

Health Inequalities in Central Bedfordshire

A report by the Director of Public Health



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Summary

This report summarises health inequalities in Central Bedfordshire. It is a striking fact that in Central Bedfordshire the most deprived males live on average 7.4 years fewer than the least deprived. For women, the difference is 5.5 years.

Health inequalities are not inevitable and through concerted effort they can be prevented. This report demonstrates inequality by comparing health between the 20% most deprived and the 80% least deprived, but it is important to remember that inequalities exist across the whole range of deprivation.

The report also recognises the major contribution that the wider determinants of health, such as housing, fuel poverty and sustainable development, make to health inequalities, although it is not currently possible to quantify their impact directly.

The key findings from the report are that:

- The pattern of premature mortality across Central Bedfordshire confirms that health is worst in the most deprived areas.
- There is a significant and growing gap in life expectancy between the 20% most deprived and the rest of the population, for both men and women.
- Circulatory diseases, cancers and respiratory diseases are significant contributors to the life expectancy gap, as they are to overall life expectancy. Compared to males, females are disproportionately affected by respiratory diseases.
- The data suggest inequalities among the 20% most deprived compared with the 80% least deprived for: babies living with a smoker; breastfeeding rates; child obesity at age 11; injuries to children and young people; teenage conceptions; education attainment at key stage 4; unemployment (out of work benefit claimants) and smoking prevalence.
- There are inequalities in child development and educational attainment from age 5 to age 16. The gap is larger for older children.
- Central Bedfordshire is better¹ than the England average for the proportion of people in households in receipt of means-tested benefits; inequality in percentage receiving means-tested benefits and young people not in employment, education or training.

In a fair and prosperous society, everyone should have the same chance to lead a long and healthy life. This report shows that significant inequalities exist within Central Bedfordshire and therefore challenges all those who can influence health to take action. This includes Central Bedfordshire Council, Bedfordshire Clinical Commissioning Group, Local Hospitals, South Essex Partnership Trust and individual general practices. All will need to consider what action they can take to start reducing these inequalities.

¹ At a statistically significant level

Recommendations

In the first instance, the following recommendations are made:

1. **Central Bedfordshire Council and the Public Health directorate** should:
 - a. Give every child the best start in life by ensuring early access to antenatal care, reducing smoking in pregnancy and the number of babies living with a smoker, increasing breastfeeding and reducing childhood obesity.
 - b. Improve the wider determinants of health such as housing, employment, child poverty, educational attainment, and the natural environment.
 - c. Secure high quality alcohol and drug prevention and treatment services for our most vulnerable residents.
 - d. Continue to deliver on public health targets which influence health inequalities such as teenage pregnancy rates, smoking in pregnancy, obesity and NHS health checks.
 - e. Increase access to the Stop Smoking service for the populations with the highest smoking prevalence and premature mortality rates by providing additional support to practices serving these people and by setting and monitoring challenging quitter targets.
 - f. Produce tailored information on health inequalities for GP practices in the most deprived areas and make practice-specific recommendations for evidence-based action.
 - g. Make Every Contact Count by ensuring that relevant frontline council staff have received MECC training.
2. **General practices** in Central Bedfordshire should:
 - a. Overachieve on smoking cessation targets, with a focus on practices in the most deprived areas
 - b. Ensure performance targets for NHS health checks are met and that health checks are of high quality to ensure early diagnosis and management of risk factors for cardiovascular disease
 - c. Make Every Contact Count by ensuring that all frontline staff have received MECC training.
3. **Bedfordshire Clinical Commissioning Group** should:
 - a. Take account of health inequalities in all the services it commissions, for example by ensuring access to high quality cardiac care exist in the most deprived areas and access to secondary care is equitable across the Central Bedfordshire
 - b. Build public health targets into the contracts held by provider trusts where these do not already exist, and actively monitor them
 - c. Commission high quality healthcare for vulnerable groups such as looked-after children, young offenders and Gypsies & Travellers.
4. **Other providers, such as Bedford Hospital Trust, Luton and Dunstable Foundation Trust Hospital and South Essex Partnership Trust (SEPT)** should:
 - a. Maximise their opportunities for secondary prevention, starting with users of cardiac, respiratory and cancer services
 - b. Make Every Contact Count by ensuring that all frontline staff have received MECC training

- c. Ensure that recommendation 6 of NICE guidance PH10 (Smoking cessation) is comprehensively implemented and monitored
 - d. Ensure that recommendations 6-12 of NICE guidance PH24 (Preventing harmful drinking) are comprehensively implemented and monitored.
 - e. Deliver other public health targets within contracts
5. **The Health and Wellbeing Board** should:
- a. Monitor the member organisations' progress against these recommendations and ensure that the health and wellbeing strategy is delivered proportionate to need.

1 Introduction

Health inequalities are differences in health between two or more communities or populations. This term is often used as a way of identifying inequalities that are either avoidable or regarded as unfair in some way. In a fair and prosperous society everyone should have the same chance to lead a long and healthy life. Vulnerable groups, such as people suffering from mental health problems and those with learning disabilities, can also suffer poorer health outcomes than the rest of the population.

This report describes health inequalities which have been observed between geographical areas within Central Bedfordshire, particularly in relation to deprivation. Other health inequalities, which are known about through national studies, may well occur in Central Bedfordshire but without local evidence we cannot be sure. Health inequalities suffered by vulnerable groups are not within the scope of this report but are fully documented in the Joint Strategic Needs Assessment².

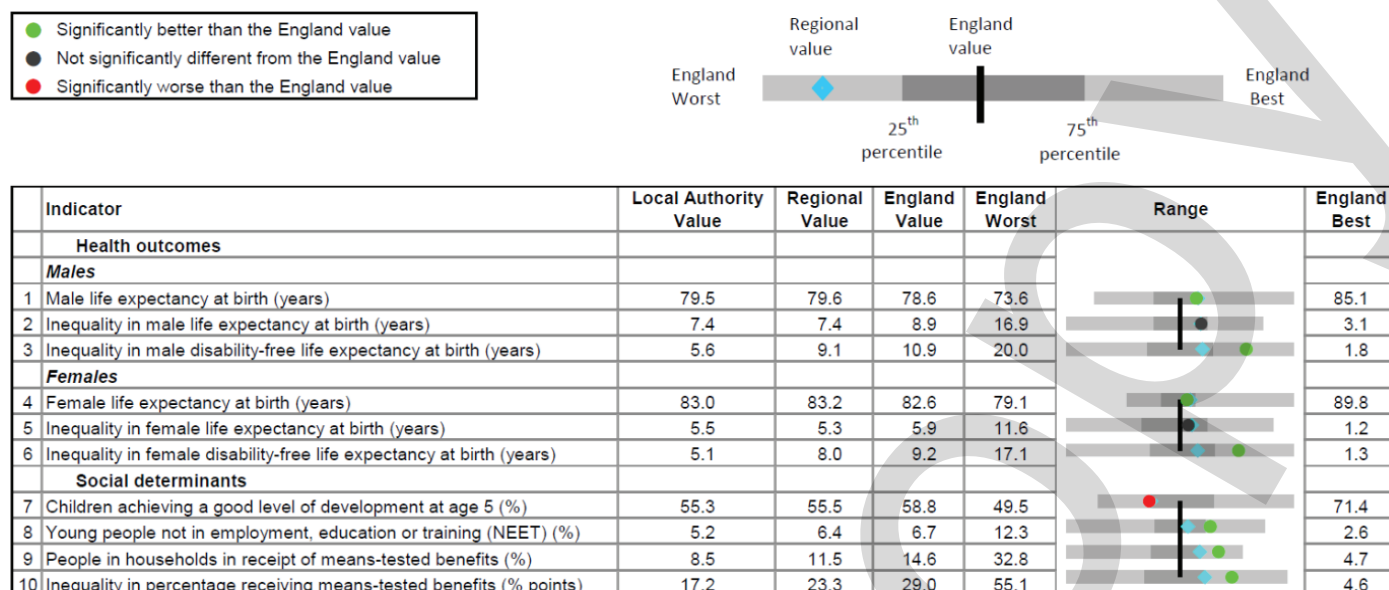
The 2010 Marmot Review, Fair Society, Healthy Lives³, proposed an evidence based strategy to address the social determinants of health - the conditions in which people are born, grow, live, work and age and which can lead to health inequalities. The Review identified six objectives to reduce inequalities in health:

1. giving every child the best start in life.
2. enabling all children, young people and adults to maximize their capabilities and have control over their lives.
3. creating fair employment and good work for all.
4. ensuring a healthy standard of living for all.
5. creating and developing sustainable places and communities.
6. strengthening the role and impact of ill-health prevention.

The Marmot Review estimated that the annual cost of health inequalities in England was between £36 billion to £40 billion through lost taxes, welfare payments and costs to the NHS. Pro-rata to the Central Bedfordshire population this would be £176 to £195 million, although the figure will be considerably lower than this as inequalities in Central Bedfordshire are not as large as across England. Marmot recognised that action can neither be taken at a general population level, nor be aimed solely at those who have the worst health outcomes and experiences, but should be directed in proportion to the level of need. As a result of the Review, a set of 10 key Marmot Indicators are produced each year by the UCL Institute of Health Equity. Figure 1 summarises the Marmot Indicators for Central Bedfordshire for 2012.

2 www.centralbedfordshire.gov.uk/health-and-social-care/jsna/joint-strategic-needs-assessmentjsna.aspx
3 <http://www.instituteofhealthequity.org/Content/FileManager/pdf/fairsocietyhealthylives.pdf>

Figure 1: Marmot Indicators for Central Bedfordshire compared with England, 2012



Source: UCL Institute of Health Equity, www.instituteofhealthequity.org and London Health Observatory, www.lho.uk

In summary:

- In 2012 Central Bedfordshire was significantly better than the England value for all 7 indicators marked with a green dot.
- Central Bedfordshire was better than England, but not significantly, for inequality in male and female life expectancy at birth (black dots), however there is a significant and growing gap between the most deprived and the rest of the population.
- Central Bedfordshire was significantly worse than England for children achieving a good level of development at age 5⁴, however, 2012 provisional data shows improvement has been made.

Central to the Marmot Review is the recognition that disadvantage starts before birth and accumulates throughout life. Thus, the highest priority is attached to the first objective: giving every child the best start in life.

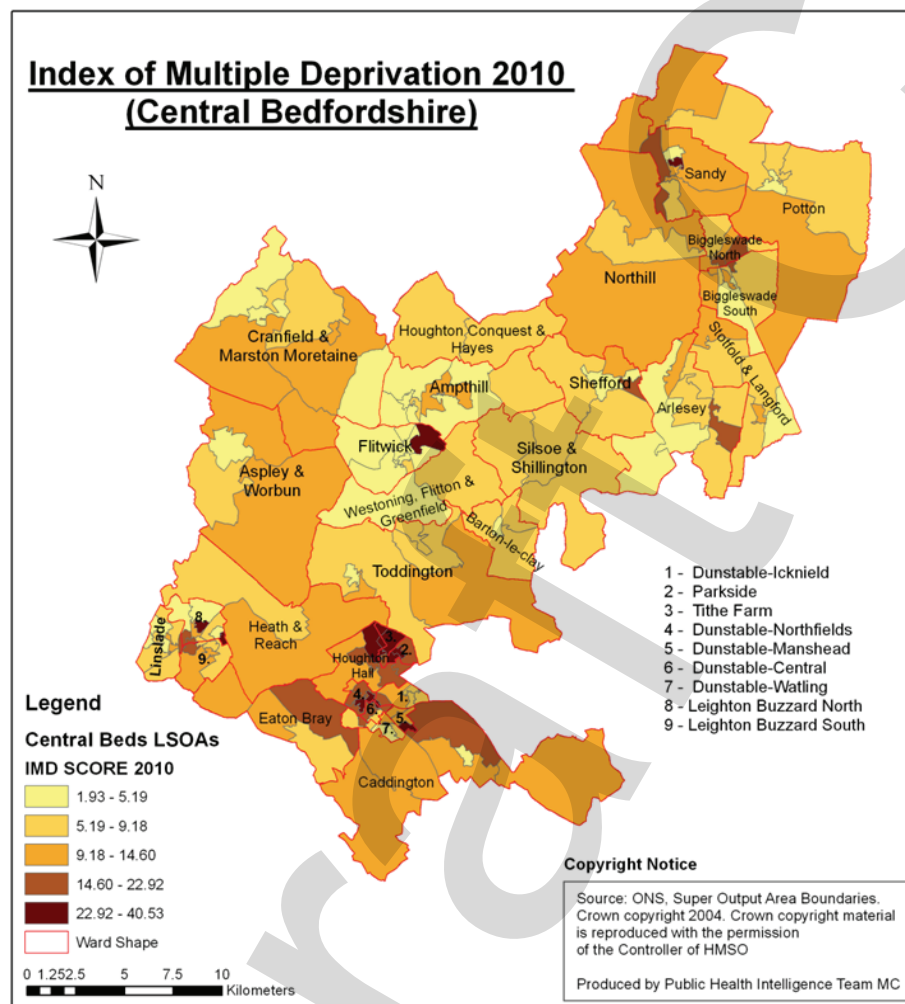
4 Percentage of children assessed by a teacher at Early Years Foundation Stage Profile (EYFSP) as having achieved a 'good level of development' in the year they turn five. 2011 Source: Department for Education

2 Inequalities and deprivation by geographical area

For small area statistics Lower Super Output Areas (LSOAs) are used. There are 154 LSOAs in Central Bedfordshire with an average population of just under 1,660. The level of deprivation in an LSOA is given by the Index of Multiple Deprivation (IMD)⁵. In Central Bedfordshire the LSOA IMD scores range from 1.93 to 40.53, the higher the score the higher the deprivation.

Central Bedfordshire is less deprived on average than England and the east of England. Central Bedfordshire has an average IMD score of 10.73, ranking it in the least deprived 20% of local authorities. The least deprived local authority has a score of 9.99 and the most deprived a score of 43.45

Figure 2: Map showing distribution of index of multiple deprivation in Central Bedfordshire.



Data source: Department for Communities and Local Government, Indices of Deprivation 2010

⁵ The IMD is built up from 7 components (Crime & Disorder, Barriers to Housing and Services, Education Skills and Training, Living Environment, Health Deprivation and Disability, Employment, Income) and the weighted average gives the overall IMD score for each LSOA.

The most deprived 20% of LSOAs within Central Bedfordshire are those shaded in the two⁶ darkest colours on the map (Fig 2) with an IMD score over 14.60. None of Central Bedfordshire LSOAs are in the most deprived 10% in England but three LSOAs (with a total population of 5,200) are in the most deprived 10-20% and a further six LSOAs (with a total population of 10,100) are in the 20-30% most deprived nationally.

Although the overall IMD shows only a few areas are deprived in comparison with England some of its components show a wider impact in Central Bedfordshire. For example 5.25% of the Central Bedfordshire population (some 13,400 people) are in the most deprived 10% in England for Education Skills and Training. The areas affected by this component of deprivation are largely the same as affected by overall IMD.

In addition to the IMD and its sub-domains there are two additional indices: Income Deprivation Affecting Children Index (IDACI) and Income Deprivation Affecting Older People Index (IDAOPI). The IDACI shows a greater proportion of the child population are affected by income deprivation compared to the overall IMD and compared to the income component of IMD.

LSOAs can be grouped together to give more stable statistics. One way to do this is to combine the data from the 20% most deprived LSOAs and compare the figure produced with that generated by combining the data from the other less deprived 80% of LSOAs. In this report, wherever possible, health inequalities are assessed in this way. When particular 'hot-spot' areas have been identified these are also noted.

6 The thresholds for the colours on the map are set to show the range of the IMD scores which are wider at the higher levels of deprivation. There are 12 LSOAs in the darkest category and 19 LSOAs in the next darkest group, which makes a total of 31 – approximately one fifth of the LSOAs in Central Bedfordshire.

3 Life expectancy and mortality

3.1 Inequalities in life expectancy

The overall health of a population can be measured using life expectancy at birth. This takes into account the current rates of death in all age-bands. The smallest areas that life expectancy has been calculated for are MSOAs, which are local groupings of LSOAs.

Inequalities in life expectancy across the whole range of deprivation in a population are measured by the Slope Index of Inequalities (SII). This is used in the Marmot Indicators for Local Authorities. The SII is calculated by grouping LSOAs into tenths by deprivation, and calculating the life expectancy for each tenth. The best-fit straight line is computed and its slope gives the SII. The higher the SII the greater the health inequality within the area. A slope of zero means that life expectancy does not vary with deprivation. However, an SII of 10 years indicates that life expectancy for the most well off is, on average, 10 years higher than for the least well off.

Table 1 shows that, using data for the five-year period 2006-10, Central Bedfordshire had lower inequalities for life expectancy than England for both males and females, however, the differences are not statistically significant.

Table 1: Inequality in life expectancy at birth in Central Bedfordshire

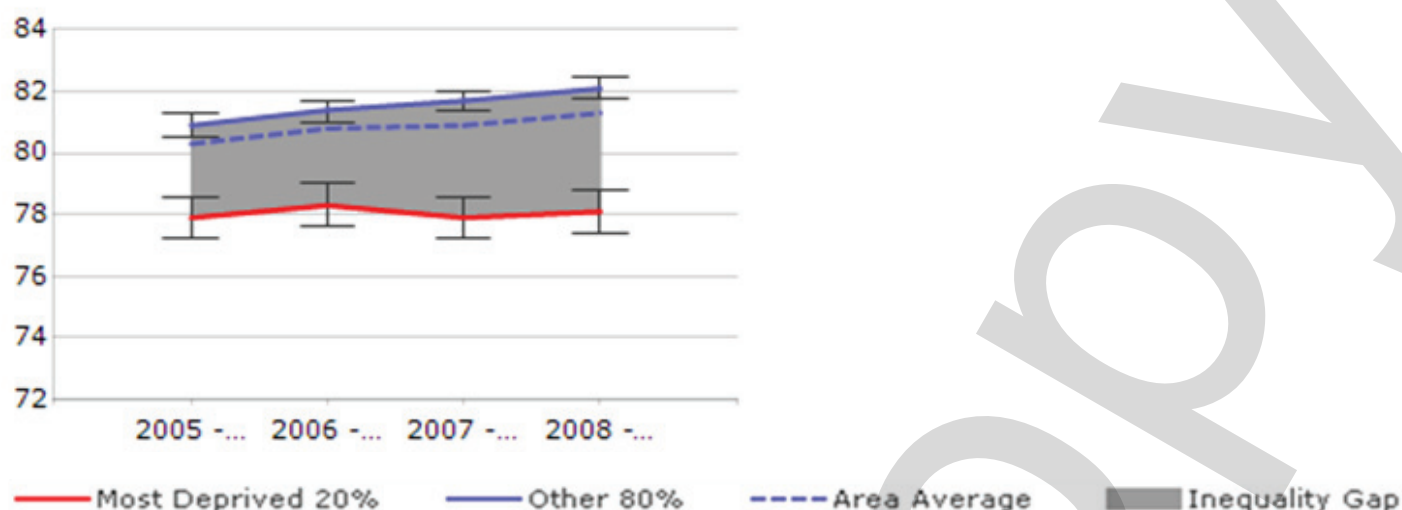
	Inequality in life expectancy at birth, SII (years) ⁷ for 2006-10		
	Central Bedfordshire	England value	England LA range
Male	7.4	8.9	3.1 - 16.9
Female	5.5	5.9	1.2 - 11.6

Source: Marmot Indicators for Local Authorities in England, 2012 - Central Bedfordshire UCL Institute of Health Equity, www.instituteofhealthequity.org

Although it does not show the entire variation across society, the extremes can be highlighted by calculating the life expectancy for the 20% most deprived and comparing with the other less deprived 80%. Figure 3 shows the trend in three-year pooled data, and suggests that the inequality in life expectancy between the less deprived and most deprived is widening. There is a statistically significant and growing gap between the most deprived 20% and the least deprived 80% within Central Bedfordshire. Health inequalities are widening because life expectancy in the deprived 20% is static, but in the other 80% it is improving year on year. This is true for both males and females.

7 Source: The Public Health Observatories in England, based on analysis of ONS mortality data and population estimates & Department for Communities and Local Government, Indices of Deprivation 2010.

Figure 3: Trends in life expectancy at birth (years) in Central Bedfordshire (persons)

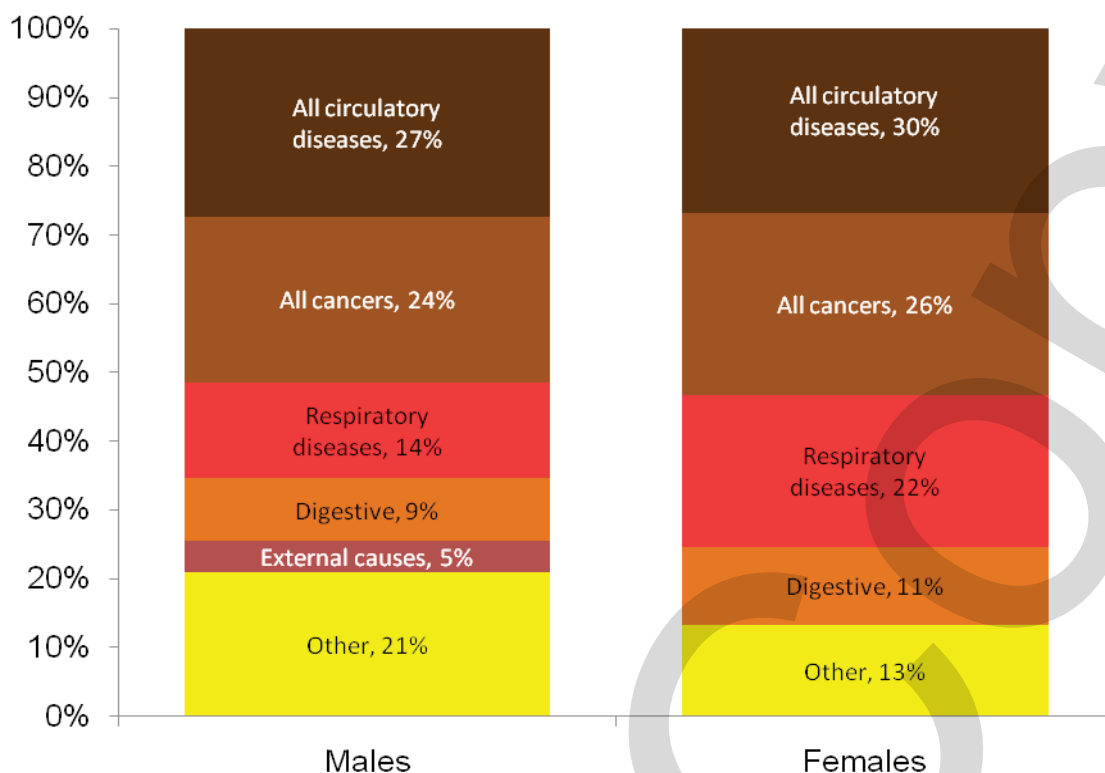


Source: ERPHO fingertips: <http://fingertips.erpho.org.uk/>

3.2 Inequalities in all cause mortality

Figure 4 shows which diseases are causing the difference in mortality between the most deprived 20% and the least deprived 80%. It shows the proportions of deaths due to the 'big killers', i.e. circulatory diseases, cancers and respiratory diseases. These, along with infant mortality, are significant contributors to the life expectancy gap, as they are to overall life expectancy. It shows that respiratory diseases make a greater contribution to the mortality gap for females compared to males, and external causes of death only affect the male mortality gap. External causes include accidents, fires, assault, intentional self-harm and complications of medical and surgical care.

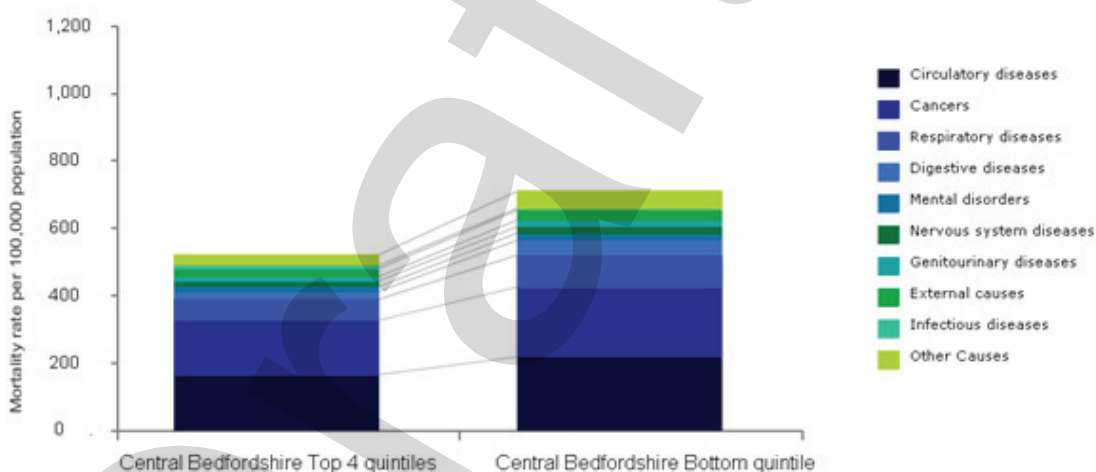
Figure 4: Leading causes of the mortality gap between the 80% least deprived and 20% most deprived areas in Central Bedfordshire, 2005-09 combined



Data source: http://www.sepho.nhs.uk/gap/gap_national.html

Figure 5 shows the absolute gap in mortality between the most deprived 20% and the least deprived 80% for males and females combined. It shows how much higher the mortality rate is in the most deprived 20% for the main causes of mortality.

Figure 5: Cause specific mortality for Central Bedfordshire persons - top 4 quintiles (80%) of deprivation and bottom quintile (20%), 2005 to 2009 combined.



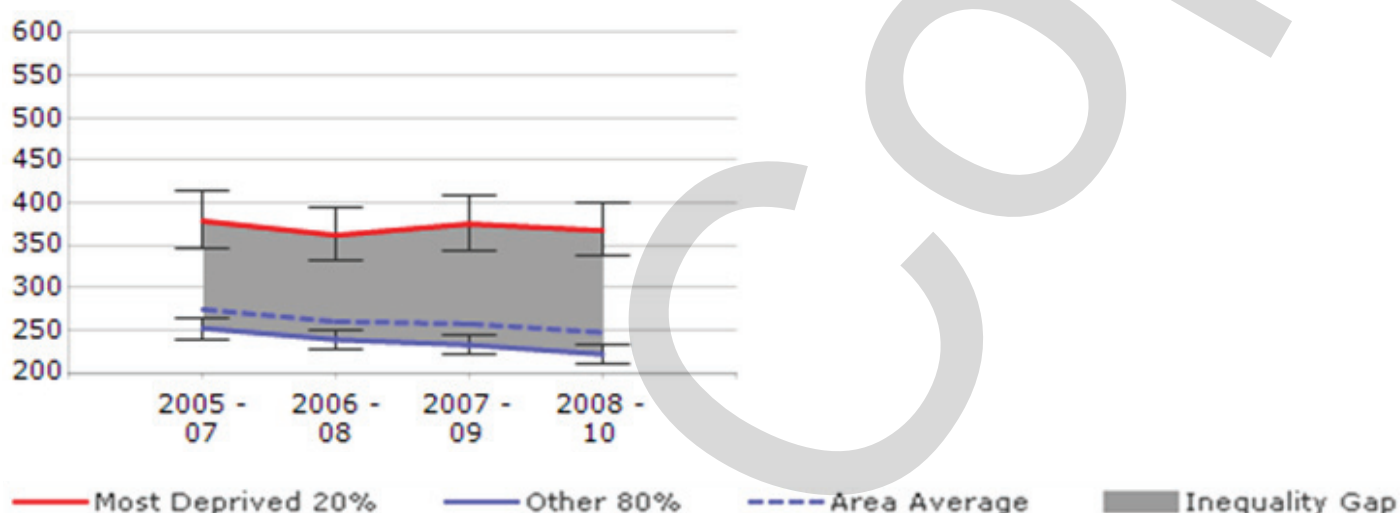
Source: http://www.sepho.nhs.uk/gap/gap_national.html

3.3 Inequalities in premature mortality

Premature mortality, defined as deaths under the age of 75 years, has a large impact on life expectancy. The inequalities in premature mortality rates for the 3 biggest killers (circulatory diseases, cancer and respiratory diseases) are described below.

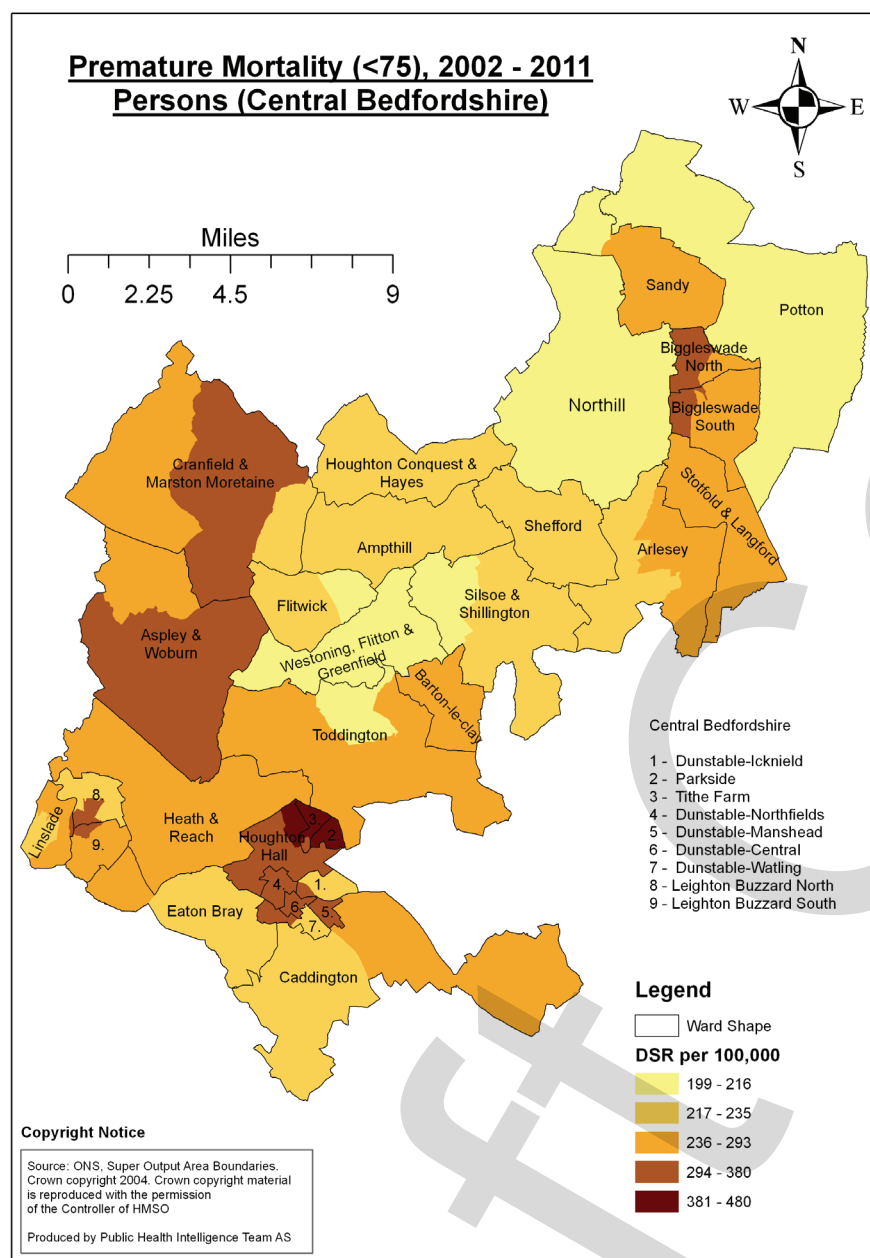
Figure 6 shows the mortality from all causes for people aged below 75 years. For both males and females, there is a statistically significant and growing premature mortality gap between the most deprived 20% and the least deprived 80%. The gap is growing because the mortality rate in the least deprived 80% is decreasing whereas in the most deprived 20% it is not improving.

Figure 6: Trends in all cause mortality per 100,000 among people aged below 75 years in Central Bedfordshire persons



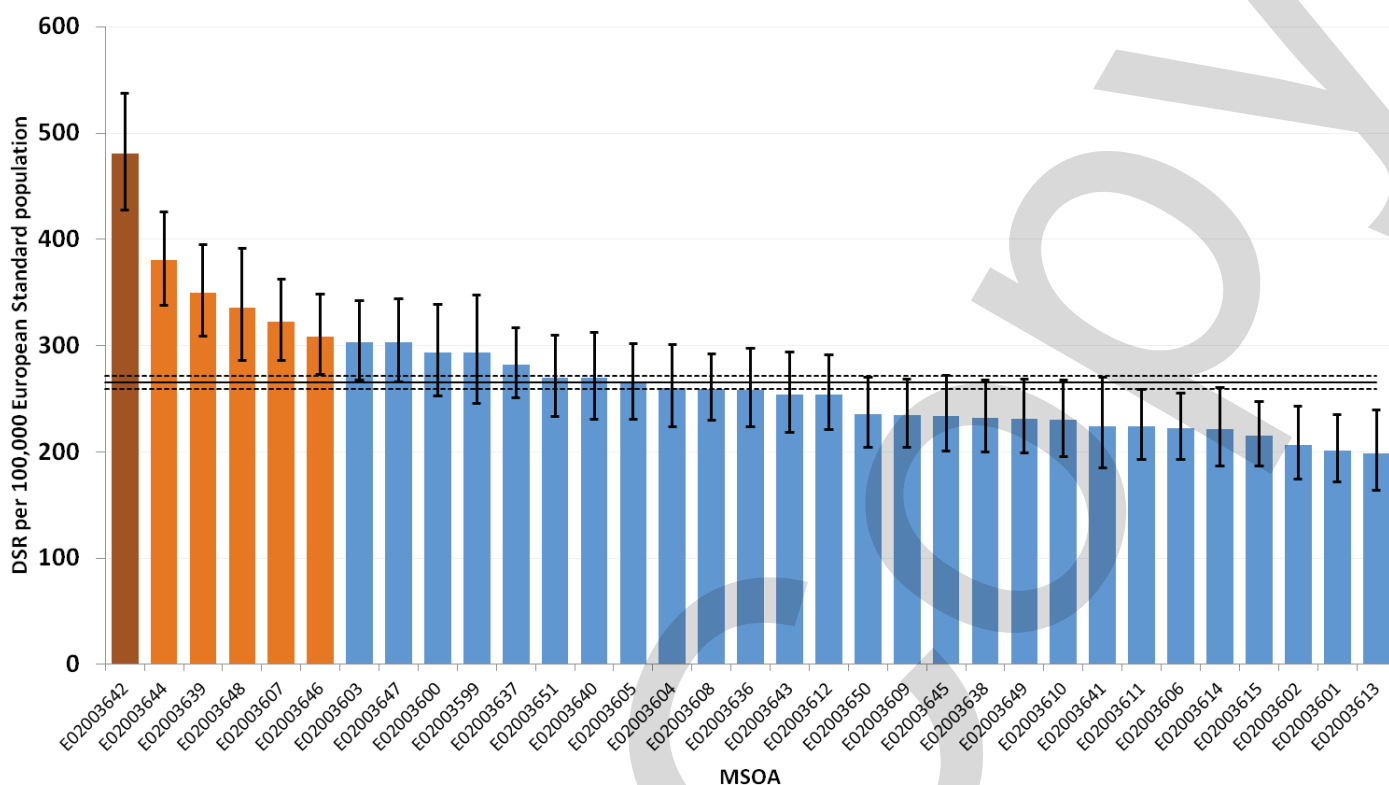
Mapping premature mortality demonstrates that the risk of dying early in Central Bedfordshire follows a similar pattern to deprivation. In figure 6a, the darkest coloured areas are those where premature mortality is highest; comparing this to figure 2 (page 9) shows that many of the areas worst affected are also those with high deprivation scores. Ten years' worth of data from 2002 to 2011 has been used to smooth out year-to-year variation and generate a more reliable pattern. One area that goes against the general pattern covers Marston Moretaine, Woburn. This area has average deprivation but above average premature mortality, this should be investigated to rule out any systematic issues.

Figure 6a: Premature mortality rates by middle-layer super output area, Central Bedfordshire, 2002-2011, directly standardised by age.



The variation between the different areas of Central Bedfordshire is shown in figure 6b. The data are grouped by MSOAs, which do not cover the same geography as electoral wards but in most cases approximate quite closely to ward boundaries. The highest rate of premature mortality (in the area of Tithe Farm and Parkside wards) is 2.4 times greater than the lowest rate (in the eastern portion of Flitwick). The six bars coloured brown represent areas which suffer premature mortality rates that are significantly higher than the Central Bedfordshire average: from left to right they match the areas on the map as follows: Tithe Farm/Parkside, Houghton Hall, Leighton Buzzard, Dunstable Manshead, the large area crossing Cranfield & Marston Moretaine and Aspley & Woburn wards, and Dunstable Northfields.

Figure 6b: Premature mortality rates by middle-layer super output area, Central Bedfordshire, 2002-2011.

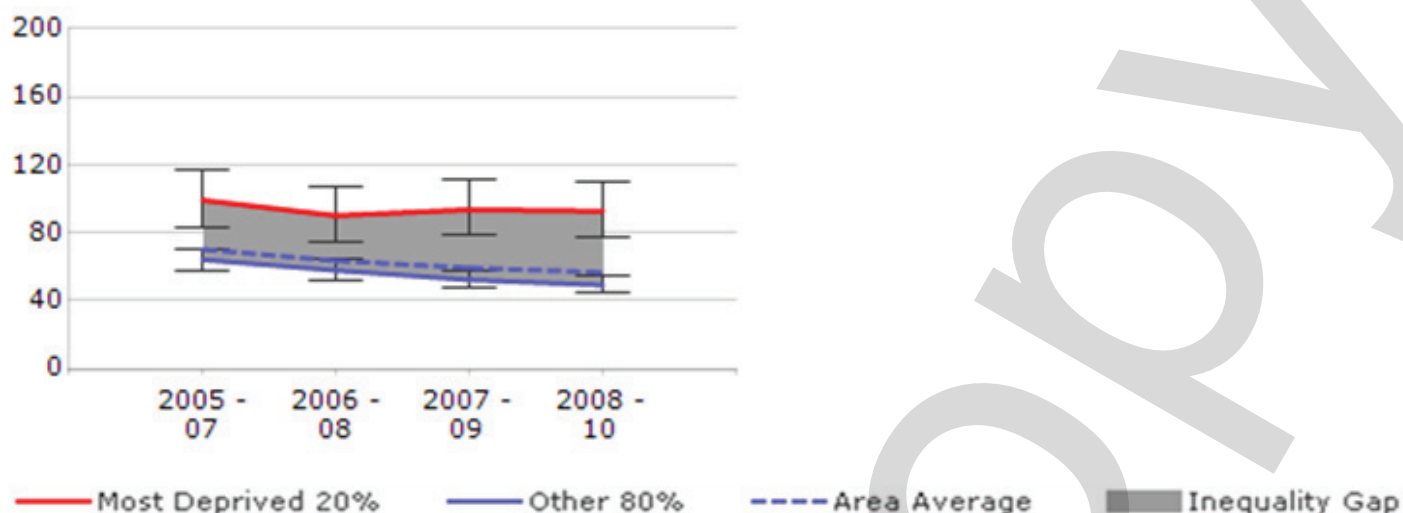


3.4 Circulatory disease inequalities

Cardiovascular disease (CVD) is the collective term for a group of related conditions affecting the heart, arteries or blood vessels. It includes coronary heart disease and stroke which account for about 50% and 25% of these conditions respectively.

As shown in Figures 4 and 5 in the previous section, cardiovascular disease is the single largest driver of increased mortality in the 20% most deprived compared to the 80% least deprived. Figure 7 below, shows that there is a widening gap in premature mortality due to CVD (as the confidence intervals do not overlap the difference is statistically significant). This gap is widening because the rate in the most deprived 20% has changed very little, but the rest of the population shows a steady decrease.

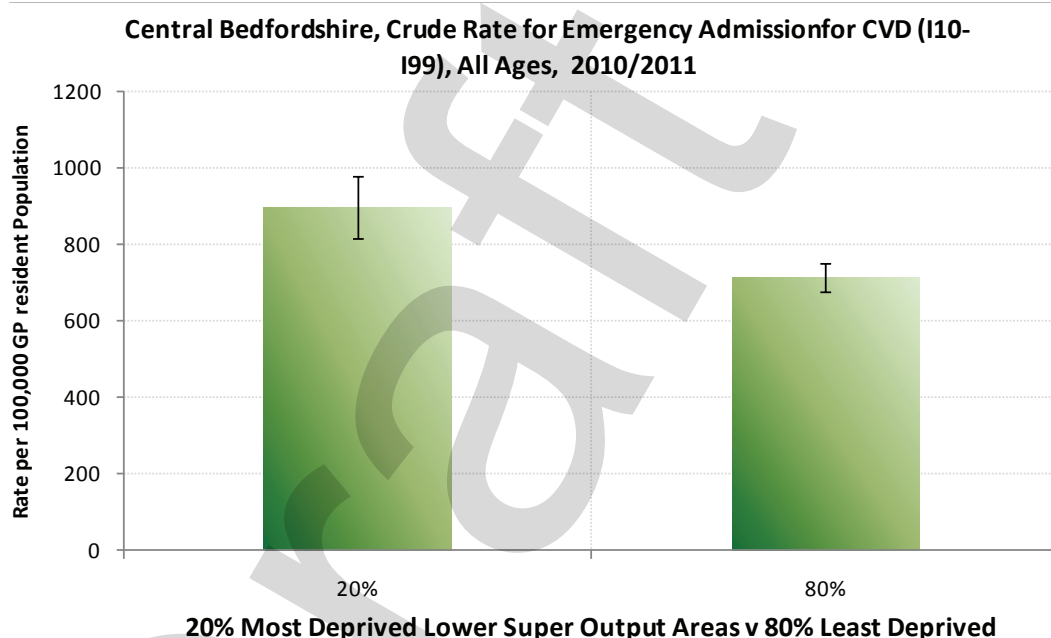
Figure 7: Trends in cardiovascular disease mortality per 100,000 among people aged below 75 years in Central Bedfordshire



Source: ERPHO fingertips: <http://fingertips.erpho.org.uk/>

Higher rates of cardiovascular disease in the most deprived areas leads to higher rates of emergency admissions as shown in figure 8. Within CVD, significantly higher rates of emergency admissions are also seen from the deprived 20% for coronary heart disease (1.4 times greater) and heart failure (1.7 times greater) but not for cerebrovascular disease, which includes stroke.

Figure 8: Emergency admission crude rates for cardiovascular disease 20% most deprived and 80% least deprived in Central Bedfordshire



Source: NHS Bedfordshire

Key Actions

The Care Quality Commission report of 2009⁸ acknowledges that up to 90% of the risk of a first heart attack is due to lifestyle factors that can be changed. There are effective interventions that can reduce risk, prevalence and deaths from CVD. In addition to medical interventions, people making healthier choices, such as eating healthier foods, using alcohol in moderation, undertaking regular physical activity, stopping smoking, reducing obesity and promptly accessing services can reduce the risk and deaths from CVD.

We need to ensure that the NHS Health Checks programme, which identifies those aged 40 – 74 at greatest risk of a cardiovascular event (e.g. heart attack, stroke, etc.), is taken up by those from deprived areas. We also need to monitor that those identified at greatest risk adopt lifestyle and other changes to reduce their risk.

Revascularisation rates for persons who live in the most deprived areas of Bedfordshire are 1.7 times greater than those who live in the least deprived areas, thus suggesting that medical care is provided more to those with greater need.

‘NSF standard five: Stroke’ recommends taking action to reduce the incidence of stroke in the population, and ensure that those who have had a stroke have prompt access to integrated stroke care services. It sets out four main components for the development of integrated stroke services:

- Prevention: including the identification, treatment and follow-up of those at risk of stroke.
- Immediate care: including care from a specialist stroke team.
- Early and continuing rehabilitation.
- Long-term support for the stroke patient and their carers.

3.5 Cancer inequalities

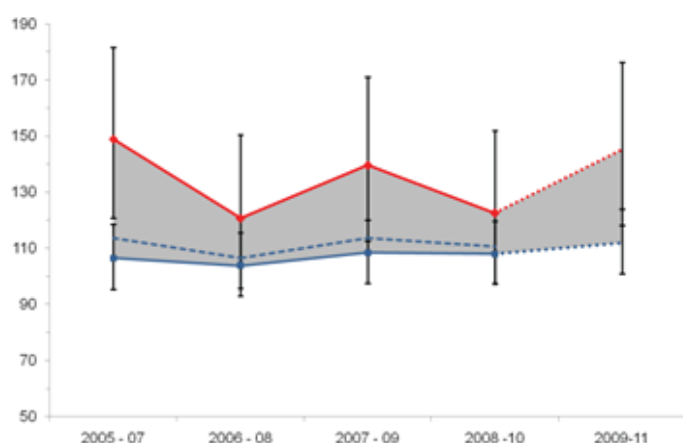
Overall, cancer is the second biggest cause of the life expectancy gap between the most deprived 20% and the other 80%. It is also the largest cause of premature mortality in Central Bedfordshire, accounting for around 41% of deaths before the age of 75 years. Premature mortality from cancer has declined in Central Bedfordshire by about 20% in the last 10 years.

Figure 9 shows the cancer mortality trends using 3-year pooled data for 2005-07 to 2008-10 for males and females aged below 75 years in Central Bedfordshire. The gap for males has been decreasing and is now no longer significant, mostly due to decreasing rates in the more deprived areas. However, for females the gap widened between 2006-08 and 2008-10 due to both increasing rates in the most deprived 20% and decreasing rates in the least deprived 80%. The combined figures (i.e. for persons under 75) shows that, apart from 2006-08, there has been a statistically significant gap in the mortality rates between the 20% most deprived and the least deprived 80%. This gap shows no discernible trend.

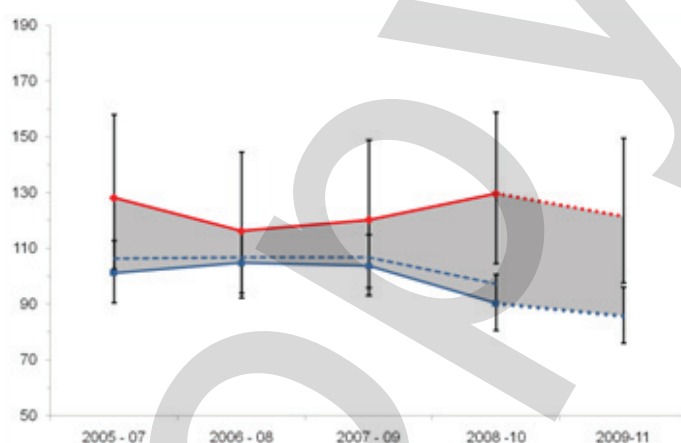
8 Care Quality Commission, 2009. Closing the gap Tackling cardiovascular disease and health inequalities by prescribing statins and stop smoking services.
URL: http://archive.cqc.org.uk/db/documents/Closing_the_gap.pdf

Figure 9: Trends in cancer mortality DSR per 100,000 among people aged below 75 years in Central Bedfordshire

Males



Females



— Most Deprived 20% — Other 80% - - - Area Average Inequality Gap

Data source: 2005 – 2010 ERPHO fingertips: <http://fingertips.erpho.org.uk/> and 2009-11 NHS Bedfordshire (provisional figures)

For mortality under 75 the most common cancers, accounting for about half of all cancers, are:

- **Males:** Lung (21%), Colorectal (10%), Oesophageal (9%) and Prostate (8%)
- **Females:** Breast (24%), Lung (15%) and Colorectal (10%)

For all age mortality the order changes somewhat, the main cancers are:

- **Men:** Prostate (26%), Colorectal (16%) and Lung (12%)
- **Women:** Breast (36%); Colorectal (11%) and Lung (10%)

Key actions

By far the largest preventable risk factor for cancer is smoking. Excess weight, unhealthy diets and alcohol together with smoking causes about one third of cancer diagnoses in the UK each year⁹.

Early diagnosis is important in improving survival and preventing avoidable deaths. This is supported through good public awareness of signs and symptoms of cancers and good screening programmes.

9 DM Parkin (2011). The fraction of cancer attributable to lifestyle and environmental factors in the UK in 2010. British Journal of Cancer, 105 (Supplement 2)

Key actions to reduce premature mortality from cancer in Central Bedfordshire include:

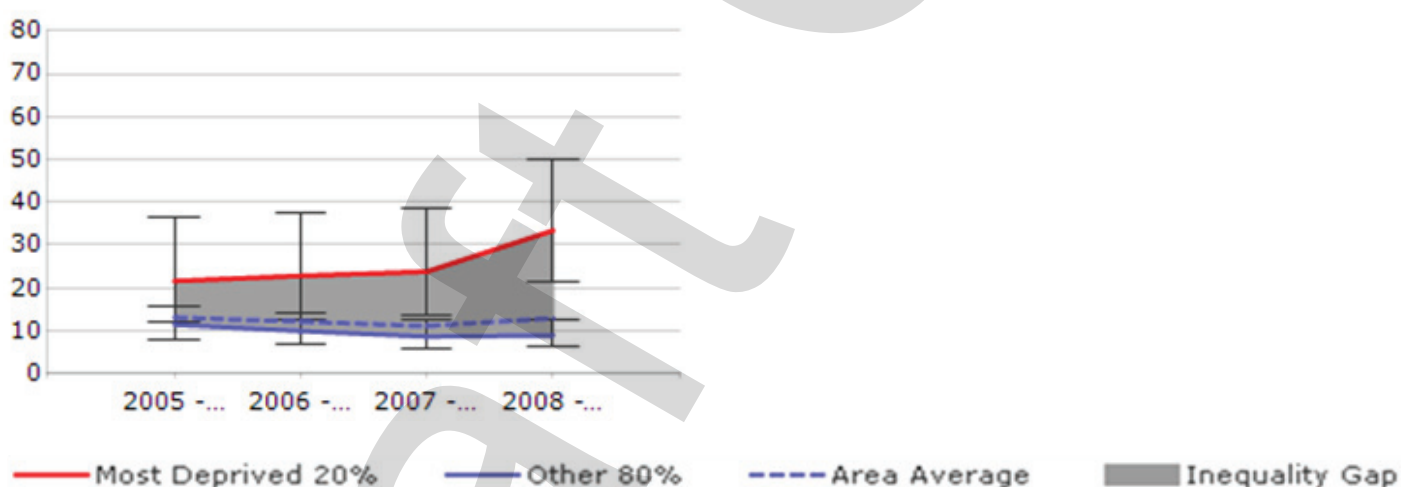
- Increasing awareness of symptoms - The National Awareness and Early Diagnosis programme has shown some promising results and should be continued and expanded.
- Continued emphasis on the delivery of an effective Stop Smoking Service, particularly in more deprived areas.
- Close working with Anglia and Mount Vernon cancer networks to improve outcomes for Central Bedfordshire residents.
- Increasing uptake of cancer screening programmes, particularly bowel cancer screening, through health promotion activities - starting with the GP practices where there is low uptake of the programme.

3.6 Chronic respiratory disease inequalities

Chronic respiratory diseases are the third biggest contributor to the inequalities gap in mortality in Central Bedfordshire. Premature mortality from respiratory disease in Central Bedfordshire (11.1 per 100,000 people) is statistically significantly higher than the east of England (8.9).

There is virtually no gap in premature mortality for females, but there is a growing gap for males, as shown in figure 10. For males, premature mortality is now three times as high in the most deprived 20% as in the other 80%.

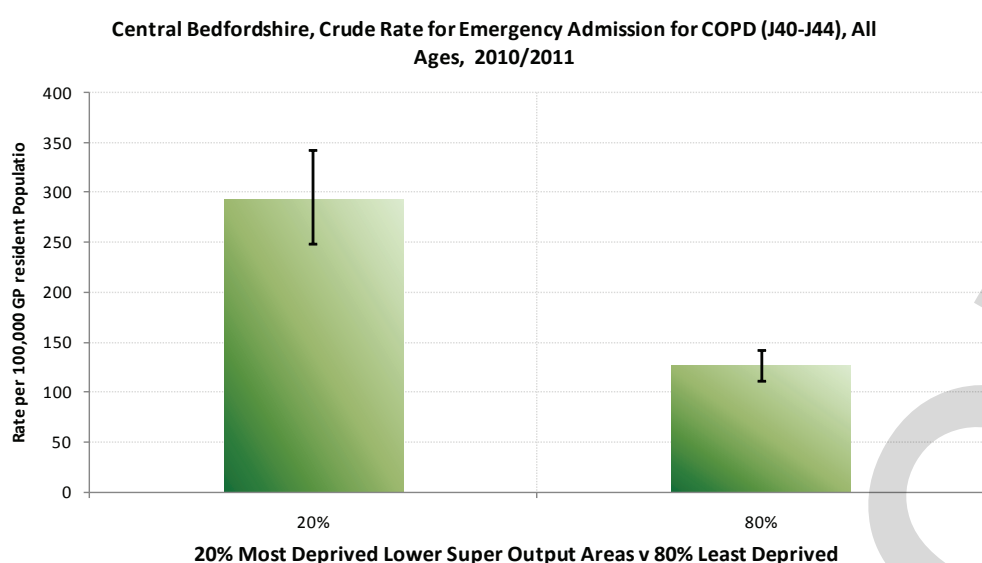
Figure 10: Trends in chronic respiratory disease mortality per 100,000 among males aged below 75 years in Central Bedfordshire



Source: ERPHO fingertips: <http://fingertips.erpho.org.uk/>

Figure 11 shows that the emergency admission rate for chronic respiratory disease is 2.3 times greater in the most deprived 20% than the rate for persons who live in the least deprived 80% of Central Bedfordshire.

Figure 11: Emergency admissions for chronic respiratory disease per 100,000 population, all ages in Central Bedfordshire



Source: NHS Bedfordshire

Key Actions

The majority of chronic respiratory diseases are due to smoking, so reducing rates of smoking in the most deprived areas is vital.

Early diagnosis through improved awareness of symptoms amongst those who live in deprived areas, followed by good control of symptoms, improves quality and length of life.

4 Lifestyles and health inequalities

Many interconnected factors lead to health inequalities. It is clear that lifestyle factors such as smoking, poor diet, inactivity and excessive alcohol consumption all play their part in determining poor health. On average people with all four of these unhealthy behaviours die 14 years earlier than those with none. However these lifestyle factors are not adopted by deliberate choice but are often the result of living in a family or community where these lifestyles are prevalent and considered normal.

4.1 Smoking

Smoking increases the risk of developing many diseases including cardiovascular diseases, cancers, and chronic respiratory diseases. Smoking is the single, biggest cause of inequality in death rates between the rich and the poor in the UK. Smoking accounts for over half of the difference in risk of premature death between the least and most well off.¹⁰

Since the health dangers of smoking have become well known, rates of smoking have declined significantly - more amongst the most well off than those who are more deprived.

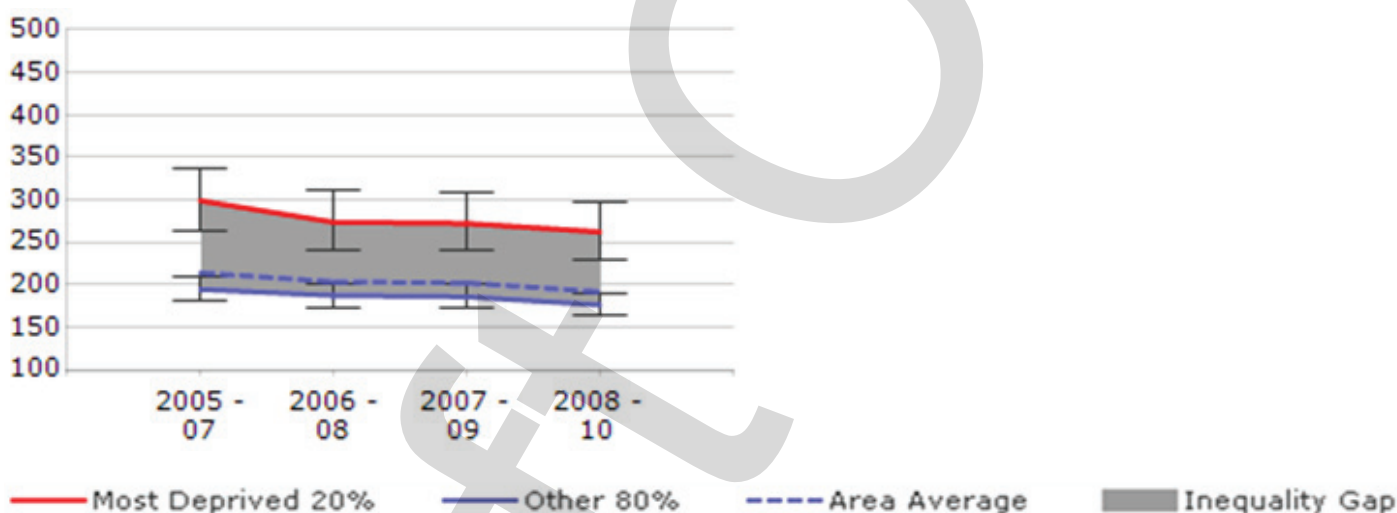
10 ASH, Smoking and Health Inequalities, 2011

In 2011, the prevalence of smoking among adults in Central Bedfordshire was 16.7%, lower than the east of England average of 19.8% (ERPHO Fingertips¹¹). The smoking prevalence in the more deprived areas of Central Bedfordshire is not known. A telephone survey¹² in 2008 indicated that the smoking prevalence in the most deprived 20% of MSOAs in the whole of Bedfordshire¹³ was 22.2% (CI 18.6% - 22.6%) compared to 15.8% (CI 13.3% - 18.7%) in the least deprived 80%.

The Integrated Household Survey¹⁴ carried out between October 2010 and September 2011 showed that 25.1% of routine and manual adults in Central Bedfordshire were smokers. Although not all 'routine and manual' people will live in the more deprived areas, this does confirm higher rates of smoking among the less well-off.

Based on studies comparing smokers and non-smokers, mortality can be attributed to smoking. For example, 90% of lung cancers are due to smoking. Smoking attributable mortality is declining in both the most deprived and the rest of the population at about the same rate, as shown in figure 12. However, there is still a significant gap between the 20% most deprived and the least deprived 80%.

Figure 12: Trends of smoking attributable mortality per 100,000 in Central Bedfordshire persons



Source: ERPHO fingertips: <http://fingertips.erpho.org.uk/>

11 ERPHO Fingertips. <http://fingertips.erpho.org.uk/>, exact period 2010/11 Q3 – 2011/12 Q2

12 Erpho Revised 2008 Lifestyle Survey summary: Bedfordshire PCT.

13 Bedfordshire here means the 2 Unitary Authorities of Central Bedfordshire and Bedford Borough.

14 Integrated Household Survey, ONS, published by London Health Observatory www.lho.org.uk.

Key actions

In 2011/12 31.0% of quitters came from the 20% most deprived LSOAs in Central Bedfordshire, this is just sufficient to prevent the widening of inequalities. The targets for 2012/13 have been calculated for Central Bedfordshire to ensure at least 30% of quitters are from the 20% most deprived MSOAs. Work should continue to get a higher proportion of smoking quitters from the most deprived areas by:

- Targeting women from deprived areas who smoke during pregnancy.
- Working with schools whose pupils come from the most deprived areas to support young people to stop smoking or not to start in the first place.
- Targeting those from lower social classes by offering support through the workplace.
- Working with trading standards to reduce under age sales of cigarettes in areas where rates are highest amongst young smokers.
- Increasing the provision and ease of access to stop smoking services in deprived areas e.g. through clinics in neighbourhood centres.
- Providing increased support to GPs serving deprived areas to meet targets.

4.2 Adult obesity

Conditions linked with obesity (and the associated lifestyle choices) include: cardiovascular disease; respiratory conditions; insulin resistance and type 2 diabetes; certain cancers; musculoskeletal problems; low self esteem and depression. There is an exponential rise in risk as obesity levels increase. As a result, development of obesity in middle age shortens life expectancy on average by 2-4 years, or by 8-10 years in those who become morbidly obese¹⁵.

The prevalence of obese adults in Central Bedfordshire is estimated to be 24.2%, similar to the east of England average (ERPHO Fingertips¹⁶). It is estimated that in Central Bedfordshire there are over 8,800 people with high blood pressure, nearly 4,100 people with cardiovascular diseases and around 2,800 people with diabetes because they are obese¹⁷.

While everyone is susceptible to obesity, levels are disproportionately higher in the lower socio-demographic, socially disadvantaged groups and some ethnic groups. A greater proportion of men are overweight than women but approximately three times as many women as men are severely obese (BMI equal to or greater than 40). In both men and women BMI generally increases with age.

Key actions

- Ensure Central Bedfordshire workplaces are exemplars of healthy working environments.
- Deliver social marketing interventions to influence positive health behaviour in target geographical locations.
- Promote brief intervention advice for healthy living throughout the patient journey such as Making Every Contact Count (MECC).
- Actively consider opportunities for active travel on all future planning requests.
- Engage business through the Governments Food and Nutrition and Physical Activity Responsibility Deal partnerships.
- Ensure that opportunities for increasing physical activity are maximised e.g. leisure facilities and the built environment.

¹⁵ Observatory NO. Briefing note: Obesity and life expectancy. Oxford, UK: NOO; 2010.

¹⁶ Erpho Fingertips. <http://fingertips.erpho.org.uk/>

¹⁷ Central Bedfordshire Joint Strategic Needs Assessment.

4.3 Alcohol

The impact of alcohol misuse is widespread; encompassing alcohol related illness and injuries, as well as significant social impacts including crime and violence, teenage pregnancy, loss of work place productivity and homelessness.

The impact of alcohol on health, social status and safety can affect everyone. Generally, as income rises, so does alcohol consumption. The proportion of people exceeding the sensible drinking guidelines also rises as income rises. People with lower socio economic status are more likely to abstain altogether. If they do consume alcohol, they are more likely to have problematic drinking patterns and dependence than people higher up the social scale.

Higher admission rates for alcohol specific conditions for both males and females are also associated with higher levels of deprivation.

Projections of the number of people predicted to have an alcohol problem in Central Bedfordshire are shown in table 2.

Table 2: People aged 18-64 predicted to have an alcohol problem by gender projected to 2025 in Central Bedfordshire

	2012	2015	2020	2025	2030
Males	7,151	7,308	7,586	7,830	7,995
Females	2,716	2,762	2,871	2,957	3,000
Total population predicted to have alcohol dependence	9,867	10,070	10,457	10,787	10,995

Source: Projecting Adult Needs and Service Information (www.pansi.org.uk/)

Key actions

To tackle issues and problems associated with alcohol use, the Joint Needs Strategic Assessment (JSNA) has proposed the following actions:

Children and Young People

- Deliver universal alcohol education in all middle and upper schools, particularly targeting those schools serving the more deprived areas.
- Enhance early intervention services for young people, particularly: those who have offended; Looked after Children; those who are not in education, employment or training (NEET); those in contact with Social Care Services and those aged 14 and under.
- Enhance services for families and in particular work with parents, children and young people affected by substance misuse issues.
- Improve the interface between Tier 2 & Tier 3 services for children and young people and their families affected by substance misuse issues.

Adults and older people

- Continue delivery of the Alcohol Identification and Brief Advice (IBA) training, ensuring that IBA is routinely provided by frontline agencies/services.
- Highlight the changing drinking patterns of older people and women through the delivery of IBA, Making Every Contact Count (MECC) and the monthly alcohol campaign.
- Provide a greater focus on the effects of problematic home drinking, preloading and habitual drinking.
- Effectively commission high quality alcohol prevention and treatment services.

5 Health inequalities affecting babies, children and young people

Central to the Marmot Review is the recognition that disadvantage starts before birth and accumulates throughout life. Thus, the highest priority is attached to the first objective: giving every child the best start in life.

5.1 Low birth weight

Low birth weight is defined as a weight of less than 2500g; a subset of this is very low birth weight (less than 1500g). At the population level, the proportion of babies with a low birth weight is an indicator of a multifaceted public-health problem that includes long-term maternal malnutrition, ill health, hard work and poor health care in pregnancy¹⁸.

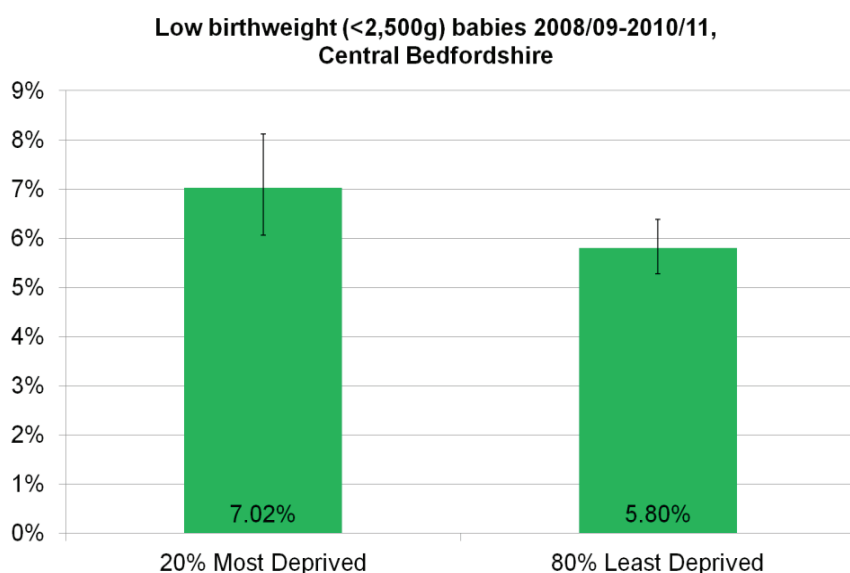
On an individual basis, low birth weight indicates that the pregnancy was not optimal; that growth in the womb was restricted; and that the baby's organs, including its heart, kidney and bone, are permanently changed. This leads to an increased risk of infant mortality, poor infant health and poor adult health. Low birth weight has been correlated with coronary heart disease, stroke, cancer, diabetes and osteoporosis in later life and reduced life expectancy¹⁹.

Figure 13 shows that the percentage of low birth weight babies in the most deprived 20% of LSOAs is 21% higher than in the 80% least deprived. Although this is not statistically significant (as the confidence intervals overlap in the chart below), it is important to continue to monitor the situation to ensure the gap does not widen further. Very low birth weight births (under 1,500 grams) are 57% more common in the most deprived 20%, but again this is not statistically significant.

¹⁸ <http://www.who.int/whosis/indicators/compendium/2008/2bwn/en/index.html>

¹⁹ www.thebarkerfoundation.org

Figure 13: Inequalities in low birth weight in Central Bedfordshire



Source of data: Office for National Statistics

Key actions

Nutrition of girls and young women

In England, even though there is very little calorie malnutrition, many babies remain poorly nourished in the womb because their mothers eat diets that are unbalanced in macronutrients (protein, fats and carbohydrates) and deficient in micronutrients (including vitamins and minerals)²⁰.

Fundamental to increasing birth weights is improving the nutrition of girls and women of child bearing age. Ideally they should be well nourished throughout life, not just when they become pregnant, to ensure their bodies have reserves to pass on to their baby.

Intensive antenatal visits (as recommended in the Marmot Report) by a health visitor or midwife for women who live in deprived areas should occur as early as possible in pregnancy. This should include nutritional advice as well as advice and support to stop smoking if required (see below). This should be monitored by those commissioning the 0-5 years Healthy Child Programme.

5.2 Stopping Smoking in pregnancy

Stopping smoking in pregnancy is one of the most effective steps a woman can take to improve her health and the health of her baby. Many of the 4,000 chemicals in tobacco smoke can cross the placental barrier and have a direct toxic effect on the foetus. Maternal smoking can cause major morbidity and mortality to the foetus and new born baby, including:

- 32% increase in miscarriage and 26% increased risk of perinatal death.
- 1.5 to 2.5 fold increased risk of low birth weight babies.
- 27% increased risk of a preterm birth (before the 37th week of pregnancy). Preterm birth is a major cause of infant mortality and can affect physical and mental development during childhood.

20 www.thebarkerfoundation.org

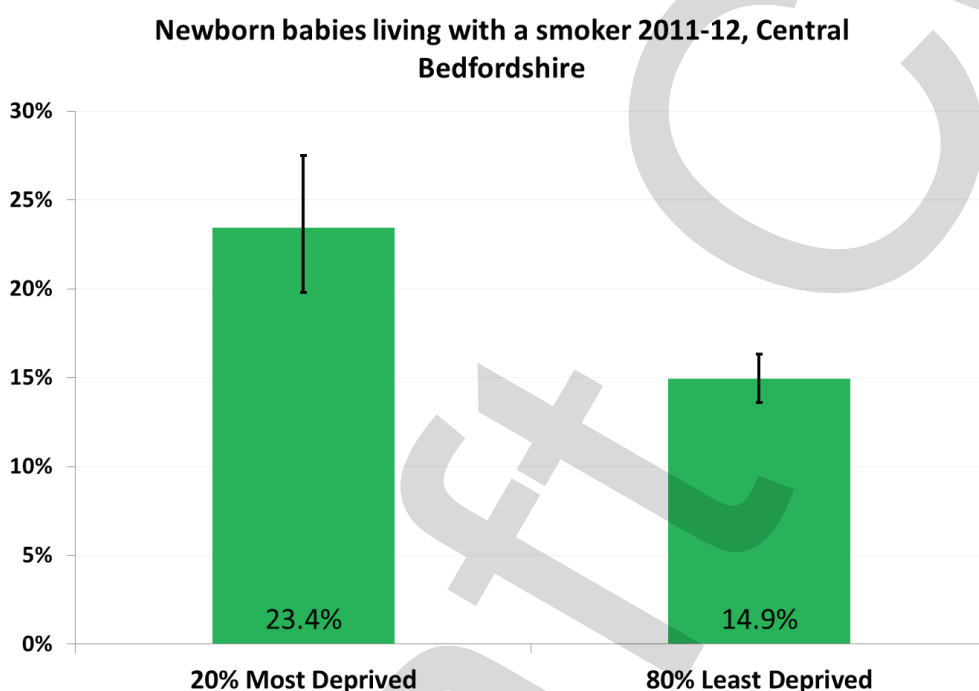
Data are available for hospital trusts for all NHS Bedfordshire patients but not at unitary authority level. These show that smoking rates have been consistently higher in the Luton and Dunstable Hospital (above 20%) compared to Bedford Hospital (just over 10%), indicating higher smoking rates in pregnancy in the south of Central Bedfordshire.

Babies living with a smoker

This can be used as a proxy for smoking during pregnancy. Compared to smoking in pregnancy, more details are available on babies living with a smoker in the household, whether the smoker is the mother or another member of the household. These babies suffer the harm caused by second hand smoke, and if the smoker is also their mother they will have suffered the harms listed above whilst in the womb.

Figure 14 shows the proportion of new born babies living with a smoker in Central Bedfordshire. In 2011/12, 23.4% of babies from the 20% most deprived LSOAs lived in a household with at least 1 smoker, compared to 14.9% in 80% least deprived LSOAs; a statistically significant gap.

Figure 14: Proportion of new-born babies living with a smoker in Central Bedfordshire



Data source: SystmOne, South East Essex Partnership Trust (SEPT)

Key actions

There is a need to continue to reduce the rates of smoking prevalence, with an emphasis on those from the most vulnerable communities, where the rates are highest - specifically targeting pregnant women and individuals sharing a house with a baby or young child. This can be done by:

- Increasing access to stop smoking services for women from deprived areas who smoke during pregnancy.
- Continuing to provide Level 1 and Level 2 stop smoking training to midwives and health visiting teams.

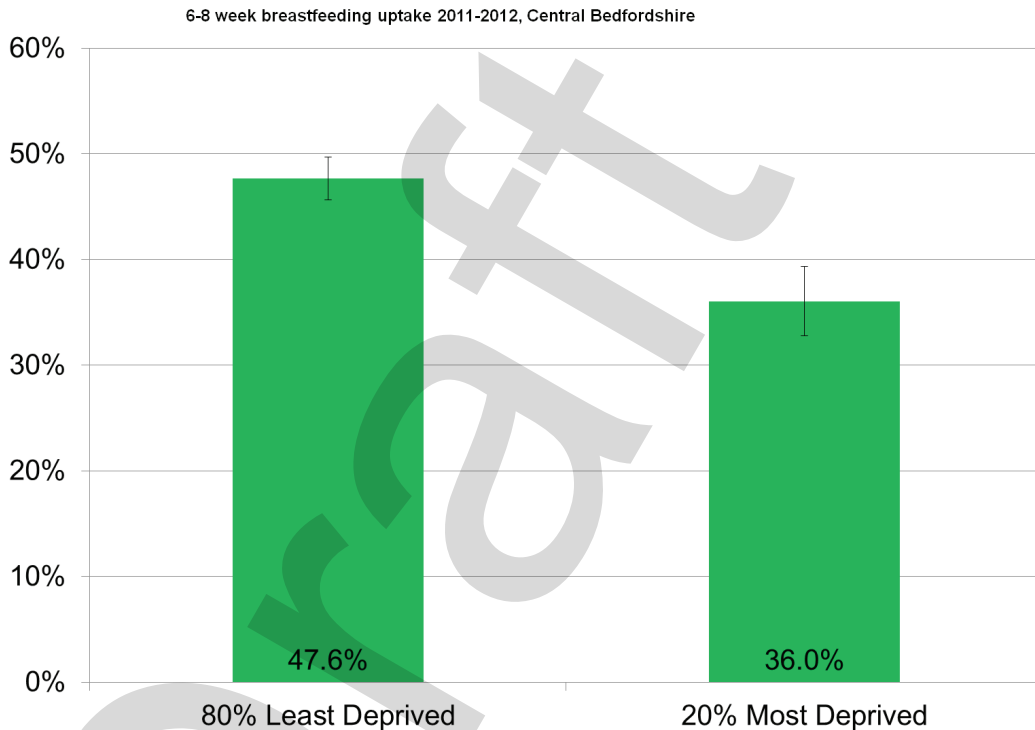
- Continuing to provide home based appointments with the Stop Smoking Service to improve access by mothers with young children.
- Supporting the reduction of smoking prevalence including partners and families and to improve outcomes for parents and their children by expanding the Smokefree homes and cars programme
- Extending partnership working to encompass smoking in pregnancy and second-hand smoke
- Analysing existing data to identify communities with high rates of smoking amongst mothers to enable targeting of future stop smoking campaigns.

5.3 Breastfeeding

Building on a healthy pregnancy, breastfeeding helps secure the best start in life for new-born infants. It promotes health and prevents disease in both the short and long term for both infant and mother. Infants who are not breastfed appear more likely to suffer with conditions such as gastroenteritis and respiratory disease requiring hospitalisation. Breastfeeding reduces the risk of high blood pressure and raised blood cholesterol in adulthood and may reduce the risk of type 2 diabetes and obesity. Breastfeeding is also associated with a reduction in the risk of breast and ovarian cancers for mothers (DH, 2009).

Figure 15 shows the 6-8 weeks breastfeeding uptake in Central Bedfordshire. In 2011/12 the breastfeeding rate at 6-8 weeks was 36.0% in the 20% most deprived LSOAs and was 47.6% in the 80% least deprived; a statistically significant difference. The rate in Tithe Farm, the most deprived ward in Central Bedfordshire, doubled from 16.7% in 2010/11 to 32.8% in 2011/12, thanks to the targeted work described below.

Figure 15: 6-8 weeks breastfeeding uptake in Central Bedfordshire



Data source: SystmOne, South East Essex Partnership Trust (SEPT)

The majority of the deprived LSOAs lie in the south of Central Bedfordshire and the women are most likely to have delivered at Luton and Dunstable Hospital, which has a relatively poor record at initiating breastfeeding.

Key actions

Evidence shows that Baby Friendly accreditation can add 10% to breastfeeding rates (UNICEF, 2011). Both Bedford Hospital and Luton and Dunstable Hospital have achieved Stage 1 Baby Friendly Accreditation. The Community Health Services and eight Children's Centres, including those in Tithe Farm, Dunstable and Parkside, have been awarded Stage 2 Baby Friendly accreditation. Plans are under way for the 0-19 team to achieve Baby Friendly accreditation at level 3 next year.

Baby Brasseries located in Children's Centres across Central Bedfordshire offer encouragement to pregnant women to consider the benefits of breastfeeding and support to new mothers to help them practically with breastfeeding. The Tithe Farm Children's Centre has a Baby Brasserie, which may account for the improved breastfeeding rates recently seen in the area.

Other actions include:

- Continuing to raise awareness of the benefits of breastfeeding and remove barriers antenatally, through intensive antenatal visits.
- Continuing to train peer supporters.
- Encouraging a positive culture of breastfeeding in deprived areas, including through development of local community champions and extension of the 'Out and About' award to accredit breastfeeding-friendly eating establishments.
- Improving monitoring of the use of Children's Centres to help determine whether particular groups of women are not accessing the programmes so that specific support can be given.

5.4 Childhood obesity

The emotional and psychological effects of being overweight are often seen as the most immediate and most serious problems by children themselves. They can include: teasing and discrimination by peers; low self-esteem; anxiety and depression.²¹

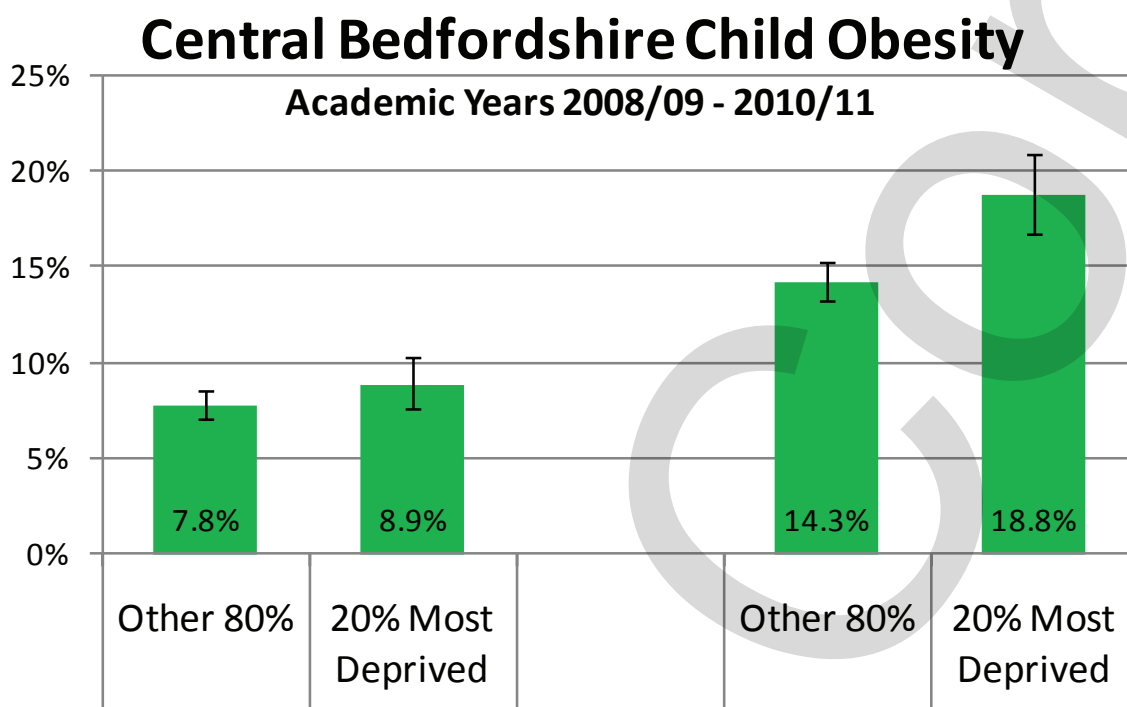
Obese children may also suffer disturbed sleep and fatigue. Some obesity-related conditions can develop during childhood. Type-2 diabetes, previously considered an adult disease, is beginning to be seen in obese children as young as five. Some musculoskeletal disorders are also more common. Overweight and obese children are more likely to become obese adults, and have a higher risk of morbidity, disability and premature mortality in adulthood. Above average BMI at age 5 and older is a risk factor for development of type-2 diabetes later in life. Below average BMI at age 5 combined with above average BMI at age 11 creates increased likelihood of coronary heart disease as an adult (Barker, 2007²²).

21 Schwimmer, J.B., Burwinkle, T.M and Varni, J.W. (2003) Health-Related Quality of Life of Severely Obese Children and Adolescents. JAMA 289: 1813-1819

22 Obesity and early life, D. J. P. Barker, obesity reviews (2007) 8 (Suppl. 1), 45-49

Children's heights and weights are monitored through the National Child Measurement Programme (NCMP), for which there is very good participation in Central Bedfordshire. Figure 16 shows the prevalence of childhood obesity in Central Bedfordshire; higher rates of obesity are seen in the 20% most deprived areas compared to the 80% least deprived. This is not statistically significant in the Reception Year (Year R, age 4-5) but it is in Year 6 (age 10-11).

Figure 16: Prevalence of childhood obesity in Central Bedfordshire



Source: NHS Bedfordshire

Locally there are insufficient data to comment on inequalities in childhood obesity due to ethnicity.²³

Key actions

Apart from improving the health of mothers-to-be and infants as described in sections 5.1 and 5.2, various actions can be taken. These include:

- Improving access to high quality and affordable food in deprived areas.
- Improving access to open play areas and use of active transport e.g. by making these safe options in deprived areas.
- Supporting play programmes and other physical activity schemes in deprived areas.
- Ensuring that school staff, GPs and health visitors working in deprived areas are trained to discuss overweight and obesity, offer brief intervention advice and signpost to services.
- Educating parents to recognise childhood obesity and have the confidence and knowledge to seek advice and support.
- Training parents and carers in deprived areas in healthy cooking.

²³ http://www.noo.org.uk/NOO_about_obesity/child_obesity/epidemiology

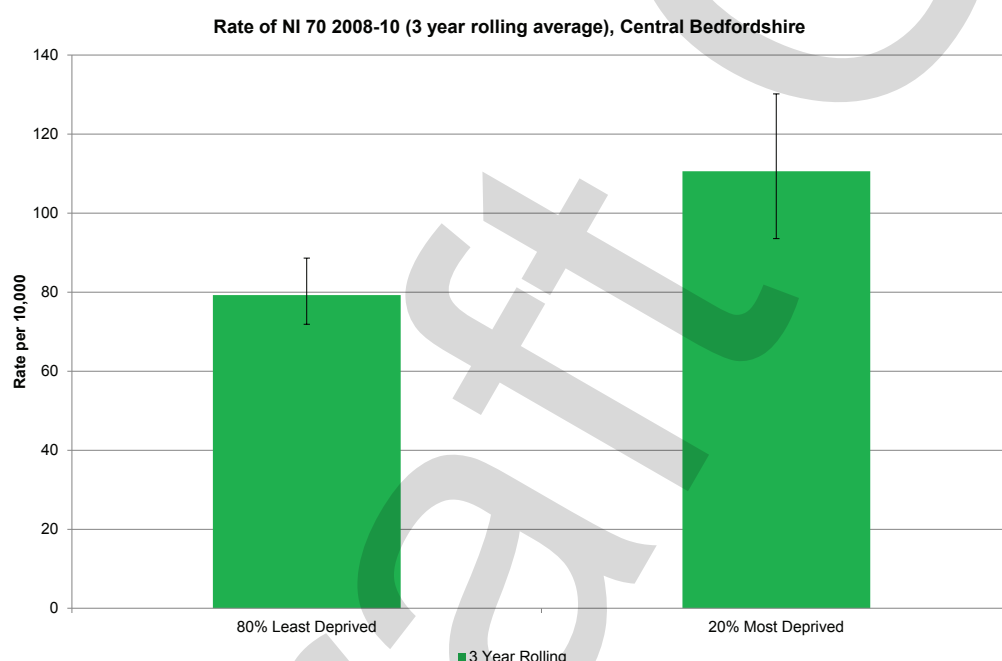
- Using social marketing to influence positive health behaviour in deprived areas.
- Introducing procedures within planning applications to monitor and potentially restrict the numbers of approvals for take-aways serving foods high in fats, sugars and salt, near schools and Children's Centres.
- Recording in full individual children's growth curves, measuring those aged 2 years and older every year to identify future risk profiles, so that interventions can be put in place as early as possible.

5.5 Injuries to children

Most injuries and their precipitating events are predictable and preventable²⁴, and yet unintentional injury is a leading cause of death and illness among children and young people under 14 years, and causes more children to be admitted to hospital each year than any other reason²⁵.

Emergency hospital admissions caused by unintentional and deliberate injuries in children and young people are grouped as national indicator number 70 (NI 70).²⁶ Figure 17 shows the rates (per 10,000) of emergency hospital admissions in children and young people caused by injuries. Compared to the 80% least deprived, the rate of emergency hospital admissions caused by injuries was significantly higher among children from the 20% most deprived LSOAs.

Figure 17: Rates of emergency hospital admissions caused by unintentional and deliberate injuries in children and young people (three year rolling average per 10,000 population)



Source: Hospital admission based on Secondary User Service (SUS) data, NHS Bedfordshire

- 24 Davis R, Pless B (2001) BMJ bans 'accidents'. Accidents are not unpredictable. British Medical Journal 322:1320-1
- 25 Audit Commission and Healthcare Commission (2007) Better safe than sorry: preventing unintentional injury to children. London: Audit Commission
- 26 Communities and local governments (2003) National Indicators for Local Authorities and Local Authority Partnerships: Handbook of Definitions: <http://www.communities.gov.uk/documents/localgovernment/pdf/543055.pdf> The NI 70 indicator comprises external causes of injury under International Classifications of Diseases Tenth revision (ICD-10) codes V01 to Y98, but excludes codes X33-X39 and X52 which refer to forces of nature.

Key actions

The National Institute for Health and Clinical Excellence (NICE) guidance on preventing unintentional injuries among children and young people under 15 is based on the best available evidence of what works and what gives best value for money.^{27,28,29}

Recommendations cover the planning and co-ordination of programmes as well as specific interventions to improve safety on the road, in the home and at outdoor play and leisure. Priorities for the most urgent attention selected by the Accidental Injury Taskforce (2002) for children aged 0-14 years are:

- Pedestrian injuries
- Fires and thermal injuries
- Injuries from play and recreation

5.6 Teenage conceptions

Teenage pregnancy is an important public health issue because it leads to poor health and social outcomes for both teenage mothers and their children. The risk factors associated with teenage pregnancy include³⁰:

- living in a deprived area;
- limited knowledge of where to access contraception and sexual health advice;
- living in care;
- alcohol and substance misuse;
- early onset of sexual activity;
- low educational attainment;
- disengagement from school;
- leaving school at 16 with no qualifications;

Teenage conceptions are measured as the rate per 1,000 females aged 15-17. The latest data for 2008-2010 shows that the rate for Central Bedfordshire is 33.3 per 1,000 girls aged 15-17. This is similar to the regional rate (30.8 per 1,000).

Teenage conception data are not released at LSOA level. The smallest areas data are provided for are wards. In 2008 – 2010, in Central Bedfordshire there were 9 wards that were teenage pregnancy 'Hotspots'³¹: These were Manshead (106), Sandy Ivel (72), Tithe Farm (73), Houghton Hall (81), Planets (59), Parkside (61), Stanbridge (56), and Northfields (70) (rates given per 1,000 females age 15-17). All except Sandy Ivel and Planets are in the 20% most deprived wards in Central Bedfordshire. Over a third of teenage conceptions occur in the deprived areas, although they only have a fifth of the population.

27 NICE PH29 (2010). Strategies to prevent unintentional injuries among under-15s. Available via internet URL: <http://guidance.nice.org.uk/PH29>

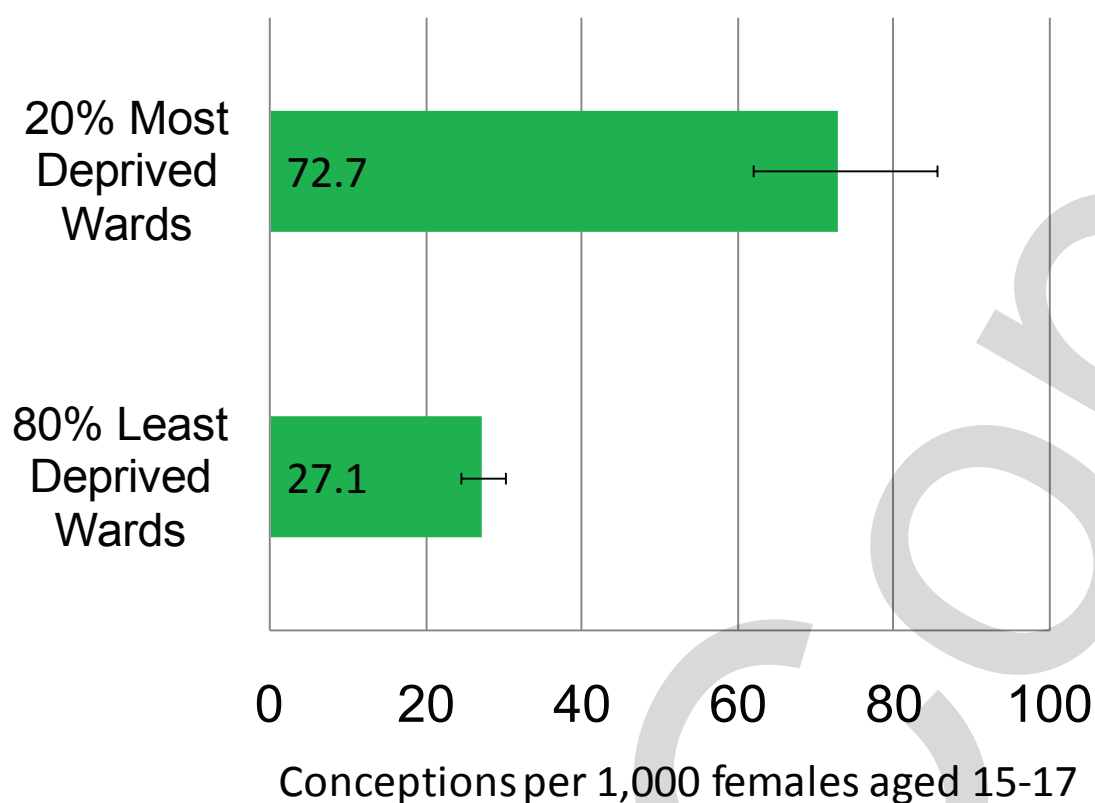
28 NICE PH30 (2010). Preventing unintentional injuries among under-15s in the home. Available via internet URL: <http://guidance.nice.org.uk/PH30>

29 NICE PH31 (2010). Preventing unintentional road injuries among under-15s: road design. Available via internet URL: <http://guidance.nice.org.uk/PH31>

30 DCSF(2006) Teenage Pregnancy Next Steps: Guidance for local Authorities and Primary Care Trusts on Effective Delivery of Local Strategies

31 'Hotspot' wards are in the highest 20% in England with an under-18 conception rate equal or higher than 53.3 per 1000 females aged 15-17.

Figure 18: Under 18 pregnancy rates in Central Bedfordshire, 2008-10



Data source: ONS teenage pregnancy unit

Key actions

- Ensure high quality Sex and Relationships Education in schools serving deprived areas.
- Continue to provide on-site sexual health services within upper schools serving deprived areas.
- Ensure equitable access for young people to Contraceptive and Sexual Health Services (CASH).
- Raise the self-esteem, aspirations and resilience of children from deprived areas who may be disengaging from education e.g. the evidenced based Aspire programme which is being delivered at three middle schools serving teenage pregnancy "Hot-spot" wards.
- Provide specific support to the most vulnerable such as looked after children and young people not in education, employment or training (NEET) e.g. through sexual health education outreach workers who provide one to one and group work to help raise self esteem and develop decision making skills.

6 Other wider determinants of health

6.1 Educational attainment

Education is a major social determinant of health. Not only can a better level of education help to equip individuals to access greater career opportunities and income, but it can also provide the necessary knowledge, personal and social skills to access and use information and services, which in turn can maintain and improve their own and their family's health and wellbeing.³²

Inequalities in educational outcomes affect physical and mental health, as well as income, employment and quality of life. Improving educational outcomes amongst the most disadvantaged groups has the potential to make a positive impact on health inequalities.

Where are we now

Data on inequalities in educational attainment are provided in various ways including by geographical deprivation and by eligibility for free school meals. In a deprived geographical area some children will be deprived whereas some will not. Therefore eligibility for free school meals is a stronger measure because all the children are suffering economic hardship. There is one caveat as not all children who would be eligible for free school meals claim them.

The data show that there is a gap in attainment between those known to be eligible for free school meals and those not eligible. This is true at all ages and the gap is larger than in the older age groups.

Early Years

Children's development can easily be prevented from reaching its potential when their early years' circumstances are disadvantaged. Unfortunately, by the time children start school, the effects can be so deep set that the state education system is often unable to remedy them.

Children's development at age 5 years is measured as they enter the school system and reported in the Early Years Foundation Stage Profile³³. Provisional 2012 data shows 63% of children across Central Bedfordshire were achieving a good level of development³⁴, compared to 64% in England.

Provisional data for 2012 shows that for pupils known to be eligible for free school meals in Central Bedfordshire, 48% had achieved a good level of development compared with 65% who are not eligible; a gap of 17 percentage points.

32 Health Impacts of Education: a review, IPH, 2008

33 The EYFSP has 13 scales across 6 areas of development: Personal, social and emotional development; Communication, language and literacy; Problem solving, reasoning and numeracy; Knowledge and understanding of the world; Physical development; Creative Development

34 Good level of development: Those children who achieve a score of 6 or more across seven scales within 'Personal, Social and Emotional Development' (3 scales) and 'Communication, Language and Literacy' (4 scales) of the EYFSP and 78 points or more in total across all 13 scales

Education to age 11

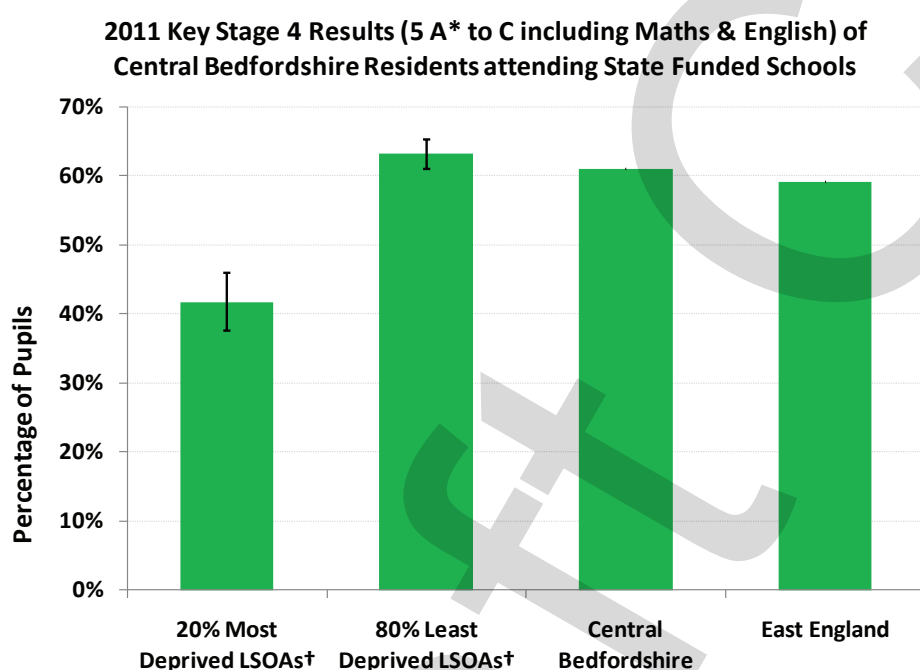
Provisional 2012 data shows 77% of Central Bedfordshire's school children achieving level 4 in English and Maths at Key Stage 2.

Provisional data for 2012 shows that of the Central Bedfordshire pupils eligible for free school meals, 57% achieved level 4 (key stage 2) in both English and Maths, compared to 78% of the non-free school meal children, a gap of 21 percentage points. The gap had only grown a little compared to the equivalent one seen at the Early Years Foundation Stage Profile.

Education to age 16

In Central Bedfordshire there is significant inequality in educational attainment at Key Stage 4 between the children from the 20% poorest areas and those from the other 80%, as shown in figure 19. In 2011, 41.6% of children from the most deprived 20% of LSOAs achieved 5 A*-C grade GCSEs including English and Mathematics, whereas 63.2% from the other 80% achieved this standard, a significant gap.

Figure 19: Central Bedfordshire Key Stage 4 Results, 2011



† Based on those LSOAs with published data. For some LSOAs, with small values, the numbers are suppressed.

In 2011 for those pupils known to be eligible for free school meals in Central Bedfordshire only 34.1% achieved 5 A*-C grade GCSEs including English and Maths, compared to 61.0% for those not eligible for free school meals – this gap of 26.9 percentage points is similar to that seen in England of 34.7% - 62.2%.

There are also inequality gaps in achievement for Looked After Children, Gypsy/Roma and travellers of Irish Heritage and those from a Black Caribbean background (see the JSNA).

Key Actions

Helping children and young people achieve more and gain improved educational attainment are key priorities in the Children and Young People's Plan, the Child Poverty Strategy and the Council's Medium Term Plan. The key objectives and actions relating to these priorities can be found in these plans. Below is a summary of some of the actions being taken:

- Utilise Children's Centres to continue to support pre-school education, development of basic skills and early identification of poor development. They can encourage parents to be more active in pre-school learning, e.g. through encouraging play, reading to their children and help parents whose own level of education (e.g. poor literacy) act as barriers to them being engaged in their children's learning.
- Continue to provide targeted sessions at Children's Centres in areas of high deprivation. The activities should focus on all six areas of development of the Early Years Foundation Stage Profile and ensure that any children falling behind in a particular area are identified and supported.
- Ensure high quality early years intervention and prevention services are in place through Children's Centres working with parents of the very young on healthy diets, longer breastfeeding, sexual health, drugs and alcohol and stop smoking initiatives.
- Support parents and families through the parenting and family support strategy with clear pathways through to targeted parenting and family support where additional needs are identified.
- Provide multi-agency support to vulnerable families such as teenage parents where children have a 60% increased chance of being brought up in poverty.
- Ensure high quality child care is available so that parents can access training courses and opportunities to work.
- The development of a teaching school to lead good practice in Central Bedfordshire area.
- School to school support through groups of academy chains, learning partnerships and federations and a talent map of support on the Council website that schools can commission.
- Development of an alternative provision school led by head teachers for those middle and upper school age pupils who find the school environment difficult, which helps these pupils find alternative pathways to learning, training and employment and reduce permanent exclusions.
- The role of the Council as a champion for vulnerable pupils will be strongly supported.
- The role of school governors as school and community leaders will be developed.

Beyond School

According to the 2010 IMD eight LSOAs in Central Bedfordshire were within the 10% most deprived nationally in terms of education, skills and training. A further four were in the most deprived 10-20%. To address this requires education of adults as well as children. As these are also areas where the number claiming Job Seekers Allowance tends to be higher the training needs to be relevant to local employment opportunities.

Inequalities in education need to be addressed throughout life. Lifelong learning should be embedded throughout an individual's working life and should be appropriate to the needs of different groups. It should equip individuals with the skills required to take advantage of local employment opportunities.. The following actions help address inequalities:

- Promote the benefits of learning to all age groups, especially those with backgrounds of low attainment.
- The National Careers Service is an important partner which provides information for everyone. It needs to provide accessible support and advice for those from the most disadvantaged populations, on life skills, training and employment opportunities.
- Provide work-based learning, for those from deprived areas, including apprenticeships and work placements for those aged 18-24, which may be provided through Get Britain Working.
- Work related learning should be embedded throughout an individual's working life and should be appropriate to the needs of different groups and equip individuals with the skills required to take advantage of local employment opportunities

Further information is available in Central Bedfordshire's All Age Skills Strategy (<http://www.centralbedfordshire.gov.uk/learning/adult-learning/all-age-skills-strategy.aspx>)

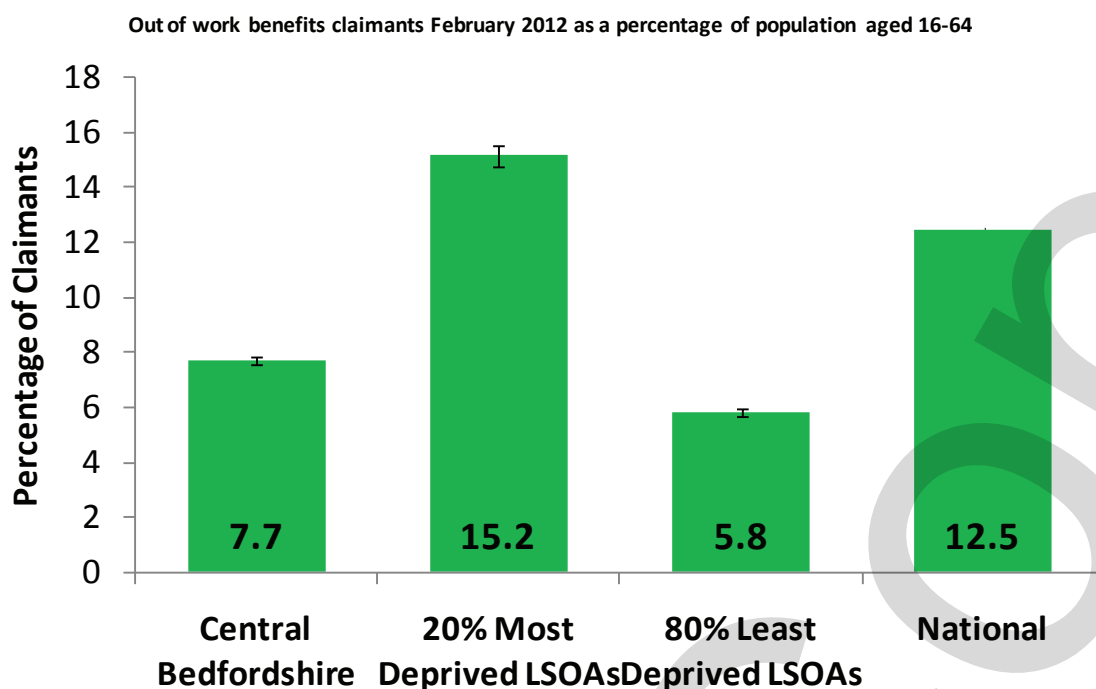
6.2 Improving employment

One area where the recent economic downturn can be expected to impact on health inequalities is through an increase in unemployment. Being in good employment is positive for your health. People are happier and live longer when they have useful work to do. Firstly it increases income, which provides better access to services and allows more healthy life choices. It increases social networks and gives a greater sense of purpose, all of which are linked to improved mental health outcomes.

However, jobs need to be sustainable and offer a decent living wage. They also need to provide opportunities for in-work development and enable a healthy work/life balance.

There are significant inequalities in employment according to where in Central Bedfordshire an individual lives, with the percentage rate of unemployed for those living in the most deprived 20% being double the overall rate for Central Bedfordshire and over 2.6 times the rate in the 80% least deprived (see figure 20).

Figure 20: Central Bedfordshire Out-of-Work Benefits Claimants February 2012



Source: Claimant count from Nomis via Central Bedfordshire Council, rates produced using population estimates from NHS registers. National is Great Britain.

The 2001 Census showed that some BME communities, particularly Chinese, White Irish and Pakistani, were more likely to have no qualifications than the overall population of Central Bedfordshire.

Raising qualifications is critical to individual employment prospects because there is a strong correlation between the highest qualification attained and the employment rate. Those with no qualifications are far less likely to be in employment. On the whole the Central Bedfordshire population is more highly qualified than the east of England and England. Also, the level of skills attainment at all levels has increased in Central Bedfordshire in each of the past four years. Those with no qualifications has halved from 14.3% to 7.2% between 2006 and 2011

Key actions

National policy will have a significant impact on employment, but local interventions are more able to reflect the level and nature of need in Central Bedfordshire, as follows:

- i. Key local stakeholders, including Health and Local Authorities to provide a range of targeted tailored interventions for the workless in the most deprived areas and communities, including working in partnership with providers engaged in delivering the Department for Work and Pensions (DWP) Work Programme and Get Britain Working through:
 - Work Programme Providers, Job Centre Plus, etc. to ensure interventions target those in the most deprived areas and communities.
 - Accurate assessment of individual needs and clear signposting to appropriate interventions.

- Support for those whose mental and physical health needs prevent sustainable working.
 - Provision of volunteering opportunities.
- ii. Key local agencies to work closely with European Social Fund (ESF) and Get Britain Working providers to:
- Encourage awareness and utilisation of provision, including the regional Skills Support for the Unemployed Programme and local projects targeting, for example, those with work limiting illnesses and Gypsies and Travellers.
 - Encourage self-employment, through Enterprise Coaching and Get Britain Working measures (e.g. New Enterprise Allowance and Enterprise Clubs).
 - Promote volunteering, through ESF provision and Get Britain Working – both as a means of gaining employability skills and also for its wider social benefits.
- iii. The Local Authority and partners to work together to improve the support available to existing businesses, and to potential inward investors to encourage job creation.
- iv. The Local Authority and partners to work with training providers and support organisations to ensure programmes equip workless individuals with the skills and experience required for existing and emerging employment opportunities. For example, work clubs are running across Central Bedfordshire.
- v. Improved opportunities to be provided for young people who are Not in Education, Employment or Training (NEET) by encouraging the take-up of tailored support offered through local ESF projects for those currently NEET and those deemed at risk of becoming NEET.

Further information about the local economy is available: <http://www.centralbedfordshire.gov.uk/local-business/business-information-and-advice/local-economic-information-policy.aspx>

6.3 Housing

Housing conditions affect people's health. Inadequate housing causes or contributes to many preventable diseases and injuries, including respiratory, nervous system and cardiovascular diseases, cancer and poor mental health.

The locally commissioned Housing Stock Modelling Report estimated that over a quarter (28%) of private sector dwellings in Central Bedfordshire fail to meet the Decent Homes Standard³⁵ compared to 36% in England as a whole. The main reason for failing the decent homes standard is the presence of a category 1 hazard. Around a fifth of all private homes in Central Bedfordshire contain at least one category 1 hazard. Category 1 hazards include: excess cold; falls on the level and on stairs; entry by intruders; flames and hot surfaces; damp and mould growth and fire.

Excess cold was the most frequent category 1 hazard (55%) followed by risk of falls (41.6%). Note, a dwelling may have more than one hazard. What is clear is that poor thermal comfort and excess cold are key issues, with 11% -12% of all private homes having these problems.

³⁵ Under the 2004 Housing Act the Housing Health and Safety Rating System

Wards (pre June 2009) with high proportions of non-decent homes include:

Aspley Guise	-	42%
Houghton Conquest	-	39%
Northill and Blunham	-	38%
Woburn	-	47%
Caddington	-	37%
Kensworth and Totternhoe	-	43%
Stanbridge	-	43%

Wards (pre June 2009) with high numbers of non-decent homes include:

Caddington	-	912
Kensworth and Totternhoe	-	718
Potton and Wensley	-	794
Dunstable Central	-	654
Amphill	-	649

There are an estimated 11,000 vulnerable households in Central Bedfordshire, 28% of these live in non-decent homes. This is an improvement on previous years.

Key Actions

- Identify households at greatest risk – i.e. those in receipt of means-tested benefits and households with older people and/or people with disabilities – paying particular attention to certain geographic communities.
- Initiate appropriate action where Category 1 Hazards are found
- Continue investment to bring all households up to the 'Decent Homes' standard.
- Work in partnership with private landlords to improve housing standards in the private rented sector (for example Property Accreditation)
- Identify houses with multiple occupancy.
- Provide smoke alarms to members of vulnerable communities.
- Tackle fuel poverty (see below).
- Obtain and analyse new data sources to improve targeting of resources

6.4 Fuel Poverty

Households are considered to be in fuel poverty if more than 10% of their net household income would need to be spent on heating and hot water to give an adequate level of provision. With energy costs continuing to increase, the number of households in fuel poverty will also increase. Approximately 16% of households in Central Bedfordshire are currently affected by fuel poverty due to recent price rises. Fuel poverty is usually associated with dwellings where one or more residents are in receipt of a means-tested benefit.

Older people are more likely to suffer from fuel poverty. Over one third of those households where the oldest person is aged over 80 are affected by fuel poverty. Households with older people are more likely to have lower incomes and have higher fuel dependency.

Fuel poverty tends to be more of an issue in rural areas, and those areas with high levels of private rented accommodation. In Central Bedfordshire, four LSOAs are in the worst 20% in England for fuel poverty. The first area covers part of Woburn, plus Potsgrove, Battlesden, Milton Bryan, Ridgmont and Eversholt. The other three areas are in Houghton Regis, Cranfield (covering the university) and Southill and Old Warden.

Key Actions

Improve the energy efficiency of housing (this also reduces carbon emissions) and support households in fuel poverty by:

- Requiring agencies with workers who go into private homes to identify where individuals may be in fuel poverty.
- Providing signposting and information to enable people to take up energy grants.
- Providing effective advocacy to support vulnerable people to take up energy grants.
- Identifying and pursuing all opportunities to utilise external resources to tackle fuel poverty in a co-ordinated, partnership approach. This would be led by the council.

6.5 Excess winter deaths

Excess winter deaths continue to be an important public health problem. It is estimated that half of the excess winter deaths are from cardiovascular and circulatory diseases and a third from respiratory disease. The excess winter deaths index (EWDI) is the number of excess winter (December to March) deaths expressed as a percentage of the average of non-winter deaths.

Excess winter deaths are most commonly seen in those aged 65 years and over and especially affect those aged 85 and over. A history of respiratory disease is also a risk factor.

There is lack of a clear link between excess winter mortality and deprivation, due to the inclusion of heating costs within the rent for people in council and housing association owned properties.

Key Actions

Focussing particularly on the elderly, very elderly and those with a history of respiratory disease:

- Tackle fuel poverty (see above).
- Ensure influenza vaccination is taken up as about 5% of excess winter deaths are caused by 'flu.

6.6 Sustainable development

The Marmot Review 'Fair Society, Health Lives' recognises that, globally, climate change and attempts to combat it have the worst effects on the poorest and most vulnerable. The need for mitigation of and adaptation to climate change means that we must do things differently. Creating a sustainable future is entirely compatible with action to reduce health inequalities. Sustainable local communities, active transport, sustainable food production, and zero-carbon houses will have health benefits across society. Measures that will aid mitigation of climate change will also reduce health inequalities³⁶.

36 The Marmot Review 2010, *Fair Society, Healthy Lives*.

The Marmot Review makes recommendations to address the need for a sustainable economy, food system, transport systems, and use of green spaces. Many measures to address climate change also bring health benefits such as more active travel (for instance walking and cycling), which, in addition to reducing carbon emissions, also increase physical activity and reduce air pollution and traffic accidents.

Key actions

To encourage sustainable development, Central Bedfordshire should prioritise policies and interventions that both reduce health inequalities and mitigate climate change across the social gradient by:

- Improving active travel
- Improving availability of good quality open spaces
- Improving the food environment in local areas
- Improving energy efficiency in housing

7 Conclusions

There are significant economic and health inequalities in Central Bedfordshire. Although inequality in life expectancy is better than England there is a significant and growing gap between the 20% most deprived and the rest of the population. The gap is widening because life expectancy in the deprived 20% is static but in the other 80% it is improving year on year.

This report has summarised actions to tackle specific health inequalities in Central Bedfordshire such as: low breastfeeding rates; childhood obesity; teenage conceptions and smoking; and the drivers of inequality such as low education attainment and unemployment. Chronic diseases such as circulatory diseases, cancers and respiratory diseases are significant contributors to the life expectancy gap.

To tackle health inequalities we need to focus on wider social and economic inequalities as advocated by the Marmot Review. Giving every child the best start in life is a priority. This approach provides the best chance of breaking the links between early disadvantage and poor outcomes throughout life.

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