



Stoke on Trent



Health and vulnerable groups of people in Stoke-on-Trent

Director of Public Health Annual Report 2011

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Director of Public Health Annual Report 2011

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2011

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Introduction



For the last few years the City has embarked on intensive industrial scale public health programmes to deal with poor health experienced by large sections of the City. It is pleasing to see that some of these programmes are making a positive impact. There are improvements across several health and lifestyle indicators. The shift in the focus of Primary Care towards prevention and better identification and management of long term conditions is also beginning to show benefits. There is continued good performance on both circulatory disease and infant mortality. Despite this the overall assessment of health within Stoke-on-Trent remains unacceptably poor. We need to do much better on life expectancy and avoidable mortality, where there is a significant contribution from cancer and respiratory disease. Our intelligence suggests that we need to single out cancer as a leading priority among the big killers. There are also concerns around alcohol and obesity particularly amongst children.

Times of austerity bring into focus the bigger picture and ask hard questions about what our priorities are. We are enthusiastic about sharing the vision of City Council, so eloquently stated in its Mandate for Change: Make Stoke-on-Trent a great working city as employment is a key determinant of health. Aspirations of being a prosperous working city must go hand in hand with being a healthy city. We need to develop a compelling vision of what success will look like in terms of a healthy Stoke-on-Trent. It is encouraging to note the sign up by partners to the Marmot¹ policy objectives, beginning with Stoke-on-Trent's future: in securing the best start in life from birth and in maximising capabilities and skills in schools.

While we are making steady progress on several health fronts we must improve our national ranking as the 16th most deprived area in England by giving a lift to our most disadvantaged populations. Good public health is about adding value and making a difference to populations as well as individuals. Trying to help the poorest is a most difficult challenge. We provide a preview of our partnership initiative to tackle problems of vulnerable people living in socially excluded communities of Stoke-on-Trent. Incidentally, they represent the bull's-eye of the city's long term unemployed. They are hard to reach and present in the later stages of disease to emergency services, often resulting in avoidable hospital admissions and significant health and social care costs. The strategy will recommend several initiatives and we urge partners to consider strengthening innovations around community engagement and better coordination of services for vulnerable groups.

I hope you will find this report stimulating and informative. The views expressed are mine and I would welcome any questions or comments.


Professor Zafar Iqbal
Acting Director of Public Health

¹Marmot M (2010). Fair society, healthy lives: the Marmot review. Final Report.

Chapter 1

Health Status



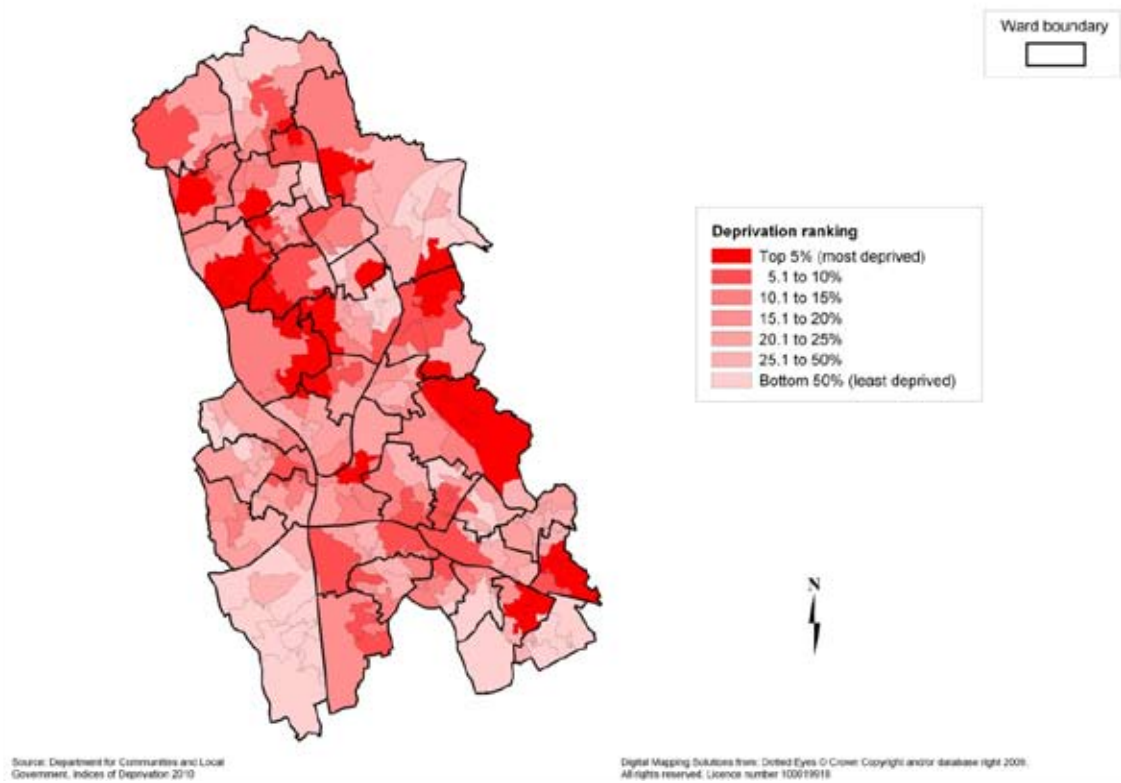
The City of Stoke-on-Trent

In helping to understand and set in context the health and lifestyles of people in Stoke-on-Trent, it is useful first to have a brief look at what the City is like. There were an estimated 240,072 people resident in the City of Stoke-on-Trent in 2010. The NHS Stoke-on-Trent population is largely coterminous with the City Council but has patients registered from outside Stoke-on-Trent giving a registered NHS population of 280,711 in 2011.

Within Stoke-on-Trent, people of a White British ethnic background account for 89.4% of the population, whilst people from a South Asian background (Indian, Pakistani or Bangladeshi) make up the largest ethnic minority group (4.6%, around 10,900 people). Children aged under 16 years make up 19.2% (46,079) of the population, whilst people aged 65 years and over account for 16.3% (39,152) of the total.

Stoke-on-Trent is highly deprived. Out of 326² local authorities in England, Stoke-on-Trent is the 16th most deprived (based on the 2010 Indices of Deprivation). There are a number of areas within Stoke-on-Trent that are among the top 5% most deprived areas in the whole of England (map 1). These include areas within the wards³ of Bentilee and Ubbertley, Abbey Hulton and Townsend (both located in the east of the city), Burslem Central, Moorcroft, Etruria and Hanley (in the west and north) and Meir North (in the south east).

Map 1. Index of Multiple Deprivation in Stoke-on-Trent 2010



² Based on the post April 2009 boundary changes for local authorities

³ See Appendix 1 for a list of ward names and locations

Of the 160 lower super output areas (LSOAs) that make up Stoke-on-Trent (an LSOA is a small geographical area containing approximately 1,500 people), 50 LSOAs (31.3%) were among the top 10% most deprived in England. There were 74,424 people in Stoke-on-Trent living in these top 10% most deprived LSOAs.

Information from a range of national and local sources shows some of the other characteristics of Stoke-on-Trent (table 1).

Table 1. Characteristics of Stoke-on-Trent

The value of the Stoke-on-Trent economy increased by 36.8% between 1995 and 2007 compared with a 90.5% increase in the UK
Levels of unemployment remain higher in Stoke-on-Trent compared with England
People in Stoke-on-Trent are more likely to be employed in low skilled jobs compared with England and Wales and, conversely, less likely to work in managerial and professional jobs
Average incomes in Stoke-on-Trent were 30.7% below the national average in 2006-2007
Almost 1 in 4 adults of working age in Stoke-on-Trent were in receipt of benefits in 2009 compared with 1 in 7 across England and Wales
30.2% of households in Stoke-on-Trent in 2009 were in receipt of Council Tax Benefit compared with 22.0% in England and Wales
More older people in Stoke-on-Trent were in receipt of Pension Credit compared with England
Children in Stoke-on-Trent were more likely to be excluded from secondary school, to be in care and to be on child protection registers compared with England
Nearly one third of children (32.3%) were living in poverty (living among families receiving means tested benefits in 2007) in Stoke-on-Trent compared with 22.4% in England (this equates to around 14,750 local children)
Educational attainment was low in Stoke-on-Trent: 39.7% of children leaving school with 5A*-C (including English and Maths) versus 50.9% in England in 2008/2009
Violent crime was high (crude rate of 27.8 per 1,000 population in 2008/2009) in Stoke-on-Trent compared with 16.4 in England (this equates to around 6,650 recorded incidents locally)

Against such a backdrop, the challenges facing the NHS and Local Authority in Stoke-on-Trent with regard to maintaining and improving people’s health, along with promoting and changing people’s lifestyles, are all too evident. This chapter consider these issues and looks at how the health and lifestyles of local people in Stoke-on-Trent have changed over time.

The health of people in Stoke-on-Trent

Health” and “well-being” are different but complementary concepts. Well-being is particularly difficult to measure, but includes elements of social support and general happiness, as well as physical and mental health. When measuring health we tend to stick to indicators that are more easily counted, and in this chapter we look at the health status of people in Stoke-on-Trent across a range of key health indicators. These include:

- Life expectancy
- All cause mortality
- Cancer
- Circulatory disease
- Respiratory disease
- Infant mortality
- Teenage pregnancy

However, in the future it is likely that we will find new ways to measure wellbeing, as national legislation requires the local authority to be responsible for health and wellbeing in future. They will do this through the creation of Health and Wellbeing boards, who will wish to record both the current indicators, and newly devised measures of wellbeing. The board will bring together those who buy services across the NHS, public health, social care and children’s services, elected representatives and representatives from a new independent consumer champion for health and social care called HealthWatch to plan the right services for their area. They will look at all health and care needs together, rather than creating artificial divisions between services.

Life expectancy

Life expectancy remains one of the best overall measures of health status. One of the reasons for this is that every death that takes place within an area is included in its calculation. It is also relatively straight forward to understand. Nationally, there are two life expectancy targets:

- To reduce the gap in life expectancy between the most affluent and most deprived areas of the country by 10% by 2010
- To increase life expectancy in England to 78.6 years for men and 82.5 years for women by 2010

We have looked at these national targets and considered how they can be applied locally. Based on this approach, our 2010 life expectancy targets are to reduce the gap in life expectancy between Stoke-on-Trent and England from 2.2 years to 1.6 years for males and from 2.0 years to 1.5 years for females. Progress towards hitting these targets in Stoke-on-Trent is shown in table 2.

⁴ The 2010 targets are based on the average of the three years 2009-2011 (here and elsewhere in the report)

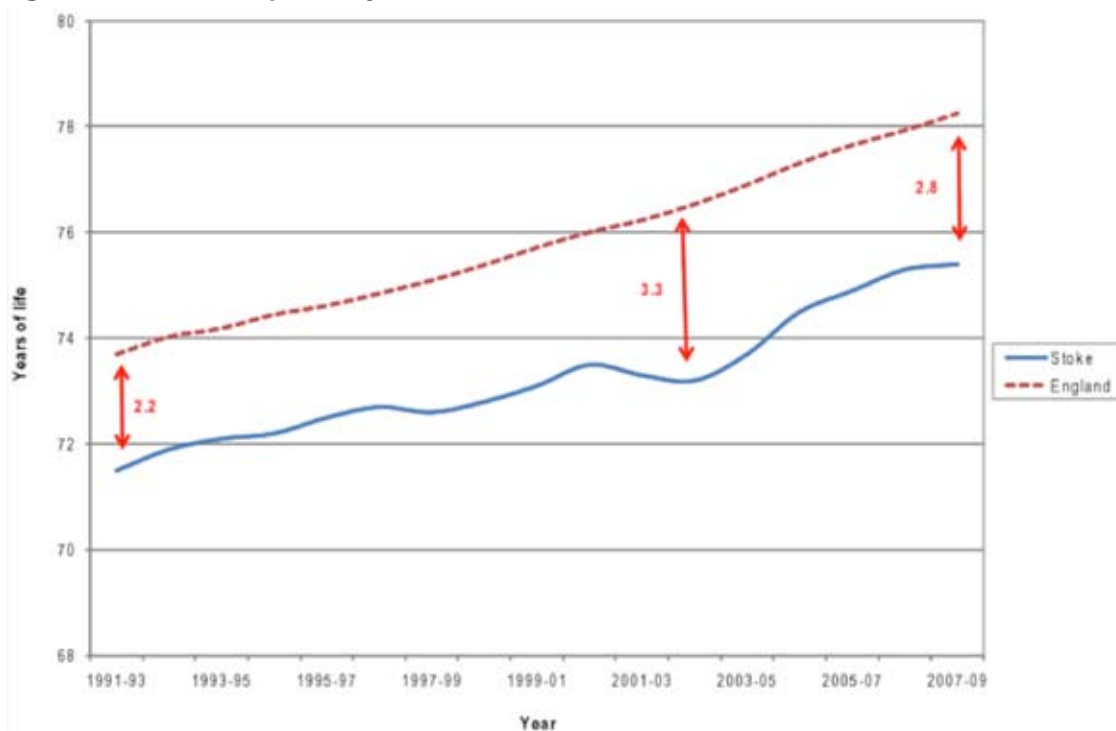
Table 2. Progress towards the 2010 life expectancy targets in Stoke-on-Trent

Sex	2007-2009 life expectancy	2007-2009 gap ⁵	2010 target gap	2010 Stoke
Males	75.4	-2.8	-1.6	77.0
Females	79.9	-2.4	-1.5	81.0

Source: Compendium of Clinical and Health Indicators 2011

There has been a steady increase in life expectancy for both males and females in Stoke-on-Trent since the early 1990s (figures 1 and 2). As noted above, current life expectancy for males in Stoke-on-Trent is 75.4 years and 79.9 years for females.

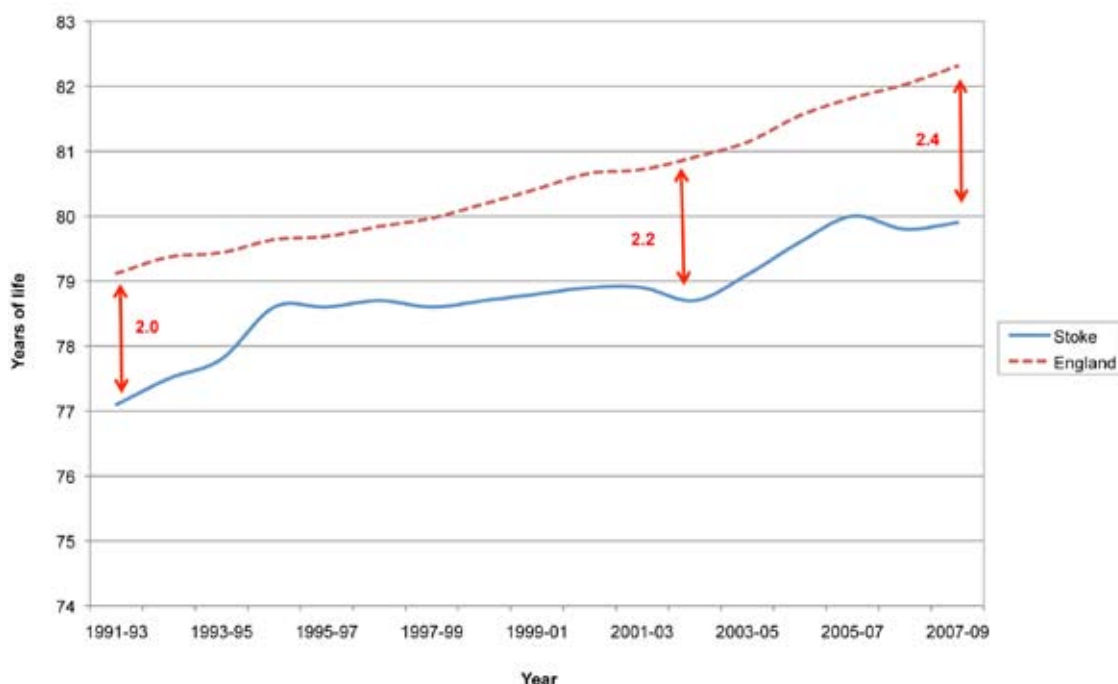
Figure 1. Male life expectancy in Stoke-on-Trent between 1991-1993 and 2007-2009



Source: Compendium of Clinical and Health Indicators 2011

⁵ Life expectancy gap between Stoke-on-Trent and England

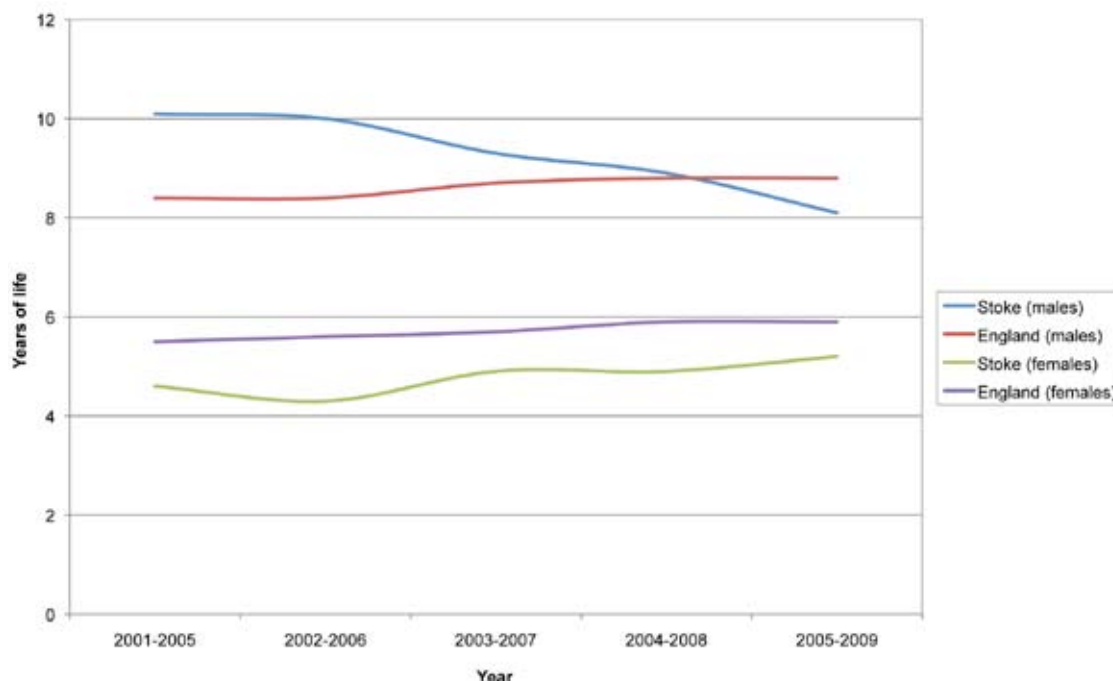
Figure 2. Female life expectancy in Stoke-on-Trent between 1991-1993 and 2007-2009



Source: Compendium of Clinical and Health Indicators 2011

Life expectancy can also be used to look at health inequalities within Stoke-on-Trent. The 2005-2009 gap in life expectancy between the most deprived and most affluent males in Stoke-on-Trent was 8.1 years. Since 2001-2005, this gap has fallen among males in Stoke-on-Trent, whilst it has increased in England. For females, the gap in Stoke-on-Trent was 5.2 years.

Figure 3. Difference in life expectancy between the most deprived and most affluent people in Stoke-on-Trent between 2001-2005 and 2005-2009

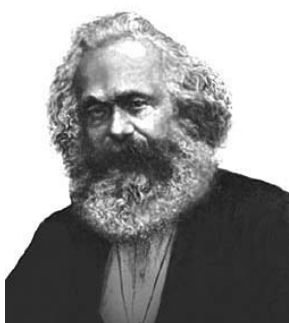


Source: Association of Public Health Observatories 2011

Although there remains some way to go for the 2010 life expectancy targets to be met in Stoke-on-Trent, especially when considered in the context of the recent and ongoing economic downturn and the detrimental impacts this is having upon people’s health, the overall take home message from Stoke-on-Trent remains very encouraging: people are living longer, our health inequality gaps are lower than England, and fewer people, including infants, are dying each year (see later sections).

Causes of death

Although the pottery industry brought great prosperity it also contributed to many health and social problems in the 19th Century. The working conditions and associated health problems are described in detail by Karl Marx in Das Kapital. Marx made reference to

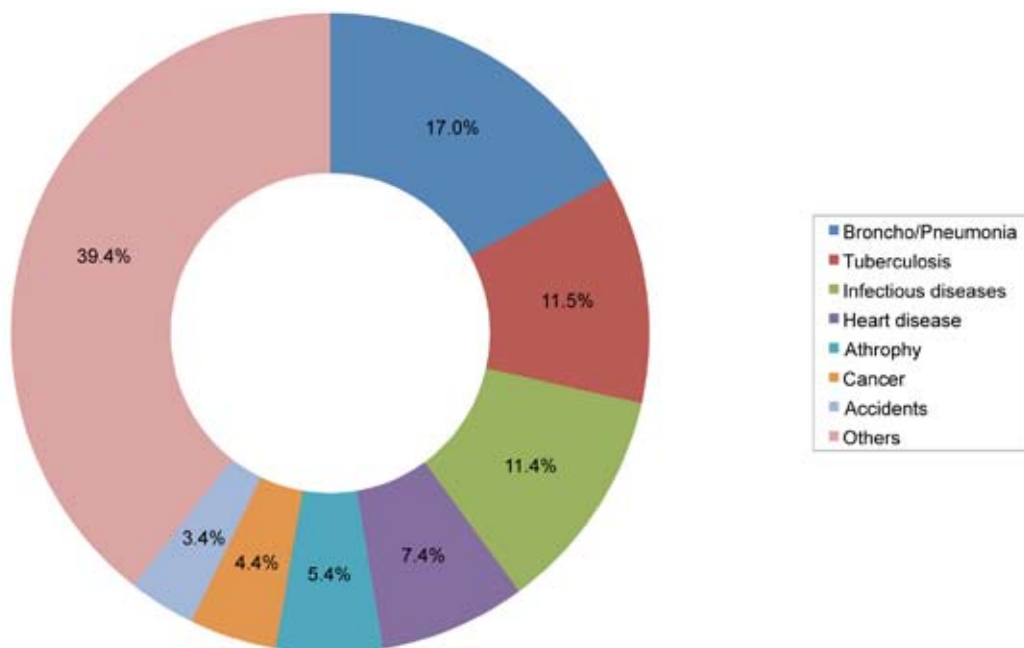


the “extraordinary short life expectancy in the Potteries” and “great success is accompanied with the physical deterioration, widespread daily suffering and early death of working people”.

At the beginning of the 20th Century, the main killers of local people were respiratory diseases and infectious diseases (figure 4). As the century progressed, the numbers of deaths associated with these conditions declined, and more people started to die from circulatory disease and cancer (figures 5 and 6).

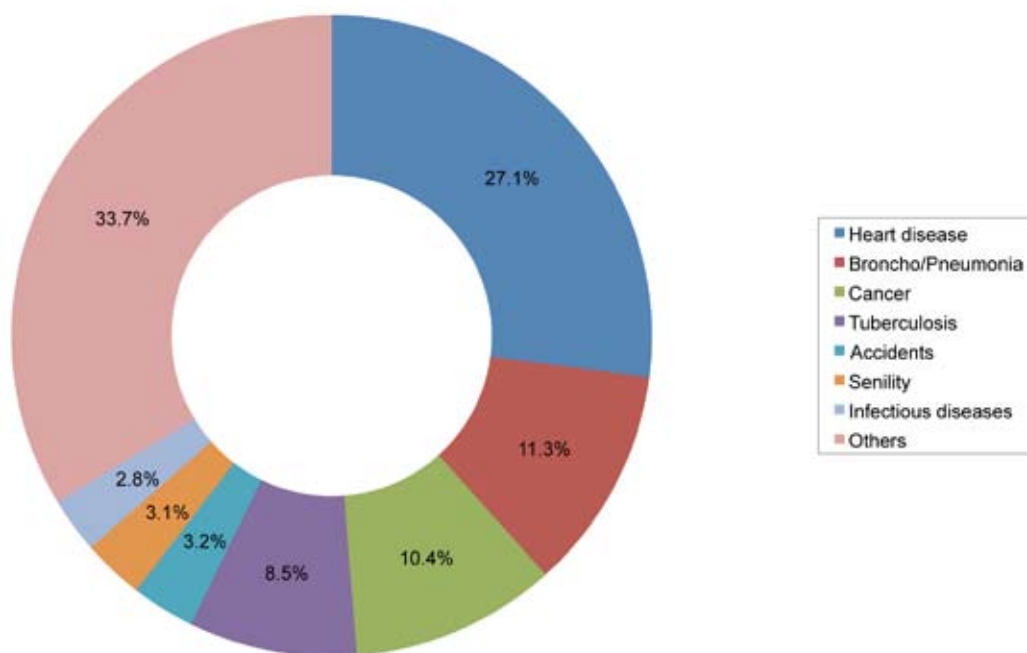
In 2009, there were 2,475 deaths in total in Stoke-on-Trent. The three main killers of local people were cancer, circulatory disease and respiratory disease. These conditions, which are also the three biggest killers nationally, were responsible for 76.7% of all deaths in Stoke-on-Trent in 2009 (figure 7).

Figure 4. Major causes of deaths (all ages) in Stoke-on-Trent in 1910



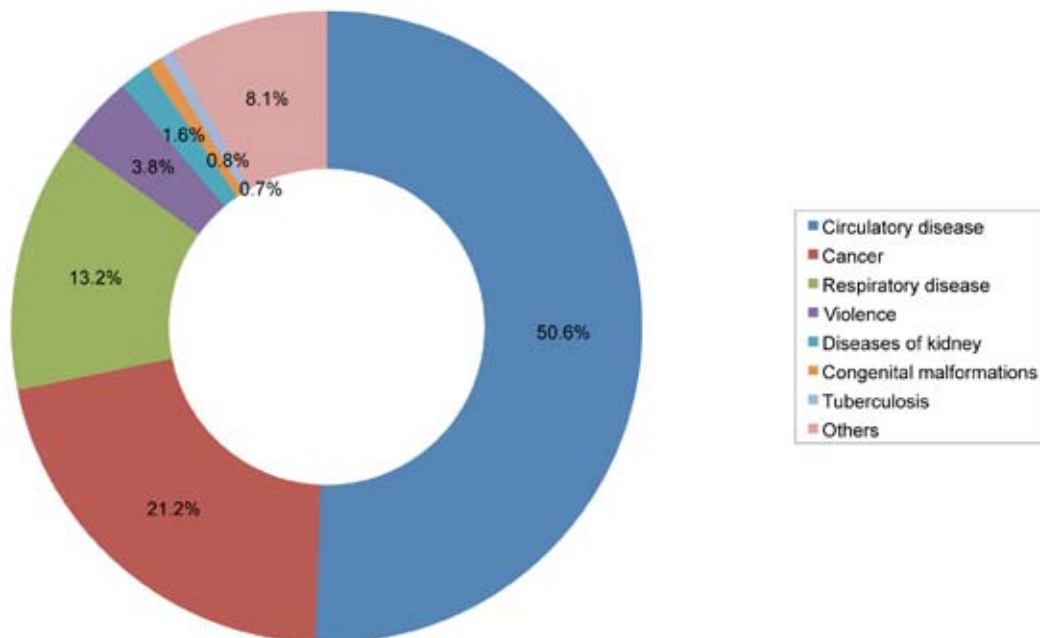
Source: University of Leeds 1989

Figure 5. Major causes of deaths (all ages) in Stoke-on-Trent in 1935



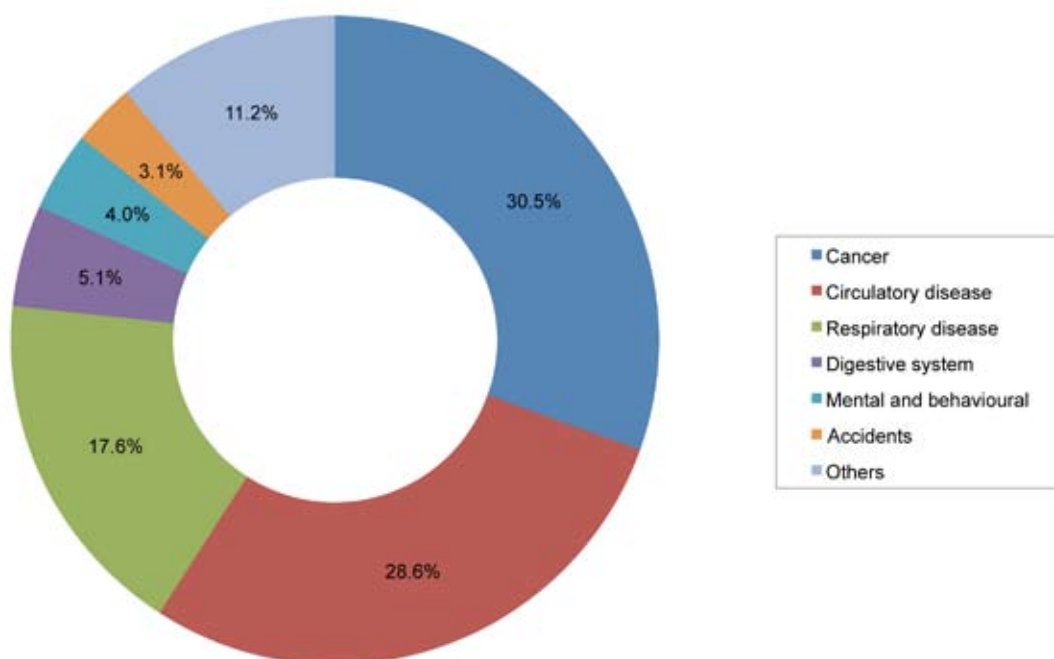
Source: University of Leeds 1989

Figure 6. Major causes of deaths (all ages) in Stoke-on-Trent in 1972



Source: University of Leeds 1989

Figure 7. Major causes of deaths (all ages) in Stoke-on-Trent in 2009



Source: Office for National Statistics 2010

Of the 2,475 people who died in Stoke-on-Trent in 2009, 23 (0.9%) were infants aged under one year, 48 (1.9%) were aged between 1 and 34 years, 870 (35.2%) were aged between 35 and 74 years, and 1,534 (62.0%) were aged 75 years and over.

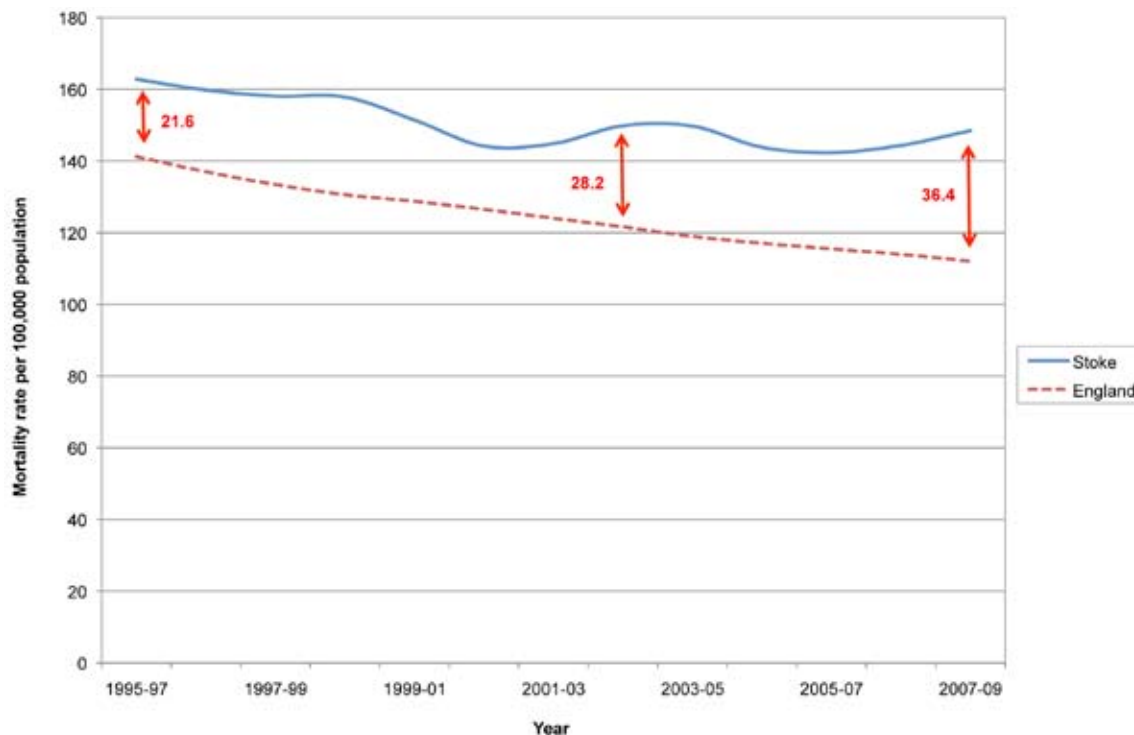
Cancer

Cancer is now the biggest killer of people in Stoke-on-Trent, replacing circulatory disease as the number one killer (nationally, circulatory disease remains the biggest killer). Of the 2,475 people who died locally in 2009, 755 (30.5%) died from cancer (compared with 28.0% in England). Deaths from lung, breast, colorectal, prostate and stomach cancer are among the most common. Nationally, there are two cancer targets:

- To reduce mortality from cancer by 20% in people aged under 75 years by 2010
- To reduce by 6% the gap between the bottom fifth of areas with the worst health and deprivation indicators and the population as a whole by 2010

We have looked at these national targets and considered how they can be applied locally. Based on this approach, our 2010 cancer targets are to reduce mortality by 20% by 2010, and to further reduce the mortality gap between Stoke-on-Trent and England by an additional 6%. Progress towards hitting these targets is shown in figure 8.

Figure 8. Mortality from cancer (people aged under 75) in Stoke-on-Trent between 1995-1997 and 2007-2009



Source: Compendium of Clinical and Health Indicators 2011

Mortality rates from cancer (among people aged under 75 years) have fallen in Stoke-on-Trent since 1995-1997. The current 2007-2009 rate of 148.5 (per 100,000 population) means there were 164 fewer deaths in Stoke-on-Trent compared with 1995-1997. However, although the rate and numbers of deaths has fallen, a further look at figure 8 shows that the mortality gap between Stoke-on-Trent and England is widening. If these trends are maintained, our 2010 cancer targets are currently unlikely to be met.

This remains one of the main challenges facing the NHS and Local Authority in Stoke-on-Trent as we move forward together in partnership. A local cancer prevention plan has been implemented that will have an impact on reducing the numbers of deaths. However this plan will predominantly only have a major impact in the long term as typically there is a time lag between exposure to known risk factors and the development of particular cancers. A good example of this time gap is research evidence showing a 20 year gap between increases in the number of smokers and the subsequent increases in the number of people developing lung cancer, initially for males and then for females.

Circulatory disease

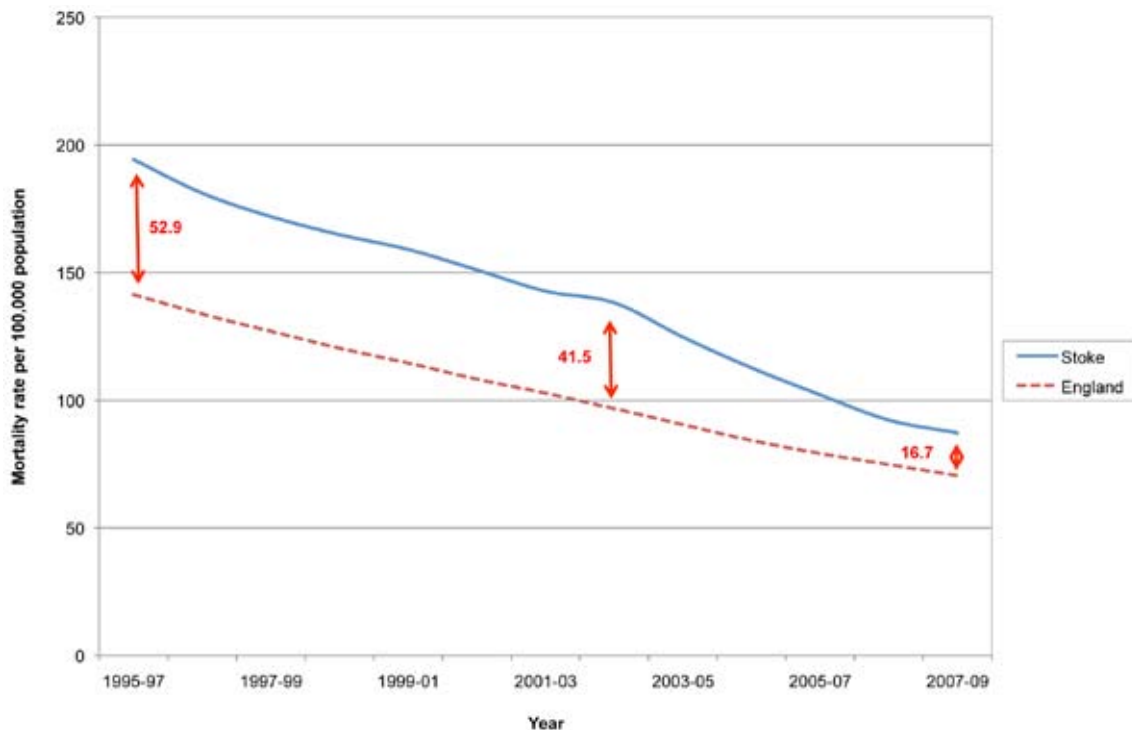
Circulatory disease (which includes conditions such as heart disease, stroke, hypertension) is the second biggest killer of local people. Of the 2,475 people who died in Stoke-on-Trent in 2009, 708 (28.6%) died from circulatory disease (compared with 32.4% in England). Nationally, there are two circulatory disease targets:

- To reduce mortality from circulatory disease by 40% in people aged under 75 years by 2010

- To reduce by 40% the gap between the bottom fifth of areas with the worst health and deprivation indicators and the population as a whole by 2010

We have considered these national targets and looked at what they mean for Stoke-on-Trent. Based on the national approach, our 2010 circulatory disease targets are to reduce mortality by 40% by 2010, and to further reduce the mortality gap between Stoke-on-Trent and England by an additional 40%. Progress towards hitting these targets is shown in figure 9.

Figure 9. Mortality from circulatory disease (people aged under 75) in Stoke-on-Trent between 1995-1997 and 2007-2009



Source: Compendium of Clinical and Health Indicators 2011

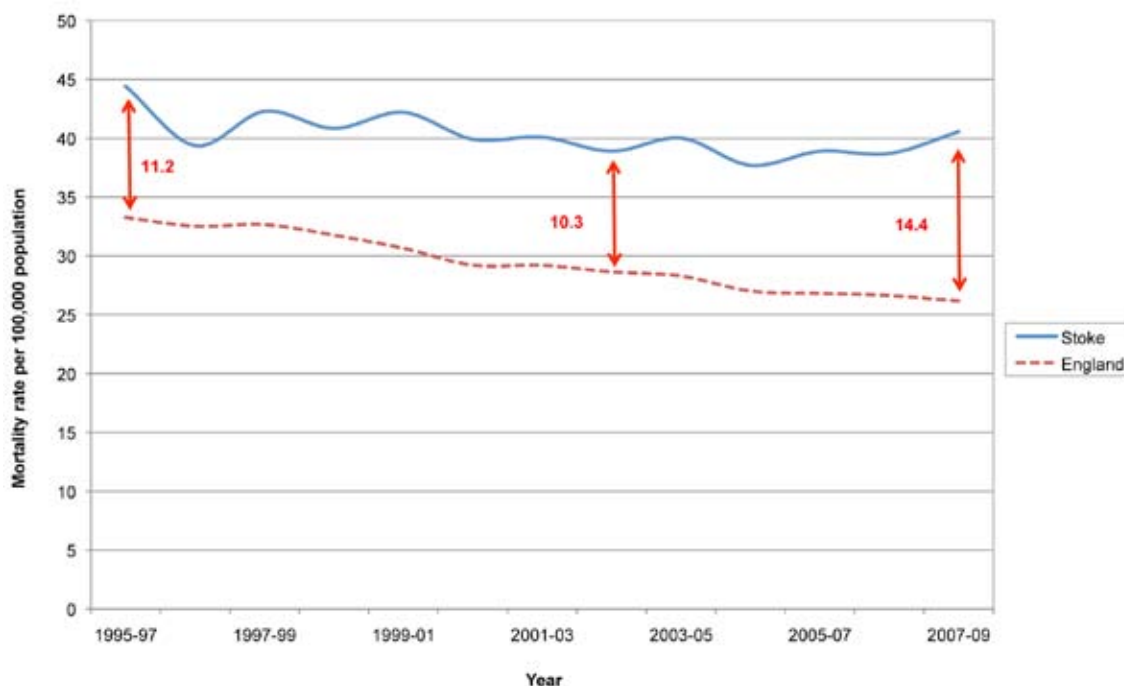
Mortality rates from circulatory disease (among people aged under 75 years) continue to fall in Stoke-on-Trent and at a much *faster* rate compared with England. The current 2007-2009 rate of 87.2 (per 100,000 population) means there were 945 *fewer* deaths in Stoke-on-Trent compared with 1995-1997. As reported in last year’s annual report, this performance in Stoke-on-Trent has been so good that we have hit our 2010 circulatory disease targets *early*.

Respiratory disease

Unlike cancer and circulatory disease, there are no specific national targets for respiratory disease. However, respiratory disease (which includes conditions such as influenza, pneumonia, chronic bronchitis, emphysema, chronic obstructive pulmonary disease (COPD), asthma) remains the third biggest killer of people in Stoke-on-Trent. This is in part due to the mining and manufacturing history of the city, along with high and heavy levels of smoking. Of the 2,475 local people who died in 2009 in Stoke-on-Trent, 435 (17.6%) died from respiratory disease (compared with 13.8% in England).

Mortality rates from respiratory disease⁶ (among people of all ages) have fallen in Stoke-on-Trent since 1995-1997 (figure 10). The current 2007-2009 rate was 40.6 (per 100,000 population). However, although the rate has fallen, a further look at figure 10 shows that the mortality gap between Stoke-on-Trent and England is widening. Furthermore, the actual numbers of people dying from respiratory disease has remained unchanged in Stoke-on-Trent since 1995-1997. The challenge facing the NHS and Local Authority in Stoke-on-Trent is to reduce the burden of smoking related diseases and levels of morbidity and mortality associated with COPD in particular through better proactive care.

Figure 10. Mortality from respiratory disease (people of all ages) in Stoke-on-Trent between 1995-1997 and 2007-2009



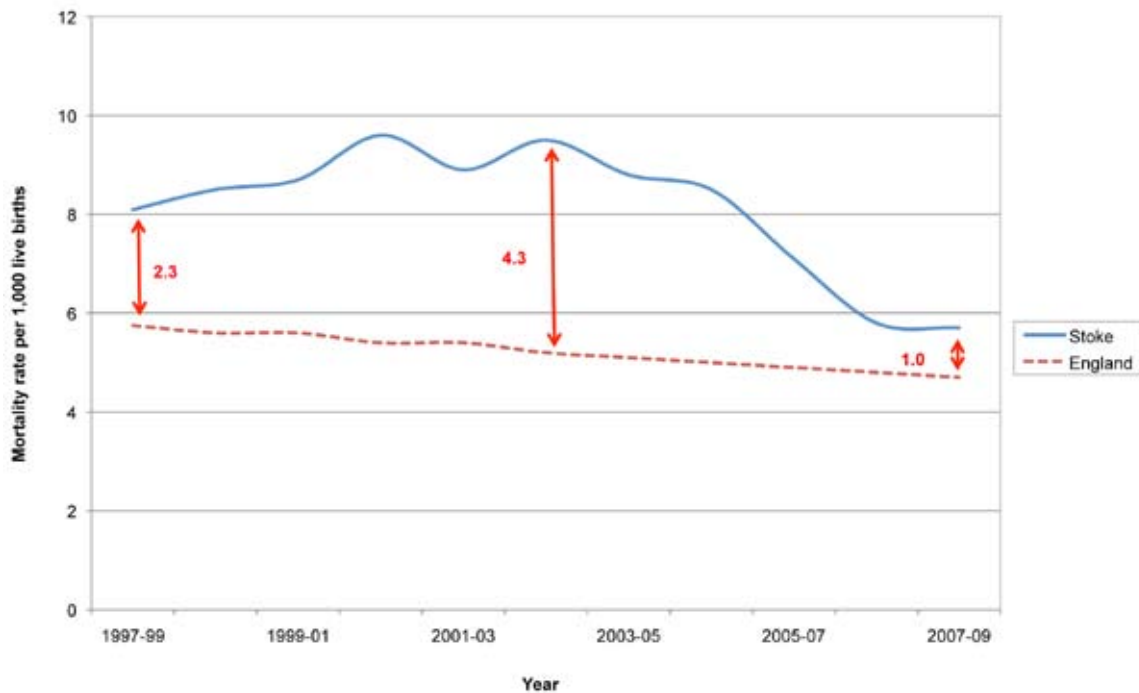
Source: Compendium of Clinical and Health Indicators 2011

Infant mortality

Infant mortality looks at deaths among infants during the first year of life. Although the numbers of deaths are low, it remains a very important contributor to overall life expectancy. Indeed, research has shown that the major driving force behind increasing levels of life expectancy has been a reduction in infant mortality.

Infant mortality rates continue to fall in Stoke-on-Trent and at a much faster rate compared with England (figure 11). The current 2007-2009 rate of 5.7 (per 1,000 live births) means there were 23 fewer deaths in Stoke-on-Trent (from 86 to 63) compared with 2002-2004 (when the gap between Stoke-on-Trent and England was at its greatest). Nationally, infant mortality has been defined as a good indicator of a population’s health status. Therefore the recent reduction in infant mortality infers that local health status has started to improve.

⁶ Defined here as bronchitis, emphysema and other chronic obstructive pulmonary disease

Figure 11. Infant mortality in Stoke-on-Trent between 1997-1999 and 2007-2009

Source: Compendium of Clinical and Health Indicators 2011

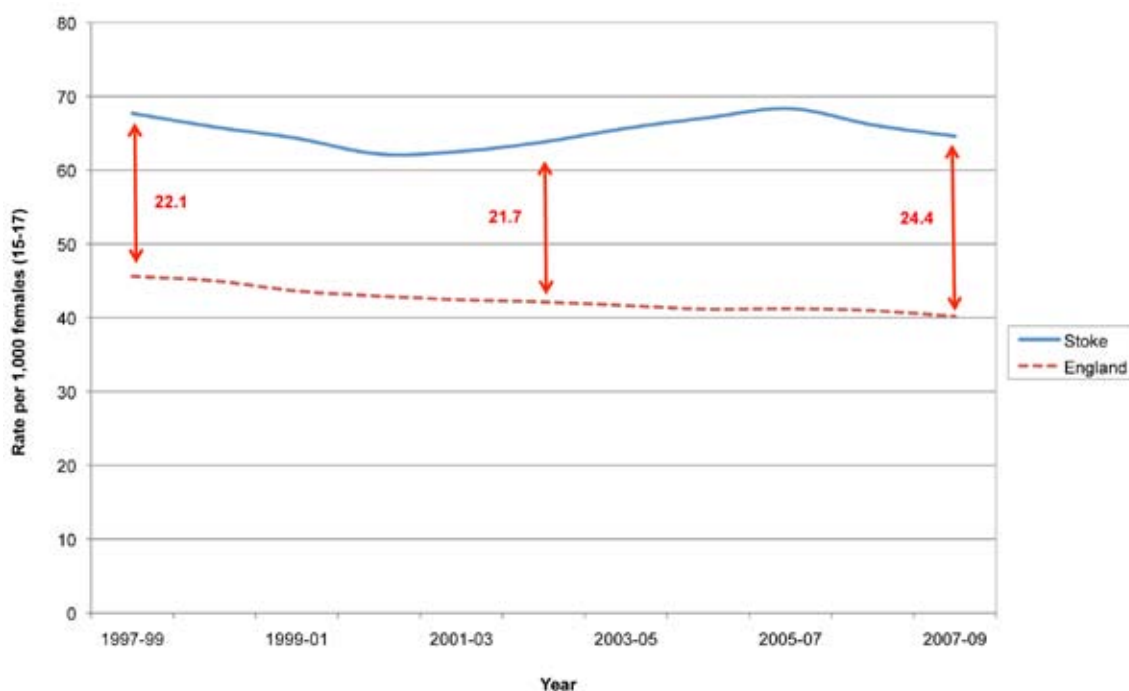
In recognising the fall locally in infant deaths, data from the Perinatal Institute shows that pregnant women in Stoke-on-Trent (when compared with the West Midlands) have: high rates of early antenatal booking (that is, booking before 13 weeks); high rates of continuity of carers (in regards to midwives); higher rates of detecting low birth weight babies (which is particularly important in offering appropriate interventions).

However it is of concern that smoking rates remain unacceptably high in pregnancy and more needs to be done to enable midwives and doctors to make referrals into the pregnancy smoking cessation services.

Teenage pregnancy

Teenage pregnancy can have a detrimental impact upon the health of both mothers and their babies. Babies born to teenage mothers are more likely to be born prematurely, to have a low birth weight, to have a higher risk of cot death and are more likely to be born into poverty. For mothers, teenage pregnancy can increase the likelihood of poor educational attainment, unemployment and poverty.

Teenage pregnancy rates have started to fall in recent years in Stoke-on-Trent (figure 12). The current 2007-2009 rate of 64.6 (per 1,000 females aged 15-17) means there were 862 teenage pregnancies compared with 969 in 2005-2007, a fall of 107. Whilst this reduction is encouraging, it is important to recognise that the current gap between Stoke-on-Trent and England is higher than it was in 1997-1999.



Sources: Compendium of Clinical and Health Indicators 2011, Office for National Statistics and Department for Education 2011

Whilst the transformation of sexual health services has shown clear benefits we need a fresh look at what further initiatives are needed to make reductions in teenage pregnancies.

The lifestyles of people in Stoke-on-Trent

The relationship between health and other factors is extremely complex. A person’s health is determined by many different social factors, such as their level of education, the type of work they do, the quality of housing, the area in which they live. The lifestyles we choose to lead also have a big impact upon our health. Smoking, taking illegal drugs, drinking, physical activity, the food we eat, along with many other lifestyle issues, all have an impact upon our health, both good and bad. In this section, we consider some of these lifestyle issues and the impact they have upon people’s health. These lifestyles include:

- Smoking
- Supporting smokers to stop
- Smoking during pregnancy

- Breastfeeding
- Alcohol admissions
- Obesity and physical activity
- Healthy eating

Smoking

Smoking is the biggest single cause of preventable death and ill health in England, and accounts for between 1 in 6 and 1 in 10 of all deaths. It is also a major cause of health inequalities. In Stoke-on-Trent, around 540 people (aged 35 and over) die from smoking related diseases each year, which equates to 1.5 smoking related deaths to local people every day. The local costs to the NHS in terms of smoking related hospital admissions were approximately £5.4m in 2008/2009. It is estimated that the cost of smoking related sick days is around £11m in Stoke-on-Trent each year, whilst the wider costs to the local economy are estimated at £51m per year. As a further example of the wider impact of tobacco use, in 2007-2008 Staffordshire Fire and Rescue reported that 49 fires were caused by smoking related materials, resulting in three deaths.



Smoking accounts for half the difference in life expectancy between the highest and lowest social groups. This is particularly pertinent locally given the high levels of deprivation across the city. Socially disadvantaged people are more likely to:

- Have grown up with exposure to second-hand smoke in the home
- Take up smoking at a young age
- Smoke more cigarettes a day
- Take more nicotine and tar from the cigarettes they smoke

Further to this, socially and economically disadvantaged people who smoke are no less likely to want to quit smoking, but are less likely to succeed due to social-cultural barriers.

The latest 2009/2010 estimates for adults (aged 18 and over) smoking in Stoke-on-Trent is 25.1% (compared with 21.2% in England)⁷. Based on this latest estimate, there are around 47,300 adults currently smoking in Stoke-on-Trent, which gives an indication of the size of the challenge facing the NHS and Local Authority in Stoke-on-Trent.

The impact of tobacco use is far reaching and must be tackled with a range of interventions not only to support people who smoke to quit but also to protect the whole population from the harmful effects of second-hand smoke and create an environment where non-smoking is the 'norm'. The negative impact of exposure to second-hand tobacco smoke is now widely recognised as a significant cause of ill health and death in non-smoking adults and children. However, 27% of young people in Stoke-on-Trent living with someone who smokes are exposed to tobacco smoke in the home, and 40% to second-hand smoke in the car.

7. Nationally estimates are now for 18 years and over rather than 16 years and over resulting in lower reported prevalence than previously

In addition, many children are brought up in families and communities where smoking is an ingrained behaviour, and children living with someone who smokes are around three times more likely to take up smoking themselves. Youth smoking rates in Stoke-on-Trent are 3% above the national average, with 9% of secondary school children classing themselves as a 'regular smoker'⁸. Furthermore, 25% of all children who had ever tried smoking had done so before they started secondary school. We must therefore prioritise actions which tackle these social norms so that young people understand the true dangers of taking up smoking and are empowered to reject smoking.



NHS

The Stoke on Trent Stop Smoking Service provides free stop smoking support including friendly advice and stop smoking medicines such as patches and gum for the cost of a prescription.

For further details call
0800 085 0928

"Two reasons I need to quit"

SMOKEFREE

Supporting people who smoke to stop

Smoking, as we have seen, continues to be the main cause of premature death and preventable ill health in the country. It is the major cause of cancer, heart disease and COPD. In short, smoking kills people. Therefore, helping people to stop smoking remains at the forefront of saving lives and improving the health of both people who smoke and the whole population especially children within the home. Here, we report on the numbers of people who have attempted to quit smoking and who have remained quit four weeks later (an indication of successfully giving up smoking), following advice and support received from the local NHS Stop Smoking Service.

The number of people who smoke using the Stoke-on-Trent Stop Smoking Service has increased over the last three years from 4496 quit dates set (QDS) in 2008-2009, with 1852 of those remaining quit four weeks later (4WQ), to 5,700 QDS and a record 2,465 number of 4WQ in 2010/2011. We have also seen an increase in the quit rate locally (the percentage of people who quit after setting a quit date) locally. The quit rate is a marker of the quality of the service being offered to people who smoke, and although the local

⁸. Nationally defined as smoking more than one cigarette per week (data from the Stoke-on-Trent Young People's Lifestyle Survey 2009)

rate still remains slightly lower than the national average, it is on an upward trend where overall in England the quit rate is falling.

Smoking during pregnancy

Smoking during pregnancy, more often than not, harms an unborn baby as well as the mother and will often result in both short and long term health difficulties for the child once born. Smoking during pregnancy can increase the risk of early miscarriage, being stillborn, the baby being born prematurely, having a low birth weight, being at increased risk of cot death, having poorer lung function and at increased risk of respiratory disease. At its worst, smoking can kill unborn babies. Therefore encouraging expectant mothers (and fathers) to stop smoking remains a top priority. There were 864 (22.6%) women smoking during pregnancy in NHS Stoke-on-Trent in 2010/2011. This is compared to 13.5% of mothers smoking during pregnancy in England for the same time period. In the West Midlands, Stoke-on-Trent has the highest percentage of mothers who smoke at the time of getting pregnant and more work needs to be done to encourage midwives and doctors to motivate mothers to quit smoking and refer to smoking cessation services. It must be noted that once mothers are in the smoking cessation services they have a much higher chance of quitting.

With regard to the overall issues of smoking in Stoke-on-Trent, the take home message remains encouraging: fewer adults are smoking, fewer women are smoking during pregnancy, and the percentage of people quitting smoking at four weeks is increasing. Whilst none of these figures have changed dramatically, the direction of travel is going the right way, which can only be good for people's health and the city of Stoke-on-Trent in general.

Breastfeeding

Breastfeeding provides the very best and most appropriate nutrition for infants, and has been shown to have a range of health and social benefits. These include helping to protect infants against infection, respiratory diseases, gastroenteritis, ear infections, urinary tract infections, allergies and obesity. Compared with bottle feeding, breastfeeding is free, which results in large financial savings for families. Similarly, as breastfed babies are far less likely to be admitted to hospital for certain conditions, the potential savings to the NHS are huge. In short, the phrase *Breast is Best* is definitively and unquestionably true.



The percentage of mothers who start breastfeeding their babies (in the first 48 hours) after they were born *increased* in NHS Stoke-on-Trent from 44.0% in 2004/2005 to 61.2% in 2010/2011. This equates to 2,339 babies (out of 3,823) being breastfed within the first 48 hours in

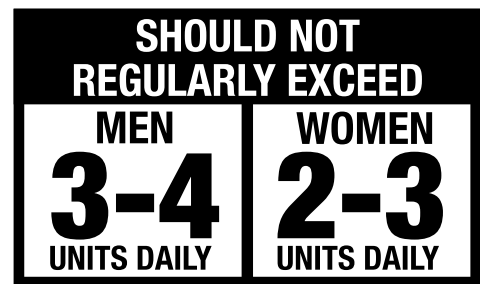
NHS Stoke-on-Trent in 2010/2011. The percentage of babies’ breastfed also increased in England during this time from 63.0% to 73.7%, but the rate of increase in NHS Stoke-on-Trent was *greater* compared with England.

Another indicator of breastfeeding which is regularly used is the percentage of infants who are breastfed at 6-8 weeks. In NHS Stoke-on-Trent the percentage of infant’s breastfed at 6-8 weeks *increased* from 26.1% in 2008/2009 to 32.3% in 2010/2011. In England, the percentage increased during this time from 36.3% to 45.7%, which was similar to the local increase. Both measures of breastfeeding are showing an overall increase in the percentage of infants being breastfed, and hence, more and more local children are being exposed to and receiving the correct and most beneficial nutrients which their young bodies require.

Breast feeding needs to remain a public health priority as it makes an important contribution to the early years agenda.

Alcohol admissions

In 2007-2008, 20.1% of adults (aged 16 and over) were estimated to be binge drinking in England, whilst there were over one million hospital admissions for alcohol related harm in England in 2009/2010. Harmful alcohol use has serious health and social consequences for affected individuals. Excessive drinking is associated with higher death rates from circulatory disease, cirrhosis of the liver, stomach cancers, suicides and violence. The health of others is also affected through increases in physical and sexual assaults, crime, motor accidents, domestic abuse and child abuse.



Hospital admissions for alcohol related harm increased in Stoke-on-Trent from 1,920.7 (per 100,000 population, all ages) in 2005/2006 to its current rate of 2,129.0 in 2009/2010. This means that the number of hospital admissions for alcohol related harm increased in from 5,079 to 5,672 per year. Compared with England, the increase in the rate of admissions in Stoke-on-Trent has been slower, which has meant the gap in the rate between Stoke-on-Trent and England has fallen. The NHS and Local Authority have invested a significant amount of resources in redesigning and enhancing the capacity of services to deal with these problems across the city. It is hoped future changes will lead to a reduction in hospital admissions for alcohol related harm.



Obesity and physical activity

Obesity (classified as a Body Mass Index (BMI) of 30 and over) is associated with an increased risk of heart disease, high blood pressure, stroke, diabetes and certain types of cancers. Obesity is also associated with poverty and deprivation. One of the consequences of these interactions is that obese people have a reduced life expectancy of around nine years compared with the general population. Obesity continues to be a growing problem in England. Estimates from 2009 suggest that 23.0% of adults (aged 16 and over) were obese compared with just 14.9% in 1993 (a relative increase of 54.1%). If we combine the percentage of adults who are obese with those who are overweight (classified as a BMI of 25 and over), we find that a staggering 61.3% of adults in England were either overweight or obese in 2009.

Locally, 27.6% of adults (aged 16 years and over) were estimated to be obese in Stoke-on-Trent in 2006-2008. This estimate suggests that around 53,500 local people are obese. This poses one of the biggest challenges facing the NHS and Local Authority in Stoke-on-Trent.

Obesity is also an issue among children. Between 2006/2007 and 2009/2010, the percentage of obese school children aged 4-5 years increased in Stoke-on-Trent from 10.9% to 12.6% (compared with a fall in England from 9.9% to 9.8%), whilst among 10-11 year olds, the percentage increased locally from 20.3% to 21.9% (compared with an increase of 17.5% to 18.7% in England). These increases among schoolchildren once again highlight the challenges we face locally.

The recent rise in prevalence of obesity in the UK is known to be associated with the wider determinants of health, including education, employment and access to transport. One of the main reasons why people become obese is due to a lack of physical activity and exercise. Between 2005/2006 and 2009/2010, the percentage of adults (aged 16 years and over) estimated to be taking part in the recommended levels of physical activity⁹ increased in Stoke-on-Trent from 8.0% to 9.9% (compared with a *fall* in England during this time from 11.6% to 11.5%). This means that to around 19,200 local people are undertaking the recommended levels of physical activity which is positive. However it is important to highlight that 174,800 local people are not undertaking sufficient physical activity.

⁹ Participation in moderate intensity sport and active recreation on 20 or more days in the previous four weeks (equivalent to 30 minutes on five or more days per week)



Healthy eating

There is evidence that eating at least five portions of fruit and vegetables a day reduces risk of death from conditions such as heart disease, stroke and cancer by up to 20%. Diet may contribute to the development of one third of all cancers, and increasing fruit and vegetable consumption is the second most important cancer prevention strategy (after smoking). Eating fruit and vegetables can also help people achieve other dietary goals such as increasing fibre intake, reducing fat intake, and helping maintain a healthy weight.

The percentage of adults (aged 16 years and over) estimated to be eating five portions of fruit and vegetables a day *increased* in Stoke-on-Trent from 15.3% in 2001-2002 to 20.7% in 2006-2008 (in England, the percentage increased from 23.8% to 28.7%). This means that around 40,200 people in Stoke-on-Trent are eating five portions of fruit and vegetables a day. This *greater* increase locally has resulted in a reduction in the healthy eating gap between Stoke-on-Trent and England, which is encouraging for the city.

Health and lifestyles summary

In this chapter we have looked at a range of different health and lifestyle indicators. This is not an exhaustive list, but we have tried to capture, as best as we can, those key indicators which are likely to have had the greatest impact upon people's health and wellbeing in Stoke-on-Trent. For some indicators, performance has been very good; whilst for others, there is room for improvement. The performance of the health and lifestyle indicators examined in this chapter are summarised in table 3.

Table 3. Performance of health and lifestyle indicators in Stoke-on-Trent

Indicator	Trend ¹	Gap ²
Health		
Life expectancy (males)	▲	Increasing
Life expectancy (females)	▲	Increasing
All cause mortality	▼	Increasing
Cancer	▼	Increasing
Circulatory disease	▼	Reducing
Respiratory disease	▼	Increasing
Infant mortality	▼	Reducing
Teenage pregnancy	▼	Increasing
Lifestyles		
Smoking	▼	Increasing
4 week smoking quitters	▲	Reducing
Smoking during pregnancy	▼	Increasing
Breastfeeding (at birth)	▲	Reducing
Breastfeeding (6-8 weeks)	▲	Increasing
Alcohol admissions	▲	Reducing
Obesity (adults)	▼	Reducing
Obesity (Reception children)	▲	Increasing
Obesity (Year 6 children)	▲	Increasing
Physical activity	▲	Reducing
Healthy eating	▲	Reducing

¹ Stoke-on-Trent performance between baseline and current year

² Gap between Stoke-on-Trent and England

Whilst there have been considerable improvements (shown by the green arrows) across the majority of health and lifestyle indicators in Stoke-on-Trent, the scale of the existing and future challenges facing the city should not be underestimated (table 4). Tackling these issues will require a range of large, innovative and sustainable interventions.

Table 4. Health and lifestyle characteristics of adults (aged 16 and over) in Stoke-on-Trent

Characteristic	Estimate of numbers
Overweight (BMI 25 to 29.9)	74,300
Obese (BMI ≥ 30)	53,500
Smoking (18+)	47,300
Increasing and high risk drinking	41,100
Not eating 5 portions of fruit and veg a day	153,800
Not doing recommended levels of physical activity	174,800



Chapter 2



Industrial Scale Interventions in Stoke-on-Trent

Introduction



This chapter introduces a selection of recent local industrial scale intervention programmes that have been implemented across Stoke-on-Trent. The purpose is to provide readers of this report with a flavour of the type of work undertaken, the scale of projects implemented and the outcomes and recognition we have achieved both at a local and national level through effective partnerships.

In 2006/2007 NHS Stoke-on-Trent undertook a fundamental review of the historic poor progress toward improving health outcomes within Stoke-on-Trent. There were major reviews (Floor Target Action Plans) of the life expectancy, infant mortality and teenage pregnancy targets. These reviews led to a strategic shift of local policy on public health. The Public Health function within Stoke-on-Trent was strengthened. A number of well resourced industrial scale public health programmes were developed which aimed to address specific local health needs. The new strategic direction also influenced delivery of health care services, in particular primary care services.

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review of the historic poor progress toward improving health outcomes within Stoke-on-Trent. There were major reviews (Floor Target Action Plans) of the life expectancy, infant mortality and teenage pregnancy targets. These reviews led to a strategic shift of local policy on public health. The Public Health function within Stoke-on-Trent was strengthened. A number of well resourced industrial scale public health programmes were developed which aimed to address specific local health needs. The new strategic direction also influenced delivery of health care services, in particular primary care services.

However, we need to build on our initial success. Our future aim must be to provide both prevention and treatment support to an even greater number of the population of Stoke-on-Trent. Looking to the future this will require understanding why people who are offered the opportunity to participate in programmes decide to decline. For example, only half of the people offered health checks are agreeing to participate in the programme.

Who and why are people not able to/choose not to take up the opportunities available to them?

To ensure that the current situation improves there will need to be a clear and effective partnership between NHS and local authority staff. This is particularly pertinent to people defined as vulnerable, often they are described as 'hard to reach'. Chapter 3 will describe who these people are and why it is important that we identify people and improve access to healthcare services for them.

NHS Stoke-on-Trent's Primary Prevention Programme

In Stoke-on-Trent rates for circulatory diseases such as diabetes, hypertension, coronary heart disease and strokes are all well above the national average. Furthermore, the city has high rates of physical inactivity, smoking and obesity; which increases the risk of developing circulatory disease. In many cases changes to lifestyle and medication can



reduce a person's risk and may even stop the process of them developing a circulatory disease condition. It was estimated that up to 20,000 people in Stoke-on-Trent were at high risk of suffering of adverse cardiac event but did not have signs or symptoms of heart disease.

Considering the scale of the challenge that faced our city, from 2007 the Primary Care Trust (PCT) began developing two very important programmes to improve the health of local people; these were the Primary Prevention and Lifestyle Programmes. The Primary Prevention Programme involved identifying patients who were free of circulatory disease but could be at high risk of developing these conditions. A specialist computer package called Oberoi was installed in all general practices in the city; allowing us to use existing patient information to

identify the people at highest risk of developing circulatory disease. These patients were then invited to receive a circulatory disease risk assessment/health check to assess their likelihood of developing circulatory disease in the next 10 years. For those patients found to be at high risk of circulatory disease or who had been diagnosed with a circulatory condition, practices were able to offer referral to the Lifestyle Programme. Patients could therefore work with a specially trained Lifestyle Coach to help them change their lifestyles. Furthermore, they had the opportunity to access a range of initiatives such as physical activity and slimming world which was free of charge for a set period of time.

So if the Primary Prevention programme is about identifying people at risk of developing circulatory disease earlier, the Lifestyle Programme is about allowing them to manage that risk/condition more effectively through making positive changes in their lifestyle. Since the programmes began over 12,000 people (as at March 2011) have received a circulatory disease risk assessment/health check and 5,000 of these and others with existing conditions have been referred to the Lifestyle Programme. By 2013 we aim to have screened in the region of 40,000 people.

Since our programmes began the Department of Health launched the NHS Health Check Programme in 2008, which essentially is a primary prevention programme. They have been impressed with the breadth of work we have undertaken and have visited the Stoke-on-Trent team several times to learn from our approach. Furthermore the team have published several papers in national journals with much more on the way. Since 2009 the team has been undertaking research (Randomised Control Trial) to assess the effectiveness of the lifestyle interventions. This is due for completion in December 2011 and it is one of the first international studies of its kind examining this intervention in this particular target group. We are hoping to hold a national conference to share our learning with others plus write many more publications.

This is a good example of where some of the real challenges in Stoke-on-Trent have been met with important programmes to motivate positive changes. The initial evaluations suggest a significant improvement (12%) in general health status of patients involved with the programme at 1 year. Those at high risk of circulatory disease have seen a significant reduction in their risk of developing circulatory disease at 1 year.

Primary Care

A programme was established to transform the organisation and delivery of primary care across all 55 general practices in Stoke-on-Trent in order to reduce health inequalities. The aim was to improve the health of the poorest at a faster rate than other parts of the country and thus improve local life expectancy outcomes.

Primary care was selected because it plays a crucial role in the effective management of chronic illnesses which impact on life expectancy such as circulatory disease, diabetes and chronic obstructive pulmonary disease (COPD). As well as providing optimal management of those with long-term conditions, GPs are in an ideal position to identify those with undiagnosed illness. Primary care also has an important role in assessing individuals' readiness to change behaviour and providing appropriate brief interventions for a number of unhealthy lifestyle habits such as smoking, excess alcohol intake and too little physical activity. Clinicians are often poorly motivated to undertake these interventions because of low success rates in changing behaviour or attitudes. However these low outcomes translate into large year on year cumulative public health benefits if the brief interventions are applied systematically across populations.

Primary care also is in an ideal position to provide or direct those in the greatest need to structured services for a range of social issues including welfare services, housing services, counselling (in particular to address loneliness) and job centres.

The initial evaluation is encouraging with some improved outcomes such as blood pressure control and blood glucose control for diabetes. A particular success has been the dramatic increase in the number of people whose blood glucose is defined as well controlled (HbA1c <7.5) from 3568 people in 2009/2010 to 9506 people in 2010/2011. The next two years of the programme will have a greater focus on promoting self-management of long-term conditions, promoting health lifestyles and identifying opportunities where primary care teams can contribute to better management of social issues.

Children's Services

Improving outcomes and early intervention for children from 0-5 years and their families is recognised as the best way to achieve long-term improvements for the population, in terms of health, wellbeing, and education, in the Marmot Report and has been endorsed by the current Government. In Stoke-on-Trent the Children Strategic Partnership (local health and social economy) considers young children to be a key priority. With this in mind, we have embraced the Health Visitor (HV) Implementation Plan (Department of Health 2011) and are working in partnership with the Local Authority and third sector partners to build on the strengths of our families and deliver the full service offer for

Health Visiting; this includes improved collaborative working to ensure effective use of resources and contribute to improved shared outcomes. A key area is the delivery of evidence based Family Nurse Partnership (FNP) and parenting programmes.

This ambitious programme aims to provide services to all families in the area according to need, and includes Children’s centres, Midwives, Home-Start and Health Visitors. Stoke-on-Trent has been designated an Early Implementer Site for the delivery of the Health Visiting implementation plan and is piloting Group Family Nurse Partnership (gFNP) this dynamic and innovative work is contributing to leading the way across the country.



Teenage Pregnancy

A number of programmes have been implemented and with the aim of reversing and subsequently reducing teenage pregnancies in Stoke-on-Trent. The Stoke-on-Trent teenage pregnancy partnership focuses on sustained reduction in teenage pregnancy.



There are 3 key areas that have been shown to be effective in sustained reduction in teenage pregnancy – improved access and uptake of contraception, robust relationships and sex education and a reduction in young people not in education, employment or training.

1. NHS Stoke-on-Trent has focused on increasing access to contraception services. The target set was to achieve double the number of young people accessing contraception, for example, the Hanley Young Persons Clinic had 2700 attendees in 2007/2008; this rose in the following year to 5902 and reached 7546 by 2009/2010. Key actions that have influenced this success include; extended opening hours, improved access including walk in service, computer triage, maintaining contraception, advice and sexual health (CASH) clinics, utilising information technology to deliver information, improving outreach contraception provision in non-NHS settings, appropriately trained staff, rolling out DASH (developing adolescent sexual health in general practice) to include more general practices and maintaining the delivery of Family Nurse Partnership (FNP) and Young Parents Support Service.
2. The Local Authority focus of teenage pregnancy prevention has been to use a risk assessment process of identifying and supporting young people believed to be at high risk of becoming teenage parents. This includes tailored multi-agency support of people identified once their needs have been assessed. The assessment focuses on looked after young people and other young people at high risk, improving educational attainment of young mothers, improving the number of young people in education, employment and training and on-site multi-agency support in selected secondary schools (MAC Places).
3. The “Transforming the Nations Sexual Health” report highlighted that similar to other NHS services, sexual health services have often not been designed around the needs of the people they are funded to provide for. At the present time there is no one service that is able to meet the full sexual health needs of patients locally in Stoke-on-Trent.

However, from October 2011 the integrated sexual health service will open at Cobridge in Stoke-on-Trent. The proposed range of services that will be integrated into the Cobridge LIFT Programme are: GUM, Contraception, specialist clinics e.g. HIV prevention, diagnosis and treatment, menopause, counselling services such as HIV/AIDS and psychosexual, Chlamydia Screening and terminations. This will ensure that this central service can meet the full sexual health needs of patients.

The Cobridge development will also incorporate the local Sexual Assault Referral Centre (SARC) for Staffordshire and Stoke-on-Trent. There are a number of advantages to locating services in one building, including reducing the length of time required by the various services for a victim of sexual assault and reducing the number of times they need to recount their experience. This will hopefully minimise the risk of post-traumatic stress experienced by victims.





Alcohol

The Government recognises that alcohol presents a significant threat to the health of the population. For example liver disease is now the 5th biggest cause of death in England and the main cause is alcohol misuse.

In Stoke-on-Trent 1 in 5 adults regularly drink in excess of the recommended daily limits for alcohol (2-3 units for women and 3-4 units for men). As a result in 2009-10 there were 5116 alcohol-related hospital admissions in the City, at a cost of £7.8 million to the local NHS. Add to this the costs to the City of the associated crime and anti-social behaviour, plus the costs of presentations at A and E and primary care, and it is clear that reducing alcohol consumption amongst the population would bring considerable health, social and financial benefits.

NHS Stoke-on-Trent has responded to this by working with the Safer City Partnership to increase investment in acute treatment services and begin new investment in prevention and early intervention. The Alcohol Delivery Plan has been supported by £2 million and this investment now starting to bring results.

To try and prevent alcohol misuse, a range of resources has been developed, for example alcohol unit measures for use at home, to raise public awareness of the risks of alcohol consumption, and under the auspices of the Safer City Partnership a strong local brand image has been created to make alcohol measures relevant to people in Stoke-on-Trent. We have also invested in two Drug and Alcohol Advisors to work with schools to ensure school staff, children and young people, and parents are aware of the risks associated with alcohol misuse. To date 44 schools have been supported to deliver high quality drug and alcohol education.

In primary care, training has been taken up by approximately 80% of general practices in screening people for alcohol use, delivering brief interventions and referring to services as necessary. As a result 34000 adults have been screened for alcohol use over an 18 month period, and referrals into acute alcohol services from primary care have risen from 14% (2008-9) to 25% (2010-11). Front line staff working in criminal justice have also been

trained in brief interventions as they are well placed to pick up people whose alcohol misuse has resulted in criminal behaviour. As a result, 450 have been referred to alcohol treatment services after being arrested

For those in need of specialist help to change their drinking behaviour, there are now twice as many high risk drinkers able to access an appropriate acute service, and there is no waiting list for treatment. Alcohol continues to be a priority for the City and while good progress is being made, there is much more work to be done. Future plans include:

- Targeting key groups of front line staff with training in brief interventions for alcohol
- Increasing provision of relapse provision to complement the increased investment in community detoxification
- Continuing to improve and sustain outcomes for services users accessing structured treatment

How do we improve Stoke-on-Trent's ranking as the 16th most deprived area in England? Or...

While we are working hard in Stoke-on-Trent to improve health status and social care, and are seeing positive trends, so too are most other areas. The only way we can improve our ranking is to seriously tackle our most deprived communities and begin to lift them out of their lowly status. Large numbers of people, especially among the vulnerable and socially excluded, are out of contact with our services; exerting a huge impact on budgets. There is compelling reason to target our desperately deprived or vulnerable groups of people. The chart below emphasises their urgency and importance.

Average annual income growth by percentile of income distribution

The bars show the average annual income growth by percentile of the income distribution over the period 1996/7 - 2005/6. The line shows the same data for the period between 1979 and 1996/7.

Source: Social Exclusion Taskforce (Cabinet Office), 2007.

Poorer groups are on the left; richer on the right. For 1997-2006, each bar represents a percentile of population. Data for 1979-1997 are represented by a line. In contrast to the highly regressive picture from 1979-1997, over the next 10 years poorer families saw their incomes rise faster than the better-off. However, the tails in this chart show that despite all the success in addressing inequalities, *the very richest have got even richer, while the very poorest have remained in deep poverty.*

...why our most deprived, vulnerable and socially excluded groups of people are highly significant.

Chapter 3

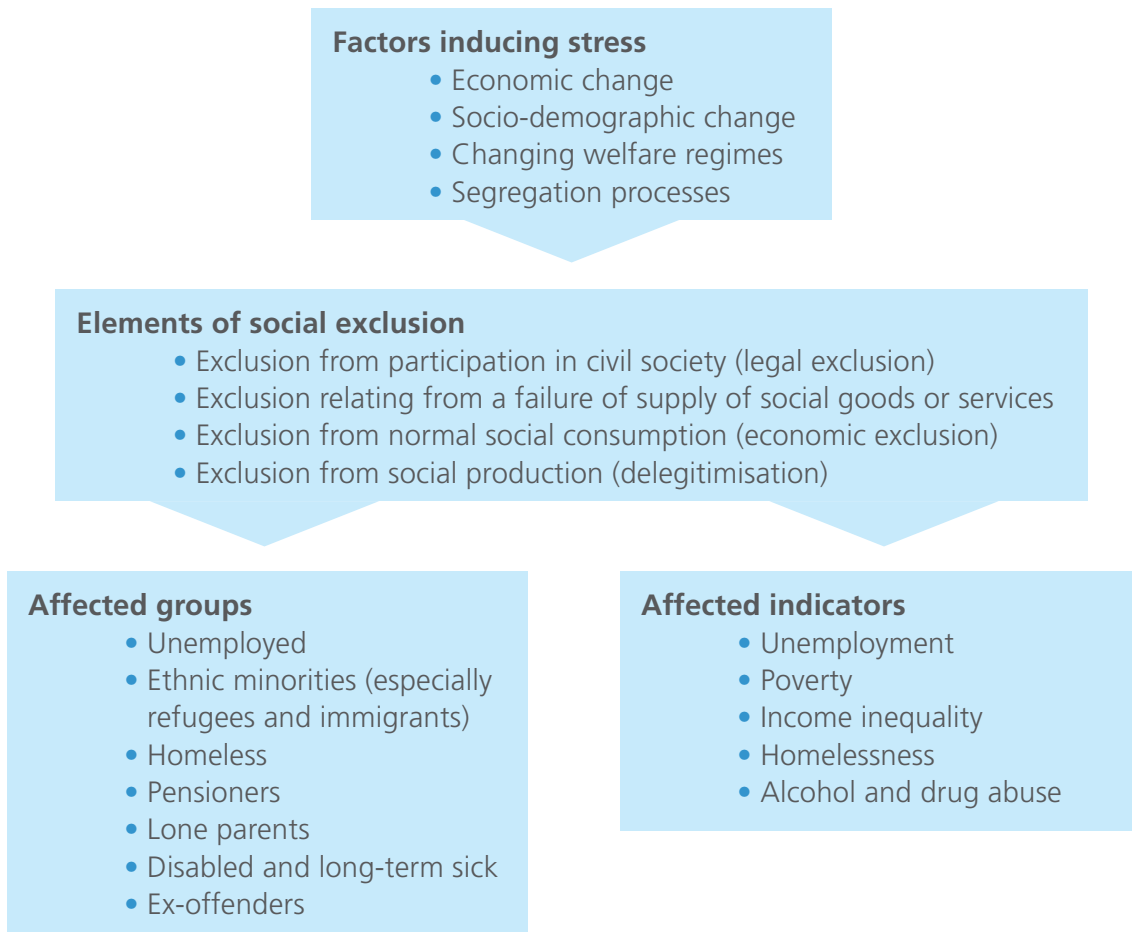
Vulnerable Groups



Introduction

This section is intended to highlight the issues surrounding vulnerable people in Stoke-on-Trent, as a prelude to a report which will be completed later in 2011, *Vulnerable people in Stoke-on-Trent's socially excluded communities*. There is no agreed definition of vulnerability or what constitutes a vulnerable person. When the Social Exclusion Unit, based in the Cabinet Office, was established in December 1997 it began work on definition and measurement. There were difficulties in identifying indicators of vulnerability, since there was no agreed definition of what social exclusion was or what caused it. However, it was clear from the start that social exclusion and poverty were closely intertwined. Vulnerable or socially excluded groups of people can be defined by the communities in which they live, since they can become victims of deprivation or stigma. All people within a community may become affected, such as when a factory closes down and no other alternative jobs become available. Areas with high unemployment and high levels of deprivation are also likely to have poor schools, and so an individual's circumstances and risk of social exclusion can depend very much on their geographical setting. There is a spatial dimension to social exclusion, whereby you can be born into such an existence and remain there.

Figure 13. The process and outcome of social exclusion in Europe



Source: White P (1998). *Urban life and social stress*. In: *The New Europe: economy, society and environment* (Ed. Pinder D). Wiley, Chichester.

The importance of identifying and engaging with vulnerable groups

Vulnerable groups have been described as *hard to reach* but they are easily reached by the tobacco industry, and by cheap available alcohol. They tend to be disadvantaged, not only through income inequality but also choice, for example, healthy diets and exercise facilities. Awareness and uptake of health information, vaccines and screening is often lower for vulnerable groups. Their access to health care is usually late and the usage of Accident and Emergency is more common. Compliance with recommended treatments and medication is typically not very good. These and other factors account for the fact that vulnerable groups exert a disproportionately high economic impact on the health and social care budget.

Among socially excluded communities and vulnerable families, childhood and youth are the key to later chances in life and with them the potential to lift themselves and their families out of extreme poverty and social exclusion. The impact of social exclusion is great, and work is urgently needed to minimise its effects, including:

- 1 in 3 children in care ends up not in employment, education or training
- People with no qualifications are 7 times more likely to be unemployed and 5 times more likely to be low paid than those with higher education
- Children from the 5% most disadvantaged households are more than 100 times more likely to have multiple problems at age 30 than those from the 50% most advantaged households
- 1 in 4 adults in prison experienced being in care at some point as children
- 65% of children with parents in prison go on to offend
- Boys with a convicted father are 3.3 times more at risk of being convicted of a crime than those with a non-convicted father
- The daughter of a teenage mother is twice as likely to become a teenage mother compared with a daughter of an older mother
- Only 15% of young people from unskilled backgrounds begin higher education by the age of 21 compared with 79% of young people from a professional background

Demand on health services is also higher in more deprived groups. In particular, frail older people pose a huge burden as life expectancy increases. Spending is highly concentrated among a relatively small portion of high-cost service users, with just 5% of the population responsible for almost 50% of spending (National Institute for Health Care management 2011). People over 55 years make up a much larger proportion of the high spending groups, along with others having chronic health conditions, typically seen in the vulnerable.

Who are vulnerable or socially excluded people?

Vulnerable or socially excluded groups contain people who fit several categories in the following list (White 1998):

- Not in employment, education or training (NEET)
- Homeless and those not in continuous and suitable housing
- Disabled (physical and learning) and the long-term sick
- Lone parents (and those with low birth weight babies)
- Some pensioners, especially the very old and infirm
- Deprived people among ethnic minority groups
- Many with chaotic drug and alcohol misuse
- Young and ex-offenders, gang members
- Many with mental health issues

Vulnerable groups in Stoke-on-Trent

National estimates suggest that this vulnerable group of people comprises between 2 and 3% of the population, and contains people with multiple problems such as mental health issues, drug misuse, young offenders and children in care amongst others. With an estimated population of 240,072 people living in Stoke-on-Trent in 2010, **it is likely that Stoke-on-Trent has at least 7,200 people who are in a state of deep and persistent vulnerability. In all probability**, this is likely to be an under-estimate of the number of people in Stoke-on-Trent who are vulnerable or at risk of being so.

Whilst the numbers may remain open to debate, most people in Stoke-on-Trent including professionals, the voluntary sector, local government and the public have a view on who the most vulnerable people are *and* where they can be found. Using a range of recognised markers of vulnerability, such as multiple deprivation, substance misuse, teenage pregnancy and people classified as NEETs, we have attempted to define and map where the most vulnerable people in Stoke-on-Trent are by calculating an overall Vulnerability Index (VI).

It is important to understand that not every household or family in any identified socially excluded community will conform to this definition, and not every individual within a socially excluded household will be so defined. However, the likelihood of poverty and vulnerability is greater.

Local mapping of vulnerability

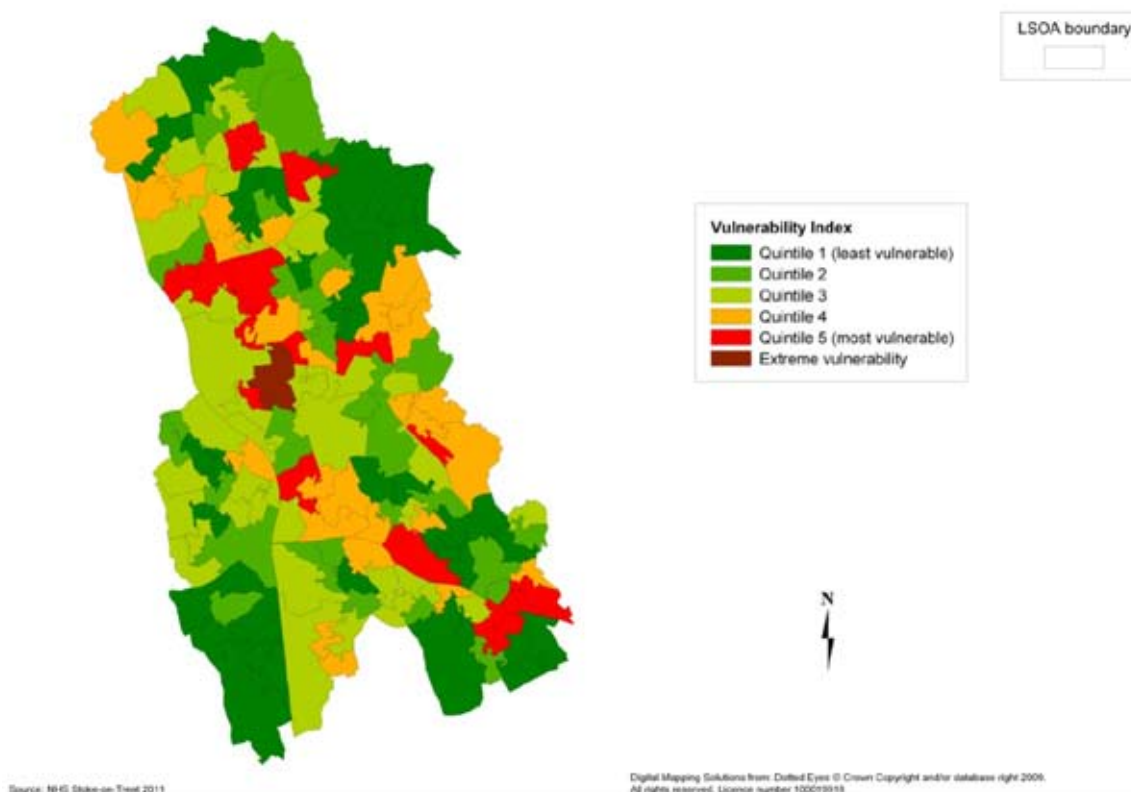
There were 18 Local Super Output Areas (LSOAs) (out of 160) that were ranked in the highest quintile (the top 20%) of greatest vulnerability on the VI in Stoke-on-Trent (map 2). These 18 LSOAs (shaded red on the map) fell broadly into eight discrete areas (or hotspots) of greatest vulnerability. These were located around the wards of: (1) Etruria and Hanley/Joiner's Square⁹ (an area of extreme vulnerability); (2) Meir South and Meir North; (3) Broadway and Longton East; (4) Hanley Park and Shelton/Fenton West and

⁹ Some of the hotspot areas of greatest vulnerability cut across ward boundaries

Mount Pleasant; (5) Bentilee and Ubbertley; (6) Birches Head and Central Forest Park/ Abbey Hulton and Townsend; (7) Burslem Central and Moorcroft; (8) Baddeley, Milton and Norton, and Bradeley and Chell Heath (see Appendix 1 for location of wards).

There were a further 29 LSOAs (shaded orange on the map) which were ranked in the second highest quintile of vulnerability on the VI. These LSOAs were mainly clustered around the wards of Blurton West and Newstead, Fenton West and Mount Pleasant, Fenton East, Bentilee and Ubbertley, Abbey Hulton and Townsend, Burslem Park, Little Chell and Stanfield, and Tunstall.

Map 2. Vulnerability Index for Stoke-on-Trent in 2011



These 47 LSOAs make up the top 40% most vulnerable LSOAs in Stoke-on-Trent and have a population of just over 70,000 people. It is estimated that at least 1 in 5 households within a vulnerable area are likely to be in a state of deep and persistent vulnerability, or at risk of being so. Based on these estimates, there are likely to be around 14,000 people in Stoke-on-Trent who are vulnerable or at risk of being so. If we apply these estimates of 1 in 5 to the area around Etruria and Hanley/Joiner’s Square (identified as being extremely vulnerable on the VI), it is likely that 282 people (out of a total population of 1,410) are likely to be in a state of deep and persistent vulnerability. However, given the extreme nature of vulnerability in this area, this number is likely to be far higher.

The VI does not claim to be a complete solution to the measurement and identification of vulnerability in Stoke-on-Trent. However, it is intended to aid and act as a guide in helping us identify those areas of greatest vulnerability, with the view of informing our communication, engagement and commissioning intentions in our efforts to reach those who are most vulnerable or at risk of being so.

Effective ways of engaging with vulnerable groups

The World Bank has a model of development which may improve the situation for vulnerable groups. It requires improvements in all four areas identified which are related to each other. Regeneration involves building social capital and human capital along with exploiting environmental assets and economic growth:

- 1. Human capital.** This is the sum total of an individual's skills and health. It enables people to participate.
- 2. Social capital.** This is about the levels of trust, reciprocity and engagement within and between communities. Low social capital leads to impoverished networks and connectivity outside of our immediate communities. Lack of trust not only affects social life, but also the willingness to engage with other groups of people, or a heightened fear of crime and *strangers*.
- 3. Environmental assets.** Not only includes natural assets like mineral wealth and topography but also quality of the built environment and how an area looks. Our perceptions about the safety of an area can be strongly influenced by its appearance.
- 4. Economic assets.** Wealth creation, capital investment, generating jobs, growing businesses and encouraging entrepreneurial activity and the infrastructure that relates to it are the key components of economic regeneration.

One effective strategy in tackling social exclusion, aiming to reduce costs and meet needs, can simply revolve around a better coordination of services (Social Exclusion Task Force 2006). **The Government admits failure in addressing issues of vulnerable people with complex needs, who are still not benefitting from services because their lives are too chaotic.** They usually experience deprivation and lack of work, engage in offending and substance misuse, and have mental or physical health problems and poor family relationships. The reality is that services are geared for delivering to the majority and are not well established to address the needs of those with complex problems. The solution to these problems is "joined up" services, with better co-ordination and communication across professional and geographical boundaries. Much work is ongoing here in Stoke-on-Trent to ensure a better co-ordination in meeting people's needs.

Projects and schemes that have been successful across the UK include the following:

- The **Compass employability initiative** in Glasgow used 15 GP practices to support employment.
- **Liverpool healthy homes initiative** aimed to reduce death and illness due to poor housing and accidents in the home.
- **Nurse led welfare benefits screening** focused on patients over 64 years judged to be physically or mentally frail. They were referred to a welfare officer who contacted all claimants by phone, offering a home visit to assess for unclaimed benefits.
- **Supporting People**, a service which provides strategically planned housing-related services to vulnerable people, administered through local authorities, with the goal of improving their quality of life by providing a stable environment to enable independent living. Client groups benefitting from the programme include people with alcohol and/or drug problems, people with learning disabilities, people with mental health problems, offenders, older people receiving support or who are in sheltered accommodation and teenage parents.

Examples of work with vulnerable groups

A number of local projects are already underway in Stoke-on-Trent to address the needs of vulnerable groups. Examples of these projects are described below.

Creating a Great Working City

Unemployment particularly affects those who are more deprived and is a cycle that repeats endlessly to affect generations. Interventions in early life can help to break the intergenerational cycle of poor social and health outcomes, including employment prospects.

Why is a working city important for Stoke-on-Trent?

Financial problems associated with the sudden experience of poverty is an important reason for the acute effects of unemployment on health. Another reason is that job loss is known to be a highly stressful life event. Employment provides many non-financial benefits for psychological health.

Warr (1987) developed the vitamin theory of the benefits of employment, which include physical and mental activity, use of skills, interpersonal contact, social status, and motivation to go from one day to the next. These are lost with unemployment.

***“Being out of work long term
is one of the greatest known risks to public health”***

A third reason for health damage after unemployment is the appearance of new behaviours. Many are destructive, and include suicide. This is not surprising given that spells of unemployment are also associated with loss of home and marriage breakdown. New behaviours include alcohol dependency, and it is easy to understand how job loss can be so acutely traumatic and damaging that a person can rapidly move towards a socially excluded state.

What is happening locally to make Stoke-on-Trent a great working city?

The City Council has developed their vision of Stoke-on-Trent as a great working city through the ‘Mandate for change’ document. Areas identified to deliver this vision include:

- Attracting new business to Stoke-on-Trent.
- Supporting the existing workforce by increasing workplace productivity and reducing sickness absence.
- Promoting independence and resilience in our community.
- Making Stoke-on-Trent a great place to live.

Employment is a key determinant of health. Therefore it is important for the NHS to work with the City Council to support and share this vision. Examples of ways the NHS including Public Health locally can support the vision include:



- As a major employer in the area, help create jobs and employ local people.
- Help ensure that people in employment remain healthy and able to work.
- Try to prevent short-term sickness progressing to long-term sickness through identifying the underlying causes of an individual's ill health through proactive approaches in primary care.
- Individual's living with long-term sickness are managed effectively to minimise associated symptoms for the individual and the economic impact locally.
- Provide individuals with the opportunity and promote independence through the use of self-care management plans, particularly people with long-term conditions.
- Work with partner organisations to create an environment that is conducive to promoting positive lifestyles and well-being at both individual and population levels.
- Engage and build relationships with local communities, community leaders, patient groups and third sector organisations to raise local aspirations for better health and resilience.



The Willow Bank social enterprise

While many GPs in Stoke-on-Trent are addressing health inequalities, one in particular is involved with true community engagement. Dr Paul Roberts (Willow Bank Surgery, Longton) undertook a project in targeting vulnerable people among his practice population. Dr Roberts designed services around his communities, containing marginalised and deprived groups who tend to have long term conditions and literacy problems. The practice serves parts of the Longton and Meir areas, and parts of Dresden and Normacot: areas with significant levels of deprivation. The practice population consists of Pakistani people who cannot read Urdu and a Czech Roma migrant working community who have health and literacy problems.

Since 2007 the practice has been owned by a Community Interest Company; a social enterprise owned by the health centre staff. Its philosophy of care actively engages patients as partners, rather than just consumers of health care. It helps people *choose better, feel better, be better*; and delivers high quality medicine by recruiting good staff, by providing good training and support, and by involving everyone in audit and governance.

My Health Matters and Connecting Communities

My Health Matters is a community development initiative which has been operating in three deprived areas from April 2009 (Bentilee, Meir and Burslem South; since identified as social exclusion hotspot areas). The initiative is supported by one community development worker for each geographical area. There have already been successes, for example, residents have been a key factor in supporting the growth of the Portland Street Recreation Centre, which serves as a hub for health enhancing physical activity, while *My Health Matters* materials have been integrated into a scheme supporting people back into work at Bentilee. The initiative aims to contribute to the evidence base for engaging communities and across the European Healthy City network there is a lot of interest in its

findings. Early indications are that this approach brings added value to communities and agencies alike.

Twining with the USA

In September 2011, Stoke-on-Trent will be one of five English Cities invited for twinning with a specific city in the USA. This initiative is being established by the US Centre for Disease Control, the International Union for Health Promotion and Education, the DH and the Health Action Partnership International (HAPI) as a learning exchange to tackle health inequalities. This work will build on the work of Healthy City and put Stoke-on-Trent on the international stage.

Conclusion

By working with partners, we will continue to protect the most vulnerable through two key approaches. One approach is to focus on those individuals and specific interest groups identified through the vulnerable groups report as most at risk, and putting in place an integrated, multi-agency approach to better identification and early intervention. The second approach is to work through our most vulnerable and disadvantaged neighbourhoods to support them to take more responsibility for the health and wellbeing of their neighbourhood. Enabling people to take more control over their wellbeing and lead flourishing lives can greatly contribute to an increase in healthy life expectancy across the social gradient (Marmot 2010).

Detailed conclusions will be published within the overall vulnerable people's report.



Conclusions



Conclusions

The health of the people of Stoke-on-Trent certainly continues to improve, as evidenced by the many positive trends. The overall picture however remains that of poor health outcomes with significant gaps between Stoke-on-Trent and other parts of the country. Much of this ill health has its roots in the extensive deprivation experienced by large sections of the population. We still need to at least keep pace with the rest of England on improvements in life expectancy and all cause mortality: at present it seems cancer and respiratory disease are making a significant and persistent contribution to poor outcomes. Catching up may take some time yet since there is a historic background of widespread deprivation associated with the pottery and coal mining industries, decades of heavy smoking, and late presentation of disease. We need to press on with cancer prevention awareness and early diagnosis, coupled with our continued efforts on smoking cessation. Primary Care is now lending more weight by shifting its focus towards prevention, especially in relation to smoking, healthy eating and physical exercise. As noted last year, there is continued progress on circulatory disease and on infant mortality. Improvements in lifestyle are also evident, but there are serious concerns around alcohol consumption and childhood obesity. Primary Care can play a key role on both issues, and especially alcohol, where the technique of brief interventions needs to be vigorously pursued and normalised. Alcoholic cirrhosis is fast becoming a leading chronic disease and is being diagnosed in younger people on a scale never seen before. Obesity certainly needs to be a top priority of the health improvement programmes in schools.



In 2006/07 the PCT undertook a fundamental review of the historic poor progress toward improving health outcomes within Stoke-on-Trent. There were major reviews (Floor Target Action Plans) of the life expectancy, infant mortality and teenage pregnancy targets. These reviews led to a strategic shift of local policy on public health. The Public Health function within Stoke-on-Trent was strengthened. A number of well resourced industrial scale public health programmes were developed which aimed to address specific local health needs. The new strategic direction also influenced delivery of health care services in particular primary care services. Examples of these healthcare programmes are highlighted in Chapter 2. These initiatives have led to improvement in some health outcomes however

the overall picture remains that of significant health inequalities in Stoke-on-Trent.

It is good to see the concerted adoption of the Marmot policy objectives in Stoke-on-Trent, beginning with *the best start in life*, to ensure the early adoption of healthy lifestyles through a solid grounding in the home prior to school entry. This is strongly reflected in the current Children and Young People’s Needs Assessment, the Child Poverty Needs Assessment and the implementation plans for the 0 to 5 year olds. This is so fundamental in securing future population health, particularly in shaping healthy lifestyles through the mother and family at home. That is why initiatives to promote breastfeeding and tackle smoking in pregnancy are so important. A further Marmot objective is found in *maximising our children’s capabilities and skills in schools*, along with the in-house health

improvement programmes to increase health consciousness and awareness of healthy choices such as diet and regular exercise, especially in relation to obesity, as already mentioned. The early years and time at school are pivotal in securing the future of health for Stoke-on-Trent's people.

Employment is a key determinant of health and we are confident of providing a unique role in supporting the working city vision. This fits well with the third objective of the Marmot report *fair employment and good work for all*. Public Health will soon be located within the Council and will therefore be ideally situated to ensure that the wider determinants of health, including employment, are considered within processes and decisions.

This vulnerable group report presents another element of Public Health and the Council's shared vision. It proposes action to tackle socially excluded communities, with their concentrations of dysfunctional families and high unemployment, which is the crux of the vision of a great working city. The vulnerable groups report is still in preparation but we can already begin to make a difference. It will be worthwhile because we can only improve our ranking as the 16th most deprived area in the country by lifting up our poor, *hard to reach* population groups. Serious attempts at engagement of individuals and communities, to encourage the take up of services, will reduce the burden on our local budget. For example, marginalised groups tend to present in the later stages of disease to emergency services, often with avoidable hospital admission. The work will recommend several initiatives and we urge the Council to consider and implement innovations around community engagement. General Practice and Primary Care are already starting to make progress in this area (see above). It is time for a positive, *glass half-full*, asset based approach, building on the enthusiasm in General Practice, Public Health and the Council to make real changes for the people who need it most.

The shift of public health responsibilities from the NHS to the Local Authority provides many opportunities to tackle the causes of the causes of poor health which are the social determinants of health. The establishment of Health and Well-being Boards provides an excellent platform to refresh public health strategy in the light of the economic realities facing the City and the new landscape of the local NHS and Local Government following Government reforms. All stakeholders who contribute to health and well-being should be engaged in developing a vision of a Healthy Stoke in 2012. This vision will determine selection of priority health outcome targets for the City and underpin the Health and well-being Strategy.

Recommendations

1. The Health and Wellbeing Board should ensure that cancer prevention and smoking cessation strategies are strengthened and fresh approaches to implementation are examined.
2. Developing an obesity strategy should be a priority for the Health and Wellbeing Board.
3. It is vital that the Children and Young People's Strategic Partnership maintain the momentum and innovation in the delivery of the best possible services for children aged 0-5 years.
4. Local health services need to critically examine how they can collectively contribute and share in the Local Authorities' vision for making Stoke-on-Trent a great working city and specifically help individuals to return to work.
5. The Local Authority should lead on undertaking systematic engagement with socially excluded communities to enable better coordination of services.
6. The Stoke-on-Trent Clinical Commissioning Group should explore the role of primary care in better managing the social and medical and interface for patients.

Progress of recommendations from the Director of Public Health Annual Report 2010

1. NHS Stoke-on-Trent and the Local Authority should lead by example and develop a programme of 'Making Every Contact Count' to support behaviour change within the public sector. Public health is everybody's business.
A programme of every contact counts training has been agreed with the City Council and targeted training of staff groups is underway. This training will allow members of staff to raise sensitive health issues with the general public, as well as to both signpost and refer into wellbeing services.
2. Young People should be encouraged to become health conscious and make healthy choices through the development of health improvement programmes in schools.
In 2010 – 2011, Stoke-on-Trent schools demonstrated excellent commitment to the National Healthy Schools schemes with 98% of schools achieving Healthy Schools status. Following the recent cessation of the National Healthy Schools scheme by Central Government, local schools were surveyed to find out how much they had valued the healthy school approach, and their level of commitment to continuing to promote health and wellbeing in school settings. The response was overwhelmingly positive, and an excellence in health and wellbeing scheme is in development for schools in Stoke on Trent based on a reflective self assessment tool methodology.
3. The NHS needs to consider how to build on the Primary Care Strategy to further shift its focus from reactive to preventative care.
Progress has been made but further work is required. For example, UHNS is developing stronger detection and management of alcohol problems.
4. The Local Authority needs to consider how it will maximise opportunities for improving health in the City as it takes on new Public Health responsibilities.
The local authority and Public Health have agreed to hold an integration workshop to examine how the city council will embrace public health as part of its responsibilities.
5. A cancer prevention awareness and early diagnosis plan should be developed and implemented.
A cancer prevention and earlier diagnosis plan has been developed. It includes actions on increasing awareness of symptoms and signs of the common cancers and improving cancer screening uptake.
6. Locally elected members, who in their leadership role are already promoting healthy lifestyles in their communities, should be supported to provide even further enhancements.
Further work is required to build on the pivotal role that elected members have in promoting health and wellbeing in their communities, through raising community aspirations.



References



References

Department of Health (2011). *Health Profile 2011: Stoke-on-Trent*. www.healthprofiles.info.

Department of Health (2011). *Health Visitor Implementation Plan 2011-2015 – A call for action*.

Marmot M (2010). *Fair society, healthy lives: the Marmot review*. Final Report.

NHS Institute for Innovation and Improvement (2010). *Healthy Places, Healthy Lives Programme*.

National Institute for Health Care Management (2011). *Understanding US health care spending*. NIHCM Foundation data brief. www.NIHCM.org.

Shaw M, Dorling D, Davey Smith G (2006). Poverty, social exclusion, and minorities. In: *Social determinants of health* (Ed. Marmot M, Wilkinson RG), 2nd Edition, Oxford University Press.

Stoke-on-Trent City Council (2011). *Mandate for change*. Consultation draft document.

White P (1998). Urban life and social stress. In: *The New Europe: economy, society and environment* (Ed. Pinder D). Wiley, Chichester.

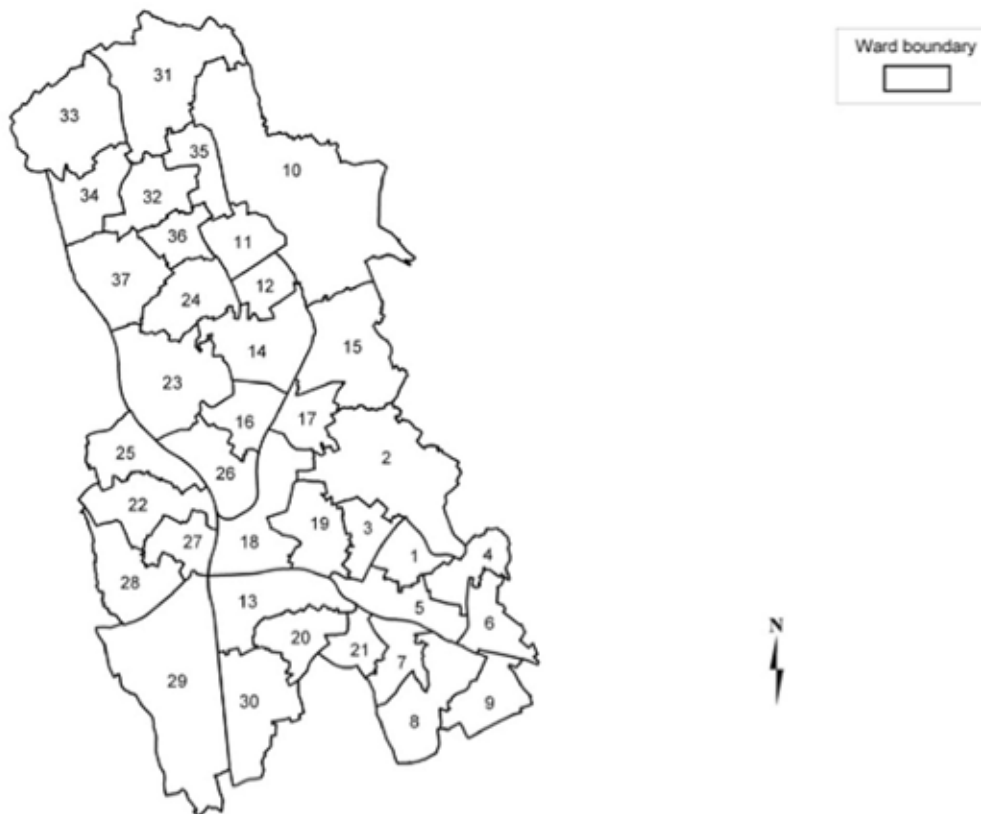
Warr P (1987). *Work, unemployment and mental health*. Oxford University Press, London.

Appendices



Appendix 1

2011 Wards in Stoke-on-Trent



Source: NHS Stoke-on-Trent 2011

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Key

- | | | | |
|----|--------------------------------------|----|-----------------------------|
| 1 | Meir Hay | 20 | Blurton East |
| 2 | Bentilee and Ubbberley | 21 | Dresden and Florence |
| 3 | Sandford Hill | 22 | Penkhull and Stoke |
| 4 | Weston Coyney | 23 | Etruria and Hanley |
| 5 | Broadway and Longton East | 24 | Moorcroft |
| 6 | Meir North | 25 | Hartshill and Basford |
| 7 | Lightwood North and Normacot | 26 | Hanley Park and Shelton |
| 8 | Meir South | 27 | Boothen and Oakhill |
| 9 | Meir Park | 28 | Springfields and Trent Vale |
| 10 | Baddeley, Milton and Norton | 29 | Hanford and Trentham |
| 11 | Ford Green and Smallthorne | 30 | Blurton West and Newstead |
| 12 | Sneyd Green | 31 | Great Chell and Packmoor |
| 13 | Hollybush and Longton West | 32 | Little Chell and Stanfield |
| 14 | Birches Head and Central Forest Park | 33 | Goldenhill and Sandyford |
| 15 | Abbey Hulton and Townsend | 34 | Tunstall |
| 16 | Joiner's Square | 35 | Bradeley and Chell Heath |
| 17 | Eaton Park | 36 | Burslem Park |
| 18 | Fenton West and Mount Pleasant | 37 | Burslem Central |
| 19 | Fenton East | | |

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هذه الوثيقة متاحة أيضا بلغات أخرى والأحرف الطباعية الكبيرة وبطريقة سمعية عند الطلب.

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