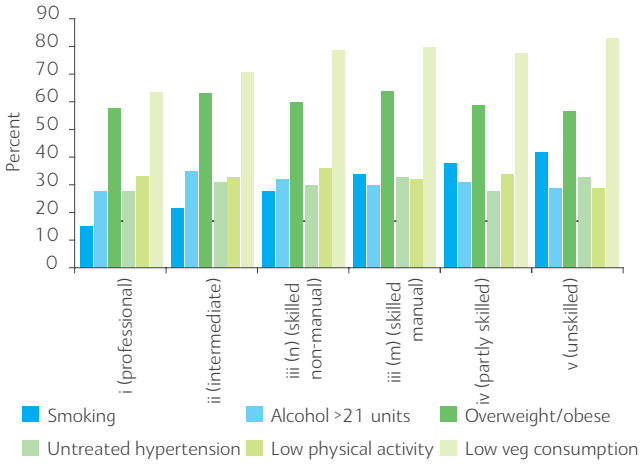
The workplace is well placed to support the drive to help people in the UK smoke less, drink less alcohol, exercise more and eat more healthily.

Nearly 80 percent of people of working age are economically active,[174*] spending on average around 37 percent of their waking hours for around 40 years of their life at work.[175] So the workplace offers the opportunity to influence the behaviour of large numbers of people.

It also offers the opportunity to target some of the individuals most at risk of disease. This is important because the Government is keen to reduce health inequalities, that is, differences in health between people from different socio-economic groups.[176,†] The workplace offers the opportunity to target people from a diverse range of backgrounds and socio-economic groups.

This is important because employees in different socio-economic groups are likely to have different health behaviours (figures 49 and 50). In addition, research has shown a relationship between an individual's socio-economic group and their likelihood of successfully making changes to their lifestyle. For example, people in social grade V (unskilled workers) are less than half as likely to quit smoking as those in social grades I and II (professional workers).[177]

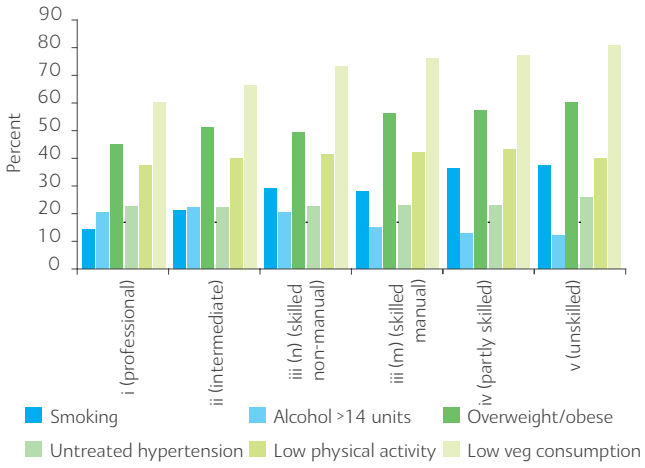
Figure 49: Lifestyle factors by socio-economic group, males, 1998-2001, England



*Source: Department of Health, 'Health survey for England, 1998-2001'**

* An individual is considered economically active if they are employed, self-employed or are actively seeking employment.
† From a public health perspective, people who are unemployed or receiving incapacity benefits are likely to be among those most in need of support. So in that respect, the potential for the workplace to play a role in helping to tackle health inequalities is limited.

Figure 50: Lifestyle factors by socio-economic group, females, 1998-2001, England



*Source: Department of Health, 'Health survey for England, 1998-2001'**

Another advantage of using the workplace as a location for interventions to help people lead healthier lives is that it can be effective in engaging hard-to-reach groups of people, such as those who are less likely to access health interventions in the community. For example young men are notoriously less likely to visit their GP when they have a health problem. In one survey, 50 percent of men in the UK admitted that they would delay going to their doctor, even if they developed warning signs of cancer.[178] This is a problem because these groups include people at highest risk of certain diseases, for example young men are most at risk of testicular cancer. Health interventions in the workplace may be more accessible, so they provide an opportunity to offer targeted support and guidance to people who would otherwise choose not to access the advice they need.

5.7 Encouraging lifestyle change: advantages of workplace health interventions

There are a number of practical reasons why interventions* in the workplace have the potential to be effective in helping people to change their lifestyle behaviours and complement those delivered in the community. For example:

- Employers can tailor interventions to support the needs of specific groups of employees.
- Employers are well placed to facilitate the kind of social and cultural changes, and changes to the physical environment, that might be needed to support employees lead healthier lives.
- The effectiveness of interventions in the workplace can be readily and easily monitored over time.

Employers can tailor interventions to support the specific needs of groups of employees

Interventions designed to help people lead healthier lives are more likely to be effective if they are developed and implemented with the specific needs of the target group in mind.[179] For example, it is important to understand the group's attitudes and motivations, and to build on the group's strengths, such as their skills, talents and capacity. Employers

* Interventions in the workplace to help people make changes to their lifestyle and lead healthier lives include health promotion campaigns, counselling, health assessments and on-site health interventions. For a detailed description of these interventions see Appendix 1.

have access to information that can be helpful in building an understanding of the needs of the group. This includes information on the group's skills, their levels of sickness absence and the nature of their day to day work. In this way, the information held about employees could be used to optimise the likelihood that the intervention will be effective.

Facilitating the kind of social and cultural changes, and changes to the physical environment, that might be needed to help employees lead healthier lives

According to the World Health Organization, "people's behaviour is influenced by their physical and social environments."[180] The workplace is an effective location for interventions to help people lead healthier lives because employers can create an environment that helps them to sustain their new behaviour and integrate it into their day to day life. For example they can provide a range of healthy food in the staff canteen, or provide showers to encourage people to exercise at lunchtime. They can also provide employees with the social support that they need. This could include, for example, facilitating lunchtime social sessions for employees to share advice and discuss progress. This kind of support is important because interventions that help develop social approval for health-enhancing behaviours are more likely to be effective.[181] By fostering an organisational culture which encourages healthy behaviours, employers can give employees the support they need to sustain a healthier lifestyle.

The effectiveness of interventions can be readily and easily monitored over time

Interventions to target behaviour change are likely to be more effective if the target group is involved in the development, evaluation and implementation of the intervention.[182] In order to achieve this it is important to seek regular feedback from those who use the service. In the workplace employers can readily seek feedback from employees, either formally, through surveys and questionnaires, or informally, through group discussion. In addition, the workplace is well placed to collect longitudinal data about the effectiveness of the intervention. Depending on their level of employee turnover, employers can monitor the extent to which the intervention helps employees make changes to their behaviour that are sustained over time.

5.8 Encouraging lifestyle change: achieving value for money in the workplace

For employers operating in an increasingly competitive economic climate, the ability to invest in supporting the long-term health of their employees may be limited. Employers with high levels of employee turnover, in particular, are likely to be keen to ensure that interventions to help employees lead healthier lives are effective in reducing absence and improving productivity in the short to medium-term as well as reducing their risk of disease over the long-term. If employers are to play an increasing role in supporting the health of the workforce over the coming decades, it is important to understand how they can invest their resources to get the best value.

There are a number of approaches employers can adopt to deliver improved value for money. They include:

- Considering whether to target high risk employees or the whole workforce.
- Focusing on the short-term benefits to health and wellbeing that will help employees work more productively.

Targeting high risk employees or the whole workforce

There is considerable debate among policymakers and health economists about whether health promotion and disease detection interventions in the community should be targeted at high risk groups or at the wider population to maximise their impact on the burden of disease.[183] This debate is also relevant to interventions in the workplace. In the workplace, employers can either put in place interventions that target employees whose behaviour puts them at high risk of disease or they can take a more general approach and put in place interventions that are aimed at the whole workforce (such as posters, leaflets and health promotion campaigns).

The advantages, disadvantages and cost benefits of each approach are set out below:

Figure 51: Advantages and disadvantages of targeted versus general approaches to workplace health interventions

Approach	Advantages	Disadvantages
Targeting high-risk employees	• Allows interventions to be tailored to the specific needs of a group, so more likely to be effective in bringing about behavioural change. • Likely to be cost-effective because allows resources to be deployed where they are most needed by targeting those most at risk of disease and therefore those most likely to benefit. • Employees who are identified as being high risk are more likely to be motivated to change their behaviour. • Reduces the risk of 'adverse selection', where employees most likely to benefit from the intervention are also likely to be those least inclined to participate.	• Requires some kind of screening process to identify high risk employees, which can be expensive and difficult to manage. Employers also run the risk of stigmatising employees by singling them out for particular treatment (see Figure 57). • Employees' behaviour is likely to be constrained by social norms: if their colleagues continue to engage in unhealthy lifestyle behaviours, they are likely to find it harder to change their behaviour.
Targeting the entire workforce	• Attempts to tackle the underlying causes of disease. • Can be successful at changing the behaviour of large groups of people because once healthy living becomes the norm for most people, it becomes harder for individuals to slip back into their old habits. • Can be cheaper because a similar approach is used across an entire workforce.	• May be less effective as the same approach is used for all employees, who may have very different lifestyle behaviours and risks of disease.

Source: Table adapted from information included in Rose G (1984) 'Sick individuals and sick populations', International Journal of Epidemiology, Volume 14.[184]

According to the World Health Organization, a key measure of the effectiveness of an intervention to promote lifestyle change is how well it targets those at greatest risk and the extent to which it ensures their compliance.[185] For employers looking to target high risk employees there are number of ways in which they can identify the most appropriate individuals to target. They could, for example, ask them to fill in a survey about their health behaviours, after appropriate consultation. They could also use sickness absence data; research shows there is a link between the type and amount of sickness absence that an employee has and their mortality. In one study, employees who had one or more medically certified spells of sickness absence (more than seven days) in a three year period had a mortality rate 1.7 times greater than those without.[186]

These approaches help employers to identify and target those employees who have the riskiest lifestyle behaviours. But there is an argument to say that it is better value to identify and target those employees whose behaviours are at the cusp of what constitutes risky lifestyle behaviour. This is because they only need to modify their behaviour, rather than change their lifestyle completely, in order to significantly reduce their risk of disease. Helping people to modify their behaviour is likely to require fewer resources so a limited amount of investment can be made to go further and can be a more cost-effective way of reducing the risk of disease for a larger number of employees.

An individual's relative risk of disease is likely to be influenced by the duration and intensity of their exposure to the lifestyle behaviour that puts them at risk. For example someone who has smoked 30 cigarettes a day for 20 years is likely to be at greater risk of lung disease than someone who has smoked 10 cigarettes a day for 5 years. Similarly someone who has been obese all their life is at greater risk of diabetes than someone who has been a few pounds overweight since middle age. So it's important to understand where the tipping point lies – in other words, the point at which an individual's behaviour

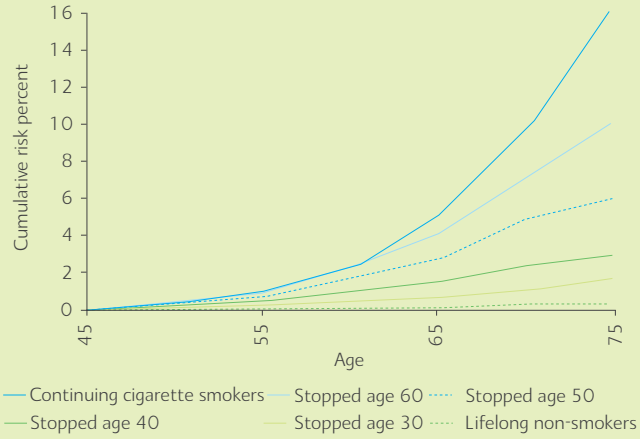
tips over from being marginally harmful to their health to putting them at *significantly* increased risk of a particular disease or condition. This is because just before an employee reaches this 'tipping point' represents an optimal point for intervention.

Some of the 'tipping points' for alcohol, smoking and obesity are set out below:

Smoking

The age at which an individual quits smoking can affect their risk of smoking-related disease. For example, a study of 40,000 British doctors over 40 years found that stopping smoking before middle age avoids more than 90˜percent of the risk attributable to tobacco.[187] It also found that smokers who quit before they reached 35 years of age return to having almost the same relative risk of mortality from smoking-related diseases as someone who has never smoked. Quitting later (over 35 years) allows a partial return to the risk of a non-smoker. The following graphs show the effects of quitting smoking at certain ages.

Figure 52: Effects of stopping smoking at different ages on cumulative risk (%) of death from lung cancer



Source: Peto R, Darby S, Deo H, Silcocks P, Whitley E, Doll R (2000). 'Smoking, smoking cessation, and lung cancer in the UK since 1950: combination of national statistics with two case-control studies'. British Medical Journal, volume 321

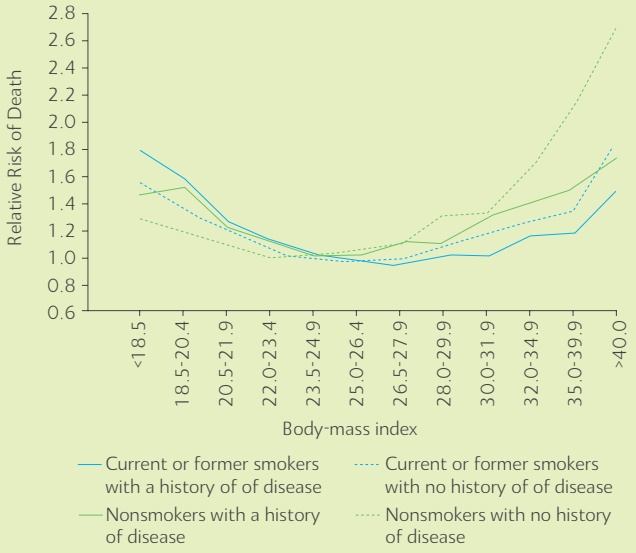
Alcohol

Even limited levels of alcohol consumption can significantly increase a person's risk of disease. There are different 'tipping points' for a range of diseases and conditions, where even limited consumption of alcohol can increase risk. For example a female drinking five units of pure alcohol daily is 5.39 times more likely than a non-drinking female to suffer from lip and or pharyngeal cancer, 13 times more likely to have unspecified liver cirrhosis, and 1.4 times more likely to have a low birth weight baby.[188]

Obesity

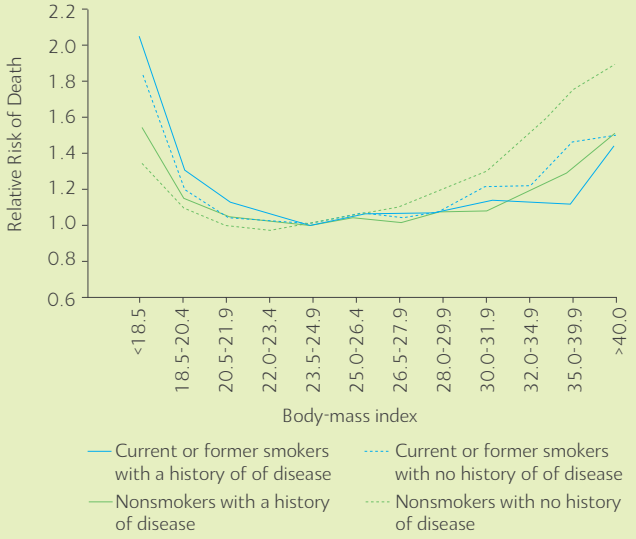
Being even slightly overweight can significantly increase an individual's risk of various diseases, including cardiovascular disease and cancer (Figure 55). The 'tipping point' for many diseases, or the point at which an individual's risk starts to increase, tends to be around BMI of 28 which is only just higher than the average BMI for men and women in the UK today (average BMI is 27).[189] The ideal range is BMI of 20-25.

Figure 53: Relative risk of death from all causes by body mass index, smoking status and disease status (men)



Source: Calle E et al (1999). 'Body-Mass Index and Mortality in a Prospective Cohort of U.S. Adults' The New England Journal of Medicine, volume 341, pp.1097-1105.[190]

Figure 54: Relative risk of death from all causes by body mass index, smoking status and disease status (women)



Source: Calle E et al (1999). 'Body-Mass Index and Mortality in a Prospective Cohort of U.S. Adults'. The New England Journal of Medicine, volume 341,pp.1097-1105.[190]

In order to deliver best value for money, employers need to consider the advantages and disadvantages of interventions that are aimed at all employees versus those that target certain groups of employees. They also need to consider whether it is more cost-effective to target employees with the riskiest behaviours, thereby significantly reducing the risk of disease for a small number of very unhealthy employees; or whether it is more cost-effective to target employees at the 'tipping point', thereby marginally reducing the risk of disease for a large number of quite unhealthy employees.

Focusing on the short-term benefits to health and wellbeing that will help employees work more productively

Another way in which employers can demonstrate value for money for investment in workplace health is by focusing on the productivity gains that can be made from helping employees to improve their health and wellbeing. Employers who focus on improving productivity as well as reducing absence can demonstrate that investment can help add value to the company's top line as well as reducing the costs to the company's bottom line.

Improvements in productivity can be hard to measure. But employees who are healthy and well are more likely to be productive than those who are not (see section 2.11). And by focusing on productivity as well as absence, employers can also demonstrate that investment in workplace health can deliver a return in the short to medium term as well as reducing an employee's long-term risk of disease. This is because helping people to quit smoking, reduce their alcohol intake and eat more healthily can deliver immediate benefits to health and wellbeing (Figure 55).

Figure 55: Short-term impact on health and wellbeing of quitting smoking, reducing alcohol in-take and losing weight

Lifestyle behaviour	Short-term impact on health and wellbeing
Smoking	Giving up smoking can have an immediate impact on many aspects of health. Figure 56 shows the short-term health benefits of quitting. In addition, a survey of smokers who had quit a year previously showed that most considered that they experienced fewer migraines and headaches, fewer chest and breathing problems and fewer heart and blood problems than they did when they smoked. They also said that their general wellbeing had improved and that they were less likely to feel stressed or constantly under strain.[191]
Alcohol	There is compelling evidence about the knock-on effect excessive drinking can have on an individual's ability to function effectively at work. For example, excessive alcohol consumption is associated with a number of neurotic disorders that are likely to affect an employee's productivity. These include sleep problems, fatigue, irritability, worry, depression, concentration and forgetfulness, anxiety, phobias and compulsions.[192]
Obesity	Losing even a few pounds can immediately improve joint disease and musculoskeletal disorders. For example, weight loss of 10 to 15 pounds is likely to slow the development of, and halt the symptoms associated with, knee osteoarthritis and other musculoskeletal problems.[193,194] Similarly, elevated blood pressure can start to reverse within days of the beginning of weight loss and for every two pounds lost, low-density lipoprotein cholesterol levels are reduced by one percent. Other immediate benefits to investing in helping employees lose weight include the fact that within a few days to weeks of beginning a weight loss programme, levels of insulin-resistance can be altered and the resulting reduced incidence of type II diabetes becomes evident within one or two years.[195]

Figure 56: short-term health benefits of quitting smoking

Timeframe	Health benefits
20 minutes	Blood pressure drops to normal. Pulse rate drops to normal. Body temperature of hands and feet increases to normal.
8 hours	Oxygen level in blood increases to normal.
24 hours	Chance of heart attack decreases.
48 hours	Nerve endings start re-growing Ability to smell and taste is enhanced.
2 weeks to 3 months	Circulation improves Walking becomes easier Lung function increases up to 30 percent
1 to 9 months	Coughing, sinus congestion, fatigue and shortness of breath decrease Increasing ability to handle mucus, clear the lungs and reduce infection Body's overall energy increases

Source: US National Cancer Institute (2004). 'Quitting tobacco: short-term and long-term health benefits'.[196]

By recognising the short-term benefits that such interventions deliver, employers can maximise their return on investment and make a significant contribution to the drive to reduce the burden of disease in the UK.

5.9 Encouraging lifestyle change: limitations of the workplace

There are a number of reasons why employers may find it difficult to increase their focus on helping employees to change their lifestyle behaviours over the coming decades. Figure 57 sets out examples of the barriers which could limit employers' ability to play a greater role in supporting the health of the UK workforce, as well as the opportunities that exist to address these barriers:

Figure 57: Examples of barriers to increased employer investment in workplace health and opportunities to address them

Type of barrier	Issue	Examples	Opportunities
Economic	The difficulties of demonstrating the business case	There are a number of ways in which employers can demonstrate the value for money of investment in workplace health (see section 5.8) but in order to do this they need consistent, reliable data on absence and productivity. Only 72 percent of organisations collect absence data.[197] And improvements in productivity can be difficult to measure. In addition, the business case is likely to be different for organisations of different sizes, with different levels of absence and turnover.	In July 2008, the Government's Health, Work and Wellbeing team launched an online tool, called BusinessHealthCheck,[198] to help employers calculate their return on investment for workplace health interventions. This tool will help more employers to recognise the value of collecting baseline data, for example on levels of sickness absence, in order to better make the case in the boardroom for increased investment in supporting the health of employees.
Social and cultural	The fear of being accused of 'nannying' employees	There is a debate about the extent to which companies can and should intrude on the personal lives and choices of their employees outside the workplace. For example in 2001 there was extensive condemnation when an employer appeared to have fired an employee because he smoked in his personal time.[199] As a result, some employers feel uneasy about the legitimacy of taking a 'hands on' approach to employee health.	As more evidence becomes available on the impact that lifestyle has on an individual's ability to perform effectively at work, attitudes may change and the legitimacy of employers taking an interest in their employees' health may become more widely recognised.
Legal	Fear of being accused of discrimination	Employees with particularly risky lifestyle behaviours, such as those who are obese, or who smoke heavily, may feel stigmatised if their employer chooses to make healthy living a focus of attention. They may, for example, be concerned that their opportunities for promotion within the organisation could be affected unless they change their behaviour. Some employers may feel that by focusing on their employees' lifestyles they could leave themselves vulnerable to accusations of discrimination.	There is now more advice and guidance available to employers on appropriate ways to implement a health and wellbeing strategy in the workplace. As more guidance becomes available, employers are less likely to be fearful of inadvertently discriminating against individuals or groups of employees.
Practical	The growing burden on line managers and the increasing number of atypical workers.	A typical long-term sickness absence policy contains at least 90 decision-points for line managers. With all the other pressures and obligations which line managers have, their scope for taking on or extending their roles is likely to diminish rapidly.[200] In addition, there are increasing numbers of atypical workers, for example part-time workers, those on fixed-term contracts and those that work remotely, and this provides greater challenges to employers looking to implement equitable health at work policies.	Workplace health interventions need to develop to keep pace with changes in the role of line managers. They also need to be designed in such a way that they can be delivered flexibly to ensure they meet the needs of different types of employees.

The extent to which an individual employer is deterred by these barriers from investing in workplace health interventions will depend on their motivations for investment in the first place. In general, if the employer's primary motivation is to deliver a return on investment to the company's bottom line, they are more likely to be deterred by the economic barriers. If, however, the employer's primary motivation is a sense of social responsibility, they may be less deterred by the economic barriers and more deterred by the social and cultural ones.

The barriers that are likely to be the hardest to overcome in the period to 2030 are likely to be those that relate to social and cultural change. This is because they require a fundamental shift in society's attitudes towards employers, which will take time. There is a precedent, however, for change of this kind. Expectations of 'corporate citizenship' are changing and companies are being expected to demonstrate that they are socially responsible. For example, 83 percent of the British public say that a company's social responsibility is an important factor that they take into consideration when deciding which product or service to purchase.[201] Over the past decade, and as a result of social pressure, it has become increasingly unacceptable for employers not to take a responsible attitude towards the environment and to take steps to reduce their carbon footprint. Already, 30 percent of employees think employers have a duty to help them maintain their health.[202] And as evidence of the impact of lifestyle on health becomes better recognised, it could well be the case that neglecting to invest in the health of their employees becomes as socially unacceptable for employers as neglecting to reduce the impact of their business on the environment.

Key question: What impact will future trends in disease and the costs of ill-health have on workplace health?

Changes in disease trends will mean that workplace health has a greater opportunity than ever before to make a significant contribution to reducing UK workers' risk of disease and illness. This is because in future a larger portion of the UK's burden of disease will be attributable to people's lifestyle behaviours, which are modifiable through health promotion.

The workplace will increasingly be recognised as an effective location for interventions to help people lead healthier lives. Employers will become more knowledgeable about the cost-benefits of targeting groups of employees versus the entire workforce. And they will be better at identifying when an individual's lifestyle puts them at greatly increased risk of disease and offering targeted interventions. Such an approach will also allow them to get better value for money from the interventions they offer and deliver the most health gain for that investment.

In future there may be greater alignment between the short-term goals of employers with high levels of employee turnover looking for a return on investment in workplace health and the longer-term goals of the Government in improving public health. This is because there may be more awareness among employers of the short-term improvements in health that can be gained from the kind of health promotion campaigns around smoking, drinking and obesity that the Government is keen to implement to reduce future levels of disease.

Some employers will still feel constrained by economic, cultural and legal barriers that can act as a deterrent to further investment in workplace health interventions. But in general there will be more opportunities to increase the role that workplace health can play in supporting the health of the nation as a whole.

Summary of key findings in Chapter 5: Disease trends: impact of lifestyle

The impact of lifestyle on health

An increasing portion of the burden of disease in the UK is in future will be caused by lifestyle. There is a direct link between the amount that an individual smokes, drinks alcohol, exercises their level of obesity and their risk of common diseases and conditions. Together, smoking, alcohol and obesity are linked to nearly a third of the total burden of disease and disability in the UK. So a larger portion of disease in the UK than ever before can be attributed to behaviours which are modifiable. In this respect, health promotion in the workplace can make a significant contribution to reducing disease and helping support the health of the nation as a whole.

continued

Summary of key findings in Chapter 5: Disease trends: impact of lifestyle continued

Trends in smoking

Levels of smoking are projected to fall over the coming decades, but deaths from smoking related diseases will continue to rise until 2010 and then level off or decline slowly to 2030. Smoking significantly increases an individual's risk of COPD, cancer and cardiovascular disease. For employers, helping employees to give up smoking offers a number of returns, not least because smokers who quit experience the kind of improvements in their general health and wellbeing that are likely to mean that they are less absent from work and more productive whilst in work. For employers with limited resources, it is important to target smoking cessation programmes at employees under 35. This is because quitting by the age of 35 can 'wipe out' a smoker's relative risk of smoking-related disease to the extent that they return to almost the same level of risk as someone who has never smoked.

Trends in the consumption of alcohol

Death rates from alcohol-related causes have almost doubled in the UK since 1991. Excessive consumption of alcohol increases the risk of cirrhosis of the liver and epilepsy. Helping employees to reduce their alcohol intake is likely to improve health and wellbeing and lead to cost savings through reduced absence and improved productivity.

Trends in levels of obesity

Rates of obesity are estimated to rise to approximately 47 percent for men and 36 percent for women by 2035. Significant rises in obesity are predicted for children, who will be the workforce in 10 or 20 years time. Obesity is likely to have a significant impact on diabetes, which is predicted to increase by 60 percent over the period to 2030. The short-term benefits of losing weight include lowered blood pressure and relief of musculoskeletal disorders such as osteoarthritis. Musculoskeletal disorders are currently one of the biggest causes of sickness absence so reducing them could deliver huge cost-savings for employers. The risk of various diseases and conditions including cancers, cholesterol and musculoskeletal disorders increases with body mass index; even people who are marginally overweight are at increased risk even if they are not considered to be obese.

The link between lifestyle and the workplace

In any given workforce there will be employees from different socio-economic backgrounds and this is likely to affect their propensity to smoke, drink alcohol and undertake exercise. So the workplace offers an opportunity to target individuals who are at risk of disease and influence the lifestyle behaviours of an entire organisation. Interventions in the workplace to help employees lead healthier lives can reduce their long-term risk of disease and improve their health and wellbeing in the short-term. This is important because even employers with high levels of employee turnover are likely to see improved employee productivity and reduced levels of absence as a result. Some employers may feel constrained by economic, social and cultural barriers that can act as a deterrent to further investment. But in general the workplace offers huge opportunities to reduce future levels of disease and to close the gap between workers whose prospects for long-term health are good and those whose lifestyle puts them at risk.

Conclusions 6

The UK is facing a challenging economic period in the short to medium-term, but stronger prospects in the long-term. Throughout the period to 2030 there will be major changes in demography and the way in which people work. Levels of disease in the workforce will increase, driven in part by lifestyle. This report explores the implications of these trends for the health of the workforce, and sets out a number of challenges and opportunities for workplace health interventions.

Challenges	Opportunities
• An ageing workforce. • Rising levels of ill-health and long-term conditions. • Likelihood of worsening health inequalities due to lifestyle. • More people in society dependent on the working population. • Short to medium-term downturn in the economy. • More of the UK workforce likely to be in jobs that could have a detrimental effect on their mental health. • Greater demand for highly skilled workers who may be in insufficient supply, leading to reduced wellbeing for employees in jobs ill-matched to their level of skill. • Cultural, economic and legal constraints that could constrain appetite among employers to invest in interventions that help employees to make the kind of changes to their lifestyle that could improve their health.	• Increased understanding of the role of lifestyle in determining levels of ill-health and disease in the UK; which means more opportunity to modify and reduce the burden of disease through concerted action. • Greater awareness of the impact of lifestyle on an individual's risk of disease, which means more opportunity to target workplace health interventions to deliver best value and promote improved public health. • Greater awareness of the benefits of the workplace in supporting people to change their lifestyle behaviours and in targeting those in society who are hard to reach or at risk of disease. • Greater awareness of the short-term health benefits from changes to lifestyle, so greater alignment between the long-term causes of disease and the immediate causes of sickness absence and productivity loss in the workplace. • More companies recognising the importance of promoting good quality work, with increased opportunities to embed workplace health more closely in organisational culture. • More opportunities for partnership between employers and Government, including the potential to review the case for incentives for employers to invest in the health of their employees.

Over the next 20 years, the project team believes that there is scope for workplace health interventions to play a more fundamental role in:

Supporting people in poor health

A rise in the number of lifestyle conditions could lead to worsening health inequalities and increased levels of absence and ill-health at a time when society is more dependent on the health of the working population than ever. More people will be living and working with conditions that require ongoing management and support. Investing in workplace health interventions that enable employees to manage their condition at work will make good business sense for employers as it will help reduce absence and improve productivity. It will also bring a number of societal benefits, allowing people who are in work to care for their dependants, and helping people who might otherwise have been on incapacity benefits to participate in work.

Preventing future ill-health

The workplace offers an opportunity to influence the health behaviours of large numbers of people as well as those at risk of disease and hard to reach groups who may otherwise be reluctant to access health interventions in the community. In the past, employers may have been less inclined to invest in workplace health interventions that help employees to lead healthier lives because there is a perception that these interventions improve an individual's long-term risk of disease, but offer few immediate benefits to the employer. They may also have held back from fear of being accused of 'nannying' their employees. But evidence about the impact of lifestyle on performance at work is powerful. Health promotion campaigns in the workplace can both reduce an individual's long-term risk of disease and deliver short-term health gains that will lead to improved productivity and reduced absence. Raising awareness of this will encourage more employers to invest in the kind of health promotion campaigns that will help reduce future levels of ill-health in the UK. Their capacity to do so would be further increased if the Government were to introduce targeted financial incentives to encourage employers to tackle a range of diseases and conditions, not just those that are the biggest cost to their bottom line.

Promoting good health through good work

Short to medium-term pressures on the economy and changes in the UK labour market are likely to lead to increased levels of mental illness in the workforce. By taking a broader view of the role that workplace health interventions can play in improving the quality of work so as to promote employee wellbeing, employers can help reduce levels of mental illness caused both in and outside work. This requires employers to embed workplace health more closely in organisational culture. It also requires them to align investment in workplace health more closely with other aspects of human resources, such as skills and training, job design and working practices. By investing to improve the quality of work, employers can help to promote the positive relationship between good work and good health.

Recognising the challenges and turning them into opportunities

Employers, the Government, providers of workplace health and health professionals need to work together to recognise the challenges set out in this report and turn them into opportunities. There will be benefits to doing this sooner rather than later.

In publishing this report, the project team identified a number of limitations with the availability of data that could act as a barrier to concerted action. They include a lack of consistent data on incidence and prevalence rates for major diseases broken down across similar age groups, geographies and timescales, and the true cost of ill-health in the workplace. Without a full assessment of the relative impact on major diseases and the true scale of their costs it will be difficult for different stakeholders to know where to concentrate their efforts.

A second report to be published later in 2009 will set out recommendations on how these challenges can be overcome, as well as the role that different stakeholders can play in allowing workplace health to play a greater role in supporting the health of the nation. In addition, it will:

- Consider the existing evidence for the effectiveness and cost-effectiveness of a range of health at work interventions - and combinations of interventions.
- Suggest ways to increase the quantity and quality of workplace health for individuals, employers, the NHS, Government and other organisations.

* Prevalence is the proportion of a population that are cases of a specific condition at any time within a stated period. Incidence is the rate at which new cases occur in a population during a specific period.

Appendix 1: Common workplace health interventions*

Absence management

Absence Management interventions help companies to monitor sickness absence, identify absence trends and health and safety risks across the organisation.

Case management

Case management interventions help employers manage the process through which an employee returns to work after sickness absence. Some case management interventions help employers make an assessment of the employee's medical needs and make recommendations on their fitness for work and any adjustments they might need. Others offer interventions such as physiotherapy and counselling, to help ease an employee's return to work.

Dental insurance

These schemes tend to cover the costs of annual dental treatment, often up to an annual limit. Some schemes offer cover towards the costs of dental accidents and also cover dental emergencies in the UK and abroad.

Drug and alcohol screening

This helps employers develop a policy on drug and alcohol abuse to ensure staff never perform tasks under the influence. It is especially used in industries where there is use of heavy machinery. Interventions can include providing routine and random screening for safety critical employees, and a call out service to respond immediately to an incident or accident at work.

Employee assistance programmes

Employee assistance programmes gives employees access to confidential advice and support over the telephone, often with referral to face-to-face counselling if required.

Employee health surveys

Employee surveys profile the health of an organisation's workforce. They can be online or paper-based and provide a benchmark on levels of health and wellbeing, with recommendations on the issues that need to be addressed. Some provide a personal report for each employee, with lifestyle advice on how to minimise their health risks for the future.

* As defined by Bupa

Health assessments

Health assessments help detect health problems in good time for employees to take corrective action or for them to be treated with a greater chance of success. Health assessments include a range of medical tests for example, for heart and lung function as well as blood and urine analysis. They are available on an employer-paid or employee-paid basis or as part of a flexible benefits scheme.

Health promotion

Health promotion interventions offer employees health education and advice on a range of issues such as healthy eating, smoking cessation, posture, sleep and stress prevention. They generally use leaflets, posters, emails and intranet sites to raise awareness among employees.

Health surveillance

Health surveillance interventions offer a way of ensuring that employees are fit to perform their work safely and that their health is not adversely affected by work or the work environment. They include a range of health tests, including vision, hearing and lung function. The need for health surveillance can be identified through a workplace health and safety risk assessment.

Ill-health retirement reviews

Businesses need to ensure that ill-health retirement pensions are given to appropriate cases, whilst protecting a vulnerable fund from inappropriate claims. These interventions help employers to assess each claimant and provide an independent report to the pensions trust on eligibility for benefits.

Income protection

Income Protection insurance provides employers with the ability to insure a benefit of a percentage of salary for employees who are unable to work for more than six months (typically) due to sickness or injury - payments continue until the earliest of return to work, retirement or death.

Medicals to meet industry standards

Many industries have their own specific health standards. For example, large goods vehicle drivers holding a Group 2 driving license must have a medical.

On-site health interventions

On-site health interventions allow employees to visit a GP, nurse, physiotherapist or dentist at their place of work. This reduces the need to take time off and results in less disruption to the working day.

Organisational risk assessment

By law every employer must conduct a risk assessment to identify the risks to its employees' health and safety and then implement measures to address the issues identified. Some providers also offer assistance with health and safety policy development.

Pre-employment/pre-placement screening

Pre-employment screening through a questionnaire or face-to-face medical helps businesses comply with any applicable legislation when recruiting new employees. It also helps them identify an individual's health needs so they can make reasonable adjustments to accommodate them.

Private medical insurance

Private Medical Insurance (PMI) can come with various levels of cover. It allows employees to receive treatment fast and at a time of their choosing.

Stress management programmes

These programmes offer training sessions for managers and individuals to help them recognise stress, and show them how to prevent or deal with it, so that it does not affect business performance.

Vaccinations

Vaccination programmes include those to protect employees against flu. Other interventions include travel vaccinations for employees planning a trip overseas as well as travel health advice for a range of countries.

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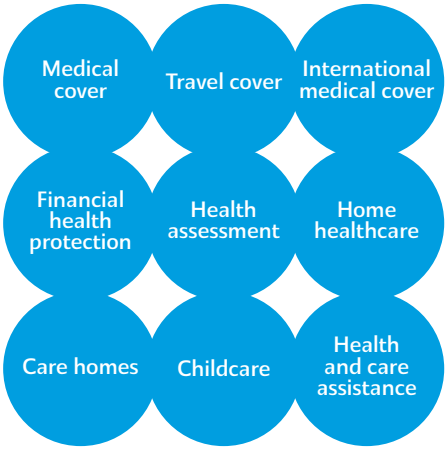

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