Annual Public Health Report
2008/2009

Tackling Health Inequalities
Commissioning for Equality

Director of Public Health
NHS Luton and Luton Borough Council
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**Introduction**

My first Annual Public Health Report as Joint Director of Public Health for Luton aims to synthesise some of the information we have to describe the health inequalities in Luton and recommends concerted action to tackle them. It pulls together data about the wider determinants of health, and health inequalities, from a wide range of sources including general practice performance and public health issues.

Section 1 considers Luton’s socio-demographics and the wider determinants of health.

Section 2 examines the main causes of poor health and death, in particular cardio-vascular diseases (CVD) – which includes coronary heart disease (CHD) and stroke.

Section 3 considers quality in primary care and access to primary care health services for particular vulnerable groups. It looks at what may be improved to help address health inequalities and improve accessibility.

Each topic ends with a short summary of key points and the report makes 13 major recommendations aimed at reducing the current unacceptable levels of inequality in Luton. I recommend that the reduction of inequalities should be the main priority of NHS Luton and Luton Borough Council. We should focus on ensuring equitable access to and quality of services for all of our residents. In particular the need to ensure that all primary care services provide a high standard of service, reducing the current variability across the Borough. The report recommends a continued targeted focus on the areas of Luton which have the poorest health outcomes. These recommendations are not just for the NHS which cannot reduce inequalities without the support of our partners. For example, joint action will be important in reducing obesity in children and adults and it will be necessary to focus on how planning can have an influence on the built environment and access to fast food outlets around schools.

The report provides an update on our achievements following the previous APHR and sets out our priorities for the coming years. In future reports I will provide an update on the recommendations made in this report including the use of health equity audits to demonstrate where inequalities in health remain.

**Gerry Taylor**
Joint Director of Public Health

**Acknowledgements**

Many members of the Public Health directorate have contributed to the production of this annual report.

I would especially like to thank those who prepared each of the chapters: Morag Stewart, Kelly O’Neill, Debbie Adger, Sarah Annetts and Chimeme Egbutah. I would especially like to thank Caroline Thickens who made significant contributions throughout the report, particularly around preparing the data and creating the maps and Stuart Lines, who brought the whole report together.
Section 1

The Population of Luton
Luton’s Population

The population of Luton was estimated to be 188,800 in 2007.1

These population estimates are produced by the Office for National Statistics (ONS). Luton Borough Council (LBC) have also estimated Luton’s population and based on these calculations2 the population is estimated to be 15,000 more than the ONS estimate at 203,800. Table 1 highlights these differences. The largest difference is amongst the 20-34 year olds. The Council believes the influencing factor in this is migration which they believe is underestimated by ONS.

Although there may be a discrepancy we are required to use official ONS statistics and estimates in our statutory returns and official documents as they are produced nationally.

Table 1
Proportions of the population by age group for Luton, ONS Vs LBC

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimates</td>
<td>0-14</td>
<td>15-64</td>
<td>65+</td>
<td>Total</td>
</tr>
<tr>
<td>ONS MYE</td>
<td>20.8</td>
<td>66.9</td>
<td>12.3</td>
<td>188,800</td>
</tr>
<tr>
<td>LBC Estimate</td>
<td>20.3</td>
<td>68.4</td>
<td>11.3</td>
<td>203,800</td>
</tr>
</tbody>
</table>

The General Practice
Registered Population

In 2007/08 Luton GPs held approximately 204,300 patients on their registers. This is 8% (15,500) above the ONS estimated 2007 resident population. This may be influenced by patients living in neighbouring areas to Luton but accessing a Luton GP. However, it is similar to the LBC estimate.

Figure 1 shows a comparison of the registered and resident populations by age. The largest differences lie in the working age group (25-54 years) and school children (5-14 years). In the working age group 90,100 are registered to Luton GPs and 78,900 are estimated to be resident in Luton. In school children 27,300 are registered and 24,200 estimated to be resident. The populations are very similar in the older age groups (55+). There are also a large number of children aged under 4 years.

The population of Luton was estimated to be 188,800 in 2007.
The figure above shows a breakdown of the population of Luton by age and gender. There is a much higher proportion of the female population in those aged 75 years and older than males which reflects the life expectancy differences between the sexes locally and nationally. There are also a greater proportion of males in the 30-44 year age group than females.

Luton's population is younger than the East of England and England as a whole (Table 2). This is shown by 21% of Luton's population being aged under 15 years, compared with 18% in the East of England and England as a whole. Although Luton's population is more similar to its statistical neighbours than the East of England, Luton still has a higher proportion of younger people than its comparators, with Birmingham East and North PCT being the exception.

Table 2 also shows the 5 priority Middle Super Output Areas (MSOAs) in Luton. These are areas that had the lowest expectancy in Luton in the period 2004/06. Within these 5 areas the population is considerably younger than the Luton population as whole, with much higher proportions of the population being aged between 0-14 years in three out of the five areas. The two remaining areas have much higher proportions of the population in the working age group (15-64 years). High Town stands out in particular.
Population Projections

The population of Luton is projected to increase by 15% between 2006 and 2031. Figure 3 shows the projected year on year growth for the different age groups.

These ONS projections look at birth, death and local migration rates but do not take into account the potential effects of planned local policies such as new housing developments. Luton and Bedfordshire are part of the sub-regional growth area (Milton Keynes and South Midlands) which is also predicted to see a large growth in population over the next 25 years.

Local estimates forecast Luton’s population to increase to 2011 when it will stabilise and experience a small decline to 2021. The main areas of growth are estimated to be in the wards of South and Crawley (Figure 4), reflecting major housing developments at the Vauxhall site and Town Centre.

The increase in households is predicted to be around 5,200 over the next 15 years (2006-2021). This represents a 7% growth and the majority (83%) of this is predicted to occur before 2011.
The number of people in the older age groups will continue to rise, reflecting the general trend nationally towards an aging population. The 5-15 year old age group is projected to increase by 11.5% from 2011 to 2016, similar to the older age groups, and the 16-19 year olds are projected to decrease up to 2016 but then increase by 15.5% to 2021. The 'labour force' (the section of the population classified as either working or seeking work) is projected to increase to 2011 and then decrease thereafter. An increasing older population will have implications for future health and social care needs and planning will need to consider these long term demands, as well as those for the 5-15 year olds over the next 5-10 years.

Table 3
Luton’s population change by age structure (percent)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>2006-2011</th>
<th>2011-2016</th>
<th>2016-2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-school (under 5s)</td>
<td>15.2</td>
<td>-5.8</td>
<td>-6.6</td>
</tr>
<tr>
<td>School Age (5-15s)</td>
<td>5.2</td>
<td>11.5</td>
<td>4.4</td>
</tr>
<tr>
<td>School Leavers/ Higher Education (16 to 19s)</td>
<td>-5.3</td>
<td>-10.4</td>
<td>15.5</td>
</tr>
<tr>
<td>Working Adults (20-64s)</td>
<td>4.7</td>
<td>-4.0</td>
<td>-3.3</td>
</tr>
<tr>
<td>Post Retirement (65-74s)</td>
<td>2.6</td>
<td>10.7</td>
<td>3.5</td>
</tr>
<tr>
<td>Older People (Over 75s)</td>
<td>12.3</td>
<td>8.4</td>
<td>10.0</td>
</tr>
</tbody>
</table>

Figure 5
Luton’s population change by age structure (2006-2021) (percent)

Births and Deaths

The general fertility rate in Luton (i.e. the number of births per year per 1,000 total population) has increased, similar to the national trend. However, Luton has the second highest general fertility rate of all unitary authorities in England, with 83.7 live births per 1,000 women aged between 15-44 years compared with 62.1 in England. It is therefore unsurprising that Luton has the highest spend nationally on maternity services according to programme budgeting data for 2006/07.

Circulatory disease remains the biggest cause of death in Luton and nationally. Although early deaths from heart disease and stroke have been declining in recent years they still remain higher in Luton than the national average. Figure 6 shows the breakdown in Luton of the most common causes of death in 2007. All age all cause mortality in Luton is statistically higher than England and East of England for both males and females. For more information on this and Circulatory Disease and Cancer deaths in Luton please see section 2.1.2.

Figure 6
Most common causes of death in Luton, 2007 (percent)
Source: ONS Mortality Files, 2007

- Cancer
- Coronary Heart Disease
- Other (including neuropsychiatric conditions, accidents and diseases of liver and urinary system)
- Other circulatory disease
- Stroke
- Respiratory Disease

Figure 7 shows the number of births and deaths in the last 10 years in Luton from 1997 to 2007. According to local estimates Luton births are forecast to increase to 2011 and then fall as net migration of young mobile adult age groups occurs. Deaths are expected to remain at a similar level to 2021 due to the increasing numbers in the older age groups.

Figure 7
Actual births and deaths (1997-2007) and projected live births and deaths (2006-2011) in Luton (thousands)

- Births
- Deaths
- Forecast Births
- Forecast Deaths
Ethnicity and Migration

Luton is a very ethnically diverse town, with approximately 35% of the population being from Black and Minority Ethnic (BME) communities. Within this group there are significant Pakistani, Bangladeshi, Indian and African Caribbean communities. The 2006 ethnic group experimental estimates from ONS\(^7\) (Figure 8) show these high proportions in BME communities and in comparison with the East of England and statistical neighbours. These estimates show how ethnically diverse Luton is compared to the East of England. Luton's ethnic mix is more similar to its statistical neighbours although differences are still apparent. For example, there are lower Indian populations and much higher Pakistani and Bangladeshi populations as well as higher Black ethnic groups. There are similar proportions in the mixed ethnic groups and the 'Other' categories and a much higher proportion of White Irish populations in Luton.

Ethnicity Projections

Luton Borough Council has produced forecasted trends\(^8\) for ethnicity from the 2001 Census to 2021. Figure 9 shows these forecasted trends in the main ethnic groups in Luton. The groups highlighted are those that show notable changes over the period compared to other groups. The forecasts show a year on year increase in the Pakistani and Bangladeshi groups and a decline in the Irish group. In 2001 the white population accounted for 71.9% of Luton’s population (132,550 people) and in the 2021 forecast it is expected to account for 68.0% (122,100 people). However, the 2006 experimental estimates from ONS already suggest the white population to be 60% in Luton. The rate of change may therefore be more rapid than estimated.
Although now quite old, the 2001 Census still provides the most comprehensive source of ethnicity information, especially at a local level, within Luton. Figure 10 shows the proportions of broad ethnic groups by ward. The high Asian populations are located in Biscot, Dallow, Saints and Challney wards. All other ethnic groups are quite similar across the wards. Stopsley, Wigmore and Bramingham wards have the lowest proportion of BME groups (less than 20%) when compared with Saints, Biscot and Dallow which all have over 50% of their population classified as BME groups.
The recent expansion of the European Union has led to an increase in the number of Eastern Europeans coming to live in Luton. However, it is unclear at present whether this is a temporary trend. Due to the current economic situation, with the weak pound and rising unemployment, there may be a decrease in the numbers of Eastern Europeans as people return to their home country. Recent National Insurance Number Allocations* to Adult Overseas Nationals entering the UK (Table 4) show large increases both in Luton and the UK from 2002/03 to 2007/08. However, in the last year Luton has seen a small decrease (5%) in the numbers whereas nationally there is an increase of 4%.

* NI figures reflect adult overseas nationals allocated a NI number through the adult registration scheme. The figures provide a measure of in-migration (inflow) for adult overseas nationals registering for a NI number, however do not reflect emigration (outflow, i.e. migrants who leave the UK) or the overall migrant population (stock).
The population of Luton is estimated at between 188,800 (ONS) to 203,800 (Luton Borough Council).

The population of Luton is projected to increase by 15% between 2006 and 2031.

Luton has a high number of children aged under 5 years (8% of total population) compared with 6% in the region and nationally.

Luton has a high general fertility rate compared to England and therefore a relatively high spend on maternity services. Local estimates forecast a decline in Luton births after 2011.

Both the number of people in the older age groups (aged 65+) and school-age (5-15 years) are set to rise up to 2021, whereas the number of school leavers are projected to decrease up to 2016 and then increase again up to 2021.

Luton is ethnically diverse with 35% of the population being from Black and Minority Ethnic (BME) communities.

Estimates forecast the proportion of the White population in Luton will decline by 2021 and that there will be a year on year increase in the Pakistani and Bangladeshi groups, along with a decline in the Irish population.

Until 2008, Luton was seeing an increase in the number of Eastern Europeans living in Luton but this trend appears to have stopped in the last year, a trend that is not reflected nationwide.

Key Points

- The population of Luton is estimated at between 188,800 (ONS) to 203,800 (Luton Borough Council).
- Both the number of people in the older age groups (aged 65+) and school-age (5-15 years) are set to rise up to 2021, whereas the number of school leavers are projected to decrease up to 2016 and then increase again up to 2021.
- Luton is ethnically diverse with 35% of the population being from Black and Minority Ethnic (BME) communities.
- Estimates forecast the proportion of the White population in Luton will decline by 2021 and that there will be a year on year increase in the Pakistani and Bangladeshi groups, along with a decline in the Irish population.
- Until 2008, Luton was seeing an increase in the number of Eastern Europeans living in Luton but this trend appears to have stopped in the last year, a trend that is not reflected nationwide.
- Luton has a high general fertility rate compared to England and therefore a relatively high spend on maternity services. Local estimates forecast a decline in Luton births after 2011.
Section 2

Health Inequalities

the key public health priorities in Luton
Introduction

There are wide differences in health experiences and outcomes in Luton. This section highlights some of the key health inequalities that exist within Luton.

Tackling health inequalities is a key national strategy. In 2007, the Department of Health (DH) agreed Public Service Agreements with PCTs with two main targets aimed at improving life expectancy:

- Starting with children under one year, by 2010 to reduce by at least 10% the gap in mortality between routine and manual group and the population as a whole.
- Starting with local authorities, by 2010 to reduce by at least 10% the gap in life expectancy between the fifth of areas with the worst health and deprivation indicators (the Spearhead Group) and the population as a whole.

There are many factors that contribute to inequalities of health outcomes. These are what are usually referred to as ‘the wider determinants of health’ and are inter-related in their effects.

Tackling health inequalities is a priority nationally, regionally and locally, and is focused on narrowing the health gap between disadvantaged groups, communities and the rest of the country. Reducing the health inequalities that exist within Luton is a key priority for both NHS Luton and Luton Borough Council.

Factors that have been found to have the most significant influence – for better or worse – are known as the wider determinants of health. While health and social services contribute to health, most of the key determinants of health lie outside the direct influence of health and social care; for example, education, employment, housing, and social and physical environments. Figure 11 below presents the determinants of health in terms of layers of influence, starting with the individual and moving to wider society.
Reducing health inequalities and achieving greater health equality requires long term sustained effort across agencies and sectors. The fundamental determinants of health and programmes to influence them do not respond to short term initiatives. While the focus of this report is on immediate and short-term actions and interventions to reduce health inequalities, it is essential to place this work in the context of the longer-term policies required. The brief section below sets out the wider context, while the rest of the report considers immediate action.

Many different factors have an important influence on health. There are three types of inequality in health:

- Inequality in access to health care (for example homeless, undocumented persons, cultural barriers e.g. for women from some minority communities)
- Inequalities in health/health outcomes (for example, there are over five years’ difference in average life expectancy at birth between the least deprived and most deprived fifths of the Luton population for males and four years for females)
- Inequalities in the determinants of health (for example, in income, education, employment or housing)

Luton is a diverse community, with areas of affluence and of deprivation with public health challenges similar to those found in larger urban conurbations. Communities from Africa, Eastern Europe and Asia add to our diversity. Health inequalities exist by location, gender, income and ethnicity.

Over the past ten years, deaths from all causes and early deaths from heart disease and stroke in Luton have been higher than the England average. This gap has widened for deaths from all causes in women and early deaths from heart disease and stroke. In addition there are high rates of recorded diabetes which are expected to rise with the high rate of obesity in the population.

Poorer health outcomes are generally more prevalent in people from lower socio-economic groups and among BME communities. In some communities within Luton, there are higher levels of premature mortality and higher rates of infant mortality and babies born with a low birth weight compared to the national average. The distribution of infant deaths is influenced by social and ethnic differences and so reducing health inequalities in infant mortality will contribute towards the aim of improving overall life expectancy. Rates of breastfeeding initiation and the proportion of adults who eat healthily and are physically active are also worse than the England average.
2.1.1 Health Inequalities: Life Expectancy

Life expectancy at birth is one of the key measures for the health inequalities national target.\textsuperscript{13}

Although life expectancy in Luton has shown a steady increase since 1999, life expectancy for both males (76.5yrs) and females (80.3yrs) is over one year below the national average (77.7yrs and 81.8yrs respectively)\textsuperscript{14}. Men and women in Luton have lower life expectancy than people living elsewhere in the East of England. The latest life expectancy data for 2005-2007 shows that a boy born in Luton can be expected to die three and a half years earlier than a boy born in St. Albans, only 11 miles away. Luton is ranked 316th out of 352\textsuperscript{*} local authorities for female life expectancy and 280th for male life expectancy.\textsuperscript{14}

Figure 12 shows life expectancy to be lower than Luton’s statistical neighbours, with a much larger difference being apparent for females.

Inequalities within Luton

Although life expectancy has been rising in Luton, this masks the inequalities that exist between areas. The life expectancy gap between the lowest and highest life expectancy in MSOAs of Luton is 11 years for men (70.2 to 81.7 years) and 10 years for women (75.5 to 85.5 years).\textsuperscript{15}

\textsuperscript{*} The rank 352 has the lowest life expectancy in the country
Figure 13
Life expectancy by Middle Super Output Area (MSOA) for all persons in Luton (2005-2007)
Source: Life Expectancy Data ERPHO 2005-2007
Life expectancy
- 73.10-77.58
- 77.59-78.16
- 78.17-79.62
- 79.63-80.29
- 80.30-83.12

Figure 14
Life expectancy by Middle Super Output Area (MSOA) for all persons in Luton (2004-2006)
Source: Life Expectancy Data ERPHO 2004-2006
Life expectancy
- 73.05-76.97
- 76.98-77.83
- 77.84-78.43
- 78.44-79.85
- 79.86-81.45
Areas of lowest life expectancy are situated in the south and west parts of Luton, in particular in Dallow, High Town, Biscot, Challney and Leagrave (Figure 13 and 14). In addition, Farley is an area of low life expectancy, particularly for males who are living 2.2 years below Luton average (ERPHO, 2005/07). These inequalities in life expectancy are largely related to low income and deprivation. The poorer than average life expectancies indicated in Figure 13 and 14 correspond closely with areas of low income and deprivation (Figure 15).

Deprivation

Luton has a diverse population with inequalities by location, gender, income and ethnicity. The indices of deprivation (IMD, 2007) rank Luton as the 87th most deprived area out of 354 local authorities in England compared to 101st in 2004.

There are 19 wards in Luton and figure 15 shows there are areas both of relative affluence and of deprivation within Luton. The most deprived areas are concentrated in the south-west and north-west areas of Luton. The pockets of deprivation are predominantly in Dallow, Biscot, High Town and Northwell wards.

* The rank of 1 has the highest deprivation
The Health Inequalities Intervention Tool

The Health Inequalities Intervention Tool\textsuperscript{16} was commissioned by the Department of Health and produced by the Association of Public Health Observatories (APHO). It is a planning tool to help PCTs and local authorities with local delivery planning and commissioning to reduce inequalities in life expectancy.

Using this tool shows the key diseases contributing to the life expectancy gap in Luton between the least and most deprived areas are different for males and females:

- For males the key diseases are diabetes, coronary heart disease and stroke, followed by respiratory diseases, including pneumonia, and diseases of nervous system.

- For females the key diseases are heart disease and stroke, endocrine, nutritional and metabolic diseases, mental and behavioural disorders and other respiratory diseases.

This shows a need to continue the PCTs focus on CVD, diabetes and lifestyle related illnesses - e.g. reducing smoking to reduce respiratory deaths.

The relative potential to reduce inequalities by addressing specific disease mortality is shown in Figure 17. This shows the breakdown of the life expectancy gap between the most deprived and the least deprived quintiles in Luton by cause of death. The figure indicates reducing deaths from circulatory diseases to have the greatest potential for reducing health inequalities in men (35%). Circulatory diseases are also a key contributor to the life expectancy gap for women (21%).

Life Expectancy and Deprivation

Nationally, life expectancy at birth is increasing for both men and women. However the inequalities gap is widening as the rate of increase in the most deprived group is slower than the rest of the population.

Figure 16 shows the inequalities in life expectancy within Luton and shows that the gap between the most deprived fifth of areas and the least deprived fifth has widened for males. Despite a narrowing of the gap in 2004-06 the gap has widened in more recent 2005-07 data for females.

![Figure 16](https://example.com/figure16.png)

Source: ERPHO Health Inequalities Profile

<table>
<thead>
<tr>
<th>Year</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001-03</td>
<td>78</td>
<td>74</td>
</tr>
<tr>
<td>2002-04</td>
<td>78</td>
<td>74</td>
</tr>
<tr>
<td>2003-05</td>
<td>78</td>
<td>74</td>
</tr>
<tr>
<td>2004-06</td>
<td>78</td>
<td>74</td>
</tr>
<tr>
<td>2005-07</td>
<td>78</td>
<td>74</td>
</tr>
</tbody>
</table>

The Health Inequalities Intervention Tool
Reducing the health inequalities that exist for life expectancy is a key priority for NHS Luton. In addressing the relatively low life expectancy of the population of Luton, it is critical to ensure a person has greater ownership of their health. Short life expectancy, obesity, cardiovascular disease, diabetes and health inequalities are often related to lifestyle issues. Moving resources to primary and community settings will help to ensure further focus on education, prevention and early diagnosis, rather than treatment.

This report focuses in greater depth on circulatory diseases in section 3.1.

Potential interventions targeted at addressing circulatory and respiratory diseases could contribute nearly half of any reductions in health inequalities for men, and nearly 40% for women. Reducing smoking would be a key contributor to reducing both groups of conditions.

Figure 18 shows the potential reduction in the life expectancy gap in males and females in Luton if a number of different interventions are applied (reducing smoking quitters and increasing the number of hypertensive patients treated, and patients treated with statins).

Reducing the health inequalities that exist for life expectancy is a key priority for NHS Luton. In addressing the relatively low life expectancy of the population of Luton, it is critical to ensure a person has greater ownership of their health. Short life expectancy, obesity, cardiovascular disease, diabetes and health inequalities are often related to lifestyle issues. Moving resources to primary and community settings will help to ensure further focus on education, prevention and early diagnosis, rather than treatment.
2.1.2 Health Inequalities: Mortality

The 2008 health profile\textsuperscript{17} for Luton shows that over the past ten years, deaths from all causes and early deaths from heart disease and stroke in Luton have been higher than the England average. This gap has widened for early deaths from heart disease and stroke and from all cause mortality in women.

All Cause Mortality (ACM)

All age, all cause mortality (AAACM) is used as a proxy measure for life expectancy as it is easier to interpret, can be calculated more frequently and correlates well with life expectancy.

The AAACM rate is a Directly Standardised Rate (DSR) per 100,000 population for all ages and all causes of death, normally displayed as a three-year average. As shown in Figure 19, the latest data (2005-07) shows Luton’s rate (males 776 per 100,000; females 570) is statistically higher than England (710; 500) and East of England (657; 468) for both male and female mortality.

Rates are more similar when compared to Luton’s statistical neighbours.\textsuperscript{3} The male rate is only statistically higher than Redbridge and the female rate statistically higher then Redbridge and Hillingdon. The male mortality rate for all comparators in figure 19 is statistically higher than females.

Figure 19
AAACM rates for 2005-2007 in Luton compared to England, East of England and statistical neighbours (per 100,000 population)
Source: NCHOD 2005-2007

Males DSR
Females DSR
Persons DSR

Figure 20 shows Luton’s rate for AAACM and for those aged under 75 years and shows for the past 10 years it has been consistently higher than England and the East of England. Luton’s yearly rate has also been higher than the average for the statistical neighbours for all ages but is more similar for those aged under 75 years.
Within Luton Inequalities (mortality under 75 years)

Mortality is unevenly distributed geographically, with some areas in Luton having much higher rates than others. All cause mortality in those aged under 75 is shown in Figure 21.
Much of this geographical difference is due to some areas having much more deprivation than others: more deprivation is associated with higher mortality (Figure 22).

There is a moderate relationship between ACM (<75 years) and the national index of multiple deprivation, \(^1\) averaged to Luton MSOAs with moderate correlation coefficients, 0.49 for <75 ages, Figure 22.

Table 5 shows the extent of the excess mortality in the most deprived communities in Luton. Males and females in the most deprived fifth of the population have significantly higher mortality rates for ACM (<75 years) than any of the comparators. This highlights the large inequalities that exist within Luton.

<table>
<thead>
<tr>
<th>Deprivation</th>
<th>Male</th>
<th>Female</th>
<th>Male</th>
<th>Female</th>
<th>Males</th>
<th>Females</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Least deprived fifth</td>
<td>306</td>
<td>357</td>
<td>207</td>
<td>169</td>
<td>250</td>
<td>226</td>
<td>256</td>
<td>226</td>
</tr>
<tr>
<td>All but most deprived fifth (80%)</td>
<td>382</td>
<td>410</td>
<td>246</td>
<td>225</td>
<td>268</td>
<td>297</td>
<td>314</td>
<td>332</td>
</tr>
<tr>
<td>Most deprived (20%)</td>
<td>601</td>
<td>675</td>
<td>353</td>
<td>298</td>
<td>414</td>
<td>436</td>
<td>481</td>
<td>528</td>
</tr>
<tr>
<td>Area Average</td>
<td>424</td>
<td>450</td>
<td>264</td>
<td>244</td>
<td>285</td>
<td>345</td>
<td>329</td>
<td>362</td>
</tr>
<tr>
<td>East of England average</td>
<td>326</td>
<td>409</td>
<td>266</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: ERPHO Health Inequality Profiles 2008
It should be noted however, that the 5 most deprived MSOAs do not correspond precisely with the 5 MSOAs with the lowest life expectancy.

Figures 23, 29 and 31 show this data as a trend over the last seven years and broken down into the main causes of death in Luton - CHD, Cancer and Smoking attributable deaths.

Figure 23 shows inequalities have widened for males and females AAACM and under 75 years, with the biggest gap for males. In 2004-06 the AAACM data showed a narrowing in the gap for females. However, recent data (2005-07) has shown an increase in mortality rates in the most deprived group and therefore widening of inequalities. For males although the gap had not narrowed in 2004-06 the mortality rates had been decreasing. The recent data shows the most deprived group rates increasing and widening of the inequalities gap.

The picture is similar for the all cause mortality in under-75s. Rates have continued to increase for males in the most deprived group while the least deprived group continues to decrease. For females the gap is narrower but rates are increasing slightly in the most deprived group in recent data.
Cancer and Circulatory Disease Mortality

Cancer mortality is the second biggest cause of death in Luton behind circulatory diseases, which is similar to the national pattern. Cancer accounts for more than a quarter of all deaths (26.4%). Just over half of all cancer deaths (52%) in Luton are to people aged under 75 years. Lung Cancer is the major cause of death accounting for 1 in 4 cancer deaths in 2007 in Luton. Figure 24 shows a breakdown of the main causes of cancer deaths.

Luton's premature mortality rate (<75 years) from cancer is higher than the East of England although not statistically higher. Figure 25 shows Luton's rate has been higher than the East of England (especially in recent years) however similar to the national average and average for its statistical neighbours. Despite this large inequalities exist within Luton (see Figures 27 and 29).
Circulatory disease is the biggest cause of death nationally and in Luton with 422 deaths in 2007 accounting for 30% of all deaths in that year. Of these nearly one in three (31%) are to people aged under 75 years. Coronary Heart Disease (CHD) accounts for half (49.7%) of all circulatory disease deaths.

Figure 26 shows Luton’s rate for premature circulatory mortality is consistently higher than England and East of England, but in line with its statistical neighbours over the last 10 years. In 2005-07 Luton’s rate (89.7 deaths per 100,000 population) was statistically higher than England (79.1) and East of England (67.4).
Within Luton Inequalities

Figures 27 and 28 show the premature mortality for Cancer and CVD in Luton. For cancer the highest mortality rates are mainly in areas in Dallow, Biscot, Challney, and Northwell wards. The highest circulatory disease mortality is situated mainly in Dallow, Biscot and High Town wards. Both maps highlight the inequalities that exist geographically across Luton with some adjacent areas having the lowest and highest mortality rates.
Data from the 2008 health inequality profile from the Eastern Region Public Health Observatory (ERPHO)\(^1\) shows the inequalities in death rates vary between the sexes (Figure 29).

For males the inequalities in premature cancer are increasing with rising mortality rates for the most deprived areas and a widening inequality gap between the most and least deprived areas. Circulatory disease mortality shows a slightly better picture with mortality rates decreasing and the gap slightly narrowing, although the gap is larger than for cancer.

For women mortality rates for cancer have remained the same in recent years and the rates in the most deprived fifth are similar to the area average for Luton. Premature circulatory disease mortality in females shows a different picture. Despite the narrowing of the inequalities gap in 2004-06 the most recent data (2005-07) show the mortality rate has increased for the most deprived and decreased in the least deprived. The ideal picture would be to see the mortality rates decreasing in all areas but at a faster rate in the most deprived group to reduce the inequalities that exist.

---

**Figure 29**

Inequalities in circulatory disease and cancer (<75 years) mortality in Luton (deaths per 100,000 population)

Source: ERPHO Health Inequalities Profile 2008

- Least Deprived fifth (20%)
- Area Average
- Most Deprived fifth (20%)

---

**Cancer Mortality <75**

**Circulatory Mortality <75**
Smoking

Smoking is a major contributor to mortality. In Luton there are 268 smoking related deaths per year.\textsuperscript{17}

The 2008 East of England lifestyle survey\textsuperscript{19} was conducted to obtain more accurate figures of lifestyle behaviours for PCTs in the East of England. Overall in Luton 21% of the population are thought to smoke compared to 23% in the most deprived areas, this is lower than previous estimates. This compares to a prevalence of 18.4% in the East of England as a whole. Of these current smokers 69% of those asked expressed an interest in quitting. For a summary of the results from the lifestyle survey please see Appendix 2.

Figure 30 highlights the inequalities that exist in smoking attributable mortality (SAM) across Luton. The areas with the highest SAM are comparable with areas of low life expectancy and high deprivation in the south west of Luton (Dallow, Biscot and High Town).

The 2008 Health Inequalities Profile suggests smoking attributable mortality in males has gone down in the least deprived fifth and Luton overall. However it has increased for the most deprived areas, widening the health inequalities for men. For females the inequality gap is smaller than males and despite narrowing in 2004-06 (mainly due to an increase in mortality in the least deprived group) it has now widened (2005-07). The least deprived groups and area average mortality rates have started to decrease in recent years, but unfortunately the most deprived continued to increase and therefore widening the gap between the two (Figure 31).
Smoking is a major contributor to mortality. In Luton there are 268 smoking related deaths per year.
Key Points

The population of Luton continues to experience health inequalities.

The poorest health is mainly concentrated in the south and west of the borough (largely the most deprived areas).

The longest life expectancy in any group in the community is that of women in the most affluent areas, 85.5 (Stopsley/Wigmore) years and the shortest, 70.2 (Dallow) years, in men in the most deprived parts of Luton.

Health inequalities are associated with factors which include ethnicity, deprivation, access and uptake of services.

Reducing health inequalities and achieving greater health equality requires long-term sustained effort across agencies and sectors. The fundamental determinants of health and programmes to influence them do not respond to short-term initiatives. It is essential to place current local work in Luton in the context of longer-term policies that are required.

Evidence indicates that while ultimately broad, long-term initiatives are required to make a profound difference to health inequalities, there are short term local actions which are worthwhile with NHS Luton having many and varied projects in place to tackle inequality.

Luton’s All Age All Cause Mortality (AAACM) rate is significantly higher than England for both males and females and has been consistently higher for the last 10 years.

There are large health inequalities for mortality in Luton. The inequality gap for AAACM and premature mortality from all causes has widened for both men and women in 2005-07, with the biggest gap seen for men.

The most deprived fifth of areas has on average 143 more deaths per 100,000 population than the least deprived fifth of areas.

Premature circulatory disease (CVD) mortality has been consistently higher than the East of England and England average over the last 10 years.

The inequality gap for males is wider for circulatory disease than cancer mortality but there is a slight narrowing of the inequality gap.

For females there is an increasing mortality rate for premature circulatory disease in the most deprived areas.

Inequalities between socio-economic groups are much lower for females than males for stroke.


Smoking is a major contributor to the life expectancy gap and in Luton there are 268 smoking related deaths per year.

The inequality gap for SAM has widened for both males and females in Luton, with increasing mortality rates in the most deprived group and decreasing rates in the least deprived group.
Section 3
The Main Diseases of Health Inequality in Luton
Introduction

Figure 32 shows the life expectancy years that could reasonably be expected to be gained for each disease area, if the most deprived quintile of Luton were to have the same mortality rate as the least deprived quintile.

<table>
<thead>
<tr>
<th>Disease Area</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coronary heart disease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heart failure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stroke</td>
<td></td>
<td></td>
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<tr>
<td>Other cardiovascular disease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oesophageal cancer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stomach cancer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colorectal cancer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lung cancer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breast cancer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other cancers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pneumonia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chronic obstructive Airways Disease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other respiratory disease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stomach/duodenum Ulcer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chronic cirrhosis of the liver</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other digestive disease</td>
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<td></td>
</tr>
<tr>
<td>Road traffic accident</td>
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<tr>
<td>Other accident</td>
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<tr>
<td>Infectious and parasitic diseases</td>
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<td></td>
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<tr>
<td>Infectious and parasitic diseases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Endocrine, nutritional, metabolic diseases</td>
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<td></td>
</tr>
<tr>
<td>Mental and behavioural disorders</td>
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<td></td>
</tr>
<tr>
<td>Diseases of nervous system</td>
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<td></td>
</tr>
<tr>
<td>Musculoskeletal disease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Genitourinary diseases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perinatal conditions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Congenital anomalies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ill defined conditions</td>
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<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deaths under 28 days</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All causes &lt; 28 days</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Department of Health/Association of PHOs Health inequalities intervention tool London Health Observatory, June 2008

Figure 32 shows the life expectancy years that could reasonably be expected to be gained for each disease area, if the most deprived quintile of Luton were to have the same mortality rate as the least deprived quintile.
Luton is a diverse community with areas of affluence and deprivation with public health challenges similar to those found in larger urban conurbations. Communities also have the potential to make significant contributions to increasing life expectancy. Action to reduce smoking prevalence and uptake will have a direct effect on the rates of COPD and cancer.

HIV is one of the most important infectious diseases. Although the rising trend in the rates and number of new people diagnosed with HIV is slowing, the overall numbers living with HIV are increasing. The current rate of HIV in Luton is 286 per 100,000 population but based on recent figures, it is likely that Luton’s prevalence of HIV cases will reach 400-450 per 100,000 by 2010. This equates to between 750 and 850 people with HIV but this is still likely to be an underestimate of the real number. A local HIV/Sexual Health Strategy has been in place since 2004. This sets out a number of local targets and is monitored by an HIV Advisory Group. A key priority for Luton is to increase access to testing through the introduction of early community based rapid testing.

Although perinatal and infant mortality are also important contributors to years of life lost they are not shown in Figure 32 because ‘infant mortality’ is not a single disease category. Further detail on the inequalities in Infant Mortality is given in section 4.

### 3.1 Inequalities in Cardiovascular Disease (CHD and Stroke)

Cardiovascular disease (CVD), which primarily comprises coronary heart disease (CHD) and stroke, is the biggest cause of preventable death in the UK, accounting for over a third of all deaths annually. Nationally, vascular disease affects over 4 million people in England, causing 36% of deaths (170,000 a year) and is responsible for a fifth of all hospital admissions. In Luton the premature (less than 75 years) mortality rate for circulatory disease in men is 122 per 100,000 population (DSMR 2005-2007) compared to 111 for England; and for women it is 56 in Luton and 49 for England. Reduction in the CVD mortality rate in people aged under 75 (40% by 2010) is a national priority.

Damage to the vascular system increases with age, and generally progresses faster in men than women, in those with a family history of vascular disease and in some ethnic groups. The rate at which vascular damage progresses is also determined by the ‘modifiable risk factors’: smoking, physical inactivity, high blood pressure, raised cholesterol levels and obesity.

The combined effects of these factors lead to a build-up of fatty deposits in the arteries (atheroma). In the coronary arteries of the heart this can lead to heart attacks and angina. In the arteries of the brain, atheroma and high blood pressure can lead to strokes or TIsAs. In the arteries of the kidneys, and small blood vessels that make up the filters of the kidneys, the result is the commonest form of chronic kidney disease that, in turn, increases the risk of heart attacks and may lead to kidney failure. Obesity and physical inactivity may lead to Type 2 Diabetes, which, if unrecognised or poorly controlled, itself damages blood vessels and increases the risk of atheroma and therefore other vascular disease.
Vascular disease is also the largest single cause of long-term ill health and disability. The burden of these conditions falls disproportionately on people living in deprived circumstances and on particular ethnic groups, such as South Asians. People in lower socio-economic groups tend to suffer earlier and more severe disease. As such vascular disease accounts for the largest contribution to health inequalities in England.

Although Luton’s mortality from CVD has shown a continued downward trend since the early 1990s (Figure 33) this follows achievements made nationally and are largely a result of improved medication and treatment. To have a real impact on reducing the level of risk in the population as a whole requires sustained effort in the areas of lifestyle change and risk management and reduction. The implementation of the new national vascular check programme, NHS Health Checks, for everyone aged between 40 to 74 over the next 5 years is expected to have a major impact in improving the cardiovascular health of the population of Luton. We will initially be focusing on those groups that are at higher risk and that are regarded as being difficult to engage in health care, such as homeless people and men from some ethnic communities.

Over the past ten years, deaths from all causes and early deaths from heart disease and stroke in Luton have been higher than the England average. This gap has widened for deaths from all causes in women and early deaths from heart disease and stroke. In addition there are high rates of recorded diabetes which are expected to rise with the high rate of obesity in the population.

Poorer health outcomes are generally more prevalent in people from lower socio-economic groups and among BME communities. In some communities within Luton, there are higher levels of premature mortality and higher rates of infant mortality and babies born with a low birth weight compared to the national average. The distribution of infant deaths is influenced by social and ethnic differences and so reducing health inequalities in infant mortality will contribute towards the aim of improving overall life expectancy. Rates of breastfeeding initiation and the proportion of adults who eat healthily and are physically active are also worse than the England average.
Coronary Heart Disease (CHD)

An integrated approach to reducing inequalities in CVD in Luton is being developed. This includes raising awareness about healthy lifestyles, building on behavioural interventions, and linking these with primary and secondary prevention and treatment. The strategy will include a targeted approach for those more likely to have higher risk factors, such as people from South Asian communities and those living in the most deprived areas of Luton.

Changing these modifiable risk factors can greatly reduce the likelihood of developing CVD. Interventions aimed at reducing the mortality from CVD in Luton are detailed in NHS Luton’s Strategic Plan 2009/10 – 2014/15. A key element will be to introduce the national Health Checks programme to identify and treat people at risk of CVD.

Stroke

Almost 500 people experience a stroke each year in Luton. Around half of these will be admitted to hospital and a fifth will die. As such, stroke is a key contributor to the number of people who die prematurely in Luton. Improving stroke outcomes, together with addressing the key contributory diseases of diabetes and CHD, is therefore vital to reducing our life expectancy gap.

Stroke is also a major contributor to long term disability and morbidity. There are over 2,000 people currently registered with a GP who have had a stroke or Transient Ischaemic Attack (TIA). Therefore a key aim for our population is to implement the requirements of the National Stroke Strategy to reduce the incidence of TIA and stroke in our population and improve the outcomes for those who do have a stroke.

We are working with the Bedfordshire and Hertfordshire Heart & Stroke Network to develop a local response to the National Stroke Strategy. The priorities and actions for each part of the stroke pathway include:

- Improving public awareness, education, information and training
- Developing rapid access to assessment and treatment for patients who have had a stroke or TIA
- Improving the quality of stroke patients’ experience in hospital
- Improving acute rehabilitation and discharge
Diabetes mellitus is one of the common endocrine diseases affecting all age groups with over one million people in the UK having the condition. It is estimated that there are over 2 million people in England living with diabetes, but that there are many more that have the condition but are unaware of it. Type 1 and type 2 diabetes are the most common forms. The causes of both types are different, but both result in too much glucose (sugar) in the blood.

Type 1 diabetes is caused by the body’s failure to produce insulin. Insulin is a hormone released by the pancreas to help control levels of sugar in the blood. It is sometimes called juvenile diabetes or early-onset diabetes because it usually appears before the age of 40.

Type 2 diabetes is caused by the body not producing enough insulin or not using what it produces effectively. This is the most common form and accounts for around 90% of all diabetes.

Diabetes is more likely to develop if a person:
- Has a relative with type 2 diabetes
- Is overweight or obese
- Takes little exercise
- Has poor regulation of blood glucose
- Is of South Asian, African-Caribbean or Middle Eastern descent
- Is over 40 years old

Diabetes can increase the risk of developing other vascular conditions, such as CHD and stroke. Effective control and monitoring can reduce mortality and morbidity and making lifestyle changes can reduce the likelihood of developing diabetes and can improve the effective management of the condition.
Black and Minority Ethnic communities are up to six times more likely to develop diabetes 20 than the white population. Additionally, people living in deprived areas in the UK are 2.5 times more at risk of developing diabetes. Figure 34 shows the estimated prevalence of diabetes in Luton in 2005 by ward, taking into account age, sex and ethnic group. The 3 wards with the highest level of estimated diabetes are Challney, Biscot and Dallow wards, followed by Leagrave, Icknield and Farley. These are largely correlated with the areas in Luton with the lowest life expectancy and NHS Luton’s priority areas.

There are almost 9,000 people in Luton registered with their GP as having diabetes.

The PBS diabetes prevalence model, developed by the Yorkshire and Humber Public Health Observatory (YHPHO)\(^2\), includes both diagnosed and undiagnosed diabetes, and indicates an average prevalence for Luton of 4.7% compared with 4.5% in England. In Luton around 4.3% of men and 5.0% of women have diabetes. These rates are higher than the East of England and higher than the national average for men (3.8% and 5.1% respectively).

Although these figures indicate our prevalence is marginally higher than regional and national figures it should be noted that as recorded figures are calculated on the registered population (204,300) and the estimates are calculated on the resident population for 2005 (186,400), actual prevalence is likely to be higher. Figure 35 shows the estimated expected prevalence compared with Luton’s statistical neighbours.

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**Figure 35**


*Source: Phase 3 Diabetes Prevalence Model - developed by YHPHO*

- **Males**
- **Females**

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Black and Minority Ethnic communities are up to six times more likely to develop diabetes 20 than the white population.
Reducing Inequalities in Diabetes

Over the next five years our focus will be to reduce the likelihood of onset of diabetes and the impact diabetes has on overall health. Key initiatives include:

- Identification of those with or at risk of developing diabetes in order to provide advice and support aimed at preventing or delaying onset
- Early identification, diagnosis
- Improving management, and self-management, through developing patient and professional education and support
- Reviewing pathways in order to ensure they are effective
- Providing accessible treatment and care in the most appropriate setting, whether primary or secondary care
- Rolling out a weight management training programme to health and non health professionals to ensure stronger focus on prevention and early intervention
- Increasing access to weight management programmes for adults and children
- Working with Active Luton to increase access to physical activity

Obesity

There is increasing evidence indicating the growing prevalence of obesity, defined as a body mass index of 30 or above, and the causal role of obesity in adverse health outcomes. Overweight and obesity is a strong risk factor for developing diabetes, as well as many other serious health conditions, including hypertension, CHD, high cholesterol and some forms of cancer. Should the numbers of overweight and obese people continue to rise there will be an inevitable impact on the numbers of people who develop diabetes and the health services that they will require. However, clinical trials have shown that behavioural interventions targeting weight reduction and physical activity in people with impaired glucose tolerance can improve the natural course of diabetes.

The 2008 East of England lifestyle survey\(^9\) includes a number of indicators related to adult obesity. The survey shows that of the sample interviewed 15.6% of men and 16.3% of women were obese compared to 14.2% and 13.8% respectively in the East of England. This is much lower than the other estimates for Luton. It must be noted that due to the sample sizes these are not significantly different and are based on a subjective response to questions regarding a person’s height and weight. The proportion that was overweight was much higher (37.5% for men and 27.8% of women) and may indicate that the subjective responses were an underestimation of their weight. The survey also shows that the most deprived areas in Luton consume less fruit and vegetables than the rest of Luton and significantly less than the East of England.

Data collected from the National Child Measurement Programme (NCMP) in 2007-08 indicated that 12.5% of Year R (reception classes) and 20.5% of Year 6 children were obese in Luton compared to a national average of 9.6% and 18.3% respectively for the same year.
Figures 37 and 38 below show the levels of overweight and obesity mapped by lower super output area. The darker blue areas indicate where, according to NCMP data for 2007-2008 the largest number of children were obese. For Year R (4-5 year olds), the map suggests that Saints, Dallow, South, Lewsey, Leagrave and Challney had the highest numbers of obese children (Figure 37). For Year 6 (10-11 year olds), the map suggests that highest areas are the same as Year R, but also more widespread, including areas such as Round Green, Farley, Northwell and Biscot (Figure 38). However, it is important to note that cohort sizes vary across the areas. If we look at percentages of the NCMP cohort who are obese rather than numbers, Stopsley and Dallow for Year R and Limbury and Dallow for Year 6 have the highest percentages.
The increase in the prevalence of overweight and obesity has occurred over a relatively short time period and therefore genetic changes are unlikely to be responsible. The growing health problems are therefore more likely to be due to environmental and behavioural changes in society. Health inequalities exist in overweight and obesity as there is a higher prevalence in lower socio-economic and socially disadvantaged groups, particularly among women. Figures show that women's obesity (BMI > 30 kg/m²) and morbid obesity (BMI > 40 kg/m²) prevalence is far lower in managerial and professional households (18.7% and 1.6% respectively) compared to households with routine or semi-routine occupations (29.1% and 4.1% respectively).
Key Points

Cardiovascular disease is the largest single cause of long-term ill health and disability

An integrated approach to reducing inequalities in CVD in Luton is being developed

The strategy will include a targeted approach for those more likely to have higher risk factors, such as South Asian communities and people living in the most deprived areas of Luton

Changing modifiable risk factors can greatly reduce the likelihood of developing cardiovascular disease

Implementation of the NHS Health Checks programme is expected to have a major impact in improving the cardiovascular health of the population of Luton

BME groups are up to six times more likely to develop diabetes than the white population and people living in deprived areas are up to 2.5 times more at risk of developing diabetes

There are almost 9,000 people in Luton registered with their GP as having diabetes but there is likely to be significant under-reporting and we expect there to be up to 12,000 people living in Luton with diabetes

Rates of childhood obesity are higher in Luton than England (12.5% of Year R and 20.5% of Year 6 compared to a national average of 9.6% and 18.3%)

Our learning from focusing on CVD will serve to inform future intervention models and approach in other long term conditions
Section 4

Inequalities in Infant Mortality
The national infant mortality target is:

“Starting with children under one year, by 2010 to reduce by at least 10% the gap in infant mortality between the routine and manual group and the population as a whole. The baseline is 1997-99.”

Infant mortality is a sensitive measure of the overall health of a population. It reflects an association between the causes of infant mortality and other factors that are likely to influence the health status of the whole population, such as their economic development, general living conditions, social well-being, rates of illness and quality of the environment.  

Luton has higher than national rates of infant mortality, perinatal mortality, stillbirths and babies born with a low birth weight. This indicates poorer maternal health and increases the risk of health complications for children in later life. Figure 39 shows these rates for Luton in comparison with England and Wales. While the general trend shows a decline overall in infant mortality over 10 years there are fluctuations year on year as a result of small numbers.

Infant mortality is affected by a wide range of health determinants and associated health inequalities. Deprivation, ethnicity, age of the mother and lifestyle factors such as nutritional status, smoking, excessive alcohol consumption and use of drugs are all additional risk factors that contribute to a child’s long term health.

Using the indices of multiple deprivation (2007) and overlaying infant mortality rates per 1000 live births the general picture is that infant mortality is greater in some of the more deprived areas, especially those where the BME communities are resident (Figure 40).
Infant Mortality by Socio-economic Group

Data for 2007 shows that overall the IMR in England and Wales was 4.8 deaths for 1,000 live births and in Luton 5.7 per 1,000 live births. The map above also indicates wide variations across Luton itself with highest rates in Challney (12.9 per 1,000 live births). It must be noted that data were pooled for 5 years in order to get meaningful data as numbers of infant deaths are small at smaller geographies. Therefore rates and variations calculated are not statistically significantly different from one another.

Perinatal Mortality and Stillbirths

The level of perinatal mortality and stillbirths in Luton has remained largely the same in recent years. This reflects the national trend. The Luton data again shows wide fluctuation year on year due to the small numbers.
4.1 Factors Associated with Infant Mortality

The DH, Review of the Health Inequalities Infant Mortality PSA target (2007) states that IMRs as a result of immaturity related conditions generally increases as the proportion of females aged 15-44 from Black and Black British ethnic groups increases. The report also states that there is an even clearer relationship between higher proportions of females aged 15-44 from Asian and Asian British ethnic groups and higher IMR as a result of congenital anomalies. For example:

- 75% of neonatal deaths are due to immaturity related conditions and congenital anomalies
- 44% are due to signs, symptoms and ill defined conditions (predominantly SUDI) and congenital anomalies
- All cases of neonatal mortality share a socio-economic gradient and all except one cause of post neonatal deaths (diseases of the nervous system and sensory organs)

Low Birth-Weight (LBW)

LBW (babies born with a birth weight of less than 2.5 kg) are often born prematurely. LBW is the most significant single cause of infant death. Birth weight is also a strong predictor of health outcomes in childhood and adulthood.

LBW babies who survive the first months of life are more likely to have disabilities, be hospitalised and in later life have an increased chance of having a chronic illness such as diabetes, stroke and lung disease (Confidential Enquiry into Maternal and Child Health, 2006).

Figures 42 and 43 show that although there is a tendency for LBW babies to be born in the more deprived parts of Luton. The correlation is not very strong.
The proportion of babies born in Luton with a birth weight lower than 2.5kg is greater than the regional average and the general trend does not show any reduction both regionally and locally (Figure 44).
Figure 44
Proportion of births low birthweight and very low birthweight (percent)
Source: ONS Birth Files, ERPHO
- LBW (<2500g)
- VLBW (<1500g)
- East of England LBW

Figure 45 includes a comparison with statistical neighbours i.e. other areas that are similar in terms of population and the picture shows that while Luton LBW births are higher than the regional and national average it is slightly below that of statistical neighbours.

Figure 45
Proportion of births recorded as low birth weight and very low birth weight in Luton and comparators (2007) (percent)
Source: NCHOD
- LBW(<2500g)
- VLBW(<1500g)

It is recognised that all the adverse child health indicators disproportionally affect certain groups in the community such as BME communities, teenage mothers and parents who smoke, drink to excess or take drugs.
### Congenital Anomalies

Congenital anomalies and associated conditions are an important contributor to infant mortality and childhood morbidity. They are conditions of malformations present before, or at the time of birth and include structural malformations, genetic and chromosomal defects, congenital infections and unborn errors of metabolism.

Most congenital anomalies are detected during the antenatal or neonatal period.

- 10% of all disabilities are due to congenital anomalies
- It costs at least 3 times more to bring up a child with a disability than it does a child without a disability
- Children with disabilities have a reduced life expectancy

### Sudden Unexpected Death in Infancy (SUDI)

SUDI is a significant cause of infant mortality normally occurring within 8 months of life. The risk is higher for males, pre-term and low birth weight babies and those sleeping in non-supine (on front or on their side). SUDIs occur in all socio-economic groups but are more common in disadvantaged populations.

There are a number of effective actions to reduce the risk of SUDI:

- Ensure infants sleep on their backs
- Ensuring infants sleep in separate cots, especially if their parents smoke, have been drinking alcohol or take drugs
- Ensuring infants sleep in the same room as their parents
- Reducing parental smoking

### Smoking in Pregnancy

Smoking in pregnancy is a cause of ill health for both mother and baby. Babies of mothers who have smoked during pregnancy are:

- More likely to be born prematurely
- Twice as likely to have low birth weight
- Up to 3 times more likely to die from a sudden unexplained death in infancy

Smoking in pregnancy increases infant mortality by approximately 40% and is much higher in lower socio-economic groups (1.5 times more likely to smoke during pregnancy). 45% of mothers under 20 smoke during pregnancy, this is nearly three times higher than the smoking rates for all pregnant women.

### Immaturity Related Conditions

Prematurity at birth, defined as babies born at less than 37 weeks gestation is a significant cause of infant mortality and results in short and long term morbidity. The Epicure study found that 46% of extremely premature babies (less than 26 weeks gestation) have moderate or severe disability at 6 years of age. The total duration and number of hospital admissions for infants born less than 38 weeks and 38-31 weeks gestation is 8.5 and 16 times that for term infants.

Preventing deaths from prematurity-related conditions focuses on preventing pre-term birth and ensuring babies born prematurely receive high quality healthcare through networks of care for maternity and neonatal services.

Risk factors associated with reducing prematurity include reducing environmental factors such as smoking, reducing teenage pregnancy, optimising maternal care through a healthy lifestyle and good nutrition.
4.2 Actions to Reduce Infant Mortality

Antenatal Screening

There are a number of antenatal tests that are routinely available to mothers during their pregnancy to detect anomalies in their unborn child.

- Screening for Downs Syndrome
- Infectious disease screening
- Screening for structural abnormalities

Data suggests there are differences between ethnic groups accessing prenatal testing. Early booking by 12 weeks gestation allows for antenatal diagnosis and planned management. Ensuring that all women including those in lower socio-economic groups and women from BME communities book early to access antenatal care is important as these pregnancies are at higher risk of an adverse outcome for the child.

Ensuring those at greatest risk attend antenatal screening may help reduce the inequalities that exist in infant mortality.

Reducing Teenage Pregnancy

Young women from the poorest backgrounds are 10 times more likely to become teenage mothers than young women born to parents from professional backgrounds. Around 7% of babies born in England are born to mothers under 20 years of age. These children are at a high risk of growing up in poverty and experiencing poor health and social outcomes.

The under 18 (U18) conception rate for Luton is on a downward trend. 2006 saw a dramatic drop in the rate from the previous year - 41.7/1000 to 34.7/1000. In 2007 teenage pregnancy rates in England rose by 1.1% and this was reflected in Luton with an increase of 0.9% and a rate of 35.6/1000. Rates in Luton are still below the England rate. The current rate represents a -17.4% from the baseline in 1998 and achieving the national target of a 45% reduction from baseline by 2010 will be a significant challenge.

To meet the challenge there is an evidence based multi agency strategy in place with strong commitment from a full range of stakeholders and support from the Children and Young People’s Board.
In comparison to its statistical neighbours, Luton rates have gone down more consistently over the last few years (Figure 47) and are now the lowest.

Nationally there is a high correlation between teenage pregnancy rates and levels of deprivation across England with half of all conceptions to under 18 year olds in England occurring in the 20% most deprived wards (Figure 48). This situation is largely replicated in Luton with the more deprived wards having the higher rates of under 18 conceptions. However, Biscot and Saints wards, which have higher levels of deprivation, have relatively low under 18 conception rates for the period 2004-6, the latest years for which ward-level data are available (Figure 49).
Figure 49
Annual conception rates for under 18 year olds in Luton by electoral wards, (2004-2006) (per 1000)

Luton average

Figure 50
Under 18 conception rates and ward relative deprivation (2004-2006) (per 1000)
Source: ONS ward-level conceptions 2004-2006, ONS Ward population estimates for England and Wales, mid-2005 (experimental stats) and Index of Multiple Deprivation (IMD, 2007), Department of Communities and Local Government (DCLG)

IMD Deprivation score (Higher score = more deprived)
Luton’s Teenage Pregnancy Strategy

Figure 51 shows the link between deprivation and teenage pregnancy.

A multi agency steering group oversees the implementation of the local evidence based strategy. Recent developments to reduce under-18 conceptions include:

- The launch of a new integrated community based sexual health service for under-25s in July 2008
- The appointment of a Health Improvement Specialist to support the development of school based health services
- An increase in frontline support for vulnerable young people
- Increased provision of LARC (Long Acting Reversible Contraception) to high risk groups
- Provision of sexual health training for primary care clinicians
- The introduction of pregnancy testing alongside provision of condoms via Condom Card Scheme
- The introduction of mandatory sexual health training for all Luton Borough Council (LBC) youth workers
- Improved access to termination of pregnancy services

These interventions are based on evidence of what works from areas with the largest reductions in teenage conceptions.
Compared to England and Wales, Luton has poorer child health as defined by infant, perinatal mortality, stillbirths and low birth weight rate. The issue of consanguinity cannot be ruled out as a contributory factor.

Infant mortality is affected by a wide range of health determinants and associated health inequalities. Deprivation, ethnicity, age of the mother and lifestyle factors such as nutritional status, smoking, excessive alcohol consumption and use of drugs are all additional risk factors that contribute to a child’s long term health.

Low birth weight is more prevalent in the some of the more deprived areas of Luton.

Improving outcomes for local children requires a partnership between health services and services provided by the local authority. As a result infant mortality is now a priority for both the children and Young People Partnership Board and NHS Luton five year strategy.

A draft action plan is now in place and to take a coordinated strategy forward requires agreement from partner organisations to meet targets addressed at health, wellbeing, education and economic improvement. This is not a short term solution.

Access to early medical abortions has increased from 64% in 2006 to 74% in 2008.

Teenage Pregnancy rates in Luton are on a downward trend. They are below the England average and have shown a more consistent rate of reduction compared to statistical neighbours.

Key Points

A draft action plan is now in place and to take a coordinated strategy forward requires agreement from partner organisations to meet targets addressed at health, wellbeing, education and economic improvement. This is not a short term solution.
Section 5

Health and Primary Care
This section looks at variation in quality in primary care and goes on to consider the ‘health experience’ of particular marginalised groups and their access to primary health care services.

5.1 Primary Care Performance and Quality

5.1.1 The Location of General Practices in Luton

There are 29 general practices in Luton, located on 35 sites, including branch surgeries. The location of general practices in Luton broadly corresponds with population density; clustered around the centre of the borough.

Figure 52
The location of General Practices in Luton mapped against population density
Source: 2001 Census

- Luton GPs (including branch surgeries)

Number of people per hectare
- 6-38
- 39-49
- 50-61
- 62-74
- 75-138

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5.1.2 The Population Registered with Luton General Practices

There were 204,300 people registered with general practices in Luton in 2007/08; 8% (15,500) more than the ONS population projections, but in line with LBC population estimates.

Gender

There are slightly more males registered with a GP in Luton (51.3%) than females (48.7%). The basic age and sex profiles of the population registered with each practice (Figure 54) suggest that there may be significant differences in the health needs of practice populations. For example, there is a higher proportion of females to males in the older age groups (aged 75+), reflecting the make up of the local population and the life expectancy pattern seen in Luton. There is a higher proportion of males in the older working age population (aged 30-65) but a lower proportion than females registered in the 20-29 year age group, which may be an indication that young males tend not to register with a GP. Women in this main child bearing age range will impact on the nature of services needed. Similarly, men in the 30 to 64 year age range, will impact on the types of services required in relation to male health in middle age.

Figure 55 shows the proportion of males and females registered with each practice.
Figure 54
Proportion of Luton’s population by gender and age group (2007 estimates) (percent)
Source: Exeter system – GP registered population 2007-2008

- Male
- Female

Figure 55
Proportion of males and females registered with each practice in Luton (percent)
Source: Exeter system – GP registered population 2007-2008

- Male
- Female
5.2 Quality in Primary Care

5.2.1 Quality and Outcomes Framework (QOF)

A number of indicators may be used to assess quality in primary care. This section provides an overview of some of the quality-related data available in primary care, mainly provided from the Quality and Outcomes Framework (QOF). Although not a quality measure in itself, QOF enables payments to be made to practices according to their achievement in caring for patients with certain chronic diseases, or long-term conditions, assessing how well practices achieve their clinical targets.

Levels of QOF achievement relate to a variety of local circumstances and should be interpreted in that context. For example, although Luton has a relatively young population, which might lead to a lower prevalence for some long-term conditions, there is also a high BME population which would lead to an increased prevalence of conditions such as diabetes, hypertension (high blood pressure) and coronary heart disease. Luton also has areas of high social deprivation, which is related to increased health need.

In terms of prevalence of the key diseases that this report focuses on (CHD, stroke, and diabetes), Figure 56 shows that although Luton’s prevalence remained relatively stable between 2006/07 and 2007/08 and CHD and stroke are below national averages, diabetes prevalence has increased between the two years and is higher than the national average.

5.2.2 Quality and Long Term Conditions - CHD, Stroke and Diabetes

In determining the quality and variation in quality across the borough it is helpful to look in detail at the QOF indicators for the main long-term conditions, and the biggest killers, in Luton.

QOF Practice Prevalence

The following graphs show the recorded prevalence of each of these conditions across practices. The accompanying maps give an indication of the practice prevalence for each condition mapped against deprivation.
Coronary Heart Disease (CHD)

The recorded prevalence of CHD varies widely across practices, ranging from under 1% to over 3.5%. (Figure 57)

Overall, practices with the higher prevalence tend to be in the more deprived areas of Luton. However, this is not a consistent picture. Several practices with significantly lower than average prevalence of CHD are located in the most deprived areas. This may indicate significant under recording.
Stroke

The recorded prevalence of stroke also varies widely across practices, ranging from under 0.2% to over 1.6%. (Figure 59)

**Figure 59**
Luton GP practice prevalence - Stroke (percent)
Source: QOF 2007/2008

- PCT average
- GP

Overall, practices with the higher prevalence tend to be in the more deprived areas of Luton. However, as with CHD, this is not a consistent picture. Several practices with significantly lower than average prevalence of stroke are located in the most deprived areas. This may indicate significant under recording.
The recorded prevalence of diabetes also varies widely across practices, ranging from under 2.5% to around 5.9%. (Figure 61)

**Figure 61**
Luton GP practice prevalence - Diabetes (percent)

Source: QOF 2007/2008

- PCT average
- GP

**Figure 62**
Estimated diabetes prevalence in Luton ward (2005)


Source: QOF 2007/2008

Estimated Diabetes Prevalence
- 5.25-11.62
- 11.63-18.88
- 18.89-27.54
- 27.55-35.42
- 35.43-55.48

Sig Diff to PCT
- Sig Higher
- No Sig Diff
- Sig Low

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Clinical Indicators for Coronary Heart Disease (CHD)

CHD 8 - The percentage of patients with CHD whose last measured total cholesterol (measured in the previous 15 months) is 5mmol/l or less

This indicator provides a measure as to how well a patient with diagnosed CHD is being clinically managed, mainly through the use of prescribed medication such as statins.

5.2.3 QOF Practice Performance

The following graphs show the recorded practice performance for the key CHD, stroke and diabetes QOF secondary prevention indicators.
CHD 10 – The percentage of patients with CHD who are currently treated with a beta blocker (unless a contra-indication or side effects are recorded)

Long-term beta blockade is an effective treatment that reduces mortality and morbidity in patients with angina and patients after myocardial infarction.

Figure 64 below indicates a relatively wide range in achievement, from below 60% to almost 100%.

CHD 11 – The percentage of patients with a history of myocardial infarction (diagnosed after 1 April 2003) who are currently treated with an ACE inhibitor or Angiotensin II antagonist

A number of trials have shown reduced mortality following myocardial infarction with the use of angiotensin-converting enzyme (ACE) inhibitors. There is evidence that angiotensin II antagonists have a similar effect.

All practices achieved over 70%, with several achieving 100% (Figure 65).
Clinical Indicators for Stroke

**STROKE 8** – The percentage of patients with TIA or stroke whose last measured total cholesterol (measured in the previous 15 months) is 5mmol/l or less

Patients who have had a stroke or TIA have a reduced risk of a subsequent vascular event if treated with statin therapy.

Figure 66 indicates a wide variation in achievement, with two practices achieving only 50%, several practices achieving below 70% and only two achieving more than 90%.

**STROKE 12** – The percentage of patients with a stroke shown to be non-haemorrhagic, or a history of TIA who have a record that an anti-platelet agent, or an anti-coagulant is being taken

Long-term antiplatelet therapy reduces the risk of serious vascular events following a stroke by about a quarter. Anti-platelet therapy, normally aspirin, should be prescribed for the secondary prevention of recurrent stroke.

Overall, achievement is high for this indicator, with the majority of practices achieving over 90% and several reaching 100%. However, one or two outliers may require further investigation and possibly support. One practice recorded 0% due to having very small number of patients registered.
Clinical Indicators for Diabetes

This set of indicators relates to both Type 1 and Type 2 diabetes. Although the care of patients with Type 1 diabetes may be shared with specialists, the general practitioner would still be expected to ensure that appropriate annual checks had been carried out.

**DM17 – The percentage of patients with diabetes whose last measured total cholesterol within the previous 15 months is 5mmol/l or less**

Statin therapy is used to reduce total cholesterol to less than 5 mmol/l to reduce cardiovascular risk.

Figure 68 indicates a relatively wide range in achievement, from around 60% to around 90%.

**DM 12 – The percentage of patients with diabetes in whom the last blood pressure is 145/85 or less**

Lowering blood pressure in people with diabetes reduces the risk of macrovascular and microvascular disease, such as renal failure and blindness. The most commonly identified target level for blood pressure in patients with diabetes is 140/80 and this is the level that should be aimed for. A slightly higher level (145/85) is used as the QOF audit standard.

Figure 69 indicates a relatively wide range in achievement, from around 55% to above 90%.

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**Figure 68**

Percentage of patients with diabetes whose last measured total cholesterol within the previous 15 months is 5mmol/l or less, by Luton GP (2007/2008)

Source: QOF 2007/2008

- PCT average
- GP

**Figure 69**

Percentage of patients with diabetes in whom the last blood pressure is 145/85 or less, by Luton GP (2007/2008)

Source: QOF 2007/2008

- PCT average
- GP
DM 20 – The percentage of patients with diabetes in whom the last HbA1c is 7.5 or less in the previous 15 months

If high levels of blood glucose are present for years it may lead to damage of the small blood vessels. The HbA1c test shows the average blood glucose level. HbA1c is about 6% of the total haemoglobin in people who don’t have diabetes. The target to aim for in a person with diabetes is an HbA1c level of below 7%. An HbA1c of 7.5% shows fair control of diabetes and an HbA1c above 8.5% shows poor control. QOF uses 7.5% for the purposes of audit and reporting and this is generally considered a reasonable quality indicator. It should serve to help shift the overall distribution of blood glucose downwards in those with diabetes.

Figure 70 shows a wide variation in achievement, ranging from around 45% to over 90%.
**Exception Reporting**

QOF includes the concept of exception reporting, which allows practices to exempt patients from the quality improvement indicators and not be penalised, where, for example, patients do not attend for review, or where a medication cannot be prescribed due to a contraindication or side-effect. However, there is a possibility that the exception reporting process may be being over-used. The effect of this may be that patients who have a condition are not receiving the quality of care and management that they require.

In the case of diabetes (indicator DM20), Figure 71 below shows a wide variation in rates of exception reporting, from over 50% to less than 5%.

Key Points

- There is a wide range of performance across practices in many of the clinical indicators related to CHD, stroke and diabetes.

- There is marked variation in the completeness of registers for the key long term conditions between practices in Luton.

- CHD, stroke and diabetes are managed variably between practices in Luton.

- Secondary prevention measures, such as blood pressure control, lowering cholesterol and managing HbA1c, have the potential to narrow the gap in mortality between deprived and affluent parts of Luton and so help address health inequalities.

- There is variability in need, demand and likely workload of different practices.

- High levels of exception reporting may need to be investigated further and practices consulted on the best methods to address this.

- Some of the poorer performing practices need to be brought up to at least the level of the better performing practices.
Section 6
Inequalities and Access to Health Care in Particular Populations
Access to good quality health services is an important health determinant. Even where universal access to health services is in place, individuals can face a range of barriers that may hinder the actual use of a service.

Inequality of access may be related to the characteristics of the potential service users, such as income, age, gender, cultural background, health literacy, or health beliefs. Some of these may have relatively more impact on disadvantaged groups than others such as costs and distance, and other factors such as communication skills and health beliefs. This section discussed just a few of the issues that may have implications for access to health care.

6.1 Ethnicity

It is often difficult to determine whether there are issues with access to health care for BME communities as ethnicity data are not always collected. However, examples from elsewhere suggest that BME communities:

- Are less likely to visit the dentist, the Bangladeshi community in particular
- South Asians have relatively high immunisation rates
- Asian, Black and Mixed populations have lower rates of setting quit dates with stop smoking services

In some cases access appears to reflect disease prevalence:

- Black Africans are the largest group seen for HIV care in all regions
- Pakistani, Bangladeshi, Indian and Mixed White and Asian communities have a higher proportion of admissions for CHD reflecting higher prevalence

6.2 Young People & Sexual Health

Sexual health is an important part of physical and mental health. The consequences of poor sexual health can be serious and in the case of HIV, life threatening. Inequalities exist with the highest burden falling on young people, BME groups, particularly people residing in the UK who originate from HIV endemic areas and men who have sex with men (MSM).

Prevalence of HIV and sexually transmitted infections are both high in Luton. Key targets nationally include reducing waiting times for genito-urinary medicine (GUM) clinics and increasing the number of young people screened for chlamydia.

- Access to GUM services has improved with 100% of patients offered an appointment within 48 hours. The percentage ‘seen’ within 48 hours has shown less of an improvement, hovering around 82%, however plans are in place to increase this to 85%

- Chlamydia is the most common sexually transmitted infection (STI) and there is evidence that up to one in 10 young people aged under 25 may be infected. It often has no symptoms, but if left untreated can lead to pelvic inflammatory disease, ectopic pregnancy and infertility. Rates have steadily increased in Luton in line with national trends although the 2006 data saw a reduction in rate from the previous year - 206 per 100,000 population for all ages compared to 226 per 100,000 population in 2005
6.3 Older People’s Health

Many older people living in long term care homes in Luton by virtue of their health, age and level of dependency have significant long term care needs and are therefore considered to be vulnerable members of the community.

We have worked with Luton Care Home Partnership to identify the knowledge and skills that improve the health and wellbeing of residents. In December 2007 the Public Health team launched an educational programme designed to work in partnership with care homes to meet the care needs of residents. The aim of the programme is to utilise the knowledge of local health and care specialists and support the transfer of knowledge and skills to care home staff. This project has started to address the specific health needs of older people, especially those who are dependent for their care on others. It has delivered education in risk assessment, infection prevention and control, food hygiene, promoting nutrition in the elderly, safeguarding the elderly, health and safety, oral health and managing continence.

We are currently reviewing the health care needs of older people living in care homes and the services currently being delivered so that future planning for care delivery takes account of the needs of the elderly living in long term care homes and those people with similar health needs living in their own homes.

The National Chlamydia Screening Programme was launched in Luton in October 2004. The programme aims to deliver early detection of asymptomatic Chlamydia infection, and prevention of onward transmission. Young people under the age of 25 are offered opportunistic screening from a range of health and non-health care sites across the town. Home testing kits are available online or can be collected from participating pharmacists, GP practices and from a further education college. Screening is also conducted via ‘pee in the pot’ days and other outreach events.

In 2007/08 PCTs were set a target to screen 15% of the 16-24 population. NHS Luton screened approximately 820 people; 2.9% of the ‘eligible’ population. The target has been increased to 17% for 2008/2009 which will involve screening 4,666 young people. This is a significant challenge for us in Luton. The target is set to rise to 25% in 2009-10 and 35% from April 2010.

Initiatives to increase screening activity include:

- Launch of the new dedicated chlamydia service website – C-Sure – to promote the service
- Active promotion of home testing kits
- Outreach to increase screening in non-clinical settings including youth settings and workplaces
- Targeting young men
- Ensuring screening is offered as part of school based health services and further education drop-ins
- School nurses and youth workers offering screening
- Work with the university GP practice to increase the uptake of screening

It will be important to ensure that all of Luton’s young people have access to Chlamydia screening.
6.4 Health of the Homeless Population

Demography

The statistics for the numbers of homeless people, both nationwide and in Luton, are likely to be greatly underestimated because of the difficulty in counting those people who are not in temporary accommodation or who do not sleep in homeless shelters.

Figure 72 shows the number of households per 1000 households accepted as being homeless and in priority need in Luton, East of England and England (2002-2008) (per 1000 households).

Source: Department of Communities and Local Government 2008

In 2005/06, there appears to have been an increase in the number of accepted households in Luton followed by a rapid decrease in 2006/07 to a figure just below the national average. The reason for this rapid decrease was the introduction of a ‘catch-up’ programme to concentrate on a backlog of homeless people awaiting decisions regarding their housing status. The most recent figures are for 2007/08 for Luton show a relatively small increase in the number of households accepted as being homeless.

However, as the East of England encompasses areas of deprivation with areas of greater affluence it may be helpful to compare Luton to its statistical neighbours: Redbridge, Hounslow, Hillingdon and Wolverhampton, Figure 73 below, showing that Luton has figures comparable to its statistical neighbours.

Figure 73
Number of households homeless and in priority need compared to statistical neighbours (2002-2008) (per 1000 households)

Source: Department of Communities and Local Government 2008
Figure 74 shows the ethnic breakdown of people accepted as being homeless and in priority need in Luton. The number of white households who are homeless is almost three times higher than the number of Indian/Pakistani/Bangladeshi households who are accepted as being homeless and more than five times higher than African Caribbean households.

**Figure 74**

Numbers accepted as being homeless and in priority need in Luton by ethnic group (2007/2008)

Source: Department of Communities and Local Government 2008

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>160</td>
</tr>
<tr>
<td>African Caribbean</td>
<td>80</td>
</tr>
<tr>
<td>Indian/Pakistani/Bangladeshi</td>
<td>40</td>
</tr>
<tr>
<td>Other</td>
<td>10</td>
</tr>
<tr>
<td>Not Known</td>
<td>60</td>
</tr>
</tbody>
</table>

**Health Needs**

People who are homeless have a number of health risks and have a greatly increased risk of death. The severity of diseases in homeless people tend to be worse due to extreme poverty, delays in seeking care, non-adherence to therapy, cognitive impairment and the general adverse health effects of homelessness. Homeless people are more likely to have mental and physical illness and have higher rates of drink and drug abuse compared to the general population. Medical problems particularly prevalent among homeless adults include circulatory problems, injuries and wounds, seizures, COPD, arthritis and other musculoskeletal disorders. Homeless people also have a high prevalence of conditions such as hypertension, diabetes and anaemia that are often inadequately controlled and may go undetected. Homeless people are also at greater risk of contracting infectious diseases such as TB, which has been shown to be 25 times more prevalent in rough sleepers than the national average. Other infectious diseases such as hepatitis and sexually transmitted infections are two to three times higher than in the general population.

Further problems experienced by homeless people are poor oral and dental health and skin and foot problems due to prolonged periods of exposure to moisture and time-spent walking and standing. In a recent health report, 11% of clients reported a particular problem with accessing dentists.

There are particular issues for women and children. Women sleeping rough have a far greater risk of being subject to violence, rape and HIV infection than women in the general population. In addition, living in poor conditions can undermine personal and parental relationships. There is evidence to suggest that children from families who have experienced homelessness have an increased risk of low birth weight and greater likelihood of illness, behavioural problems and delayed development. Children are also at risk from the same health problems as homeless adults such as respiratory illness, gastro-intestinal problems and infections. Difficulties often arise with the high mobility of homeless families as there are potential gaps in the health records of a child.
6.5 Health of the Gypsy, Roma and Traveller Community

Demography

There are estimated to be around 300,000 Gypsies, Roma and Travellers living in the UK. Various studies have shown that Travellers experience worse health outcomes compared to English speaking ethnic minorities in the UK, particularly in relation to high levels of anxiety, depression, neonatal and still births. Life expectancy is between 10-12 years less than the settled population and a Gypsy, Roma or Traveller woman is 20 times more likely to experience the death of a new born compared to the settled population.

The highly mobile culture and lifestyle of Gypsies, Roma and Travelling people can also lead to social isolation and a lack of access to health and social care services.

Mobility within the Traveller community in Luton has seasonal variations. During the summer numbers can be as high as 120 families and in the winter as low as 30. Most of the families do not travel for more than a few weeks a year.

Luton has one authorised site, which has facilities for 20 plots (14 single and 6 double). There is a mix of ethnicity on the authorised site, however most of Luton’s Travellers are Irish Travellers (approximately 90%) with a small number who are Gypsy English, Gypsy Welsh or Gypsy Scottish. However, many Travellers living in Luton are housed in temporary accommodation across the town. According to the CARA Housing Association (an organisation that supports Irish Travellers) and the Equalities and Diversity school improvement team based in LBC, there are approximately 69 housed families. The primary reason for being housed is the ill health of a family member, who can no longer live in a trailer or continue with a highly mobile lifestyle.

Bi-annual counts are conducted by the LBC’s Gypsy & Traveller Liaison Officer and fed into a national recording system. Luton’s caravan count has remained relatively stable compared to neighbouring authorities but the trend is beginning to show an increase in numbers. Figure 75 shows the total number of caravan counts from July 2006 to July 2008 compared to neighbouring areas.
An accurate count of Traveller children is difficult due to the mobility and disclosure of ethnicity. However, 2008 data from the Equality and Diversity Unit in the Council show that there is a mix of children in all year groups from reception to Year 11.

Health Needs

A Health Needs Assessment was conducted in 2008 and showed that many of the health needs experienced by Travellers in Luton are similar to the national picture. Key health needs identified were:

- Dental health for under five children
- Mental health support
- Social care support, particularly carer support
- Substance misuse

The needs assessment also showed that Traveller women were interested in learning about health improvement activities and improving their knowledge on healthy eating, physical activity and anxiety/depression.

There is little information regarding Traveller children in Luton. Nationally, evidence suggests that improving antenatal and post-natal care in the community would improve the life chances of individuals. However, anecdotal local evidence from professionals working with the community, show that the dental health of the under-fives is poor.

Access

Two GP practices in Luton have a Local Enhanced Service (LES) contract to work with Homeless and ‘Hard to Reach’ groups in Luton. There 67 patients registered with the practice holding the LES for Travellers. There is an even male:female split and just over 40% (27) are children under 16 years old. In addition to the LES, NHS Luton has two part-time community-based nurses working with Travellers.
Key Points

Ethnicity
Different communities access primary care services in different ways
Specific communities have particular health needs e.g greater prevalence of long term conditions

Young People & Sexual health
Access to GUM services is generally improving
Chlamydia is the most common sexually transmitted infection and it is estimated that 1 in 10 young people under the age of 25 may be infected

Homeless
The number of White households who are homeless is considerably higher than in any other ethnic group
Homeless people are more likely to have mental and physical illness and have a higher rate of drink and drug misuse compared to the rest of the population
Homeless people are more likely to experience more severe effects of disease and be at greater risk of contracting infectious diseases
Children from families who have experienced homelessness have an increased risk of low birth weight and greater likelihood of illness, behavioural problems and delayed development

Older People
Future planning for the services for older people living in care homes and independently in their own homes should take account of the review of the health care needs of older people currently underway

Gypsy, Roma and Traveller
The Traveller community, particularly men, should be engaged and access to primary care services improved
Existing prejudices and suspicion between the community and service providers needs to be overcome on several health issues, including mental health
Adequate primary care resources and capacity to cope with any possible increase in numbers arising from future developments of authorised sites should be ensured
Section 7

Conclusions and Recommendations
1. Luton’s Population

Luton’s population is young and ethnically diverse. Ethnic diversity is expected to increase. The population is also projected to grow by 15% between 2006 and 2031. The numbers of people in the older age groups (aged 65+), school-age (5-15 years) and school leavers are set to rise by 2021. The increase in households is predicted to be around 5,200 over the next 15 years.

Recommendation 1

Planning for health and health services in Luton must be responsive to the age, gender and ethnic characteristics of the population and respond to the expected population growth. The regular use of Health Equity Audits will help ensure that this is achieved.

2. Too many People are Dying too Young

Luton’s All Age All Cause Mortality (AAACM) rate is significantly higher than England for both males and females and has been consistently higher for the past 10 years and premature circulatory disease mortality has been consistently higher than the East of England and England average over the last 10 years.

The inequality gap for AAACM and premature mortality from all causes has widened for both males and females in 2005-07, with the biggest gap seen for males.

The most deprived fifth of areas has on average 143 more deaths per 100,000 population than the least deprived fifth of areas.

Compared to England and Wales, Luton has poorer child health as defined by infant, perinatal mortality, stillbirths and low birth weight rate.

Smoking is a major contributor to mortality and the life expectancy gap, with 268 smoking related deaths per year in Luton.
Recommendation 2

Co-ordinated action plans need to be developed to address premature death from cardiovascular disease and infant mortality in order to improve overall life expectancy. These should focus on increasing uptake of smoking cessation, anti-hypertension and statin treatment in primary care and focus on the most deprived areas of Luton.

Therefore, there needs to be a combined strategy joining the PCT’s primary care, prescribing and smoking cessation strategies.

Recommendation 3

Targeted action in the 5 MSOAs identified as having the lowest life expectancy will be based on evidence obtained from needs assessments due to be completed in early 2009/10.

Recommendation 4

Interventions to improve health and life expectancy should be targeted at those most at risk, such as with the implementation of the NHS Health Checks programme.

Recommendation 5

Action to reduce smoking prevalence and uptake, particularly in certain ethnic groups, should continue. Smoking cessation services should be especially aimed at men from routine and manual occupations, white women from the most deprived communities and black African Caribbean women. Social marketing may provide a mechanism for this.

Recommendation 6

Reducing health inequalities should be an overarching priority for NHS Luton and LBC and should be the focus of all we do.

Recommendation 7

The infant mortality strategy should include a multi-agency collaborative strategy linking prenatal, antenatal and postnatal care.

3. Too many Children in Luton are Overweight or Obese

Rates of childhood obesity are higher in Luton than England (12.5% of Year R and 20.5% of Year 6 compared to a national average of 9.6% and 18.3%). This is particularly the case for children from the most deprived parts of the borough. This is of real concern as patterns of health behaviour for later life are often established in childhood and adolescence.

Recommendation 8

NHS Luton and LBC should continue to work with schools, fast food outlets, shops, families and community groups to encourage positive changes in eating and cooking habits and the amount of physical activity that is taken. Consideration should be given to how the planning process and design of the built environment can contribute.
4. **Poor Sexual Health and Teenage Pregnancy still Disproportionately effect the most Deprived in our Community**

Although there have been improvements in the provision of community based integrated sexual health services reducing teenage pregnancy and increasing the uptake of chlamydia screening remains a challenge.

**Recommendation 9**

NHS Luton should continue to build on existing successful projects using national guidance with specific interventions in the highest prevalence areas.

5. **There is too much Variation in Quality of Primary Care across Luton**

Available health data suggests that there is significant variation in the care patients in Luton experience. For example, there is a wide range of performance across practices in many of the clinical indicators related to CHD, stroke and diabetes and there is marked variation in the completeness of registers for the key long term conditions between practices in Luton.

**Recommendation 10**

NHS Luton should further investigate the causes of these variations and work with primary care and practice based commissioning groups to improve care delivery that addresses health inequalities. As a minimum the poorer performing practices need to be brought up to the level of the better performing practices.

**Recommendation 11**

NHS Luton should continue to work with primary care and practice based commissioning groups to ensure the health needs of particular marginalised groups, such as homeless people, gypsies and travellers, are addressed.

**Recommendation 12**

The development of an evidence-based primary care strategy in partnership with primary care, especially general practitioners, practice nurses and community nurses, that addresses the most important public health priorities.

**Recommendation 13**

Develop the primary-secondary care interface, so as to optimise care pathways, which include health promotion, prevention, and chronic disease management.
Section 8

Progress on Recommendations from the Previous Annual Public Health Report
**Recommendations 1 and 3**

The joint Director of Public Health should further develop and strengthen existing work across the two organisations to improve health and reduce health inequalities through the development of a joint public health strategy for Luton.

Multi-agency action to reduce health inequalities within Luton should be escalated with particular emphasis on:

- Removing the gap in life expectancy between the worst and best wards
- A health needs assessment to determine the reason why there is a 6 year difference in life expectancy in women in different areas of Luton
- Narrowing the gap in smoking prevalence between the worst and best wards
- Narrowing the gap in mortality of CHD/cancer between men and women

**Progress**

This report highlighted the five areas in Luton with the lowest life expectancy and both the Council and the PCT have agreed to focus action on reducing the gap in life expectancy between these five areas and the rest of Luton. Some of this work is already highlighted in the PCT’s strategic plan and the joint Health and Wellbeing strategic plan. Detailed needs assessments will highlight the specific issues for these areas leading to a targeted work programme.

Action to reduce smoking prevalence has increased in these priority areas. A stop smoking community development worker has been appointed to support Bangladeshi and Pakistani men in Dallow and Biscot to stop smoking; an additional stop smoking clinic has been set up in Farley and plans are in place to set up a further clinic in Challney. Local businesses in the five priority areas are being contacted with a view to providing support to their employees to quit smoking.

To narrow the gap in mortality of CHD/cancer between men and women Luton Borough Council and the PCT piloted Men’s Health MOTs with routine and manual workers in the council depot, the parks department and with local taxi drivers. During these events, men were offered the opportunity to have a series of health checks, and access relevant health information and advice. Although these events were generally well attended and picked up a number of men with health issues which needed to be addressed, it was agreed that more work needs to be done in researching best practice in improving men’s health and developing a local strategy to inform our approach. A local strategy will be implemented from April 2009.

**Recommendation 2**

A long term health and social care strategy for older people should be developed based on the findings of the Joint Strategic Needs Assessment (JSNA) to address the needs of our ageing population.

**Progress**

A needs assessment has been carried out by the University of Bedfordshire to identify how far the needs of older people in Luton, including groups that are hard to engage, are being met and the way in which older people would like services to be developed.

Luton Borough Council has commissioned Peter Fletcher Associates (PFA) to develop a Whole Systems Strategy for Older People. The recommendations from the needs assessment will help to inform this strategy.
**Recommendation 4**
Multi-agency action to reduce the prevalence of smoking and obesity in Luton should be escalated.

**Progress**
The National Indicators for both smoking and obesity have been included in the refreshed LAA and local targets have been agreed to reduce smoking and obesity prevalence. Multi agency action plans have been developed to ensure actions are in place to meet these targets. The plans are approved and monitored by the Health and Well-being partnership Board.

**Recommendation 5**
A ‘whole systems’ action plan should be developed and implemented to continue the downward trend in infant mortality.

**Progress**
Reducing infant mortality continues to be a priority. A draft action plan has been agreed by the CYPP that highlights the need for cross-organisation actions to address a complex public health issue. Full implementation of the action plan with the involvement of all partners is the priority for 2009/10.

**Recommendation 6**
Multi agency action to reduce HCAI should be escalated to ensure greater involvement of Luton Borough Council and to increase the level of public knowledge.

**Progress**
A joint strategy between the PCT and L&D Hospital aiming for No Avoidable Infections has been in place since July 2007. This work has led to significant reductions in healthcare associated infections notably MRSA and Clostridium difficile. This joint approach means that the infection control management of patients both in hospital and the community provides a safe environment for care and minimises the risk of prolonged recovery.

**Recommendation 7**
TB services should be reviewed using the recently published TB Commissioning Toolkit.

**Progress**
The PCT recognises the importance of pro-active management of TB in Luton which reduces the number of cases and the subsequent effect of disease on individuals and families life. Significant investment into the community service means that screening can be carried out as clinically specified in a timely manner, neonatal BCG vaccinations are being offered to all babies born in Luton and resources are available for contact tracing. More effective diagnostics have been resourced and to improve local investigation all cases of TB are typed to show links to other cases.
Appendix 1

Health Profile Summary for Luton (2008)
<table>
<thead>
<tr>
<th>Indicator</th>
<th>Local No. Per Year</th>
<th>Local Value</th>
<th>Eng Avg</th>
<th>Eng Worst</th>
<th>England Range</th>
<th>Eng Best</th>
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</thead>
<tbody>
<tr>
<td>1 Deprivation</td>
<td>42063</td>
<td>22.6</td>
<td>19.9</td>
<td>89.2</td>
<td></td>
<td>0.0</td>
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<tr>
<td>2 Children in poverty*</td>
<td>13063</td>
<td>31.3</td>
<td>22.4</td>
<td>66.5</td>
<td></td>
<td>6.0</td>
</tr>
<tr>
<td>3 Statutory homelessness</td>
<td>570</td>
<td>7.8</td>
<td>4.4</td>
<td>14.4</td>
<td></td>
<td>0.0</td>
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<tr>
<td>4 GCSE achievement (5 A*-C)*</td>
<td>1382</td>
<td>55.4</td>
<td>60.1</td>
<td>35.8</td>
<td></td>
<td>82.7</td>
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<td>5 Violent crime</td>
<td>4397</td>
<td>23.8</td>
<td>19.3</td>
<td>38.9</td>
<td></td>
<td>4.5</td>
</tr>
<tr>
<td>6 Carbon emissions</td>
<td>965</td>
<td>5.2</td>
<td>7.6</td>
<td>20.6</td>
<td></td>
<td>4.6</td>
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<tr>
<td>7 Smoking in pregnancy</td>
<td>574</td>
<td>18.2</td>
<td>16.1</td>
<td>38.8</td>
<td></td>
<td>4.4</td>
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<td>8 Breast feeding initiation*</td>
<td>1884</td>
<td>58.8</td>
<td>69.2</td>
<td>33.2</td>
<td></td>
<td>90.9</td>
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<td>9 Physically active children*</td>
<td>23907</td>
<td>86.7</td>
<td>85.7</td>
<td>63.3</td>
<td></td>
<td>99.2</td>
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<tr>
<td>10 Obese children*</td>
<td>241</td>
<td>11.3</td>
<td>9.9</td>
<td>16.1</td>
<td></td>
<td>4.9</td>
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<tr>
<td>11 Children’s tooth decay (at age 5)</td>
<td>n/a</td>
<td>1.8</td>
<td>1.5</td>
<td>3.2</td>
<td></td>
<td>0.4</td>
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<tr>
<td>12 Teenage pregnancy (under 18)*</td>
<td>158</td>
<td>40.6</td>
<td>41.1</td>
<td>83.1</td>
<td></td>
<td>12.5</td>
</tr>
<tr>
<td>13 Adults who smoke</td>
<td>n/a</td>
<td>27.3</td>
<td>24.1</td>
<td>40.9</td>
<td></td>
<td>13.7</td>
</tr>
<tr>
<td>14 Binge drinking adults</td>
<td>n/a</td>
<td>16.1</td>
<td>18.0</td>
<td>28.9</td>
<td></td>
<td>9.7</td>
</tr>
<tr>
<td>15 Healthy eating adults</td>
<td>n/a</td>
<td>20.6</td>
<td>26.3</td>
<td>14.2</td>
<td></td>
<td>45.8</td>
</tr>
<tr>
<td>16 Physically active adults</td>
<td>n/a</td>
<td>9.0</td>
<td>11.6</td>
<td>7.5</td>
<td></td>
<td>17.2</td>
</tr>
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<td>17 Obese adults</td>
<td>n/a</td>
<td>26.7</td>
<td>23.6</td>
<td>31.2</td>
<td></td>
<td>11.9</td>
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<tr>
<td>18 Under-15s ‘not in good health’</td>
<td>605</td>
<td>15.2</td>
<td>11.6</td>
<td>20.8</td>
<td></td>
<td>6.4</td>
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<tr>
<td>19 Incapacity benefits for mental illness*</td>
<td>2800</td>
<td>23.7</td>
<td>27.5</td>
<td>68.6</td>
<td></td>
<td>8.4</td>
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<tr>
<td>20 Hospital stays related to alcohol*</td>
<td>416</td>
<td>230.5</td>
<td>260.3</td>
<td>741.1</td>
<td></td>
<td>87.6</td>
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<tr>
<td>21 Drug misuse</td>
<td>1914</td>
<td>15.7</td>
<td>9.9</td>
<td>34.9</td>
<td></td>
<td>1.3</td>
</tr>
<tr>
<td>22 People diagnosed with diabetes</td>
<td>8099</td>
<td>4.4</td>
<td>3.7</td>
<td>5.9</td>
<td></td>
<td>2.1</td>
</tr>
<tr>
<td>23 Sexually transmitted infections</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24 New cases of tuberculosis</td>
<td>77</td>
<td>41.0</td>
<td>15.0</td>
<td>102.0</td>
<td></td>
<td>0.0</td>
</tr>
<tr>
<td>25 Hip fracture in over-65s</td>
<td>101</td>
<td>379.0</td>
<td>479.8</td>
<td>699.8</td>
<td></td>
<td>219.0</td>
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<tr>
<td>26 Life expectancy - male*</td>
<td>n/a</td>
<td>76.1</td>
<td>77.3</td>
<td>73.0</td>
<td></td>
<td>83.1</td>
</tr>
<tr>
<td>27 Life expectancy - female*</td>
<td>n/a</td>
<td>80.0</td>
<td>81.6</td>
<td>78.3</td>
<td></td>
<td>87.2</td>
</tr>
<tr>
<td>28 Infant deaths</td>
<td>20</td>
<td>6.2</td>
<td>5.0</td>
<td>10.3</td>
<td></td>
<td>0.0</td>
</tr>
<tr>
<td>29 Deaths from smoking</td>
<td>268</td>
<td>257.7</td>
<td>225.4</td>
<td>355.0</td>
<td></td>
<td>139.4</td>
</tr>
<tr>
<td>30 Early deaths: heart disease &amp; stroke*</td>
<td>168</td>
<td>98.5</td>
<td>84.2</td>
<td>142.4</td>
<td></td>
<td>39.7</td>
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<tr>
<td>31 Early deaths: cancer*</td>
<td>197</td>
<td>117.4</td>
<td>117.1</td>
<td>167.8</td>
<td></td>
<td>76.7</td>
</tr>
<tr>
<td>32 Road injuries and death*</td>
<td>58</td>
<td>31.1</td>
<td>56.3</td>
<td>194.6</td>
<td></td>
<td>20.8</td>
</tr>
</tbody>
</table>

Note (numbers in bold refer to the above indicators): 1% of people in this area living in 20% most deprived areas of England 2005. 2% of children living in families receiving means-tested benefits 2005-2006. 3% Crude rate per 1,000 households 2005-2006. 4% at key Stage 4 2006-2007. 5% of adults and children smoking 2001. 6% of mothers smoking in pregnancy where status is known 2006-2007. 7% 5-16 years old who smoke at least 20g/week on high quality PE and sport school 2006-2007. 8% of mothers initiating breastfeeding where status is known 2006-2007. 9% of mothers initiating breastfeeding where status is not known. 10% of children under 1 year, 11% of children in receipt of school meals 2006-2007. 11 Average (mean) number of deaths per 1000 population aged 15-64. 12 Under-18 conception rate per 1,000 females (crude rate) 2004-2006 (provisional). 13 14 15 16 17 18 % Modelled estimate from Health Survey for England, 2003-2005. 18% of people self assessed general health as ‘not good’. (directly age standardised) 2001. 19 Contraception rate per 1,000 working age population 2006. 20 Directly age and sex standardised rate per 100,000 population 2006-2007. 21 Crude rate per 10,000 population aged 15-64. 22% of people of GP registrants with a recorded diagnosis of diabetes 2005-2006. 23 Indicator based on population data. 24 Per 100,000 population (3-year average crude rate) 2004-2006. 25 Directly age-standardised rate for emergency admission 2006-2007. 26 Rate at birth years 2004-2006. 27 Rate per 1,000 live births 2004-2006. 28 Per 100,000 population age 35+, directly age-standardised rate. 2004-2006. 29 Directly age-standardised rate per 100,000 population under 75. 2004-2006. 31 Per 100,000 population (3 year average crude rate) 2004-2006. 32 Per 10,000 population (3-year average crude rate) 2004-2006. For more information from your regional PHED, visit www.phed.org.uk

Significantly worse than England average
Not significantly different from England average
Significantly better than England average
No significantly can be calculated

Health Summary for Luton

The Chart shows how people’s health in this local authority compares to the rest of England. The local result for each indicator is shown as a circle, against the range of results for England which is shown as a bar. A green circle may still indicate an important public health problem.

Source: AHPED and Department of Health © Crown Copyright 2008

* relates to National Indicator 2007
Appendix 2
East of England Lifestyle Survey PCT Data Summaries
East of England Lifestyle Survey - PCT Data Summaries

Background

In total, 2,500 Luton residents aged 16+ were interviewed. The sample was designed to enable comparisons to be made between the 20% most deprived and 80% least deprived MSOAs within each PCT. Sampling included quotas on residential deprivation level (middle layer super output area), PCT, gender, age, ethnicity and working status. Data are weighted to reflect the known population profile of each PCT. Where possible, questions were equivalent to those posed in other major surveys such as the Health Survey for England and General Household Survey. The survey will be repeated in 2009.

Calculations

The prevalence calculations were carried out by ERPHO. Significant tests are to a 95% confidence level. The denominator is the weighted sample population, which includes unknown and missing data.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>20% most deprived MSOAs</th>
<th>80% least deprived MSOAs</th>
<th>PCT</th>
<th>East of England</th>
</tr>
</thead>
<tbody>
<tr>
<td>White British</td>
<td>45.2% (38.1%, 52.4%)</td>
<td>69.5% (65.8%, 73.0%)</td>
<td>64.0% (60.6%, 67.2%)</td>
<td>90.7% (90.4%, 91.1%)</td>
</tr>
<tr>
<td>White Other</td>
<td>7.3% (4.3%, 12.0%)</td>
<td>8.1% (6.3%, 10.6%)</td>
<td>8.0% (6.3%, 10.0%)</td>
<td>4.5% (4.3%, 4.8%)</td>
</tr>
<tr>
<td>Black and minority ethnic groups (BME)</td>
<td>47.6% (40.5%, 54.7%)</td>
<td>22.3% (19.2%, 25.7%)</td>
<td>28.0% (25.0%, 31.2%)</td>
<td>4.7% (4.5%, 5.0%)</td>
</tr>
<tr>
<td>Indicator</td>
<td>20% most deprived MSOAs</td>
<td>80% least deprived MSOAs</td>
<td>PCT</td>
<td>East of England</td>
</tr>
<tr>
<td>-----------</td>
<td>------------------------</td>
<td>--------------------------</td>
<td>-----</td>
<td>-----------------</td>
</tr>
<tr>
<td>A/B - managerial and professional</td>
<td>11.0% (7.2%, 16.3%)</td>
<td>18.5% (15.7%, 21.8%)</td>
<td>16.8% (14.4%, 19.6%)</td>
<td>23.6% (21.1%, 24.1%)</td>
</tr>
<tr>
<td>C - skilled manual workers, clerical and junior managerial and professional</td>
<td>46.7% (39.7%, 53.9%)</td>
<td>55.7% (51.8%, 59.5%)</td>
<td>53.6% (50.2%, 57.0%)</td>
<td>54.0% (53.4%, 54.6%)</td>
</tr>
<tr>
<td>D/E - semi- and un-skilled manual workers and those on state benefit</td>
<td>38.5% (31.8%, 45.7%)</td>
<td>22.3% (19.2%, 25.7%)</td>
<td>25.9% (23.0%, 29.1%)</td>
<td>20.1% (19.7%, 20.6%)</td>
</tr>
<tr>
<td>Working Status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In full time employment</td>
<td>35.3% (28.7%, 42.4%)</td>
<td>46.5% (42.6%, 50.4%)</td>
<td>43.9% (40.5%, 47.4%)</td>
<td>42.9% (42.3%, 43.5%)</td>
</tr>
<tr>
<td>In part time employment</td>
<td>12.8% (8.7%, 18.4%)</td>
<td>10.2% (8.1%, 12.9%)</td>
<td>10.6% (8.9%, 13.1%)</td>
<td>13.5% (13.1%, 14.0%)</td>
</tr>
<tr>
<td>Retired</td>
<td>16.0% (11.4%, 22.0%)</td>
<td>19.0% (16.1%, 22.2%)</td>
<td>18.3% (15.8%, 21.1%)</td>
<td>24.0% (23.5%, 24.6%)</td>
</tr>
<tr>
<td>Not working for any other reason (incl unemployed, student, disabled, carer)</td>
<td>35.9% (29.3%, 43.1%)</td>
<td>24.3% (21.1%, 27.8%)</td>
<td>26.9% (24.0%, 30.1%)</td>
<td>19.5% (19.0%, 20.0%)</td>
</tr>
<tr>
<td>Self perception of Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td>72.9% (66.1%, 78.8%)</td>
<td>77.4% (74.0%, 80.5%)</td>
<td>76.4% (73.4%, 79.2%)</td>
<td>77.2% (76.7%, 77.8%)</td>
</tr>
<tr>
<td>Poor</td>
<td>8.3% (5.1%, 13.1%)</td>
<td>5.7% (4.2%, 7.8%)</td>
<td>6.3% (4.8%, 8.2%)</td>
<td>5.2% (4.9%, 5.4%)</td>
</tr>
<tr>
<td>LLTI</td>
<td>15.9% (11.3%, 21.8%)</td>
<td>13.9% (11.4%, 16.8%)</td>
<td>14.3% (12.1%, 16.9%)</td>
<td>16.3% (15.8%, 16.7%)</td>
</tr>
</tbody>
</table>

Key to PCT colouring
- Worse than East of England
- Similar to East of England
- Better than East of England
- Higher than East of England
- Similar to East of England
- Lower than East of England
- Highlighted when a significant inequality exists within the PCT

When high or low values cannot be interpreted as good or bad these colours are used
- Higher than East of England
- Similar to East of England
- Lower than East of England
- Highlighted when a significant inequality exists within the PCT
<table>
<thead>
<tr>
<th>Indicator</th>
<th>20% most deprived MSOAs</th>
<th>80% least deprived MSOAs</th>
<th>PCT</th>
<th>East of England</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Male – overweight</strong></td>
<td>37.2% (27.8%, 47.7%)</td>
<td>37.6% (32.5%, 43.0%)</td>
<td>37.5% (33.0%, 42.3%)</td>
<td>39.6% (38.8%, 40.5%)</td>
</tr>
<tr>
<td><strong>Male – obese</strong></td>
<td>15.2% (9.2%, 24.2%)</td>
<td>15.6% (12.1%, 20.0%)</td>
<td>15.6% (12.4%, 19.4%)</td>
<td>14.2% (13.6%, 14.8%)</td>
</tr>
<tr>
<td><strong>Female – overweight</strong></td>
<td>26.4% (18.6%, 35.9%)</td>
<td>28.3% (23.5%, 33.6%)</td>
<td>27.8% (23.7%, 32.4%)</td>
<td>27.0% (26.3%, 27.8%)</td>
</tr>
<tr>
<td><strong>Female – obese</strong></td>
<td>15.6% (9.7%, 24.1%)</td>
<td>16.5% (12.7%, 21.1%)</td>
<td>16.3% (13.0%, 20.2%)</td>
<td>13.8% (13.2%, 14.4%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Smoking</strong></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Smoking prevalence</strong></td>
<td>23.1% (17.6%, 29.7%)</td>
<td>20.5% (17.6%, 23.9%)</td>
<td>21.1% (18.4%, 24.1%)</td>
<td>18.4% (18.0%, 18.9%)</td>
</tr>
<tr>
<td><strong>Proportion of current smokers who would like to quit</strong></td>
<td>68.2% (33.2%, 80.2%)</td>
<td>69.2% (60.8%, 76.5%)</td>
<td>69.0% (61.7%, 75.4%)</td>
<td>65.4% (64.1%, 66.7%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Alcohol</strong></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Male - Hazardous drinkers (22-50 units per week)</strong></td>
<td>10.4% (5.6%, 18.6%)</td>
<td>17.0% (13.3%, 21.5%)</td>
<td>15.6% (12.4%, 19.4%)</td>
<td>20.2% (19.5%, 20.9%)</td>
</tr>
<tr>
<td><strong>Male - Harmful drinkers (51+ units per week)</strong></td>
<td>5.5% (2.3%, 12.4%)</td>
<td>7.0% (4.7%, 10.3%)</td>
<td>6.7% (4.6%, 9.5%)</td>
<td>6.5% (6.1%, 6.9%)</td>
</tr>
<tr>
<td><strong>Female - Hazardous drinkers (15-35 units per week)</strong></td>
<td>3.9% (1.5%, 9.9%)</td>
<td>11.1% (8.0%, 15.1%)</td>
<td>9.4% (6.9%, 12.6%)</td>
<td>12.3% (11.8%, 12.9%)</td>
</tr>
<tr>
<td><strong>Female - Harmful drinkers (36+ units per week)</strong></td>
<td>1.3% (0.3%, 6.1%)</td>
<td>2.3% (1.1%, 4.7%)</td>
<td>2.1% (1.1%, 4.0%)</td>
<td>2.6% (2.3%, 2.8%)</td>
</tr>
<tr>
<td>Indicator</td>
<td>20% most deprived MSOAs</td>
<td>80% least deprived MSOAs</td>
<td>PCT</td>
<td>East of England</td>
</tr>
<tr>
<td>-----------</td>
<td>------------------------</td>
<td>------------------------</td>
<td>------</td>
<td>----------------</td>
</tr>
<tr>
<td>Eats 5 portions of fruit or vegetables &lt; 1 day per week</td>
<td>24.0% (18.4%, 30.6%)</td>
<td>17.1% (14.4%, 20.3%)</td>
<td>18.7% (16.2%, 21.5%)</td>
<td>14.4% (14.0%, 14.8%)</td>
</tr>
<tr>
<td>Eats 5 portions of fruit or vegetables 5-7 days per week</td>
<td>25.7% (19.9%, 32.4%)</td>
<td>36.1% (32.4%, 39.9%)</td>
<td>33.7% (30.6%, 37.1%)</td>
<td>41.7% (41.1%, 42.3%)</td>
</tr>
</tbody>
</table>

**Exercise**

| Male - doing the recommended amount of exercise | 40.4% (30.8%, 50.9%) | 42.7% (37.4%, 48.2%) | 42.2% (37.5%, 47.1%) | 46.7% (45.8%, 47.6%) |
| Female - doing the recommended amount of exercise | 31.3% (23.0%, 41.1%) | 33.7% (28.7%, 39.2%) | 33.2% (28.8%, 37.9%) | 39.2% (38.4%, 40.0%) |

**Healthy Behaviour**

Four healthy behaviours - non-smoker, moderate drinker, recommended exercise, 5-a-day

| | 3.6% (1.7%, 7.4%) | 7.3% (5.5%, 9.6%) | 6.5% (5.0%, 8.4%) | 11.1% (10.7%, 11.4%) |

---

<table>
<thead>
<tr>
<th>Sample size</th>
<th>Weighted sample size</th>
<th>Average IMD 2007 score</th>
</tr>
</thead>
<tbody>
<tr>
<td>East of England</td>
<td>26290</td>
<td>26290</td>
</tr>
<tr>
<td>Luton PCT</td>
<td>2506</td>
<td>812.3</td>
</tr>
<tr>
<td>20% most deprived MSOAs</td>
<td>807</td>
<td>184</td>
</tr>
<tr>
<td>80% least deprived MSOAs</td>
<td>1699</td>
<td>628.3</td>
</tr>
</tbody>
</table>

---

**Sample PCT population compared to 2007 ONS resident PCT population (percentage)**

- Males PCT sample
- Males actual
- Males EoE
- Females PCT sample
- Females actual
- Females EoE

---

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Highlighted when a significant inequality exists within the PCT

---

**Source:** 2008 East of England Lifestyle Survey conducted by Ipsos MORI by telephone between 29/10/2008 and 21/12/2008
Appendix 3

Glossary of Terms
<table>
<thead>
<tr>
<th><strong>Body Mass Index (BMI)</strong></th>
<th>Used to measure overweight and obesity in adults. BMI is calculated as a fraction: $\text{BMI} = \frac{\text{Weight (kg)}}{\text{Height (m)}^2}$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coronary Heart Disease (CHD)</strong></td>
<td>Debilitating disease that results from partial or total blockage of the coronary arteries that can lead to heart attack, angina, heart failure, abnormal heartbeat and sudden death</td>
</tr>
<tr>
<td><strong>Children and Young People’s Strategic Board</strong></td>
<td>A board consisting of the Chief Executives of the main local agencies involved with commissioning or service provision for children. The group’s purpose is to identify, plan and implement new initiatives aimed at improving the range and delivery of services to children and families in Luton</td>
</tr>
<tr>
<td><strong>Chlamydia</strong></td>
<td>Genital Chlamydia trachomatis infection is the most commonly diagnosed bacterial sexually transmitted infection in the United Kingdom</td>
</tr>
<tr>
<td><strong>Chronic</strong></td>
<td>Describes a disease, condition or health problem that persists over a long period of time. The illness may recur frequently and in some cases may lead to partial or permanent disabilities. Examples include arthritis and diabetes</td>
</tr>
<tr>
<td><strong>Circulatory Diseases</strong></td>
<td>Diseases affecting the circulation of the blood in the heart, arteries, capillaries or veins</td>
</tr>
<tr>
<td><strong>Confidence Levels</strong></td>
<td>Provide a measure of assurance that a particular value truly lies within a defined range</td>
</tr>
<tr>
<td><strong>Congenital Conditions</strong></td>
<td>A condition that is recognised at birth or that is believed to have been present since birth</td>
</tr>
<tr>
<td><strong>Demography</strong></td>
<td>The study of the characteristics of human populations, such as size, growth, density, distribution and vital statistics</td>
</tr>
<tr>
<td><strong>Deprivation</strong></td>
<td>A term used to refer to a combination of factors indicating low living standards, a high need for services or both. There are a number of ways of measuring deprivation, suitable for different purposes, e.g. IMD 2004, Jarman and Townsend</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td>An ethnic quality or affiliation resulting from racial or culture</td>
</tr>
<tr>
<td><strong>Health Equity Audit</strong></td>
<td>A process through which local partners systematically review inequities in the causes of ill health, in access to effective services and their outcomes for a defined population. Actions required to make services more equitable are agreed and incorporated into local plans, services and practice</td>
</tr>
<tr>
<td><strong>Human Immunodeficiency Virus (HIV)</strong></td>
<td>Virus which gradually destroys the body’s normal immune response and leads to a fully developed AIDS syndrome which leaves the individual open to opportunistic infections and cancers infrequently seen in people with a normal function immune system</td>
</tr>
<tr>
<td><strong>Immunisation Programme</strong></td>
<td>Immunisation is the process of protecting individuals from infection through passive or active immunity</td>
</tr>
<tr>
<td><strong>Index of Multiple Deprivation (IMD)</strong></td>
<td>Index of the level of deprivation in an area taking account of income, employment, status, health and disability, housing, education and training opportunities, access to services</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Inequality</td>
<td>Differences in opportunities and experiences between groups based on factors such as social class, ethnic groups, age, place of residence etc</td>
</tr>
<tr>
<td>Inequity</td>
<td>Unfair and changeable differences in one or more aspects of health across populations or population groups defined socially, economically, demographically or geographically</td>
</tr>
<tr>
<td>Infant Mortality Rate</td>
<td>Number of deaths from the first day of life to the end of the first year of life per 1000 live births per year</td>
</tr>
<tr>
<td>Life Expectancy</td>
<td>Average lifespan expected from birth to death</td>
</tr>
<tr>
<td>Local Area Agreement</td>
<td>Set out the priorities for a local area agreed between central government and Local Strategic Partnership</td>
</tr>
<tr>
<td>Low Birth Weight</td>
<td>Babies with a birth weight below 2500 grams</td>
</tr>
<tr>
<td>Morbidity</td>
<td>The presence of illness</td>
</tr>
<tr>
<td>Obesity</td>
<td>Usually defined in adults as a body mass index greater than 30Kg/m2</td>
</tr>
<tr>
<td>Perinatal Mortality Rate</td>
<td>The number of still births and deaths of babies up to the age of 1 week per 1000 total births per year</td>
</tr>
<tr>
<td>Prevalence</td>
<td>The number of people in a population who have a disease at a specific point in time</td>
</tr>
<tr>
<td>Risk Factors</td>
<td>An environmental exposure, lifestyle or inherited characteristic that is likely to be associated with the occurrence of a specific outcome and thought to be on the casual pathway</td>
</tr>
<tr>
<td>Sexually Transmitted Infections (STIs)</td>
<td>Those infections whose primary mode of transmission is through sexual contact</td>
</tr>
<tr>
<td>Still Birth</td>
<td>Baby born dead after 24-week gestation</td>
</tr>
<tr>
<td>Still Birth Rate</td>
<td>Number of stillbirths per 1000 total births per year</td>
</tr>
<tr>
<td>Tuberculosis (TB)</td>
<td>Chronic, progressive infection that commonly affects the lung but may affect other organs and tissues such as bone, kidney and intestine</td>
</tr>
<tr>
<td>Ward</td>
<td>An electoral ward is a division of an administrative area used to elect councilors to serve on a council</td>
</tr>
</tbody>
</table>
Appendix 4

Useful Websites
### NHS Luton
[www.lutonpct.nhs.uk](http://www.lutonpct.nhs.uk)

Information about the health priorities for Luton and the services it provides.

### Luton & Dunstable Hospital
[www.idh.nhs.uk](http://www.idh.nhs.uk)

Offers key information about Luton & Dunstable Hospital's healthcare services and offers links to related websites.

### Bedfordshire & Luton Mental Health and Social Care Partnership NHS Trust
[www.blpt.nhs.uk](http://www.blpt.nhs.uk)

Provides details of specialist care services, particularly in relation to mental health, offered across Bedfordshire & Luton in collaboration with PCTs and social services.

### Luton Borough Council
[www.luton.gov.uk](http://www.luton.gov.uk)

Information about the Council and the services it provides, as well as information about the local community.

### Luton Forum
[www.luton.gov.uk](http://www.luton.gov.uk) link to the Luton Forum

The Forum is an umbrella partnership to link the community and key organisations which provide services in Luton.

### Office of National Statistics
[www.statistics.gov.uk](http://www.statistics.gov.uk)

Publishes information on all aspects of Britain's economy, population and community at both national and local level.

### Eastern Region Public Health Observatory (ERPHO)
[www.erpho.org.uk](http://www.erpho.org.uk)

Provides access to population health data, methods and expertise.

### Department of Health (DH)
[www.dh.gov.uk](http://www.dh.gov.uk)

Latest information on the Department of Health’s work and priorities, along with guidance and details of publications.

### Health Protection Agency
[www.hpa.org.uk](http://www.hpa.org.uk)

The Health Protection Agency brought together a number of organisations dedicated to protecting people's health. Provides information on communicable disease and other health protection issues.


Information on local health, government initiatives, inequalities, “Improving opportunity, strengthening society”


Information on local health, government initiatives, inequalities, “Improving opportunity, strengthening society”

### http://www.hpa.org.uk/infections/topics_az/tb/menu.htm

New TB data is available by region


Pandemic flu: WHO

### http://www.dh.gov.uk/en/PandemicFlu/Impactofflupandemic/DH_065120

Pandemic flu: Effects on services
<table>
<thead>
<tr>
<th>Resource</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://www.ukresilience.info/">http://www.ukresilience.info/</a></td>
<td></td>
</tr>
<tr>
<td><a href="http://www.erpoho.org.uk/topics/Smoking">http://www.erpoho.org.uk/topics/Smoking</a></td>
<td>General information for the public regarding reducing the risk from emergencies</td>
</tr>
<tr>
<td><a href="http://www.erpoho.org.uk/Topics/Smoking">http://www.erpoho.org.uk/Topics/Smoking</a></td>
<td></td>
</tr>
<tr>
<td><a href="http://www.dh.gov.uk/en/Publicationsandstatistics/Published-Survey/HealthSurveyForEngland/Healthsurveyresults/index.htm">http://www.dh.gov.uk/en/Publicationsandstatistics/Published-Survey/HealthSurveyForEngland/Healthsurveyresults/index.htm</a></td>
<td>Smoking</td>
</tr>
<tr>
<td><a href="http://www.data-archive.ac.uk/findingData/ghsTitles.asp">http://www.data-archive.ac.uk/findingData/ghsTitles.asp</a></td>
<td>Health Survey for England</td>
</tr>
<tr>
<td><a href="http://www.data-archive.ac.uk/findingData/ghsTitles.asp">http://www.data-archive.ac.uk/findingData/ghsTitles.asp</a></td>
<td></td>
</tr>
<tr>
<td>Some of the modeling applications might be useful e.g. mapping the Health Acom categories</td>
<td></td>
</tr>
</tbody>
</table>
References


3. Statistical neighbours as defined by ONS are Hounslow, Hillingdon, Birmingham East and North, Wolverhampton City and Redbridge PCTs. http://www.statistics.gov.uk/ sobre/methodology_by_theme/area_classification/sa/corresponding_las.asp


6. 2007 Birth Statistics, ONS


9. National Insurance Number Allocations can be found at: http://www.dwp.gov.uk/asd/tabtool.asp#ni_alloc

10. Monthly unemployment bulletins and more information can be found at: http://www.luton.gov.uk/Internet/social_issues/Luton%20Observatory%202007stats%20and%202008data/employment%20information


15. 2008 Health Inequality Profile for Luton. Eastern Region Public Health Observatory (ERPHO)


22. Swanton K and Frost M. Lightening the load: tackling overweight and obesity. A toolkit for developing local strategies to tackle overweight and obesity in children and adults. 2007 National Heart Forum


30. Bilton H St Mungo’s Health Report. Homelessness it makes you sick, St Mungo’s Action Week September 2008


