Summary

- Cancer is now the main cause of death in Hampshire and for each CCG, taking over from circulatory disease. Approximately 30% of all deaths in Hampshire in 2011 were caused by cancer, compared to 28% from circulatory disease and 13% from respiratory disease. This is similar to England and Wales.
- There were 34,214 deaths in Hampshire during the three year period from 2009 to 2011, a rate of 468 deaths per 100,000 population. This is significantly lower than the England rate of 553 deaths per 100,000 population.
- The death rate has fallen in Hampshire over the three year period from 2009 to 2011, in line with the national trend. However this trend was not seen across all parts of Hampshire – the death rate in women in North Hampshire and men in Fareham and Gosport has remained static. The overall death rate in Fareham and Gosport has also remained static, which is likely to be related to the generally poorer health and bigger health inequalities in that area.
- Premature mortality is defined as deaths occurring before the age of 75. There were 9,890 premature deaths in Hampshire during the three year period from 2009 to 2011, equating to a death rate of 220 per 100,000 population (significantly lower than the national and south east region averages).
- Premature mortality rates are decreasing nationally and this trend is seen in Hampshire, South Eastern Hampshire and West Hampshire CCGs for both men and women. The premature mortality rate has been static in Fareham and Gosport for both men and women since 2006. In North East Hampshire and Farnham CCG, the premature mortality rate is dropping overall but has been static for men since 2006. The opposite picture is seen in North Hampshire CCG, where the rate is dropping for men but has remained static for women.
- This picture is reinforced by life expectancy (LE) data for Hampshire, which shows a LE difference of 13.1 years between the 20% of wards with the highest average LE compared to the 20% of wards with the lowest average LE.
- LE for men in Hampshire was 80.8 years and 84.2 years for women during 2009/11, significantly higher than the national (78.6 and 82.6 years) and south east region averages (79.7 and 83.5 years). This masks variation within Hampshire – LE was relatively lower for men in Fareham and Gosport and South Eastern Hampshire CCGs; and relatively lower amongst women in Fareham and Gosport, North Hampshire and South Eastern Hampshire CCGs.
- There were 5,827 preventable deaths in Hampshire during the three year period from 2009 to 2011. This equates to a rate of 119 preventable deaths per 100,000 population, lower than the national average of 146 preventable deaths per 100,000 population. Preventable deaths are those which could be avoided by public health interventions in the broadest sense. Examples include lung cancer, illicit drug use disorders, land transport accidents and certain infectious diseases.
- Preventable deaths were significantly more likely to occur in the most deprived fifth of people in Hampshire compared to the least deprived fifth, and were more common amongst men than women. The rate of preventable deaths in Hampshire has decreased in the last five years.
- Mental and behavioural disorders (including stress, anxiety and depression) and musculoskeletal disorders are the cause of the greatest number of years lived with disability in the UK. Currently we do not have Hampshire estimates of years of life lived with disability.
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Recommendations

- We need to be prepared to support increasing numbers of people living with and dying from cancer.
- We need to do more to reduce inequalities in premature deaths between parts of Hampshire, for example focusing more effort on men and women in Fareham and Gosport, men in North East Hampshire and Farnham, and women in North Hampshire. This focus should be on the factors that have the biggest impact on premature death – smoking, alcohol, physical inactivity, obesity – as well as the drivers of these behaviours – poverty, poor educational attainment, unemployment, housing issues.
- As life expectancy increases, we need to do more to reduce the number of years people are living with disability. The UK GBD study suggests the greatest burden is mental health problems (anxiety, stress and depression) and musculoskeletal problems including chronic pain. We need to investigate this for Hampshire and tailor our strategies and interventions accordingly.

1. Introduction

When considering the broad changes in mortality and morbidity, it is clear that the real improvements across England are replicated in Hampshire. Life expectancy at birth and at 65 has increased, all cause mortality rates have decreased, as have infant mortality rates. Much of this positive change can be attributed to the reductions in cardiovascular mortality (particularly coronary heart disease and stroke) and cancer. The contributing factors include healthcare interventions although reductions in smoking, high blood pressure and cholesterol have all played an important role.\(^1\) There still remain large inequalities in health measures and health outcomes for almost every disease examined. Geographical differences in rates often reflect patterns of deprivation. The national analysis of life expectancy and years lived in disability shows that people living in the areas with the greatest life expectancy tend to be those with the least number of years lived with disability or limiting long term illness (difference between life expectancy and disability-free life expectancy). Life expectancy is lower in more deprived areas, so this relationship is likely to relate to deprivation. However, the data also show that it is possible for people to live long lives without substantial disability.\(^1\) This chapter shows that this national picture is also seen in Hampshire.

2. Main causes of death in Hampshire

For the first time, cancer\(^2\) has overtaken circulatory diseases as the main cause of death (figure 1 and 2). There were 11,397 deaths in Hampshire during 2011, of which 3,341 (30%) were from cancer, 3,210 (28%) from circulatory diseases and 1,548 (13%) from respiratory diseases. This is similar to England and Wales, where in 2011 30% of deaths were from cancer, 29% from circulatory diseases and 14%...
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from respiratory diseases. A very similar picture was also seen in each CCG within Hampshire. Fareham and Gosport and North East Hampshire and Farnham CCGs had a marginally lower proportion of deaths from coronary heart disease than Hampshire while Fareham and Gosport CCG had a marginally higher proportion of deaths from Chronic Obstructive Pulmonary Disease (COPD) than Hampshire. Tables 1 and 2 contain the numbers of deaths for each CCG and district.

Figure 1: Main causes of death in Hampshire, 2011

Lung cancer caused 17% (566) of cancer deaths in Hampshire; colorectal (bowel) cancer caused 11% (363) of cancer deaths, and prostate and breast cancer each caused 7% of cancer deaths (245 and 240 deaths respectively) (figure 3).
Death, life expectancy and life lived with disability

Figure 2: main causes of death in Hampshire, 2011

Figure 3: breakdown of cancer deaths in Hampshire, 2011

Sources: ONS Public Health Mortality Annual Extract
Death, life expectancy and life lived with disability

Table 1: main causes of death in Hampshire by CCG, 2011

<table>
<thead>
<tr>
<th>CCG</th>
<th>Neoplasms</th>
<th>CHD</th>
<th>Other diseases of the respiratory system</th>
<th>Mental and behavioural disorders</th>
<th>Cerebrovascular disease</th>
<th>Diseases of the digestive system</th>
<th>Bronchitis, emphysema and other COPD</th>
<th>Suicide and Injury Undetermined</th>
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<td>88</td>
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<td>182</td>
<td>43</td>
<td>100</td>
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</table>

Deaths from mental and behavioural disorders includes conditions such as Alzheimer’s and vascular dementia, psychotic illnesses such as schizophrenia, mood disorders including depression, mental disorders caused by substance use, and mental retardation.
2.1 All age all cause mortality

The age-standardised mortality rates (ASMR) in 2011 were the lowest since records began in England and Wales with 624 deaths per 100,000 population for males and 446 deaths per 100,000 for females. These age-standardised rates include all causes and cover all ages. During the decade from 2001 to 2011, the age-standardised rate for males fell by 24% (from 823 deaths per 100,000); while for females it decreased by 20% (from 557 deaths per 100,000).³

Age-standardised mortality rates fell in Hampshire during the three year period from 2009 to 2011 (figure 4). Table 3 shows the numbers and directly standardised death rates in Hampshire and by CCG. There were 34,214 deaths in Hampshire during the three year period from 2009 to 2011, a rate of 468 deaths per 100,000 population. This is significantly lower than the England rate of 553 deaths per 100,000 population. There was a lower death rate in all CCGs in Hampshire than the England and south east region averages. Fareham and Gosport CCG had the highest death rate in Hampshire during this time period, closely followed by North Hampshire CCG and South Eastern CCG. West Hampshire CCG had the lowest death rate (figure 5).

Although the overall mortality rate in Hampshire decreased in line with the national average, this trend was not consistent in all Hampshire CCGs. North East Hampshire and Farnham, South Eastern Hampshire and West Hampshire CCGs all had a decreasing mortality rate for men and women. In Fareham and Gosport, the mortality rate decreased for women but not for men, resulting in a static mortality rate overall. The opposite was seen in North Hampshire CCG, where the mortality rate decreased amongst men but was static for women, given an overall slightly decreasing mortality rate. We might expect to see more static mortality rates at the moment in women in areas where there have been historically high rates of smoking amongst women, as we know there is a current peak in lung cancer deaths amongst women related to historical smoking patterns. This would fit with the mortality trend seen in North Hampshire. The static mortality rate in Fareham and Gosport amongst men may be explained by higher levels of deprivation in this area.

Figure 6 shows the strong relationship between death rates and deprivation – death rates are highest among the most deprived and lowest amongst the least deprived. In Hampshire, the death rate amongst the 40% most deprived proportion of the population was significantly higher than the national average.

³ http://www.ons.gov.uk/ons/dcp171778_284566.pdf
Death, life expectancy and life lived with disability

Figure 4: Hampshire trend in all age all cause mortality

Table 3: numbers and directly standardised rate of deaths in Hampshire, 2009-2011

<table>
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<tr>
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<th>Males</th>
<th>Females</th>
<th>Persons</th>
</tr>
</thead>
<tbody>
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<td></td>
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<td>95% CI</td>
</tr>
<tr>
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<td>UL</td>
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<tr>
<td>West Hampshire CCG</td>
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2.2 Premature all cause mortality

Premature mortality is defined as deaths occurring before the age of 75. There were 9,890 premature deaths in Hampshire during the three year period from 2009 to 2011. This equates to a death rate of 220 per 100,000 population, which is significantly lower than the national and south east region averages (figure 7 and table 4). Fareham and Gosport and South Eastern Hampshire CCGs had the highest premature death rates in Hampshire at 245 and 244 per 100,000 respectively, but these were still lower (better) than the national average and similar to the south east region average.

Figure 8 shows the strong relationship between premature death rates and deprivation – death rates are highest among the most deprived and lowest amongst
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the least deprived. In Hampshire, the death rate amongst the 40% most deprived proportion of the population was significantly higher than the national average.

Premature mortality rates are decreasing nationally and in Hampshire as a whole for both men and women (figure 9), but this trend is not seen for all CCGs in Hampshire. The premature mortality rate has been static in Fareham and Gosport for both men and women since 2006. In North East Hampshire and Farnham CCG, the premature mortality rate is dropping overall but has been static for men since 2006. The opposite picture is seen in North Hampshire CCG, where the rate is dropping for men but has remained static for women. In both South Eastern Hampshire and West Hampshire CCGs the premature mortality rate has decreased in line with the national and Hampshire trends.

**Figure 7: premature mortality by CCG, 2009-2011**

![Graph showing premature mortality by CCG, 2009-2011](image)

**Figure 8: premature mortality by deprivation quintile, 2009-2011**

![Graph showing premature mortality by deprivation quintile, 2009-2011](image)
Figure 9: trend in premature mortality in Hampshire

![Graph showing trend in premature mortality in Hampshire](image)

Sources: CDS received from Provider Trusts via SUS & ONS 2010 LSOA mid year population estimates

Table 4: numbers and directly standardised rate of premature deaths in Hampshire, 2009-2011

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<thead>
<tr>
<th></th>
<th>Males</th>
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<th>Females</th>
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<td>Number</td>
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<td>200 185 215</td>
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<td>and CCG</td>
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</table>

2.3 Life expectancy (LE)

Life expectancy at birth (LE) is a synthetic measure. It indicates the number of years a newborn infant would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life. Over the last 50 years (1960-2010) the average life span has increased by around 10 years for a man and 8 years for a woman. The most common age at death in England and Wales in 2010 was 85 for
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men and 89 for women. LE in Hampshire for both men and women has consistently been higher than the national average over recent years, reflecting Hampshire’s population being generally healthier and wealthier than the national average.

Figure 10 shows the LE at birth for men and women in Hampshire during 2009 to 2011. LE for men in Hampshire was 80.8 years and 84.2 years for women during this time period, significantly higher than the national (78.6 and 82.6 years) and south east region averages (79.7 and 83.5 years). This masks variation within Hampshire – LE was relatively lower for men in Fareham and Gosport and South Eastern Hampshire CCGs and relatively lower amongst women in Fareham and Gosport, North Hampshire and South Eastern Hampshire CCGs.

Greater inequalities are revealed by looking at LE by deprivation quintiles or fifths (figure 11). LE was 76.2 years for men and 80.8 years for women in the most deprived fifth of people in Hampshire, compared to 82.3 years for men and 85.1 years for women in the most affluent fifth of people in Hampshire. This amounts to a LE gap of 6.1 years for men and 4.3 years for women. However this still masks the even greater inequalities in LE that exist at ward level. The mean life expectancy for the fifth of wards with the highest LE is 93.5 years and the mean life expectancy for the fifth of wards with the lowest LE is 80.5 years - a difference of 13.1 years.

Figure 10: Life expectancy at birth for men and women in Hampshire, 2009 to 2011

Sources: ONS Annual Death Extract & ONS LSOA mid year population estimates. Comparators from ONS Life Expectancy Tables.

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2.4 Preventable deaths

A death is preventable if, in the light of understanding of the determinants of health at the time of death, all or most deaths from that cause (subject to age limits if appropriate) could be avoided by public health interventions in the broadest sense. Examples include lung cancer, illicit drug use disorders, land transport accidents and certain infectious diseases.

There were 5,827 preventable deaths in Hampshire during the three year period from 2009 to 2011. This equates to a rate of 119 preventable deaths per 100,000 population, lower than the national average of 146 preventable deaths per 100,000 population. Preventable deaths were highest in Fareham and Gosport CCG (993 deaths over three years, 134 preventable deaths per 100,000 population) and lowest in West Hampshire CCG (2,320 deaths over three years, 110 preventable deaths per 100,000 population).

Preventable deaths were significantly more likely to occur in the most deprived fifth of people in Hampshire compared to the least deprived fifth (figure 12), and were more common amongst men than women (figure 13). The rate of preventable deaths in Hampshire has decreased in the last five years (figure 13).

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Figure 12: preventable deaths in Hampshire by deprivation quintile, 2009 to 2011

![Bar chart showing preventable deaths in Hampshire by deprivation quintile, 2009 to 2011.](chart12.png)

Figure 13: trend in preventable deaths in Hampshire, 2006/08 to 2009/11

![Bar chart showing trend in preventable deaths in Hampshire, 2006/08 to 2009/11.](chart13.png)

2.5 Years lived with disability (YLD)
The UK burden of disease study\(^6\) found that although years lived with disability per person hadn’t changed between 1990 and 2010 in the UK, overall death rates have fallen, which means the importance of chronic disability is rising. The major causes of YLD in 2010 were mental and behavioural disorders, which includes (amongst other things) stress, anxiety, depression and substance misuse; and musculoskeletal

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http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(13)60355-4/abstract
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problems (figure 14). Currently we do not have estimates of years of life lived with disability in Hampshire. It is likely that mental and behavioural and musculoskeletal disorders are also prominent in Hampshire, but having local data would help us shape our strategies and target our interventions more effectively.

Figure 14: years lived with disability in the UK by cause and age, 2010

3. Evidence of what works

There is much evidence of what works to prevent people from dying prematurely. NICE has published a briefing for local authorities, summarising key findings from numerous NICE guidelines about preventing premature death. If implemented effectively, these recommendations will make a significant contribution to reducing premature mortality and associated prior disability and care needs.

Local authorities have a key role to play in preventing and reducing premature deaths from non-communicable diseases such as cancer, heart disease, stroke, respiratory disease and alcohol-related liver conditions. By tackling the wider determinants of health such as education, employment and housing as well as tackling these diseases, they will also help reduce health inequalities, because the more disadvantaged people are, the more likely they are to die before they reach 75. An approach which combines strategy, action and delivery is key – whether tackling smoking and harmful drinking, encouraging people to be physically active or encouraging them to adopt a healthy, balanced diet.

The NICE guidance summarises actions that should be taken to reduce premature deaths and inequalities through taking strategic and cross-organisation working on the following:
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- Smoking cessation.
- Preventing harmful drinking.
- Physical activity including maximising local government opportunities to develop physical environments that support people to be more physically active eg through planning, transport etc.
- Healthy eating.
- Obesity.
- Type 2 diabetes.
- Heart disease and stroke.

4. Recommendations

- We need to prepare to support increasing numbers of people living with and dying from cancer.
- We need to do more to reduce inequalities in premature deaths between parts of Hampshire, for example focusing more effort on men and women in Fareham and Gosport, men in North East Hampshire and Farnham, and women in North Hampshire. This focus should be on the factors that have the biggest impact on premature death – smoking, alcohol, physical inactivity, obesity – as well as the drivers of these behaviours – poverty, poor educational attainment, unemployment, housing issues.
- As life expectancy increases, we need to do more to reduce the number of years people are living with disability. The UK GBD study suggests the greatest burden is mental health problems (anxiety, stress and depression) and musculoskeletal problems including chronic pain. We need to investigate this for Hampshire and tailor our strategies and interventions accordingly.