



Improving Health in Leicester

Annual Report of the Director of Public Health and Health Improvement 2010

Contents

1. Introduction	4
2. Update on the Annual Report of the Director of Public Health 2009	7
3. Health Inequalities	9
4. Infant Mortality	19
5. Health-related behaviour, knowledge and attitudes in Leicester	23
6. Health Protection	34
7. Health Facts	38
8. Deprivation Maps	47
9. Glossary	48

1. Introduction

I am pleased to present this report on the health of the population of Leicester. This builds on the picture of health in the city painted in my report last year and in the three previous reports of the Director of Public Health. The Health Facts section at the back of the report provides key demographic data relating to health and is the fifth in its series, allowing a degree of comparability over the past five years, including at ward level.

Leicester

As the Health Facts section shows, Leicester has a resident population of around 290,000 to 300,000 people. Compared with England it is relatively young – with more people under the age of 35 years – and very diverse. In the 2001 census 34% of the population classified themselves as coming from a black minority group and since then there has been significant movement into the city of people from Somali, Middle Eastern and African backgrounds and more recently from Eastern European countries. The latest Index of Deprivation (2007) shows that in comparison with the Index of Deprivation prepared in 2004, Leicester's rank position has worsened from the 31st most deprived local authority in England to the 20th worst deprived in 2007.

Health Inequalities

The body of this report considers a number of topics, mostly linked to the chosen theme of health inequalities. While continuing an upward trend in life expectancy and improvements in the overall health of the population, Leicester continues to experience significant health inequalities. People in Leicester as a whole, are likely to have a significantly shorter lifespan, men by some 2.4 years and women by 2.1 years, when compared to the national average. This, of course, masks differences, particularly by ethnicity and socio-economic status and health experience across the city. The span of these differences can be seen in the chapter in this report on health inequalities, which shows that both men and women in the *least* deprived tenth of the Leicester population can expect to live around, and possibly in excess of, the England average life expectancy, while in the most deprived tenth, men live some 7 years and women some 3 years less.

During 2010, Leicester's Health Inequalities Improvement Plan was developed and agreed as a vehicle to galvanise efforts locally to accelerate improvements in

health, particularly amongst those with the worst health outcomes. This has provided an important focus and driver for work across the city during the past year and this needs to continue.

Causes of Death

The major contributors to the life expectancy gap between Leicester and England remain deaths from cardiovascular disease (CVD), respiratory disease and infant mortality, as Chapter 3 shows, with cancer deaths making a smaller contribution to the gap. However, the picture is complex and Figures 1 and 2 below show that deaths from cancer constitute 23.4% of deaths in the city and almost 30% of all deaths under the age of 75 years of age. This underscores the need to ensure that, as well as focussing on the major contributors to the life expectancy gap with England, there is increased effort to reduce deaths from cancer and other avoidable causes of premature death. There is a shared prevention agenda for both CVD and cancer – reducing smoking, moderation in alcohol consumption and maintaining a health weight – which are key to the reduction in premature mortality in the city. There is also a clear need to maintain a focus on reducing infant mortality in Leicester. Chapter 4 provides an analysis of infant mortality and makes recommendations relating to this particular aspect of health inequalities.

Improving and Protecting Health

Understanding health-related behaviours is vital for targeting specific populations and for service design. This understanding also enhances capacity to address differences in health and life expectancy across populations, helping service providers and communities themselves to take action on lifestyle factors which impact on health. For these reasons, the main findings of the *Leicester Health and Lifestyle Survey 2010* are summarised in this report. These findings support and enhance existing understanding of health-related behaviour and attitudes in the city.

Both tackling health inequalities and rising to the challenges of the current economic recession, require that there should be greater targeting of resource and a willingness to be innovative in commissioning services, whilst drawing heavily on the evidence base to steer selection of additional and alternative service models. A Leicester-bespoke 'health typologies' tool has been developed to assess local needs and increase understanding of the relative differences in health and social care spending patterns for different segments of the population. This is an aid to targeting resource to the population segments where greatest need and inequalities exist and the typologies are explained in Chapter 3 of the report.

2009/10 brought a significant health protection challenge, in the form of the swine flu pandemic. Responding to this required considerable resource to be deployed in public health, across the NHS, local authorities and other partner organisations within the Local Resilience Forum. Concurrently the city made considerable progress on uptake of childhood immunisations. A health protection section in Chapter 6 details these and other emergency planning and communicable disease control issues faced since the last report and includes an overview of challenges for the forthcoming year.

Each of the above chapters makes a number of recommendations to be considered by those reviewing, planning and commissioning services.

Changing Economic and Governmental Content

It is important to record the context of this report which is being written and published at a time of significant challenge, against the backdrop of global and national economic recession, substantial reductions in public expenditure and far-reaching organisational change within the NHS. The recession and associated reductions in publicly funded services will undoubtedly have a negative impact on population health over the coming years and are likely to impact disproportionately on those with the poorest health, widening current health inequalities.

Changes in the structure of the NHS and the organisation of public health have been set out in the NHS White Paper *Equity and Excellence: Liberating the NHS* in July 2010 and in the Public Health White Paper *Healthy Lives, Healthy People*, which is subject to consultation at the time of writing this report. During periods of such significant organisational change, there is the risk that the process of transition itself may divert time, energy and focus away from much needed work on the ground. It is important that we guard against this in Leicester. Times of change also present new opportunities and the Public Health White Paper *Healthy Lives, Healthy People* outlines a governmental commitment to protect the population from serious health threats, help people to live longer, healthier and more fulfilling lives and to improve the health of the poorest, fastest. It is important that we seize the opportunities for new partnerships and renewed efforts to improve health during this time of change. In the face of this context, my summary of the overall challenges are summarised below:

Leicester Public Health Challenge 2011

1. Intensify efforts to:
 - a. Reduce smoking prevalence
 - b. Increase exercise
 - c. Improve diet
 - d. Reduce misuse of drugs and alcohol
2. Focus efforts to reduce the rate of infant mortality
3. Work to support the effectiveness and take-up of preventative health services, particularly in relation to reducing vascular disease mortality and particularly by GPs and primary care
4. Promote and protect mental health
5. Further develop prevention activities in relation to growing numbers of older people
6. Address issues in relation to housing and homelessness
7. Target effective interventions towards the people and places where need and benefits are greatest
8. Establish and implement a programme of audit of services against best practice and to ensure equity to need
9. Maintain a programme of prioritised needs assessments through the Joint Strategic Needs Assessment (JSNA) framework and actively use this to inform the decisions of commissioners within the Local Authority and the health system, in both PCTs and the emerging GP Consortia
10. Strengthen the culture of evaluation, impact assessment and equity audit within the NHS, Local Authority and partners to ensure focus and best use of resources

Acknowledgements

Finally I would like to acknowledge the contribution of many people in the production of this report, particularly Sandie Nicholson, Helen Reeve and all those who have drafted sections of the report.

Deb Watson
Director of Public Health and Health Improvement
NHS Leicester City and Leicester City Council
March 2011

Figure 1: Main Causes of Death in all Persons, 2008

Source: Mortality data, Office of National Statistics, 2009

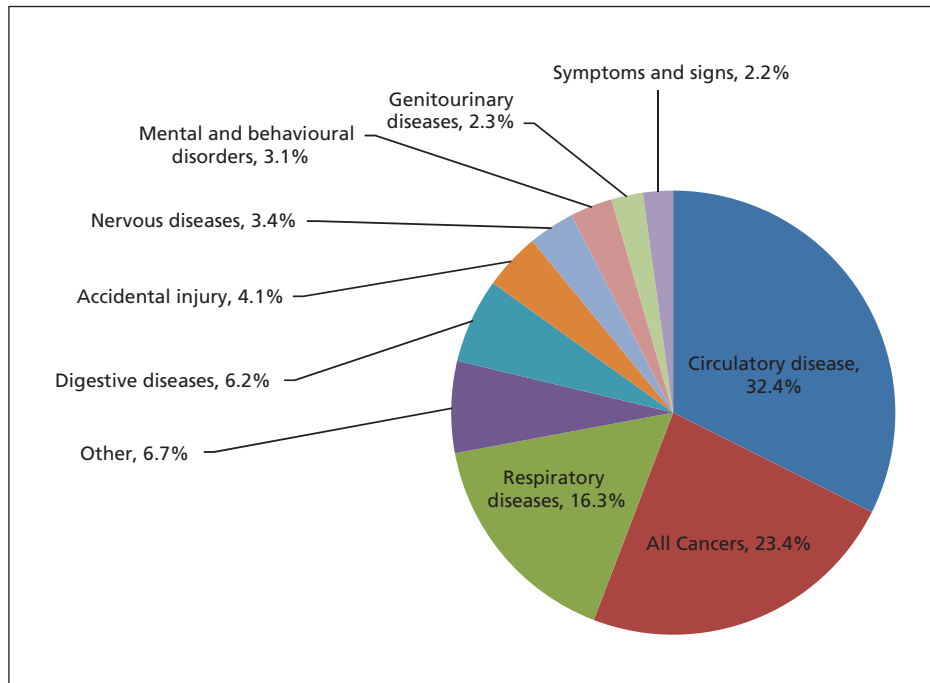
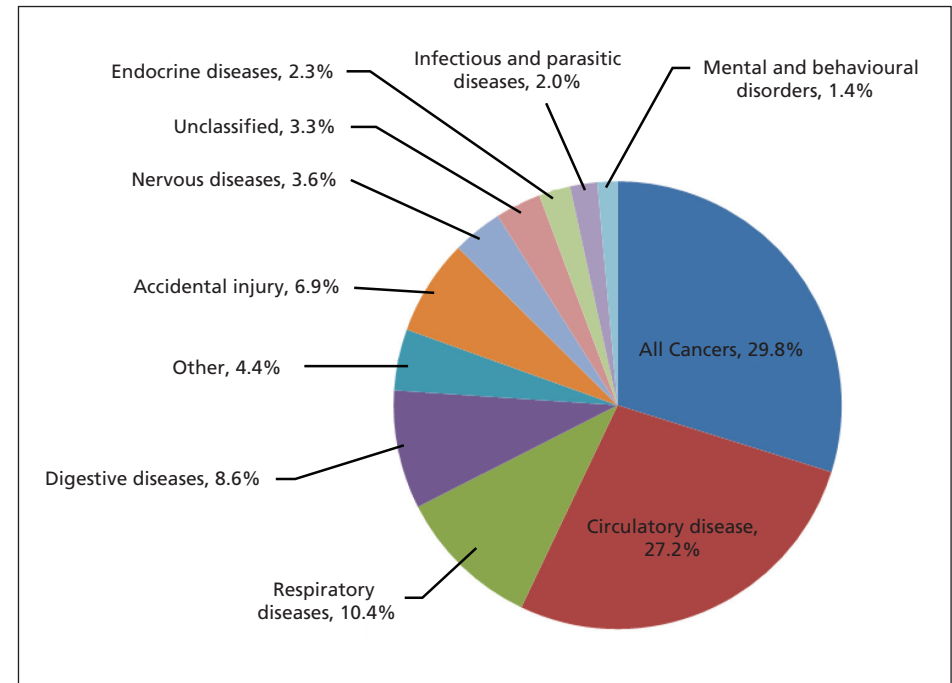


Figure 2: Main Causes of Death in all Persons under 75 years, 2008

Source: Mortality data, Office of National Statistics, 2009



2. Update on the Annual Report of the Director of Public Health 2009

Much of the Annual Report of the Director of Public Health 2009 was devoted to the needs of people with mental illness, the impact of the wider determinants of health on mental health and well-being and the promotion of better mental health in Leicester. It described the burden of mental illness on individuals, families, communities and wider society. It showed how poor mental health has an impact on physical health and the links between mental well-being and socio-economic circumstances. Mental health and well-being continues to depend on the contribution of a range of factors and services beyond the scope of mental health services and successful management of mental health problems depends upon a holistic approach. The new national strategy for mental health outcomes, *No health without mental health*¹, advocates building resilience, promoting mental health and well-being and challenging health inequalities in much the same way as the recommendations of the Annual Report of the Director of Public Health 2009. Since the report there has been progress in addressing mental health need in Leicester as summarised below.

- There have been improvements in the delivery of mental health services. For instance, the Improving Access to Psychological Therapies (IAPT) service, Open Mind, is now operating on a city-wide basis. It provides a range of therapeutic interventions for people with mild or moderate depression, based on the NICE recommendations for the management of depression and anxiety. There are on-going regional reviews of services for people with perinatal maternal mental illness and eating disorders.
- The *2008-2011 Children and Adolescents Mental Health Strategy* has been implemented and a new strategy is currently being developed. Mental health services for children and young people have been enhanced by the development of specialist roles to help with problems of attachment and behaviour and to support the mental health and well-being of children with physical health problems. Professionals can obtain advice for the mental healthcare of children by contacting Professional Advisory Services.
- The identification of mental health problems associated with long-term conditions has become part of the Quality and Outcomes Framework (QOF) in

general practice. However, further work is needed to help people who have mental ill-health problems to overcome barriers to accessing services, to ensure that they gain equitable access to innovations, such as NHS Health Checks. NHS Leicester City and Leicester City Council are also partners in the 'Fit for Work' pilot scheme. This is an initiative which promotes the positive links between health and work and aims to help more people with health conditions to find and stay in employment.

- The local *Joint Commissioning Strategy for Adult Mental Health* sets out the priorities for a partnership between the local health services and social care services, guided by the local authority and health commissioners. It emphasises the quality and accessibility of services, and focuses on the core areas of personalisation, dementia and IAPT.
- The national strategy, *Living Well with Dementia*², has been considered in the East Midlands. The response has highlighted the need for more quality care at home, in hospital and in care homes, earlier diagnosis of dementia and timely access to appropriate medication. The regional objectives are that:
 - by 2014 local health and social care partners will have in place a regionally equitable care and support pathway which demonstrates delivery of high quality services and value for money for people with dementia
 - by 2014, at least 75% people living with dementia will have a formal diagnosis
 - in general the experience of patients diagnosed with dementia will be improved, by supporting and enabling them to live well with the condition, by ensuring that when they need inpatient care that they do not experience unnecessary delays

Improving mental health and well-being in Leicester is not something that can be achieved solely by the local health and social care sectors. Success in tackling poor mental health and well-being will also depend on the ability of local communities to build resilience and support. This is a difficult prospect given the context of the economic downturn, when factors such as unemployment and debt are likely to have an increased impact. Nonetheless, it remains that a holistic approach is needed to build resilience to mental ill-health with many organisations and services having an important role including employers, schools, parks, sport and leisure organisations, housing, environment, transport, voluntary and community organisations as well as health and social care.

Recommendations

It is recommended that:

- All commissioning takes into account that inequality is a key determinant of health and that there is an association between poor mental health and health inequalities
- There is a continued focus on the recommendations made in the Annual Report of the Director of Public Health 2009

Lead Author

Mark Wheatley

Public Health Specialist (Mental Health and Vulnerable People)

Tel: 0116 295 1583

Email: mark.wheatley@leicestercity.nhs.uk

References

- 1 Department of Health. 2011. *No health without mental health: A cross-government mental health outcomes strategy for people of all ages*. London: Department of Health. Available at: www.dh.gov.uk/mentalhealthstrategy [Accessed on 21 February 2011]
- 2 Department of Health. 2009. *Living well with dementia: A National Dementia Strategy*. London: Department of Health.



3. Health Inequalities

Introduction

Priorities for health improvement and reducing health inequalities have been identified in previous *Annual Reports of the Director of Public Health*¹, the *Joint Strategic Needs Assessment 2008/09*², and the NHS Leicester City's Commissioning and Investment Strategy 2009/10 – 2013/14³ and in the strategic commissioning statements developed for well-being and health by Leicester City Council. Health inequalities have also been reflected in the *Local Area Agreement 2008-2011*⁴, *One Leicester*⁵, the city's sustainable communities strategy and in a range of other partnership strategies and plans. The last year has seen the development and adoption of a Health Inequalities Improvement Plan (see box) which drew together into a single plan the actions to reduce health inequalities in Leicester. This chapter provides the background to the Health Inequalities Improvement Plan.

Leicester Health Inequalities Improvement Plan (HIIP)

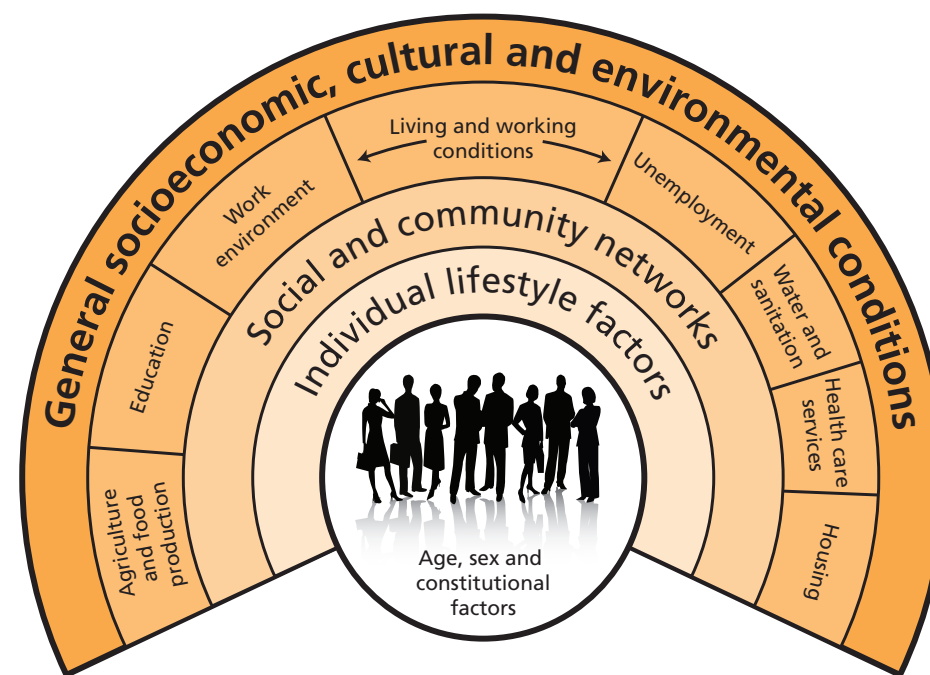
The first HIIP covers the period November 2009 to March 2011. It is shaped by a strategic vision to ensure that tackling health inequality becomes part of the everyday work of the city, harnessing the capacity of a partnership of statutory and voluntary organisations to:

- drive up the quality of, and outcomes from, universally provided services such as education, primary care and housing
- expand and improve prevention services, ensuring that these are clearly and appropriately targeted
- improve health through the provision of lifestyle advice and support, targeted campaigns and changes to the environment that support making healthier choices
- improve specialist services and support for people that need them

Under these four strategic headings, 80 specific actions have been identified. Overall progress is measured against a basket of indicators related to the key causes of the life expectancy gap between Leicester and England. Both the basket of indicators and the specific actions in the plan are performance managed on a monthly basis. The HIIP has been reviewed and endorsed by the Department of Health National Support Team for Health Inequalities (NST HI) and the East Midlands Strategic Health Authority.

Health Inequalities

The term “Health Inequalities” refers to differences in health which are unfair, unjust and which usually reflects the impact of socio-economic circumstances. The factors that influence health are shown in the diagram below. At the centre of the diagram are components which are fixed. The surrounding layers include individual lifestyle factors, social and community networks, living and working conditions and the general socio-economic, cultural and environmental conditions – factors that are potentially modifiable.

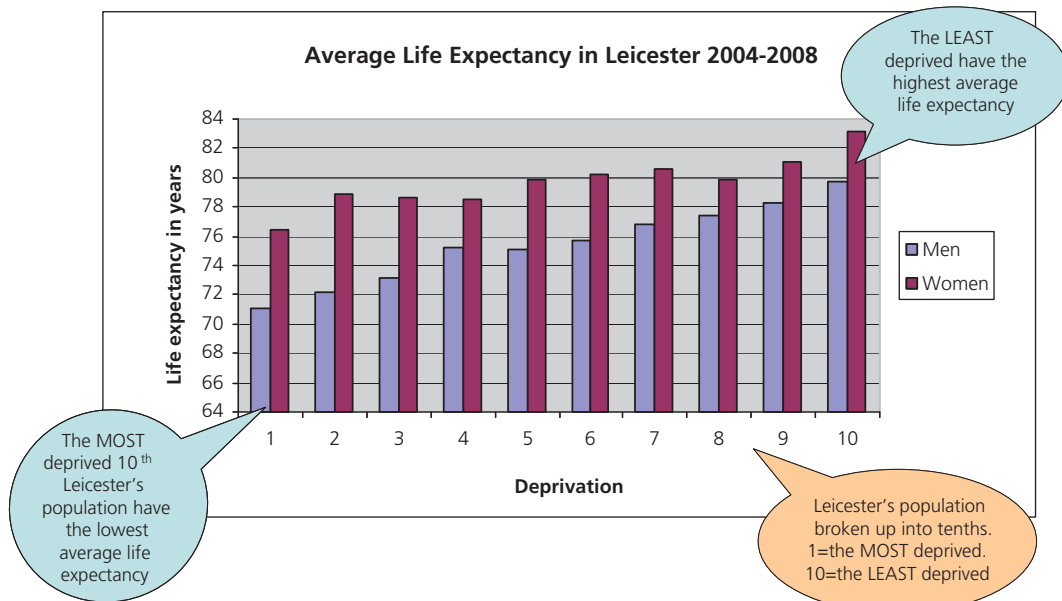


Factors which influence health. Dahlgren & Whitehead (1991)

Poorer health in the UK is generally associated with greater deprivation. Figure 3 below shows the number of years which individuals in Leicester can expect to live at birth, depending on the level of deprivation they experience. It shows that the greater the deprivation, the shorter the life expectancy. As well as living in circumstances that support health such as warm homes, secure employment and more, affluent people tend to develop or adopt lifestyle factors which support better health, such as following a healthy diet, being physically active and not smoking. Influences which damage health, such as poor accommodation, smoking, poor diet and poor working conditions, tend to disproportionately affect those in more deprived circumstances.

Figure 3: Average Life Expectancy in Leicester in Men and Women by Deciles of Deprivation, 2004-2008

Source: Association of Public Health Observatories (APHO), 2004-2008



Life expectancy at birth: the gap between Leicester and England

Average life expectancy at birth is an estimate of how long a newborn child would be expected to live **if current** age-specific mortality rates remain constant. It is a widely used proxy indicator for the overall health of a population. It is not a forecast of how long babies born today will actually be expected to survive, because it is unlikely that age-specific mortality rates will remain constant for an extended length of time.

While the average life expectancy at birth for both men and women in Leicester has continued to improve, this improvement has been at a slower rate than that of England as a whole as Figures 4 and 5 show. In the period 1996-1998 and 2006-2008 life expectancy in Leicester increased from 73.3 to 75.5 years for men and 78.6 years to 79.9 years for women. However over this period the gap between Leicester and England widened by 1% for both men and women. The current gap in average life expectancy means that in Leicester men live for 2.4 years and women 2.1 years less than their England counterparts. The average life expectancy at birth for England is 77.9 years for men and 82 years for women.

Figure 4: Life Expectancy at Birth for Males in England and Leicester

Source: Clinical and Health Outcomes Knowledge Base, National Centre for Health Outcomes Development (NCHOD) – www.nchod.nhs.uk, 1996-2008

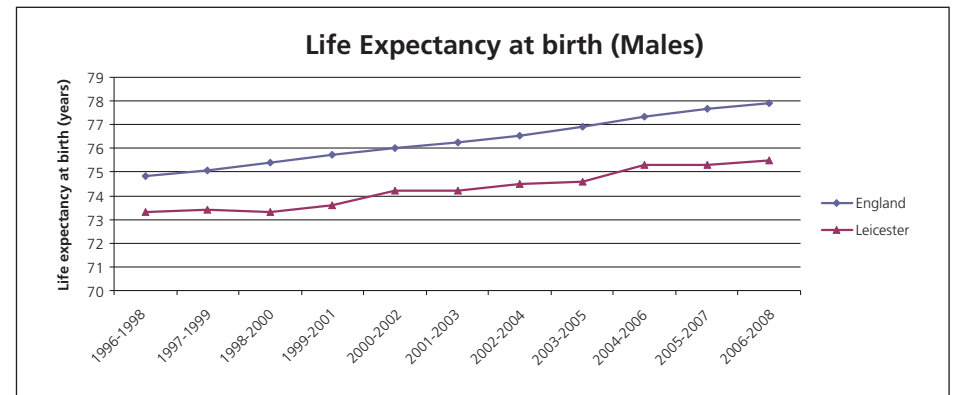
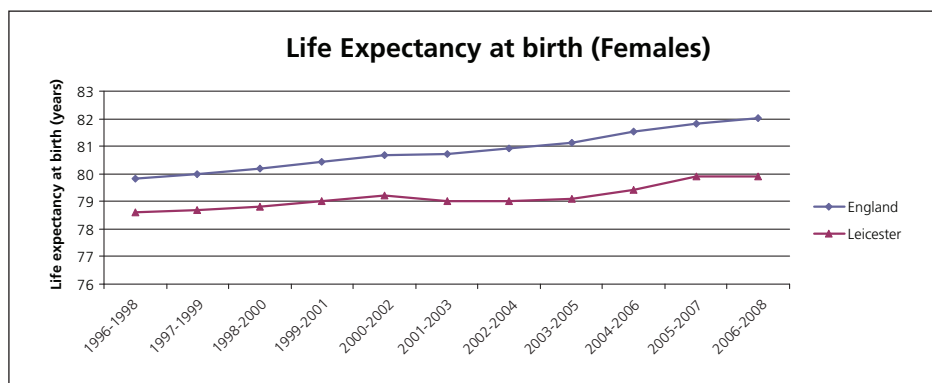


Figure 5: Life Expectancy at Birth for Females in England and Leicester

Source: Clinical and Health Outcomes Knowledge Base, NCHOD – www.nchod.nhs.uk , 1996-2008



Principal causes of death in Leicester

Over the ten year period 1998 to 2008 the principal causes of death in Leicester - cardiovascular disease (CVD), cancer and respiratory disease - have remained the same, though there have been changes in the proportions of deaths from each cause.

As a proportion of all deaths, those from CVD fell from 40.8% in 1998, to 32.4% in 2008. However, for men in Leicester the reduction of 5.9% in CVD deaths has lagged behind that for England where there has been a reduction of 8.8%. For women in Leicester the reduction in CVD deaths by 10.7%, is similar to that for England, 9.7%.

The proportion of deaths from cancer has increased from 20.3% in 1998 to 23.4% of all deaths in 2008. Deaths from cancer over the period have increased more in women (4.9% increase) than in men (1.2% increase). Compared with England, the increase in cancer mortality is greater in women (England 1.7%, Leicester 4.9%) and lower in men (England 2.1%, Leicester 1.2%).

Deaths from causes amenable to healthcare have fallen in Leicester over the period. In men from 27% in 1998 to 17% in 2008, slightly higher than the England rate in 2008 of 14%. For women deaths from causes amenable to healthcare have fallen from 14% in 1998 to 12% in 2008, again slightly higher than the England rate in 2008 of 9%.ⁱ

Key contributors to the life expectancy gap between Leicester and England

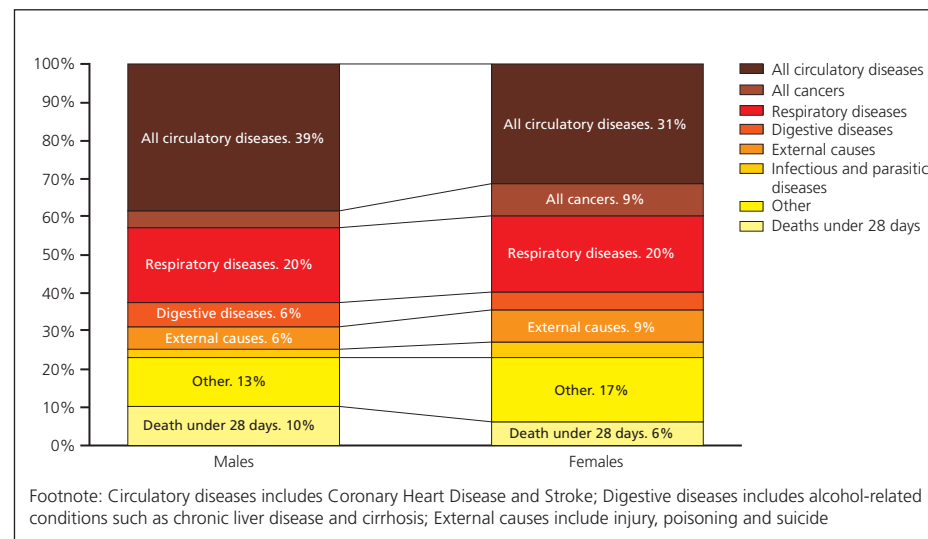
Disease

The principal contributors to the life expectancy gap with England for men and women in the years 2006 to 2008 (see Figure 6) are as follows, with the proportion each disease contributes to the life expectancy gap by sex, in parenthesesⁱⁱ:

- circulatory disease (39% men, 31% women)
- respiratory diseases (20% men, 20% women)
- infant mortality (10% men, 6% women)
- cancer mortality makes less of a contribution to the life expectancy gap with England, accounting for 5% of the gap for men and 9% for women

Figure 6: Life Expectancy Gap between Leicester and England Average: Breakdown by Cause of Death, Males and Females, 2006-2008

Source: Health Inequalities Intervention Toolkit, Department of Health (DH), 2010



ⁱ Comparative data is unavailable for respiratory disease

ⁱⁱ Analysis by the London Health Observatory on behalf of the Department of Health <http://www.lho.org.uk/viewResource.aspx?id=16068>

Comparison with other similar areas

The previous government established what it termed the ‘Spearhead Group’, which consisted of areas with the worst health and deprivation indicators when compared to Englandⁱⁱⁱ. Leicester was part of the Spearhead Group and the main comparisons between Leicester and the former spearhead areas are shown in the figures below. Deaths from all circulatory diseases make a greater contribution to the life expectancy gap between England and Leicester than they do for the former spearhead group. Deaths from cancer in Leicester make a smaller contribution. However, there is a larger gap with England for respiratory disease deaths in men (Figure 7), which is higher for Leicester than the former spearhead group. However, when the data are analysed in detail, they show similar rates of deaths from Chronic Obstructive Pulmonary Disease (COPD) overall (Leicester 7.8% versus Spearhead Group 8.2%) and a significantly lower rate of deaths from COPD in women (Leicester 1.7% versus 11.7%, as per Figure 8).

Figure 7: Life Expectancy Gap between Leicester and England Average: Breakdown by Cause of Death, Males, 2006-08, Compared with Average Spearhead Group Gap with England

Source: Health Inequalities Intervention Toolkit, DH, 2010

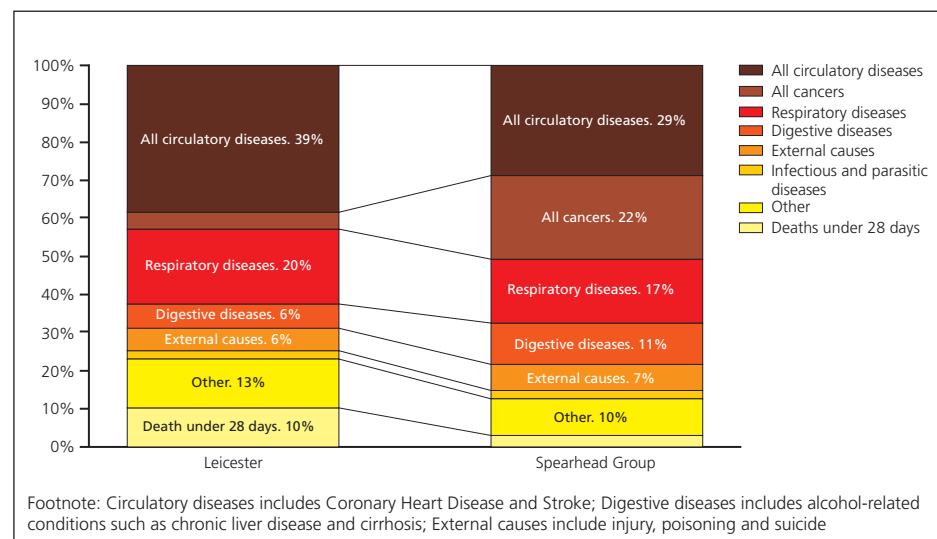
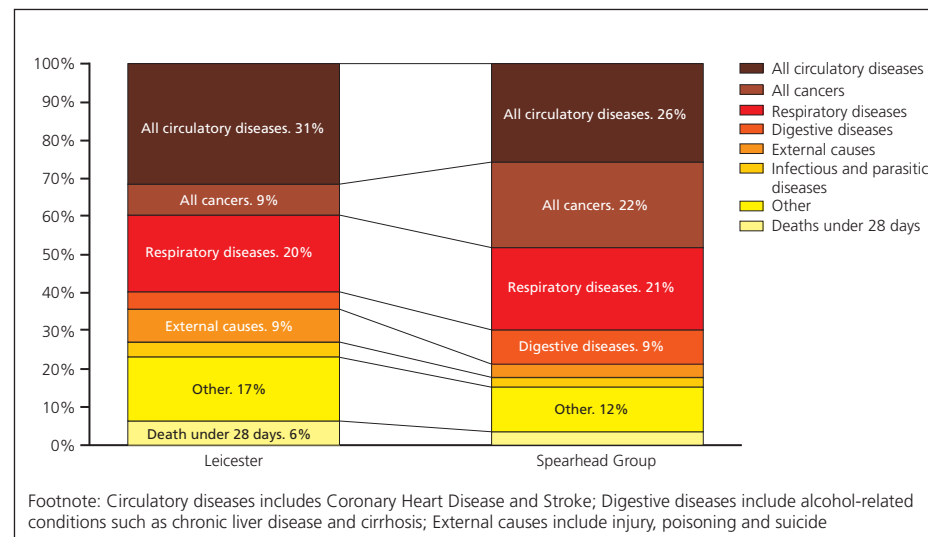


Figure 8: Life Expectancy Gap Between Leicester and England Average: Breakdown by Cause of Death, Females, 2006-08, Compared with Average Spearhead Group Gap with England

Source: Health Inequalities Intervention Toolkit, DH, 2010



Age and gender

In Leicester, 39% of the life expectancy gap in men results from premature deaths in the 40-69 age group, with a further contribution of 40% from deaths in those aged over 70. 11% of the life expectancy gap with England is a result of deaths under 12 months and some 15% of the gap comes from deaths up to the age of 14 years. As Figure 9, shows, deaths over 70 years make a larger contribution (40%) to the gap with England than the Spearhead Group average (35%), as do deaths under 12 months (11.2% versus 4.2%).

- ⁱⁱⁱ The former Spearhead Group consisted of the 70 Local Authority (single-tier and district council) areas (based on boundaries prior to the 1 April 2009 local government reorganisation), which overlap with 62 Primary Care Trusts, that are in the bottom fifth nationally for 3 or more of the following 5 factors:
- Male life expectancy at birth
 - Female life expectancy at birth
 - Cancer mortality rate in under 75s
 - Cardiovascular disease mortality rate in under 75s and
 - Index of Multiple Deprivation 2004 (Local Authority Summary), average score

Figure 10 shows that 40% of the gap for women arises from premature deaths in the 50-69 age group, with deaths over 70 years contributing a further 47%. 4% of the gap is the result of deaths under 12 months and 8% overall is contributed by deaths under 15 years.

Infant mortality (deaths under 12 months), is discussed in Chapter 4 of this report.

Figure 9: Life Expectancy Gap between Leicester and England Average: Breakdown by Age Group, Males, 2006-08, Compared with Average Spearhead Group Gap with England

Source: Health Inequalities Intervention Toolkit, DH, 2010

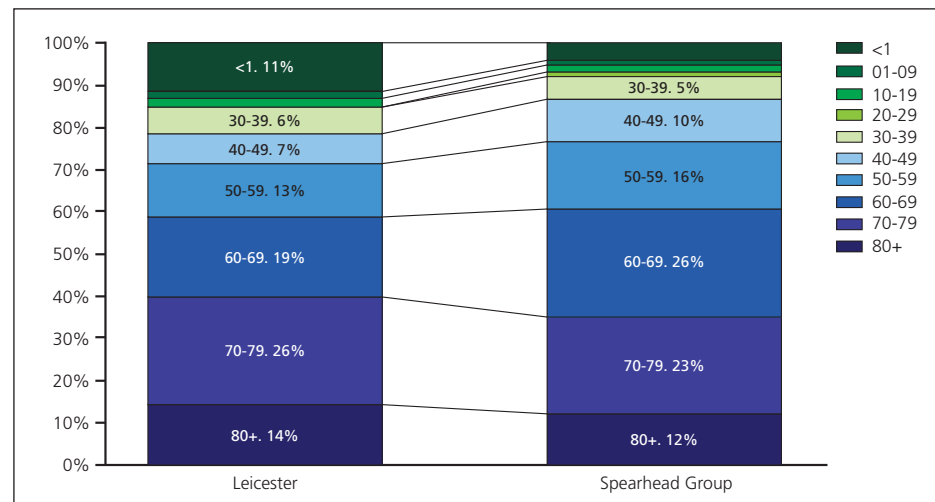
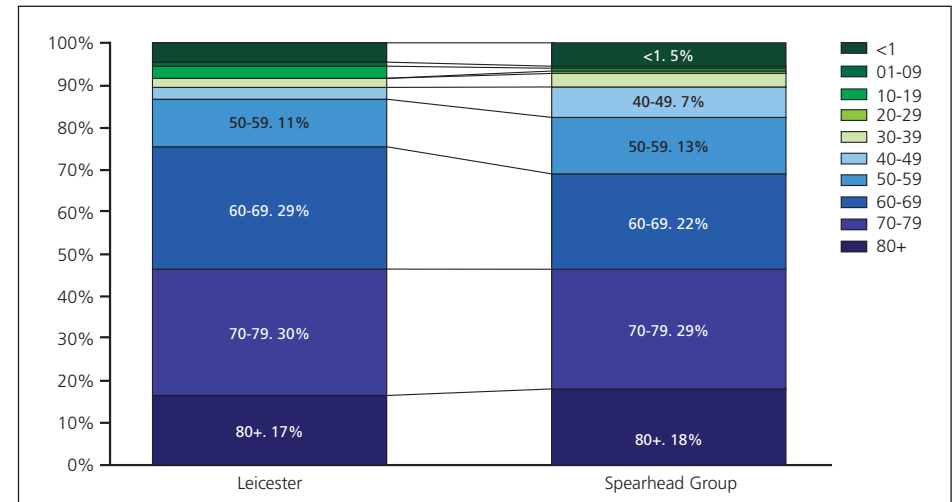


Figure 10: Life Expectancy Gap between Leicester and England Average: Breakdown by Age Group, Females, 2006-08, Compared with Average Spearhead Group Gap with England

Source: Health Inequalities Intervention Toolkit, DH, 2010



The Life expectancy gap within Leicester

In addition to the gap in life expectancy between Leicester and England, there are also gaps in life expectancy between different communities within Leicester, with more deprived communities tending to have lower life expectancy. The extent of inequalities in life expectancy within Leicester is measured by what is called the Slope Index of (Health) Inequality (SII)^{iv}. In Leicester, the SII is 8.8 years for men and 5.4 years for women (see Figures 11 and 12); this is similar to the England median for both males (8.6 years) and females (5.8 years).

Leicester's SII score is consistent with the widespread deprivation experienced within many communities within Leicester and Leicester's high levels of deprivation, where 50% of the population live in the 20% most deprived areas in England and some 75% in the worst 40%. Leicester's deprivation ranking has worsened over the last 10 years.

Leicester's SII contrasts, for example, with Derby City (male SII of 11.9 years) and Westminster (male SII 15.6 years) which have wider internal health inequalities. The SII for the tenth of PCT areas with the lowest internal inequalities is 5.7 years for males and 3.3 years for females.

^{iv} The life expectancy gap within Leicester is measured by a 'best fit' line across the mean life expectancy for each decile of deprivation in the Leicester population. The higher the index in years, the greater the inequalities in life expectancy. An Index score of zero would indicate no inequalities by deprivation in life expectancy.

Figure 11: Life Expectancy by Deprivation Deciles, showing the Slope Index of Inequality, Leicester City PCT, Males, 2004-2008

Source: APHO, 2004-2008

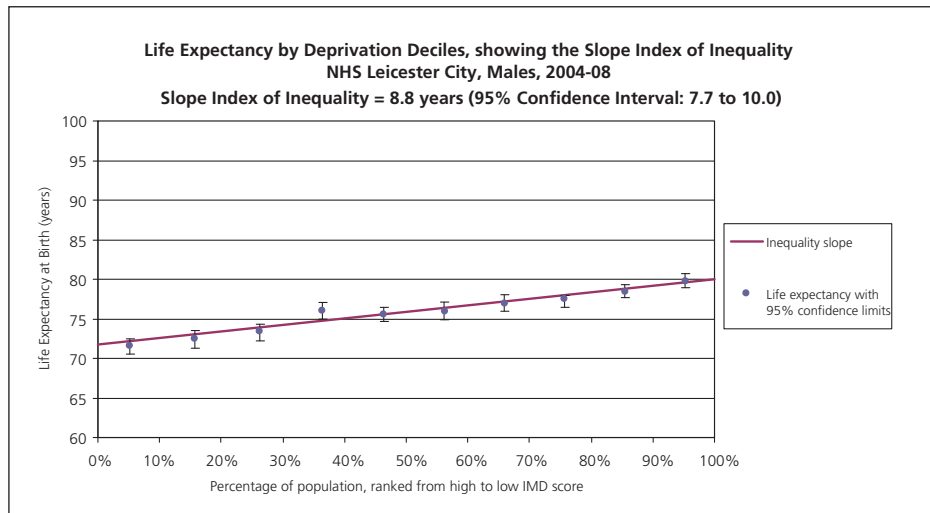
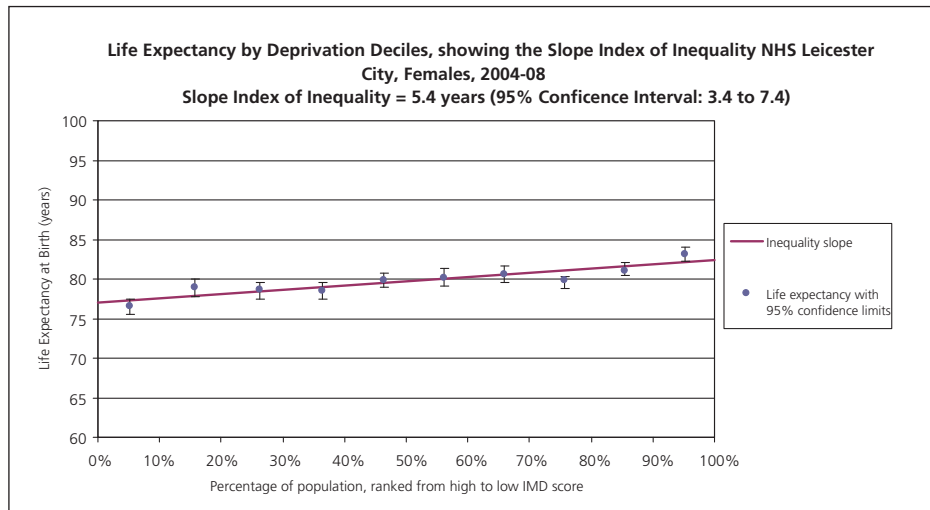


Figure 12: Life Expectancy by Deprivation Deciles, showing the Slope Index of Inequality, Leicester City PCT, Females, 2004-08

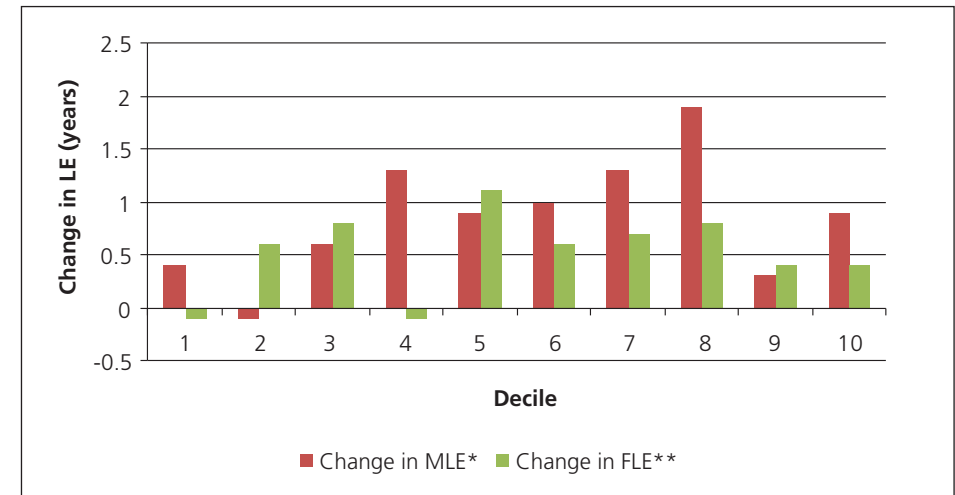
Source: APHO, 2004-2008



While there has been an increase in average life-expectancy for males and females in Leicester since 2001, Figure 13 compares data for two five year periods, 2001-2005 and 2004-2008 and shows life expectancy in each tenth of the Leicester population, ranked by the *Index of Deprivation 2007* (1=most deprived, 10=least deprived).

Figure 13: Change in Life Expectancy in Leicester, 2001-2005 to 2004-2008

Source: APHO data, 2001-2008



* MLE – Life expectancy in males
** FLE - Life expectancy in females

The data in Figure 13 is indicative rather than conclusive, as numbers are very small. With this caveat, it suggests that over the two periods of time, there has been improvement in life expectancy in most deciles of deprivation, for both men and women in Leicester. Further interpretation is difficult, because 75% of Leicester’s population live in the 40% most deprived areas nationally. It suggests that improvements in life expectancy are greatest for men in the 4th to the 8th deciles and for women in the 3rd to 8th deciles, and that progress has been limited or negative in the most deprived 1st and 2nd deciles. It confirms the importance of focusing efforts on the most deprived sections of Leicester’s population, whilst recognising that deprivation, as measured by the *Index of Deprivation 2007*, is fairly widespread in the city. Maps showing the geographical distribution of national and local deciles of deprivation are presented as Figures 27 and 28.

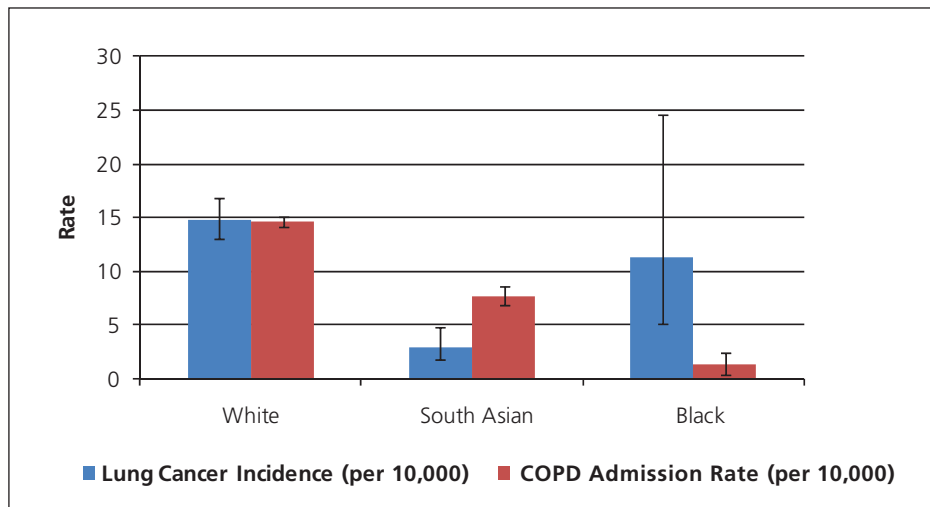
Ethnicity

For many aspects of population health, ethnicity is one of the strongest determinants. Leicester has one of the largest BME communities in the UK, with nearly 40% of its population being of black and minority ethnic (BME) origin⁶. By far the largest BME group in Leicester is that of South Asian, particularly Indian, descent (31% and 28%, respectively).

The disease risk patterns in different ethnic groups vary and can be influenced more by socio-economic, environmental or cultural factors, than by genetic predisposition. Many, if not most, of these factors are potentially modifiable and ill-health can be substantially reduced. For example, much lower smoking rates in the South Asian population (10% of the Indian group smoke against 26% of White British) translate into a lower occurrence of lung cancer and COPD (Figure 14) in South Asians.

Figure 14: Rates of Disease linked to Smoking in Different Ethnic Population Groups in Leicester

Source: Hospital In-Patients datasets, 2010

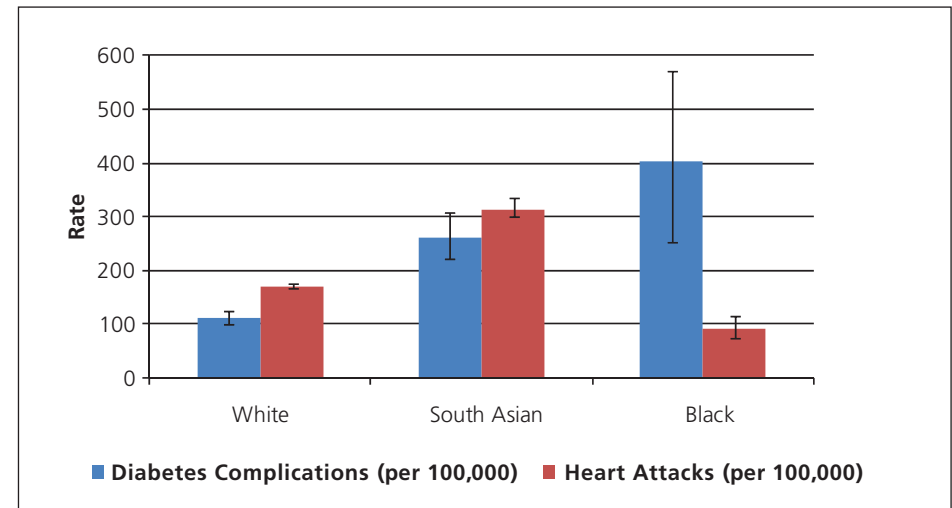


Conversely, South Asians do experience consistently higher premature mortality from coronary heart disease (CHD) by 50% and much higher rates of other cardiovascular conditions, particularly of diabetes. The direct link to lifestyle factors such as obesity, lack of physical activity or diet is less straightforward than

the link between smoking and lung cancer, but in Leicester, the South Asian population has on average, twice the risk of acute CHD or diabetes (Figure 15) when compared to white residents.

Figure 15: Excess Cardiovascular Morbidity in BME Populations in Leicester

Source: Hospital In-Patients datasets, 2010



Leicester Health Typologies

NHS Leicester City is in the process of finalising a segmentation of the Leicester population by health experience. This will support greater personalisation, encourage a shift from a focus on the places people live to the people themselves, and should be used with other data, judgement and experience to inform targeting of effective interventions. The segmentation is based upon the identification of seven typologies with varying health need. People identified with each typology are distributed across Leicester, with some more predominant in certain locations than others.

The predominant distribution of the typologies is shown in different colours, on the map of Leicester (Figure 16). Where there are two typologies per colour, as in Red 1 and Red 2, there are significant differences which require a different typology.

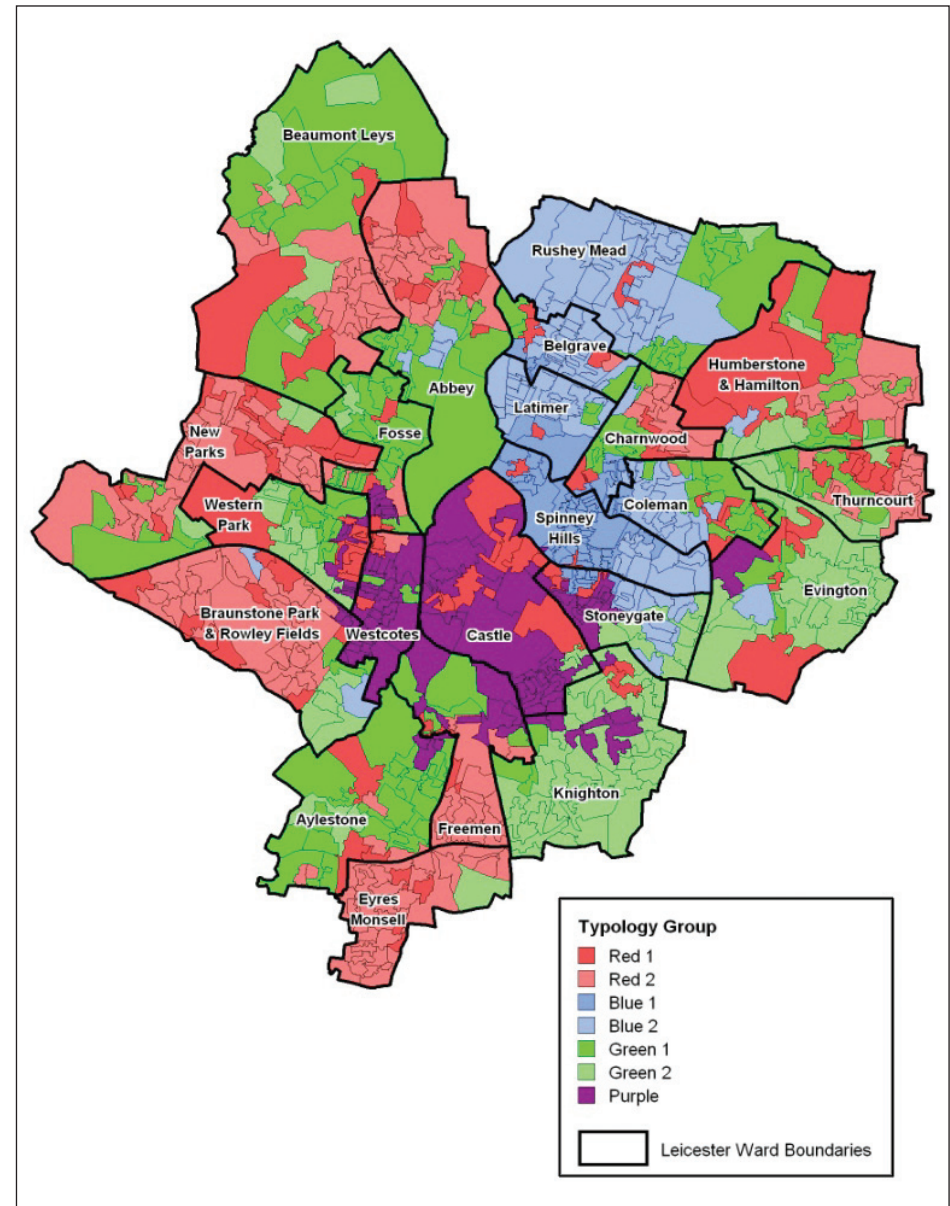
Generally, the typologies which are coloured green include people enjoying the

'best' health. Of the other typologies, those which are coloured 'red' have worse health and have a greater likelihood of a range of factors, including premature death, illness, service use, unpaid care, mental ill-health, greater use of smoking cessation services, domestic assault and residential care with a long-term condition. Those which are categorised as blue, are people who are predominantly from BME backgrounds, in the mid-range of health experience for infant mortality, low birth weight and childhood obesity, though above the city average for cardiovascular conditions and effects. 'Purple' typologies are people mainly aged 20 to 30 years, who live more centrally in the city. This group are low users of health and care services generally, although they have higher need and use of mental health services. When these colours are highlighted on a map of the city (as below in Figure 16), two important themes emerge; first, that the link between deprivation and poorer health is not even across the city and second, that there is a complex interplay between ethnicity and deprivation.



Figure 16: Leicester Health Typologies, NHS Leicester City

Source: Leicester Health Typologies, Dr Foster, 2010



Determinants of Health

Poor population health is driven by underlying levels of social and economic disadvantage such as unemployment, low skill levels, poor housing or low household income. Historically, Leicester had its economic roots in the textile manufacturing industry, which has been in significant decline in recent decades. Some traditional employers have cut their workforces, whilst other companies have simply ceased to exist. This has meant reduced employment opportunities, particularly for people in manual and semi-skilled occupations. Increasingly, new job opportunities require higher levels of qualifications and skills. In some parts of Leicester, low levels of educational attainment and high levels of unemployment have resulted in significant problems of poverty and social exclusion, with serious consequences for health.

Improving life expectancy

The previous government established a life expectancy target to be met by 2010. The coalition government, while not maintaining the focus on the 2010 target, has laid out its vision for Public Health in its White Paper, *Healthy Lives, Healthy People*⁷. This vision aims to protect the population “from serious health threats, helping people live longer, healthier and more fulfilling lives; and improving the health of the poorest fastest”, and signals an intention to continue a focus on health inequalities.

Locally, NHS Leicester City, in its *One Healthy Leicester* Commissioning and Investment Strategy 2009/10 – 2013/14 put forward the aspiration to increase life expectancy in Leicester from the 2005-2007 baselines by 3.5 years for men and 2.8 years for women by 2013. This will result in an increase in the average life expectancy from 77.8 to 78.8 years for males and 81.7 to 82.7 years for females between 2010/11 and 2014/15. To achieve this target the estimated reduction to the total number of deaths will be in the region of 315 deaths in men and an estimated 199 deaths in women.

Evidence-based interventions for reducing the life expectancy gap with England

Key to reducing the gap in life expectancy with England is maintaining a focus on interventions that are supported by evidence of impact. The National Support Team for Health Inequalities (NST HI) has published an estimate of the theoretical maximum contribution of selected evidence-based interventions to achieve life

expectancy targets. It identifies clinical interventions which will defer premature deaths in the short-term, that is, within one to two years. Some interventions, such as smoking cessation or reducing alcohol consumption, improve health in the short-term and reduce premature mortality, and thus increase life expectancy, in the medium to long-term.

The NST HI recommend the following key interventions that will have an impact in the short to medium term:

Identifying people with a high risk of CVD

- Effective implementation of NHS Health Checks

Improving the management of existing conditions

- Cardiovascular disease: Secondary prevention
 - Four treatments (beta blocker, aspirin, ACE inhibitor, statin) for all patients with a previous CVD event currently untreated
- Additional treatment for people with high blood pressure and no previous CVD event
- Anticoagulant therapy (Warfarin) for all patients over 65 with atrial fibrillation
- Diabetes
 - Reducing blood sugars (HbA1c) over 7.5 by one unit
- Chronic obstructive pulmonary disease (COPD)

III-health prevention

- Reducing smoking in pregnancy
- Reducing Harmful alcohol consumption
- Maintaining focus on smoking cessation clinics

The Health Inequalities Improvement Plan has included actions in most of these areas and all will be considered in the refreshed version of the plan being prepared for April 2011 onwards. The HIIP also addresses wider areas of health improvement with longer term impacts including diet and physical activity, actions on the wider determinants of health, and actions to improve the health experience of vulnerable groups.

Recommendations

It is recommended that:

- All partners in Leicester remain focused on reducing health inequalities and taking forward the actions of the Health Inequalities Improvement Plan.
- The plan should continue to focus on those interventions which have the greatest impact, particularly in Primary Care and should be carefully managed.
- As a tool for ascertaining CVD risk in the population and providing access to treatment, the implementation of the NHS Health Checks programme locally should be audited with a view to ensuring equity in access, take up and benefit from the programme.

Lead Authors

Rod Moore

Deputy Director of Public Health

Tel: 0116 295 1453

Email: rod.moore@leicestercity.nhs.uk

Helen Reeve

Senior Public Health Analyst

Tel: 0116 295 1515

Email: helen.reeve@leicestercity.nhs.uk

References

- ¹ *Annual Reports of the Director of Public Health, 2005, 2006, 2007, 2008-09.* Leicester. Available at: <http://www.phleicester.org.uk/documents.htm>
- ² Leicester City PCT and Leicester City Council. 2009. *Joint Strategic Needs Assessment 2008/09.* Leicester: Leicester City PCT and Leicester City Council Available at: <http://www.oneleicester.com/leicester-partnership/jsna/>
- ³ NHS Leicester City. 2008. *One Healthy Leicester Commissioning and Investment Strategy 2009/10 – 2013/2014.* Leicester: NHS Leicester City. Available at: <http://www.leicestercity.nhs.uk/Library/OneHealthyLeicesterrefresh2ndrevisionsFINAL18June2010.pdf>
- ⁴ One Leicester Partnership. Revised 2009. *Leicester's Local Area Agreement 2008-2011.* Leicester: One Leicester Partnership. Available at: <http://www.oneleicester.com/EasySiteWeb/getresource.axd?AssetID=16199&type=full&servicetype=Attachment>

- ⁵ One Leicester Partnership. 2008. *One Leicester – Shaping Britain's Sustainable City.* Leicester: One Leicester Partnership. Available at: <http://www.oneleicester.com/EasySiteWeb/getresource.axd?AssetID=9706&type=full&servicetype=Attachment>
- ⁶ Office for National Statistics. 2007.
- ⁷ Department of Health. 2010. *Healthy Lives, Healthy People: Our Strategy for Public Health in England.* London: Department of Health



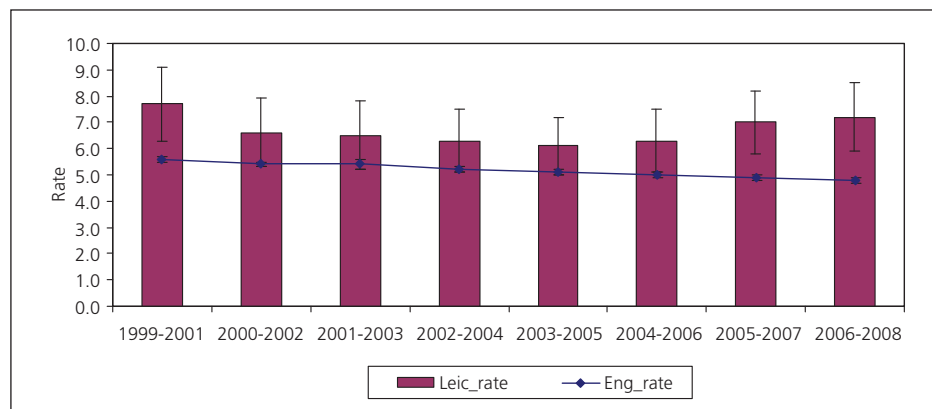
4. Infant Mortality

The death of any child is one too many. The infant mortality rate (IMR), or deaths in children under the age of 1 year per 1,000, has declined nationally and locally since 1999. The IMR consists of two components, firstly the neonatal mortality rate, which is the number of deaths occurring during the first 28 days of life per 1,000 live births, and secondly, the post-neonatal mortality rate, which is the number of infants who die between 28 days and less than one year per 1,000 live births. Data for 2005 to 2009 suggests that the majority of total infant mortality deaths in Leicester occur in the first 28 days of life.

Between 1999 and 2008, the IMR in England has consistently reduced. As illustrated in Figure 17 below, the overall IMR in Leicester has reduced since 1999-2001, although the rate is now increasing.

Figure 17: Infant Mortality Rate (per 1000 live births)

Source: Births & Deaths data, Office of National Statistics, 1999-2008



Mortality during the neonatal period is considered a good indicator of both maternal and newborn health and care; however numerous factors, such as ethnicity and deprivation, can affect this period of a mother and child's life. For example, babies from poorer families and babies from some ethnic minority families are more likely to die before their first birthday. Therefore it is important that the reasons for these inequalities are understood and appropriate action is taken to prevent infant deaths in more vulnerable populations.

National and Local Priorities

Tackling health inequalities has been the Government priority for a number of years and seems set to remain so under the new Coalition Government¹.

Work continues towards the attainment of aspirations to reduce inequalities in health outcomes, as measured by infant mortality and life expectancy at birth². This has been underpinned by a specific national objective on reducing infant mortality particularly reduce by at least 10% the gap in mortality between the routine and manual group and the population as a whole³.

The 'routine and manual group' (R&M group) is an Office of National Statistics Socio-Economic classification, based on father's occupation⁴. The rationale for this is that the major causes of infant deaths are strongly influenced by socio-economic factors, with babies from poorer families being more likely to die in the first year of life.

There is also a clear ethnic dimension to infant mortality. A national review of the Infant Mortality PSA Target in 2007⁵ highlighted the need to reduce infant mortality in Black and Minority Ethnic (BME) groups. National analysis based on mother's country of birth indicates that infant mortality rates are higher among ethnic minority communities and reflects a particular risk of poverty and socio-economic disadvantage among some ethnic minority communities, including Pakistani, Bangladeshi, African-Caribbean and Black African families.

Infant Mortality in Leicester

Data from 2009 show that in Leicester the majority of infant deaths (31%) are due to prematurity (delivery prior to 37 weeks gestation). The second greatest cause is congenital anomalies (8%), for example Down's syndrome and spina bifida. To put this into context, in 2009 in Leicester, 16 deaths were attributed to prematurity. While such numbers may appear to be low, the impact on each parent involved is immeasurable.

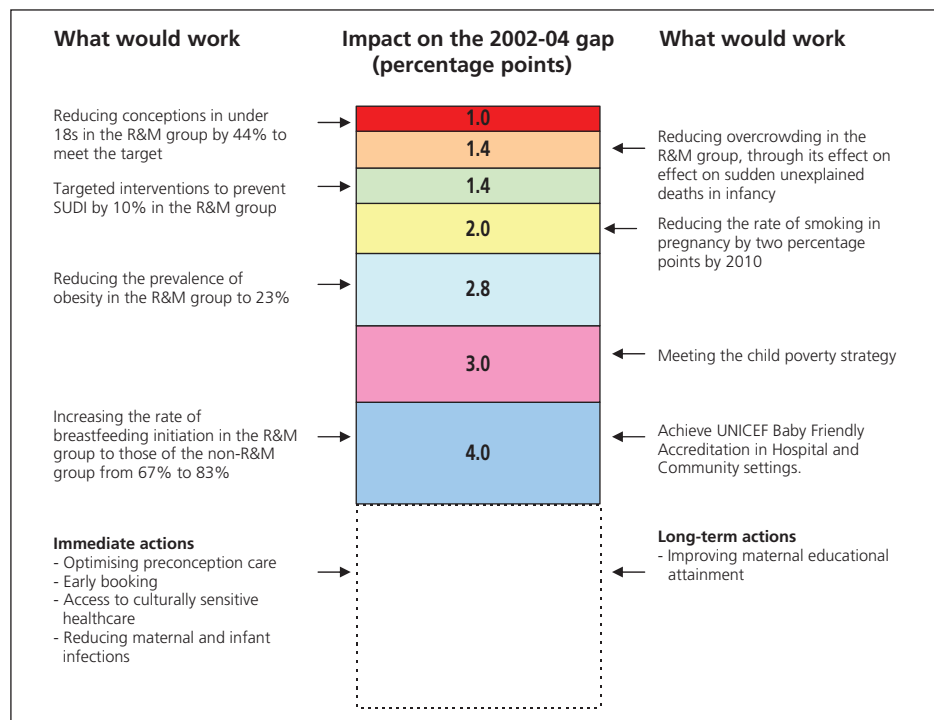
Although some national targets are based on saving lives in the routine and manual and ethnic minority groups, the broader aim is about improving life chances for all disadvantaged families. Improving outcomes for these groups will require a range of actions to tackle the underlying determinants of infant mortality and morbidity; actions which are expected to have significant positive impacts on infants now and in the future.

As discussed above, a national review of the Infant Mortality target by the Department of Health in 2007 identified some BME populations as at increased risk of experiencing infant mortality. As people from BME backgrounds make up 39% of Leicester's population of childbearing age (15-44 years old), NHS Leicester City (NHSLC) and other partners must ensure that health improvement approaches meet the needs of these communities.

While deprivation is the most important determinant of infant mortality, it is also the most difficult one to tackle. In 2007 the National Support Team for Health Inequalities identified a number of actions, aimed at reducing infant mortality and improving population health, which could be tailored to meet the needs of a specific population. The actions addressed a number of issues experienced by disadvantaged families in Leicester.

Figure 18: Identifiable Actions to Reduce the 2002-04 Gap in Infant Mortality

Source: Department of Health (2007) Implementation Plan for Reducing Health Inequalities in Infant Mortality: A Good Practice Guide. London: Department of Health



Many of the areas identified as requiring action in Figure 18 reflect known issues within the differing communities in Leicester. Therefore, in order to reduce infant mortality further, it is important that actions are sustained and appropriately targeted where necessary.

Table 1 illustrates the effect of deprivation on certain areas of maternal and infant health.

Table 1: Effect of Deprivation on Birth Statistics Associated with Infant Mortality

Source: Births, GP Lists, University Hospitals of Leicester Maternity Data, Office of National Statistics, 2010

Birth Statistic (2009 Averages)	Highest Deprivation Quintile in Leicester (Most deprived 5th as compared to others in Leicester)	Lowest Deprivation Quintile in Leicester (Least deprived 5th as compared to others in Leicester)
Birth Rate per 1000 Women	98.5	58.4
Maternal Age (mean)	27	30.1
Infant Mortality per 1000 Live Births	10	6.2
Breast Feeding Initiation (%)	58.3	76.8
Mothers Smoking at the Time of Delivery (%)	21	6.4
Mothers Overweight or Obese (%)	47.8	35.1

From this table we can see that almost twice as many children are born into marked deprivation each year, when compared to the least deprived quintile; with increased infant mortality rates, lower breast feeding rates, higher rates of maternal smoking and obesity.

Infant Mortality National Support Team Recommendations

There is already considerable work being undertaken in Leicester to tackle the underlying determinants of infant mortality in the areas outlined in Figure 18. In most areas, there have been steady improvements but further work is required to deliver further reductions in infant deaths.

To this end the Infant Mortality National Support Team (IMNST) visited Leicester in April 2010 and, following a series of interviews and workshops, provided feedback on actions to reduce further infant mortality in Leicester.

The key recommendations made were:

- to clarify further and communicate the local vision to reduce infant mortality
- to consider the use of staff events and multi-agency training to increase engagement and identify roles and responsibilities in relation to risk factors associated with infant mortality
- to develop further partnership agreements with the voluntary sector
- to utilise integrated children's arrangements to produce more detailed local plans specific to the needs of each locality
- to ensure that the Children's and Young People's Plan, Child Poverty and Housing Strategies and associated action plans specify commitment in relation to related risk factors for reducing infant mortality
- to embed a culture whereby it is recognised that reducing infant mortality is 'everybody's business'

Future Initiatives

It is important that all partners in Leicester continue to work towards a overarching strategy to reduce infant mortality which targets additional support and interventions towards disadvantaged and ethnic minority families where there is evidence of increased risk of infant deaths.

The strategy should provide a high-level framework to review and strengthen actions relating to:

- improving maternal nutrition (which will contribute to reductions in maternal obesity)
- reducing smoking in pregnancy
- promoting breastfeeding initiation and continuation
- reducing sudden unexpected death in infancy (SUDI)
- reducing teenage pregnancy
- improving early access to maternity care including targeted support and early booking of antenatal care in disadvantaged groups
- improving immunisation uptake in disadvantaged groups
- reducing overcrowding in accommodation
- reducing child poverty
- provision of high quality family support

In conjunction with the implementation of specific recommendations made by the IMNST, It is important that good practice guidance continues to be used and disseminated, particularly the Department of Health *Implementation Plan for Reducing Health Inequalities in Infant Mortality: A Good Practice Guide*⁶.

The perinatal death clinical audit, undertaken by UHL to identify potential contributory/preventable factors and influence future practice, should also be maintained. The information gathered from this audit should continue to feed into investigations performed by the Child Death Overview Panel (a sub-committee of the Local Safeguarding Children Board) which collects and analyses information relating to the death of a child to identify concerns and recommend methods for preventing childhood death.

Recommendations

It is recommended that:

- Proposals by the IMNST are implemented
- Collection of BME data is improved to increase our understanding of the issues experienced by these populations
- Adherence to the Department of Health's Good Practice Guide continues
- Participation in the perinatal death clinical audit is maintained and its findings are used to inform the work of the Child Death Overview Panel

Lead Authors

Lucy Douglas-Pannett

Public Health Specialty Registrar

Tel: 0116 295 7275

Email: lucy.douglas-pannett@nhs.net

Dr Cath Pritchard

Consultant in Public Health

Tel: 0116 295 1479

Email: cath.pritchard@leicestercity.nhs.uk

References

- ¹ Department of Health. 2010. *Equity and Excellence: Liberating the NHS*. London: The Stationary Office.
- ² Department of Health. 2009. *Mortality Target Monitoring (Infant Mortality, inequalities): Update to include data for 2008*. London: The Stationary Office.
- ³ Department of Health. Updated 2004. *Technical Note for the Spending Review 2002 Public Service Agreement*. London: Department of Health.
- ⁴ Rowan, Steve. *Implications of Changes in the United Kingdom Social and Occupational Classifications in 2001 on Infant Mortality Statistics*. In: *Health Statistics Quarterly* 17, Spring 2003, p.33-40
- ⁵ Department of Health. 2007. *Review of the Health Inequalities Infant Mortality PSA Target*. London: Department of Health.
- ⁶ Department of Health. 2007. *Implementation Plan for Reducing Health Inequalities in Infant Mortality: A Good Practice Guide*. London: Department of Health.



5. Health-related behaviour, knowledge and attitudes in Leicester

Introduction

The *Leicester Health and Lifestyle Survey 2010* was undertaken to provide information about health-related behaviour, knowledge and attitudes in the adult Leicester population. The survey results are based on a representative sample of 2,377 twenty minute, face to face, in home interviews conducted with adults aged 16 and over living in Leicester, between 6th January and 11th April 2010ⁱ. This chapter provides an overview of the main findingsⁱⁱ.

Lifestyle and deprivation

As the chapter on Health Inequalities demonstrates, there are marked differences in health outcome in the city, related to increasing deprivation. In general, the findings of this survey support the link between poorer health and higher levels of deprivation. Where this general principle is not true or where another factor seems to be of importance, comment is made to that effect in the sections below.

Health in general

Overall, 72% of adults in Leicester said that they thought their health was “very good” or “good”; a slightly lower proportion than the 76% reporting a similar health status in England via the *Health Survey for England* in 2008. Only 7% of all respondents said their health was “bad” or “very bad”, with more people reporting “bad” or “very bad” health in Spinney Hills (10%), Eyres Monsell and Western Park (11%) and in New Parks (12%) wards.



Long-term conditions

Overall, 20% of respondents said that they had a long-term limiting condition (LTLC) – an illness or disability that respondents felt limited their activity in some way. People living in Freeman (31%) and Thurncourt (30%) wards were most likely, and in Westcotes (14%) and Castle (13%) least likely, to report having a LTLC.

Attitudes towards leading a healthy lifestyle

Without any prompting, 86% of respondents recognised a healthy diet and 79% of respondents recognised the need to take regular exercise, as key elements of leading a healthy lifestyle. However, only 25% recognised the importance of not smoking and 24% recognised the importance of not drinking too much alcohol, as important factors in a healthy lifestyle.

Willingness to change

The survey found that the majority of people (71%) expressed a willingness to change. They intended to make at least one of six changes, the most commonly mentioned of those being to lose weight (32%), to increase physical activity (32%) and/or to eat more healthily (26%).

This willingness to change was greater in:

- younger respondents (85% of those under 55 years, compared to 54% in those aged 55 or over)
- smokers (77%, compared with 69% non-smokers)
- those who had taken drugs in the last year (83%, compared with 71% of non-users)
- those who were overweight (74%) or obese or morbidly obese (82%) (compared with 66% of people with an ideal Body Mass Index (BMI))

i The full report, *Leicester Health and Lifestyle Survey 2010*, is available from <http://www.phleicester.org.uk/documents.htm>. The survey was commissioned by NHS Leicester City and undertaken by GfK NOP.

ii Quotas, and corrective weights were applied and analysis by a range of variables was undertaken to increase accuracy and reliability of data. Wide confidence intervals apply to all data below city level, so there is uncertainty about the absolute values of all the data below that level shown by the wide confidence intervals used in this chapter. Where proportions for wards are cited, these wards are statistically significantly different from the Leicester City average.

Smoking

The prevalence of cigarette smoking in Leicester is, at 25%, higher than the national rate of 22%, found by the Health Survey for England 2009.

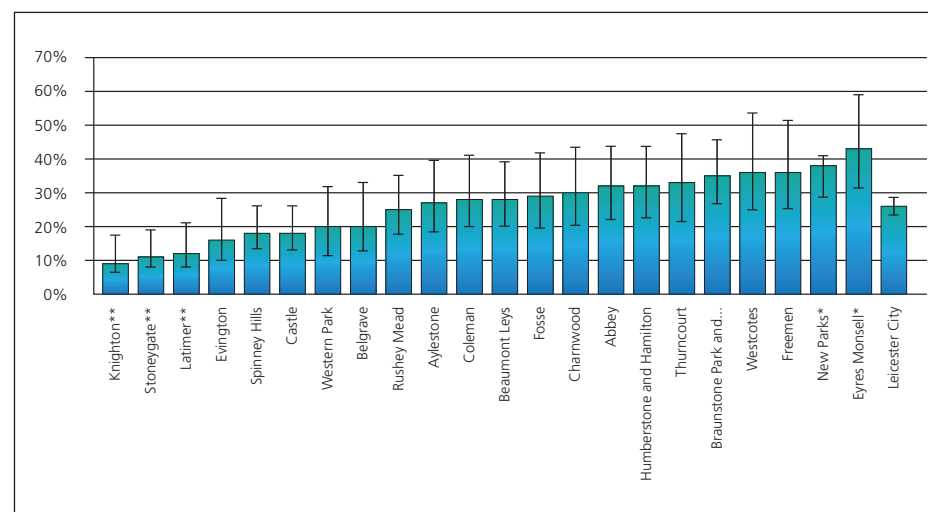
When other tobacco products, for example, cigars, a pipe, sheesha/hookah or bidi, are included the prevalence of smoking any tobacco substance increases to 27%.

Prevalence of smoking any tobacco substance varies by populations and the survey found:

- men (31%) were more likely to smoke than women (23%)
- age differences were less marked with the proportion smoking only decreasing after the age of 55 (29% of 16-54 year olds 21% of people aged over 55)
- white respondents (34%) were much more likely to smoke than those from Black and Minority Ethnic (BME) groups (14%), but there were no significant differences between minority ethnic groups. Among South Asians, men were much more likely to smoke (16%) than women (only 2%). Leicester's deprivation profile suggests that its prevalence figure should be considerably higher than the national average, but this is counterbalanced by the high South Asian population in the city, which has much lower smoking rates
- smoking was highest in the most deprived quarter of the city (37%), compared with 26% in the next most deprived quarter and 20% elsewhere
- the highest rates of current smoking were reported in Eyres Monsell (43%), and New Parks (38%), and the lowest in Knighton (9%), Stoneygate (11%) and Latimer (12%) wards. Rates of smoking broadly reflect the pattern of deprivation in the city with the most deprived wards showing the highest prevalence of smoking (see Figure 19)
- some 7% of the South Asian sample said that they used other tobacco products such as bidi, paan, and sheesha/hookah. There was very little use of such substances in the white sample and none at all among black respondents

Figure 19: Smoking Prevalence by Ward for Leicester City

Source: Leicester Health and Lifestyle Survey 2010



* Significantly higher than Leicester

** Significantly lower than Leicester

Quitting smoking

65% of those who currently smoke said that they wanted to quit smoking. Those most likely to say that they wanted to give up smoking were:

- younger people (74% of 16-24 year old smokers, compared with 48% of those aged 55 and over)
- ethnic minority smokers (76%, compared with 62% of white smokers)
- those living with children (73%, compared with 61% of those not living with children)

The most common reason given for wanting to quit was "better health" (84% of smokers). Included in this was the desire to reduce the risk of getting smoking-related illnesses (21%) and to avoid exacerbating an existing health problem (17%).

The other main reasons were the cost (23%), influence or expectations of family and friends (23%), and the effect smoking would have on their children (17%).

Quit attempts and awareness of help to stop smoking

25% of all respondents said that they had smoked cigarettes at some point but do not currently smoke.

75% of current smokers had tried to quit smoking at some point. 80% had heard of the STOP! Smoking Service and a quarter (24%) of those aware had used STOP! in the past. Of those who had used the service, 81% were aware that they could use STOP! again to support further attempts to stop smoking.

Smoking in the home

74% of current smokers and non-smokers did not allow smoking anywhere in the home. 26% allowed smoking somewhere in the household, with 17% restricting it to certain parts of the home and 9% allowing smoking anywhere.

Respondents were more likely to allow smoking anywhere in the home if they were smokers (27%, compared with just 2% of non-smokers), and those reporting poor mental well-being (17%, compared with 6% amongst those reporting good mental well-being).

The vast majority (93%) of respondents said they would be confident asking visitors not to smoke in their home, with 82% feeling very confident. Just 6% did not feel confident asking people not to smoke in their home.

Alcohol Consumption

53% of those interviewed in the survey said that they currently drink alcohol - 59% of men and 47% of women. This is a smaller proportion than that reported for England as a whole where 71% of men and 56% of women currently drinkⁱ.

Fewer people drink within Leicester's BME population than in the white population. 68% of the city's white, 30% of the black and minority ethnic (BME), and within that, 26% of the South Asian population, reported drinking alcohol.

There were also marked differences by religion: 68% of Christians reported drinking alcohol, compared with 39% of Hindus and 7% of Muslims.

47% of respondents reported that they do not drink alcohol, a higher proportion of non-drinkers than in England overall.^{iii 2}

Alcohol consumption also differed by levels of deprivation as well as by other health behaviours:

- Those living in the more affluent half of the city were more likely (57%) than those in more deprived areas (47%) to drink alcohol currently
- Smokers (62%) were more likely to drink nowadays than non-smokers (49%)
- Those who had taken drugs in the last 12 months (78%) were more likely to drink alcohol than those who had not done so (51%)

Daily unit and weekly consumption of alcohol

27% of respondents drank above the daily recommended maximum units on a typical day when they were drinking alcohol (see Figure 20); 25% drank within recommended guidelines, and the remainder were non-drinkers. Men were more likely to drink above the threshold on a typical day when they have alcohol (32%) compared to women (23%).

Alcohol Units and Guidelines

- Men should not regularly* drink more than 3-4 units a day, or 21-28 units a week
- Women should not regularly* drink more than 2-3 units a day, or 14-21 units a week
- * 'Regularly' means drinking these amounts every day or most days of the week.
- Pregnant women and women trying to conceive are advised to avoid alcohol altogether.
- Everyone is advised to have a few alcohol-free days each week.
- A unit is approximately a half pint of normal strength beer, cider or lager or 25ml of 40% single spirit (a shot of normal strength spirits) and a 125ml glass of normal strength wine is approximately 1.5 units.

ⁱⁱⁱ Around 10% of males and 18% of females are non-drinkers in England.

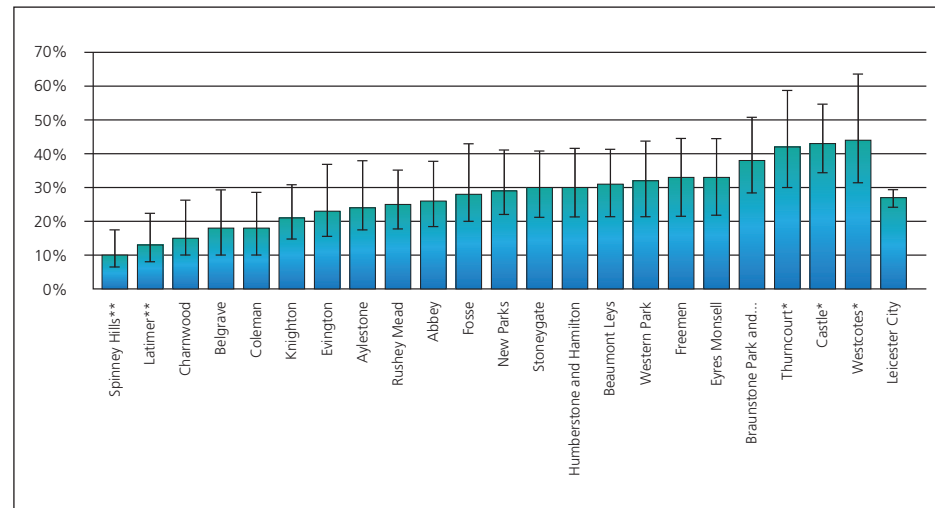
5% of all respondents reported exceeding the weekly recommended maximum (see also Figure 21) and men (7%) were more likely than women (2%) to consume above the weekly recommended limits.

The difference between the proportion of the sample drinking in excess of the maximum recommended units on a daily and weekly basis suggests that some respondents engage in a pattern of 'binge' drinking. A commonly used definition of 'binge' drinking is double the recommended daily limits, so for men this is consuming more than eight, and for women, more than six, units of alcohol in one day³. National data suggests that around 28% of men and 19% of women² in England exceed the weekly maximum units. The difference between England and Leicester-wide levels may be accounted for by the city's younger age profile, and the large South Asian population which has a lower prevalence of alcohol consumption.

When looking at ward level data, as per Figures 20 and 21, those wards with larger BME populations, for example Spinney Hills (82.4% of its population) and Latimer (82.7% of its population), have some of the lowest proportions of their populations exceeding the recommended units.

Figure 20: Drinking more than the Daily Recommended Units by Ward

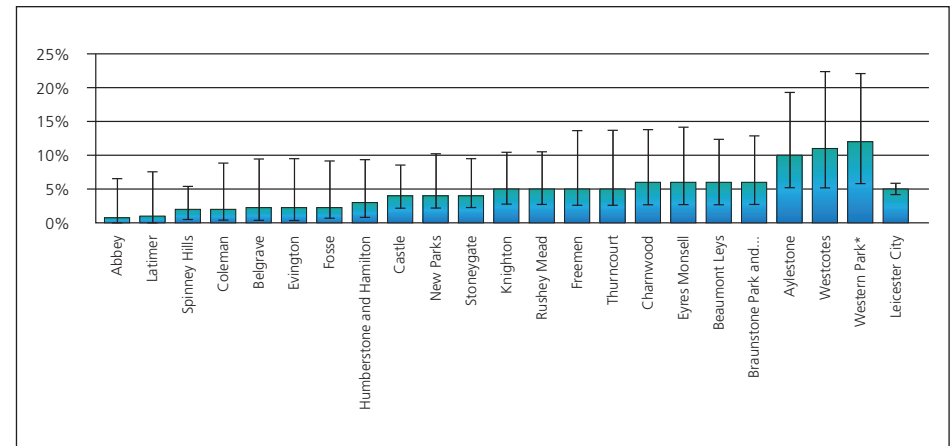
Source: Leicester Health and Lifestyle Survey 2010



* Significantly higher than Leicester
 ** Significantly lower than Leicester

Figure 21: Drinking more than the Weekly Recommended Units by Ward

Source: Leicester Health and Lifestyle Survey 2010



* Significantly higher than Leicester
 ** Significantly lower than Leicester

Proportions exceeding the daily recommended units are significantly higher than the city average in Westcotes (44%), Castle (43%) and Thurncourt (42%) wards. Proportions exceeding the weekly recommended limits are significantly higher than the city average in Western Park ward (12%). These wards are not amongst the most deprived, either within Leicester or as measured against England. This pattern of higher alcohol consumption being associated with better off groups in the population, rather than the most deprived, is in line with national trends¹.

Age distribution may also be a factor in drinking in excess of the recommended units, with Castle and Westcotes wards having greater proportions of residents aged between 15 and 64 years (Castle at 88.7% and Westcotes at 82.7%) than the city average of 69.4%.

Knowledge of alcohol units

79% were aware of units of alcohol as a measure of alcohol content. However, only 29% of men and 34% of women were able to accurately identify the maximum daily recommended units.

Awareness of units was highest for men who were:

- white respondents (39%, compared with 18% of the BME sample)
- those drinking above the maximum recommended weekly units (49%, compared with 27% of those drinking within the limits)

Awareness of units was highest for women who were:

- younger (40% of 16-24 year old women, compared with only 8% of women aged 55 and over)
- white respondents (46%, compared with 17% of BME respondents)

Willingness to change

Those who reported drinking above the maximum recommended weekly guidelines were more likely to be thinking about cutting down the amount of alcohol they consume, than those who drink within the guidelines (32%, compared with 10%).



Drug-taking in the last 12 months

The vast majority of all respondents (93%) had not taken any illegal or proscribed drug on the list shown in Figure 22 in the previous year.

Figure 22: List of Illegal or Illicit Substances, included in the Survey Questionnaire

- Amphetamines (speed, whizz, uppers, billy)
- Cannabis (marijuana, grass, hash, ganja, blow, skunk, draw, weed, spliff)
- Cocaine/coke
- Crack/rock/stones
- Ecstasy (E)
- Heroin (smack, H, brown)
- LSD/Acid
- Magic Mushrooms
- Methadone/physeptone (not prescribed by a doctor)
- Semeron
- Tranquillizers (Temazepam, valium, not prescribed by a doctor)
- Amyl Nitrite (poppers)
- Anabolic steroids (not prescribed by a doctor)
- Glues, solvents, gas or aerosols to sniff or inhale
- Ketamine (green, K, special K, super K, vitamin K)
- Any other pills or powders not prescribed by a doctor, even if you didn't know what they were
- Anything else you may have smoked when you didn't know what it was
- Anything else you knew or thought was a drug (not prescribed by a doctor)

6% said that they had used at least one of the drugs on the list. 5% reported taking cannabis, 2% cocaine and 1% ecstasy. Men (9%, compared with 3% of women) and younger respondents (14% of those aged 16-24, compared with 5% of 25-54 year olds and less than 1% of those aged 55 and over) were more likely to have taken an illegal or illicit drug.

The proportion that had taken any drug (6%) was lower than that reported in the 2008/09 *British Crime Survey (BCS)* (10%). The difference is at least partly explained by the ethnic profile of Leicester and the fact that the drug-taking section of the BCS was only asked of 16-59 year olds. However, of the corresponding sample of the *Leicester Health and Lifestyle Survey 2010*, that is, those aged 16-59, 7% had taken drugs in the previous year, still lower than the BCS proportion.

Prevalence of drug use was consistently quite low at individual ward level, largely in line with the overall reported drug-taking levels across the city. However, there were a number of wards in which the prevalence of reported drug use was higher: Freeman (16%), Castle (11%), Westcotes (12%) and Stoneygate (12%).

Willingness to change

Respondents who had taken drugs in the last year (83%) were more likely than those who were non-drug users (71%) to want to make a lifestyle change. The survey did not include questions to assess willingness or barriers to change among drug-takers.

Diet

Eating fruit and vegetables

23% of respondents reported eating the recommended five or more portions of fruit and vegetables a day. 37% of respondents were eating three or four portions, with another 35% eating one or two daily. Just 4% said they did not eat any fruit and vegetables. The average number of portions of fruit and vegetables consumed per person was 3.1 per day.

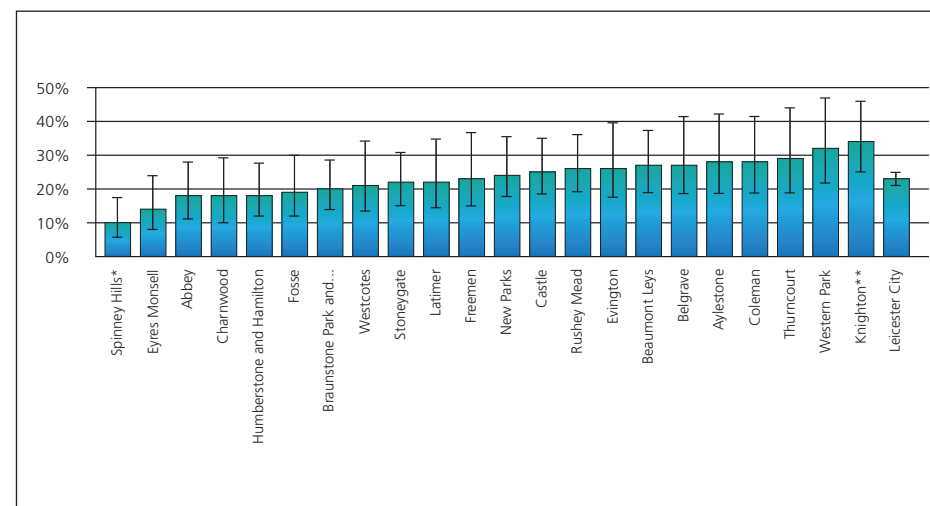
The proportion eating five or more portions of fruit and vegetables a day in Leicester (23%) is slightly lower than that reported in the *Health Survey for England (HSE) 2009* (26%). However, this is not strictly comparable, as the HSE asked a large number of more detailed questions than the current survey to determine overall fruit and vegetable consumption.

72% of respondents correctly identified that the recommended daily intake of fruit and/or vegetables is five portions.

Figure 23 shows that 34% living in Knighton ward said they ate five portions of fruit and vegetables a day, significantly higher than the Leicester average, while only 10% of those in Spinney Hills eat five or more portions of fruit and vegetables a day, significantly lower than the Leicester average (23%).

Figure 23: Prevalence of Daily Consumption of 5+ Portions of Fruit & Vegetables by Ward for Leicester City

Source: Leicester Health and Lifestyle Survey 2010



* Significantly lower than Leicester

** Significantly higher than Leicester

Willingness and barriers to change

26% of respondents said they wanted to eat more healthily. Those who ate fewer than five portions of fruit and vegetables a day (28%) were more likely than those who eat five-a-day (19%) to say they would think about eating more healthily in the next six months.

Barriers to healthy eating were financial issues (approximately 20% of respondents), including affordability, and "lack of will-power" (14%). Around 40% of respondents felt that there were no barriers to eating more healthily. There were fewer perceived barriers to healthy eating than for increasing physical activity.

Physical Activity

46% of respondents reported that they undertook five or more sessions of 30 minutes physical activity per week, the recommended minimum amount of exercise a week. A further 18% said they took 3-4 sessions a week, 11% took one or two sessions and 23% said that they took no such exercise.

The finding that 64% of the sample took three or more sessions of exercise a week, should be treated with some caution, as it is much higher than that reported in the *Active People's Survey 3* for 2008/09, which found that 18% of adults (16 years plus) participate in sport and active recreation of moderate intensity for at least 30 minutes, on at least 12 days in the previous four weeks. Different questions, additional physical activity categories included and less focus on sport and recreation in the Survey may account for these differences. The physical activity categories used in this survey are listed below.

Figure 24: List of Activities generating Faster Breathing and Heart Rate, through Physical Exertion, included in the Survey Questionnaire

- Cycling
- Swimming
- Jogging/running
- Sports (e.g. football, tennis, netball)
- Exercise like aerobics, weights
- Brisk walking (e.g. walking to work, walking to the shops, walking to school, hiking, rambling)
- Dancing
- Heavy gardening
- Heavy work around the house (e.g. heavy housework, DIY)
- Heavy manual work as part of your job
- Other (specify)

There was no significant difference by ward of residence from the Leicester average for those reporting undertaking physical activity on at least three days a week.

Willingness and barriers to change

32% of respondents wanted to increase the amount of physical activity they take. Those who reported that they already do physical activity for even 30 minutes once or twice a week were more likely than those who do not take **any** exercise to be thinking about increasing the amount of physical activity they take (40%, compared with 31%).

Barriers to increasing the amount of physical activity respondents take in the next six months were cited as being too busy or not having time (42%), ill-health (16%), and laziness (6%). 25% said "nothing" would stop them from increasing the amount of activity they take.

Body Mass Index (BMI)

Prevalence of Obesity

Based on self-reported height and weight data, the survey identified that 46% of respondents giving full information (91% of all respondents), were overweight, obese or morbidly obese, with 17% of these being obese or morbidly obese. These findings should be treated with caution. When compared with the *Health Survey for England 2009*, where the height and weight of respondents is directly measured as part of the survey, the Leicester result is significantly lower. A factor in this is likely to be respondents not knowing or reporting accurately their current weight and height. The *Health Survey for England 2009* found on the basis of measurements that 63.7% of respondents in England were overweight, obese or morbidly obese, with 25.4% of these being obese or morbidly obese.



Sexual Health

All respondents aged 18-54 years were asked a number of questions relating to sexual health and the findings below relate only to this age group.

Preferred access to sexual health services in Leicester

77% of those aged 18-54 indicated that their preferred method of access to sexual health services was via their own family doctor or GP. 7% said that they would like to access sexual health services via Contraceptive Services, and 5% said they would like to go to a separate service that provides both contraception and testing for sexually transmitted infections (STIs). 4% said they would prefer to access these services through Genitourinary Medicine (GUM) clinics. Just 1% said they did not need to access sexual health services. 7% of the sample, including 9% of South Asians, refused to answer this particular question.

Those aged 20-24 (5%) and 25-34 (8%) were more likely than those aged 35-54 (2%) to prefer accessing sexual health services through GUM clinics.

Use of condoms in the last 12 months

40% said that they had not used a condom in the past year but almost as many (38%) had used condoms to prevent pregnancy and 17% had used them to protect against HIV and other STIs.

Patterns of motivation for condom use by age group are shown in Table 2. In all ages, condoms were more often used for contraception than to protect against STIs and HIV. Younger people and men rather than women were more likely to report using a condom. These results are consistent with national surveys⁴

Table 2: Proportions using Condoms and Reasons for Use by Age and/or Sex

Source: Leicester Health and Lifestyle Survey 2010

Age Group	Percentage using condoms	Percentage using condoms for contraception	Percentage using condoms for protection from HIV or STIs
All 16 +		38	17
16-24	57	47	34
25-34	50	46	20
35-54	31	28	6
Men overall	20		
Female Overall	14		

The top three reasons for not using a condom in the past year were being in a long-term relationship and only having one partner (35%), no sex in previous year (23%), or using a different method of contraception (14%).

53% of those who drink above the weekly recommended limits have not used condoms in the past year.

14% of respondents refused to answer this particular question. Age and ethnicity seem to have had an impact here, as well as some positive health behaviours. Those most likely to refuse to answer this question were:

- Older respondents (18% of 35-54s, compared with 12% of those aged 16-24 and 11% of 25-34 year olds)
- Respondents from South Asian communities (22%, compared with 9% of the White sample and 11% of Black respondents)

Mental Health

To determine views on positive mental health, respondents were assessed against a shortened version of the validated Warwick-Edinburgh Mental Well-Being Scale⁵.

The results showed that 13% of the sample reported good mental well-being, 76% were in the average group and 9% had poor mental well-being.

Poor mental well-being was reported in 11% of those living in the most deprived quartile, compared with 6% in those from more affluent areas. Data by ward shows higher rates of poor mental well-being in Beaumont Leys (13%), Spinney Hills (14%) and Freeman (16%).

Multiple Risk Factors

Throughout the survey results, the findings pointed to the fact that risk factors for poor health and unhealthy behaviour are often shared by groups or populations. Table 3 shows the areas where there have been statistically significant associations between factors in the survey.

The figure shows that, for example, those not undertaking regular exercise are more likely to: be female, older, living in a deprived area, report bad or very bad health, have a long-term limiting condition, be a current smoker, eat fewer than five portions of fruit and vegetables a day, are overweight, obese or morbidly obese and report poor mental well-being. Current smokers are more likely to be male, white, report bad or very bad health, have a long-term limiting condition, drink more than the recommended weekly units of alcohol, to have taken an illegal or proscribed drug in the last year, eat fewer than five portions of fruit and vegetables a day, take no regular exercise and have poorer mental well-being.

The results indicate the importance of having more integrated interventions aimed at improving health behaviour and engaging communities, rather than parallel interventions for different issues such as alcohol, smoking, diet, physical activity and, mental health and well-being.



Table 3: Significantly Higher Likelihood of Associations and Multiple Risk Factors

Source: Leicester Health and Lifestyle Survey 2010

Self-reported status	Self-Reported Risk Behaviour								
	LTLC	Current smoker	Allow smoking anywhere in home	Drink > daily and/or weekly recommended alcohol units	Drug in last year	Less than 5 fruit /vegetables per day	Overweight, obese or morbidly obese	No regular exercise	Poor Mental Well-being
Male		✓			✓	✓			
Female								✓	
16-24					✓	✓			
25-34	✓								
35-54	✓						✓		
>55	✓						✓	✓	
White	✓	✓	✓	✓					
Black / Black British							✓		
Ethnic minority						✓			
Living in deprived area	✓		✓			✓		✓	✓
No children			✓						
Health bad or very bad		✓	✓			✓	✓	✓	✓
LTLC		✓					✓	✓	✓
Current smoker	✓		✓	✓	✓	✓		✓	✓
Exceed alcohol weekly limit		✓			✓	✓			✓
Drug in last year		✓		✓		✓			✓
Less than five a day fruit and vegetables		✓		✓	✓			✓	✓
No regular exercise	✓	✓				✓	✓		✓
Overweight, obese or morbidly obese	✓							✓	
Poor mental well-being	✓	✓	✓	✓	✓	✓		✓	

Recommendations

It is recommended that:

- The information in this report is used in conjunction with other data to improve the physical and mental health of people in Leicester, by:
 - targeting resource towards greatest need
 - increasing awareness of key features of a healthy lifestyle
 - focussing reduction efforts on areas of highest smoking prevalence
 - promoting an understanding of the risks to health of non-cigarette-related tobacco
 - improving the understanding of alcohol content in drinks
 - supporting efforts to improve levels of physical activity and healthy diet
 - developing integrated health improvement interventions where this suggests greater benefit
 - improving access to sexual health services
- Further work be undertaken to gain an accurate understanding of BMI levels in the Leicester adult population

Lead Editors

Rod Moore

Deputy Director of Public Health

Tel: 0116 295 1453

Email: rod.moore@leicestercity.nhs.uk

Sandie Nicholson

Public Health Advanced Practitioner

Tel: 0116 295 1182

Email: sandie.nicholson@leicestercity.nhs.uk

References

- ¹ NHS Information Centre for Health and Social Care. 2010. Statistics on Alcohol: England, 2010. London: NHS Information Centre for Health and Social Care
- ² Deborah Lader & Matthew Steel. 2009. Opinions Survey Report No. 42 - Drinking: adults' behaviour and knowledge in 2009 - A report on research using the National Statistics Opinions Survey. London: NHS Information Centre for Health and Social Care
- ³ Parliamentary Office of Science and Technology. Binge Drinking and Public Health. Postnote, 244, 1-4, July 2005. London: Parliamentary Office of Science and Technology
- ⁴ Office of National Statistics. 2009. Opinions Survey Report No. 41 Contraception and Sexual Health, 2008/09. London: Office of National Statistics
- ⁵ NHS Health Scotland, University of Warwick and University of Edinburgh. 2006. Warwick-Edinburgh Mental Well-Being Scale (WEMWBS). Edinburgh: NHS Health Scotland, University of Warwick and University of Edinburgh

6. Health Protection

During 2009/10, there were a number of challenges to the work of preventing and controlling infectious diseases and other environmental threats to the health of the population of Leicester. In addition to infection-control around Tuberculosis, Healthcare Associated Infections (HCAs) and vaccine-preventable childhood diseases, there was the identification and treatment of cases of the H1N1 (swine flu) influenza pandemic.

Emergency Preparedness

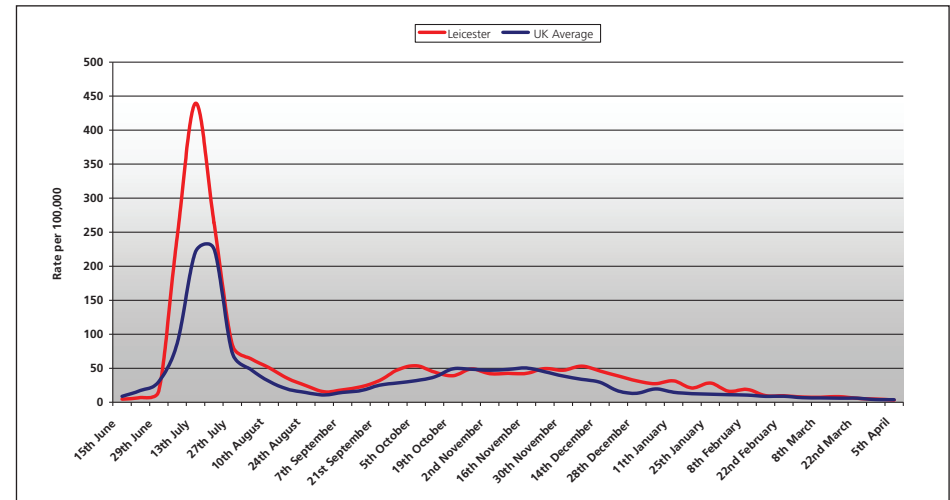
'Swine Flu'

Over recent years there have been regular international warnings of an imminent influenza pandemic, from viruses to which the bulk of the population had little or no previous exposure. In 2009/10, a pandemic was declared by the World Health Organisation (WHO), following the emergence of the H1N1 (swine flu) influenza virus in Mexico and its subsequent transmission around the world. The outbreak began in April 2009, with the first cases confirmed in the UK on 26th April 2009. The peak of activity months occurred between June and September 2009. In this period, there were a significant number of cases of swine flu in Leicester and at one stage, the city was classified as a national 'hot spot', with 450 cases per 100,000 at the peak. Leicester had the second highest pandemic flu activity area in the country for the week commencing 13th July 2009 (see Figure 25).



Figure 25: Influenza-like Illness in Leicester 2009-10

Source: QSurveillance, HPA/ Nottingham University, 2009-2010



Between July 2009 and February 2010, 16,000 assessments were carried out on those suspected of having swine flu and approximately 12,000 courses of antiviral drugs (Tamiflu) were supplied to patients from the 3 distribution points established in the city. A vaccination programme to protect the most vulnerable members of the population, via direct immunisation and through the vaccination of frontline healthcare workers, saw 11,000 H1N1 vaccinations administered in the city between October 2009 and February 2010. Preparedness planning for the ongoing threat of pandemic influenza continues. Lessons learned from the H1N1 outbreak are being incorporated into the revised influenza pandemic preparedness plans.

Tuberculosis (TB)

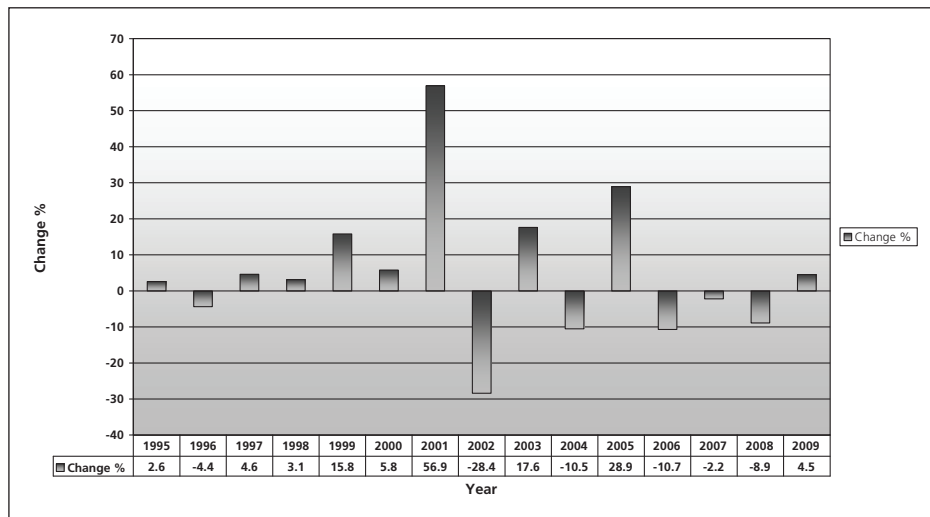
TB usually causes disease in the lungs (pulmonary), but it can also affect other parts of the body (extra-pulmonary). Only the pulmonary form of TB disease is infectious and therefore represents the main public health threat. Transmission occurs through coughing of infectious droplets and usually requires prolonged, close contact with an infectious case. TB is curable with a combination of specific antibiotics, but treatment must be continued for at least six months¹.

Leicester has long been considered an area of high TB prevalence in England. Most of the cases of TB in Leicester are in populations from high prevalence countries, arriving with the disease.

In 2009/10 there were 209 cases of TB reported in Leicester and Figure 26 shows that this represents a 4.5% increase over 2008. This small increase is in line with the national trend, with provisional, national data for 2009/10 showing a 5.5% increase in incidence. Prior to 2009/10, Leicester had three successive years of decline in TB cases. The reversal indicates the importance of a continuing vigilance against TB.

Figure 26: Annual Change in the Proportion of Confirmed TB Cases

Source: TBIT, Leicester TB Service, 1995-2009



A TB new entrant screening service for 0-16 year olds has been commissioned. A support worker will deliver TB screening in community clinics. Candidates for screening and treatment will be drawn from new entrants to Leicester from countries with high TB prevalence and will be identified in collaboration with GP colleagues.



Childhood Immunisation

The national childhood immunisation programme remains one of the most important mechanisms to protect children against a range of serious and life-threatening infections. The national programme is detailed below in Table 4.

Table 4: Current National Childhood Immunisation Programme (2010)

Source: Department of Health

Recommended uptake age	Vaccinations	Diseases protected against
Two months	DTaP/IPV/Hib and PCV	Diphtheria, Tetanus, Pertussis (whooping cough), Polio and Haemophilus influenzae type b (Hib), and Pneumococcal infection
Three months	DTaP/IPV/Hib and Men C	Diphtheria, Tetanus, Pertussis (whooping cough), Polio and Haemophilus influenzae type b (Hib), and Meningitis C
Four months	DTaP/IPV/Hib, Men C and PCV	Diphtheria, Tetanus, Pertussis (whooping cough), Polio and Haemophilus influenzae type b (Hib), and Meningitis C, and Pneumococcal infection
12 to 13 months	Hib/MenC, PCV and MMR	Haemophilus influenzae type b (Hib) and Meningitis C, and Pneumococcal infection, and Measles, Mumps and Rubella
Three years and four months	DTaP/IPV (pre-school booster) and MMR	Diphtheria, Tetanus, Pertussis and Polio, and Measles, Mumps and Rubella
Girls aged 12 to 13 years	HPV	Cervical cancer caused by Human Papillomavirus types 16 and 18
13 to 18 years	Td/IPV (School leaver booster)	Tetanus, Diphtheria and Polio

The World Health Organisation (WHO) recommends 95% coverage level to fully protect the population. If this proportion of children is vaccinated, the potential spread of an infection within a community is significantly reduced and even unvaccinated children are at much less risk of catching the illness. This community protection is known as “herd immunity”.

Following a review of immunisation services and systems, the uptake of many childhood vaccinations in Leicester, has shown considerable improvement over the previous 12 months and halts a recent decline in uptake. The goal for the city remains to have children protected from these life threatening infections, with the ultimate target being achievement of the WHO recommended levels. Continued vigilance and service improvement is required to ensure that the children of Leicester are protected against these diseases. Inequalities in immunisation uptake persist, with poorer families living in disadvantaged areas having lower uptake levels than those from more affluent families, and this must remain a particular focus of activity.

New vaccines

A new vaccine was introduced on 1st April 2010 to provide better protection against pneumococcal disease. Prevenar 13 has replaced Prevenar and now offers protection against an additional 6 strains of *S. pneumoniae*. The original vaccine had been very successful at reducing cases of pneumococcal disease, caused by the seven strains against which it offered protection. However, other pneumococcal strains had increasingly presented, which is why a new, wider-acting vaccine was developed to replace Prevenar.

Infection Control

Healthcare Associated Infections (HCAs) are classified as infections that develop as a direct result of healthcare contact. Sources of infection include the contaminated hands of healthcare workers, contaminated medical devices, and a failure to adhere to local policies, procedures and guidelines. It is essential that the risk of such transmissions is kept to an absolute minimum. Whilst there are a number of factors that increase the risk of acquiring an infection, high standards of infection control practice minimise the risk of transmission.

Clostridium Difficile (C. Difficile) and Methicillin Resistant Staphylococcus Aureus (MRSA) are amongst the most commonly occurring HCAs. The incidence of these occurring in a particular healthcare setting has been used as a measure of infection control performance. In 2009/10, significant progress in reducing HCAs

was made across Leicester, Leicestershire and Rutland, with fewer cases of C. Difficile and MRSA in comparison with previous years. The total number of confirmed cases of C. Difficile in Leicester, Leicestershire and Rutland between March 2009 and February 2010 was 132, compared to the 918 cases in 2007/08. There were 21 cases of MRSA over the same period, compared to 43 in 2007/08.

For Leicester, current levels of HCAs remain below the national average and collaborative working on infection prevention and control, as well as effective treatment pathways for HCAs, continues to deliver improvement in this area.

Recommendations

It is recommended that:

- The learning points from the H1N1 (swine flu) pandemic are used to inform the development of plans for future potential outbreaks
- A vigilant approach against TB is maintained, to protect Leicester's population
- Actions targeted at increasing the uptake of childhood immunisations are maintained and additional developments to support the achievement of the WHO recommended immunisation levels are implemented, including targeted work to increase uptake among poorer families living in disadvantaged areas
- Work targeted at reducing the levels of HCAI is continued, hand-in-hand with attentive performance management, through the close monitoring of case numbers

Lead Authors

Ivan Browne

Consultant in Public Health

Tel: 0116 295 4153

Email: ivan.browne@leicestercity.nhs.uk

Dr Philip Monk

Consultant in Communicable Disease Control

Health Protection Agency - East Midlands South

References

- ¹ Health Protection Agency. 2010. Tuberculosis (TB). London: Health Protection Agency. Available at: <http://www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/Tuberculosis/> [Accessed 20 July 2010].



7. Health Facts

Health Facts 1: Mid-year 2008 estimates of resident population by age¹

Source: National Centre for Health Outcomes Development, NHS Health and Social Care Information Centre

Area		0-4 years	5-14	15-34	35-64	65-74	75+	Total
Leicester	Total	22,774	33,043	98,846	102,458	18,006	17,563	294,690
	%	7.7%	11.9%	33.5%	34.8%	6.1%	6.0%	100.0%
East Midlands	Total	255,413	504,704	1,130,031	1,811,031	383,417	348,404	4,433,000
	%	5.8%	11.4%	25.5%	40.9%	8.6%	7.9%	100.0%
England	Total	3,129,287	5,903,977	13,562,429	20,565,328	4,273,740	4,011,467	51,446,228
	%	6.1%	11.5%	26.4%	40.0%	8.3%	7.8%	100.0%

Population projections for Leicester up to 2031 (figures in thousands)

Source: Office of National Statistics, 2008-based Population projections

Year	Age group (years)							Total
	0-4	5-14	15-34	35-64	65-74	75-84	85+	
2011	24.7	36.5	111.2	107.5	18.2	12.2	5.2	315.5
2016	26.2	41.6	115.5	111.8	20.2	12.5	5.5	333.3
2021	27.1	45.5	116.1	118.8	22.7	13.1	6.1	349.4
2026	27.3	47.2	117.7	125.1	24.6	15.1	7.2	364.2
2031	27.5	48.2	121.4	129.3	26.9	17.0	8.3	378.6

* figures may not sum due to rounding

Health Facts 2: Maternal, Child Health and Screening

Source: Office of National Statistics, National Centre for Health Outcomes Development, Health and Social Care Information Centre

Births and conceptions (2008)¹

	Leicester	East Midlands	England
Total births	5215	54447	676236
Live births	5176	54192	672809
Still births	39	255	3427
% low birth weight (>1500g and <2,500g)	9.2	7.4	7.5
% very low birth weight (<1,500g)	1.5	1.4	1.4
General fertility rate	74.0	61.3	63.9
Under 18 conception rate (per 1,000 females aged 15-17 years)	48.6	39.6	40.4

Deaths (2008)¹

Stillbirth rate	7.5	4.7	5.1
Perinatal mortality rate	10.9	7.4	7.6
Infant mortality rate	7.2	5.2	4.8

Childhood Immunisations (2009-10)

Source: Health Protection Agency, COVER data

	Percentage of children immunised by their second birthday		
	Leicester City	East Midlands	England
Diphtheria, Tetanus, Polio, Pertussis & Hib	96.4	96.6	95.3
Measles, Mumps, Rubella	90.1	89.7	88.2
Meningitis C	97.1	96.6	94.2
Percentage of children immunised by their fifth birthday			
Diphtheria, Tetanus, Polio, Pertussis	97.3	95.2	94.0
Diphtheria, Tetanus, Polio, Pertussis Booster	89.2	86.8	84.8
HIB	94.6	93.4	93.1
Measles, Mumps, Rubella (first dose)	95.0	92.3	91.0
Measles, Mumps, Rubella (first and second dose)	87.6	85.6	82.7

Screening Coverage (2009-10)

Source: NHS Health and Social Care Information Centre, Community Health Statistics

	Leicester	East Midlands	England
Breast Screening uptake	75.1	81.7	76.9
Cervical Screening uptake	76.3	82.1	78.9

■ Significantly worse than the national rate

■ Significantly better than the national rate

Health Facts 3: Mortality rates

Source: National Centre for Health Outcomes Development, NHS Health and Social Care Information Centre

Mortality rates in males			Standardised Mortality Ratio (Indirect)			Directly age-standardised rate					
			2006-8 pooled, for all ages			2006-8, for all ages			2006-8, for under 75 yr olds		
Cause of death	ICD 10	No. deaths in Leicester	England	East Midlands	Leicester	England	East Midlands	Leicester	England	East Midlands	Leicester
			SMR	SMR	SMR	DSR	DSR	DSR	DSR	DSR	DSR
Coronary heart disease	I20-I25	246	100.0	102.5	136.8	126.5	129.0	177.7	65.5	65.5	106.3
Cerebrovascular disease (stroke)	I60-I69	99	100.0	98.7	114.9	48.6	47.8	57.1	15.7	14.6	22.3
All cancers	C00-C97	303	100.0	99.9	100.3	207.4	207.1	206.2	126.3	125.2	122.2
All accidents	V01-X59	36	100.0	114.8	109.7	21.4	24.9	24.6	16.8	19.9	19.9
All accidental falls	W00-W19	18	100.0	94.6	193.3	4.7	4.4	9.6	2.6	2.5	6.2
Road traffic accidents	V01-V89	9	100.0	127.9	83.0	7.5	9.8	6.2	7.3	9.9	5.8
Suicide and undetermined death	X60-X84, Y10-Y34 exc Y33.9	27	100.0	96.0	125.1	12.0	11.4	14.7	11.9	11.3	14.5
Bronchitis, Emphysema & Chronic obstructive Pulmonary Disease	J40-J44	80	100.0	98.4	134.9	34.1	33.5	47.2	14.1	13.5	24.5
Stomach and duodenal ulcer	K25-K27	11	100.0	91.5	168.1	4.2	3.8	7.0	2.2	1.9	3.3
Diabetes	E10-E14	17	100.0	109.3	143.1	7.2	7.8	11.4	3.4	3.5	7.8
Tuberculosis	A15-A19	4	100.0	93.2	357.8	0.6	0.6	2.5	0.4	0.4	1.8
Chronic liver disease	K70, K73-K74	32	100.0	89.6	129.4	14.1	12.5	18.1	13.2	11.5	21.8
All causes	A00-Y99	1244	100.0	101.4	119.9	692.3	698.7	837.9	364.5	357.9	464.3

Mortality rates in females

Cause of death	ICD 10	No. deaths in Leicester	England	East Midlands	Leicester	England	East Midlands	Leicester	England	East Midlands	Leicester
			SMR	SMR	SMR	DSR	DSR	DSR	DSR	DSR	DSR
Coronary heart disease	I20-I25	182	100.0	102.9	128.8	58.7	60.8	83.9	20.5	21.6	38.3
Cerebrovascular disease (stroke)	I60-I69	115	100.0	99.2	107.6	45.5	45.0	51.2	15.7	14.6	22.3
All cancers	C00-C97	297	100.0	99.3	105.5	149.9	149.2	159.5	102.7	102.4	108.3
All accidents	V01-X59	38	100.0	120.5	142.1	10.4	12.1	15.1	5.8	6.3	8.1
All accidental falls	W00-W19	12	100.0	93.0	291.4	2.9	2.7	7.7	1.1	1.0	1.9
Road traffic accidents	V01-V89	0	100.0	113.3	100.1	2.2	2.7	2.2	2.0	2.5	2.0
Suicide and undetermined death	X60-X84, Y10-Y34 exc Y33.9	9	100.0	98.0	148.3	3.7	3.6	5.4	3.6	3.6	5.5
Bronchitis, Emphysema & Chronic obstructive Pulmonary Disease	J40-J44	51	100.0	93.1	101.5	21.7	20.6	23.5	10.2	9.9	13.0
Stomach and duodenal ulcer	K25-K27	12	100.0	95.6	151.2	2.8	2.6	4.2	1.1	1.1	1.7
Diabetes	E10-E14	13	100.0	108.9	124.3	5.2	5.6	6.7	2.2	2.2	2.8
Tuberculosis	A15-A19	2	100.0	99.5	340.3	0.3	0.4	1.5	0.2	0.3	1.6
Chronic liver disease	K70, K73-K74	14	100.0	91.8	106.3	7.3	6.7	8.0	13.8	12.1	18.0
All causes	A00-Y99	1286	100.0	102.1	117.1	490.6	499.6	596.0	230.4	232.4	298.7

■ Significantly better than the national rate (100)
■ Significantly worse than the national rate (100)

Health Facts 4: Cancer rates

Source: National Centre for Health Outcomes Development, NHS Health and Social Care Information Centre

Cancer rates in males

Cause of death	ICD 10	New cases in Leicester (2004-06)	No. deaths in Leicester (2008)	England	Standardised Mortality Ratio (Indirect), 2006-8 pooled, all ages		Directly age-standardised mortality rate per 100,000 (2006-8), All ages			Directly age-standardised mortality rate per 100,000 (2004-6), under 75s					1 yr survival (2000-02)	5 yr survival (2000-02)
					East Midlands	Leicester	England	East Midlands	Leicester	England	East Midlands	Leicester	LCL	UCL		
					SMR	SMR	DSR	DSR	DSR	DSR	DSR	DSR	DSR	DSR		
All	C00-C97	1639	303	100	99.9	100.3	207.4	207.1	206.2	126.3	125.2	122.2	110.62	133.75	-	-
Lung	C33-C34	320	82	100	97.1	110.0	49.7	48.1	54.7	31.9	30.7	34.5	28.27	40.68	25.4%	6.7%
Colorectal	C17-C21	211	36	100	98.7	91.0	22.2	21.9	20.4	13.4	13.1	12.8	9.05	16.56	66.9%	47.9%
Stomach	C16	64	19	100	102.4	139.1	8.0	8.2	11.4	4.5	4.6	7.5	4.60	10.36	34.1%	12.3%
Oesophageal	C15	66	15	100	104.5	99.7	12.8	13.4	12.1	8.9	9.3	6.9	4.10	9.60	35.2%	10.5%
Bladder	C67	72	10	100	102.4	95.8	8.0	8.1	7.5	3.6	3.5	3.1	1.25	4.89	79.5%	62.1%
Malignant Melanoma	C43	29	1	100	92.0	55.2	2.9	2.7	2.0	2.5	2.4	1.1	0.01	2.20	-	-
Prostate	C61	332	25	100	104.5	68.7	24.5	25.6	16.6	8.7	8.9	4.7	2.37	6.95	88.7%	69.4%
Leukaemia	C91-C95	-	10	100	100.9	70.2	6.6	6.7	4.4	4.1	4.2	2.4	0.83	3.99	-	-
Hodgkins	C81	-	2	100	102.1	144.9	0.5	0.5	0.7	0.4	0.4	0.5	0.00	1.25	-	-

Cancer rates in females

Cause of death	ICD 10	New cases in Leicester (2004-06)	No. deaths in Leicester (2008)	England	Standardised Mortality Ratio (Indirect), 2006-8 pooled, all ages		Directly age-standardised mortality rate per 100,000 (2006-8), All ages			Directly age-standardised mortality rate per 100,000 (2004-6), under 75s					1 yr survival (2000-02)	5 yr survival (2000-02)
					East Midlands	Leicester	England	East Midlands	Leicester	England	East Midlands	Leicester	LCL	UCL		
					SMR	SMR	DSR	DSR	DSR	DSR	DSR	DSR	DSR	DSR		
All	C00-C97	1713	297	100	99.3	105.5	149.9	149.2	159.5	102.7	102.4	108.3	97.61	118.92	-	-
Lung	C33-C34	199	54	100	93.1	113.2	30.0	28.3	34.3	21.1	20.1	24.5	19.41	29.54	26.6%	7.8%
Colorectal	C17-C21	176	29	100	97.6	105.3	14.1	13.7	14.8	8.4	8.1	8.7	5.73	11.73	67.1%	48.6%
Stomach	C16	23	13	100	101.0	94.0	3.5	3.5	3.5	1.9	2.0	2.3	0.80	3.85	31.3%	15.5%
Oesophageal	C15	39	13	100	110.4	153.9	4.7	5.1	7.5	2.8	3.0	4.9	2.65	7.05	32.4%	10.4%
Bladder	C67	33	3	100	105.4	87.0	2.8	2.9	1.9	1.3	1.3	0.2	0.00	0.67	68.2%	47.8%
Malignant Melanoma	C43	32	4	100	99.0	49.4	2.0	2.1	0.6	1.6	1.7	0.2	0.00	0.67	-	-
Breast	C50	543	45	100	103.3	100.7	26.8	27.4	28.6	20.6	20.8	22.8	17.90	27.78	93.9%	79.7%
Cervical	C53	48	4	100	95.7	156.9	2.3	2.2	3.8	2.0	1.9	3.2	1.39	5.09	80.6%	65.2%
Leukaemia	C91-C95	-	8	100	93.3	93.0	3.7	3.5	3.2	2.3	2.2	1.6	0.31	2.91	-	-
Hodgkins	C81	-	2	100	93.5	219.3	0.4	0.3	0.6	0.3	0.3	0.3	0.00	0.75	-	-

Significantly worse than the national rate (100)

Significantly better than the national rate (100)

*not age-standardised

Health Facts 5 - Health Targets for Leicester

Source: East Midlands Strategic Health Authority, National Centre for Health Outcomes Development, Health Care Commission, Health Protection Agency

Aim	Indicator	Target Ref	Leicester City PCT		
			Current position	Target 2009-10	
Reduce health inequalities by 10% by 2010 as measured by infant mortality and life expectancy					
Life Expectancy	By 2010 increase life expectancy in England to 78.6 for men	Life Expectancy at birth in men		75.5 (2006-8)	78.6 (2010)
	By 2010 increase life expectancy in England to 82.5 for women	Life Expectancy at birth in women		79.9 (2006-8)	82.5 (2010)
Reduce life expectancy gap between the fifth most deprived areas and the population of Leicester as a whole					
Infant Mortality	Reduction in smoking levels during pregnancy	Percentage smoking in pregnancy	PSA06a	14.5% (2009-10)	
	Increase breastfeeding initiation	Percentage where breast feeding is initiated	PSA06b	74.2% (2009-10)	
Reduce cardiovascular disease mortality rates in under 75s by at least 40%, with at least a 40% reduction in the gap between the fifth of areas with the worst health and the population as a whole					
Cardiovascular disease mortality and inequalities	Reduce cardiovascular disease mortality rates in under 75s	Mortality rate per 100,000 directly age standardised population from heart disease and stroke and related diseases in people aged under 75	PSA01a	112.6 (2006-8)	80.7
	Blood pressure monitoring	Percentage of patients on CHD register whose last blood pressure reading measured within the last 15 months is 150/90 or less		89.4% (Mar 2010)	89.3%
	Checking cholesterol levels	Percentage of patients with CHD whose last cholesterol reading measured within the last 15 months is 5mmol or less	PSA01d	80.1% (Mar 2010)	80.8% (Mar 2010)
Reduce cancer mortality rates in under 75s by at least 20%, with at least a 6% reduction in the gap between the fifth of areas with the worst health and the population as a whole					
Cancer mortality and inequalities	Reduce cancer mortality rates in under 75s	Mortality rate per 100,000 directly age standardised population from all cancers in people aged under 75	PSA03a	114.8 (2006-8)	108.5
	Smoking: Reduce the adult smoking rates to 21% or less by 2010, with a reduction in prevalence among the routine manual groups to 26%				
Smoking	Smoking Quit levels	Smoking quitters at four-week follow-up stage	PSA08a	2484 (2009-10)	2418
	Smoking prevalence	No. of patients aged over 16 years on a GP register with recorded smoking status (yes or non-smoker)	PSA08b	201,489 (70%) (Mar 2010)	90%
Sexual health: Reduce the under-18 conception rate by 50% by 2010					
Sexual Health	Reduce teenage conceptions	Teenage conception rate per 1,000 population aged 15-17 years.	PSA11a	48.6 (2008)	29.2
	Implement a Chlamydia Screening Programme	Percentage of sexually active 16-24s opportunistically screened for chlamydia	PSA11d	26.5% (March 2010)	25%
Mental Health and well-being: Substantially reduce mortality rates by 2010 from suicide and undetermined injury by at least 20%					
Mental Health	Mortality from suicide/injury undetermined	Mortality rate per 100,000 directly age standardised population from suicide and undetermined injury	PSA05a	9.9 (2006-8)	8.7
Obesity: Halt the year-on-year rise in obesity among children under 11 by 2010					
Obesity	Childhood obesity	% of Primary School children with BMI recorded % of Primary School children obese	PSA10a	88.7 % Yr R, 86.9% Yr 6 (2009-10) 10.0 % Yr R, 17.8% Yr 6 (2009-10)	88 % Yr R, 86% Yr 6 11.1 % Yr R, 21.0% Yr 6 (2008-9)
	Adult obesity	Number of patients aged over 16 years on a GP register with BMI recorded in the last 15 months	PSA10b	105,806 (36.6%) (Mar 2010)	75%

Note: This section refers to previous government targets important for public health. They are noted here as a matter of record, as we move towards the proposed new outcomes framework for public health.

PSA: Public Service Assessment targets set by the Department of Health that will contribute towards improving the health of the population and reducing health inequalities.

LAA: Local Area Agreement

Note: The targets shown above relate to the Local Delivery Plan 2005-2008. New targets have been set for the Vital Sign indicators within the Operational Plan 2008-2011.

Health Facts 6: Census 2001 demographic and health indicators by electoral ward

Source: Office of National Statistics: Census 2001

Population: Census 2001										
Ward Code	Ward Name	Total population	% living in 5% most deprived SOAs	00-04 years (%)	05-14 years (%)	15-24 years (%)	25-44 years (%)	45-64 years (%)	65-75 years (%)	75+ years (%)
00FNFF	Abbey	12707	11.6	6.8	13.8	12.8	28.0	20.5	9.0	9.1
00FNNG	Aylestone	10804	-	5.5	11.8	12.3	30.1	22.6	8.3	9.4
00FNHH	Beaumont Leys	13849	32.5	8.5	16.5	15.5	32.8	20.0	3.6	3.1
00FNJJ	Belgrave	10305	-	6.6	16.8	15.5	29.2	20.4	6.5	5.1
00FNKK	Braunstone Park and Rowley Fields	16609	37.8	8.0	17.2	15.2	27.3	18.5	7.0	6.9
00FNLL	Castle	13453	11.1	3.2	4.5	36.8	33.6	13.0	4.0	4.8
00FNMM	Charnwood	10660	-	8.8	17.9	14.8	30.1	18.2	5.5	4.8
00FNNN	Coleman	12085	-	8.4	16.4	15.3	30.4	18.9	5.4	5.2
00FNPP	Evington	9790	-	4.7	11.7	11.7	23.3	23.7	11.4	13.5
00FNQQ	Eyres Monsell	11233	13.4	7.5	16.4	12.7	25.8	19.0	9.7	8.9
00FNRR	Fosse	10737	-	6.6	11.1	15.6	34.3	19.3	6.5	6.6
00FNSS	Freemen	9984	41.7	7.0	14.1	23.8	29.0	16.3	5.3	4.6
00FNNT	Humberstone and Hamilton	11885	-	7.5	13.3	12.0	30.5	20.3	8.6	7.7
00FNNU	Knighston	16260	-	5.6	11.4	15.4	28.1	22.4	8.0	9.1
00FNNV	Latimer	11584	11.4	6.5	15.5	14.3	29.6	21.5	7.3	5.4
00FNXX	New Parks	16013	18.6	7.8	16.8	13.2	26.5	19.5	7.6	8.6
00FNYY	Rushey Mead	15140	-	6.0	14.1	13.5	29.8	24.1	7.1	5.4
00FNZZ	Spinney Hills	21256	26.7	9.3	17.2	17.6	30.4	17.0	5.1	3.4
00FNPA	Stoneygate	17068	-	6.7	14.3	22.3	28.7	18.8	5.2	3.8
00FNPB	Thurncourt	9930	-	6.2	14.2	11.3	24.8	22.1	11.1	10.3
00FNPC	Westcotes	8651	-	4.8	7.3	30.6	35.4	13.1	4.5	4.3
00FNPD	Western Park	9884	-	5.1	10.8	14.4	31.1	20.7	7.2	10.7
00FN	Leicester City	279887	10.5	6.8	14.0	16.7	29.4	19.5	6.9	6.6
E	England	49138831		6.0	12.9	12.2	29.3	23.8	8.3	7.5

Ward Code	Ward Name	Population: Census	Ethnicity					Health		Socio-economic			
		Total population	White	Asian/ British (%)	Black/ British (%)	Mixed (%)	Other (%)	Number reporting health as "Not good" (%)	People with Limiting long term illness (%)	Number unemployed (%)	Households with no car (%)	Households Rented (%)	Households over crowded (%)
00FNNF	Abbey	12707	81.1%	14.2%	2.0%	2.1%	0.6%	11.9	21.2	9.8	41.5	44.9	7.7
00FNNG	Aylestone	10804	92.6%	4.0%	1.5%	1.3%	0.6%	10.1	19.1	4.7	30.6	25.1	4.8
00FNNH	Beaumont Leys	13849	78.2%	12.2%	4.6%	4.0%	1.0%	9.0	16.8	9.4	35.8	48.4	10.1
00FNNJ	Belgrave	10305	26.1%	69.0%	1.7%	2.6%	0.6%	11.9	20.0	9.3	39.1	43.8	16.7
00FNNK	Braunstone Park and Rowley Fields	16609	86.1%	9.7%	1.7%	2.3%	0.3%	11.7	20.7	9.6	46.3	56.8	7.7
00FNNL	Castle	13453	75.7%	13.3%	5.5%	2.2%	3.3%	8.0	14.8	7.2	47.5	60.6	18.6
00FNNM	Charnwood	10660	53.4%	36.4%	5.5%	3.9%	0.7%	11.6	19.6	12.3	49.4	56.6	13.4
00FNNN	Coleman	12085	38.4%	53.6%	4.7%	2.7%	0.5%	10.4	17.9	9.7	41.4	42.9	14.2
00FNNP	Evington	9790	58.5%	35.6%	3.0%	2.2%	0.8%	10.1	21.2	6.0	26.5	24.0	7.4
00FNNQ	Eyres Monsell	11233	94.7%	1.9%	1.1%	2.0%	0.3%	12.2	22.8	9.1	46.1	53.7	8.1
00FNNR	Fosse	10737	84.6%	10.1%	2.4%	2.2%	0.7%	9.0	16.4	5.6	35.7	29.8	5.2
00FNN S	Freemen	9984	87.2%	4.6%	3.3%	3.1%	1.7%	10.1	18.6	8.2	44.5	57.9	8.4
00FNN T	Humberstone and Hamilton	11885	75.3%	20.5%	1.6%	1.9%	0.7%	9.0	17.9	5.0	28.7	31.1	5.3
00FNN U	Knighton	16260	76.1%	18.8%	1.8%	2.1%	1.2%	7.2	15.5	4.0	20.8	19.3	6.7
00FNN W	Latimer	11584	17.3%	79.1%	1.4%	1.7%	0.5%	12.7	21.2	9.9	42.4	40.3	17.9
00FNN X	New Parks	16013	91.5%	3.8%	1.7%	2.6%	0.3%	11.8	21.9	9.8	46.8	55.8	5.9
00FNN Y	Rushey Mead	15140	38.5%	57.7%	2.0%	1.5%	0.3%	10.0	18.2	6.4	22.2	15.7	12.3
00FNN Z	Spinney Hills	21256	17.6%	72.4%	6.9%	2.2%	0.9%	10.3	18.1	13.0	47.2	53.1	21.6
00FNPA	Stoneygate	17068	32.8%	58.9%	5.1%	2.5%	0.8%	9.4	16.4	8.5	36.0	39.9	14.2
00FNPB	Thurncourt	9930	83.0%	12.8%	1.9%	1.9%	0.3%	11.9	22.9	6.5	36.8	37.9	7.1
00FNPC	Westcotes	8651	73.7%	18.1%	3.2%	3.2%	1.8%	8.7	14.9	5.7	44.3	53.4	11.1
00FNPD	Western Park	9884	81.9%	13.5%	1.9%	1.8%	0.8%	9.0	18.4	4.6	31.0	25.7	7.5
00FN	Leicester City	279887	63.8%	29.9%	3.1%	2.3%	0.8%	10.2	18.8	7.9	38.3	42.1	10.6
E	England	49138831	90.9%	4.6%	2.3%	1.3%	0.9%	9.0	17.9	5.0	26.8	31.3	7.1

Health Facts 6b: Local measures of Health at ward level

Data: ONS mortality data, ONS mid-2005 population estimates, ONS conception data, ONS birth data

Ward Code	Ward Name	Life expectancy		Mortality: DSR per 100,000 (all ages)		Infant Mortality rate (2006-8)	Perinatal mortality rate (2006-8)	Still birth rate (2006-8)	Low and very low birth weights (%) (2006-8)	Under 18 conception rate 2006-2008	Access to Services		Lifestyle ward estimates for 16+ year olds (2010)	
		Females (2006-8)	Males (2006-8)	Coronary Heart Disease (2006-8)	Cancers (2006-8)						Elective (Apr 06-Mar 09)	Emergency (Apr 06-Mar 09)	Smoking prevalence	Adult Obesity
		00FNNF	Abbey	79.2	73.2	122.5	226.2	8.5	15.4	8.4	8.8%	High	131.1	152.5
00FNNG	Aylestone	80.3	75.9	121.9	160.0	9.3	11.6	6.9	9.7%		120.3	125.8	27%	21%
00FNNH	Beaumont Leys	78.0	72.4	149.5	206.9	9.6	11.5	15.3	9.6%	High	126.4	149.4	28%	25%
00FNNJ	Belgrave	81.2	76.4	152.6	148.7	8.4	13.0	3.6	10.9%		99.9	125.8	20%	18%
00FNNK	Braunstone Park and Rowley Fields	77.3	72.6	150.2	249.8	8.6	14.6	13.4	11.9%	High	136.3	160.4	35%	23%
00FNNL	Castle	78.6	72.9	167.9	171.6	11.7	20.2	8.6	11.0%	High	102.4	171.3	18%	18%
00FNNM	Charnwood	80.0	74.6	129.4	179.6	4.0	11.8	9.2	11.2%		101.6	149.0	30%	22%
00FNNN	Coleman	79.4	75.7	110.5	122.0	5.7	9.5	13.3	7.4%		104.2	138.3	28%	16%
00FNNP	Evington	81.8	77.4	92.4	157.6	10.5	18.6	8.3	13.9%		113.8	117.5	16%	15%
00FNNQ	Eyres Monsell	78.9	73.5	137.1	244.0	3.7	10.9	3.6	11.3%	High	133.5	155.2	43%	32%
00FNNR	Fosse	79.9	74.5	141.8	246.6	10.9	16.8	1.2	13.5%	High	113.3	114.1	29%	16%
00FNNS	Freemen	80.8	75.5	122.1	220.5	6.5	13.7	3.7	10.3%	High	133.9	153.4	36%	20%
00FNNT	Humberstone and Hamilton	81.1	76.3	132.0	179.6	5.2	5.2	18.2	7.5%		129.6	130.6	32%	24%
00FNNU	Knighton	80.5	78.0	99.2	152.1	6.5	6.4	6.4	8.8%	Low	114.3	100.3	9%	11%
00FNNV	Latimer	82.3	76.3	132.8	100.5	9.6	14.4	6.7	10.2%	Low	95.4	110.6	12%	13%
00FNNX	New Parks	77.9	71.8	152.6	270.8	4.3	13.9	5.4	9.8%	High	131.2	163.1	38%	32%
00FNNY	Rushey Mead	81.0	78.0	101.1	166.3	1.7	5.0	6.7	7.2%	Low	110.3	109.3	25%	15%
00FNNZ	Spinney Hills	81.9	79.2	110.3	150.8	3.4	5.1	25.3	7.7%	Low	92.8	126.8	18%	25%
00FNPA	Stoneygate	85.1	76.7	154.2	119.4	2.0	10.1	20.2	7.5%		95.6	122.2	11%	13%
00FNPB	Thurncourt	80.1	74.9	133.1	181.0	9.4	9.4	1.0	7.0%		113.5	130.7	33%	18%
00FNPC	Westcotes	77.3	78.9	94.7	134.3	6.7	6.7	0.0	10.4%	High	88.5	120.5	36%	8%
00FNPD	Western Park	80.1	78.5	92.1	165.9	2.7	10.7	8.0	7.7%		97.8	105.7	20%	12%
00FN	Leicester City	79.9	75.5	126.7	178.6	7.2	12.2	7.6	10.0%	High	112.0	132.3	26%	19%
LLR	Leicester, Leicestershire & Rutland			91.7	160.8	5.7	7.6	5.1	6.7%	Low	105.2	76.1	-	-
ENG	England	82.0	77.9	89.2	173.9	4.8	7.8	6.1	7.6%	41.2			-	-

Significantly worse than the England average

Significantly better than the England average

Significantly worse than the Leicester average

Significantly better than the Leicester average

Access to services (Hospital Admissions): Directly age-standardised hospital admission rates per 100,000 population

Health Facts 7 - Disease notifications 2009

Source: East Midlands South Health Protection Unit

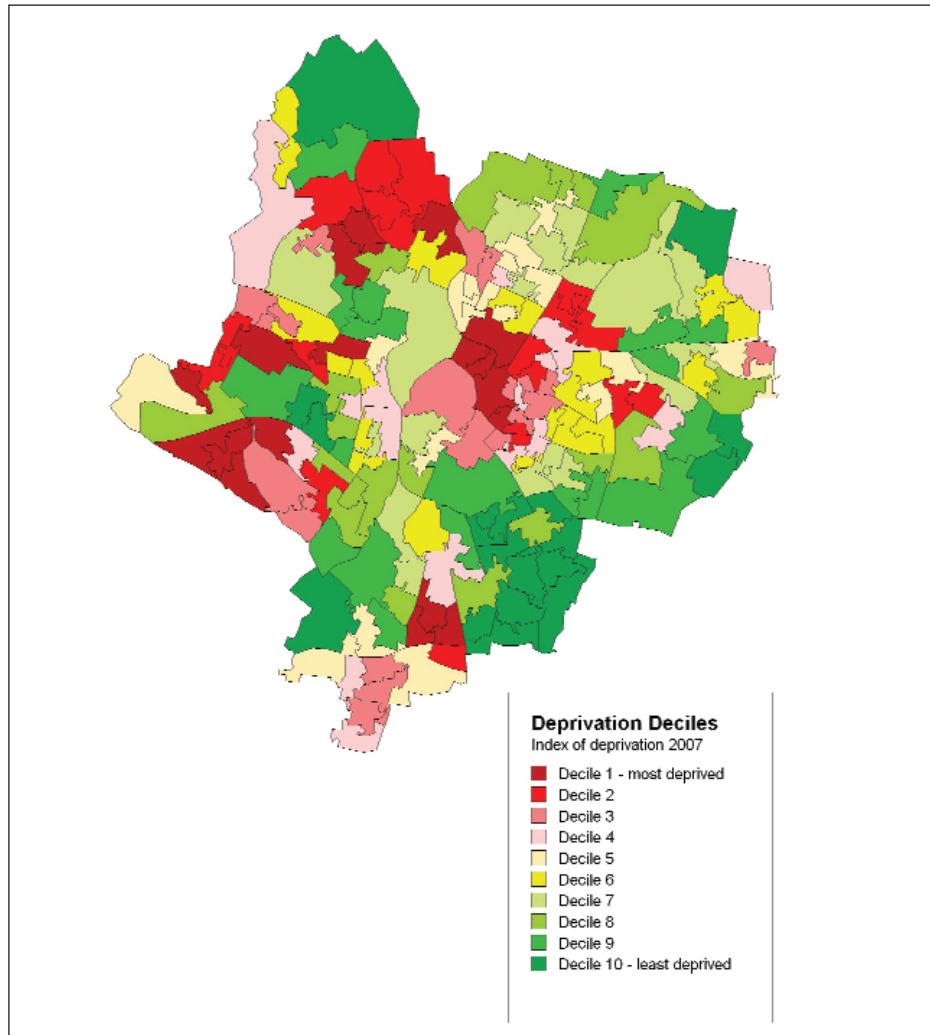
Disease notifications	Leicester 2009		Leicestershire County & Rutland 2009		Leicestershire, Northamptonshire & Rutland, 2009	
	Number	Rate per 100,000	Number	Rate per 100,000	Number	Rate per 100,000
Campylobacter	201	68.2	628	91.7	1584	95.1
Cryptosporidium	31	10.5	90	13.1	188	11.3
E.Coli O157	3	1.0	18	2.6	28	1.7
Food poisoning	16	5.4	26	3.8	57	3.4
Gastroenteritis	3	1.0	1	0.1	4	0.2
Giardia	35	11.9	84	12.3	129	7.7
Hepatitis A	2	0.1	2	0.3	9	0.5
Hepatitis B	53	18.0	26	3.8	115	6.9
Hepatitis C	33	1.1	57	8.3	149	9.0
Hepatitis E	2	0.7	0	0.0	3	0.2
Legionella	1	0.3	3	0.4	7	0.4
Listeria	2	0.7	1	0.1	6	0.4
Malaria	5	1.7	3	0.4	10	0.6
Measles	23	7.8	49	7.2	107	6.4
Meningococcal disease	13	4.4	23	3.4	53	3.2
Mumps	253	85.9	352	51.4	809	48.6
Norovirus	38	12.9	81	11.8	145	8.7
Para-typhoid	5	1.7	1	0.1	6	0.4
Pertussis	5	1.7	50	7.3	57	3.4
Rotavirus	11	3.7	13	1.9	109	6.5
Rubella	7	2.4	26	3.8	50	3.0
Salmonella	38	12.9	68	9.9	225	13.5
Scarlet Fever	16	5.4	35	5.1	109	6.5
Shigella	2	0.7	9	1.3	22	1.3
Tuberculosis	257	87.2	60	8.8	389	23.4
Typhoid	7	2.4	0	0.0	7	0.4

Rates calculated using ONS mid-2008 population estimates

8. Deprivation Maps

Figure 27: Deciles of Deprivation in Leicester

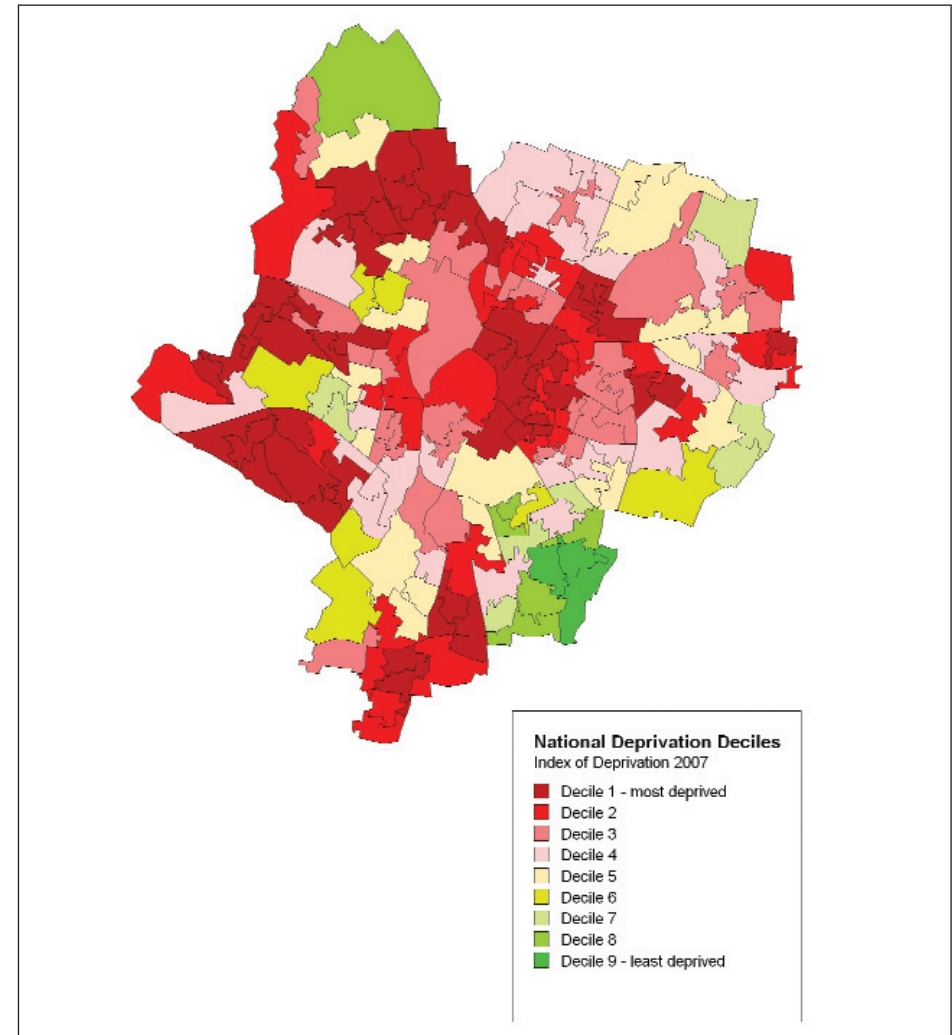
Source: Index of Deprivation, 2007



This shows differing deprivation within Leicester.

Figure 28: National Deciles of Deprivation

Source: Index of Deprivation, 2007



This shows Leicester's deprivation compared to England.

9. Glossary

Breast screening uptake: Percentage of eligible women aged 53-70 screened within the last 3 years

Cervical screening uptake: Percentage of eligible women aged 25-64 with an adequate test in the last 5 years

Directly age-standardised rate: Measure which allows direct comparison between populations with different age and gender structures. The crude rates in one or more populations are applied to a standard population to derive rates per 100,00 persons per year

Excessive drinking: Estimates of adults consuming more than double the recommended daily units on their heaviest drinking day during the week (8+ units for men, 6+ units for women)

Fruit & Vegetable consumption: Estimate of adults consuming 5+ portions of fruit and vegetables in a day

Index of deprivation: Measure of deprivation at a small area level. Indicators such as income, employment, health and disability, education skills and training, barriers to housing and services, crime and living environment are combined to form a single score. The lower the mean score, the more deprived the area

Infant mortality: Babies who die within the first 12 months of life. Where a rate, per 1,000 live births

International classification of diseases (ICD 10): World Health Organisation's internationally accepted classification of death and disease. (revision 10 currently in use)

Life Expectancy: Measure of mortality at every age that allows comparisons between areas and time. Life expectancy in an area can be interpreted as the number of years a baby born in a particular period could be expected to live, if it experienced the mortality rates in that time period and area throughout its life

Live births: Number of live births for all maternal ages 11+ years

Local Area Agreement (LAA): A three year agreement that sets out the priorities agreed between Central Government, Local Strategic Partnerships (LSPs) and other key partners for a local area. The primary objective of an LAA is to

deliver better outcomes for local people through four broad areas: children and young people; safer and stronger communities, healthier communities and older people; and economic development and enterprise

Low birth weight: Babies with a birth weight under 2500g

Obesity prevalence: Estimate of adults with a body Mass Index greater than 30

Perinatal mortality: Babies who are stillborn or who die in the first week of life. Where a rate, per 1,000 total live and still births

Quintile: The proportion of the distribution containing one fifth of the total sample. For ID2007, quintile 1 as the most deprived contains the lowest 20% of the national rankings

Resident population: Count of the population living within the geographical area of the PCT. An individual may reside in a rural area, but be registered with a City GP and would therefore be counted in the registered population but not the resident population

Screening: Identification among apparently healthy individuals, who are sufficiently at risk from a specific disorder, to benefit from a diagnostic test or procedure

Smoking prevalence: Estimate of adults currently smoking

Standardised mortality ratio (indirect): Ratio of the number of deaths in a population compared with the national, standardised to adjust for differences in age and sex of the local population. A Score greater than 100 indicates an increased probability and a score below 100 indicates a reduced probability

Standardised registration ratio (SRR) for cancer: Ratio of cancers registered in a population compared with the national population, standardised to adjust for differences in age and sex of the local population. A score greater than 100 indicates an increased probability and a score below 100 indicates a reduced probability

Still birth rate: Number of still births per 1,000 total births

Super output area (SOA): Geographical areas based on size, social homogeneity and population and designed for reporting small area statistics. There are 3 levels of super output area; lower, middle and upper. The lower super output area (used for reporting Index of Deprivation 2004) has a population of 1,000-1,500)

Survival rate: Ratio of the survival rate actually observed among the cancer patients and the survival that would be expected if they had only had the same overall mortality rates as the general population

Survival rate (1 year/ 5 years): Relative survival rate observed at one and five years after diagnosis, compared with general population

Trajectory: Predicted level of activity based on historical trends and planned actions to influence these. Trajectory may include a target measure

Under 18 conception rate: Number of conceptions in under 18 year olds per 1,000 females aged 15-17

Years of life lost: Number of potential years of life lost in a population as a result of premature death (under 75 years). Where standardised rate, per 10,000 European standard population



Leicester City



To find out more about the work of the Directorate of Public Health and Health Improvement for NHS Leicester City contact:
Director of Public Health and Health Improvement
3rd Floor, St Johns House
30 East Street
Leicester LE1 6NB
Tel: Leicester (0116) 295 1400
Fax: Leicester (0116) 295 1111

Additional information and an electronic version of this report are available on our website at www.phleicester.org.uk

If you would like this document in a different format, such as larger print, Braille or on audio tape, please contact Jane Whitehouse on Leicester 0116 295 1453 / 0116 252 6095 or jane.whitehouse@leicester.nhs.uk

For more information on the contents of this document, please telephone Leicester (0116) 295 4743

આ પત્રિકામાં આવેલ મુદ્દાઓની વધુ માહિતી માટે, મહેરબાની કરીને લેસ્ટર (0116) 295 4743 ઉપર ટેલિફોન કરો.

इस दस्तावेज़ के विषयों सम्बन्धी जानकारी प्राप्त करने के लिए कृपया लेस्टर (0116) 295 4743 पर टेलीफोन कीजिए ।

ਇਸ ਦਸਤਾਵੇਜ਼ ਵਿਚ ਸ਼ਾਮਲ ਵਿਸ਼ਿਆਂ ਬਾਰੇ ਜਾਣਕਾਰੀ ਲਈ, ਕ੍ਰਿਪਾ ਕਰਕੇ ਲੈਸਟਰ (0116) 295 4743 ਤੇ ਟੇਲੀਫੋਨ ਕਰੋ ।

Si aad warar faahfaahsan oo dokumentigan ku saabsan u heshid fadlan nagalasoo xiriir telefoonkan Leicester (0116) 295 4743.

এই ডকুমেন্ট-এর (প্রমাণপত্র) বিষয় সম্পর্কে তথ্যের জন্য, অনুগ্রহ করে লেস্টার (0116) 295 4743 নাম্বারে টেলিফোন করুন।

اس دستاویز میں جو کچھ ہے اس کی معلومات کے لئے برائے کرم (0116) 295 4743 پر ٹیلیفون کریں۔