our area
our health

Annual report of the
Director of Public Health
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1. Introduction

This is the first time that South Gloucestershire has had its own Director of Public Health (DPH) Annual Report. This reflects the new public health responsibility of South Gloucestershire Primary Care Trust (PCT).

The traditional purpose of such a report is to provide an independent assessment of the health of the local population and to make recommendations for improvement. This report attempts to go further than simply making recommendations, by describing a strategy to improve health. The strategy is linked to a more detailed work plan. Both the strategy and work plan have been developed jointly with South Gloucestershire Council and support the recently published local community strategy, Our Area: Our Future.

This report is relatively slim and I hope this will encourage busy people to read it. It concentrates on the major health challenges faced by South Gloucestershire. More detailed information can be accessed at our local public health website:
http://www.avon.nhs.uk/phnet/spotlight/south_gloucestershire.htm

A major theme of the report is to highlight the considerable differences (inequalities) in health, experienced by different groups in the population. The next section describes why these differences are so important and how these have been measured. In the UK as a whole, the difference in health between the rich and the poor has been widening over the past 20 years. Although South Gloucestershire residents have better health, on average, than the rest of the UK, the same pattern of marked differences can be seen. Residents in the poorest areas of South Gloucestershire are twice as likely to die of lung cancer or to die before the age of 14 years, than those in the better off areas.

Local health services play an important part in keeping us healthy. However most of the influences on our health are embedded in our everyday life. Improving health and reducing inequalities depends on action at all levels - from the government down to individuals. The PCT is developing strong links with the council and local communities, and I believe we have a unique opportunity to jointly improve health and reduce inequalities.

Dr Chris Payne
Director of Public Health
South Gloucestershire PCT
2. Inequalities in Health

We are experiencing increased prosperity, wider opportunities and improving health in this country. Yet there are still striking differences in health between ethnic groups, between men and women and between the rich and the poor. For some groups, the difference, or health gap, is getting wider.

In South Gloucestershire, people are generally healthier and have a greater life expectancy than the national average. But these are only averages. We have the same types of differences, or inequalities in health, as the rest of the UK. In this section we concentrate on the differences in health that are associated with poverty or a low standard of living, and consider what this means for South Gloucestershire.

What are inequalities in health?

The opportunity for a long and healthy life is still linked today, to social circumstances, childhood poverty, where we live, what job we do, how much our parents earned, our race and our gender. Some of the differences, or inequalities in health, are due to factors such as gender that are fixed. But many relate to our social circumstances, our lifestyles and our behaviours: things that can change.

The main determinants of health

Source: Dahlgren and Whitehead 1991

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1 Source: Dahlgren and Whitehead 1991
The links between material deprivation and poor health work through many mechanisms, both direct and indirect. Some links are clear, such as low income limiting the choice of good food, the quality of housing, and the type of work we do. Others are less obvious and relate to factors such as social and psychological stress, self esteem and the ability to plan securely for the future; all of which are likely to make healthy behaviours more difficult.

Measuring Deprivation

There are several ways that levels of deprivation can be measured. Most rely on information from the census, using data such as the level of car ownership, overcrowding, etc. Measures of deprivation in this report use DETR 2000 neighbourhood statistics and the 1991 census data for Townsend and Jarman scores. Office of National Statistics files have been used for information on deaths and for grouping areas according to their level of deprivation.

The graphs and text in this report make reference to ‘deprivation quintiles.’ This simply means that we have taken all of the enumeration districts, or wards, in South Gloucestershire, looked at the deprivation score of each and then sorted them into five groups (fifths = quintiles). The least deprived (most affluent) areas make up the first fifth, followed by the next most affluent group, and so on, until the fifth group is made up of the most deprived areas. We can then look at death rates, or health problems in each of the groups. This method gives sufficient numbers to make the figures reliable.

National Targets

The national targets for tackling health inequalities are:

By 2010, reduce inequalities in health outcomes by 10% as measured by infant mortality and life expectancy at birth.

Starting with children under one year, by 2010 to reduce the gap in mortality by at least 10% between ‘routine and manual’ groups and the population as a whole.

Starting with local authorities, by 2010 to reduce the gap by at least 10% between the fifth of areas with the lowest life expectancy at birth and the population as a whole.

In addition, there are targets relating to teenage pregnancy, smoking and breastfeeding which all aim to reduce inequalities. These are shown in Section 3.
Inequalities in South Gloucestershire

The map below shows the relative levels of deprivation in South Gloucestershire, as indicated by deprivation quintiles.

South Gloucestershire is generally an affluent area. There are no wards that are in the 10% most deprived wards nationally, as shown in the DETR Index of Multiple Deprivation. The three most deprived wards in South Gloucestershire are Kings Chase, Staple Hill, and Yate (West). But average ward scores can easily mask pockets of deprivation and ill health. We know from a range of data, that there are also areas of deprivation in Kings Chase, Staple Hill, Patchway, Filton, Stoke Gifford (North), West Yate, and Cadbury Heath, Ventura Farm.
Effects of Inequalities in South Gloucestershire

Life expectancy at birth in South Gloucestershire is greater than in England and Wales and continues to increase in line with the national trend.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>England and Wales</th>
<th>South Gloucestershire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life expectancy at birth – males 1999 - 2001</td>
<td>75.6 years</td>
<td>77.9 years</td>
</tr>
<tr>
<td>Life expectancy at birth – females 1999 - 2001</td>
<td>80.3 years</td>
<td>81.8 years</td>
</tr>
</tbody>
</table>

Source: ONS

But men in the most deprived areas in South Gloucestershire live an average 3.0 fewer years than those in the least deprived areas and women live for 2.7 fewer years.

The infant mortality rate is low in South Gloucestershire at 4.8 deaths per 1000 live births, compared to 5.2 in Avon as a whole.

The incidence of childhood deaths, lung cancer and coronary heart disease in under 65 year olds, all show a marked gradient with deprivation.
More information about lung cancer and coronary heart disease can be found in Section 3.

Approximately 1990 people die each year in South Gloucestershire, 35% before the age of 75. The top five causes of mortality for all ages are shown below.

<table>
<thead>
<tr>
<th>Cause of death</th>
<th>Percentage of total deaths, all ages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coronary heart disease</td>
<td>22.8%</td>
</tr>
<tr>
<td>Stroke</td>
<td>10.1%</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>9.4%</td>
</tr>
<tr>
<td>Lung cancer</td>
<td>5.0%</td>
</tr>
<tr>
<td>Chronic obstructive pulmonary disease</td>
<td>4.6%</td>
</tr>
</tbody>
</table>

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2. DETR 2000 Indices of Deprivation 2000 see www.doh.gov.uk/healthinequalities
3. see www.avon.nhs.uk/phnet/PHinfo/understanding.htm#Deprivation for more information
4. see www.statistics.gov.uk
5. for more information about deprivation quintiles see www.statistics.gov.uk
6. HM Treasury and DOH 2002 Tackling Health Inequalities. Summary of the 2002 Cross Cutting Review. This has updated targets to reflect changes in social classifications and NHS structures
7. see www.statistics.gov.uk
3. Major Health Problems

Cardiovascular Disease

Cardiovascular diseases are the second main cause of premature death in adults under 75 years in South Gloucestershire. 813 people die of cardiovascular diseases every year. Of these, 31% are under 75 years. Approximately half of all cardiovascular deaths are from coronary heart disease (CHD) and a quarter from stroke.

The mortality rate for the under 75s is significantly lower than the England and Wales average, but not significantly different from the regional average.\(^8\)

Trends

The mortality rate in South Gloucestershire has fallen steadily over the last ten years, as it has for England and Wales and for other similar ‘growth areas’.

![Trends in mortality from CHD in South Gloucestershire](image)

SMR=Standardised Mortality Ratio where England and Wales average equals 100

Source: Compendium of Clinical Indicators DOH 2001

Inequalities

The mortality rate for coronary heart disease for under 65s, in the fifth most deprived areas of South Gloucestershire, is approximately double that in the fifth least deprived areas. In South Gloucestershire, inequities in access to heart operations, relative to need, exist across gender, age and level of deprivation.
Women, older people and people from more deprived areas have fewer procedures than men, the young, and people in the more affluent areas.

Source: ONS Mortality files and 1991 census for Townsend deprivation scores

**Targets**

*Saving Lives - Our Healthier Nation*\(^9\) set a target to reduce the death rate from cardiovascular diseases in the under 75s by at least two fifths, by 2010. If the current trend is maintained, South Gloucestershire will meet that target.

**What can we do to make a difference?**

Improving our diet, stopping smoking and increasing physical activity are the main factors that reduce our risk of cardiovascular disease.

**Links to the Health Promotion Work Plan**

The work plan includes programmes that:

- promote healthy eating: improve access to healthy food, particularly fruit and vegetables, seek to reduce over-weight and obesity and support relevant local and national campaigns.

- promote physical activity: walking and cycling, develop play provision, opportunities for dance, and improve access to leisure facilities.

- address smoking: maintain the smoking cessation service and address tobacco control (see smoking section for more information).

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\(^8\) Compendium of Clinical Indicators 2001 and DOH ONS mortality files

\(^9\) Secretary of State for Health 1999 Saving Lives: Our Healthier Nation
Diabetes

Diabetes can lead to a number of complications, including problems with eyesight, blood supply to lower limbs, and increased risk of kidney failure and cardiovascular disease.

2.3% of the South Gloucestershire population has diabetes. In 2001, the number of new (incident) cases of diabetes was estimated to be 372. Sixteen people a year die from diabetes. This, however, underestimates the burden of the disease. Diabetes is a major factor in mortality from other conditions, in particular cardiovascular disease.

The mortality rate from diabetes in South Gloucestershire is significantly lower than the England and Wales average. South Gloucestershire has a significantly lower rate of hospital episodes for ketoacidosis and coma and a significantly higher rate for lower limb amputations, compared to the South West Region.

Trends

The number of diabetics has been increasing in the past few years. Although some of this increase is likely to be due to an ageing population, better diagnosis and recording of information, there is also evidence of a real increase. Some of this increase is linked to increases in obesity in the population.

Inequalities

![Diabetes mortality rates by deprivation quintile in South Gloucestershire (95-99)](image)

Source: ONS mortality files and 1991 Census for Townsend Scores
Mortality rates from diabetes increase with deprivation in South Gloucestershire, as can be seen in the graph.

Type 2 diabetes (the commonest) is up to six times more common in people of South Asian descent. It is also more common in those of African, African Caribbean and Chinese descent.

**Targets**


**What can we do to make a difference?**

Interventions that promote a balanced diet and tackle obesity will help prevent the onset of diabetes in later life (type 2 diabetes). Regular physical activity lowers the risk of developing type 2 diabetes and this reduction is independent of body weight. Physical activity rates are low across the entire adult population – around six in ten men and seven in ten women are not sufficiently physically active.

**Links to the Health Promotion Work Plan**

The work plan includes programmes that promote healthy eating and physical activity. The programmes include activities that:

- promote walking and cycling and other physical activities.
- improve access to and availability of healthy food, particularly fruit and vegetables.
- seek to reduce overweight and obesity.
- support the themes in the Schools for Health\(^{13}\) scheme.
- support local and national campaigns and offer training for the public health workforce.

*‘Walking the Way to Health’* is a joint project in Kingswood that encourages people over 50 to walk more. A monthly programme of walks has been developed. Four taster walks, two bus walks and three doorstep walks have already been offered. 87 people have participated in walks and 16 walk volunteers have been recruited. A co-ordinator has now been appointed to develop the programme over the next two years.

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\(^{10}\) This is based on those practices in 2002 who submitted information.

\(^{11}\) Compendium of Clinical Indicators 2001 and DOH ONS mortality files

\(^{12}\) see NSFs at www.doh.gov.uk/nsf

\(^{13}\) see www.wiredforhealth.gov.uk
Cancer

Cancer is the most common cause of premature death in people under 75 years in South Gloucestershire. There are an average of 521 deaths a year from cancer, 52% before the age of 75. Each year there are around 969 new diagnoses. Breast, lung and colorectal (bowel) cancer account for almost 45% of all cases. Residents have significantly lower mortality rates than in England and Wales.14

There are national screening programmes for breast and cervical cancer. These are delivered as Avon-wide programmes. In South Gloucestershire in 2001/02, 27,845 females aged 50-70 were eligible for breast screening and the percentage screened, of those invited, was 76.2%. 59,807 females aged 25-64 were eligible for cervical screening and 84.3% of them had the test.15

Trends

Over the last ten years, the age standardised mortality rate for all cancers in people under 75 years has fallen in line with the national average.

Inequalities

Cancer mortality rates are higher in the most deprived areas than the least deprived areas. However, the pattern varies depending on the type of cancer. Of the common cancers, lung cancer is highly associated with deprivation, mainly because smoking is higher in deprived areas.

Source: Compendium of Clinical Indicators 2001
Targets

*Saving Lives - Our Healthier Nation*\(^{16}\) set a national target to reduce the death rate from cancer in the under 75s by at least a fifth by 2010.

**What can we do to make a difference?**

A healthy diet, particularly fresh fruit and vegetables, is important. Legislation can protect us from many potential carcinogens. Sunburn plays an important role in skin cancer. The largest preventable cause of cancer is smoking.

**Links to the Health Promotion Work Plan**

The work plan includes programmes that promote healthy eating, seek to reduce overweight and obesity, and support the Schools for Health scheme. It includes action against smoking (see smoking section).

**The Healthy Pre-School Project** encourages fruit and vegetable consumption in the pre-school setting. This year it has helped staff identify practical ways of encouraging healthy snacks and developed an 'Ideas and Action' pack. A healthy award and a grant scheme have been created to support this work.

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\(^{14}\)Compendium of Clinical Indicators 2001 and DOH ONS mortality files

\(^{15}\)AIS which interrogates the Exeter system

\(^{16}\)Secretary of State for Health 1999 Saving Lives: Our Healthier Nation HMSO
Accidents

Accidents are the single largest cause of death in young people in the United Kingdom. Approximately two thirds of accidental deaths are in men.

Between 1998 and 2000, there were 33 deaths a year from accidents in South Gloucestershire, 56% of them in people under the age of 65 years. The mortality rate is significantly lower than both the England and Wales and the regional averages. The three most common causes of accidental death in South Gloucestershire were transport crashes (44%), falls (23%), and poisoning (11%). Falls are the main cause of accidental death in older people, while transport crashes caused 50% of deaths in the under 24s. Overall men were twice as likely to die from accidental injury than women.17

Trends

The mortality rate in South Gloucestershire has fallen over the last ten years, and has remained well below the national average.

Trends in mortality from accidents in South Gloucestershire

Inequalities

There is no clear association between mortality rates from accidents and deprivation in South Gloucestershire.

SMR=Standardised Mortality Ratio where England and Wales average equals 100.

Source:Compendium of Clinical Indicators 2001

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Targets

The white paper, Saving Lives - Our Healthier Nation,\(^{18}\) set a national target to reduce the death rate from accidents by at least a fifth, by 2010.

What can we do to make a difference?

Recent evidence\(^{19}\) shows that the areas which have the scope to make the biggest impact in the short term include action on falls at, or near home, road accidents, dwelling fires and action on risks associated with play and recreation.

Links to the Health Promotion Work Plan

The work plan includes activities that support injury prevention. This is delivered through implementation of the Avonsafe strategy.\(^{20}\) The plan includes programmes that:

- are specifically for children and young people.
- support falls prevention work in older people.
- improve the quality of information available to enable evaluation.
- support national and local campaigns.

\(^{17}\) Compendium of Clinical Indicators 2001 and DOH ONS mortality files
\(^{18}\) Secretary of State for Health 1999 Saving Lives: Our Healthier Nation
\(^{19}\) The Accidental Injury Task Force 2002 Preventing Accidental Injury-Priorities for Action DOH
\(^{20}\) Avonsafe Injury Prevention Alliance Strategy 2001-2006 see at [www.avon.nhs.uk/phnet](http://www.avon.nhs.uk/phnet)
Mental Health and Suicides

Every year, 15 people in South Gloucestershire die from suicide and undetermined injury. Ninety-three per cent of them are under the age of 75 years. This mortality rate is significantly lower than both the England and Wales and South West regional averages.

In the UK, around a quarter of all the drugs prescribed by the NHS are for mental health problems. Stress related absences account for half of all sickness from work.²¹ Around one in ten children between the ages of five and 15 years in the UK are experiencing a problem serious enough to require professional help. In South Gloucestershire, the child and adolescent mental health service currently has a waiting list of over 200 young people.

Trends

Worldwide, mental disorders account for approximately 12% of the burden of chronic disease. Their contribution is higher in wealthier countries. Major depression, if the present trends persist, will be second only to chronic heart disease by 2020.

Over the last ten years, the mortality rate from suicide and undetermined injury in South Gloucestershire has declined.

Progress towards Our Healthier Nation target of a 20% reduction in mortality from suicides

Source: Compendium of Clinical Indicators
Inequalities

We do not have reliable South Gloucestershire data on the links between mental health and deprivation, but we know from other studies that such links exist. Unemployed people are twice as likely to have depression as people in work. Children in the poorest households are three times more likely to have mental health problems, than those in well off households.

Targets

*Saving Lives - Our Healthier Nation* set a national target to reduce the death rate from suicides in all ages by at least a fifth by 2010.\(^{22}\)

What can we do to make a difference?

Action needs to be multi-agency and to work with individuals and families, to strengthen emotional resilience and promote positive parenting; organisations, to promote mental health and well being of all staff; communities and schools, to increase social support, inclusion and participation.

Links to the Health Promotion Work Plan

The work plan includes the promotion of mental health and well-being. The programme includes:

- implementing the South Gloucestershire Mental Health Strategy.
- supporting the World Mental Health Day campaign to raise awareness of mental health issues and combat stigma and discrimination.
- working with the new multi-agency group - Emotional Well Being Promotion – Children and Young People.
- the Schools for Health project, through which ten schools are currently planning work related to emotional health and well-being.
- reviewing the role and support offered by the health visiting service to parents with young children.

Forty schools in South Gloucestershire have been working on the *Schools for Health* programme this year, participating in activities across all the themes: personal, social and health education, citizenship, drugs, alcohol and tobacco, emotional health and wellbeing (including bullying), healthy eating, physical activity, and safety. ‘Staff and children have improved their eating habits, become more aware of sun safety issues, cancer awareness and the need to manage stress. Staff are confident to try out new initiatives that affect the traditional routines of the school day.’ (Stoke Lodge Infant School)

\(^{21}\) Mind Out for Mental Health fact sheet 2002
\(^{22}\) Secretary of State for Health 1999 Saving Lives: Our Healthier Nation HMSO
Falls in the elderly

Falls are the main cause of accidental death in older people.

Between 1998 and 2000, 25 people in South Gloucestershire, aged over 65 died as the result of a fall. In 2001/02, there were 539 discharges from hospital of people over 65 who had a fall. Three-quarters were women, almost half of whom were over the age of 85 years.

Trends

The older population in South Gloucestershire is increasing rapidly. It is estimated that there will be over a 50% increase in the over 65 years age group in the next 20 years.

![Projected growth in South Gloucestershire population over next 20 years](chart.png)

Source: ONS

Targets

The National Service Framework for Older People\(^{23}\) has a standard on falls:

*To reduce the number of falls which result in serious injury and ensure effective treatment and rehabilitation for those who have fallen.*
What can we do to make a difference?

We can work to:

- reduce the risk of falling. This may include improving an individual’s environment, checking that medication is not causing dizziness, and improving co-ordination, strength and balance. Specifically modified exercises, including Tai Chi, have good evidence to show that they can improve balance and prevent falls.

- take steps to improve bone fragility. Should the person end up falling, the chance of fracture can be reduced if their bones are strong. Certain types of exercise, specifically those that are weight bearing, can increase or maintain bone strength. Calcium and vitamin D supplements, or dietary improvements can also help preserve bone strength.

- reduce the force of the fall. Providing hip protectors to people identified as at risk of falling, can help lessen the impact should they fall and so reduce the chance of fracture. A recent randomised controlled trial suggested that issuing hip protectors to nursing home residents, together with simple education of staff, reduced the likelihood of hip fracture by approximately 40%.

Links to the Health Promotion Work Plan

The work plan includes promoting the health of older people. The programme includes:

- sending advice to all GPs about identifying fallers, providing general advice, prescribing calcium and vitamin D where appropriate and reviewing medicines to reduce unnecessary medication.

- training wardens in sheltered accommodation to provide exercises for their residents.

- running Tai Chi taster sessions for over 150 people in Age Concern South Gloucestershire.

- ensuring hip protectors are made available to older people referred to the falls clinic at Frenchay Hospital.

- reviewing the role and support offered by the health visiting service to the elderly, including falls prevention.

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23 see NSFs at www.doh.gov.uk/nsf
24 G Meyer, A Warnke, R Bender, and I Mühlhauser  Effect on hip fractures of increased use of hip protectors in nursing homes: cluster randomised controlled trial  BMJ 2003; 326: 76.
Maternal and Newborn Health

This section has information about stillbirths and infant mortality, low birth weight, breastfeeding and teenage pregnancy.

Stillbirths/Low Birth Weight

In the year 2000, the general fertility rate (number of live births per 1000 women aged 15-44 years) in South Gloucestershire was 57.1, compared to an Avon average of 52.6. In 2001, there were 12 stillbirths, a rate of 4.5 per 1000 total births, compared to 3.9 across Avon.

The number of stillbirths is, thankfully, small. This makes it difficult to spot trends that are real as opposed to chance variation. Low birth weight is more common and can be more reliably monitored. In 2001, 6.3% of babies were of low birth weight. This was not significantly different from the England and Wales average and was slightly lower than the Avon average of 6.9%.

Trends

Over the last six years, in South Gloucestershire, the number of babies born has decreased and the general fertility rate has declined. The number of low birth weight babies has also declined.

Inequalities

Between 1997 and 2001, no wards in South Gloucestershire had significantly more low birth weight babies than the Avon average. There is no clear association between deprivation and low birth weight in South Gloucestershire.

Source: Compendium of Clinical Indicators; ONS; 1991 census for Townsend Scores
Targets

One of the national inequalities targets\textsuperscript{26} is:

Starting with children under one year, by 2010 to reduce the gap in mortality by at least 10\% between ‘routine and manual’ groups and the population as a whole.

What can we do to make a difference?

There is a link between birth weight, still births, and infant deaths. Action to reduce the number of low birth weight babies will also reduce stillbirths and infant deaths.

Babies may be of low birth weight, despite being full term, because of poor conditions in the womb, or they may be premature. Although there may be medical conditions that predispose to both of these events, lifestyle factors can also make a difference, in particular, poor diet and smoking. Stopping smoking can have a major health benefit for the baby, reflected in higher birth weight and less susceptibility to childhood illness and infant death.

Putting babies to sleep on their backs has dramatically reduced the incidence of cot death. It is also important for babies to avoid any contact with tobacco smoke. Breastfeeding is also of benefit.

Links to the Health Promotion Work Plan

The work plan includes promoting the health of mothers and newborn babies. The programme includes:

- smoking cessation; increasing the number of women who stop smoking throughout their pregnancy.
- providing support for young parents’ groups and opportunities for developing cooking skills and supporting the nutritional needs of pre-school and school age children.
- the South Gloucestershire teenage pregnancy strategy.
- developing the health visitor role.
- the breastfeeding work plan.

Some young parents’ groups decided that they would like to develop their cooking skills. Groups were linked up with a tutor who designed a programme with them. The sessions offered the chance to develop new skills in a supportive environment, learn more about healthy eating, and engage in the social aspects of eating and sharing food. The parents were encouraged to try out these new skills at home and share them with their families. ‘I think more about what I feed my one year old on now.’ (Comment from one participant).
Teenage Pregnancy

The UK has the highest rate of teenage pregnancy in Europe. Even areas such as South Gloucestershire, which have lower rates than the national average, have teenage birth rates that are high by European standards.

Although many teenagers make excellent mothers and bring up children successfully, they are more likely than their peers to live in poverty and to be unemployed. The death rate for the babies of teenage mothers is 60 per cent higher than for babies of older mothers and they are more likely to be of low birth weight, have childhood accidents, and be admitted to hospital.

Every year in South Gloucestershire there are 120 conceptions in young women aged under 18 years, a rate of 30.3 per 1000. 12% of these are in girls under the age of 16. Approximately half of all conceptions in women under 18 years, result in a termination.

Trends

The under 18 years conception rate was significantly lower than the England and Wales average in 2001, and has fallen overall since 1998.

The under 16 years conception rate is considerably lower than the England and Wales average, although there was an unexpected jump in year 2000, shown in the graph on the next page. Because the actual number each year in this age group is small (around 15), a small ‘chance’ variation in one year can make a marked apparent difference. For this reason the results are usually taken over a three-year period. Provisional national figures show a 4% reduction in this age group in 2001. However, local figures are not yet available.
Targets

The Government's ten-year strategy aims to both reduce the number of teenage pregnancies and help young mothers to get back into education and training. In 1999, the Social Exclusion Unit report on teenage pregnancy set targets to:

- Halve the rate of conception amongst under 18 year olds in England by 2010. South Gloucestershire has been set a target of a 40% reduction.
- Increase to 60% the participation of teenage parents in education and training to reduce their long term risk of social exclusion.

What can we do to make a difference?

The National Electronic Library for Health lists two quality assured summaries of evidence of effectiveness of interventions to reduce teenage pregnancy. There is a relative lack of evidence from good quality randomised controlled trials. However, the following appear to be effective:

- School-based sex education plays an important role in the prevention of teenage pregnancy. Characteristics of successful programmes include the use of social learning theories; provision of factual, accurate information; inclusion of activities that address social or media influences on sexual behaviours and practice of communication and negotiation skills. Such programmes are likely to help young people make other healthy choices.

- Youth orientated family planning clinics. There is an association between conception rates and the level and type of contraceptive services available, including the distance to the nearest youth orientated family planning clinic. In order to attract young people, services need to be well advertised, easily accessed outside school hours (opening times and location), informal and
confidential. They should be developed in collaboration with key statutory agencies, relevant voluntary organisations and community groups, and should be staffed by people trained to work with young people.

- Specialised antenatal care programmes for pregnant teenagers involving, for example, GPs, district nurses, health visitors and social workers, are likely to improve health outcomes. They may also save resources.
- Health visitors and social workers can usefully provide targeted support for teenagers and their families, during and after pregnancy. Programmes involving home visits, support from other young mothers, and home-based parenting schemes may also be beneficial.

**Links to the Health Promotion Work Plan.**

South Gloucestershire Teenage Pregnancy Strategy is overseen by the multi-agency Teenage Pregnancy Group. Initiatives include the ‘No Worries’ information service for young people.

**Breastfeeding**

Breastfeeding improves a child's long term physical health. The benefits include less asthma and eczema and fewer gastro-intestinal problems.

In 2000-2001, 42% of mothers in South Gloucestershire were breastfeeding at eight weeks. South Gloucestershire has significantly lower breastfeeding levels than the average rate for Bristol and North Somerset.\(^{28}\)

**Trends**

Breastfeeding initiation rates have increased nationally over the last ten years with rates increasing from 64% in 1990, to 70% in 2000. Rates are higher among mothers of first rather than later babies, older mothers, mothers who continued their education past 18 years, and those in Social Classes I and II.\(^{29}\)

**Targets**

The government’s targets to reduce health inequalities include the following breastfeeding target.

*Deliver an increase of two percentage points per year in breastfeeding initiation rates, focussing especially on women from disadvantaged groups.*

**Inequalities**

Ten wards in South Gloucestershire have significantly lower rates of breastfeeding than the Bristol, North Somerset and South Gloucestershire averages. Breastfeeding rates in the most deprived areas are significantly lower than the least deprived areas.
What can we do to make a difference?

Four types of intervention have been shown to be effective, the first two particularly at increasing breastfeeding amongst women on low incomes.

- Peer support programmes delivered in the ante and post-natal periods.
- One-to-one health education.
- Informal small group health education sessions delivered during the antenatal period.
- Changes in maternity ward practices, for example, ‘rooming in’ and breastfeeding support.

Links to the Health Promotion Work Plan

The promotion of breastfeeding is part of the healthy eating programme. Through a local breastfeeding network, activities support national campaigns, provide training, support the establishment of ‘breastfeeding friendly’ public premises, develop resources, support the establishment of breastfeeding support groups and policy development.

25 DOH Compendium of Clinical Indicators; ONS; 1991 Census data for Townsend Scores
26 HM Treasury&DOH 2002 Tackling Health Inequalities Summary of the Cross cutting Review.
27 http://www.nelh.nhs.uk/
28 Child Health Surveillance; 1991 Census for Townsend Measures of Deprivation
29 2000 Infant Feeding Survey.
Childhood Immunisation

Immunisation is one of the most effective of all preventive health care measures, and the high uptake by children in the UK has virtually eradicated many of the infectious diseases that used to cause widespread death and disability.

However, none of these diseases has disappeared and a continuing high level of immunisation is important, particularly now that international travel is so common. If the ‘pool’ of children who have not been immunised for a given disease becomes large enough, then the disease can re-emerge and cause an outbreak by spreading from person to person. A sustained uptake by 95% of the population provides a good level of immunity for the population as a whole.

Immunisation rates in South Gloucestershire for children up to five years old are high, with uptake rates of over 93% for most vaccines. The exception to this is the second measles, mumps and rubella vaccine (MMR2). The MMR vaccine is given twice, once at 13 months and again before school age. The uptake of this second vaccine is significantly lower than the other vaccines.

DTP = diptheria, tetanus and pertussis.
MMR = meausles, mumps and rubella
Men C = Menigitis C

Source: Child Health Surveillance
Trends

Studies have not shown any link between the MMR vaccine and autism or bowel disease, but there has been considerable parental anxiety leading to falls in MMR rates. This will have implications in terms of levels of circulating virus in the community and could lead to outbreaks of measles, mumps and rubella. These diseases have serious complications and can result in death.

The uptake rate of the second MMR vaccine has changed little over the last year but there has been some fall in uptake of the first MMR vaccine across Avon. This fall has not been so marked in South Gloucestershire.

By the age of five years, 97% of children in South Gloucestershire had had the MMR1 vaccine in 2001/02. However, the uptake rate for the second MMR vaccine (MMR2), given just before school, was low, with only 87% of children vaccinated. This compares to 74% in 2001/02 in England.

Targets

The Department of Health guidelines state that 95% of children should be immunised by the age of two years against diphtheria, tetanus and polio (DTP), pertussis (also known as whooping cough), haemophilus influenzae type b (HIB) and measles, mumps and rubella (MMR). 31

What can we do to make a difference?

There are well established, computerised administration systems that ensure all children are offered immunisation. The drop in uptake occurs when the public loses confidence in the safety of a particular vaccination. Health professionals can also be affected by media reports.

Assuming that the fears are unfounded, as with MMR, we need to ensure that health professionals have access to up-to-date, reliable information that they can discuss with parents. This traditionally has been the role of the local immunisation co-ordinator. That task should be made easier, now that frontline members of staff are getting access to the internet and e-mail.

30 Child Health Surveillance
31 see Department of Health web site www.doh.gov.uk
Smoking Cessation and Tobacco Control

In 2001, 27% of the population smoked. There are about 12 million adult cigarette smokers and another three million who smoke pipes and/or cigars. 10% of young people aged 11-15 years are regular smokers.32

Smoking is the leading single cause of avoidable ill health and early death. One in two smokers dies prematurely. It has been estimated that 371 deaths a year in South Gloucestershire are attributable to smoking.

Smoking in pregnancy is linked with low birth weight and perinatal mortality, and to poor health in later life. Twenty-eight per cent of women who became pregnant in 2000-2001, smoked before pregnancy and of those that smoked, 69% continued during pregnancy.33

Cigarette smoke is a source of indoor air pollution and harm to non-smokers.

Trends

There has been an overall reduction in smoking over the last 30 years. Research in South Gloucestershire34 found that more than half of current smokers (55%) indicated that they wish to give up smoking.

Mortality from lung cancer in men fell from around 880 deaths per million population in 1990 to 628 in 1999, continuing the downward trend since the 1970s. This reflects the fall in tobacco consumption by men. Female mortality rates from lung cancer are still less than half the male rates: 301 deaths per million in 1999, and this rate has remained stable throughout the 1990s.35

Inequalities

Despite a reduction in the overall prevalence of smoking, there has been little change in smoking rates amongst those living on low incomes and those who are least advantaged. The wards of Rodway and Staple Hill have around double the survey average of current smokers (29% and 27% respectively).36

This accounts for the twofold difference in lung cancer rates between the most deprived and least deprived quintile as shown in the graph on page 13. Smoking also makes a major contribution to the marked inequalities in rates of cardiovascular disease.

The proportion of mothers smoking before and during pregnancy increases with deprivation.
The NHS Cancer Plan, the NHS Plan and the white paper on tobacco, *Smoking Kills* set targets to reduce the prevalence of smoking, and to reduce inequalities in smoking. Targets include:

- Reduce the number of adults who smoke from 28% to 24% by 2010.
- Reduce the number of smokers in manual groups from 32% to 26% by 2010. Reduce the number of children who smoke from 13% to 9% by 2010. Reduce the number of women who smoke during their pregnancy from 23% to 15% by 2010.

The Department of Health has set targets including targets for South Gloucestershire PCT, to achieve across a range of health service provision. These include:

- 3,076 smokers in South Gloucestershire from all groups successfully quitting at the four-week stage by 2006. Deliver a one percentage point reduction per year in the proportion of women continuing to smoke throughout pregnancy, focusing especially on smokers from disadvantaged groups.

Source: Maternity Services
What can we do to make a difference?

Co-ordinated action is needed including: national and European legislation to ban advertising, raise taxes on cigarettes, stop smuggling, promote smoke free environments, tackle under age sales (82% of smokers take up the habit as teenagers), education in schools and other settings and help for individuals who want to give up smoking.

In 1999, a smoking cessation service was set up to provide specialist support to those wanting to give up smoking. This is largely delivered in GP practices by specially trained nurses. Between November 1999 and July 2002, the service helped 2411 people in South Gloucestershire to set a quit date. Of those, 51% quit for at least four weeks.

Links to the Health Promotion Work Plan

The work plan includes programmes that promote smoking cessation and tobacco control. The programmes include activities that:

- maintain and develop the smoking cessation service across South Gloucestershire. Develop a range of services so that smokers have a choice when seeking help to stop smoking.
- increase the number of smokers accessing the smoking cessation service from manual groups and increase the number of women who stop smoking during pregnancy.
- promote smoke free environments and offer help to employees who wish to give up smoking.
- develop resources and training for young people around tobacco control and smoking cessation.

The smoking cessation service contacted successful quitters in South Gloucestershire one-year on, to find out their smoking status. 84% replied and 32% of them had not smoked at all since their quit date. A further 15% who had relapsed were now not smoking. ‘I am better off in health and pocket.’ (Comment from a ‘quitter’).

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33 Maternity Services
34 South Gloucestershire Viewpoint Survey 2002
35 Cancer Research Campaign 2001 Cancer statistics: Mortality-UK
36 South Gloucestershire Viewpoint Survey 2002
37 The NHS Cancer Plan, the NHS Plan and The White Paper on tobacco Smoking Kills, 1999 see www.doh.gov.uk
38 DOH Priorities and Planning Framework 2003-2006
Sexual Health

Chlamydia and gonorrhoea are the most prevalent sexually transmitted bacterial infections nationally. The virus that causes hepatitis B can also be transmitted sexually, and this disease is given particular attention in this report. Acute hepatitis B can occasionally be fatal. More commonly the patient recovers, but may suffer from chronic hepatitis, which in turn can cause liver cirrhosis or liver cancer.

Trends

Since 1995, there have been large increases in chlamydia and gonorrhoea diagnosed in genito-urinary clinics nationally and those serving the local area. The rise in gonorrhoea is thought to be reflective of changes in sexual behaviour, particularly in young people and men who have sex with men. The rise in chlamydia may be due to increased awareness of the disease leading to more people getting tested.

![Total number of diagnosed chlamydia and gonorrhoea cases at the Bristol Royal Infirmary](chart)

Source: KC60  Note: There is currently no data specific to residents of the PCTs. It is assumed that most Bristol and South Gloucestershire residents will attend the clinic at the BRI.

Hepatitis B cases in the Bristol area have risen over the past 18 months. South Gloucestershire residents have also been affected, particularly in the past six months.

People infected with hepatitis B may not develop symptoms for up to six months, but they are able to infect others in that time. Infection is usually associated with exposure to blood or infectious bodily fluids. Common means of transmission
include heterosexual and homosexual sex (including oral sex), injecting drug use and perinatal transmission (mother to infant).

The increase in hepatitis B cases in Bristol and South Gloucestershire is being monitored and investigated by the Avon Health Protection Unit (part of the newly formed Health Protection Agency). The outbreak is not yet fully understood, although at least part of the increase appears to be due to risky sexual behaviour as well as the sharing of injecting equipment by intravenous drug users (IVDUs).  

**What can we do to make a difference?**

Prevention involves information and the promotion of safer sex, the use of condoms and, for hepatitis B, the provision of clean needles through needle exchange schemes. It is particularly important to work with ‘hard to reach’ groups, with the help of organisations such as the Terence Higgins Trust and outreach services to commercial sex workers. Avon Health Protection Unit has recommended that vaccination is offered to all IVDUs, commercial sex workers and all those who have multiple sex partners.

**Action to control the hepatitis B outbreak**

The South Gloucestershire Drug Action Team is co-ordinating a campaign to ensure that all known IVDUs are offered vaccination. The PCT has introduced a new item of service fee, as a short term measure, to help GP practices fund the extra administration involved in bringing this outbreak under control.

Source: Avon Health Protection Unit

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39 Avon Health Protection Unit at www.avon.nhs.uk/phnet/hpu
4. Improving health and Tackling Inequalities

In 2002, South Gloucestershire Council formed a Local Strategic Partnership to help ensure a co-ordinated approach to planning. The partnership includes representatives from the Council, PCT, local businesses, voluntary sector and others. It recently published a ten-year strategy, Our Area: Our Future.

There are seven themes within the strategy, one of which is health and care and this has four strategic aims.

- To promote health and wellbeing.
- To reduce inequalities in health.
- To prevent disease.
- To improve health and care services.

The third aim, ‘preventing disease’ refers to protecting the public from harmful agents, such as infectious diseases and environmental hazards. This continues to be a traditional responsibility of the Director of Public Health, although practical work involves close liaison between the local Environmental Services Department and the newly formed Health Protection Agency.

Plans for achieving the fourth aim, improving health and care services, are described in the PCT Local Delivery Plan.

This report outlines an approach to achieving the first two of the aims, improving health and reducing inequalities. This final chapter suggests how this work should be focussed and prioritised.

Priorities for improving health

What health problems should we focus on?

Action to improve health, and reduce inequalities, needs to occur at all levels and to involve many different agencies. In order to get the greatest improvement in health we need to direct our activity carefully and focus on:

- health problems that are common and serious, in particular, cardiovascular disease, cancer and accidental injuries.
- those groups with the most to gain, that is, the most deprived communities and low income groups, children and young people.

What should we do?

Action needs to:

- concentrate on activities that have been shown to be effective and make a difference, for example, reducing smoking, increasing physical activity,
increasing consumption of fresh fruit and vegetables, and ‘designing out’ injuries (seat belts, cycle helmets, smoke alarms, road design etc), rather than expecting changes in behaviour.

• help people to get to a position where they can make healthy choices more easily. This means supporting efforts that help communities and individuals tackle basic needs, such as those created by poverty, unemployment and fear of crime, as a stepping stone toward a healthier lifestyle. For this reason, efforts to reduce poverty and to enable communities to develop are essential ingredients of health improvement, as are initiatives to improve skills and improve life chances and self esteem.

• consider the potential health impact of local strategic developments. Many initiatives that improve living conditions will also improve health as a welcome by-product. For example, a successful light railway scheme for South Gloucestershire would be likely to have a substantial impact on health by encouraging car users to switch to public transport and include some walking in their journey to work. On the other hand, it is possible for housing, transport or commercial developments to unexpectedly have a negative impact on health. Achieving this consideration of health issues in a practical, useful way, provides a challenge, as formal ‘Health Impact’ assessments are time consuming and often unsatisfactory.

How do we reach those with most to gain?

In order to reduce inequalities in health we need to focus some of our effort on well defined areas, complemented by an approach across all areas.

Targeting improvement at geographical areas

Some of the effort to reduce inequalities in health needs to be focussed on:

• Kings Chase, Staple Hill.
• Patchway / Filton.
• West Yate.
• Cadbury Heath, Ventura Farm.

Suggested priorities for these geographical initiatives include:

• strengthening the public health role of community nurses, particularly health visitors and local authority environmental services staff.
• closer liaison with local authority community development initiatives.
• improving services for young parents and pre-school children, including parenting skills.
• increased uptake of physical activity through ‘exercise referral’ schemes.
• improving the uptake of welfare benefits. This is a direct way of reducing poverty in those groups who need it most. A relatively small investment in expert advice services can bring considerable extra resources into the local economy. For example, in 2002, North Bristol Advice Centre saw 480 clients from the Southmead area in Bristol and generated £144,680 in extra income, (with a secondary benefit to the local economy). Extending the availability of such services would appear to be an extremely ‘good buy.’ Primary care can play an important part in an advice network by ‘signposting’ patients to appropriate advice.

**Targeting improvement at particular groups and individuals**

There are people, with actual or potential poor health, living in all areas of South Gloucestershire, and geographically focussed initiatives need to be complemented by activity across the whole area. The Government’s recent Cross Cutting Review suggests that, to successfully tackle inequalities, interventions must reach more than just the most deprived areas. The ‘trick’ to achieve will be to target services and support to the most needy individuals, wherever they live. This targeting can take two forms:

• Ensuring services and support, intended for the most needy, reach them (welfare benefits, ‘affordable warmth’ etc). Front line staff in health (primary care and community) and the local authority (social services, education, community services, etc.) are in daily contact with individuals with ‘high needs,’ and play a vital role in helping them access information, advice and services.

• Ensuring mainstream services are audited and ‘flexed’ to ensure the most needy use them, (primary care services including coronary heart disease prevention, smoking cessation, physical activity, parenting skills etc).

The need to ‘audit’ mainstream services deserves some explanation. Such audits are necessary to counteract the tendency that those who need a service most are least likely to receive it. This phenomenon (first noticed by a Dr Tudor Hart in relation to blood pressure screening), has been dubbed the ‘inverse care law,’ and has proved to be a constant feature of health services throughout the world.

Even though a service may be available to all, it may not be equally accessible. Barriers to access for some groups may range from opening times, access to transport, language and cultural factors, clinical behaviour, or a mismatch in understanding between the patients and clinicians. For example, the uptake of the smoking cessation service is lower in young men from more deprived areas. This suggests that we need to rethink the means by which people learn about the service, and to consider changing the way it is provided for that particular group.
Planning the Work

Shared health promotion work plan

Public health staff in the PCT and local authority now work to a shared health promotion work plan. This balances the principle of prioritising activities that make a difference to the major health problems, with an emphasis on reducing inequalities. It includes the following areas:

- Injury prevention
- Breastfeeding
- Community health development and support to young families
- Smoking cessation and tobacco control
- Food and health
- Physical activity
- Healthy schools and young people
- Older people
- Mental health.

Partnership working

The PCT is also working closely with the local authority on other work with a direct impact on health. All strands of work target deprived groups and areas. In particular this includes:

- the teenage pregnancy strategy
- drugs/community safety
- a review of children's services, including the development of a children's preventative strategy.

Developing public health capacity

Many people do work that improves health, even though many would not think of themselves as health workers, even less as public health workers. Yet public health is everybody's business, and developing the public health capacity involves a range of activities from simple education and awareness raising through targeted training for public health practitioners, to more formal training of specialists. The following steps are being taken to improve public health capacity:

- Quarterly “Better Health” fora on particular health topics, open to all health and local authority staff and voluntary groups.
• A PCT review of the public health role of health visitors, developing tools and training to assist health needs assessment.

• Presentation of this report to councillors and local public meetings to allow discussion of public health issues.

• Developing public health capacity of local authority Environmental Services staff.

• Improved access to local health data, using the Avon public health website.

**Equity audits**

Equity ‘audits’ of all NHS services will be carried out, but with an initial focus on:

• blood pressure screening and secondary prevention of coronary heart disease.

• smoking cessation.

• treatments with high health gain, e.g. hip replacements and cataracts.

**Strategic advice and support to other agencies**

The PCT and the Local Authority have formed a Health Improvement Working Group, with representatives from both organisations at a Director or Assistant Director level. The group will provide strategic advice to the Local Strategic Partnership. The Partnership will be an important mechanism for improving health and addressing inequalities, particularly in the fields of:

• transport policy.

• affordable warmth initiative and housing improvements.

• education – developing young people’s resilience and competency (drugs, sexual health, relationships).

• planning for sustainable communities.

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5. Closing remarks

In this report, I have attempted to show that although South Gloucestershire residents overall enjoy good health, there are groups, particularly those living on low incomes and in poorer neighbourhoods, that are at a markedly increased risk of poor health and premature death. The causes of these differences are largely understood and can be reversed. The local structures are in place to make this happen, but will need concerted action across traditional organisational boundaries. Since coming to South Gloucestershire, I have been impressed by the local resolve to make this happen.

I am extremely grateful to the following people who did most of the work in producing this report:

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