Improving Health in Leicester
Annual Report of the Director of Public Health and Health Improvement 2008/09
# Contents

**Introduction**  
2

**Demographic Profile of Leicester**  
4

**Measuring and Addressing Health Inequities (Health Equity Audit)**  
6

**Mental Health in Leicester**  
12
  - Mental Health Promotion  
  14
  - Delivering Race Equality in Mental Health  
  17
  - Perinatal Maternal Mental Health  
  20
  - Child and Adolescent Mental Health  
  24
  - The Mental Health of Working Age Adults  
  28
  - The Mental Health of Older People  
  32
  - Suicide  
  35
  - The Mental Health of Offenders  
  38
  - Domestic Violence and Mental Health  
  40
  - Dual Diagnosis  
  44

**Alcohol**  
46

**Oral Health**  
50

**Health Protection**  
53

**Health Facts**  
55

**Glossary**  
64
Introduction

I am pleased to introduce this report on the state of health of the population of Leicester. It is my first Annual Report following my appointment as the Joint Director of Public Health and Health Improvement for both NHS Leicester City and Leicester City Council. As in previous reports a number of topics are considered in the main body of the report and the Health Facts section at the back of the report again provides a range of health related information, some of it at ward level, continuing the series established in the 2005 Annual Report.

Health Challenge

As can be seen from the demographic profile, Leicester is a city with a diverse population, more younger people and fewer people aged over 65, than is to be found in England as a whole. It is a city also that faces considerable health challenges. It ranks as the 20th most deprived of 354 Local Authority districts and, in Leicester as a whole, both men and women are likely to have a significantly shorter lifespan, by some 2 years, when compared to the national average (see figures 1 & 2). This, of course, masks differences, particularly in ethnicity and socio-economic status and health experience across the city, which can be identified in people living in different geographical areas and also in disadvantaged population groups. As is shown in this report the life expectancy gap with England is greatest in the most deprived 5th of the Leicester population, where the difference in life expectancy is 5.3 years for men and 3.5 years for women.

Figure 1. Male Life Expectancy for Leicester City and England, 1997 - 2007
Source: National Centre for Health Outcomes Development, 2007

Health Inequalities

Reducing such health inequalities remains the key health challenge for the city so that both the life expectancy gap and the life expectancy variation within Leicester is reduced. The major causes of death at all ages (see figure 3) in the city remains circulatory disease – coronary heart disease and strokes (36%), cancer (24%) and respiratory disease (16%).

Figure 3. Main Causes of Death in All Persons, All Ages (2005-2007)
Source: ONS Public Health Mortality File, 2007
The major causes of premature mortality, that is death under the age of 75, are shown in figure 4 and these mirror the causes of death at all ages, although there are differences by gender. The main causes of premature death in men are circulatory disease (35%) followed by cancer (28%) and for women cancer (37%) followed by circulatory disease (27%). The causes of death however that make the major contribution to the life expectancy gap between Leicester and England have been shown to be circulatory disease in men (36%) and women (35%), while deaths from cancer makes up only 6% of the life expectancy lost in men and 4% in women. While reducing deaths from cardiovascular causes is a clear priority for the city, maintaining effort on reducing deaths from cancer and other avoidable causes of premature death is essential. There is a shared prevention agenda for both Cardiovascular Disease (CVD) and Cancer – reducing smoking, moderation in alcohol consumption, increasing physical activity, improving diet and maintaining a healthy 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.

Figure 4. Main Causes of Death in All Persons, Under 75 (2005-2007)
Source: ONS Public Health Mortality File, 2007

Priorities for Health
As in previous years all issues considered in this report are important and need to be acted upon but the need for prioritisation is clear. Priorities for health improvement and reducing health inequalities have been identified in previous DPH Annual Reports1, the Joint Strategic Needs Assessment 2008/092, the NHS Leicester City Commissioning and Investment Strategy 2008 – 2013, and reflected in the Local Area Agreement 2008-20113. This unity of purpose around improving Leicester as a place to live finds its fullest expression in ‘One Leicester’, the city’s Sustainable Communities Strategy, agreed and published in 20084.

This Report
This Annual Report has a particular focus on mental health, with sections on associated issues of domestic violence and alcohol harm. These are areas that have received less attention in previous DPH Annual Reports and it is intended that their inclusion in this report will be helpful to the development of services and responses to the issues they raise. There is also a section on Oral Health which follows a recent assessment of Oral Health needs. Communicable disease continues to be an important cause of ill-health within Leicester and the Health Protection Agency again contribute an overview of the issues for the city.

Acknowledgements
Finally, I would like to acknowledge the contributions made to this report by many people. All direct contributors are acknowledged in different sections of the report and the range of these reflects the partnerships involved within the city. However, I would particularly want to acknowledge the contributions of Mark Wheatley for his work on the mental health sections and Rod Moore, Helen Reeve, Hanna Blackledge and Nia Reeves for their work in pulling together and checking the data presented in this report. Sandie Nicholson has again played a key role in managing the production of this report.

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

References
1 Director of Public Health Annual Reports 2005, 2006 and 2007
   Available at: http://www.phleicester.org.uk/annualreport.htm
2 Joint Strategic Needs Assessment 2008/09
   Available at: http://www.oneleicester.com/leicester-partnership/jsna
3 Local Area Agreement 2008-2011
   Available at: http://www.oneleicester.com/leicester-partnership/leicesters-local-area-agreement
   Leicester: Leicester Partnership
   Available at: http://www.oneleicester.com/one-leicester-vision
Demographic Profile of Leicester

Population Structure
Leicester has an estimated population of 292,600\textsuperscript{1} with a larger proportion of younger people (aged 15-34) than England as a whole and a slightly smaller proportion aged 65 and over (see Appendix 1 - Health Facts 1).

The population structure and predictions for the future all have implications for planning services to meet health needs. Overall, Leicester's population has been increasing annually and is predicted to continue to rise, reaching around 356,500 in 2031\textsuperscript{2}. An increase is expected across all ages, with larger increases in the younger population and smaller increases in people aged over 75 years. Nationally, fertility rates have risen by 4.1\% (1997-2007), whilst in Leicester births have soared by 15.2\% (1997-2007)\textsuperscript{3}.

Leicester has a very diverse population. In the 2001 Census, around 36\% of the population classified themselves as coming from a Black or Minority Ethnic (BME) background. The largest ethnic minority community is the South Asian community, which is predominantly of Indian origin and the majority of Leicester’s South Asian population are of Hindu faith. Since the 2001 Census, there has been further migration into the city, including people of Somali origin (2002-4), people from Poland and other countries joining the European Union since 2005 and a number of refugees and asylum seekers.

Leicester has some of the most disadvantaged areas in the whole of England, as measured by the \textit{Index of Deprivation 2007} and ranks as the 20th most deprived of 354 local authority districts.

There is a strong link between deprivation and ill-health, explored in more detail in Chapter 1 of the report. Average life expectancy is a good proxy indicator of the population’s general health and is calculated from current data on death rates. In Leicester (Figures 1 & 2, p. 2), both men and women are likely on average, to have a significantly shorter life expectancy (by 2 years) when compared to the national average. In addition, there are inequalities in life expectancy between the affluent and deprived populations of Leicester. While the most affluent fifth of Leicester’s population has a life expectancy similar to the national average, the most disadvantaged fifth of Leicester’s population has a much lower life expectancy than the national average (of 5.3 and 3.5 years for men and women, respectively).
Lead Author
Helen Reeve
Senior Public Health Analyst
Tel: 0116 295 1515
Email: helen.reeve@leicestercity.nhs.uk

Contributor
Dr Hanna Blackledge
Public Health Specialist (Clinical Effectiveness and Commissioning)
Tel: 0116 295 1524
E-mail: hanna.blackledge@leicestercity.nhs.uk

References:
3 Clinical and Health Outcome Knowledge Base, 1999 and 2008. *Compendium of Clinical and Health Indicators*. Available at: www.nchd.nhs.uk
Description of the Issue: Health Inequality and Equity of Health Care

People who experience disadvantage in some way, be it through their ethnicity, age, gender, poverty, social exclusion or a combination of these and other factors, are much more likely to fall ill and even die earlier than their more privileged counterparts. The term health inequality refers to such unacceptable and avoidable differences in health outcome between groups. In addition, access to healthcare is often hampered by the very same factors that affect health, an observation fittingly described over 30 years ago as the ‘inverse care law’ (see Box 1). The term health inequity is used to express the level of unfairness in the distribution of many aspects of health or health-related services.

Socio-economic differentials in health and healthcare delivery have long been acknowledged in many countries, affecting even centrally funded healthcare systems such as the NHS which is based on the principle of delivery at the point of need.

Box 1: The Inverse Care Law

“The availability of good healthcare tends to vary inversely with the need for it in the population served.”
Tudor Hart

Our knowledge of health inequality is by no means new. The effect of poor working and living conditions on rates of illness and mortality was first described in England in the early 1830s. Since then, wide disparities were documented in many countries and in all types of social and health systems. Throughout the 19th and 20th centuries mortality rates were significantly higher in the North and West, compared to South and East UK, as well as in urban, compared to rural areas. By 1946, this evidence of a growing health divide was strong enough to make equality a central objective for the new National Health Service. However, in the following decades it became clear that health inequalities in Britain were growing rather than diminishing\(^1\), demanding more targeted action by the health service in partnership with local authorities and other agencies\(^2\).

Explanations of Health Inequalities

Why are health inequities so universal and resistant to change despite the overall improvement in health in many countries, including the UK? Many explanations have been proposed, most of them widespread and not mutually exclusive. They include material causes, such as poor diet, housing, pollution levels or adverse working conditions; psycho-social factors, such as lack of social status, community support or low level of control over one’s life; and often complex cultural or political roots, emerging from the distribution of power in society. In some cases, genetic causes are equally important. Any or all of these factors may affect a person’s health in a cumulative way throughout their life. It is now widely recognised that exposures in early childhood or even before birth can have a particularly strong impact on later health\(^3\). It seems inevitable that tackling inequalities is complex – both at a macro level, through political and redistributive initiatives and at micro level through effective community development and individual modification of health-related behaviour.

Addressing Inequalities in Health: National and Local Priorities

The last decade saw some significant political initiatives involving both NHS and social care in the UK. In 2002 tackling inequalities became a statutory public health objective for all primary care trusts with a national target of a 10% reduction in infant mortality and a 10% increase in life expectancy by 2010.\(^4\)

Action on health inequality includes national and local initiatives (Table 1) and is based on our understanding of the root causes.

Table 1. Examples of Policy Initiatives to Reduce Health Inequalities

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Action Zone (HAZ)</td>
<td>There is distinct geography to health inequalities</td>
</tr>
<tr>
<td>Sure Start and the Child Poverty Strategy</td>
<td>Inequalities affecting children have a powerful effect on their future health as adults</td>
</tr>
<tr>
<td>Public Service Agreement (PSA) targets</td>
<td>Health inequalities have their roots in wider social and lifestyle determinants of health</td>
</tr>
<tr>
<td>Child and Working Tax Credits</td>
<td>There is a strong link between economic and health inequalities</td>
</tr>
</tbody>
</table>
At the same time, the concept of health equity audit emerged, as a process of identifying how fairly services and other resources are distributed in relation to the health needs of different population groups, with the intention of initiating priority actions to provide services more closely aligned with identified need. Thus health equity audit is a formal process of identifying and reducing inequities in health through appropriate intervention.

In Leicester, a comprehensive annual assessment of health equity is carried out using a common framework of outcomes across a variety of individual and population dimensions (Figure 7) for the following health topics:

- Chronic diseases, including cardiovascular diseases, diabetes, asthma and chronic obstructive airway disease (COPD), and cancer
- Mental health
- Health of the elderly
- Maternal and child health
- Access to healthcare

Figure 7. A Framework for Health Equity Audit Assessment in Leicester
Source: Health Equity Audit, 2007

This process gives a comprehensive cross-sectional snapshot of health inequities and allows for an annual re-evaluation of progress in tackling inequalities locally.

Issues Identified
Socio-economic Deprivation

As the 20th most deprived local authority in the country, Leicester is a spearhead area, targeted for a reduction in mortality and ill-health of the population. Nearly half of Leicester's population (48%) can be described as highly disadvantaged and there are pockets of very high deprivation (Figure 8) with significantly more violent crime, poor quality housing, higher proportion of children living in poverty and lower educational attainment levels.

Figure 8 shows the distribution of socio-economic disadvantage in the city, using small geographic areas, known as Super Output Areas (SOAs), ranked into quintiles (fifths) according to the value of their Index of Deprivation. This SOA classification allows us to compare health care provision and health outcome in the resident population in order to evaluate the level of inequity locally.

Figure 8. Deprivation in Leicester
Source: Department for Communities and Local Government, 2007

This process gives a comprehensive cross-sectional snapshot of health inequities and allows for an annual re-evaluation of progress in tackling inequalities locally.
Life Expectancy - The Big Picture of Inequality
Life expectancy is the average number of years a newborn baby is expected to live if current death rates continue and is a good proxy indicator of the current health of the population.

Gaps in life expectancy between different groups can provide the most startling evidence of health inequalities, whether at a geographical level, or between groups classified by their socio-economic status.

Figure 9. Life Expectancy by Geographical Area (ward) in Leicester in 2007 (Average for Men and Women)
Source: Office for National Statistics, 2007

In the most disadvantaged wards of Leicester the average expected survival can be more than 7 years shorter, when compared to the most affluent wards (Figure 9). Women can expect to live longer than men, regardless of their level of deprivation (Figure 10) and women in the most disadvantaged groups have a similar life expectancy to the most affluent men.

Figure 10. Deprivation Gap in Life Expectancy, 2006
Source: Leicester Health Equity Audit, 2007

Health Inequities in Leicester
In addition to unequal levels of mortality, the audit shows persisting inequalities in morbidity and access to care for chronic diseases, such as diabetes and coronary heart disease (CHD). There are also significant gaps in mental ill-health and in the provision of care for people with mental health problems.

Chronic Diseases
The rates of acute diabetes complications, for example, are three times as high in the most disadvantaged fifth of the population when compared to the most affluent fifth (Figure 10). A number of other diabetes-related indicators reveal marked inequalities in diabetes care, including high emergency hospital admission rates. The results of the audit allow us to estimate that each year at least 500 emergency admissions for diabetes can be attributed to deprivation. Together with a significant gap in diabetes mortality, this picture indicates a marked inequity in the burden of disease combined with an inadequate focus on preventive treatment and care.

Poor outcomes are significantly higher among men with rates up to twice as high when compared with women. Also, many of the city practices have outcomes worse than the local or the national average for their populations.
Perhaps less striking, but equally significant, are inequalities in cardiovascular disease, with a particular gap in premature mortality, incidence of acute coronary events (myocardial and unstable angina) (Figure 12) and heart failure in the more deprived populations. However, the impact of deprivation on cancer rates is much lower in relative terms, when compared with cardiovascular disease or diabetes.

Figure 12. Inequalities in Acute Heart Disease in Leicester, 2005 - 2007
Source: Leicester Health Equity Audit, 2007

Ethnic Inequalities in Health
As introduced in the demographic profile, a substantial proportion of Leicester’s population is from a Black or Minority Ethnic (BME) background (36% of the total population in 2001), with South Asians being the largest group (Indian: 26%, Pakistani and Bangladeshi: 1% each), followed by Black minority groups (3% of the total) and mixed and other BME (5% of the total).

Ethnic differentials in cardiovascular disease and its determinants have been described in the UK in the past⁸ and Leicester’s ethnic minority populations have similarly increased risks of emergency hospitalisation for diabetes, heart failure and acute coronary events (Table 2). However, despite higher morbidity, survival following an admission with a heart attack or stroke is no worse for ethnic minority patients than white patients (the relative risks of death following such events for Black or Minority Ethnic (BME) populations are 1 and 0.94 respectively).
Heart disease is particularly prevalent in the local South Asian population. However, the rate of surgery (coronary revascularisation) is also higher, demonstrating equity of care. South Asian patients tend to present with more acute forms of coronary heart disease (CHD) and at an earlier age, in which management by a coronary procedure (whether percutaneous intervention or coronary bypass) is more appropriate, so we might expect to see the higher revascularisation rates among the South Asian population.

Hip fractures and falls appear to be significantly lower in BME populations, matched by lower rates of hip replacement (Table 2) in these groups.

Table 2. Significant Differentials in Health Outcome and Access to Elective Care for BME Populations in Leicester, 2007

<table>
<thead>
<tr>
<th>Event</th>
<th>Rate Ratio*</th>
<th>Number**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency admissions for diabetes</td>
<td>2.76</td>
<td>1600</td>
</tr>
<tr>
<td>Admission rate for heart failure</td>
<td>2.08</td>
<td>390</td>
</tr>
<tr>
<td>Acute complications of diabetes</td>
<td>1.89</td>
<td>60</td>
</tr>
<tr>
<td>Admissions for CHD</td>
<td>1.75</td>
<td>900</td>
</tr>
<tr>
<td>Coronary Events</td>
<td>1.70</td>
<td>500</td>
</tr>
<tr>
<td>Incidence of hospitalised CHD</td>
<td>1.64</td>
<td>300</td>
</tr>
<tr>
<td>Hip replacement</td>
<td>0.22</td>
<td>-30</td>
</tr>
<tr>
<td>Revascularisation</td>
<td>1.87</td>
<td>100</td>
</tr>
<tr>
<td>Knee replacement</td>
<td>2.41</td>
<td>50</td>
</tr>
<tr>
<td>Cataract operation</td>
<td>3.05</td>
<td>360</td>
</tr>
</tbody>
</table>

*All BME groups, compared to white population

** number of excess health events across all BME population when compared with white populations per year.

Source: Leicester Health Equity Audit, 2007

Although in the South Asian population, the rates of severe mental illness with an admission to hospital are lower than the Leicester average (Figure 14), they are almost twice as high in the black community.

Despite some advances in ethnicity coding of admission records in acute care, where its completeness exceeds 85%, equivalent up to date population figures and referral data from general practice are not available routinely. As a result, robust monitoring of ethnic equality in health is currently difficult, particularly for groups in transition or those harder to reach.

Figure 14. Prevalence of Severe Mental Illness by Ethnic Group, 2008

Source: Leicester Health Equity Audit, 2007

Commissioning equitable healthcare

The world class commissioning (WCC) competencies require commissioners to

a) manage knowledge and assess needs and

b) prioritise investment according to local need.

This includes investment in healthcare as well health promoting public health interventions at population level.

Practice-based commissioning (PBC) is an important tool to help address health inequalities by providing crucial link to local communities. Both the levels of ill-health and prevalence its determinants are taken into account in commissioning decisions for practice populations locally.

Recommendations

It is recommended that:

- Health inequities within Leicester should be addressed more explicitly by local policies and when implementing national priorities particularly for cardiovascular conditions and mental health

- Methods for monitoring inequalities affecting hard-to-reach groups and new arrivals should be developed
Local NHS commissioning, particularly practice-based commissioning, should have clearly specified objectives to reduce documented inequities in healthcare delivery. The evidence base of inequalities among harder to reach communities should be strengthened. There is a need for robust ethnicity data collection by GP practices.

**Lead Author**
Dr Hanna Blackledge, Public Health Specialist (Clinical Effectiveness and Commissioning)
Tel: 0116 295 1524
E-mail: hanna.blackledge@leicestercity.nhs.uk

**References**
Mental Health in Leicester

Introduction
The Annual Report of the Director of Public Health and Health Improvement provides a timely opportunity to reflect on mental health need in Leicester. The National Service Framework for Mental Health (NSF for Mental Health) will expire in 2009 and decisions about the direction of mental health policies and services need to be made. Assembling the current information on the risk factors linked to poor mental health, the mental health status of the local population and the provision of interventions of care for those with mental ill-health, will enable informed decision-making concerning those policies locally.

Mental illness not only has an emotional, mental and social impact on individuals, families and friends, it has an impact on wider society. The Layard report suggests that the output lost from sickness resulting from depression, anxiety and stress in Britain is around £4 billion per year. People with mental health problems have the lowest employment rate of any disabled group and mental illness is more prevalent in the most deprived areas. Perinatal maternal mental illness may be harmful for mothers, children and their families; the mental well-being of children is likely to have an impact on their present and future health. For older people, a range of mental health issues from depression to dementia are projected to increase. There is a need to develop appropriate mental healthcare for people from Black or Minority Ethnic (BME) communities, as there is over-representation of people from Black ethnic backgrounds in the take-up of services and under-representation of people from South Asian backgrounds. There is also a need to meet the challenges presented by new arrivals to Leicester, some of whom have experienced trauma and abuse prior to their arrival. In addition, prisoners and offenders have higher levels of mental illness than the general population.

It is imperative to continue to promote mental health in order to strengthen individuals and communities and reduce the structural barriers to mental well-being. It is also incumbent upon the health and social care community to provide better access to treatment for those with mental health problems. One initiative to facilitate better mental health is the national Improving Access to Psychological Therapies Programme. As Figure 15 shows part of this approach is to design a stepped care system of delivering and evaluating mental healthcare so that the most effective treatment is delivered to the patient. In addition to the promotion of mental health for the community as a whole, this will require the provision of low intensity treatments with more intensive therapy for those who do not recover.

Figure 15: Stepped Care Approach to the Management of Depression as Outlined in NICE Guidance
Source: Depression (amended): management of depression in primary and secondary care, 2007

Another key innovation for improving mental healthcare is the personalisation agenda, set out in Putting People First. By using mechanisms such as direct payments and individual budgets it is hoped that care will be radically transformed, with people deciding the form of their own care, who delivers it and how to spend the funds allocated to meet their needs.

The information presented in the following sections will be of interest to service commissioners, providers, users and carers. It identifies priorities by investigating...
current needs and recognising future trends in mental health and providing information to assist stakeholders in healthcare to meet the challenges raised by Our NHS, Our Future: Next Stage Review. We know that social and economic factors influence the duration of mental illness and the length of time it takes to recover and these issues need to be addressed. Each section will make recommendations for action by NHS Leicester City (NHSLC) and its partners.

The Future Vision Coalition, a collaboration of seven national mental health organisations, has produced the discussion paper A New Vision for Mental Health. This suggests that the aims of future mental health policy should be to:

- overcome persistent barriers to social inclusion that continue to affect those with experience of mental health problems
- improve the whole-life outcomes of those with experience of mental health problems
- improve the mental health of the whole-population

This vision of change concentrates on four areas, all of which are important to mental healthcare in Leicester. Firstly, there is a need to develop an integrated approach to mental healthcare which incorporates the social determinants of mental health. Secondly, it places importance on promoting good mental health and well-being. Thirdly, services should support the recovery of a good quality of life. Finally, systems of support should be built by the person who is the focus of care and their advocates.

By collaborating with partner organisations, this section of the Annual Report of the Director of Public Health 2008/09 covers all of those areas and has resulted in the core priorities shown in Box 2.

**Box 2: Priorities for the Delivery of Mental Health Care in Leicester**

- The stepped care approach to the delivery of mental health services should be developed to ensure that there is a clear care pathway and effective working between different professionals which always hold the patient at the centre of consideration
- Addressing the determinants of inequality and ill-health through mental health promotion, as set out by Standard 1 of the NSF for Mental Health, will benefit the mental health of the population. This work should continue to receive priority after the expiry of the NSF in 2009 and should be a priority of the health and social care community

- Work to develop indicators which reflect the importance of health and well-being to mental health should continue and should be adopted by NHSLC and partner organisations
- There should be increased support for the involvement of service users and carers in the planning, development and delivery of mental health services
- Developments in mental health care, such as Improving Access to Psychological Therapies are used to address the needs of people from BME backgrounds, ensuring that all patients have access to the appropriate level of care
- The implementation of NICE guidelines for the assessment of maternal mental health
- The implementation of the Joint Strategy for Promoting the Mental and Emotional Health of Children and Young People in Leicester, Leicestershire and Rutland
- Developing services which provide appropriate and accessible mental health care for older people according to the nature of their illness rather than their age
- Continued efforts to raise awareness about suicide and self-harm amongst the general public and professionals
- There should be improved care pathways for prisoners and offenders
- Care pathways should be developed to ensure that service users with mental health and substance abuse co-morbidity are able to access primary care from both general mental health and drug or alcohol services

**Lead Author**
Mark Wheatley
Public Health Specialist (Mental Health and Vulnerable Groups)
Tel: 0116 295 1583
Email: mark.wheatley@leicestercity.nhs.uk

**Reference**
Mental Health Promotion

Description of the Issue
Mental health is more than just an absence of mental illness. It influences how we think about ourselves and others. It affects our ability to learn and communicate, to form and sustain relationships and to interpret and cope with change and life events. How we think and feel also impacts on our physical health. Mental health promotion looks at how individuals, families, organisations and communities think and feel and the factors which influence this, on an individual and collective level. Mental health promotion is any action designed to enhance mental well-being and can be aimed at the general population or targeted at individuals at greater risk, vulnerable groups and those with mental health problems.

Promoting mental health carries significant social, economic and health benefits. These include preventing mental ill-health particularly depression, anxiety, self-harm including drug and alcohol dependence, suicide and improving the health and well-being of individuals with mental health problems. It has wider universal benefits including improved physical health, increased emotional resilience, increased social inclusion and participation and improved productivity. It supports action to challenge the stigma of mental illness and suicide.

National and Local Priorities
Standard 1 of the National Service Framework for Mental Health relates to mental health promotion and seeks “to promote mental health for all, working with individuals, organisations and communities”. This was reinforced in the 2004 White Paper on Choosing Health. Activity to tackle the risk factors for mental health sits with a range of agencies and partnerships. Other national and local priorities to improve employment, social inclusion, crime prevention, the environment, physical health, education, the environment and housing are capable of delivering mental health promotion. In order to structure this, the Health Education Authority (HEA) publication Mental Health Promotion: A Quality Framework1 sets out a framework through which these can be delivered.

Mental Health Promotion in Leicester: Epidemiology and Interventions
Locally the Leicester, Leicestershire and Rutland Mental Health Promotion Group is responsible for developing a strategy and developing and monitoring an action plan to deliver Standard 1. It reports to the Local Implementation Teams for Mental Health.

The HEA quality framework has three strands:

**Strengthening individuals** - or increasing emotional resilience through interventions designed to promote self-esteem, life and coping skills, for example, communicating, negotiating, relationship and parenting skills.

**Strengthening communities** - increasing social inclusion and participation, improving neighbourhood environments, developing health and social services, which support mental health, anti-bullying strategies at school, tackling violence and abuse of children and adults, workplace health, community safety, childcare and self-help networks.

**Reducing structural barriers to mental health** - through initiatives to reduce discrimination and inequalities and to promote access to education, meaningful employment, housing, services and support for those who are vulnerable.

The Leicester, Leicestershire and Rutland Mental Health Promotion Strategy is in the process of being reviewing in the light of national good practice guidance.
This guidance suggests the following headline themes for targeted mental health promotion activity and these are:

- Marketing Mental Health
- Equality and Inclusion
- Tackling Violence and Abuse
- Parents and Early Years
- Employment
- Workplace
- Communities
- Schools
- Later Life

A revised action plan is being drawn up to capture current and proposed work in these areas, for example, publicity campaigns, production of information, workshops and packs for employers.

**Issues Identified**

Mental health is a central part of our health and well-being and yet is dogged by stigma and prejudice. The *NSF for Mental Health* seeks to ensure that mental health promotion is recognised as an important activity in its own right, contributing significantly to the health of the general population and vulnerable groups. It reinforced the shift from an ill-health service to a health service. Mental health promotion at population level and for those in the mental health system, needs to be systematically addressed, prioritised and resourced.

In addition to focusing on the mental health of the general population and those at greater risk of mental ill-health the 2004 Social Exclusion Unit report on mental health and social exclusion recognised the need for a massive shift in the attitudes of the public and employers “to enable people to fulfil their aspirations and to significantly improve opportunities and outcomes for people with mental health problems.”

The other great challenge in mental health promotion is also the breadth of activity that is required. Mental health needs are met in a wide range of environments including:

- School
- Home and Relationships
- Work
- Community
Neighbourhood and Environment

Where we feel safe, included, valued and respected

This requires the initiation and maintenance of activity to improve mental well-being across a wide range of partnerships and agencies in the public, voluntary and commercial sector and with communities. Whilst some NHS Vital Signs indicators support mental health promotion, much of the work to improve mental health lies beyond the NHS. A significant proportion will relate to the broader public health agenda and fall within the wider remit of the Local Area Agreement (LAA). This requires cross-sectoral and multi-professional ownership as well as the engagement with communities. Measuring improvements in mental well-being in the population require a long term approach and robust indicators are still in development.

Recommendations

It is recommended that:

- The Leicester Partnership explicitly recognises the key role it has to play across all of the LAA in the promotion of mental health and well-being and develops shared indicators to measure progress
- The Local Implementation Team (LIT) for Mental Health endorses an approach that includes mental health promotion as an integral part of commissioning arrangements for all services
- There are effective links between the LIT, the Leicester Health and Wellbeing Partnership, the Mental Health Promotion Group and structures to deliver the Social Inclusion agenda
- NHSLC and partner organisations develop robust mental health in the workplace policies and review internal procedures to promote the employment and retention of individuals with mental health problems

Lead Author

Carole Devaney
Public Health Programme Manager
Tel: 0116 295 1514
Email: carole.devaney@leicestercity.nhs.uk

References

1  Health Education Authority, 1997. Mental Health Promotion: A Quality Framework. London: Health Education Authority

Improving Health in Leicester Mental Health Promotion
Delivering Race Equality in Mental Health

Description of the Issue
At the time of the 2001 Census 39% of the population of Leicester came from a Black or Minority Ethnic (BME) background. Ethnicity is an important issue in mental health because there are variations between ethnic groups in underlying morbidity, diagnosis and management. Equality in the provision of appropriate mental health services is obviously important and in addition, nationwide evidence suggests that people from BME backgrounds are particularly dissatisfied with the mental health services they receive. People from BME backgrounds are over-represented in compulsory detention under the 1983 Mental Health Act and are over-represented in incidents of violence, restraint and seclusion in psychiatric inpatient settings. People from BME backgrounds tend to be under-represented in the take-up of counselling and psychotherapy services and tend to be less involved in the planning and delivery of mental health services.

National and Local Priorities
Delivering Race Equality in Mental Health Care (DRE) is a national and local priority, driven by the National Institute for Mental Health in England (NIMHE) and aimed at achieving equality and tackling discrimination in mental health services in England. Many of the actions described in DRE have their roots in existing legislation and guidance such as the Race Relations (Amendment) Act 2000. The DRE programme brings together such requirements and guidance, sets them in a mental health context and adds the focused activity required to ensure rapid progress. The DRE programme is based on three ‘building blocks’:
- more appropriate and responsive services
- community engagement
- better information

The programme highlights 12 key actions, which should be achieved by 2010, including a reduction in the disproportionate rates of admission and compulsory detention of people from BME communities, less fear of mental healthcare, increased satisfaction with services, fewer incidents of violence and a more active role for communities and service users in the planning and provision of treatment.

Delivering Race Equality in Mental Health in Leicester: Epidemiology and Interventions
The Ethnic Minority Psychiatric Illness Rates in the Community (EMPIRIC) 2002 study gives prevalence of common mental problems among people aged 16-74 years from different backgrounds: White, Black Caribbean, Bangladeshi, Indian and Pakistani. It found prevalence rates of 12% - 14% for men from Indian, Pakistani, Bangladeshi or Black Caribbean backgrounds, were not significantly different from the rates for White men. However, significantly higher rates were found amongst Indian and Pakistani women (23.8% and 26% respectively). There was a lower rate for Black Caribbean and Bangladeshi women.

There were minor differences between the different ethnic groups on measures of social functioning, chronic strain and personality difficulties. These aspects correlated more with social class than with ethnicity for all BME groups. People from the Bangladeshi community reported slightly more difficulties with social functioning and chronic strain. Those from Pakistani, Bangladeshi and Black Caribbean communities were more likely to have poor physical health and significantly less likely to have approached their GP about a stress-related or emotional problem. Asian/Asian British groups provided more informal care within their homes than other ethnic groups. Although the Bangladeshi participants reported strong emotional and practical support from close relationships, those who had higher scores on measures of common mental health problems reported lower levels of social support. People from Black Caribbean backgrounds reported receiving less confiding, practical or emotional support.

The period since the 2001 census has seen the arrival of new communities to the city. Current estimates suggest that the Somali community in Leicester numbers 8,000-10,000, the Polish community between 3,000 and 5,000 and there are other substantial groups including people from Slovakia and Portugal. In the 2006 Count Me In Census of inpatients in Leicestershire Partnership Trust (LPT) institutions 3% of inpatients came from Polish, French or Portuguese backgrounds.

The mental health needs of people in new communities are likely to be complex. A study of Somali immigrants aged 18 and over in the Netherlands showed that over 36% of respondents reported moderate to major anxiety or depression and 31.5% post traumatic stress disorder (PTSD). A key source for information regarding the mental health and well-being of the Somali population is the project called MAAN Somali Mental Health operating in Sheffield and Liverpool (MAAN means mind in Somali). The project observed that most Somalis suffer the mild to moderate forms of mental health disorders such as depression, anxiety and PTSD. They noted that these

Leicester, Leicestershire and Rutland together comprise a Focus Implementer Site (FIS) for the DRE programme. In 2006, five mental health Community Development Workers were commissioned from Age Concern specifically to liaise with and improve mental healthcare for people from BME communities in Leicester.
are rarely recognised as mental ill-health although many patients visit their GPs repeatedly for physical health problems.

There are a few projects specifically commissioned to provide support to people from BME communities in Leicester, such as Foundation Housing, Akwaaba Ayeh, Savera Resource Centre and Adhar project. There is a need for more groups representing the Black Caribbean/Black British and new communities.

With regard to the statutory sector, people from Black Caribbean/Black British communities in the city are generally over-represented in many of the secondary and tertiary mental health services and people from South Asian communities under-represented. One way of showing the pattern of over representation of people from Black/African Communities is to refer to the Count Me Census data for 2007; this is shown in Table 3. This data covers four different groups: White, South Asian, Black African/British and other for Leicester, Leicestershire and Rutland and mirrors the findings from the Health Equity Audit reported in Figure 14. The inpatient rate for Black African/British groups is significantly higher than average, with this group forming 1.2% of the local population according to the 2001 Census, and 4.2% (95% CI 2.6, 6.5) of the inpatient population in Leicestershire Partnership Trust institutions on March 30th 2007.

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>Count Me In Census 2007 Observed</th>
<th>% Inpatients 2007 Count Me In Census</th>
<th>95% Confidence Interval</th>
<th>% Population of Leicester, Leicestershire and Rutland 2001 Census</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>356</td>
<td>82.2</td>
<td>78.3</td>
<td>85.5</td>
</tr>
<tr>
<td>South Asian</td>
<td>36</td>
<td>8.3</td>
<td>6.1</td>
<td>11.3</td>
</tr>
<tr>
<td>Black African</td>
<td>18</td>
<td>4.2</td>
<td>2.6</td>
<td>6.5</td>
</tr>
<tr>
<td>British</td>
<td></td>
<td></td>
<td></td>
<td>1.2</td>
</tr>
<tr>
<td>Other</td>
<td>23</td>
<td>5.3</td>
<td>3.6</td>
<td>7.8</td>
</tr>
<tr>
<td>Total</td>
<td>433</td>
<td></td>
<td></td>
<td>2.6</td>
</tr>
</tbody>
</table>

People from Asian/Asian British communities are under-represented in assessments and detentions under the 1983 Mental Health Act and less likely to be referred for assessment by a psychiatric inpatient facility or by the criminal justice system. People from Black communities are over-represented in social care assessments and reviews and mental health advocacy.

People from BME communities who were admitted to psychiatric wards were significantly less likely to have a diagnosis of personality disorder compared to people from white communities but were more likely to have a diagnosis of schizophrenia compared to white inpatients. People from Asian communities were significantly under-represented in use of the Common Mental Health Problems Service and the eating disorders service.

In 2006, 2 studies were commissioned to validate baseline assessments about race equality and mental health in Leicester, Leicestershire and Rutland. The evidence presented in the reports suggested that there was a lack of information and explanation to patients about mental health conditions and about medication and its side-effects; mental illness was stigmatised; services were dominated by a medical model of mental illness; there was a need for talking therapy and there were patient experiences of being misinterpreted and over-medicated on wards.

Similar issues were highlighted in a recent consultation of the Somali community’s views on mental health. These consultations showed a lack of awareness about the seriousness and frequency of mental health problems. People regarded the stigma associated with mental illness as a serious obstacle to seeking help. It also became clear from these consultations that most Somali families are particularly concerned about the mental health of children and young people, given the vulnerability and exposure of this group to group pressure, bullying and racism.

This work is augmented by the activities of the Community Development Project, facilitated by Age Concern. The mental health-focused Community Development Workers have been engaged in analysing the needs of the community and identifying the gaps in service, by establishing relationships in the community. They have organised well-being and relaxation programmes and facilitated different groups, such as the African Consortium.
**Issues Identified**
Leicester has a diverse and dynamic population. There are disparities amongst BME populations in the city in terms of access to mental health services. Studies have shown a general dissatisfaction among BME communities with such services, a requirement for a more balanced range of effective therapies and a need for improved access to services, including culturally appropriate psychotherapeutic treatments and more appropriate use of pharmacological interventions.

The mental health workforce and organisation needs to be capable of delivering appropriate and responsive services to BME communities. Although there are voluntary groups currently playing a role in mental healthcare there is a need to develop this sector, specifically with more support for black communities and new communities. There should also be a development of the role and function of such organisations beyond advocacy for BME communities and service users, so that they may be involved in the referral process, training professionals, developing mental health policy and planning the provision of services.

**Recommendations**
It is recommended that:

- Developments in mental health care, such as Improving Access to Psychological Therapies are used to address the needs of people in BME communities, and ensure that they have access to the appropriate level of care
- There should be more support for third sector organisations which represent BME communities, in particular those organisations which support people from Black/Black British ethnic backgrounds and new arrivals
- Third sector organisations should be supported to have a real impact on mental health by developing their capacity and capability to provide care and by including them on the referral pathway and involving them in mental health service planning
- There is better information concerning the mental health of people from BME backgrounds, including improved monitoring of ethnicity to show the use of different services and their effectiveness

**Lead Authors**
Kala Subbuswamy
Leicester City Council

Dr Jama Warsame
Specialist Registrar in Public Health Medicine

Mark Wheatley
Public Health Specialist (Mental Health and Vulnerable People)
Tel: 0116 295 1583
Email: mark.wheatley@leicestercity.nhs.uk
Perinatal Maternal Mental Health

Description of the Issue
Psychiatric disorder following childbirth is common and often serious. Many women are at increased risk of suffering with a mental illness following childbirth, and those women who have had mental ill-health in the past are at risk of a relapse or recurrence of their condition following childbirth. In addition to the impact on the woman herself, suffering with mental ill-health following childbirth is likely to have an adverse impact on her family and the future development of her child. Confidential enquiries into maternal and child health, which audit all maternal deaths over a three year period, show that severe mental illness is the second most common cause of maternal mortality. Yet many women who experience perinatal mental health problems do not receive the care that they require.

Mental ill-health is often prolonged by a delay in diagnosis or ineffective treatment. However, when care is delivered promptly the response to treatment can be effective. Successful treatment, which may be a combination of talking therapies and medication, is likely to require:

- the co-ordination of primary and secondary care services, social services and third sector organisations
- effective provision and use of information for women with an existing mental health disorder, those who are pregnant or planning a pregnancy
- healthcare professionals to be better in predicting and detecting mental health problems
- offering support to family members
- management of depression by utilising cognitive therapy and interpersonal therapy as well as anti-depressants

National and Local Priorities
As with most mental healthcare, the impetus for change was set by the National Service Framework for Mental Health (NSF for Mental Health). However, subsequent reports have shown continued shortfalls in service provision, so more recent, relevant policy initiatives have focused on the particular issue of perinatal maternal psychiatry. These have highlighted the need for every maternity locality to have a perinatal maternal mental health strategy in place to ensure better outcomes for women who experience maternal mental health problems.

In 2007 the NICE guideline on clinical management and service guidance for antenatal and postnatal mental health highlighted five key priorities for implementation:

- **Prediction and detection:** At a woman’s first contact with antenatal and postnatal services healthcare professionals should ask screening questions about past mental health, past treatment and family history, with specific questions highlighted for primary care clinicians
- **Psychological treatments:** Women requiring treatment should be seen for treatment normally within one month of initial assessment, not delayed by more than three months

---

20 Improving Health in Leicester Perinatal Maternal Mental Health
Explaining risks: Before decisions about care are made, healthcare professionals should discuss with the woman the absolute and relative risks of treatment for mental ill-health in pregnancy and the postnatal period.

Management of depression: The guidance gives information for clinicians to consider when choosing an antidepressant for pregnant or breastfeeding women.

Organisation of care: The guidance recommends that clinical networks should be established for perinatal mental health services, managed by a co-ordinating board of healthcare professionals, commissioners, managers, service users and carers. As a result there will be a specialist multidisciplinary perinatal service in each locality, with clear referral and management protocols, providing pathways of care and access to expert advice on the risks and benefits of medication.

Perinatal Mental Health in Leicester: Epidemiology and Interventions

Depression is a common disorder in the population generally, with the gender ratio inclined towards females; lone parents have higher rates than those in a couple relationship and couples with children have higher rates than those without. Gavin et al. systematically reviewed evidence on the prevalence and incidence of perinatal depression and compared the rates with those of depression in women at non childbearing times. Although they concluded that studies with larger and more representative samples were required, they found that the prevalence of depression was 3.8% at the end of first three months of pregnancy rising to 4.9% at the end of the second, before dropping to 3.1% at the end of the third. They also estimated that in the first year after birth depression was prevalent in between 1% and 5.7% of women, with the highest rates at 2 and 6 months after the birth.

A rare but serious mental health problem related to pregnancy is puerperal psychosis. This condition usually starts in the first two weeks after the baby is born. A woman who has puerperal psychosis may be suffering insomnia, hallucinations, agitation, rapid mood swings between depression and happiness, and delusions often about the baby. They may be at risk of harming themselves or their babies, or both, and as a result they are usually cared for in hospital with their babies. They are usually given antipsychotic drugs. With regard to the incidence rate of puerperal psychosis, the NICE guidelines suggest that the most commonly quoted figure is also 1 per 1000 deliveries, although this is dependent upon the diagnostic criteria. There are other mental illness problems which may be related to pregnancy. For instance, Olde et al. found that the prevalence of symptoms of Post Traumatic Stress Disorder (PTSD) in women after child birth was between 2.8% and 5.6% at around 6 weeks postnatal, reducing to 1.5% by 6 months.

According to the Royal College of Psychiatrists, evidence suggests that between 3% and 5% of delivered women will meet the criteria for moderate to severe depressive illness. Those who are at increased risk include the young, those who experience conflict in their family life, those who have been anxious and depressed before and those who have little or no social support. When the illness is not treated the outcomes can be devastating for individuals. For instance, Why mothers die suggested that whilst suicide and self-harm is rare, suicide and deaths which result from substance misuse are believed to account for 10% of maternal deaths in the UK. In addition, Oates suggests that many mothers who non-accidentally injure or neglect their children are found to have been suffering with depression or anxiety.

The Leicester Perinatal Psychiatry Service covers Leicester, Leicestershire and Rutland. It was established in 2003 to meet the complicated clinical challenges associated with perinatal mental illness. At present it comprises a half time equivalent of a consultant liaison psychiatrist and 2 whole time community psychiatric nurses. The service receives 300-350 referrals per year, which reflects the expected perinatal morbidity for the 11,600 births in Leicester, Leicestershire and Rutland. Based on a prevalence of 3% and 5000 births annually, it can be estimated that 150 women are likely to have a major perinatal depressive illness in the city of Leicester.

Figures 16 & 17 show that most referrals to the Leicester Perinatal Psychiatry Service are from primary care and that the three main reasons for referral are depression, neurosis or a history of severe mental illness.
Research by Lazarus and colleagues has shown that ethnic minority populations are under represented in the perinatal psychiatry clinic population.

In Leicester women see obstetricians and midwives regularly throughout their pregnancy and most deliver their babies in hospital. During the period after the birth women are seen by General Practitioners and Health Visitors. These universal services are involved in the identification of emotional health problems, making referrals when necessary. The specialist perinatal psychiatry service accepts referrals from these services and when they are made, the referrals are often urgent and complicated by child protection issues. In addition to developing specialist services therefore, there is a requirement to develop the capacity of universal services, for example GPs, health visitors and community midwives, to enable those in most regular contact with women in this period to develop therapeutic relationships and support emotional resilience.

It is necessary to develop clear care pathways as in the stepped care approach (figure 15, p.12) to ensure that women have access to appropriate treatment.

The Leicester Perinatal Psychiatry Service holds outpatient clinics at Leicester Royal Infirmary and at Leicestershire Partnership Trust. Patient satisfaction surveys have shown that when the clinics are held in the maternity unit patients feel reduced levels of stigma associated with mental illness and higher levels of acceptance. The service also has a three bedded mother and baby unit and conducts community follow up in association with local community healthcare teams. The staff conduct obstetric liaison, offer second opinions, specialised advice on medication and child protection and are involved in the training of other clinicians.

The mother and baby in-patient unit exists primarily to manage women with acute perinatal mental illness and their babies, where there are no viable alternatives to admission. The aim is therapeutic and ensures that no woman is separated from her baby because of admission to a psychiatric unit. It is currently staffed by nurses from the adjoining general psychiatric ward. Community based psychiatric activity provides support for childbearing women with serious mental illness. Clinicians assess and manage the significant mental illnesses that complicate pregnancy and the period after birth and which cannot be managed effectively and safely by primary care services. They also assist in the detection and proactive management of those at risk of becoming seriously ill and support primary care, maternity and psychiatric services. The East Midlands Perinatal Mental Health Network suggests that there needs to be more specialised nurses for both the community and in-patient elements of the service.
Issues Identified

Perinatal maternal mental illness may be harmful for mothers, children and their families. More capacity needs to be created for women to have timely access to specialised therapy and to enable those professionals who regularly see women during and after pregnancy to build therapeutic relationships with women as part of their preventative work.

The potential benefits of a robustly commissioned effective antenatal and postnatal mental health service include an improvement in the mother-child relationship and timely access to appropriate services. It would also facilitate a reduction in the risk of relapse, the risk of self-harm and suicide and the prevention of avoidable separation of mother and baby.

Recommendations

It is recommended that:

• A protocol for the implementation of NICE guidelines for the assessment of maternal mental health should be adopted, which focuses on better identification of women with common mental health disorders, the provision of more information about the risks and benefits of treatment before conception and access to timely and appropriate care

The stepped care model should be developed to include:

• The development of low-intensity psychiatric services as part of the stepped-care framework for mental healthcare
• The development of the capacity and capability of generalist primary care and maternity services to ensure that vulnerable women are offered effective help in a timely and appropriate way
• More flexible referral systems to specialised mental healthcare
• Consideration of the development of the Leicester Perinatal Psychiatry Service in accordance with regional network recommendations

Lead Authors

Julia Austin
Consultant Midwife (Public Health)
University Hospitals Leicester

Mark Wheatley
Public Health Specialist (Mental Health and Vulnerable People)
Tel: 0116 295 1583
Email: mark.wheatley@leicestercity.nhs.uk

Contributors

Dr Ranuka Lazarus
Consultant Perinatal Psychiatrist
Liz Mair
CAMHS Strategy and Commissioning Manager
NHS Leicester City

References

Child and Adolescent Mental Health

Description of the Issue
The health and well-being of children and adolescents and the collaboration between statutory and voluntary organisations involved in their care are intrinsic elements to the One Leicester vision. Good emotional, psychological and social health can protect young people from emotional and behavioural problems, violence and crime, teenage pregnancy and substance misuse. Poor mental health may affect childhood development, a young person’s capacity to establish long-term relationships and the adequacy of parenting their own children. It may also affect their chances of gaining employment.

National and Local Priorities
The national and local agendas concerning the mental health of children and adolescents are underpinned by a number of strategic initiatives, aimed at ensuring that young people with mental health problems have access to timely, integrated, high quality, multi-disciplinary mental health services to ensure effective assessment, treatment and support for them and their families. This can be seen, for example, in the National Service Framework for Children and the drive from Young People and Maternity Services to integrate the delivery of all local children’s services towards improving health. Every Child Matters focuses on achieving better outcomes for children under headings such as being healthy, staying safe, enjoying and achieving through learning, making a positive contribution to society and achieving economic well-being. The Children Act 2004 gives a particular role to local authorities in securing co-operation amongst local partners, who in turn have a duty to co-operate. These partners include local NHS organisations, Youth Offending Teams, the Police, District Councils and others. The Act also encourages the involvement of schools, GPs and the third sector in the co-operative arrangements.

Appropriate integrated care for children spans tiers from universal services through to very specialist services for those with serious mental illness. Moves towards co-ordinating such services are already underway. One of the tools used to ensure the necessary co-operation between professionals is the Common Assessment Framework. This will promote more effective and earlier identification of additional needs and take into account the role of parents, carers and environmental factors on the child’s development. It will also enable practitioners to be better placed to agree, with the child and family, any necessary and appropriate support.

Child and Adolescent Mental Health in Leicester: Epidemiology and Interventions
Building and sustaining good mental health in children is affected by the child’s stage of development and their cultural, social and economic background. The dynamic demographic profile of children and adolescents in Leicester is most recently exemplified by the increased local presence of people from Sub-Saharan Africa, Eastern Europe, the Middle East and the European Union. Data from the Joint Steering Group for Children and Adolescents shows that in 2001, there were 70,109 children and young people (aged under 18 years) in the City of Leicester. Of these, it is estimated that over 55% (38,000) of these children and adolescents are from BME communities.

Approximately 10-15% of children and adolescents in the general population suffer from mental ill-health, equivalent in Leicester to approximately 3,500 to 5,250 individuals. The prevalence of particular disorders varies according to age and to some extent gender with higher rates among boys. Meltzer found that 10% of boys aged 5-10 years and 6% of girls in the same age group had a
mental disorder. Amongst 11–15 year olds the proportions were 13% for boys and 10% for girls. The spectrum of mental illness from which they may suffer is wide. Estimates of the prevalence of specific disorders suggest that diagnosable anxiety disorders affect around 12% of those aged 4 to 20, disruptive disorders around 10%, attention deficit disorder 5%, specific developmental disorders and substance abuse up to 6% depending on age group. In Leicester 3 in every 1000 residents under the age of 20 are registered with mental health services, a figure which reaches 5 in every 1000 in the most deprived areas.

Mental health problems may also be associated with issues such as education, crime, hyperactivity disorders and whether a child is in local authority care. The report Count Us In cites a 40% prevalence of mental health problems amongst those diagnosed as having a learning disability. Dolan found that 25% of juvenile offenders aged 10 to 17 appearing before the Manchester Youth Court had recent contact with psychology or psychiatric services. If applied to the same age range on the Youth Offending Team caseload, this equates to 500 individuals who may have had recent contact with Child and Adolescent Mental Health Services (CAMHS). Meltzer found that the rate of mental ill-health disorders amongst looked after children in residential units to be significantly higher than that in the general population.

Attention deficit and hyperkinetic (for example, hyperactivity) disorders, can result in inattentiveness, hyperactivity and impulsiveness. Attention deficit hyperactivity disorder (ADHD) has an estimated prevalence of 5% in those aged 4-16, or 2,300 children in Leicester; whilst the prevalence of hyperkinetic disorder is accepted as approximately 1.5% of the UK school aged population, which equates to 700 children in Leicester. Children with severe ADHD often have low self-esteem, emotional and social problems and under-achieve at school. ADHD persisting into adolescence and adulthood may be associated with continuing emotional and social problems, substance misuse, unemployment and crime. Commissioning intentions are therefore being developed to ensure the appropriate transition of adolescents into adult care.

Self-harm is a particular mental ill-health issue among adolescents. Approximately 7% of adolescents will harm themselves at some point whilst 20% will think seriously about it. Between 2% and 4% of adolescents will attempt suicide and 40% of those who survive a first attempt will repeat it. In Leicester there were 3 suicides registered amongst people aged 18 or under in 2007. The self-harm admissions for 15-19 years olds vary roughly between 200 and 300 per year (based on 2004/5-2006/7 data) for the Leicester, Leicestershire and Rutland area.

The integrated approach between mental health services, social services, education, offender management services and adult mental health is crucial to enable children and adolescents to reach their full potential. Only a small proportion of the mental health needs of children will be met by specialist mental health services. In Leicester a tiered model of care is already in place to meet the mental health needs of children and adolescents (figure 18).

Figure 18: Tiered Model of Mental Health Services for Children and Adolescents
Source: Joint Strategy for promoting the emotional and mental health of children and young people in Leicester, Leicestershire and Rutland 2008-2011.
According to this framework, children and their carers are supported on the first tier by other family members, primary care professionals and schools, Sure Start and Family Centre workers. These services are essential in the promotion of mental health and emotional resilience. It is planned that by 2010 in Leicester 99% of schools aspire to achieve National Healthy Schools status, that schools will be supported in implementing the Social and Emotional Aspects of Learning and the Personal and Social Education curricula and that there will be an increase in parents participating in a parenting group in Leicester, Leicestershire and Rutland.

The second tier comprises targeted early intervention services, such as the Leicester City Child Behaviour Intervention Initiative (CBII), Primary Mental Health Workers and Specialist Child Health Services. These services train carers and other groups to manage symptoms of mental distress and provide brief targeted interventions aimed at preventing those symptoms from escalating. The number of direct work cases seen by CBII in 2006/07 was 593. At tier 2, there is also a CAMHS Professional Advisory Service, a telephone service to support those involved in tier 1 care. Of all the calls taken in the period 2006-7, 35% were followed up by input from primary mental health and 11% suggested a referral to specialist CAMHS. The majority of those seeking advice were health professionals although 7.5% were made from the third sector. In 2006/07 269 calls were received concerning issues relating to children and services in Leicester.

Third tier services are targeted towards children and young people with significant mental health problems. Interventions at this level are instigated by a referral from services in tiers 1 or 2, or by a transition from tier 4 as the acute phase of illness eases. Services at this level are provided by Leicestershire Partnership Trust and the local authority and include the CAMHS community teams, the Young Persons Team, the Learning Disability Outpatients Team, the Joint Therapeutic Social Work Team and the Family Welfare Association. They cover the whole of Leicester, Leicestershire and Rutland and comprise a range of professionals such as consultant psychiatrists and psychologists, social workers, community psychiatric nurses and occupational therapists. In the period 2006-7 these services saw 1,674 new cases in total in Leicester, Leicestershire and Rutland.

The final tier provides very specialist services for those children whose needs are complex, intensive and interfere with a child's social functioning. The number of clients seen in 2006/07, requiring treatment at this level totalled 249 for Leicester, Leicestershire and Rutland. Local services operating at this level include Tanglewood, the Psychosis Intervention and Early Recovery (PIER) team, Oakham House and the CAMHS Assessment and Intervention Treatment Service. These teams offer expertise from consultant psychiatrists, psychiatric nurses, psychologists and a care co-ordinator. The CAMHS Assessment and Intervention Treatment Service offers nurse-led intensive behaviour intervention in educational and social care settings. PIER is a service for young people aged 14-35 during the first three years of a psychotic illness this offers a low-stigma approach focusing on psychological adjustment and the prevention of relapse. Tanglewood is a service for children up to 12 years old and their families, offering intensive interventions aimed at boosting children's self-esteem, managing behaviour and caring for children with specific problems, such as ADHD and autism. Oakham House is an 8 bedded psychiatric in-patient unit offering assessment and treatment for children and adolescents aged between 12 and 16. Referral to this service is for children whose clinical needs are too severe or complex to be managed appropriately at out-patient level.
Issues Identified

The mental well-being of children is likely to have an impact on their present and future physical health. It can determine whether or not children develop healthy lifestyles and how well they do at school. Good emotional, psychological and social health protects against emotional and behavioural problems, violence and crime, teenage pregnancy and the misuse of drugs and alcohol. Emotional and behavioural disorders may affect childhood development, a young person's future capacity to develop and maintain long-term relationships and the adequacy of parenting their own children. It may also affect their capacity to enter employment. Although service co-ordination has progressed, more integration is required to develop care pathways as a means of overcoming fragmentation and ensuring the continuity of good mental healthcare into adulthood.

Recommendations

It is recommended that:

- There are benefits in commissioning a range of services to meet the needs of children and young people, including more integrated work at Tier 1 and improved timely access to specialised services
- All professionals involved in the identification of mental and emotional health require development to improve the mental health care of children and young people
- The role of schools and third sector organisations in developing emotional resilience and community capacity to deal with the mental health problems of children and adolescents should be encouraged
- All mental health services must provide non-stigmatising, age appropriate, treatment of young people's mental health difficulties and disorders
- The Joint Strategy for Promoting the Mental and Emotional Health of Children and Young People in Leicester, Leicestershire and Rutland 2008 – 2011 is implemented

Lead Authors

Mark Wheatley
Public Health Specialist (Mental Health and Vulnerable People)
Tel: 0116 295 1583
Email: mark.wheatley@leicestercity.nhs.uk

Mel Thwaites
Assistant Director of Children and Family and CAMHS Strategy and Commissioning Manager
Tel: 0116 295 1149
Email: mel.thwaites@leicestercity.nhs.uk

Contributors

Liz Mair
CAMHS Strategy and Commissioning Manager
NHS Leicester City

Judith Hurwood and Nick Humphreys
Principal Psychotherapists
Dynamic Psychotherapy Service

References

The Mental Health of Working Age Adults

Description of the issue
For working age adults mental illness is common and can be disabling. The spectrum of illness ranges from problems of depression and anxiety with a prevalence of about 14% in the UK, to less common psychotic illnesses such as schizophrenia with a prevalence of less than 0.5%. It is estimated that one in four people will experience mental illness at some time in their lives and while most will make a full recovery a number of people will continue to experience varying degrees of disability and distress for prolonged periods. Murray and Lopez estimated that by 2020 depression will be the second most common source of disability in the world.

With regard to service provision, NICE guidance suggests that treatments should be available to all people with problems such as depression, anxiety or schizophrenia, unless the problem is very mild or recent. However only one in four who suffer from depression or chronic anxiety receive any kind of treatment.

National and Local Priorities
People with mental illness are amongst the most vulnerable and socially excluded groups in society. Effective mental health services focus on enabling such people to take a greater part in the community and realise their full potential. This agenda has been facilitated by a number of programmes both locally and nationally.

The NSF for Mental Health established priorities for mental health care which ultimately led to the development of new services, such as the Common Mental Health Problems Service, Crisis Resolution and early intervention in psychosis (PIER). In the intervening period there have been a number of initiatives such as the National Suicide Prevention Strategy, the Mental Health and Social Exclusion report, Delivering Race Equality and NICE guidance.

Locally, the World Class Commissioning agenda has identified mental health as a public health priority for NHS Leicester City. In addition, in March 2008 a Mental Health Charter, developed by service users and staff was formally signed by NHS Leicester City, Leicestershire Partnership NHS Trust, Leicester City Council, Leicestershire County Council and Rutland County Council, NHS Leicestershire County and Rutland and the local voluntary sector. The charter lays out twelve statements concerning what people should expect from mental healthcare and support services in Leicester, Leicestershire and Rutland (see Box 3).

Box 3: Charter for Mental Health in Leicester, Leicestershire and Rutland
Every person in Leicester, Leicestershire and Rutland has the right to mental health services that:

- Make a positive difference to each person they serve
- Stop doing things that are not working
- Are guided by the individual’s views about what they need and what helps them
- Treat everyone as a capable citizen who can make choices and take control of their own life
- Work with respect, dignity and compassion
- Recognise that mental health services are only part of a person’s recovery
- Recognise, respect and support the role of carers, family and friends
- Communicate with each person in the way that is right for them
- Understand that each person has a unique culture, life experiences and values
- Give people the information they need to make their own decisions and choices
- Support their workers to do their jobs well
- Challenge “us and them” attitudes both within mental health services and in the wider society

The Layard report initiated an agenda for the further development of effective treatment for those with anxiety and depression disorders. One response to this agenda has been the Increasing Access to Psychological Therapy (IAPT) programme as a way of coordinating investment, implementing NICE guidance and assisting the return to work of those people on incapacity benefit as a result of mental ill-health. IAPT focuses on increasing the number of people trained in Cognitive Behavioural Therapy (CBT) and developing clinical services in which these new therapists will function.
Mental Health of Working Age Adults in Leicester: Epidemiology and Interventions

National surveys\(^3\) suggest that 16-18% of working-age adults might be expected to experience a common mental health problem at any time. Applied to the Leicester population, this equates to between 29,000 and 33,000 people of working age. Around 60% of those experiencing common mental health problems will be women. A recent report by the Sainsbury Centre for Mental Health indicates that around 11,000 working-age adults will develop a common mental health problem each year. In terms of more serious mental illness it is estimated that around 1,600 people of working-age in Leicester will experience psychosis in a year, with equal numbers of men and women\(^4\). Given this prevalence and incidence, the burden of mental illness on working age adults is such that innovation in commissioning is required to ensure that people who experience mental ill-health have access to appropriate treatment, with minimal waiting times.

Measures of deprivation and disadvantage, such as unemployment, overcrowding, few educational qualifications and those who are lone parents with dependent children are strongly associated with poor mental health. On such measures Leicester has a rate which is higher than the national average\(^5\). Leicester has an average score on the York Psychiatric Index of 138. This score was higher than average (100) and indicates a high level of mental health need\(^5\).

Figure 19 shows the association between deprivation and the rate of mental health service registration by quintiles of deprivation, with Q5 being the most deprived. It shows the rate in comparison with the Leicester, Leicestershire and Rutland community and how the rate for the city is above average in quintiles 3, 4 and 5.

Figure 19: Mental Health Service Registration Rate 2006 Leicester compared to Leicester, Leicestershire and Rutland (LLR) Average

Source: National Centre for Health Outcomes Development

The relationship between unemployment and mental ill-health is a complex one because an individual suffering the onset of mental illness is more likely to leave employment compared with other health conditions. Indeed, as a group those who suffer mental ill-health have the lowest proportion of employment of any group with a disability. The number of adults receiving Incapacity Benefit/Severe Disablement Allowance (IB/SDA) because of mental or behavioural disorders may be an indicator of the extent of severe or disabling mental health problems amongst working-age adults. In February 2008, there were 15,820 people aged 18-64 years claiming IB/SDA in Leicester. Of these it is estimated that around 6,000 people were claiming IB/SDA on the basis of mental ill-health or a behavioural disorder.

This pattern reflects the increase in the number of claims for IB/SDA in the East Midlands region as a whole (Figure 20).

Figure 20: IB/SDA Claims on the Grounds of ‘Mental or Behavioural Disorder’, East Midlands, 1999-2008

Source: Department of Work and Pensions

Poor quality of life resulting from physical illness is also closely related to mental health problems. People with mental ill-health are twice as likely to report a long term illness or disability and over two thirds of people with a persistent mental health problem also have a long term physical illness. Physical illness of those with severe and enduring mental health problems often go undetected, contributing to increased morbidity and lower life expectancy.

With regard to service provision and demand, people with severe mental health problems have on average 13-14 consultations with their General Practitioner per year in comparison with 3-4 for the population in general. In Leicester, there are a number of services to support primary care in the management of mental illness with...
treatments ranging from observation, medication and therapy; including brief interventions, group and one-to-one therapy. Although, generally patients prefer to receive talking therapy rather than medication there were 143,872 anti-depressant items prescribed by Leicester primary care practices in 2005/06, at a total cost of £1.64 million. Nationally, psychiatric medication as a whole made up 7.2% of total items prescribed and 7.1% of the total prescribing budget in 2006/07.

In Leicester there are a range of services available which could produce effective clinical and life outcomes for working age adults with mental ill-health and which may be developed to provide an effective local infrastructure for improving access to psychological therapies, in line with the stepped care framework (figure 15, p.12). These include universal services, third sector organisations, through to Community Mental Health Care Teams and inpatient care.

The Crisis Resolution and Home Treatment Service is a gate keeper and alternative to acute inpatient hospital care for service users with serious mental illness, providing acute home treatment for people whose mental health crisis is so severe that they would otherwise require hospital admission. Users of the service typically suffer from psychoses, severe depression or bipolar affective disorder (manic depression). It enables people to be discharged earlier from inpatient wards and receive treatment in their homes whilst still in the acute phase of their illness. The service has helped to reduce admissions for mental ill-health and in the period 2006/7 the service saw 778 patients, of whom the majority suffered either with depression or schizophrenia.

Service delivery has been enhanced by low-intensity interventions at general practice level. The Common Mental Health Problems Service (CMHPS) was developed to improve mental healthcare in primary healthcare settings by providing assessment, psychological treatment and advice on the management of patients with a common mental health problem over the age of 16 years. GPs refer patients whose main presenting problems are depression and anxiety resulting from a myriad of triggers and causes. CMHPS also provides therapeutic input to two specialist practices in the City. The first is the ASSIST Service, a specialist primary healthcare setting for asylum seekers and refugees, some of whom have experienced multiple trauma and many losses. The second specialist practice is the Dawn Centre, a specialist service for the homeless, who present many challenges due to the complexity of their psychological and mental health needs. Practice Therapists engage in mental health promotion and partnership working with community projects such as Healthy Community Lifestyle Promotion on the Saffron Estate and the Feeling Good Project in Braunstone, where they have given practical advice on subjects such as managing stress.

The Cognitive Behavioural Therapy (CBT) Service treats a range of people with neurotic disorders who are unable to be managed by the CMHPS because of severity, complexity or associated risk. The current referral rate for the city is approximately 440 per year, with an annual increase of about 10%. The majority of patients are treated in diagnosis-specific groups of up to 15, usually with two therapists. Outcomes from such innovative group treatments are encouraging, attracting outside interest in the approach and recognition that local CBT therapists have valuable expertise for education, training and supervision.

Another specialist resource is Psychodynamic Psychotherapy. This service offers treatment for adults with severe and complex neuroses, affective and personality disorders. Many people who require psychotherapy have had previous psychiatric treatments, have experienced additional risk factors such as self-harm and suicide ideation and have long standing impairment to their work, social roles and well-being. It is a service which specialises in the management of suicide risk and the provision of training on sexual abuse. The therapeutic treatments delivered by this service are at a level that is too complex, specialised and time consuming to be addressed in primary care or by general psychiatric services. An internal audit of referrals from 2004-2006 showed that 26.4% came from primary care or common mental health problems service, 56.7% from secondary care, 6.5% from specialist services and 10.4% self referral. The service received 223 referrals and recorded 5,868 attendances in 2007/08. Therapy is offered in once weekly group or individual sessions. Internal cost effectiveness studies undertaken in 2003 and repeated in 2008, indicate that 5-8 years after psychotherapy, 70.2% and 85.7% of patients respectively had no further contact with mental health services, suggesting lasting benefits not only for service users but also the local health economy. Service research also supports the efficacy of its training for mental health clinicians, demonstrating improved abilities to work with difficult cases, improving quality and safety of treatment for patients in other services.

The third sector is an important provider of mental healthcare. Reviews suggest that services in this sector provide a valuable service, meeting gaps left in statutory provision and acting as an alternative for those who are reluctant to use statutory services. Indeed the Department of Health supports increased commissioning from this sector. Organisations in the third sector support a large number of people suffering from a range of mental illness from the common to severe and enduring. It does so by providing generic and specialist counselling, day services, housing related support, empowerment of service users, advocacy and support for carers.
Issues Identified
A number of factors can effect mental health. Some increase risk of mental illness whilst others have a protective effect. Employment and engagement within society may be associated with better health, chances of employment and educational attainment. Other factors, such as deprivation, illness and isolation may act to increase the risk of mental illness. It is estimated that between 29,000 and 33,000 people of working age in Leicester could be suffering with common mental health problems and that the majority of them are likely to be women. Although services exist to treat people with mental health problems, the prevalence is such that innovation is required to make use of psychological therapies. Access to such therapies can help to treat depression and encourage participation in work. Patients prefer to receive such therapies, rather than medication.

Recommendations
It is recommended that:

- There should be increased support for the involvement of service users and carers in the planning, development and delivery of mental health services
- Services should be developed, using initiatives such as the Improving Access to Psychological Therapies Programme, to develop integrated patient pathways and a stepped-care framework in which patients have timely appropriate interventions
- The Mental Health Charter is fully implemented in order to provide effective interventions, enhance quality of life, prevent deterioration, and support social inclusion
- Work should continue to reduce the stigma which surrounds mental ill-health, within health services and the community as a whole

Lead Authors
Mark Wheatley
Public Health Specialist (Mental Health and Vulnerable People)
Tel: 0116 295 1583
Email: mark.wheatley@leicестercity.nhs.uk

Kala Subbuswamy
Leicester City Council

Contributors
Marie Bradley
Consultant Practice Therapist
Common Mental Health Problem Service

Dr Peter Caunt
Clinical Director
Department of Cognitive and Behavioural Psychotherapy

Tim Colman
Manager
Crisis Resolution Team

Jan Moore
Senior Practice Therapist
Common Mental Health Problem Service

Dr John Ryder
Consultant Psychotherapist
Dynamic Psychotherapy Service

Graham Twist
Senior Practice Therapist
Common Mental Health Problem Service

References
The Mental Health of Older People

Description of the Issue
Provision of mental healthcare for older people is an urgent problem. Between 10% and 16% of people over the age of 65 will develop clinical depression, while some 25% of people over 85 suffer with dementia. Such problems exert a large socio-economic cost, with the Dementia UK report suggesting that dementia currently costs the UK over £17billion per year.¹

National and Local Priorities
National and local policy reflects the fact that the numbers of older people and the proportion of the population they comprise, are increasing. In addition to the key mental health policy documents, such as The National Service Framework for Mental Health (NSF for Mental Health), the National Service Framework for Older People and the National Suicide Prevention Strategy, there are numerous policy initiatives which aim to ensure that older people have access to general and mental healthcare services that are appropriate to their needs, that they do not suffer age discrimination and that older people are treated with respect and dignity, with zero tolerance of abuse.

Mental Health of Older People in Leicester: Epidemiology and Interventions
Based on Office for National Statistics mid 2007 population estimates there are approximately 35,600 people over the age of 65 living in Leicester. By 2025 this population is projected to exceed 44,400 people, with 21,300 over 75 years of age. Average life expectancy is longer for women and women comprise the majority of the current and projected population of older people, although the number of older men will increase as life expectancy for men improves. As the population of older people increases, it will be increasingly important for older people to maintain a sense of well-being and quality of life, with social interaction, motivation and self-confidence being important in sustaining individual mental health.

The diversity of Leicester is also reflected in the older persons population of the city. At the time of the 2001 Census, 8,282 people (21.9%) over the age of 65 were from a Black or minority ethnic background. Of these 5,245 were between the ages of 65 and 74, 2,456 were between 75 and 84 and those who were aged over 85 numbered 581. It remains a challenge to ensure that mental health services for older people from minority ethnic groups are accessible and appropriate.

Of older people living in Leicester at the time of the 2001 census some 15,000 were living alone. In a recent survey of older people 43% reported a long term illness or disability and 87% did not have a carer. Older people tend to live around the edge of Leicester. According to the Annual Report of the Director of Public Health and Health Improvement 2007 the wards that have the highest concentration of older people are Evington, Thurncourt, Eyres Monsell and Abbey.
These factors are important because isolation and limiting physical illness have been shown to exacerbate mental illness. There is a considerable need for care services suggested by the fact that a majority of older people currently living with a limiting illness are not seen by social or healthcare services and that approximately 12% of people over 60 years of age are themselves carers. In addition, there is limited capacity in Leicester care establishments for those aged over 65 years, with one 9 bedded local authority unit providing respite for all older people with mental ill-health.

As with the general population, depression is the most common cause of mental ill-health among older people. Depression in the elderly not only leads to greater impairment in physical function than most chronic physical conditions, it can also be caused by chronic physical illness. Yet depression in older people is often undiagnosed because many elderly patients do not primarily present with psychological symptoms. Even when depression in older people is recognised, the prescribed treatment is often ineffective. In Leicester, it is estimated that there are between 3,600 and 5,400 older people with depression, a number which is projected to rise to 7,000 by 2029. Severe depression is less common, affecting 3% of older people, or about 1,100 people in Leicester. It is estimated that by 2025 this total could be between 1,347 and 2,245 people.

Dementia is a devastating illness which has an impact on the mental health of older people. Given the ageing population, it is a challenge which is growing in size. There are many causes of the disorder, including amongst others Vascular Dementia resulting from strokes, Lewy-body Dementia, the presence of abnormal substances in parts of the brain and Alzheimer’s disease. These illnesses can cause memory loss, hallucinations, depression and paranoia. For the person suffering with dementia, the illness can result in changes in behaviour including aggression, changes in levels of activity and impairment in their ability to carry out activities of daily living. For their carers, the impact of looking after someone in this situation can result in a significant deterioration in their own mental well-being. Although many people with dementia live in institutional care, the majority live in private accommodation and many live alone. The report Dementia UK projected that by 2016 there will be 3,023 people suffering from dementia in Leicester, whilst local estimates suggest that currently there are 2,842 people with cognitive impairment which results from a dementia, a figure which is projected to increase to 3,462 by 2025.

The government has identified dementia as a national priority and has produced a national dementia strategy called Living well with dementia. The key priorities in this strategy include early intervention and diagnosis, an informed and effective workforce for people with dementia, improved care for people with dementia in care homes and implementation of the New Deal for Carers.

Suicide and suicide prevention is a priority area in the mental health and well-being of older people. Social isolation and loneliness are important contributing factors to suicide in older people, particularly where triggered by bereavement, in the first year of widowhood and particularly among men. There are other important factors in predicting suicide in older people such as depression and the presence of physical ill-health. In Leicester, over the seven-year period between 1999 and 2005, there were 25 deaths resulting from suicide and undetermined injury in people who were aged 65 and above. This amounted to 12% of the 206 deaths resulting from suicide and undetermined injury over the same period for the whole population of the city. Of the 25 deaths from suicide and undetermined injury in the elderly, by far the majority (16 or 64%) were in men.

There are other conditions which have an impact on the mental health of older people, such as schizophrenia and bipolar disorder. Schizophrenia is a condition which results in delusions and hallucinations as well as apathy, blunting or incongruity of emotional responses and a reduced level of social functioning.
Most older people with schizophrenia will have developed the illness before the age of 45. In the past, many of these patients have remained in long stay psychiatric beds. Schizophrenia affects about 1% of the older person population, which would equate to about 400 people over the age of 65 in Leicester. Bipolar disorder is characterised by mood swings that are far beyond what most people experience in their lives. These include episodes of intense depression and despair and feelings of elation. Bipolar disorder affects about 1% of adults at some time in their life, although it is unusual for it to start after the age of 40.

For the majority of older people with mental ill-health and their carers, the first contact with health services is through general practice. In addition, many older people with a physical long term condition will be seen by Community Matrons and other specialist services such as Community Mental Health Teams (CMHT), of which there are two covering the city undertaking clinics and domiciliary support. There are 48 inpatient beds for people with functional illnesses such as depression. For people with dementia, although their first contact is with primary care, Leicestershire Partnership Trust provides expertise in establishing a diagnosis and prescribing treatments. Memory clinics are supported by CMHTs and consultants and are run on an outpatient basis. There are 80 inpatient beds for people suffering from an organic illness, such as dementia.

Issues Identified
The number and proportion of older people are increasing. The older population of Leicester reflects the diversity in the population in general. Many older people live alone, some in residential accommodation and many are looked after by informal carers. The care of older people will be enhanced by the alleviation of loneliness and isolation. Life events are likely to have a large impact on an older person’s mental health. National and local policies accept that older people require care which is appropriate to their needs. The mental health of older people can be affected by chronic physical disease and dementia type illnesses. There is a need to develop services for older people which recognise the need for integrated working practices between health, social care and wider community services.

Recommendations
It is recommended that:
- Progress should be made in achieving the goals of the national dementia strategy
- There should be strong advocacy to support carers of older people with mental illness, particularly with planned respite, individual counselling and ensuring that carers have access to the benefits to which they are entitled
- Wider services should recognise the importance of involving older people in order to reduce loneliness and isolation and to enable older people to make a positive contribution to the community

Lead Author
Mark Wheatley
Public Health Specialist (Mental Health and Vulnerable People)
Tel: 0116 295 1583
Email: mark.wheatley@leicestercity.nhs.uk

References
Suicide

Description of the issue
Suicide has been selected nationally as an indicator of mental ill-health because the majority of suicides are committed by depressed people; it is a vital sign indicator for NHS Leicester City. The number of suicides includes deaths from self-inflicted injury and deaths for which the cause of the injury was undetermined. These are decided on the judgement of the coroner. It is acknowledged that from a medical/psychiatric perspective that some verdicts, including open and misadventure verdicts, may have been viewed as suicide when considering a suicide as a self-harm act that resulted in death.

Evidence suggests that the likelihood of a person taking their own life depends on many different factors. These include the presence of a physically disabling or painful illness or a mental illness; alcohol and drug misuse; deprivation and the level of support that a person receives. Stressful life events such as the loss of a job, imprisonment, a death or divorce may also play a significant part. For many people who commit suicide it is the combination of factors which may be important.

National and Local Priorities
Suicide prevention is a key national priority for all health and social services. The target, set out in Saving Lives: Our Healthier Nation (OHN), reinforced by Standard 7 of The National Service Framework for Mental Health (NSF for Mental Health) and a Public Service Agreement, is to reduce the death rate from suicide and undetermined injury by at least one fifth by 2010. The target is measured by using collective rates over a three year (rolling average) period. These are used in preference to single year rates in order to produce a smoothed trend from the data and to avoid drawing undue attention to annual variations instead of the underlying trend. There is also a NICE guideline for the short term physical and psychological management and secondary prevention of self-harm.

Suicide in Leicester: Epidemiology and Interventions
In Leicester, there are between 25 and 30 deaths from suicide every year. Whilst suicide rates in England have shown a downward trend since 1993, Figure 21 shows that the rate in Leicester has been fluctuating and has increased above the mean for England and the East Midlands since 2002. In Leicester the highest suicide rate is amongst those people in the most deprived quintile of the local
population. It is also highest amongst men, with the highest rate amongst men aged between 35 and 64.

A review of 25 cases of those who took their own lives, registered in Leicester in 2007, showed that there were 20 male and 5 female deaths. The median age was 43 years, with the largest number of deaths (6, 24%) among people aged between 56 and 65. Most of the 25 deaths occurred as a result of hanging (15, 60%), with self poisoning as the next frequently used method, resulting in 7 cases.

Figure 21: Mortality from Suicide and Injury Undetermined in All Ages 1993-2005, Comparing Local PCTs with East Midlands and England.
Source: Health Informatics Service

The likelihood of an act of suicide taking place can depend to some extent on the ease of access to and knowledge of an effective means. One reason for this is that suicidal behaviour is sometimes impulsive; if a lethal method is not immediately available then an act of self-harm may still occur but without its lethal consequence. Therefore there has been health promotion activity in the importance of reducing access to domestic gas, installing catalytic converters to reduce carbon monoxide emissions from vehicles, reducing the pack size and availability of analgesics and installing barriers at sites that are hotspots for suicide. According to the annual report on progress for the National Suicide Prevention Strategy 2006 improving the evidence base about, for example, high-risk groups and successful preventative interventions can only increase the effectiveness of the national suicide prevention strategy.

Being a prisoner increases the risk of suicide, because the prison population comprises vulnerable individuals, many of whom have experienced negative life events that increase the likelihood of harming themselves, such as drug and alcohol abuse, social disadvantage or isolation, previous sexual or physical abuse and mental health problems. In 2007, there were 4 prisoner suicides in HMP Leicester. In order to deal with the issue of suicide and self-harm in prison, the Department of Health, the Prison Service and National Offender Management Service collaborated in devising and introducing a revised care-planning system for at-risk prisoners (Assessment, Care in Custody and Teamwork). Furthermore, the National Institute for Mental Health in England (NIMHE) has continued to improve the skills and knowledge of prison staff through training courses, particularly around mental health and family liaison and has promoted the expansion of prison mental health in-reach services.

It is difficult to establish the risk of suicide for people from minority groups, such as ethnic minorities, lesbians or gay men as these factors are not recorded when the death is registered or at the inquest. In response to this NIMHE has commissioned research into the risk of suicide and self-harm amongst lesbians, gay men and bisexual people (LGB) and the risk factors for suicide and suicide attempts in different ethnic minorities.

NIMHE has also been working across government departments on non-legislative action which might be taken to discourage internet sites related to suicide. The internet could be used to encourage people to take their own lives by giving detailed information about methods of suicide and allowing those who may be contemplating suicide to communicate with each other. For the media in general, one of the main activities for suicide prevention is to ensure that reports communicate how to find preventative support for those who are contemplating suicide. The overview commissioned by the Department of Health indicates that although the majority of LGB people do not experience poor mental health, research suggests that some LGB people are at higher risk of mental disorder, suicidal behaviour and substance misuse².
Evidence suggests that mental health service users are a high-risk group in terms of suicide and undetermined injury. However, 75% of suicides are committed by people who are not in contact with mental health services. Therefore, it is important to make health promotion messages concerning suicide more widely known.

A history of self-harm is also associated with an increased risk of suicide. Around 40% of people who have committed suicide have a history of self-harm and at least one per cent of people who self-harm take their own lives within a year. NIMHE has established four centres to study the incidence of self-harm in England to provide accurate data on national trends and patterns in self-harm in order to inform interventions and detect changing patterns or local variations.

**Issues Identified**

Suicide prevention is a key national priority for all health and social services. Evidence suggests that the likelihood of a person taking their own life depends on many things, such as a mental illness or physically painful illness and access to an effective means.

**Recommendations**

It is recommended that:

- There should be continued efforts to raise awareness about suicide and self-harm amongst the general public and professionals
- There should be support for those who self-harm or who are affected by acts of self-harm
- The NICE guidelines on self-harm should be followed so that all individuals who self-harm receive an assessment of need and access to relevant support
- Work with the media about suicide and suicide prevention should be prioritised
- Local trends in suicide continue to be audited in order to inform local delivery and actions

**Lead Authors**

Keith Waters  
Suicide Prevention Manager (East Midlands)

Mark Wheatley  
Public Health Specialist (Mental Health and Vulnerable People)
Tel: 0116 295 1583  
Email: mark.wheatley@leicestercity.nhs.uk

**References**

The Mental Health of Offenders

Description of the issue
The report *Psychiatric Morbidity among Prisoners* indicated that approximately 90% of prisoners have a psychotic, a neurotic or a personality disorder or suffer with a substance misuse problem which has an effect on their mental health. Prisoners are also likely to have more than one problem concurrently, with remand prisoners more likely to suffer with multiple problems. HMP Leicester is a Category B Local Prison for adult men. It has a large throughput of prisoners, including those on remand, awaiting transfer to other prisons or serving short sentences. The transient nature of the prison’s population makes the provision of effective mental healthcare a major challenge. In addition, studies have shown a higher level of need for mental health services for offenders in the community than in the general population.

With regard to suicide, a problem related to mental ill-health, the risk is heightened particularly for those on remand or new to a prison, with evidence suggesting that those who have been in prison for less than one month have higher rates of suicidal thoughts. Studies have also shown that the rate of suicide amongst offenders in general is approximately 4 times that in the general population, with death most likely to occur within 12 weeks of release from prison.

Initiatives to improve mental healthcare for prisoners and offenders include the development of mental health in-reach teams and the transfer of prison healthcare to the NHS. There has also been guidance concerning how to improve mental health provision for offenders in general and in particular how to improve access to mental health services for 16 and 17 year olds, as this age group is responsible for the majority of youth crimes.

National and Local Priorities
National and local priorities are guided by the agenda that people with mental ill-health who require specialist medical treatment or social support should, wherever possible, receive it from health or social services. Partnership work between the Prison Service, Probation Service, local social services and the NHS is required in order to achieve this for offenders. Commissioning arrangements for all healthcare services in public sector prisons moved to local Primary Care Trusts in 2006. Efforts to improve the quality of prison mental healthcare include those initiatives which are specific to prisons, such as *The Future Organisation of Prison Health Care and Changing the Outlook: A Strategy for Developing and Modernising Mental Health Services in Prisons* which set out the vision for the development of prison mental health services so that services more closely match those in the community. Those efforts also include priorities for the general population, such as *The National Service Framework for Mental Health (NSF for Mental Health)* which applied to all working age adults, including prisoners.

In addition, the government has recently conducted a consultation on the health needs of all offenders, including mental health needs, entitled *Improving Health, Supporting Justice*. The government strategy for change is due for release and will be linked to the outcome of the Bradley Review on the diversion from prison of offenders with mental health problems and learning disabilities.

Mental Health of Offenders in Leicester: Epidemiology and Interventions
Those who offend have greater mental health needs than the population generally. A recent review of prisoners in HMP Leicester showed that 343 out of 368 prisoners had been prescribed medication for mental illness, 93.2% of the prison population. In another study of the prison population, 60.6% had a mental health problem which required referral, such as depression, panic attacks and insomnia, a similar prevalence of such conditions nationally was reported in *Psychiatric Morbidity among Prisoners*. The studies of the prisoners also suggested that there are high rates of drug and alcohol dependency, suicide ideation or self-harm and homelessness prior to sentencing. Prevention of suicide and self-harm is a high priority for HMP Leicester which has a number of prisoners on remand, newly sentenced and a high turnover of prisoners.

Mental health needs of offenders in general are wide. According to Howard, 45% of all offenders were identified as having a need in the ‘emotional well-being’ part of the Offender Assessment System. Women were more likely to report problems of emotional well-being such as depression, anxiety and feeling stressed or lonely. Many prisoners suggest that depression contributed to their offending behaviour. An analysis carried out by the National Offender Management Service found that 7% of all offenders were at risk of suicide and 7.3% were at risk of self-harm and these risks were higher among offenders convicted of criminal damage and women committing arson and robbery. Hagell suggests that young offenders have approximately three times the rate of mental health problems as the population in general, with high levels of...
personality disorder and psychosis. Female offenders also have high levels of mental ill-health, including psychosis.

A survey of Prolific and Priority Offenders in Leicestershire showed that about 50% were currently or previously known by the Leicestershire Partnership Trust (LPT) for a range of illnesses or disorders, including alcohol or drug misuse. A similar proportion of offenders in Approved Premises (Probation Hostels) were also known to LPT. The greater the risk the offenders posed, the more likely they were to require these services. Brooker’s study also showed that about 15% of offenders faced difficulties in accessing health services, which was concerning given the higher level of need. Offenders were more likely to attend hospital accident and emergency departments than the general population.

Issues Identified
There is a need for a joint approach to resolve the management of offenders with mental ill-health needs. Achieving better outcomes for these offenders is dependent upon joint initiatives between the PCT, local social services, HMP Leicester, the Leicestershire and Rutland Probation Trust and other stakeholders. The local Reducing Re-offending Board brings together most of these partners and could assist in co-ordinating activity on a Leicester, Leicestershire and Rutland basis.

Recommendations
It is recommended that:
- There should be improved care pathways for offenders in the community and on release from prison, with particular focus upon health and social care services, in particular those which relate to mental health. This should include improved access and co-ordination with Probation Services
- The healthcare provision in HMP Leicester matches the range and level of service of that in the community, and meets the needs of individual prisoners
- There should be greater monitoring of services and arrangements for offenders with mental ill-health
- The mental health needs of offenders should be considered and addressed collaboratively by the Health and Well-Being and Safer Leicester Partnerships
- There should be an accessible pathway into alcohol and drug treatment for offenders in the community, building on treatment which has been undertaken in prison

Lead Authors
Mark Wheatley
Public Health Specialist (Mental Health and Vulnerable People)
Tel: 0116 295 1583
Email: mark.wheatley@leicestercity.nhs.uk
Trevor Worsfold
ACO Operational Support
Leicestershire and Rutland Probation Area

Contributor
Carl Finch
CSIP Programme Lead

References
Domestic Violence and Mental Health

Description of the Issue

Domestic violence which, also referred to as domestic abuse, is “the physical, sexual, emotional, psychological, economic abuse or neglect of an individual by a partner, ex-partner, carer or one or more family members, in an existing or previous domestic relationship”. Domestic violence also encompasses forced marriage, “honour crimes” and female genital mutilation of adults.

Domestic violence includes a range of coercive and controlling behaviours used to dominate an individual or individuals and to maintain that power. It is an abuse of human rights. Some perpetrators move from one relationship or family to another, continuing to abuse. The Adoption and Children Act 2002 extended the definition of significant harm to include children living with and witnessing harm to others. National guidance for MPs had identified that 75% of children on the child protection register were living with domestic violence. In 2005 31% of safeguarding adult cases in Leicester, Leicestershire and Rutland concerned alleged abuse by family members.

Domestic violence has a significant impact on the physical, emotional, psychological health and well-being of both victims and witnesses. It cuts across all social, economic, religious and cultural boundaries. Domestic violence is rarely a single event but often escalates in frequency and severity over time. It can take many forms including:

- Physical violence
- Sexual violence and abuse
- Destruction of property
- Intimidation, such as threats to kill or harm the victim and or other family members including children and family pets
- Threatening to report victims to Social Services or Immigration Authorities
- Restricting of the victim’s liberty
- Isolating the victim from friends and families

Individuals present with a range of symptoms and issues including bruises, burns, cuts, stab wounds, broken bones, damage to teeth and jaw and bites. Prolonged stress impairs the immune system, increases vulnerability to a range of conditions and inhibits recovery. Abuse may be the underlying cause, trigger or exacerbate a range of conditions and chronic illnesses including coronary heart disease, irritable bowel syndrome, respiratory diseases or gastro-intestinal conditions. Domestic violence may result in long or short-term disability. Individuals may present over a long period of time with a range of vague and undefined symptoms or they may not attend for appointments. Sufferers or survivors of abuse are likely to have higher levels of admissions to hospital and more prescriptions.

Over 50% of adult rapes are committed by a current or ex-partner and the most severe forms of domestic violence are likely to be found among victims of sexual violence. The violence may result in pregnancy or impact on reproductive health. Sexual violence may cause severe emotional trauma and long-term sexual dysfunction, especially when sexual violence is a frequent experience.

Abuse can continue through stalking and harassment for many years, even when partners are separated, especially where perpetrators are granted contact access to children. Mental health problems can also arise, after separation from the perpetrator, as individuals contemplate with anger or sorrow what has been taken from them.

Abuse is a known risk factor for long-term mental illness, especially depression and anxiety. Women are at greater risk of violence than men and it is suggested that the high incidence of abuse may relate directly to the high prevalence of depression in women. Women use alcohol and to a lesser extent, drugs, as a mechanism to cope with current or past abuse.

Parental mental illness is known to increase the risks for the mental health and development of infants and children. Depression, which prevents the bonding between mother and child (attachment), can have long-lasting effects on children leading to poor attention skills, lack of control over emotions, difficulties with personal interactions and aggression. There is a greater risk that infants do not receive the stimulation they require to develop language and cognitive skills, particularly if these are not in place by the time they attend school.

Witnessing domestic violence in infancy and childhood can have a traumatic effect, which stimulates the brain stem (used for primitive functioning) to violently over-react. If the complex cerebral cortex has not been developed sufficiently to moderate this, children are more likely to be impulsive and violent and to see aggression as the normal means of resolving conflict.
There are increased risks of self-harm, teenage pregnancy, alcohol and substance misuse, truancy, anti social behaviour, bullying and eating issues in young people who are affected by domestic violence.

The extent to which children, even within the same family, are affected by domestic violence will be mitigated or exacerbated by a range of factors including the availability of supportive interventions.

Pregnancy has been identified as a risk factor for domestic violence and is linked to:

- Maternal death due to homicide or suicide
- Increases in rates of miscarriages
- Poor pregnancy outcomes
- Low birth-weight and pre-term labour
- Foetal distress

Maternal stress during pregnancy is associated with an increased risk of behavioural problems through infancy to adolescence.

**National and Local Priorities**

Drivers for action to tackle domestic violence include:

- Standard 1 of *The National Service Framework for Mental Health (NSF for Mental Health)*
- Leicester Local Area Agreement 2008-2011
- The development by the Home Office of a Co-ordinated Community Response to domestic violence to improve the safety of victims and reduce revictimisation including Specialist Domestic Violence Courts, Independent Domestic Violence Advisors (IDVAs) and Multi-Agency Risk Assessment Conferences (MARACs)
- The *National Domestic Violence Delivery Plan*
- Guidance for health professionals and Trusts on responding to domestic violence
- The key five outcomes for *Every Child Matters*

**Domestic Violence in Leicester: Epidemiology and Interventions**

The World Health Organisation (WHO) identifies tackling violence as a public health priority which is both predictable and preventable. The estimated prevalence of domestic violence varies, but it is frequently quoted that about one in four women and one in seven men had experienced physical abuse during their lives. However, studies have found differences in the experiences of women and men with higher rates of injury reported in female victims. Nationally on average, 2 women a week are killed by a current or former spouse or partner as a result of domestic violence. This equates to about 50% of all women killed in England. In most cases these deaths have been preceded by a history of abuse. There is significant gender variation in mortality associated with domestic violence with a rate of about 8% for male victims of homicide. In comparison, rates of homicide for women and men associated with domestic violence in Leicester are lower than the national average. Limited research has been carried out into the prevalence of domestic violence in gay and lesbian relationships, but a national study and a study in Leicester indicated this may be as high as 1 in 4 individuals in the lesbian, gay and bisexual community.

The police receive an average of 500 reports of domestic violence per month in Leicester. Data shows that the majority of victims are women abused by male partners or ex-partners but 25% of individuals are abused by other family members. Domestic violence accounts for up to 25% of all violent crime in Leicester and has the highest rate nationally and locally of revictimisation of any crime.

National research estimates the cost to hospital, ambulance, GP and prescription healthcare services is £1.2 billion per year. Physical injuries are estimated to cost about 3% of the NHS budget and the treatment of mental disorder associated with domestic violence is £176 million.

We have limited data locally on the interrelationship between domestic violence and mental health, but a national report identified that:

- Alcohol consumption is associated with both the perpetration and experience of domestic violence (this has been clearly demonstrated in the cases which have come to the local Multi Agency Risk Assessment Conferences for Domestic Violence)
- Substance use is frequently associated with domestic violence and it increases the risk to partners and children of the household of both physical and psychological harm occurring

Additional information taken from the Sane Responses guidance showed:

- Across a range of settings (psychiatric, primary care, A&E or refuges) the rates of depression amongst abused women varied from 38%-83%. The mental distress resulting from domestic violence can continue for many years after the abuse has stopped
• 70% of female psychiatric inpatients and 80% of those in secure settings have experienced physical or sexual abuse in child or adulthood

• Women experiencing domestic violence were found to be 3.55 times more likely to be suicidal than women in the general population

• On average 64% of abused women have Post Traumatic Stress Disorder (PTSD) which is characterised by intrusive memories or flashbacks, switching off/general numbing and anxiety/fear/hyper-vigilance. PTSD is a response to a traumatic event in which a person fears for the life and safety of themselves or others. Abuse victims are more vulnerable to severe and enduring PTSD when they remain in dangerous relationships, experience multiple incidents of abuse and are stigmatised through the negative reactions of others including communities

• 50% of Asian women who survive suicide or self-harm have experienced domestic violence

• Research has shown that perpetrators come from a range of social, economic and cultural backgrounds and many do not have mental health problems but there is some evidence of an increased association with morbid jealousy and personality disorder.

Activity to address domestic violence occurs through the NHS Domestic Violence Group. The Group is currently finalising a local NHS Domestic Violence Strategy.

The Leicestershire Partnership NHS Trust is a committed and active partner in this group. The Trust was one of the first to develop a specialist nurse post for safeguarding adults and children to provide a catalyst for change. The Chief Executive of Leicestershire Partnership NHS Trust is the local NHS domestic violence champion. In addition the multi-agency Leicester Domestic Violence Forum Partnership, has undertaken significant activity to develop the Coordinated Community Response.

The Mental Health Promotion Action Plan for Leicester, Leicestershire and Rutland includes activity to tackle domestic violence and abuse. Focus groups were held to explore issues around self harm, suicide and domestic violence with BME women. Participants indicated that experiences of domestic violence impacted particularly on the mental health of women from BME communities who may feel less able to seek help because of cultural pressures and perceptions of the availability and accessibility of services. There was some anecdotal evidence of links to using immolation as a form of self harm or suicide. Findings from the focus groups informed the suicide prevention awareness training programme.

The Leicester, Leicestershire and Rutland Safeguarding Children Board recognises the impact of domestic violence on children within its business plan. It set up a working group to look at improving communication and responses across children’s and adults’ services, particularly in relation to issues around parental mental health, drug and alcohol usage and where there is domestic violence. These factors have consistently emerged as key factors in serious case reviews into child deaths in Leicester and elsewhere in the country.

Issues Identified
Domestic violence has a significant impact on the physical, emotional, psychological health and well-being of both victims and witnesses. It cuts across all social, economic, religious and cultural boundaries.

Domestic violence is a hidden and often unreported issue.

Individuals face additional barriers in reporting domestic violence and accessing information and/or services because of, cultural norms and taboos, age, disability, gender, fear of racism or homophobia. This is compounded by stigma around mental health, self-harm and suicide.

Prevention and early intervention around domestic violence have significant, long-term financial benefits for the NHS. Major employers also experience hidden costs in relation to employees’ sickness, absence and reduced productivity. However,
additional activity to tackle domestic violence may incur costs in one service which result in savings in other parts of the economy.

Domestic violence has many similarities with chronic disease management - it is difficult to cure and has to be managed with the aid of a multi-disciplinary/agency team including the service user and specialist services.

Service users and staff experiencing domestic violence in Leicester still experience variations in responses unrelated to need.

Recommendations
It is recommended that:

- NHS Trusts sign up to the local NHS Domestic Violence Strategy and Action Plan and the Leicester Multi-Agency Domestic Violence Strategy
- NHS Trusts, the local authority and other partners identify leads for domestic violence at a sufficiently senior level to influence policy across the whole organisation
- The implementation of the NICE guideline on the management and prevention of self-harm in primary and secondary care is reviewed
- All commissioned services are aware of and implement best practice in the prevention of and response to domestic violence and this is included in contracts and service specification as a clear expectation

Lead Author
Carole Devaney
Public Health Programme Manager
Tel: 0116 295 1514
Email: carole.devaney@leicestercity.nhs.uk

References
Dual diagnosis

Description of the Issue
The co-existing problems of mental ill-health and substance misuse represent a difficult challenge for mental health services. Elements of care such as diagnosis and treatment are difficult and service users represent high risk of relapse, readmission to hospital, self-harm and suicide. Evidence suggests that substance misuse among people with mental health problems is usual rather than exceptional; that treatment for substance misuse problems often improves mental health problems; and the healthcare costs of untreated people with dual diagnosis are likely to be higher than for those receiving treatment. People with co-existing mental illness and substance misuse issues have high rates of physical ill-health. The provision of integrated care for people with a combination of mental health problems and substance misuse requires effective links across health, social care, the voluntary sector and criminal justice services.

National and Local Priorities
National guidance suggests that Dual Diagnosis services should be delivered within mental health services, with the aim that people should not fall between the gaps of the various organisations which may provide services for them. The Mental Health Policy Implementation Guide: Dual Diagnosis Good Practice Guide and the National Service Framework for Mental Health underpin the planning and development of integrated services. The priorities established in such guidance aim to ensure that Mental Health and Substance Misuse services do not use the identification of a primary diagnosis as a means to exclude people from services. Thus, the provision of dual diagnosis services should take place within mental health services and should be supported by specialist substance misuse services.

Dual Diagnosis in Leicester: Epidemiology and Interventions
People with co-morbidity of substance misuse and mental ill-health have a poor prognosis. There is a reciprocal relationship between the two issues. The most consistent predictor of a poor outcome for those receiving treatment for substance misuse is the presence of psychopathology whilst substance misuse is a predictor of poor treatment outcome for mentally ill patients. Research evidence suggests that drug treatment outcomes improve if mental disorders are treated.

Other problems which result from dual-diagnosis include self-destructive and antisocial behaviours which may lead to homelessness and high-risk behaviours such as offending, intravenous drug use, needle-sharing, suicide attempts, unsafe sex and binge consumption. There is also an increased risk of anxiety, depression and even early mortality. Substance misuse is also associated with increased rates of violence and suicidal behaviour. Also important are those ailments that result more directly from the administration of substances regardless of a co-existent mental illness. Intravenous drug misuse, for example, can result in venous or arterial thrombosis, blood-borne infections including HIV and Hepatitis B and C and cardiac disease. Smoking substances such as crack and heroin can result in respiratory diseases including pneumonia and emphysema. Long-term excessive use of alcohol is also associated with similar debilitating conditions.

People with a dual-diagnosis place a heavy burden on public services. Severe psychotic disorder and substance misuse may be accompanied by a range of social issues, such as homelessness, poverty, criminality, unemployment and marginalisation. A particular strain is placed on acute psychiatric services. The costs of providing treatment for those with co-morbidity are disproportionately higher than for those with psychiatric disorders that do not misuse substances.
The Office of National Statistics study of the prevalence of mental disorder in prisoners found high rates of drug use and dependence prior to coming into prison. Ten percent of male remand prisoners had a moderate drug dependency and 40% severe dependency. High levels of co-morbidity were also common. In a recent needs assessment of prisoners at HMP Leicester\(^3\), drug dependent prisoners were nine and alcohol dependent prisoners six times more likely to have mental illness.

Local services are ranged from universal services, separate mental health and drug services; the Community Drug Service has bases in Leicester and Loughborough. The team has a full time team leader, consultant psychiatrist, a consultant psychologist and full time and part time clinical specialists in substance abuse. With respect to mental health services, it is recommended that teams identify a clinician with a special interest in dual diagnosis to act as a resource, conduct audits and monitor substance use incidents. There is a nurse consultant in dual diagnosis based at Glenfield Hospital who offers additional expertise which could be drawn upon to enhance and assist current care.

### Issues Identified

Substance misuse is usual rather than exceptional amongst people with severe mental health problems and the relationship between the two is complex. This client group presents clear increased risks to their own and to public safety, with documented risk of increased crime, death and family breakdown. Individuals with these dual problems deserve high quality, patient focused and integrated care which is delivered within mental health services and treats both elements of their dual diagnosis. Providing an integrated dual approach to their treatment is essential to achieve sustainable improvement.

### Recommendations

It is recommended that:

- Mental health teams and services should identify a clinician with a special interest in dual diagnosis
- All staff in mental health and substance misuse teams are trained and equipped to work with dual diagnosis with appropriate support and supervision
- Clients with severe mental health problems and substance misuse are subject to the Care Programme Approach and have a full risk assessment
- Local priorities are shaped by a robust needs assessment of the dual mental ill-health and substance misuse co-morbidity
- Integrated governance, roles and responsibilities of the different agencies involved are defined by clear local protocols

### Lead Authors

Mags Walsh  
Models of Care Manager  
LLR DAATs  
Mark Wheatley  
Public Health Specialist (Mental Health and Vulnerable People)  
Tel: 0116 295 1583  
Email: mark.wheatley@leicestercity.nhs.uk

### References

Alcohol

Description of the Issue
The harm caused by alcohol represents a major challenge to the whole community in Leicester. It is estimated that around 33,000 people in Leicester are hazardous drinkers, 11,000 are harmful drinkers and about 3,500 are dependent on alcohol. This contributes to a range of significant problems for the individuals, families and communities living in the city.

Alcohol misuse can be directly linked to deaths from certain types of disease, such as liver cirrhosis and in some cases, it may be associated with other causes of death, such as stroke.

Impacts are also seen in alcohol-related hospital admissions to University Hospitals of Leicester. An analysis of the number of bed days attributable to alcohol and estimated costs showed that in 2005/06 the cost in Leicester was just under £10 million.

The recent review published by the Association of Public Health Observatories showed that at the regional level in England there is a strong association between higher rates of deprivation and greater evidence of alcohol-related harm. Leicester exhibits patterns of harm consistent with its higher level of deprivation.

National and Local Priorities
In order to address issues around alcohol, strategies need to be linked into both local and national priorities for them to be effective.

There is a range of national drivers to which alcohol links into:
- **Safe Sensible Social** - the 2007 update on the National Alcohol Harm Reduction Strategy
- **Choosing Health** has alcohol harm reduction as a major theme and identifies a number of ‘big wins’ related to combating alcohol misuse
- **Models of Care for Alcohol Misuse** – which sets the framework for the development and delivery of alcohol treatment services
- Regionally, the East Midlands public health strategy commits to local participation in the national strategy and Changing Ways, the national offender management service east midlands reducing re-offending plan, contains a specific pathway for tackling alcohol problems

The issue of alcohol is broad and links are made with the Home Office’s Public Service Agreement (PSA) priorities 14, 23 and 25, which all link to issues around alcohol and also within the context of safer communities.

Addressing alcohol has been identified as a priority in the following documents:
- Leicester Local Area Agreement 2008-2011
- Leicester Community Safety Strategy
- One Leicester, Sustainable Community Strategy
- NHS Leicester City Commissioning and Investment Strategy 2008-2013

To take forward this priority, the Leicester Alcohol Harm Reduction Strategy and Action Plan 2008 has been approved by the Safer Leicester Partnership focusing on:
- Prevention - preventing alcohol harm by promoting coherent education and harm reduction programmes to reduce the negative impacts of alcohol use
- Community Safety – protecting the community from the negative impact of alcohol through reducing re-offending, alcohol-related violent crime and the incidence of anti-social behaviour and by ensuring that those involved in the production and sale of alcoholic drinks act within the law and with an appropriate sense of social responsibility and that the city uses the powers at its disposal to achieve this
- Treatment – making it easier for people affected by alcohol misuse, including offenders in the criminal justice system, to access appropriately structured and effective alcohol treatment and support services

In addition the strategy addresses three cross-cutting themes:
- Meeting the needs of children and young people
- Setting a strategic framework
- Addressing equality and diversity

Alcohol in Leicester: Epidemiology and Intervention

Alcohol consumption in Leicester
- Some 75 to 80% of the Leicester population are either low risk drinkers who drink within the recommended limits, or are non-drinkers
- More men than women drink alcohol. Older people drink more regularly, whilst younger people drink more heavily
- Nationally the proportion of young people who drink alcohol increases from around 3% of 11 year olds to 46% of 15 year olds. A survey in Leicester found...
fewer young people drinking alcohol than the national average, though the proportion of those who binge drink was higher
• There are lower rates of alcohol consumption in parts of the South Asian population, compared with the white populations though there is a similar prevalence of dependence in BME populations as in the white population
• Consumption appears to be very low amongst asylum seekers and refugees

Problem drinkers
Some drinking patterns are associated with harmful outcomes. The city has around 33,000 hazardous drinkers - women drinking more than 14 and up to 35 and men more than 21 and up to 50 units of alcohol per week, either as regular excessive consumption or in less frequent sessions of heavy drinking. Around 11,000 harmful drinkers are women drinking over 35 and men over 50 units of alcohol per week and who show clear evidence of some physical or mental alcohol-related harm. The numbers of hazardous and harmful drinkers are increasing and it is estimated that Leicester has around 3,650 dependent drinkers.

Impact of alcohol misuse in Leicester
Leicester exhibits patterns of harm consistent with its higher level of deprivation as measured by the Index of Deprivation 2007.

Indications of Public Health in the English Regions 8: Alcohol shows that at a regional level there is a strong association between higher rates of deprivation and evidence of greater alcohol-related harm. “The poorest local authorities (those with the highest measures of multiple deprivation) also tend to have the highest recorded levels of health and social outcomes related to alcohol use: crime, anti-social behaviour orders, teenage conceptions, chronic liver disease, incapacity benefit claimant rates and unauthorised school absences.”3 Leicester, in comparison with the rest of Leicestershire and Rutland, has lower rates of hazardous alcohol consumption, but significantly higher levels of harm, as seen below in alcohol-related and specific deaths and alcohol-related hospital admissions.

The North West Public Health Observatory provides 17 statistical indicators of alcohol-related harm broken down by local authority area4. Leicester is above the national average for all the health and crime indicators with the exception of hospital admissions for young people.

Health
The National Alcohol Strategy estimates that up to 22,000 preventable deaths per year are associated in some way with alcohol misuse in England and over 30,000 hospital admissions due to alcohol dependence syndrome. Alcohol misuse accounts for up to 70% of A&E admissions at peak times.

Impacts are to be seen in high alcohol-related hospital admissions to University Hospitals of Leicester. Leicester has significantly worse rates than the average for England with regard to:
• Alcohol specific mortality (where alcohol consumption is thought to be a contributory factor for all cases) and chronic liver disease in men
• Alcohol specific hospital admissions
• Alcohol attributable hospital admissions in males and females (where alcohol is thought to be a contributory factor for a varying proportion of cases)

Alcohol-related hospital admissions (a combination of the latter two categories) have doubled since 2002 and Leicester has the highest rates of such admissions in the East Midlands.

Crime and disorder
Nationally, alcohol consumption is involved in around half of all violent crimes (1.2 million) and a third of all reported incidents of domestic abuse (360,000). In England around £7.3 billion is spent each year in tackling alcohol-related crime and public disorder.

Leicester is significantly worse than the average for England with regard to alcohol-related recorded crimes, violent crimes and sexual offenses. Just under half of all violent offenses in Leicester are committed under the influence of alcohol. A higher volume of violent crime is non-domestic, though domestic crime is believed to be under-reported to a greater extent than non-domestic.
The highest volume category of violent crime committed under the influence of alcohol is Actual Bodily Harm (ABH) followed by harassment.

**Offenders**

In England, over a third (37%) of offenders have been found to have a current problem with alcohol use and 37% with binge drinking. Of the 500 offenders under Probation Service supervision with an alcohol problem in Leicester, initial screening results from AUDIT suggests that up to 50% of these (or 250 per year) will be dependent to some extent on alcohol. In the first 6 months that it has been available, the courts in Leicestershire and Rutland have made 61 Alcohol Treatment Requirement orders on offenders who were identified as dependent drinkers.

**Road traffic accidents**

Nationally up to 22,000 premature deaths, at a cost of £2.4 billion to the economy, were reported as a result of alcohol. Just over 4% of all road traffic accidents in Leicester, Leicestershire and Rutland are alcohol-related. While the casualty rate per accident is similar for alcohol-related and non-alcohol-related accidents, alcohol-related accidents are more likely to result in serious or fatal injuries.

**Those affected by others’ alcohol misuse**

In England it is estimated that up to 1.3 million children are affected by parental alcohol problems. A recent mapping of services for young people affected by parental substance misuse indicated that some young people accessing services need support. For example the Leicester Youth Offending Service estimated that about 6% of their client group (70-80 young people) need specific intervention for issues related to parental substance misuse.

**Issues Identified**

Much work has been undertaken in Leicester to tackle alcohol misuse. However, a local strategy has been developed that recognises that more needs to be done and has identified a number of gaps with an action plan to address these issues using a partnership approach.

The strategy will be supported by the development of an investment plan with identified funding and an overall communication plan to support the dissemination of the strategy.

A strategic priority will be to collect and share data about alcohol misuse to ensure that there is robust baseline data available for planning and performance management. The recent extension of the National Drug Treatment Management System (NDTMS) is a major development in providing performance data from alcohol services in Leicester. Particular importance will be given to ensuring that data is used to assess the needs of diverse groups. Data from A&E will also be helpful in identifying licensed premises breaching licensing laws or selling alcohol to under-aged drinkers.

The National Support Team (NST) for Alcohol Harm Reduction visited Leicester in December 2008 to provide critical assistance with the city's plans to reduce alcohol related harm in general and alcohol related hospital admissions in particular.

Following interviews with key personnel from NHS Leicester City, Leicester City Council and other partners the NST provided a report and recommendations covering: vision, strategy and commissioning; data; communication; alcohol interventions and treatment services; targeted interventions; criminal justice, licensing and availability; workforce training and awareness; and work with families.

Key priority actions identified include; clarifying commissioning arrangements, an integrated commissioning plan, continued use and improvements in local and national data, and an initial focus on improved internal communications within the city.

In order to secure ownership and to capitalise on the NST it was agreed with the Chief Executives of the City Council and NHS Leicester that an Alcohol Executive be established to oversee implementation of the strategy and action plan. This will not replace existing partnership or governance arrangements, but rather augment them to secure progress and provide assistance.

**Recommendations**

It is recommended that the Leicester Alcohol Harm Reduction Strategy and Action Plan and the findings of the NST visit are implemented including the following:

- A robust system to collect all relevant data from all partners involved in tackling issues related to alcohol harm reduction needs to be developed
- A system for collecting data on alcohol-related admissions to A&E needs to be developed and understood by all partners involved
- A mechanism to clearly understand the joint commissioning arrangements with the county is developed
• A whole integrated treatment system of Tiers 1-4 be designed and commissioned by the alcohol commissioning group, reflecting the needs assessment and evidence base
• A forum is convened comprising representatives from Police, Courts, and the Licensing Authority to explore further actions and define proposed local policy towards community safety in relation to alcohol

Lead Author
Priti Raichura
Public Health Specialist (Substances)
Tel: 0116 295 1469
Email: priti.raichura@leicestercity.nhs.uk

References
Oral Health

Description of the Issue
Oral health can be defined as: “a standard of health of the oral and related tissues without active disease. This state should enable the individual to eat, speak and socialise without discomfort or embarrassment and contribute to general well-being”\(^1\).

Dental decay is totally preventable, but is strongly influenced by lifestyle and socio-economic factors. Oral health in children is poor in Leicester and there are substantial inequalities geographically, where there is a direct relationship with material deprivation and in terms of geographically limited access to services.

Many vulnerable groups receive limited support in terms of treatment, care and prevention. 5 year old children living in Leicester have more dental disease than in almost any other part of the East Midlands. The oral health of 5 year olds in an area reflects the oral health of the overall population. An area which has a high ‘decayed, missing and filled teeth’ (dmft) score for the 5 year old population will show high levels of decay in the rest of the population.

National Priorities

The targets were that:
- 70% of children should not have experienced decay
- On average, 5 year old children should have no more than one decayed, missing tooth due to decay, or filled primary tooth

Oral Health in Leicester: Epidemiology and Interventions
Since 1986, local epidemiological surveys to monitor the dental health of children, have been undertaken on an annual basis nationally by the British Association for the Study of Community Dentistry (BASCD). As part of this programme, 5 year old children are surveyed every four years.

The dmft index is the mean number of deciduous teeth affected by caries and it is made up of 3 constituent parts:

| dt | The mean number of teeth that are decayed and require treatment |
| mt | The mean number of teeth missing due to decay |
| ft | The mean number of decayed teeth that have been filled |
| Care Index | The percentage of teeth affected by decay that have been filled (ft X 100) dmft |

Table 4 shows the geographical variation in mean dt. The general tendency is for dental health to worsen the further north a child lives, but this is confounded by the water fluoridation scheme in the West Midlands.

### Table 4: Dental Caries Prevalence in 5 Year Old Children

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>dt</td>
<td>2.06</td>
<td>1.04</td>
</tr>
<tr>
<td>mt</td>
<td>0.09</td>
<td>0.13</td>
</tr>
<tr>
<td>ft</td>
<td>0.12</td>
<td>0.12</td>
</tr>
<tr>
<td>dmft</td>
<td>2.28</td>
<td>1.30</td>
</tr>
<tr>
<td>dt for dt &gt;0</td>
<td>4.08</td>
<td>3.31</td>
</tr>
<tr>
<td>% sepsis</td>
<td>6.8</td>
<td>2.8</td>
</tr>
<tr>
<td>Care Index</td>
<td>5</td>
<td>10</td>
</tr>
</tbody>
</table>
Table 5: The Variation in \( dt \) Across the English Regions (2006)

<table>
<thead>
<tr>
<th>Region</th>
<th>( dt )</th>
</tr>
</thead>
<tbody>
<tr>
<td>London</td>
<td>1.25</td>
</tr>
<tr>
<td>East Midlands</td>
<td>1.04</td>
</tr>
<tr>
<td>East of England</td>
<td>0.87</td>
</tr>
<tr>
<td>West Midlands</td>
<td>0.79</td>
</tr>
<tr>
<td>North East</td>
<td>1.39</td>
</tr>
<tr>
<td>North West</td>
<td>1.62</td>
</tr>
<tr>
<td>Yorkshire and Humberside</td>
<td>1.37</td>
</tr>
<tr>
<td>South Central</td>
<td>0.94</td>
</tr>
<tr>
<td>South West</td>
<td>1.11</td>
</tr>
</tbody>
</table>

5 year old children in Leicester have more decayed teeth than the East Midlands’ or national average. The extent of active, decayed teeth in this age group was 51.9% in 2005/06 compared with 34% in England as a whole.

Figure 22 shows the dmft for 5 year old children within Primary Care Trusts (PCTs) across the East Midlands Strategic Health Authority.

Figure 22: dmft for 5 Year Olds by PCT in the East Midlands

The 1994 *Oral Health Strategy for England* target that on average, 5 year old children should have no more than one decayed, missing tooth due to decay, or filled primary tooth, has clearly not been met for the 5 year old children in Leicester.

Dental caries is one of the two most common oral diseases in England. It affects the structure of the tooth and in the early stages is symptom-less. If left untreated it can go on to cause pain, infection and eventually a dental abscess. Although dental decay is rarely fatal, it can impact greatly on the person affected and those close to them. Dental caries can cause pain, sleepless nights, affect eating and can lead to individuals taking time off school or work. Those 5 year old children with decay in their deciduous teeth will also suffer from decay in their permanent teeth without appropriate action.

**Issues Identified**

In September 2007 the Department of Health published *Delivering Better Oral Health* an evidence-based toolkit for prevention. This is a clear, simplified guide on advice and action that primary dental teams can use to help prevent dental diseases in their patients. The toolkit also gives evidence-based advice on the use of topical fluorides including toothpastes, varnishes and mouthwashes. Another way of providing fluoride is through water fluoridation. The water supply in Leicester is not fluoridated at present. This is an issue that will require further consideration.

High levels of dental decay are strongly correlated with areas of deprivation and measures of socio-economic status. There is a clear need to take action to improve the standard of oral health in children in Leicester. Many of the factors that lead to poor oral health lead to poor health in general. People living in deprivation are more likely to suffer the inequality of poorer dental health. This is often worsened by difficulty accessing and using dental services. It is important that oral health initiatives link closely with other health inequality initiatives to ensure that the common risk factors of poorer health are addressed effectively. Interventions to improve oral health need to focus on promoting long-term, sustainable change and tackle inequalities. To achieve this, action is needed to address the underlying causes of oral health disease through improving diet, reducing sugar intake, improving oral hygiene and optimising exposure to fluoride.
One of the major factors in the development of dental caries is the frequent intake of refined sugar, which can also contribute to the development of other health problems such as obesity. If a common risk factor approach is adopted, then dental caries should be considered to be a disease of poor diet.

**Recommendations**

There are many new opportunities for achieving improvements in oral health. Dental decay is preventable and dental teams are now encouraged, through an evidence-based approach, to provide more emphasis on preventative dental care and give more advice on health and lifestyle issues than previously. Placing oral health on an integrated health agenda increases the opportunity for the wider health influences affecting oral health to be addressed more effectively and ultimately promote a more sustained improvement.

It is recommended that:

- There is further development of Oral Health Promotion programmes including improvements in diet
- There is promotion of the effective use of fluoride toothpaste and other topical fluorides through widespread use of the Delivering Better Oral Health Toolkit
- There are increased initiatives to improve awareness of Oral Health among general healthcare staff
- Oral Health is recognised as an integral part of the general health agenda
- Access to dental services is increased, with a particular focus on for marginalised groups

**Lead Author**
Carol Mander
Consultant Dental Public Health
Tel: 0116 295 4167
Email: carol.mander@leicestercity.nhs.uk

**Contributor**
Semina Makhani
Specialist Registrar in Dental Public Health
Tel: 0116 295 4143
Email: semina.makhani@leicestercity.nhs.uk

**References**
Health Protection

Description of the Issue
The main challenges that faced Health Protection during 2007 were those of Healthcare Associated Infection (HCAI), maintaining control of Tuberculosis and ensuring that children are protected against infectious diseases through immunisation.

Health Protection: Epidemiology, Interventions and Issues Identified

Immunisation
It is important that we ensure that we protect children in Leicester against infections by immunising them. The World Health Organisation recommends that at least 95% of all children are immunised. There is a national target of 95% for both of the primary immunisations and pre-school boosters. Leicester started well in 2007, with 94% of children being immunised. However, the end of the year saw a fall in the number of children immunised which continued into 2008. Figure 23 (below) shows the number of children who have completed their first immunisations by the age of 1 year. These protect against diphtheria, tetanus, pertussis (whooping cough), polio and haemophilus influenza b (Hib) (DTaP/IPV/Hib).

Figure 23: Percentage Uptake of DTaP/IPV/Hib Vaccine in Children Immunised at 12 Months from April 2003 to March 2008 by Quarter
Source: Health Protection Agency

At the age of 5, fewer children receive the pre-school booster than have received the primary immunisation course. This situation is worrying as the trend is also downwards.

Figure 24: Percentage Uptake of DTaP/IPV Booster Vaccine in Children Immunised at 5 Years from April 2003 to March 2008 by Quarter
Source: Health Protection Agency

Data on Measles, Mumps and Rubella (MMR) show a similar and worrying decline in the number of children who are immunised. This is particularly worrying in the light of the current measles outbreak affecting England.
A second MMR immunisation is essential to protect children. The data show that the uptake of this immunisation is low and needs to be improved to ensure that children in the City do not catch measles.

Declining uptake is an indicator that the immunisation systems within the city need careful attention.

Healthcare Associated Infection (HCAI)

Preventing HCAIs is essential if people are to receive the very best healthcare and do not become infected in hospital and community settings, whilst being treated for other illnesses. Nationally, two organisms are monitored to ensure that infections are being controlled; these are Clostridium difficile and Methicillin Resistant Staphylococcus Aureus (MRSA).

Across the whole of Leicestershire (data are not available for Leicester alone) there were 918 people who had laboratory tests confirming Clostridium difficile in 2007. This represents a decline against the number of people infected in 2005. The main way to prevent transmission of this infection is good hand hygiene and environmental cleaning.

In the financial year April 2007 – March 2008, 43 people across Leicestershire were found to have MRSA in their blood stream. This is a serious form of infection. Whilst this seems high, in comparison with the numbers of people treated in hospital it is in fact low, with the rate being 0.68 per 10,000 bed days. When University Hospitals Leicester (UHL) rates are compared with similar hospitals in England, they are shown to be low. The main way of prevention is again good hand hygiene and monitoring patients before operations to check for MRSA. Systems for monitoring patients are being developed both locally and nationally.

Tuberculosis

In 2007 there were 143 cases of Tuberculosis (TB) reported in Leicester. This is a decrease on the number reported in 2006, which has been maintained in 2008. It is important to maintain vigilance to ensure that people are protected against TB.

Recommendations

It is recommended that:

- A comprehensive review of immunisation services and systems is undertaken and measures are strengthened to increase uptake of childhood immunisations
- Efforts are continued in relation to environmental cleaning, hand hygiene and monitoring of patients prior to operations to pick up potential HCAI
- Vigilance is maintained to ensure people are protected against TB

Lead Author

Dr Philip Monk
Consultant in Communicable Disease Control, Health Protection Agency, East Midlands South
Tel: 0116 263 1400 Email: philip.monk@hpa.org.uk
### Health Facts 1: Mid-year 2007 estimates of resident population by age

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

<table>
<thead>
<tr>
<th>Area</th>
<th>0-4 years</th>
<th>5-14</th>
<th>15-34</th>
<th>35-64</th>
<th>65-74</th>
<th>75+</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leicester</td>
<td>21,771</td>
<td>34,967</td>
<td>98,744</td>
<td>101,505</td>
<td>17,951</td>
<td>17,663</td>
<td>292,601</td>
</tr>
<tr>
<td>%</td>
<td>7.4%</td>
<td>12.0%</td>
<td>33.7%</td>
<td>34.7%</td>
<td>6.1%</td>
<td>6.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Total</td>
<td>247,854</td>
<td>510,826</td>
<td>1,123,315</td>
<td>1,800,415</td>
<td>373,255</td>
<td>343,972</td>
<td>4,399,637</td>
</tr>
<tr>
<td>%</td>
<td>5.6%</td>
<td>11.6%</td>
<td>25.5%</td>
<td>40.9%</td>
<td>8.5%</td>
<td>7.8%</td>
<td>100.0%</td>
</tr>
<tr>
<td>England</td>
<td>3,038,403</td>
<td>5,960,790</td>
<td>13,481,278</td>
<td>20,452,216</td>
<td>4,192,458</td>
<td>3,966,887</td>
<td>51,092,032</td>
</tr>
<tr>
<td>%</td>
<td>5.9%</td>
<td>11.7%</td>
<td>26.4%</td>
<td>40.0%</td>
<td>8.2%</td>
<td>7.8%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

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


<table>
<thead>
<tr>
<th>Year</th>
<th>0-4</th>
<th>5-14</th>
<th>15-34</th>
<th>35-64</th>
<th>65-74</th>
<th>75-84</th>
<th>85+</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>21.0</td>
<td>35.1</td>
<td>97.4</td>
<td>100.1</td>
<td>18.3</td>
<td>13.0</td>
<td>4.8</td>
<td>289.7</td>
</tr>
<tr>
<td>2011</td>
<td>24.7</td>
<td>35.5</td>
<td>103.7</td>
<td>104.9</td>
<td>18.3</td>
<td>12.3</td>
<td>5.1</td>
<td>304.5</td>
</tr>
<tr>
<td>2016</td>
<td>26.2</td>
<td>40.3</td>
<td>105.9</td>
<td>107.7</td>
<td>20.6</td>
<td>12.7</td>
<td>5.4</td>
<td>318.8</td>
</tr>
<tr>
<td>2021</td>
<td>26.5</td>
<td>44.3</td>
<td>105.3</td>
<td>113.3</td>
<td>23.1</td>
<td>13.3</td>
<td>6.0</td>
<td>331.8</td>
</tr>
<tr>
<td>2026</td>
<td>26.2</td>
<td>45.7</td>
<td>106.7</td>
<td>118.2</td>
<td>24.8</td>
<td>15.4</td>
<td>7.0</td>
<td>344.0</td>
</tr>
<tr>
<td>2031</td>
<td>26.4</td>
<td>45.8</td>
<td>110.8</td>
<td>121.2</td>
<td>26.8</td>
<td>17.4</td>
<td>8.1</td>
<td>356.5</td>
</tr>
</tbody>
</table>

* Figures may not sum due to rounding

1 Figures unchanged from Improving Health in Leicester: Annual Report of the Director of Public Health and Health Improvement 2007
### 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 (2006)

<table>
<thead>
<tr>
<th></th>
<th>Leicester</th>
<th>East Midlands</th>
<th>England</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total births</td>
<td>4790</td>
<td>51007</td>
<td>639166</td>
</tr>
<tr>
<td>Live births</td>
<td>4747</td>
<td>50717</td>
<td>635748</td>
</tr>
<tr>
<td>Still births</td>
<td>43</td>
<td>290</td>
<td>3418</td>
</tr>
<tr>
<td>% low birth weight (&lt;2,500g)</td>
<td>11.3</td>
<td>8.1</td>
<td>7.9</td>
</tr>
<tr>
<td>% very low birth weight (&lt;1,500g)</td>
<td>2.3</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>General fertility rate</td>
<td>68.3</td>
<td>57.4</td>
<td>60.3</td>
</tr>
<tr>
<td>Under 18 conception rate (per 1,000 females aged 15-17 years)</td>
<td>61.2</td>
<td>39.6</td>
<td>40.4</td>
</tr>
</tbody>
</table>

#### Deaths (2006)

<table>
<thead>
<tr>
<th></th>
<th>Leicester</th>
<th>East Midlands</th>
<th>England</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stillbirth rate</td>
<td>9.0</td>
<td>5.7</td>
<td>5.3</td>
</tr>
<tr>
<td>Perinatal mortality rate</td>
<td>13.2</td>
<td>8.4</td>
<td>8.0</td>
</tr>
<tr>
<td>Infant mortality rate</td>
<td>7.6</td>
<td>5.4</td>
<td>5.0</td>
</tr>
</tbody>
</table>

#### Childhood Immunisations (2006-07)

**Source:** Health Protection Agency, COVER data

<table>
<thead>
<tr>
<th></th>
<th>Percentage of children immunised by their second birthday</th>
<th>Percentage of children immunised by their fifth birthday</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Leicester</td>
<td>East Midlands</td>
</tr>
<tr>
<td>Diphtheria, Tetanus, Polio</td>
<td>96</td>
<td>95</td>
</tr>
<tr>
<td>Measles, Mumps, Rubella</td>
<td>91</td>
<td>88</td>
</tr>
<tr>
<td>Meningitis C</td>
<td>95</td>
<td>95</td>
</tr>
<tr>
<td>Diphtheria, Tetanus, Polio Booster</td>
<td>96</td>
<td>95</td>
</tr>
<tr>
<td>Pertussis</td>
<td>96</td>
<td>95</td>
</tr>
<tr>
<td>Hib</td>
<td>96</td>
<td>95</td>
</tr>
<tr>
<td>Measles, Mumps, Rubella (first dose)</td>
<td>93</td>
<td>90</td>
</tr>
<tr>
<td>Measles, Mumps, Rubella (first and second dose)</td>
<td>83</td>
<td>77</td>
</tr>
<tr>
<td>Meningitis C</td>
<td>96</td>
<td>95</td>
</tr>
</tbody>
</table>

#### Deaths (2006)

<table>
<thead>
<tr>
<th></th>
<th>Leicester</th>
<th>East Midlands</th>
<th>England</th>
</tr>
</thead>
<tbody>
<tr>
<td>infant mortality rate</td>
<td>7.6</td>
<td>5.4</td>
<td>5.0</td>
</tr>
</tbody>
</table>

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

#### Low birth weight: Percent of live and still births < 1500 and < 2500g

#### General fertility rate: number of live births per 1,000 female population aged 15-44 years

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

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

#### Perinatal mortality rate: Number of stillbirths and deaths in the first week of life per 1,000 total live and still births
### Health Facts 3: Mortality rates

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

#### Mortality rates in males

<table>
<thead>
<tr>
<th>Cause of death</th>
<th>ICD 10</th>
<th>No. deaths in Leicester 2004-6, for all ages</th>
<th>England</th>
<th>East Midlands</th>
<th>Leicester</th>
<th>SMR</th>
<th>DSR</th>
<th>DSR</th>
<th>DSR</th>
<th>DSR</th>
<th>DSR</th>
<th>DSR</th>
<th>DSR</th>
<th>DSR</th>
<th>DSR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coronary heart disease</td>
<td>I20-I25</td>
<td>265</td>
<td>100.0</td>
<td>101.1</td>
<td>128.1</td>
<td>14.6</td>
<td>14.5</td>
<td>118.8</td>
<td>74.8</td>
<td>7.4</td>
<td>110.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cerebrovascular disease (stroke)</td>
<td>I60-I64</td>
<td>90</td>
<td>100.0</td>
<td>97.4</td>
<td>105.4</td>
<td>55.3</td>
<td>53.7</td>
<td>58.7</td>
<td>18.3</td>
<td>17.7</td>
<td>24.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All cancers</td>
<td>C00-C97</td>
<td>282</td>
<td>100.0</td>
<td>98.4</td>
<td>96.3</td>
<td>213.7</td>
<td>206.5</td>
<td>206.5</td>
<td>130.4</td>
<td>126.6</td>
<td>128.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All accidents</td>
<td>V01-X59</td>
<td>34</td>
<td>100.0</td>
<td>111.7</td>
<td>109.9</td>
<td>21.4</td>
<td>24.0</td>
<td>23.2</td>
<td>18.8</td>
<td>18.9</td>
<td>18.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All accidental falls</td>
<td>W00-W19</td>
<td>7</td>
<td>100.0</td>
<td>78.2</td>
<td>118.6</td>
<td>4.6</td>
<td>3.4</td>
<td>5.4</td>
<td>2.6</td>
<td>2.0</td>
<td>3.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Road traffic accidents</td>
<td>V01-V89</td>
<td>11</td>
<td>100.0</td>
<td>127.6</td>
<td>70.0</td>
<td>8.1</td>
<td>10.4</td>
<td>5.6</td>
<td>7.9</td>
<td>10.3</td>
<td>5.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suicide and undetermined death</td>
<td>X60-X84, Y10-Y34 exc Y33.9</td>
<td>19</td>
<td>100.0</td>
<td>99.1</td>
<td>116.0</td>
<td>12.5</td>
<td>12.3</td>
<td>14.4</td>
<td>12.4</td>
<td>12.1</td>
<td>14.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bronchitis, Emphysema &amp; Chronic obstructive Pulmonary Disease</td>
<td>J40-J44</td>
<td>60</td>
<td>100.0</td>
<td>96.7</td>
<td>102.4</td>
<td>35.7</td>
<td>34.6</td>
<td>36.6</td>
<td>14.6</td>
<td>14.1</td>
<td>16.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stomach and duodenal ulcer</td>
<td>K25-K27</td>
<td>8</td>
<td>100.0</td>
<td>81.4</td>
<td>92.9</td>
<td>4.7</td>
<td>3.8</td>
<td>4.7</td>
<td>2.5</td>
<td>2.0</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabetes</td>
<td>E10-E14</td>
<td>17</td>
<td>100.0</td>
<td>107.5</td>
<td>166.7</td>
<td>7.6</td>
<td>8.3</td>
<td>13.9</td>
<td>3.6</td>
<td>4.0</td>
<td>8.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>A15-A19</td>
<td>3</td>
<td>100.0</td>
<td>74.1</td>
<td>212.1</td>
<td>0.7</td>
<td>0.5</td>
<td>1.5</td>
<td>0.4</td>
<td>0.3</td>
<td>1.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chronic liver disease</td>
<td>K70, K73-K74</td>
<td>26</td>
<td>100.0</td>
<td>88.4</td>
<td>155.6</td>
<td>13.5</td>
<td>11.9</td>
<td>21.6</td>
<td>13.2</td>
<td>11.5</td>
<td>21.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All causes</td>
<td>A00-Y99</td>
<td>1232</td>
<td>100.0</td>
<td>100.4</td>
<td>116.3</td>
<td>732.0</td>
<td>732.0</td>
<td>859.1</td>
<td>383.5</td>
<td>375.0</td>
<td>471.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Mortality rates in females

<table>
<thead>
<tr>
<th>Cause of death</th>
<th>ICD 10</th>
<th>No. deaths in Leicester 2004-6, for all ages</th>
<th>England</th>
<th>East Midlands</th>
<th>Leicester</th>
<th>SMR</th>
<th>DSR</th>
<th>DSR</th>
<th>DSR</th>
<th>DSR</th>
<th>DSR</th>
<th>DSR</th>
<th>DSR</th>
<th>DSR</th>
<th>DSR</th>
<th>DSR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coronary heart disease</td>
<td>I20-I25</td>
<td>189</td>
<td>100.0</td>
<td>99.6</td>
<td>128.9</td>
<td>67.5</td>
<td>68.5</td>
<td>98.6</td>
<td>23.8</td>
<td>26.7</td>
<td>42.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cerebrovascular disease (stroke)</td>
<td>I60-I64</td>
<td>129</td>
<td>100.0</td>
<td>98.6</td>
<td>104.3</td>
<td>51.3</td>
<td>50.9</td>
<td>56.2</td>
<td>13.7</td>
<td>14.2</td>
<td>18.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All cancers</td>
<td>C00-C97</td>
<td>279</td>
<td>100.0</td>
<td>99.1</td>
<td>103.2</td>
<td>152.2</td>
<td>150.9</td>
<td>157.1</td>
<td>105.1</td>
<td>104.5</td>
<td>107.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All accidents</td>
<td>V01-X59</td>
<td>27</td>
<td>100.0</td>
<td>117.8</td>
<td>93.3</td>
<td>10.5</td>
<td>11.8</td>
<td>10.3</td>
<td>5.8</td>
<td>5.7</td>
<td>6.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All accidental falls</td>
<td>W00-W19</td>
<td>13</td>
<td>100.0</td>
<td>85.5</td>
<td>146.7</td>
<td>2.9</td>
<td>2.6</td>
<td>3.6</td>
<td>1.2</td>
<td>1.1</td>
<td>0.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Road traffic accidents</td>
<td>V01-V89</td>
<td>6</td>
<td>100.0</td>
<td>106.6</td>
<td>69.5</td>
<td>2.3</td>
<td>2.5</td>
<td>1.7</td>
<td>2.1</td>
<td>2.3</td>
<td>1.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suicide and undetermined death</td>
<td>X60-X84, Y10-Y34 exc Y33.9</td>
<td>9</td>
<td>100.0</td>
<td>97.0</td>
<td>141.4</td>
<td>4.2</td>
<td>4.1</td>
<td>6.0</td>
<td>4.1</td>
<td>4.0</td>
<td>6.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bronchitis, Emphysema &amp; Chronic obstructive Pulmonary Disease</td>
<td>J40-J44</td>
<td>47</td>
<td>100.0</td>
<td>91.7</td>
<td>104.8</td>
<td>21.5</td>
<td>19.8</td>
<td>23.2</td>
<td>10.2</td>
<td>9.6</td>
<td>12.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stomach and duodenal ulcer</td>
<td>K25-K27</td>
<td>8</td>
<td>100.0</td>
<td>95.2</td>
<td>123.3</td>
<td>3.2</td>
<td>3.1</td>
<td>4.2</td>
<td>1.3</td>
<td>1.4</td>
<td>2.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabetes</td>
<td>E10-E14</td>
<td>18</td>
<td>100.0</td>
<td>117.5</td>
<td>133.7</td>
<td>5.6</td>
<td>5.4</td>
<td>8.3</td>
<td>2.5</td>
<td>2.5</td>
<td>4.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>A15-A19</td>
<td>3</td>
<td>100.0</td>
<td>103.4</td>
<td>456.2</td>
<td>0.4</td>
<td>0.4</td>
<td>2.0</td>
<td>0.3</td>
<td>0.3</td>
<td>1.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chronic liver disease</td>
<td>K70, K73-K74</td>
<td>5</td>
<td>100.0</td>
<td>99.4</td>
<td>110.2</td>
<td>7.0</td>
<td>6.9</td>
<td>7.4</td>
<td>6.7</td>
<td>6.6</td>
<td>6.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All causes</td>
<td>A00-Y99</td>
<td>1308</td>
<td>100.0</td>
<td>102.4</td>
<td>118.6</td>
<td>512.2</td>
<td>522.9</td>
<td>622.2</td>
<td>240.0</td>
<td>243.5</td>
<td>305.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**ICD 10:**
- International Classification of Diseases: WHO’s internationally accepted classification of death and disease, revision 10.
- Standardised Mortality Ratio: Measure of whether someone is more or less likely to die compared to the standard population. A score greater than 100 indicates an increased probability and a score below 100 indicates a reduced probability.
- Standardised Years of Life Lost Rate: Potential number of years of life lost as a result of premature death (under 75 years) per 10,000 European standard population.

---

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

---

1 Figures unchanged from Improving Health in Leicester: Annual Report of the Director of Public Health and Health Improvement 2007
Health Facts 4: Cancer rates

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

### Cancer rates in males

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>C00-C97</td>
<td>1537</td>
<td>94.5</td>
<td>282</td>
<td>100</td>
<td>98.4</td>
<td>96.3</td>
<td>213.7</td>
<td>206.5</td>
<td>130.4</td>
<td>126.6</td>
<td>128.4</td>
</tr>
<tr>
<td>Lung</td>
<td>C33-C34</td>
<td>270</td>
<td>107.3</td>
<td>74</td>
<td>100</td>
<td>95.4</td>
<td>100.7</td>
<td>51.1</td>
<td>48.7</td>
<td>51.6</td>
<td>33.1</td>
<td>30.0</td>
</tr>
<tr>
<td>Colorectal</td>
<td>C17-C21</td>
<td>194</td>
<td>86.3</td>
<td>27</td>
<td>100</td>
<td>97.2</td>
<td>78.6</td>
<td>23.0</td>
<td>22.3</td>
<td>18.6</td>
<td>13.9</td>
<td>13.2</td>
</tr>
<tr>
<td>Stomach</td>
<td>C16</td>
<td>81</td>
<td>129.9</td>
<td>14</td>
<td>100</td>
<td>100.0</td>
<td>138.2</td>
<td>8.9</td>
<td>8.9</td>
<td>12.7</td>
<td>5.1</td>
<td>5.5</td>
</tr>
<tr>
<td>Oesophageal</td>
<td>C15</td>
<td>53</td>
<td>95.8</td>
<td>16</td>
<td>100</td>
<td>99.0</td>
<td>76.7</td>
<td>13.0</td>
<td>12.8</td>
<td>10.3</td>
<td>9.0</td>
<td>8.6</td>
</tr>
<tr>
<td>Bladder</td>
<td>C67</td>
<td>77</td>
<td>92.2</td>
<td>14</td>
<td>100</td>
<td>98.6</td>
<td>101.3</td>
<td>8.2</td>
<td>8.1</td>
<td>8.5</td>
<td>3.7</td>
<td>3.4</td>
</tr>
<tr>
<td>Malignant Melanoma</td>
<td>C43</td>
<td>21</td>
<td>46.4</td>
<td>4</td>
<td>100</td>
<td>93.3</td>
<td>67.8</td>
<td>2.9</td>
<td>2.7</td>
<td>2.0</td>
<td>2.3</td>
<td>2.1</td>
</tr>
</tbody>
</table>

| Prostate       | C61    | 306                             | 78.5                    | 21                            | 100     | 100.7| 87.3          | 25.7          | 25.9    | 22.2 | 9.1           | 9.2           | 7.5  | 85.2%          | 63.6%         |
| Leukaemia      | C91-C95| -                               | -                       | 6                             | 100     | 100.4| 101.9         | 6.7           | 6.6     | 6.6  | 4.2           | 4.3           | 4.5  | -              | -             |
| Hodgkins       | C81    | -                               | -                       | 0                             | 100     | 91.4| 45.3          | 0.5           | 0.5     | 0.2  | 0.4           | 0.4           | 0.2  | -              | -             |

### Cancer rates in females

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>C00-C97</td>
<td>1674</td>
<td>100.8</td>
<td>279</td>
<td>100</td>
<td>99.0</td>
<td>103.2</td>
<td>152.2</td>
<td>120.9</td>
<td>157.1</td>
<td>105.1</td>
<td>104.5</td>
</tr>
<tr>
<td>Lung</td>
<td>C33-C34</td>
<td>207</td>
<td>118.3</td>
<td>48</td>
<td>100</td>
<td>89.9</td>
<td>94.2</td>
<td>28.9</td>
<td>28.0</td>
<td>27.3</td>
<td>20.5</td>
<td>18.7</td>
</tr>
<tr>
<td>Colorectal</td>
<td>C17-C21</td>
<td>188</td>
<td>96.8</td>
<td>29</td>
<td>100</td>
<td>97.6</td>
<td>94.0</td>
<td>14.4</td>
<td>14.3</td>
<td>13.3</td>
<td>8.6</td>
<td>8.8</td>
</tr>
<tr>
<td>Stomach</td>
<td>C16</td>
<td>41</td>
<td>114.7</td>
<td>2</td>
<td>100</td>
<td>94.0</td>
<td>89.3</td>
<td>3.8</td>
<td>3.6</td>
<td>3.9</td>
<td>2.1</td>
<td>2.1</td>
</tr>
<tr>
<td>Oesophageal</td>
<td>C15</td>
<td>33</td>
<td>103.6</td>
<td>18</td>
<td>100</td>
<td>107.2</td>
<td>129.8</td>
<td>4.8</td>
<td>5.1</td>
<td>6.4</td>
<td>2.8</td>
<td>3.0</td>
</tr>
<tr>
<td>Bladder</td>
<td>C67</td>
<td>27</td>
<td>79.1</td>
<td>5</td>
<td>100</td>
<td>104.9</td>
<td>112.1</td>
<td>2.8</td>
<td>2.9</td>
<td>2.9</td>
<td>1.4</td>
<td>1.4</td>
</tr>
<tr>
<td>Malignant Melanoma</td>
<td>C43</td>
<td>33</td>
<td>55.8</td>
<td>1</td>
<td>100</td>
<td>95.7</td>
<td>42.1</td>
<td>1.9</td>
<td>1.9</td>
<td>0.9</td>
<td>1.5</td>
<td>1.6</td>
</tr>
<tr>
<td>Breast</td>
<td>C50</td>
<td>500</td>
<td>96.2</td>
<td>51</td>
<td>100</td>
<td>102.9</td>
<td>111.3</td>
<td>28.0</td>
<td>28.7</td>
<td>30.7</td>
<td>21.6</td>
<td>21.9</td>
</tr>
<tr>
<td>Cervical</td>
<td>C53</td>
<td>42</td>
<td>115.6</td>
<td>5</td>
<td>100</td>
<td>87.7</td>
<td>158.5</td>
<td>2.5</td>
<td>2.1</td>
<td>4.4</td>
<td>2.1</td>
<td>1.7</td>
</tr>
<tr>
<td>Leukaemia</td>
<td>C91-C95</td>
<td>-</td>
<td>-</td>
<td>5</td>
<td>100</td>
<td>100.1</td>
<td>49.5</td>
<td>3.8</td>
<td>3.7</td>
<td>2.0</td>
<td>2.4</td>
<td>2.3</td>
</tr>
<tr>
<td>Hodgkins</td>
<td>C81</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>100</td>
<td>108.3</td>
<td>120.4</td>
<td>0.3</td>
<td>0.3</td>
<td>0.2</td>
<td>0.3</td>
<td>0.2</td>
</tr>
</tbody>
</table>

| SRR Standardised Registration Ratio: | 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. |
| Standardised Mortality Ratio: | Ratio of number of deaths 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. |
| Standardised Years of Life Lost Rate: | Potential number of years of life lost as a result of premature death (under 75 years) per 10,000 European standard population |
| Survival rate: | Ratio of the survival rate actually observed among the cancer patients and the survival that would have been 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.

---

**Significantly worse than the national rate (100)**

**Significantly better than the national rate (100)**

---

58 Improving Health in Leicester Health Facts
## 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

**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 and these will be reported in the next annual report.

### Health Targets for Leicester

<table>
<thead>
<tr>
<th>Aim</th>
<th>Indicator</th>
<th>Target Ref</th>
<th>Leicester City PCT</th>
<th>Trajectory</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reduce health inequalities by 10% by 2010 as measured by infant mortality and life expectancy</strong></td>
<td>Life Expectancy</td>
<td>PSA06a</td>
<td>15.4% (Mar 2008)</td>
<td>16.2% (Mar 2008)</td>
</tr>
<tr>
<td><strong>Reduce health expectancy gap between the fifth most deprived areas and the population of Leicester as a whole</strong></td>
<td>Infant Mortality</td>
<td>PSA06b</td>
<td>71.6% (Mar 2008)</td>
<td>66.5% (Mar 2008)</td>
</tr>
<tr>
<td><strong>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</strong></td>
<td>Cardiovascular disease mortality and inequalities</td>
<td>PSA01a</td>
<td>120.0 (2004-6)</td>
<td>124 (2008)</td>
</tr>
<tr>
<td></td>
<td>Blood pressure screening</td>
<td>PSA01c</td>
<td>76.2% (Mar 2008)</td>
<td>75.2% (Mar 2008)</td>
</tr>
<tr>
<td></td>
<td>Checking cholesterol levels</td>
<td>PSA01d</td>
<td>78.7 (Mar 2008)</td>
<td>75.2% (Mar 2008)</td>
</tr>
<tr>
<td><strong>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</strong></td>
<td>Cancer mortality and inequalities</td>
<td>PSA03a</td>
<td>117.0 (2004-6)</td>
<td>99 (2008)</td>
</tr>
<tr>
<td><strong>Smoking; Reduce the adult smoking rates to 21% or less by 2010, with a reduction in prevalence among the routine manual groups to 26%</strong></td>
<td>Smoking</td>
<td>PSA08a</td>
<td>2,360 (2007-8)</td>
<td>2,368 (2007-08)</td>
</tr>
<tr>
<td></td>
<td>Smoking prevalence</td>
<td>PSA08b</td>
<td>189,690 (68%) (Mar 2008)</td>
<td>237,838 (90%) (2008)</td>
</tr>
<tr>
<td><strong>Sexual health; Reduce the under-18 conception rate by 50% by 2010</strong></td>
<td>Sexual Health</td>
<td>PSA11a</td>
<td>61.20 (2006)</td>
<td>42.8 (2008)</td>
</tr>
<tr>
<td></td>
<td>Reduce the number of new diagnoses of gonorrhoea</td>
<td>PSA11b</td>
<td>100% (2008)</td>
<td>95% (March 2008)</td>
</tr>
<tr>
<td><strong>Obesity; Halt the year-on-year rise in obesity among children under 11 by 2010</strong></td>
<td>Childhood obesity</td>
<td>PSA10a</td>
<td>21.6% Yr R, 33.2% Yr 6 (2006-7)</td>
<td>19.0% Yr R, 19.6% Yr 6 (2006-7)</td>
</tr>
<tr>
<td></td>
<td>Adult obesity</td>
<td>PSA10b</td>
<td>85.942 (30.9) (Mar 2008)</td>
<td>198,199 (75%) (2008)</td>
</tr>
</tbody>
</table>

**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 and these will be reported in the next annual report.
### Health Facts 6: Census 2001 demographic and health indicators by electoral ward and area committee

Source: Office of National Statistics: Census 2001

<table>
<thead>
<tr>
<th>Area Committee</th>
<th>Ward Code</th>
<th>Ward Name</th>
<th>Total population</th>
<th>00-04 years (%)</th>
<th>05-14 years (%)</th>
<th>15-24 years (%)</th>
<th>25-44 years (%)</th>
<th>45-64 years (%)</th>
<th>65-75 years (%)</th>
<th>75+ years (%)</th>
<th>White (%)</th>
<th>Asian/British (%)</th>
<th>Black/British (%)</th>
<th>Mixed (%)</th>
<th>Other (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area 1</td>
<td>00FNJY</td>
<td>Hushey Mead</td>
<td>15140</td>
<td>6.0</td>
<td>14.1</td>
<td>13.5</td>
<td>29.8</td>
<td>24.1</td>
<td>7.1</td>
<td>5.4</td>
<td>38.5%</td>
<td>57.7%</td>
<td>2.0%</td>
<td>1.5%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Area 2</td>
<td>00FFNJ</td>
<td>Belgrave</td>
<td>10305</td>
<td>6.5</td>
<td>18.8</td>
<td>15.5</td>
<td>29.2</td>
<td>20.4</td>
<td>5.5</td>
<td>5.1</td>
<td>26.1%</td>
<td>69.6%</td>
<td>1.7%</td>
<td>2.6%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Area 3</td>
<td>00FFNH</td>
<td>Latimer</td>
<td>11884</td>
<td>5.5</td>
<td>19.5</td>
<td>14.3</td>
<td>29.6</td>
<td>21.5</td>
<td>7.3</td>
<td>5.4</td>
<td>17.3%</td>
<td>79.1%</td>
<td>1.4%</td>
<td>1.7%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Area 4</td>
<td>00FNHP</td>
<td>Humberstone and Hamilton</td>
<td>11885</td>
<td>7.5</td>
<td>13.3</td>
<td>12.0</td>
<td>30.5</td>
<td>20.3</td>
<td>8.6</td>
<td>7.7</td>
<td>75.3%</td>
<td>20.5%</td>
<td>1.6%</td>
<td>1.9%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Area 5</td>
<td>00FNGB</td>
<td>Thurmaston</td>
<td>9980</td>
<td>6.2</td>
<td>14.2</td>
<td>11.3</td>
<td>24.8</td>
<td>22.1</td>
<td>11.1</td>
<td>10.3</td>
<td>83.0%</td>
<td>12.8%</td>
<td>1.9%</td>
<td>1.9%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Area 6</td>
<td>00FNIX</td>
<td>Aylestone</td>
<td>10864</td>
<td>5.5</td>
<td>11.8</td>
<td>12.3</td>
<td>30.1</td>
<td>22.6</td>
<td>8.3</td>
<td>9.4</td>
<td>92.6%</td>
<td>4.0%</td>
<td>1.5%</td>
<td>1.3%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Area 7</td>
<td>00FPNQ</td>
<td>Eyres Monsell</td>
<td>11233</td>
<td>7.5</td>
<td>16.4</td>
<td>12.7</td>
<td>25.8</td>
<td>19.0</td>
<td>9.7</td>
<td>8.9</td>
<td>94.7%</td>
<td>1.9%</td>
<td>1.1%</td>
<td>2.0%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Area 8</td>
<td>00FPNT</td>
<td>Freemen</td>
<td>9984</td>
<td>7.0</td>
<td>14.1</td>
<td>23.8</td>
<td>29.0</td>
<td>15.3</td>
<td>5.3</td>
<td>4.6</td>
<td>87.2%</td>
<td>4.6%</td>
<td>3.3%</td>
<td>3.1%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Area 9</td>
<td>00FNPC</td>
<td>Braunstone Park and Rowley Fields</td>
<td>16009</td>
<td>6.0</td>
<td>17.2</td>
<td>15.2</td>
<td>27.3</td>
<td>18.5</td>
<td>7.0</td>
<td>6.9</td>
<td>86.1%</td>
<td>9.7%</td>
<td>1.7%</td>
<td>2.9%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Area 10</td>
<td>00FNPQ</td>
<td>Westcotes</td>
<td>8651</td>
<td>4.8</td>
<td>7.3</td>
<td>30.6</td>
<td>35.4</td>
<td>13.1</td>
<td>4.5</td>
<td>4.3</td>
<td>73.7%</td>
<td>18.1%</td>
<td>3.2%</td>
<td>2.2%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Area 11</td>
<td>00FNPD</td>
<td>Western Park</td>
<td>9884</td>
<td>5.1</td>
<td>10.8</td>
<td>14.4</td>
<td>31.1</td>
<td>20.7</td>
<td>7.2</td>
<td>10.7</td>
<td>81.9%</td>
<td>13.5%</td>
<td>1.9%</td>
<td>1.8%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Area 12</td>
<td>00FNQX</td>
<td>New Parks</td>
<td>16013</td>
<td>7.8</td>
<td>16.8</td>
<td>13.2</td>
<td>26.5</td>
<td>19.5</td>
<td>7.6</td>
<td>8.6</td>
<td>91.5%</td>
<td>3.8%</td>
<td>1.7%</td>
<td>2.6%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Area 13</td>
<td>00FNNR</td>
<td>Fosse</td>
<td>10737</td>
<td>6.6</td>
<td>11.1</td>
<td>15.6</td>
<td>34.3</td>
<td>19.3</td>
<td>6.5</td>
<td>6.6</td>
<td>84.6%</td>
<td>10.1%</td>
<td>2.4%</td>
<td>2.2%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Area 14</td>
<td>00FNNP</td>
<td>Abbey</td>
<td>12707</td>
<td>8.8</td>
<td>13.8</td>
<td>12.8</td>
<td>28.0</td>
<td>20.5</td>
<td>8.0</td>
<td>9.1</td>
<td>81.1%</td>
<td>14.2%</td>
<td>2.0%</td>
<td>2.1%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Area 15</td>
<td>00FNNQ</td>
<td>Beaumont Leys</td>
<td>13849</td>
<td>8.5</td>
<td>16.5</td>
<td>15.5</td>
<td>32.8</td>
<td>20.0</td>
<td>3.6</td>
<td>3.1</td>
<td>78.2%</td>
<td>12.2%</td>
<td>4.6%</td>
<td>4.0%</td>
<td>1.0%</td>
</tr>
<tr>
<td>00FN</td>
<td>Leicester City</td>
<td>278567</td>
<td>6.8</td>
<td>14.0</td>
<td>16.7</td>
<td>29.4</td>
<td>19.5</td>
<td>6.9</td>
<td>6.6</td>
<td>63.8%</td>
<td>29.9%</td>
<td>3.1%</td>
<td>2.3%</td>
<td>0.8%</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>England</td>
<td>49736831</td>
<td>6.0</td>
<td>12.9</td>
<td>12.2</td>
<td>29.3</td>
<td>23.8</td>
<td>8.3</td>
<td>7.5</td>
<td>90.9%</td>
<td>4.6%</td>
<td>2.3%</td>
<td>1.3%</td>
<td>0.9%</td>
<td></td>
</tr>
</tbody>
</table>
## Health Facts 6a: Census 2001 demographic and health by electoral ward and area committee

Source: Office of National Statistics: Census 2001

<table>
<thead>
<tr>
<th>Area Committee</th>
<th>Ward Code</th>
<th>Ward Name</th>
<th>Health</th>
<th>Socio-economic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Number reporting health as 'Not good' (%)</td>
<td>People with Limiting long term illness (%)</td>
</tr>
<tr>
<td>Area 1</td>
<td>00FNNY</td>
<td>Rushey Mead</td>
<td>10.0</td>
<td>18.2</td>
</tr>
<tr>
<td></td>
<td>00FNNU</td>
<td>Belgrave</td>
<td>11.9</td>
<td>20.0</td>
</tr>
<tr>
<td></td>
<td>00FNNW</td>
<td>Latimer</td>
<td>12.7</td>
<td>21.2</td>
</tr>
<tr>
<td>Area 2</td>
<td>00FNNT</td>
<td>Humberstone and Hamilton</td>
<td>9.0</td>
<td>17.9</td>
</tr>
<tr>
<td></td>
<td>00FNPB</td>
<td>Thurncourt</td>
<td>11.9</td>
<td>22.9</td>
</tr>
<tr>
<td>Area 3</td>
<td>00FNNM</td>
<td>Chamwood</td>
<td>11.6</td>
<td>19.6</td>
</tr>
<tr>
<td></td>
<td>00FNHN</td>
<td>Coleman</td>
<td>10.4</td>
<td>17.9</td>
</tr>
<tr>
<td></td>
<td>00FNNP</td>
<td>Evington</td>
<td>10.1</td>
<td>21.2</td>
</tr>
<tr>
<td>Area 4</td>
<td>00FNNZ</td>
<td>Spinney Hills</td>
<td>10.3</td>
<td>18.1</td>
</tr>
<tr>
<td></td>
<td>00FNPN</td>
<td>Stoneygate</td>
<td>9.4</td>
<td>16.4</td>
</tr>
<tr>
<td>Area 5</td>
<td>00FNNJ</td>
<td>Knighton</td>
<td>7.5</td>
<td>15.5</td>
</tr>
<tr>
<td></td>
<td>00FNNL</td>
<td>Castle</td>
<td>8.0</td>
<td>14.8</td>
</tr>
<tr>
<td>Area 6</td>
<td>00FNNJ</td>
<td>Aylestone</td>
<td>10.1</td>
<td>19.1</td>
</tr>
<tr>
<td></td>
<td>00FNNQ</td>
<td>Eyres Monsell</td>
<td>12.2</td>
<td>22.8</td>
</tr>
<tr>
<td></td>
<td>00FNNR</td>
<td>Freemen</td>
<td>10.1</td>
<td>18.6</td>
</tr>
<tr>
<td>Area 7</td>
<td>00FNNK</td>
<td>Braunstone Park and Rowley Fields</td>
<td>11.7</td>
<td>20.7</td>
</tr>
<tr>
<td></td>
<td>00FNPC</td>
<td>Westcotes</td>
<td>8.7</td>
<td>14.9</td>
</tr>
<tr>
<td></td>
<td>00FNPD</td>
<td>Western Park</td>
<td>9.0</td>
<td>18.4</td>
</tr>
<tr>
<td>Area 8</td>
<td>00FNNJ</td>
<td>New Parks</td>
<td>11.8</td>
<td>21.9</td>
</tr>
<tr>
<td></td>
<td>00FNNR</td>
<td>Fosse</td>
<td>9.0</td>
<td>16.4</td>
</tr>
<tr>
<td>Area 9</td>
<td>00FNNF</td>
<td>Abbey</td>
<td>11.9</td>
<td>21.2</td>
</tr>
<tr>
<td></td>
<td>00FNNH</td>
<td>Beaumont Leys</td>
<td>9.0</td>
<td>16.6</td>
</tr>
<tr>
<td></td>
<td>00FN</td>
<td>Leicester City</td>
<td>10.2</td>
<td>18.8</td>
</tr>
<tr>
<td></td>
<td>England</td>
<td></td>
<td>9.0</td>
<td>17.9</td>
</tr>
</tbody>
</table>
### 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

<table>
<thead>
<tr>
<th>Ward Name</th>
<th>Females (2002-6)</th>
<th>Males (2002-6)</th>
<th>Mortality: DSR per 100,000 (all ages)</th>
<th>Infant Mortality rate</th>
<th>Perinatal mortality rate</th>
<th>Still birth rate (%)</th>
<th>Low birth weights (%</th>
<th>Under 18 conception rate</th>
<th>Access to Services</th>
<th>Lifestyle ward estimates for 16+ year olds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abbey</td>
<td>80.1</td>
<td>73.7</td>
<td>165.4</td>
<td>169.5</td>
<td>3.1</td>
<td>6.1</td>
<td>4.6</td>
<td>8.5%</td>
<td>high</td>
<td>Elective (Apr 04-Mar 07) Emergency (Apr 04-Mar 07)</td>
</tr>
<tr>
<td>Aylestone</td>
<td>79.3</td>
<td>75.6</td>
<td>128.2</td>
<td>189.7</td>
<td>7.3</td>
<td>9.7</td>
<td>7.3</td>
<td>6.8%</td>
<td>high</td>
<td>126.0 123.8</td>
</tr>
<tr>
<td>Beaumont Leys</td>
<td>77.7</td>
<td>76.3</td>
<td>133.1</td>
<td>219.0</td>
<td>4.3</td>
<td>13.9</td>
<td>10.7</td>
<td>9.4%</td>
<td>high</td>
<td>128.3 151.7</td>
</tr>
<tr>
<td>Belgrave</td>
<td>81.9</td>
<td>75.2</td>
<td>192.5</td>
<td>139.3</td>
<td>4.4</td>
<td>6.6</td>
<td>4.4</td>
<td>14.0%</td>
<td>high</td>
<td>121.4 145.3</td>
</tr>
<tr>
<td>Braunstone Park and Rowley Fields</td>
<td>77.2</td>
<td>73.3</td>
<td>137.3</td>
<td>242.8</td>
<td>3.4</td>
<td>7.9</td>
<td>5.6</td>
<td>10.0%</td>
<td>high</td>
<td>143.5 160.4</td>
</tr>
<tr>
<td>Castle</td>
<td>78.1</td>
<td>72.2</td>
<td>148.6</td>
<td>169.3</td>
<td>9.0</td>
<td>15.6</td>
<td>8.9</td>
<td>9.1%</td>
<td>high</td>
<td>110.4 156.9</td>
</tr>
<tr>
<td>Charwood</td>
<td>77.6</td>
<td>73.5</td>
<td>151.1</td>
<td>193.8</td>
<td>11.9</td>
<td>11.8</td>
<td>5.9</td>
<td>15.0%</td>
<td>high</td>
<td>121.1 175.1</td>
</tr>
<tr>
<td>Coleman</td>
<td>78.0</td>
<td>75.2</td>
<td>128.4</td>
<td>156.7</td>
<td>7.1</td>
<td>20.8</td>
<td>18.0</td>
<td>13.5%</td>
<td>high</td>
<td>122.0 154.2</td>
</tr>
<tr>
<td>Evington</td>
<td>81.5</td>
<td>77.2</td>
<td>110.6</td>
<td>146.2</td>
<td>0.0</td>
<td>3.1</td>
<td>3.1</td>
<td>12.3%</td>
<td>high</td>
<td>123.9 121.7</td>
</tr>
<tr>
<td>Eynes Morell</td>
<td>79.8</td>
<td>72.6</td>
<td>164.2</td>
<td>224.8</td>
<td>1.8</td>
<td>5.3</td>
<td>3.5</td>
<td>8.3%</td>
<td>high</td>
<td>141.4 158.7</td>
</tr>
<tr>
<td>Fosse</td>
<td>81.0</td>
<td>76.7</td>
<td>98.8</td>
<td>215.9</td>
<td>1.9</td>
<td>13.3</td>
<td>11.4</td>
<td>9.5%</td>
<td>high</td>
<td>116.2 118.7</td>
</tr>
<tr>
<td>Freemen</td>
<td>79.7</td>
<td>74.7</td>
<td>151.9</td>
<td>189.6</td>
<td>2.2</td>
<td>10.9</td>
<td>8.7</td>
<td>9.2%</td>
<td>high</td>
<td>135.1 151.7</td>
</tr>
<tr>
<td>Humberstone and Hamilton</td>
<td>80.7</td>
<td>76.3</td>
<td>130.0</td>
<td>163.8</td>
<td>9.6</td>
<td>20.6</td>
<td>14.2</td>
<td>10.3%</td>
<td>high</td>
<td>127.9 122.5</td>
</tr>
<tr>
<td>Knighton</td>
<td>81.5</td>
<td>78.3</td>
<td>90.6</td>
<td>142.1</td>
<td>5.8</td>
<td>9.6</td>
<td>3.8</td>
<td>7.5%</td>
<td>low</td>
<td>114.8 104.3</td>
</tr>
<tr>
<td>Latimer</td>
<td>80.9</td>
<td>75.6</td>
<td>174.6</td>
<td>119.5</td>
<td>8.6</td>
<td>14.8</td>
<td>10.6</td>
<td>11.9%</td>
<td>low</td>
<td>104.8 132.9</td>
</tr>
<tr>
<td>New Parks</td>
<td>79.0</td>
<td>74.0</td>
<td>150.3</td>
<td>201.3</td>
<td>5.6</td>
<td>12.6</td>
<td>9.1</td>
<td>9.3%</td>
<td>high</td>
<td>123.0 159.2</td>
</tr>
<tr>
<td>Rushley Mead</td>
<td>81.2</td>
<td>77.7</td>
<td>84.9</td>
<td>161.2</td>
<td>5.5</td>
<td>14.5</td>
<td>10.9</td>
<td>10.9%</td>
<td>low</td>
<td>120.9 119.3</td>
</tr>
<tr>
<td>Spinning Hills</td>
<td>80.3</td>
<td>74.6</td>
<td>167.0</td>
<td>160.4</td>
<td>10.8</td>
<td>11.9</td>
<td>7.5</td>
<td>15.8%</td>
<td>low</td>
<td>120.0 155.0</td>
</tr>
<tr>
<td>Stonegate</td>
<td>81.0</td>
<td>79.7</td>
<td>147.0</td>
<td>130.9</td>
<td>9.4</td>
<td>14.4</td>
<td>9.3</td>
<td>12.2%</td>
<td>high</td>
<td>125.0 135.6</td>
</tr>
<tr>
<td>Thurncourt</td>
<td>80.0</td>
<td>73.7</td>
<td>117.2</td>
<td>192.4</td>
<td>2.4</td>
<td>7.2</td>
<td>7.2</td>
<td>11.3%</td>
<td>high</td>
<td>119.4 191.2</td>
</tr>
<tr>
<td>Westcotes</td>
<td>78.4</td>
<td>73.1</td>
<td>174.7</td>
<td>185.9</td>
<td>5.5</td>
<td>13.7</td>
<td>8.2</td>
<td>8.8%</td>
<td>high</td>
<td>101.6 135.2</td>
</tr>
<tr>
<td>Western Park</td>
<td>78.8</td>
<td>76.0</td>
<td>90.1</td>
<td>177.6</td>
<td>2.7</td>
<td>5.4</td>
<td>7.3</td>
<td>7.5%</td>
<td>high</td>
<td>107.3 106.2</td>
</tr>
<tr>
<td>Leicester City</td>
<td>79.7</td>
<td>75.3</td>
<td>134.6</td>
<td>175.3</td>
<td>6.3</td>
<td>11.9</td>
<td>8.3</td>
<td>11.1%</td>
<td>high</td>
<td>122.4 137.6</td>
</tr>
<tr>
<td>Leicester, Leicestershire &amp; Rutland</td>
<td>81.6</td>
<td>77.8</td>
<td>106.2</td>
<td>166.5</td>
<td>5.2</td>
<td>9.8</td>
<td>6.6</td>
<td>8.4%</td>
<td>high</td>
<td>118.9 99.9</td>
</tr>
<tr>
<td>England</td>
<td>81.6</td>
<td>77.8</td>
<td>106.2</td>
<td>166.5</td>
<td>5.2</td>
<td>9.8</td>
<td>6.6</td>
<td>8.4%</td>
<td>high</td>
<td>118.9 99.9</td>
</tr>
</tbody>
</table>

**Life Expectancy (years) at birth for males and females**

- Significantly worse than the LLR average
- Significantly better than the LLR average

- DSR Mortality: Directly age-standardised mortality rates per 100,000, for all ages, using European standard population

- Infant Mortality rate: Number of deaths in live born infants under 1 year of age, per 1,000 live births

- Perinatal mortality rate: Number of still births and deaths under 7 days, per 1,000 total births

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

- Low birth weights: Percent of live and still births less than 2500 gram

- Under 18 conception rate: Number of conceptions per 1,000 females aged 15-17 years

**Under 18 conception rate**

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

- Smoking prevalence: Estimate of adults currently smoking

- Excessive drinking: Men consuming more than 8 units and women consuming more than 6 units on heaviest drinking day during the week

- Obesity prevalence: Estimate of adults with a Body Mass Index (BMI) greater than 30

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

---

62  Improving Health in Leicester Health Facts
# Health Facts 7 - Disease notifications 2007

Source: East Midlands South Health Protection Unit

<table>
<thead>
<tr>
<th>Disease notifications</th>
<th>Leicester 2007</th>
<th>Rate per 100,000</th>
<th>Leicestershire County &amp; Rutland 2007</th>
<th>Rate per 100,000</th>
<th>Leicestershire, Northamptonshire &amp; Rutland, 2007</th>
<th>Rate per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campylobacter</td>
<td>184</td>
<td>62.9</td>
<td>629</td>
<td>92.6</td>
<td>1611</td>
<td>97.6</td>
</tr>
<tr>
<td>Cryptosporidium</td>
<td>11</td>
<td>3.8</td>
<td>42</td>
<td>6.2</td>
<td>88</td>
<td>5.3</td>
</tr>
<tr>
<td>E.Coli O157</td>
<td>4</td>
<td>1.4</td>
<td>4</td>
<td>0.6</td>
<td>11</td>
<td>0.7</td>
</tr>
<tr>
<td>Food poisoning</td>
<td>13</td>
<td>4.4</td>
<td>47</td>
<td>6.9</td>
<td>78</td>
<td>4.7</td>
</tr>
<tr>
<td>Gastroenteritis</td>
<td>1</td>
<td>0.3</td>
<td>1</td>
<td>0.1</td>
<td>6</td>
<td>0.4</td>
</tr>
<tr>
<td>Giardia</td>
<td>39</td>
<td>13.3</td>
<td>61</td>
<td>9.0</td>
<td>109</td>
<td>6.6</td>
</tr>
<tr>
<td>Hepatitis A</td>
<td>7</td>
<td>2.4</td>
<td>1</td>
<td>0.1</td>
<td>14</td>
<td>0.8</td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>27</td>
<td>9.2</td>
<td>10</td>
<td>1.5</td>
<td>75</td>
<td>4.5</td>
</tr>
<tr>
<td>Hepatitis C</td>
<td>22</td>
<td>7.5</td>
<td>20</td>
<td>2.9</td>
<td>121</td>
<td>7.3</td>
</tr>
<tr>
<td>Hepatitis E</td>
<td>3</td>
<td>1.0</td>
<td>2</td>
<td>0.3</td>
<td>5</td>
<td>0.3</td>
</tr>
<tr>
<td>Influenza A</td>
<td>1</td>
<td>0.3</td>
<td>0</td>
<td>0.0</td>
<td>13</td>
<td>0.8</td>
</tr>
<tr>
<td>Legionella</td>
<td>5</td>
<td>1.7</td>
<td>5</td>
<td>0.7</td>
<td>15</td>
<td>0.9</td>
</tr>
<tr>
<td>Listeria</td>
<td>4</td>
<td>1.4</td>
<td>2</td>
<td>0.3</td>
<td>6</td>
<td>0.4</td>
</tr>
<tr>
<td>Malaria</td>
<td>17</td>
<td>5.8</td>
<td>8</td>
<td>1.2</td>
<td>30</td>
<td>1.8</td>
</tr>
<tr>
<td>Measles</td>
<td>25</td>
<td>8.5</td>
<td>53</td>
<td>7.8</td>
<td>167</td>
<td>10.1</td>
</tr>
<tr>
<td>Meningococcal disease</td>
<td>17</td>
<td>5.8</td>
<td>43</td>
<td>6.3</td>
<td>132</td>
<td>8.0</td>
</tr>
<tr>
<td>Mumps</td>
<td>133</td>
<td>45.5</td>
<td>421</td>
<td>62.0</td>
<td>619</td>
<td>37.5</td>
</tr>
<tr>
<td>Norovirus</td>
<td>19</td>
<td>6.5</td>
<td>31</td>
<td>4.6</td>
<td>124</td>
<td>7.5</td>
</tr>
<tr>
<td>Para-typhoid</td>
<td>10</td>
<td>3.4</td>
<td>0</td>
<td>0.0</td>
<td>10</td>
<td>0.6</td>
</tr>
<tr>
<td>Pertussis</td>
<td>11</td>
<td>3.8</td>
<td>37</td>
<td>5.4</td>
<td>60</td>
<td>3.6</td>
</tr>
<tr>
<td>Rotavirus</td>
<td>3</td>
<td>1.0</td>
<td>6</td>
<td>0.9</td>
<td>69</td>
<td>4.2</td>
</tr>
<tr>
<td>Rubella</td>
<td>7</td>
<td>2.4</td>
<td>22</td>
<td>3.2</td>
<td>35</td>
<td>2.1</td>
</tr>
<tr>
<td>Salmonella</td>
<td>60</td>
<td>20.5</td>
<td>139</td>
<td>20.5</td>
<td>352</td>
<td>21.3</td>
</tr>
<tr>
<td>Scarlet Fever</td>
<td>4</td>
<td>1.4</td>
<td>29</td>
<td>4.3</td>
<td>47</td>
<td>2.8</td>
</tr>
<tr>
<td>Shigella</td>
<td>2</td>
<td>0.7</td>
<td>10</td>
<td>1.5</td>
<td>39</td>
<td>2.4</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>246</td>
<td>84.1</td>
<td>60</td>
<td>8.8</td>
<td>393</td>
<td>23.8</td>
</tr>
<tr>
<td>typhoid</td>
<td>5</td>
<td>1.7</td>
<td>0</td>
<td>0.0</td>
<td>6</td>
<td>0.4</td>
</tr>
</tbody>
</table>

Rates calculated using ONS mid-2007 population estimates
**Glossary**

**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 100,000 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.

**Infant mortality:** Babies who die within the first 12 months of life.

**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.

**International classification of diseases:** 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.

**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.

**Quintile:** The proportion of the distribution containing one fifth of the total sample. In the Index of Deprivation 2007 (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.

**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 ID2007) has a population of 1,000-1,500.

**Survival rate (1 year/ 5 years):** Ratio of the 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.

**Years of life lost:** Number of potential years of life lost in a population as a result of premature death (under 75 years).
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 or jane.whitehouse@leicestercity.nhs.uk

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