

# Annual Report of the Director of Public Health 2017

Leicestershire's health -  
new insights into our population

# 1. Foreword

Welcome to my annual report for 2017. In my last annual report I set out an analysis, at county and district level, of the health profiles for England, highlighting the importance of the place as a setting for health improvement. As can be seen in the ‘update on recommendations’, presenting such an analysis has led to a renewed focus on the priorities for health throughout Leicestershire districts, while workplace health has been taken up as a priority through the work of the Unified Prevention Board and the wider Sustainability and Transformation Partnership (STP).

Building on the analysis in the last two years, I have chosen to dig a little deeper into the health of the local population. I believe that the annual report remains an important document setting out information on the health of the population and the areas we need to focus on.

This time around, I have chosen a more visually appealing style to the report. The use of infographics makes data ‘come alive’ to more people, so I hope this report casts a new light on the way people think about themselves and Leicestershire.

To that end, I would like to thank the team that have helped produce this: Rob Howard, Joshna Mavji, Mike McHugh and Liz Orton from Public Health and especially, Natalie Greasley from the Strategic Business Intelligence Team for her tremendous work in making my vague thoughts and instructions into a fantastic picture of the health of Leicestershire.



Mike Sandys  
Director of Public Health

A handwritten signature in blue ink, appearing to read 'Mike Sandys', with a long horizontal line underneath.

## Contents

<b>1. Foreword</b> .....	<b>2</b>
<b>2. Introduction</b> .....	<b>3</b>
<b>3. Recommendations and summary</b> .....	<b>4</b>
<b>4. Leicestershire’s population</b> .....	<b>6</b>
4.1 Population and population change .....	6
4.2 The wider determinants of health .....	20
4.3 Lifestyle behaviours .....	26
4.4 Life and death and illness .....	38
4.5 Prescribing .....	50
4.6 Hospital admissions .....	54
<b>5. Feedback from recommendations for 2016</b> .....	<b>60</b>

## 2. Introduction

Directors of Public Health have a statutory duty to write an Annual Public Health Report that describes the state of health within their communities.

It is a major opportunity for advocacy on behalf of the population and, as such, can be used to help talk to the community and support fellow professionals, providing added value over and above intelligence and information routinely available such as that contained within health profiles or the Joint Strategic Needs assessment (JSNA).

It is intended to inform local strategies, policy and practice across a range of organisations and interests and to highlight opportunities to improve the health and wellbeing of people in Leicestershire.

However the report is not just an annual review of public health outcomes and activity. The annual report is an important vehicle by which Directors of Public Health can identify key issues, flag up problems, report progress and thereby serve their local populations. It is also a key resource to inform stakeholders of priorities and recommend actions to improve and protect the health of the communities they serve.

Within this report, data is presented on the population of Leicestershire, its health, lifestyle behaviours, prescribing and hospitals admissions. The content should be used by commissioners and providers of services to respond to changes in the health of Leicestershire residents.



# 3. Recommendations and summary

I am aware that every slide has something in it that organisations and individuals would wish to reflect on and take forward in their future plans. This could range from demographic projections informing future service redesign, through to migration patterns informing economic growth and housing plans, etc. However, there are areas which I will be taking forward this year through the work of the department:

## Deprivation and rural health

Although relatively affluent as a whole, analysis of the 'housing and environment' domain of the Index of Multiple Deprivation shows that Leicestershire faces challenges around housing and access to services. A priority for public health in the next year will be to examine rural health in more depth and ensure that robust plans are in place to tackle rural health issues.

## Air quality

As an emerging national risk to health, I would encourage a partnership approach between Leicestershire County Council, District Councils, businesses and other partners to address this issue with the urgency and scale that it requires.

## Demography

The figures for life expectancy, healthy life expectancy and population change make it clear that Leicestershire's population is undergoing rapid change. It is estimated that 56,000 men and 58,000 women are living in the 'age gap' between healthy life expectancy and life expectancy, potentially in poor health. This accounts for 17% of the population in the county. It is imperative that government funding formulas reflect the drivers for demand for our services, such as adult social care, so that Leicestershire can plan for this ongoing change

## Lifestyles

Around two-thirds of deaths among the under 75s are caused by diseases and illness that are largely avoidable, including cancer and diseases of the circulatory system. Many of the direct causes are due to lifestyle related factors and are preceded by long periods of ill-health. I will ensure that lifestyle services tackle multiple lifestyle risk factors and that such services are integral to developments such as Integrated Locality Teams.

## Alcohol

Alcohol specific hospital admissions highlight 'hotspots' around the county where such admissions occur. I will help develop stronger links between the Leicestershire Community Safety Partnership Board and the Health and Wellbeing Board to work on identified joint priorities such as alcohol related admissions.

## Weight management

Although our weight management services show a level of effectiveness, it is clear that they are, in part, providing for a group of patients with a higher level of need than they were designed for. I would re-new a call for all partners, including Clinical Commissioning Groups (CCGs), to recognise their commissioning responsibilities in the creation of an integrated weight management pathway.

# Health summary of Leicestershire 2017

- 5.4% of all-cause adult mortality is attributable to air pollution, measured as fine particulate matter, PM2.5. Nationally, air pollution is attributable to 4.7% of all adult deaths.
- Violent crime (violent offences) is **significantly better** than the national average
- School readiness: achieving a good level of development at the end of reception is **significantly worse** than the national average
- Children with excess weight aged 4-5 years is **similar** to the national average
- Children with excess weight aged 10-11 years is **significantly better** than the national average
- Excess weight in adults is **similar** to the national average
- The percentage of physical active adults is **similar** to the national average
- Admissions to hospital for alcohol specific conditions for under 18s and all ages are both **significantly better** than the national average
- Smoking prevalence is **significantly better** than the national average
- Under 18 conceptions (teenage pregnancy rate) is **significantly better** than the national average
- Suicide rate is **similar** to the national average
- Recorded diabetes is **significantly worse** than the national average
- Life expectancy for both males and females is **significantly better** than the national average
- Healthy life expectancy for males is **similar** to the national average and healthy life expectancy for females is **significantly better** than the national average

Domain	Indicator	
Our Communities	Deprivation score (IMD 2015), Persons	Not compared
	Children in low income families (under 16s), Persons	Better
	Statutory homelessness, Persons	Better
	GCSEs achieved, Persons	Same
	Violent crime (violence offences), Persons	Better
	Long term unemployment, Persons	Better
Children's and young people's health	Smoking status at time of delivery, Female	Same
	Breastfeeding initiation, Female	Same
	Obese children (Year 6), Persons	Better
	Hospital stays for alcohol-specific conditions (under 18s), Persons	Better
	Under 18 conceptions, Female	Better
Adults' health and lifestyle	Smoking prevalence in adults, Persons	Better
	Percentage of physically active adults - current method, Persons	Same
	Excess weight in adults, Persons	Same
Disease and poor health	Cancer diagnosed at early stage, Persons	Not compared
	Hospital stays for self-harm, Persons	Better
	Hospital stays for alcohol-related harm, Persons	Better
	Recorded diabetes, Persons	Worse
	Incidence of TB, Persons	Better
	New sexually transmitted infections (STI), Persons	Better
	Hip fractures in people aged 65 and over, Persons	Better
	Estimated dementia diagnosis rate (aged 65+), Persons	Same
Life expectancy and causes of deaths	Life expectancy at birth, Male	Better
	Life expectancy at birth, Female	Better
	Infant mortality, Persons	Same
	Killed and seriously injured on roads, Persons	Better
	Suicide rate, Persons	Same
	Smoking related deaths, Persons	Better
	Under 75 mortality rate: cardiovascular, Persons	Better
	Under 75 mortality rate: cancer, Persons	Better
	Excess winter deaths, Persons	Same

Statistical Significance compared to England:

■ Better
 ■ Not compared
 ■ Same
 ■ Worse

# 4. Leicestershire's population

## 4.1 Population and population change

### Where do people live in Leicestershire?

In 2015, the population of Leicestershire was 675,300 people. Of these, 153,800 people were aged 0-19 years (22.8%), 116,300 people were aged 65-84 years (17.2%) and 17,000 people were aged 85 years and over (2.5%).<sup>i</sup>

The population of Leicestershire is growing and by 2039 the total population is predicted to reach 784,400 people, a total population growth of 17.4% compared with 2014. However, this growth is not uniform across the different age bands. In the next 25 years, the population is predicted to grow as follows:<sup>ii</sup>

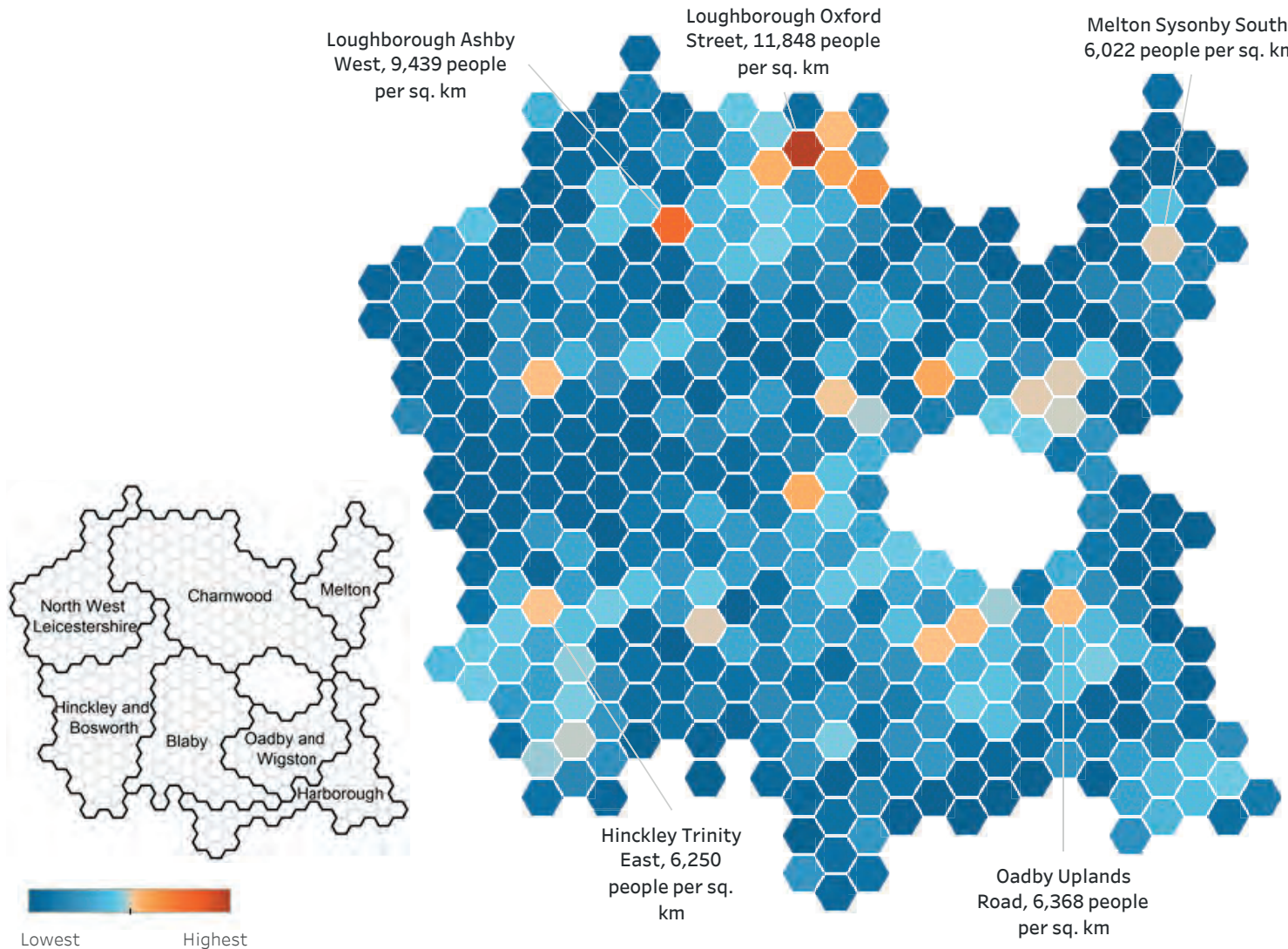
- A 13% increase in children and young people age 0-19 years (153,600 people to 173,000);
- A 4% increase in the working age population age 20-64 (from 384,400 people to 399,000);
- A 49% increase in people aged 65-84 year olds (from 113,400 people to 168,500); and
- A 162% increase in the oldest population group of people aged 85 years and over (from 16,700 people to 43,700).

The infographic examines the population density of residents in Leicestershire by each specified age group. It estimates the counts of residents per square kilometre by each Lower Super Output Area (LSOA).<sup>iii</sup> It shows that for all ages of the population, Loughborough is the most densely populated area in the county. When examining population density by age bands, areas in Loughborough, Oadby and Thorpe Astley have the highest density of children and young people. Wigston, Burbage and Loughborough have the highest population density of adults aged over 65 years and these same LSOAs in Wigston and Loughborough have the highest population density of residents aged 85 and over. The high population density of older residents is likely to correlate with the location of care homes.

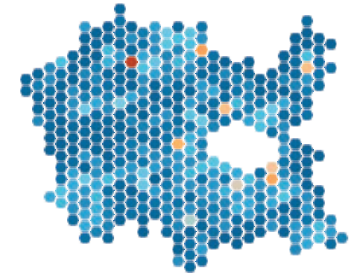
# Where do people live in Leicestershire?

Each hexagon represents one Lower Super Output Area (LSOA) in Leicestershire. These are small units of geography used for the dissemination of Census data and, on average, contain a population of 1,500. The darkest orange LSOAs have the highest counts of people per square kilometre in the specified age group.

## All Ages Population



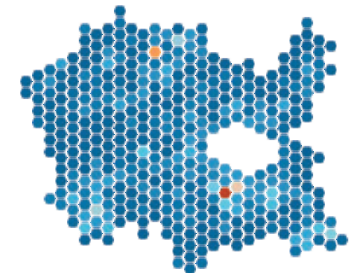
## Population aged 0-19



## Population aged 65+



## Population aged 85+



Source: Mid-2015 population estimates, ONS

Produced by the Strategic Business Intelligence Team, Leicestershire County Council, 2017.

## Living arrangements in Leicestershire

The 2011 Census data shows living arrangements vary by age. In 2011, almost all young people aged 16-24 were either single, or cohabiting; 87% were single while 10% were cohabiting. The highest density of single people was in Loughborough. This could be attributed to the large student population within the town. At 25-34, people begin to marry<sup>1</sup> resulting in an increased variation of living arrangements for this age band; in 2011 there was a relatively even split between single people (34%), cohabiting people (28%) and married couples (35%). The vast majority of people aged 34-49 were married (61%), while 10% were separated or divorced. By age 50-64, almost three-quarters of the population were married (72%) while 11% were divorced, 8% cohabiting and 5% were single. At age 65 and over, the vast majority of people were married (62%), but the proportion of people who were widowed increased to 25%, while the proportion of people separated or divorced decreased slightly to 7%. Over a third of females (36%) aged 65 or over were widowed compared to 12% of males, which reflects longer life expectancy in females compared to males.



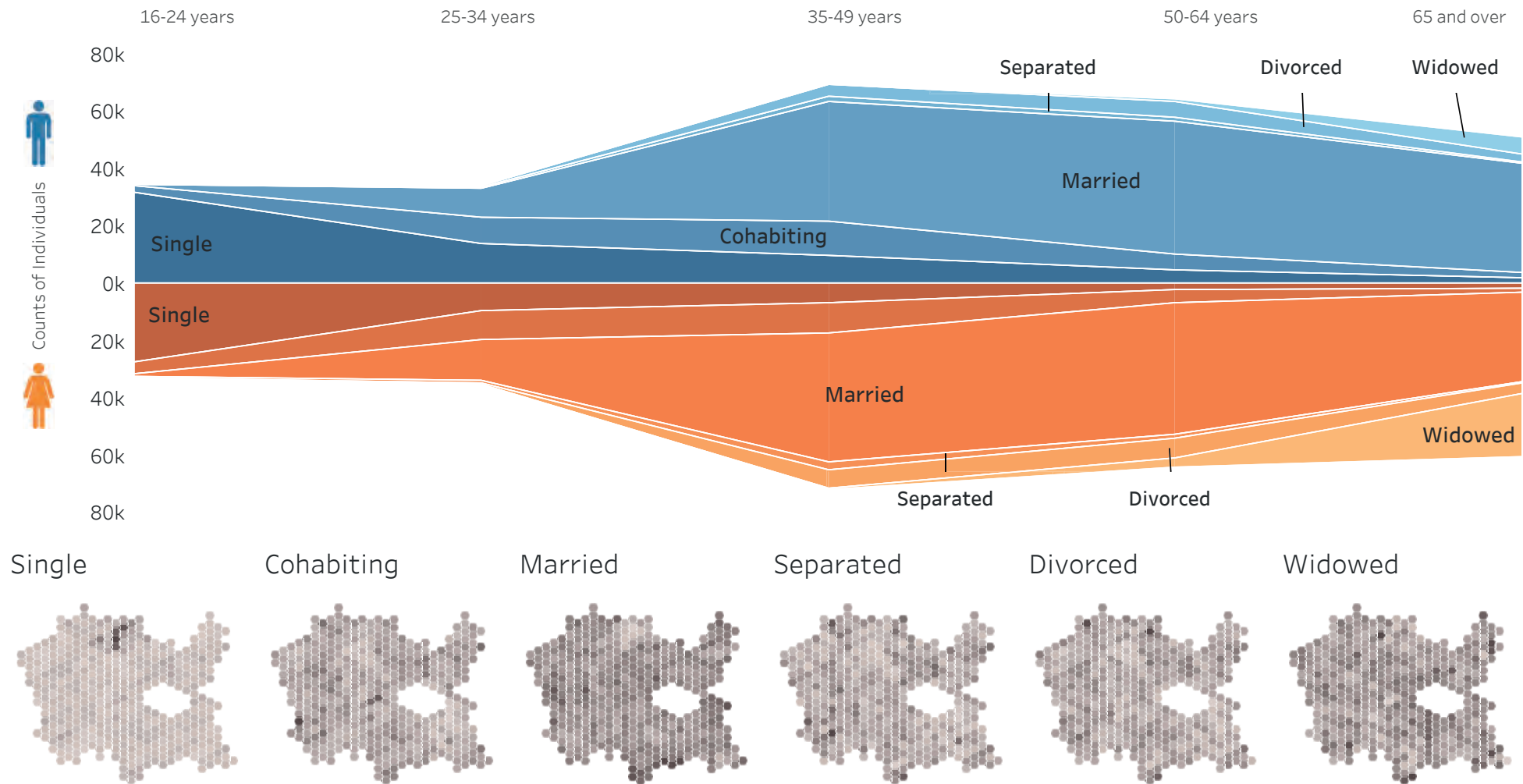
<sup>1</sup> Includes married, or in a same-sex civil partnership.

N.B. Gay marriages were introduced after 2011 Census.



# Living arrangements in Leicestershire

The Census 2011 estimates the living arrangements of household residents by age. Living arrangements differs from marital and civil partnership status because cohabiting takes priority over other categories. For example, if a person is divorced and cohabiting, then they are classified as cohabiting. The graph examines how living arrangements changes with age. The maps examine population density by living arrangement category where each hexagon represents one Lower Super Output Area (LSOA) in Leicestershire. These are small units of geography used for the dissemination of Census data and, on average, contain a population of 1,500. The darkest coloured LSOAs represent a more densely populated area.



Source: Census 2011

Produced by the Strategic Business Intelligence Team, Leicestershire County Council, 2017.

## Deprivation in Leicestershire

The wider determinants of health are described and ranked within the English Indices of Deprivation 2015<sup>iii</sup>. These are a group of indicators which gauge different aspects of deprivation. Deprivation is a general lack of resources and opportunities, which includes financial poverty and a range of other aspects such as lack of access to education or good quality housing. The measures are combined into an overall measure of the amount of deprivation in an area called the Index of Multiple Deprivation (IMD), which can be used to compare different local areas.

The indices of deprivation use several measures in each of seven “domains”;

- Income deprivation;
- Employment deprivation;
- Health deprivation and disability;
- Education, skills and deprivation;
- Barriers to housing and services;
- Crime domain; and
- Living environment deprivation domain.

The infographic presents the level of deprivation throughout Leicestershire according to the IMD 2015. The data are presented as “deciles” of deprivation - areas of Leicestershire that fall into the most deprived tenth (10%) of areas in England are decile 1, those in the second most deprived tenth of areas are decile 2, and so on, through to decile 10 which are areas that are within the least deprived tenth (10%) in England.

Despite Leicestershire being a relatively affluent county, the infographic highlights that areas of Leicestershire fall into the most deprived areas in England for the Barriers to Housing domain and Services and Living Environment domain. The Barriers to Housing and Services Domain measures the physical and financial accessibility of housing and local services whereas the Living Environment Deprivation Domain measures the quality of the local environment.

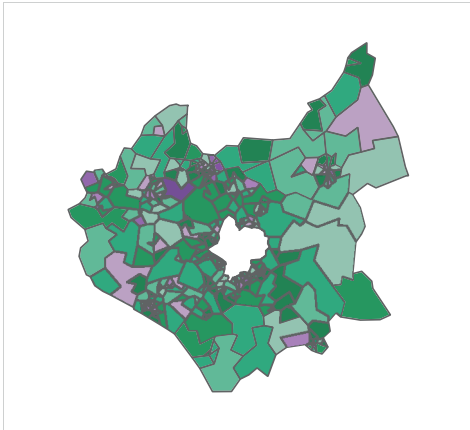
Over a quarter (24%) of the population of Leicestershire live in the most 20% deprived and most 20-40% deprived of areas in England for Barriers to Housing and Services. This accounts for over 164,210 people. In Harborough, a quarter (24%) of the population live in the most deprived 20% in the country for Barriers to Housing and Services and in Melton, over half (51%) of the population live in the most deprived 40% in the country for Barriers to Housing and Services. This is likely to be due to the rural nature of the districts.

16% of the population of Leicestershire (110,695) people live in areas categorised within the most 20% deprived and most 20-40% deprived of areas in England for Living Environment. In Melton, 41% of the population live in the most deprived 40% in the country for Living Environment.

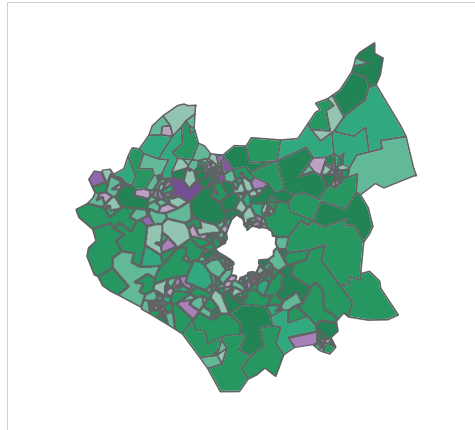
# Deprivation in Leicestershire

The English Indices of Deprivation 2015 are based on 37 separate indicators, organised across seven distinct domains of deprivation which are combined, using appropriate weights, to calculate the Index of Multiple Deprivation 2015 (IMD 2015). This is an overall measure of multiple deprivation experienced by people living in an area and is calculated for every Lower Super Output Area (LSOA), or neighbourhood, in England. The analysis presented splits all LSOAs in Leicestershire into national deciles for each of the seven domains of deprivation and for IMD 2015 overall.

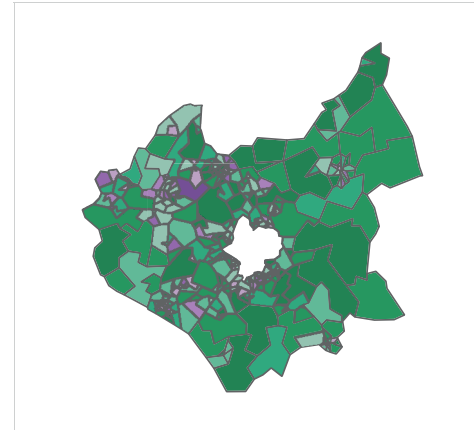
Index of Multiple Deprivation 2015



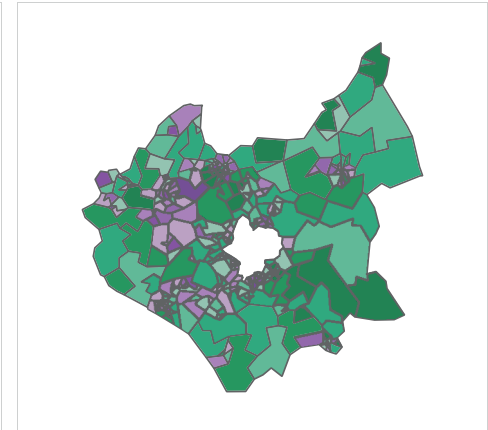
Income Domain



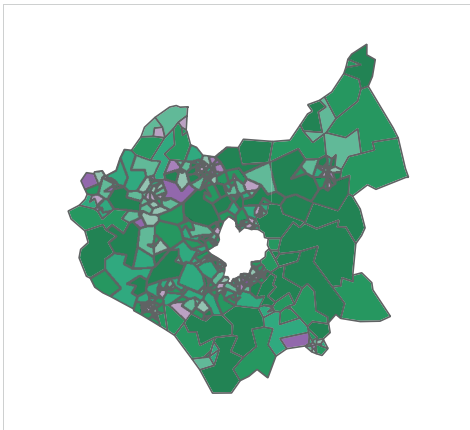
Employment Domain



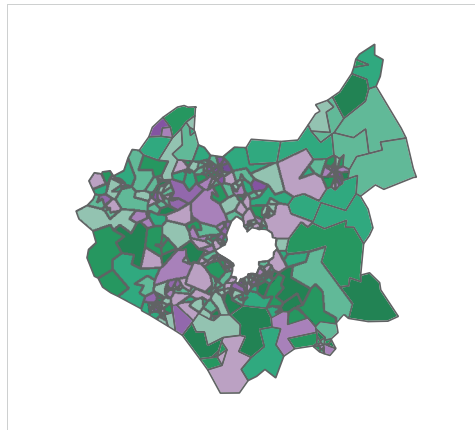
Education, Skills and Training Domain



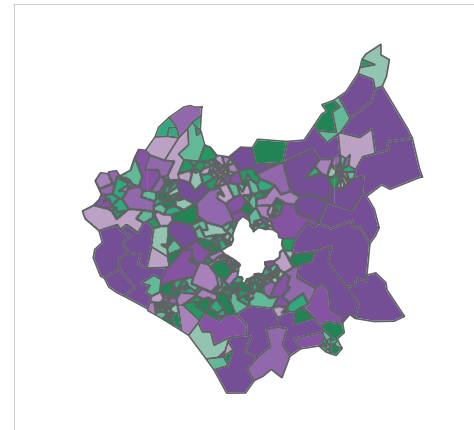
Health Deprivation and Disability Domain



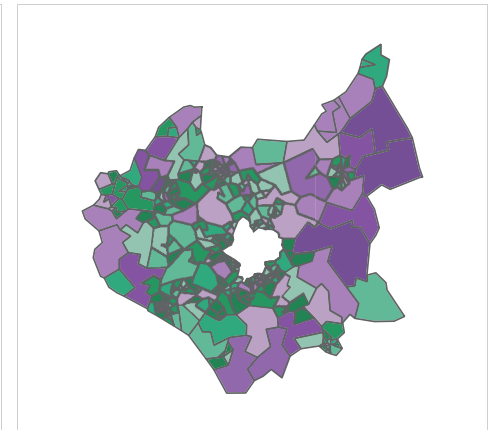
Crime Domain



Barriers to Housing and Services Domain



Living Environment Domain



National Deprivation Decile



Most deprived

Least deprived

Source: Department for Communities and Local Government

Produced by the Strategic Business Intelligence Team, Leicestershire County Council, 2017.

## Social classification in Leicestershire

The social classification chart displays the percentage point difference between the proportion of the population in a ward that are classed as higher social grades (ABC1) compared to lower social grades (C2DE).<sup>iv</sup> Wards with a very high or very low score are more uneven in their social grade composition, while wards with a score close to zero are more even in their composition. This gives a different way of representing the social make up of a ward, than just a description of 'deprivation'.

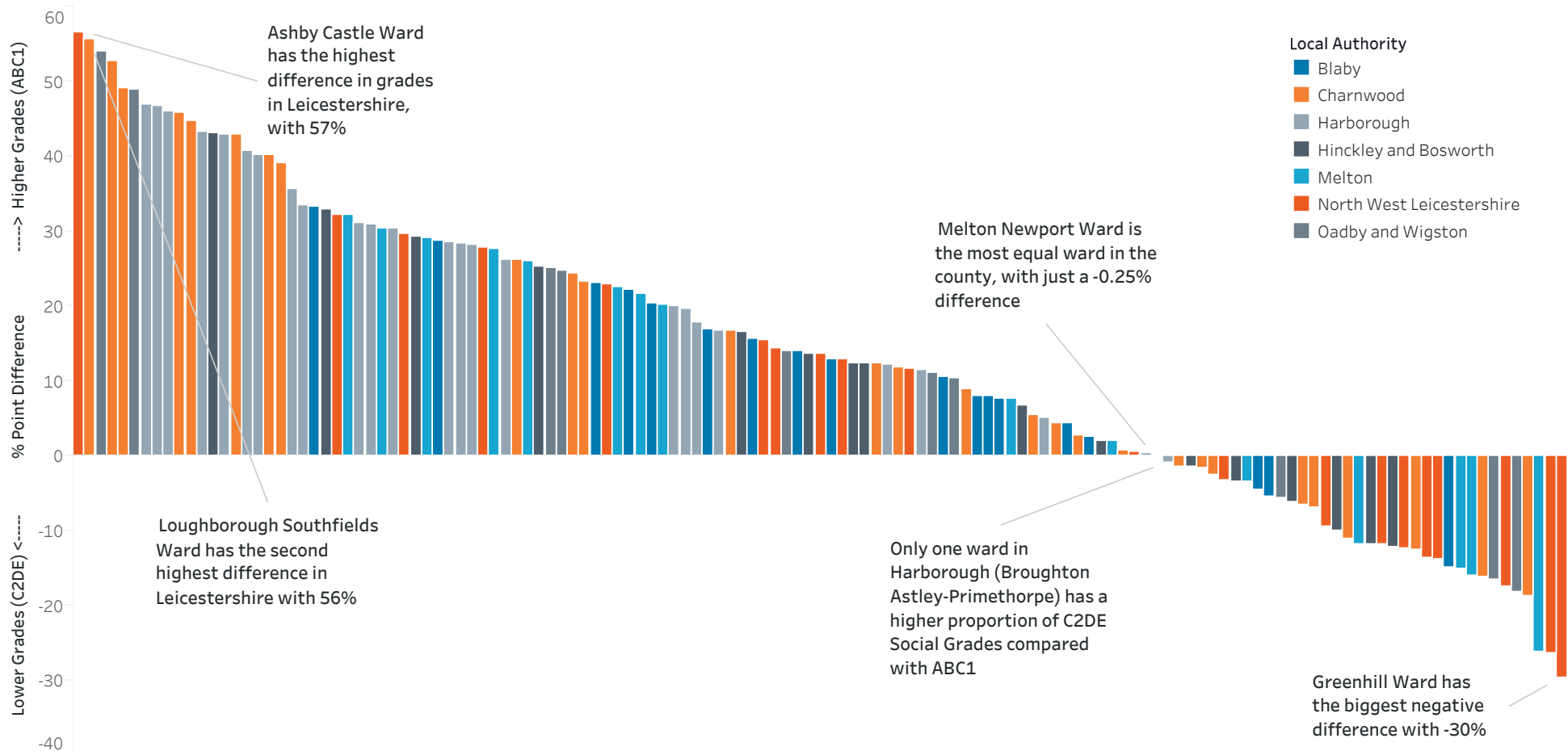
Ashby Castle Ward in North West Leicestershire has the highest difference in social grade, with a 57 percentage point difference between higher and lower social grades. The next highest is Loughborough Southfields Ward in Charnwood, with a 56 percentage point difference. At the other end of the chart, Greenhill has the highest proportion of the population in social grades C2DE, with a 30 percent difference. In comparison, Market Harborough - Welland Ward in Harborough and Melton Newport Ward in Melton are the most equal wards in the county, with an equal proportion of the population in both social grade groups.

In Leicestershire overall, there are more wards with a higher proportion of the population in higher social grades (95), compared with lower grades (36). Harborough also has a larger number of wards with larger proportions of the population in higher grades (16 wards out of the top 40). Elsewhere, eight wards in Charnwood are placed in the top 20 wards in Leicestershire for higher grades.



# Social classification in Leicestershire

Social Grade is the socio-economic classification used by Market Research and Marketing Industries, most often in the analysis of spending habits and consumer attitudes. Although it is not possible to allocate Social Grade precisely from information collected by the 2011 Census, a method for using Census information to provide a good approximation of Social Grade has been performed. The chart examines the percentage point difference between high (ABC1) and low (C2DE) grades throughout each ward in Leicestershire.



## Occupation Classification

- AB: Higher and intermediate managerial/administrative/professional occupations
- C1: Supervisory, clerical and junior managerial/administrative/professional occupations
- C2: Skilled manual occupations
- DE: Semi-skilled and unskilled manual occupations; unemployed and lowest grade occupations

Source: 2011 Census

Produced by the Strategic Business Intelligence Team, Leicestershire County Council, 2017.

## Languages spoken throughout Leicestershire

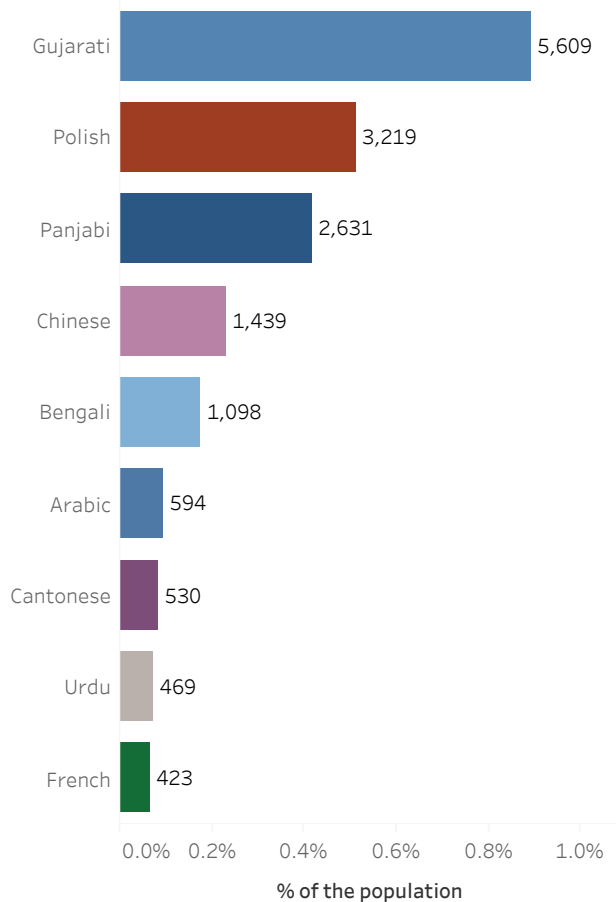
Using data from the Census 2011, we can take a closer look at language within Leicestershire. Those who reported English as their main language accounted for 96.2% of the population.<sup>iv</sup> Those who reported another main language accounted for 3.8% of the population, equating to 23,800 residents. Gujarati was the second most used language, followed by Polish and Panjabi. The map examines the second most spoken language in each Middle Super Output Area (MSOA) in Leicestershire, as English is the most spoken language throughout all areas of Leicestershire. The map highlights there are areas of varying diversity in terms of language throughout the county. South Asian languages are prevalent on the border of Leicester City, where populations may have moved out of the city into surrounding areas such as Thurmaston and Oadby. In comparison, Polish is more prevalent in Melton, Hinckley and North West Leicestershire.



# Languages spoken throughout Leicestershire

Throughout Leicestershire, **English is the main language spoken by 96.2% of the population**, followed by **Gujarati (0.9%)**, **Polish (0.5%)** and **Panjabi (0.4%)**. The map shows the second most spoken language differs throughout Middle Super Output Areas in Leicestershire. Middle Super Output Areas are small units of geography used for the dissemination of Census data and, on average, contain a population of 5,000.

Most common languages spoken in Leicestershire (excluding English)



Second most spoken languages throughout areas in Leicestershire



Source: Census 2011

Produced by the Strategic Business Intelligence Team, Leicestershire County Council, 2017.

## Migration in Leicestershire

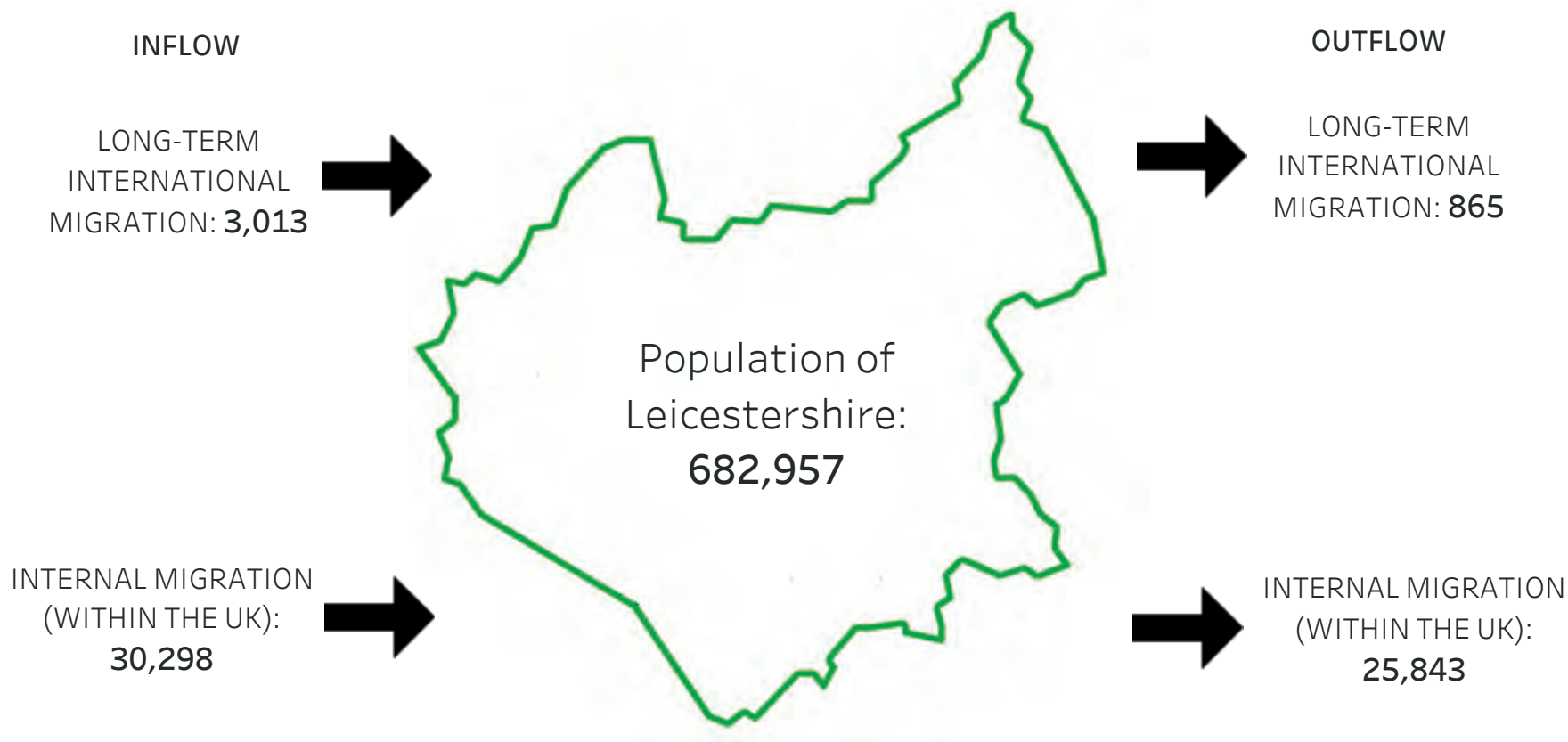
Understanding migration, both internal and international, provides a picture of those entering and leaving Leicestershire and allows us to better understand our evolving population. This learning is essential for local government and health sector planning. The infographic shows long-term international and internal migration increased the population of Leicestershire by 6,600 residents between 2015 and 2016. Internal migrants accounted for twice as many international migrants in this change. The net increase in migrants in Leicestershire has risen year or year since 2013. The percentage of live births to non-UK born mothers has risen from 9.7% in 2006 to 13.7% in 2016.<sup>v</sup>





## Migration in Leicestershire

This graphic examines the migration flows throughout Leicestershire in 2016. Long-term international migration is when someone changes their country of usual residence for a period of at least a year, so that the country of destination effectively becomes the country of usual residence. Internal migration is defined as residential moves between different local authorities in the UK, including those that cross the boundaries between the four UK nations. Long-term international and internal migration increased the population of Leicestershire by 6,600 residents between 2015 and 2016.



In 2016 in Leicestershire, there were:

**3,036** migrant National Insurance number registrations  
(0.7% of 16-64 aged population)

**3,956** new migrant GP registrations  
(0.6% of population)

The population increased by **6,600** due to migration

**975 live births** to non-UK born mothers  
(13.7% of all births)

## Fertility rates in Leicestershire

The Office of National Statistics measures the General Fertility Rate (GFR) as the number of live births per 1,000 women aged 15-44. Since 2005, the GFR for Leicestershire has remained lower than the national rate. The latest data in 2015 shows the GFR in Leicestershire is 57.3 per 1,000 women aged 15-44, compared the national rate of 62.5 per 1,000 women aged 15-44.<sup>vi</sup>

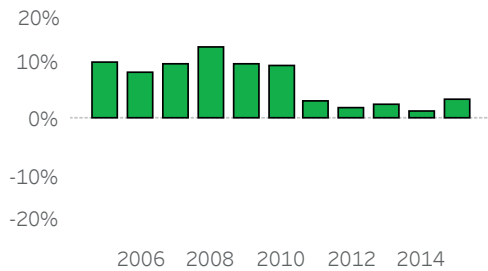
The bar charts examine the percentage difference above or below the Leicestershire rate from 2005 to 2015. The GFR in Charnwood and Oadby and Wigston has remained below the Leicestershire average over the ten year time-span; this is most likely due to the student populations in these areas. The population data from 2015 supports this hypothesis as the percentage of females aged 15-24 years in Charnwood and Oadby and Wigston represent 39% and 37% of the fertile female age range, compared with 33% in Leicestershire as a whole.



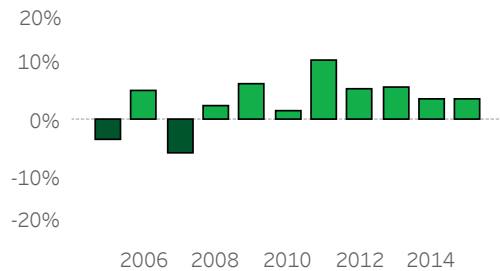
# Fertility rates in Leicestershire

The Office of National Statistics measures the General Fertility Rate (GFR) as the number of live births per 1,000 women aged 15-44. The percentage displayed is the difference above or below the Leicestershire rate for each year from 2005 to 2015.

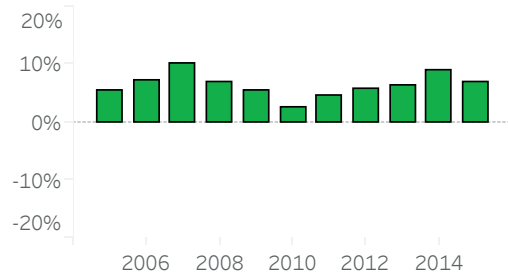
North West Leicestershire



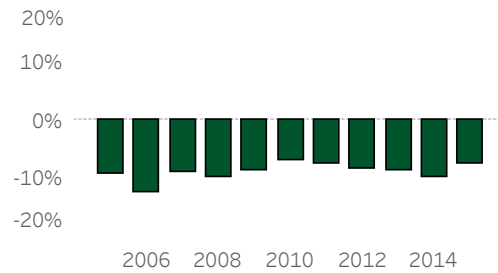
Hinckley & Bosworth



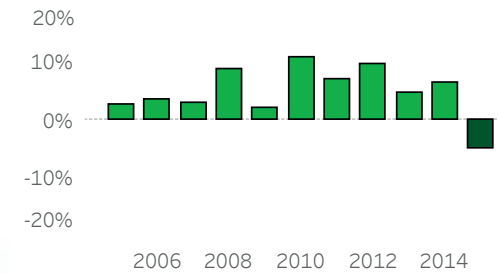
Blaby



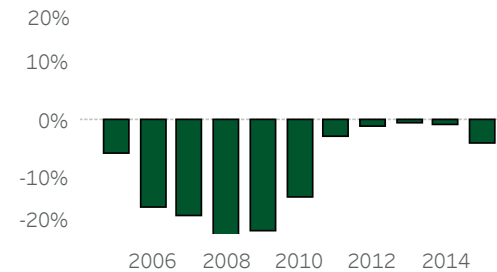
Charnwood



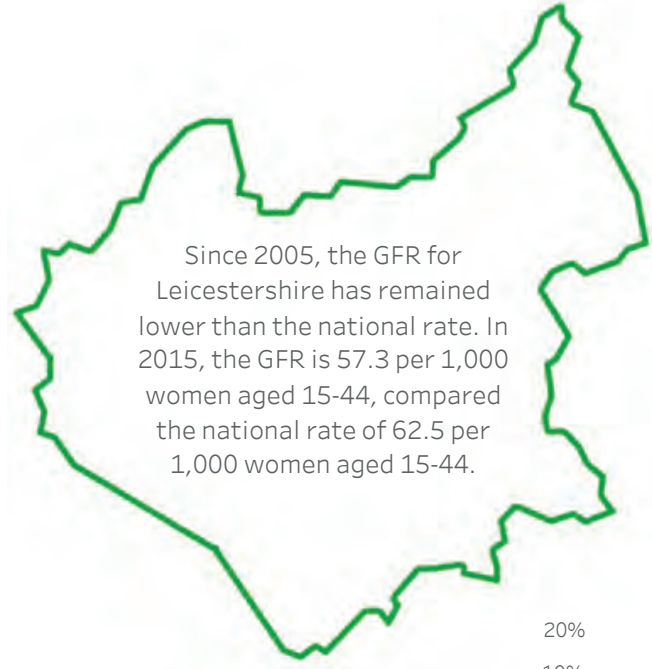
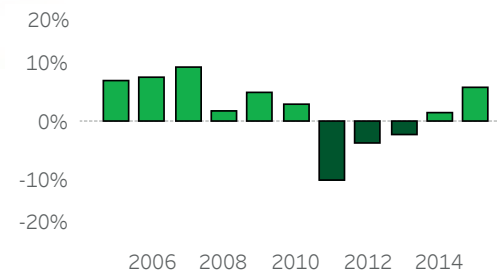
Melton



Oadby & Wigston



Harborough



Source: Live births and stillbirths by area of usual residence of the mother, Office of National Statistics

Produced by the Strategic Business Intelligence Team, Leicestershire County Council, 2017.

## 4.2 The wider determinants of health

### Air quality

Air quality has risen quickly up the public health agenda in recent years, with much publicity and interest on the effect of air quality on health. Poor air quality is the largest environmental risk to health, contributing to cardiovascular disease, lung cancer and respiratory diseases.

Inhalation of particulate matter can have adverse health impacts, particularly in the long-term. Elevated levels alongside long-term exposure have been linked to issues with the respiratory and inflammatory systems, as well as heart disease and cancer. Particulate matter affects more people than any other pollutant, and increases the age-specific mortality risk, particularly from cardiovascular causes. There is a strong correlation between exposure to high concentrations of small particulates (PM10 and PM2.5), both daily and over time, and increased mortality or morbidity.<sup>vii</sup>

The Public Health Outcomes Framework examines the fraction of all-cause adult mortality attributable to human-made particulate air pollution (PM2.5).<sup>viii</sup> The highest levels in the county are closely correlated with major roads and road junctions, such as the M1 (specifically Junction 21), as well as East Midlands airport, and the coal mining areas of North West Leicestershire.

Part IV of the Environment Act 1995 and Part II of the Environment (Northern Ireland) Order 2002 requires local authorities in the UK to review air quality in their area and designate air quality management areas if improvements are necessary.

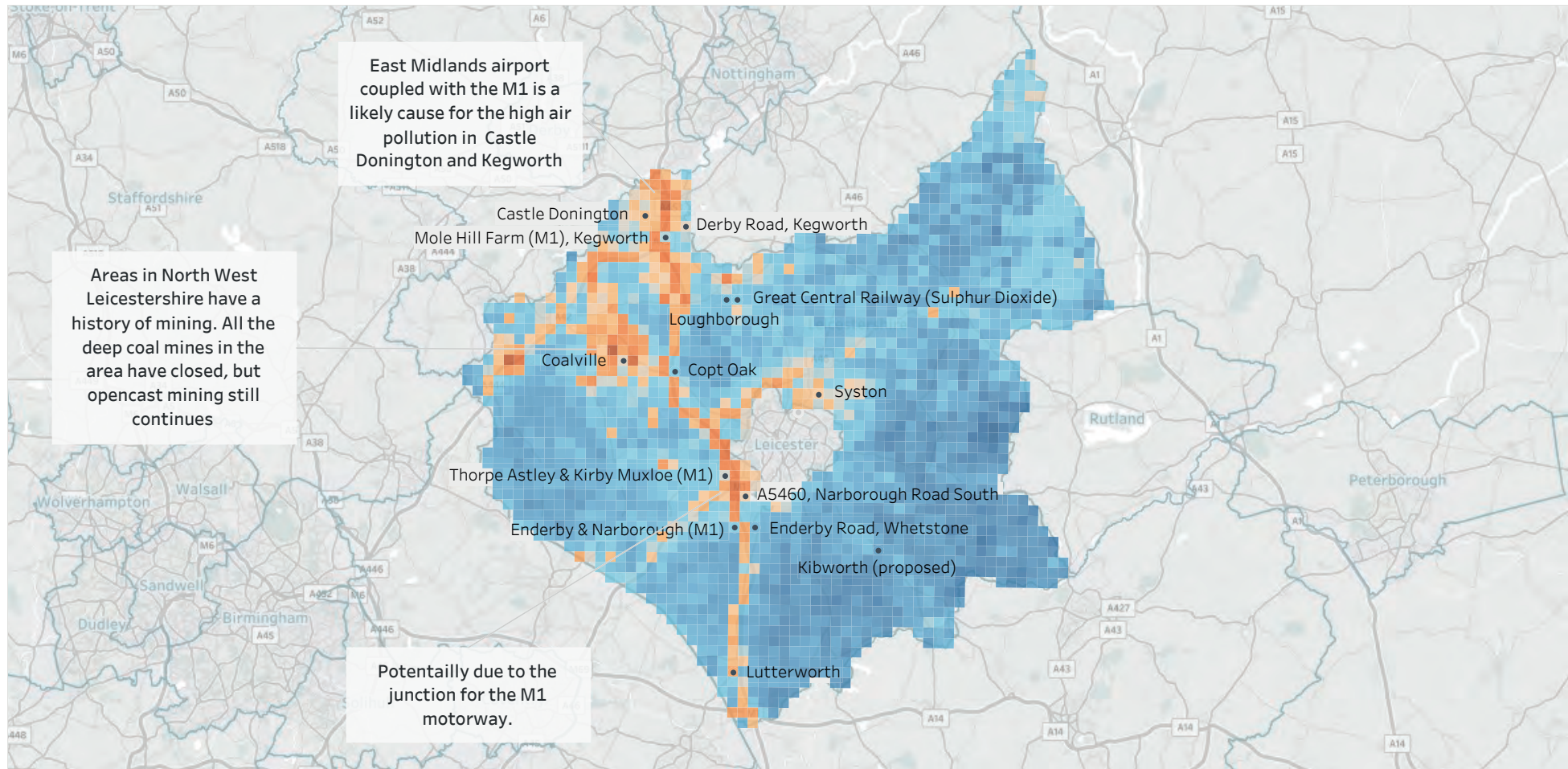
Public Health England, in its 2014 publication 'Estimating Local Mortality Burdens Associated with Particulate Air pollution', assesses that over 300 deaths in Leicestershire can be attributed to PM2.5 pollution. Combined with pollution from Nitrous Oxides, this figure could be around 430 deaths each year.

There is emerging evidence from the Royal College of Physicians (amongst others) of possible links with a range of other adverse health effects including diabetes, cognitive decline and dementia, and effects on the unborn child.

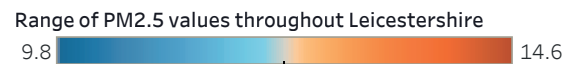
Many of the solutions to poor air quality also have enormous co-benefits by increasing levels of physical activity – for example by encouraging active travel. Future housing developments should encourage physical activity by design – making active travel the easiest, quickest and most enjoyable option. The emerging work with district councils, Public Health and Leicester-Shire and Rutland Sport to support the development of major housing developments is something to be replicated.

# Air quality

Inhalation of particulate pollution can have adverse health impacts. The biggest impact of particulate air pollution on public health is understood to be from long-term exposure to fine particulate matter, PM<sub>2.5</sub>, which increases the age-specific mortality risk, particularly from cardiovascular causes. The map examines the levels of human-made particulate air pollution, measured as PM<sub>2.5</sub>, throughout Leicestershire. The highest levels in the county are present in Blaby, North West Leicestershire and along the M1 motorway.



Please note, each square represents one Ordnance Survey 1km grid square.



Source: DEFRA, 2013

Produced by the Strategic Business Intelligence Team, Leicestershire County Council, 2017.

## Crime in Leicestershire

There were 34,854 recorded crimes in Leicestershire in 2016/17<sup>ix</sup>. There has been an increasing trend in total crimes recorded over the last three years. Of all crimes reported, 22% were recorded as violent crime. Just under half (45%) of all violent crime is domestic related and a fifth (20%) of all violent crime is alcohol related. Both and alcohol related crimes are likely to be under recorded.

Reporting of sexual offences has increased over the last two years, with 811 reported cases in 2016/17. The high profile of sexual abuse cases in the media is likely to have some bearing on this. The number of drug offences has fallen over the last five years from 1,030 recorded in 2012/13 to 479 recorded in 2016/17.

The areas in Leicestershire which have the highest crime rates and corresponding high rates of violent crime, sexual offences, alcohol related offences and drug offences are Loughborough, Coalville, Melton, Hinckley, Castle Donington and Enderby. These areas contain town centres with shopping areas and places of entertainment including pubs, clubs and restaurants. Castle Donington hosts the annual Download festival as well as other high profile events which may influence crime rates. All of these areas also have high rates of violent crime that is domestic related, except for Loughborough Southfields.

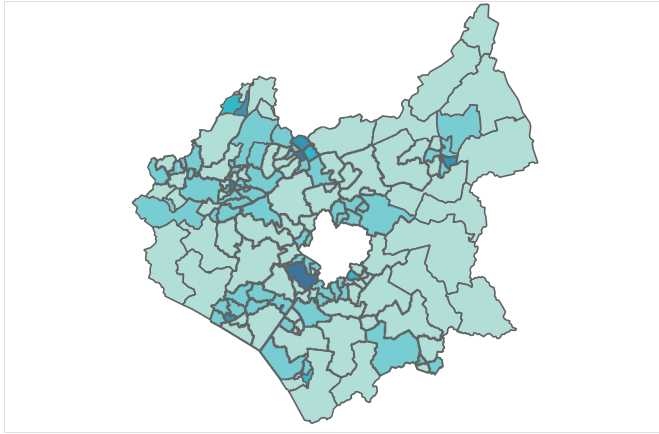
Public Health and the Community Safety Team within Leicestershire County Council are jointly working on a community safety needs assessment. This will identify joint opportunities for closer working between the Health and Wellbeing Board and the Community Safety Board. Although that work is in its early stages, likely joint priorities of tackling drugs, alcohol, sexual violence, domestic violence and mental health will see better joint work and collaboration between the two boards.

# Crime in Leicestershire

The maps examine the crime rate per 1,000 population in each ward in Leicestershire between April 2016 and March 2017 by offence. Each rate of crime is split into local quintiles, with the darkest areas equating to the highest crime rate throughout the county.

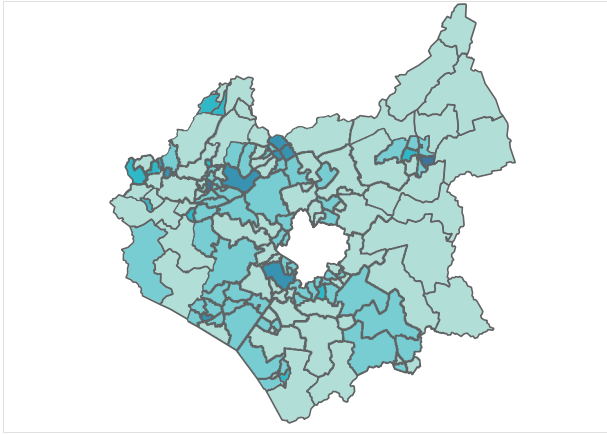
## Total Crimes

Leicestershire rate: 51.6 per 1,000 population



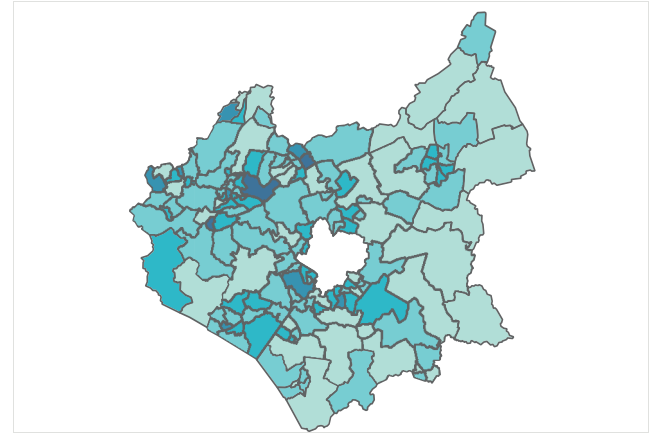
## Violent Crimes

Leicestershire rate: 11.0 per 1,000 population



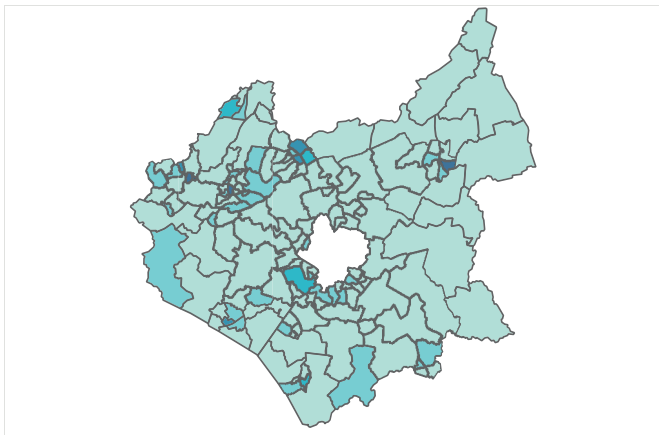
## Domestic Violence

Leicestershire rate: 5.0 per 1,000 population



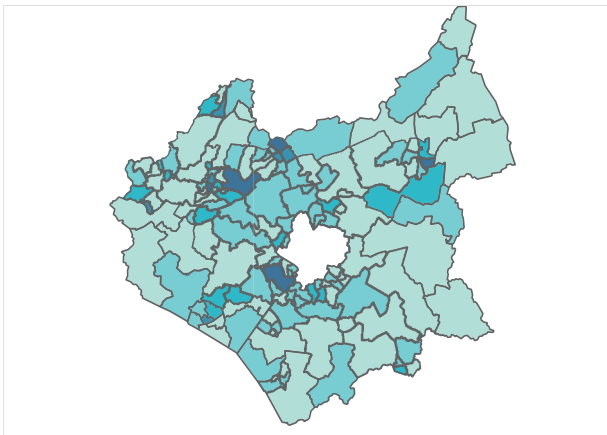
## Alcohol-related Crimes

Leicestershire rate: 2.2 per 1,000 population



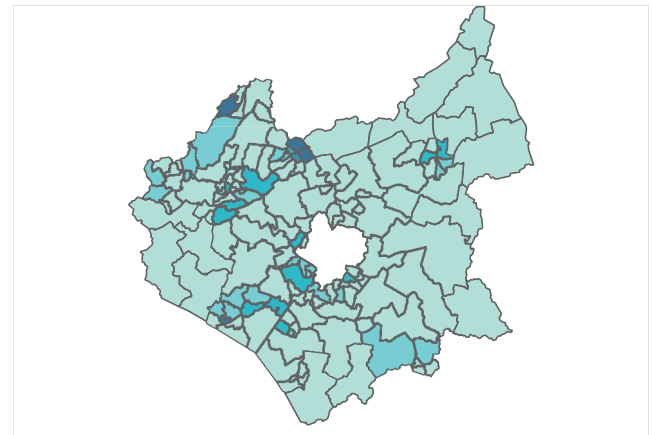
## Sexual Offences

Leicestershire rate: 1.2 per 1,000 population



## Drug Offences

Leicestershire rate: 0.7 per 1,000 population



Key



Lowest quintile      Highest quintile

Source: Leicestershire Police, 2016/17

Produced by the Strategic Business Intelligence Team, Leicestershire County Council, 2017.

## School readiness in Leicestershire

School readiness is a measure of how prepared a child is to succeed in school cognitively, socially and emotionally. It represents a combination of factors and influences that children have from before birth to the start of their school lives from parents, community and wider healthcare and educational systems. The impacts of these early years are life long and affect many aspects of a child's future health, wealth and wellbeing. School readiness is assessed in the term before a child starts Year One (i.e. in the last term of Reception), using nationally set criteria. Children are assessed on 17 early learning goals, 12 of which are used to assess whether a child is at a 'good level of development' (GLD). A child who reaches a GLD is considered to be school ready.

In 2015/16, two-thirds of children in Leicestershire achieved a good level of development at the end of Reception. Despite the percentage increasing year on year since 2012/13, it is lower than the national average (69.3%)<sup>x</sup>, although the latest figure for 2016/17 shows the gap has narrowed to 0.5% below the national average. Local research has found that the presence of Special Educational Needs (SEN) has the greatest impact on whether a child will achieve a GLD or not. Children with SEN, a statement or Education Care Health Plan are less likely to achieve a good level of development than other children. In children with no SEN, the greatest impact on a good level of development attainment is month of birth. The later in the school year a child is born, the more likely they are not to achieve a GLD. This is consistent across all districts in Leicestershire. The infographics shows within all districts in Leicestershire, approximately 80% of children born in the autumn term achieve a GLD compared to just over half of summer born children. This follows the pattern seen nationally.

Public Health has been working with Children and Families Services to dig deeper into the national data to gain a better understanding of the Leicestershire picture. Improving school readiness requires a whole system approach, reviewing all current relevant services, involving all relevant stakeholders and agreeing systematic integrated action rather than individual localised interventions. It is therefore recommended that a strategic, integrated approach is taken considering all contributory factors to school readiness. These will also be incorporated into the early childhood strategy and Leicestershire Children and Families Partnership has clearly identified ensuring children have the best start in life as a priority for the development of a 5 year action plan.



## School readiness in Leicestershire

The school readiness indicator assesses if children achieve a good level of development (GLD) at the end of reception year (4-5 years). In Leicestershire, the largest impact on whether a child will achieve a GLD or not is whether they have special educational needs (SEN). Children with SEN, a statement or Education Care Health Plan are less likely to achieve a good level of development than other children. In children with no SEN, the largest impact on a good level of development attainment is month of birth. The later in the school year a child is born, the more likely they are not to achieve a GLD. This is consistent across all districts in Leicestershire.



### Term of Birth

- Autumn
- Summer

Source: School Census 2016, Leicestershire Council County

Produced by the Strategic Business Intelligence Team, Leicestershire County Council, 2017.

## 4.3 Lifestyle Behaviours

### Overweight and obese children in Leicestershire

The extent of unhealthy weight, including overweight and obesity, in Leicestershire's children is surveyed through the National Child Measurement Programme (NCMP). This measures the height and weight of children aged 4-5 and 10-11 years each year in state maintained primary schools. Children are classified as overweight (including obese) if their BMI is on or above the 85th percentile of the British 1990 growth reference (UK90) according to age and sex. The latest data shows in Leicestershire a fifth (21.3%) of children in Reception and a third (31.3%) of children in Year 6 were overweight or obese in 2015/16. This equates to 1,500 children in Reception and 2,000 children in Year 6.<sup>x</sup> National concerns around the proportion of children with excess weight both persisting and increasing with age are shared in Leicestershire.

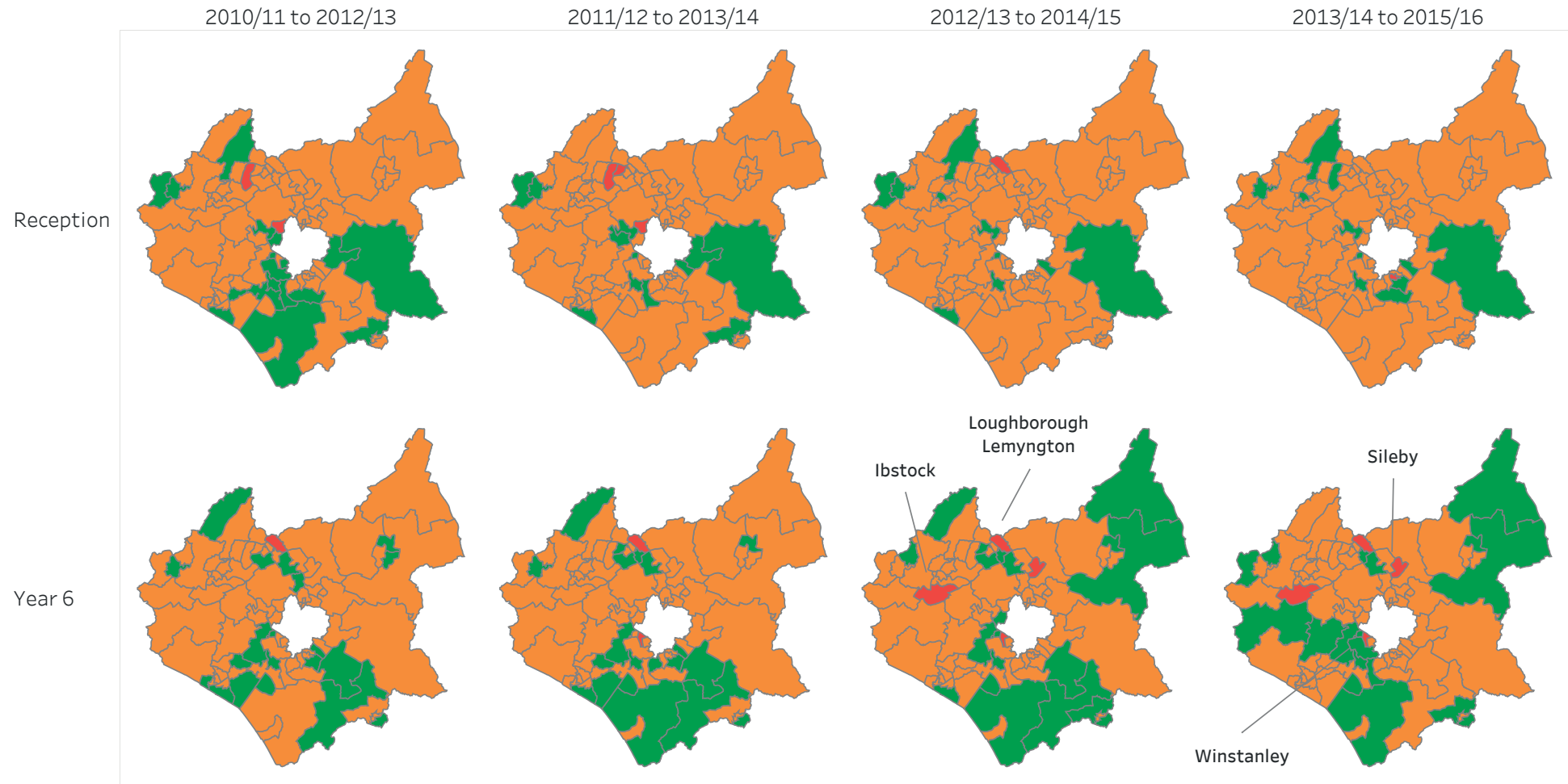
The maps use three years' worth of NCMP data to examine areas in Leicestershire that have a significantly high or low percentage of overweight or obese children in Reception or Year 6, when compared to England. Most areas within Leicestershire perform similar or significantly better than England, particularly in the Reception age range. In Year 6, areas in Winstanely, Loughborough, Ibstock and Sileby have shown a significantly worse rate of overweight or obesity in the last two time periods.<sup>xi</sup>

Obesity is a complex problem, driven by a cocktail of environmental and social factors which, combined, push us towards eating too much and exercising too little. This complex problem cannot be addressed by Public Health services alone. It requires a whole systems approach whereby obesity is everyone's business. This includes those who design and develop our environment, organisations that commission and provide public sector services (e.g. hospitals, schools and prisons), employers and the private and third sectors.

As a Public Health department we approach these challenges from a population perspective, ensuring that individuals have access to information, advice and guidance on how to live healthily, providing weight management services for people with complex health problems and working collaboratively with departments such as town planning and transport, to influence how the environment might contribute to population-level physical activity as part of daily lives.

# Overweight and obese children in Leicestershire

The latest National Childhood Measurement Programme (NCMP) data for Leicestershire shows in 2015/16, a fifth (21.3%) of children in Reception (4-5 years) and a third (31.3%) of children in Year 6 (10-11 years) were overweight or obese. This equates to 1,500 children in Reception and 2,000 children in Year 6. The maps use three years worth of NCMP data to examine over time, Middle Super Output Areas (MSOAs) in Leicestershire that have a significantly high or low percentage of overweight or obese children in Reception or Year 6. Middle Super Output Areas are small units of geography used for the dissemination of data and, on average, contain a population of 5,000. The Leicestershire data is compared to the England percentage for a national comparison.



Statistical Significance compared to England  
 ■ Better ■ Similar ■ Worse

Source: National Childhood Measurement Programme, PHE

Produced by the Strategic Business Intelligence Team, Leicestershire County Council, 2017.

## Physical activity in Leicestershire

Physical inactivity is the fourth leading risk factor for global mortality accounting for 6% of deaths globally. People who have a physically active lifestyle have a 20-35% lower risk of cardiovascular disease, coronary heart disease and stroke compared to those who have a sedentary lifestyle. Regular physical activity is also associated with a reduced risk of diabetes, obesity, osteoporosis and colon/breast cancer and with improved mental health. In older adults, physical activity is associated with increased functional capacities.

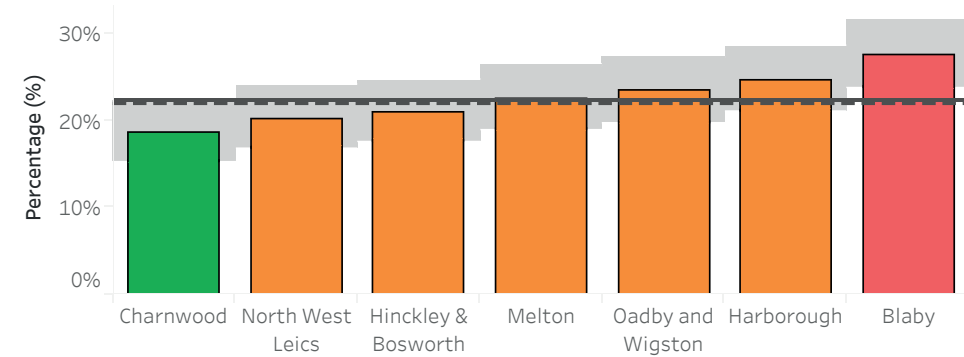
In 2015/16, 65.3% of residents aged 19 and over in Leicestershire achieved the Chief Medical Officer (CMO) recommendations of undertaking 150 minutes of moderate activity per week. All districts in Leicestershire had a similar percentage of adults achieving the CMO recommendations compared to the national average (64.9%). Adults achieving less than 30 minutes of physical activity per week are classified as “inactive”. Throughout Leicestershire, over a fifth (22%) of residents were “inactive” and in Blaby, this rose to over a quarter (27%) of all adults. Charnwood is the only district in Leicestershire that has a significantly better percentage of inactive adults (18.5%) compared to the England average (22.3%).<sup>xii</sup>

Being physically active is essential in maintaining a healthy weight and lifestyle. Public Health plays a key role in addressing the increasing levels of inactivity in our society, caused often by hectic, but increasingly sedentary working lives and lack of opportunity to build activity into daily routines. As well as supporting the provision of physical activity for all age groups, working closely with our community providers, we also deliver a number of targeted programmes for Leicestershire’s most vulnerable people. In our work with older people we have focussed activity on reducing the likelihood of potentially bone breaking trips and falls and maintain their health and fitness, in order to remain independent for longer.

# Physical activity in Leicestershire

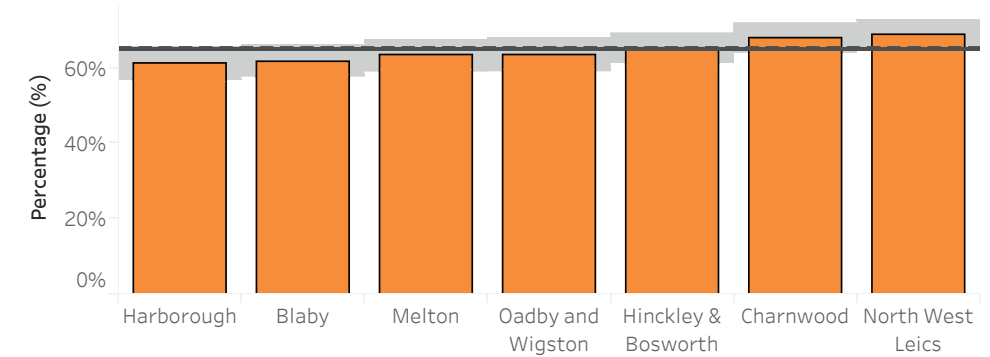
In 2015/16, 65% of residents of Leicestershire achieved 150 minutes of moderate activity per week. Adults achieving less than 30 minutes of physical activity per week are classified as "inactive". The bar chart (with 95% confidence intervals) shows throughout Leicestershire, over a fifth (22%) of residents were "inactive" and in Blaby, this rose to over a quarter (27%) of all adults. The maps below highlight the location of specified sports facilities in Leicestershire.

### Adults classified as "inactive"



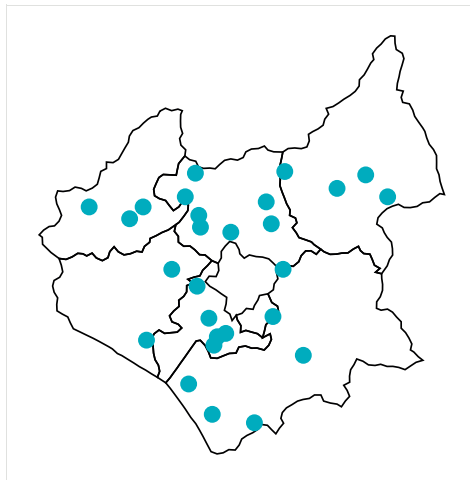
Statistical Significance compared to England  
■ Better    ■ Similar    ■ Worse

### Adults achieving at least 150 minutes of physical activity per week

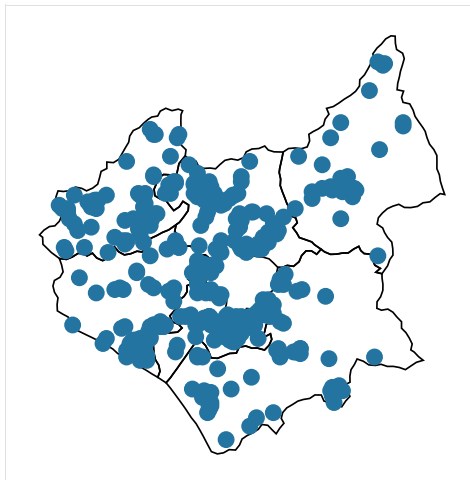


— England average  
 - - - Leicestershire average

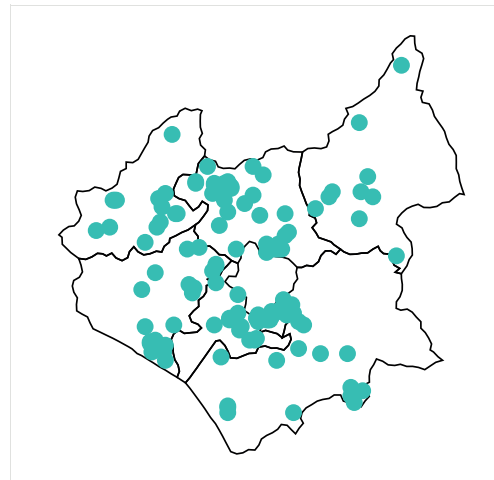
### Golf Course Locations



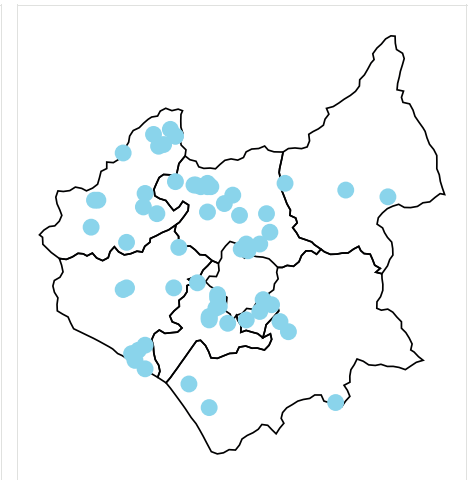
### Grass Pitch Locations



### Sports Hall Locations



### Swimming Pool Locations



Source: Fingertips, PHE and Active Places, May 2017. Contains Data © Sport England

Produced by the Strategic Business Intelligence Team, Leicestershire County Council, 2017.

## Weight management

Between April 2016 and March 2017, 623 participants took part in the 12 week Lifestyle Eating and Activity Programme (LEAP) run by Leicestershire Nutrition and Dietetic Service. The referral criteria for inclusion means all participants have a BMI of 30 or above, or a BMI of 28 or above with as co-morbidities. The criteria are different for BME communities as NICE guidance is followed on lower BMI thresholds for these participants. For BME participants, the criteria for inclusion is a BMI of 28 or above or a BMI of 26 or above with co-morbidities

The aim of the programme is to encourage long-term lifestyle changes rather than encouraging people to 'diet' for 12 weeks, as evidence shows that short-term dieting is ineffective. In 2016/17, over a quarter (27.3%) of participants from Leicestershire achieved a 5% weight loss at the end of the 12 week programme. The average weight loss for all participants was 3.5%.

Participants who started the programme in January 2016 have shown an average weight loss of 9% at 6 months, with 38% of all participants achieving a 5% weight loss or more. After one year, participants had an average weight loss of 7%, with 38% of all participants achieving a weight loss of 5% or more.<sup>xiii</sup> This long term data is more representative of the ethos of programme encouraging long-term lifestyle changes.

Helping adults and children manage their weight is a key element in maintaining a healthy lifestyle and preventing long-term health problems such as cancer and heart disease. Our commissioned weight management programmes include preventive community work to improve nutrition and healthy eating, particularly with families with children, as well as providing basic cookery and home management skills. We have commissioned Weightwatchers to provide a universal weight management programme to everyone perhaps worried about the early stages of weight gain, whilst our NHS dietitian lead service works more intensively with overweight (and underweight) patients with more complicated health concerns.

We are also running extensive, high quality programmes such as "Food For Life" and Master Gardeners, which address long term attitudes and behaviours around food. Both programmes encourage the growing of fruit and vegetables for example, a skill largely lost in the past two generations.

# Weight management

In 2016/17, 623 participants took part in the 12 week Lifestyle Eating and Activity Programme (LEAP) run by Leicestershire Nutrition and Dietetic Service. The ethos around the programme is to encourage long-term lifestyle changes rather than encouraging people to 'diet' for 12 weeks, as evidence shows that short-term dieting is ineffective. In Leicestershire over a quarter (27.3%) of participants achieved a 5% weight loss at the end of the 12 weeks programme. The average weight loss for all participants was 3.5%. The infographic examines the percentage change in weight for all participants in 2016/17 by their starting BMI.



Between 0-5% Between 5-10% More than 10%

Please note, weight status is rounded to the nearest 5%.

Source: Local data from LNDS, April 2016 - March 2017

Produced by the Strategic Business Intelligence Team, Leicestershire County Council, 2017.

## Alcohol

Alcohol consumption is a contributing factor to hospital admissions and deaths from a diverse range of conditions. Alcohol misuse is estimated to cost the NHS about £3.5 billion per year and society as a whole £21 billion annually.<sup>xiv</sup> The infographics examine the rate of hospital admissions where the primary diagnosis or any of the secondary diagnoses are an alcohol-specific condition. This includes conditions such as alcoholic liver disease, mental and behavioural disorders due to use of alcohol and alcohol poisoning.

In Leicestershire, the trend graphs show the rate of alcohol specific admissions for all ages and under 18s have remained significantly better than the national average over time. Locally the trend for alcohol-specific admissions to hospital for all ages has increased slightly year on year between 2011/12 to 2014/15, with a greater increase between 2014/15 and 2015/16.<sup>xiv</sup>

In the map, each hexagon represents one Lower Super Output Area (LSOA) in Leicestershire. The LSOAs with the highest crude rate of admissions to hospital for alcohol specific conditions between 2014/15 and 2016/17 were in Loughborough and Melton. This is expected as these areas contain town centres with places of entertainment including pubs, clubs and restaurants.

Alcohol brief advice is a service provided by GPs (and some pharmacies) and involves the delivery of screening and brief interventions to reduce alcohol consumption in those drinking at harmful levels and to improve identification of individuals with alcohol dependence and refer these individuals to specialist treatment. In the current year, nearly 9,000 individuals in Leicestershire have been screened to ascertain their alcohol-related risk, over 1,700 individuals have received a brief intervention to help reduce their alcohol-related risk and nearly 60 individuals have been referred for specialist advice for dependent drinking.

Substance misuse treatment services aim to support individual recovery to reduce the harms of substance misuse. The service is provided for young people and adults and includes those within the criminal justice system. It provides an array of support and treatment options to ensure it remains centred on each individual's needs.

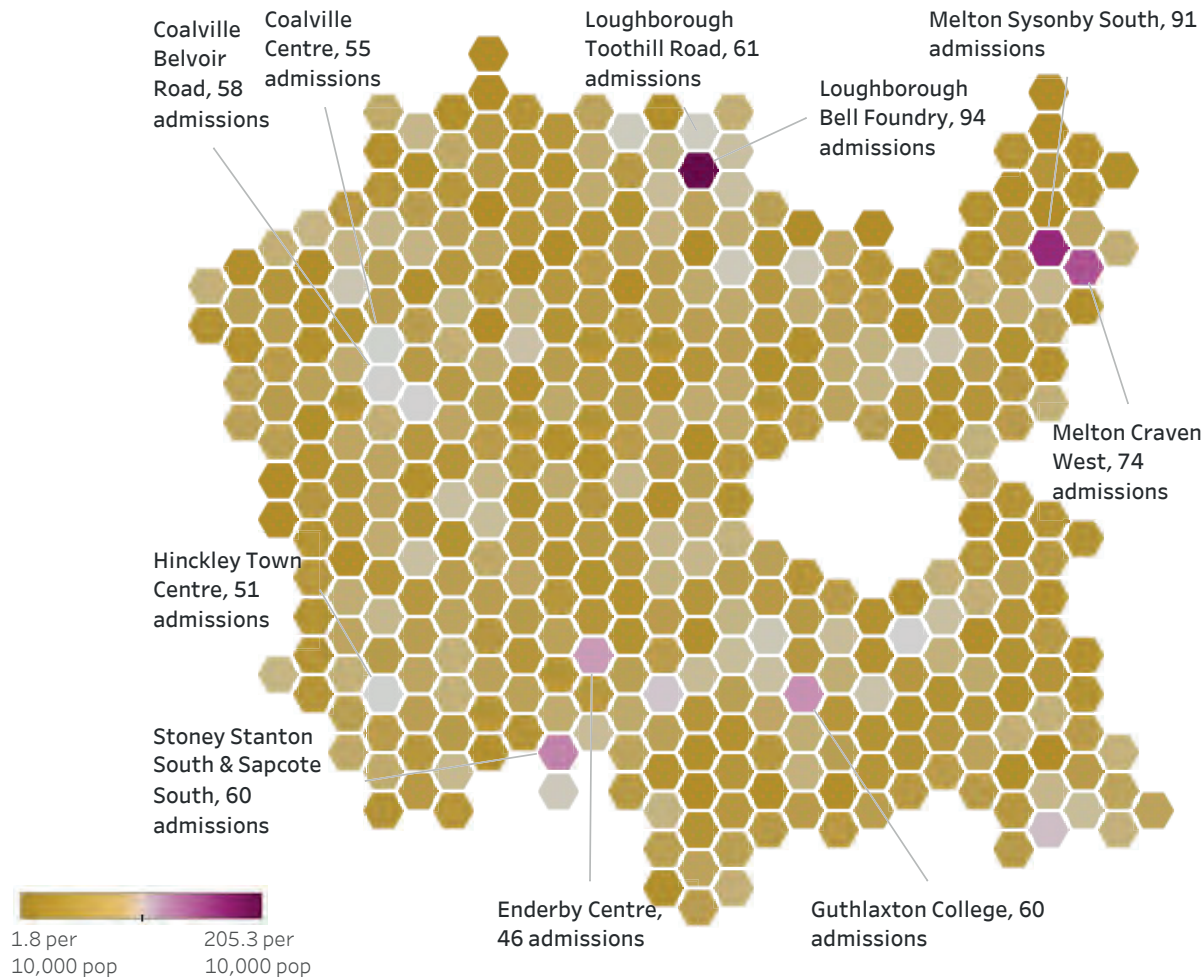
Public health also commissions an inpatient medically assisted withdrawal service (detox) for adults with substance misuse dependency with the aim of reducing alcohol (and/or drug) related harm for the individual. This will also have a positive impact on their family and the local community.

These services are focused on identifying and supporting individuals identified as being at risk of alcohol related harm. However, a greater level of work is required with regard to health promotion and prevention to reduce alcohol related harm.



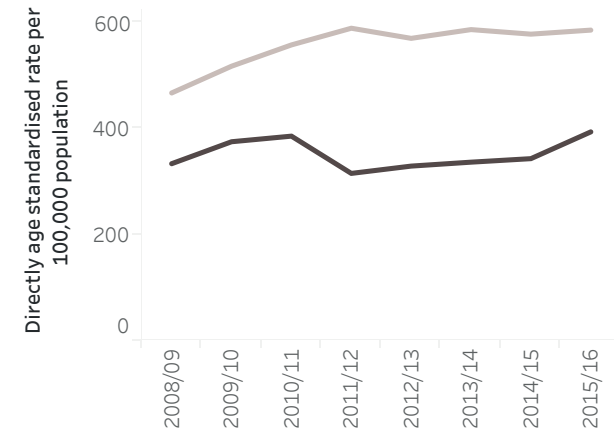
# Hospital admissions due to alcohol-specific conditions for Leicestershire residents

In Leicestershire, the rate of alcohol specific admissions for all ages and under 18s have remained significantly better than the national average over time. In the map, each hexagon represents one Lower Super Output Area (LSOA) in Leicestershire. These are small units of geography are used for the dissemination of Census data and, on average, contain a population of 1,500. The darkest purple LSOAs have the highest crude rate of admissions to hospital for alcohol specific conditions between 2014/15 and 2016/17.

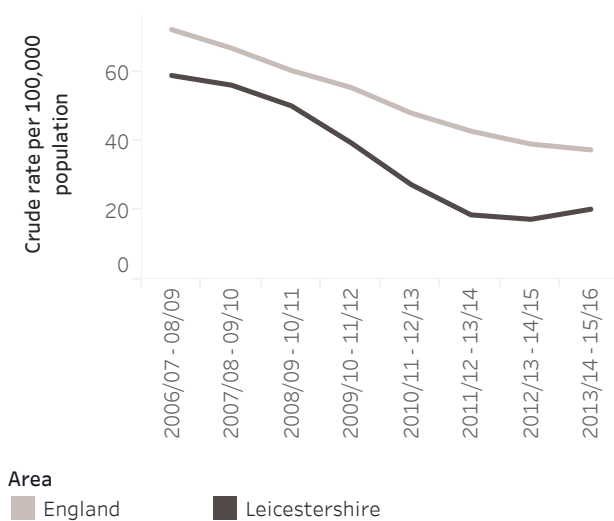


Source: SUS and LAPE, PHE

### Alcohol-specific admissions to hospital for all ages



### Alcohol-specific admissions to hospital for under 18s



Produced by the Strategic Business Intelligence Team, Leicestershire County Council, 2017.

## Smoking - Stop Smoking Service

Smoking remains the largest cause of premature death and ill health in Leicestershire.

Quit Ready Leicestershire is a tailored Stop Smoking Services programme run by Leicestershire County Council that began on 3rd January 2017. Advisors are in touch, via telephone, text message, web chat or email, to offer support on a weekly basis during the 12-week programme to ensure people have the best possible chance of staying smoke-free. Pharmacological support is also provided with 12 weeks' worth of nicotine replacement therapy, Champix or Zyban.

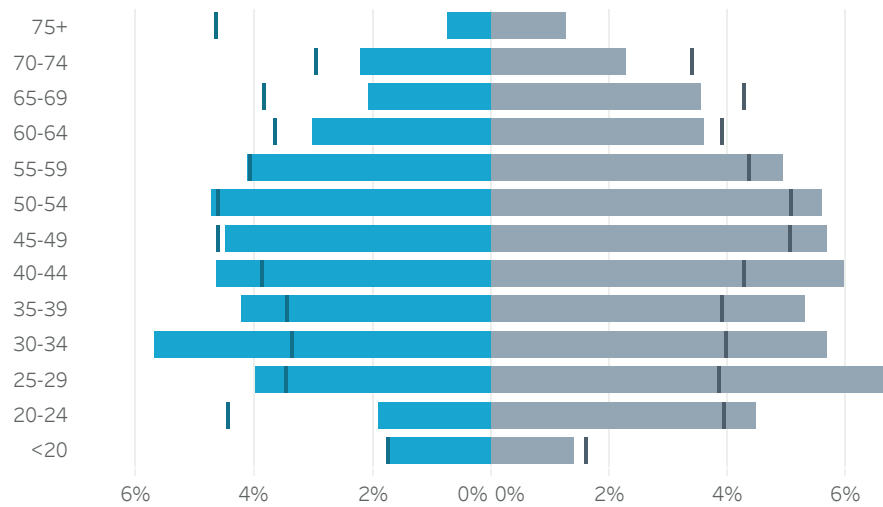
Between January and June 2017, 1,356 people (with a valid area of residence) set a quit date with Quit Ready Leicestershire. The data shows females are more likely to use the service, but males are more likely to successfully quit. Adults aged 20 to 40s are most likely to use the service, while adults aged 65 and over are underrepresented given the Leicestershire population. The use:need ratio examines the number of people using Quit Ready Leicestershire compared to the number of people wanting to quit. The map shows areas North West Leicestershire, Melton and Harborough have a significantly worse use:need ration compared to the Leicestershire average. The data shows of those who used the service, pharmacology support is more popular than unlicensed Nicotine Containing Products (NCP), such as e-cigarettes.<sup>xv</sup>



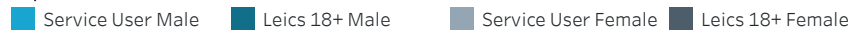
# Smoking - Quit Ready Leicestershire

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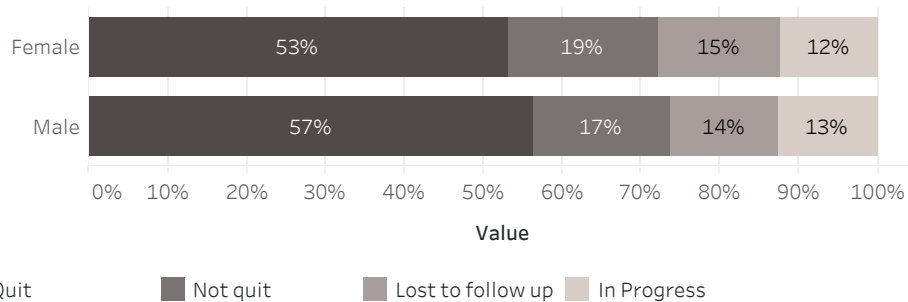
## Who uses the service?



### Population



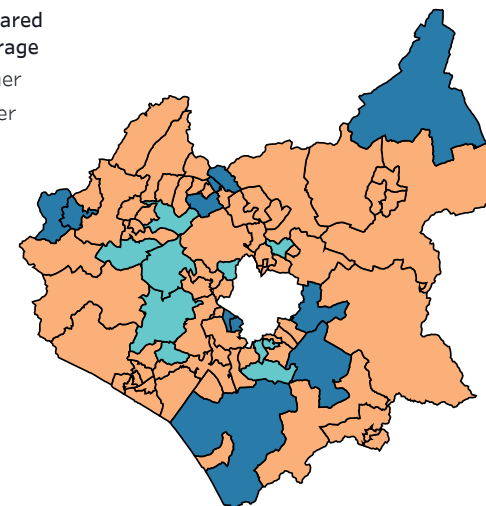
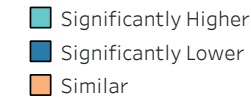
## Do they successfully quit?



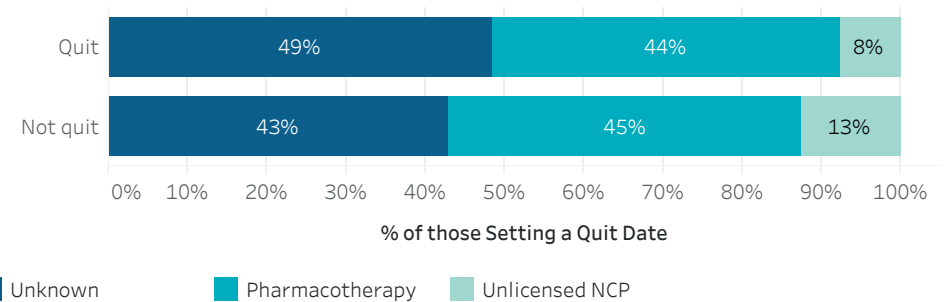
Source: Quit Ready Leicestershire, January to June 2017.

## Where do they live?

### Use:Need Ratio compared to Leicestershire average



## What pharmacological support is used?



Produced by the Strategic Business Intelligence Team, Leicestershire County Council, 2017.

## Teenage pregnancy in Leicestershire

Teenage pregnancy is closely linked with poverty, poor educational achievement and unemployment. Teenage pregnancy also impacts on health and wellbeing of both the mother and child, for example, there are links to higher rates of infant mortality, mental health and poor child development. We also know that unplanned pregnancy is highest among teenagers.

Inequalities still exist between wards, as shown through the maps. The maps highlight that areas of Blaby, Loughborough and Ibstock have a significantly higher rate of under 18 conceptions compared to the England average. When we examine the rate of teenage conceptions compared to the Leicestershire average, areas in Market Harborough, Melton and North West Leicestershire also have a rate significantly higher than the county average.<sup>xvii</sup>

Reducing teenage pregnancy requires a coordinated approach across multiple partners. This whole systems approach involves the delivery of:

- Sex and relationships education (SRE)
- Easy access to contraception and sexual health services
- Support for young parents
- Workforce training for practitioners working with young people
- Partnerships with youth and community services

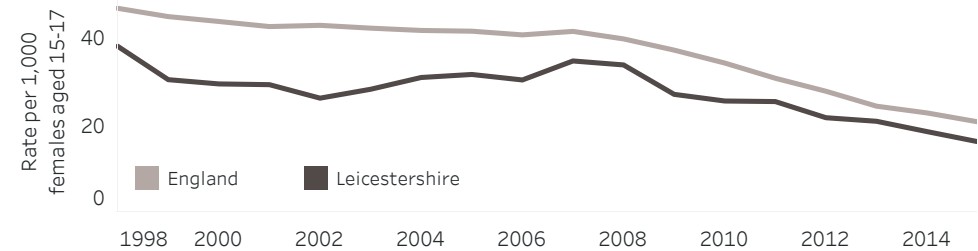
By considering these approaches, the public health offer with regard to the teenage pregnancy agenda includes:

- The Leicestershire Healthy Schools Programme – an element of this programme is the development of a practical resource and good practice guide to deliver Relationships and Sex Education (RSE) within schools. This component of the curriculum supports schools to equip children and young people with the knowledge, understanding and skills they need with regards to RSE.
- A condom distribution scheme (C-Card) for young people – this schemes aims to support ease of access to contraception through the availability of multiple registration and distribution sites across the County.
- Young people's 'choices' clinics – This service offers testing and treatment for sexually transmitted infections, contraception, emergency contraception, pregnancy testing, and condom provision for young people aged 24 and under. The clinics are held in accessible locations such as schools, colleges, universities, youth venues and health centres.
- A Baby Box initiative for young parents – this initiative provides expectant mums with baby essentials and information on local services as a mechanism of providing ongoing support.
- Commissioning of the Children's Centre Programme to coordinate and facilitate the Teenagers with Babies Action Group (TBAG) meetings for young parents
- Sex and Relationships Education (SRE) training for staff in primary schools, secondary schools, special schools, and post 16 settings
- Provision of the Family Planning Association's Speak Easy training for professionals – the aim is to increase competence and confidence among professionals in engaging parents in conversations around young people and sexual health

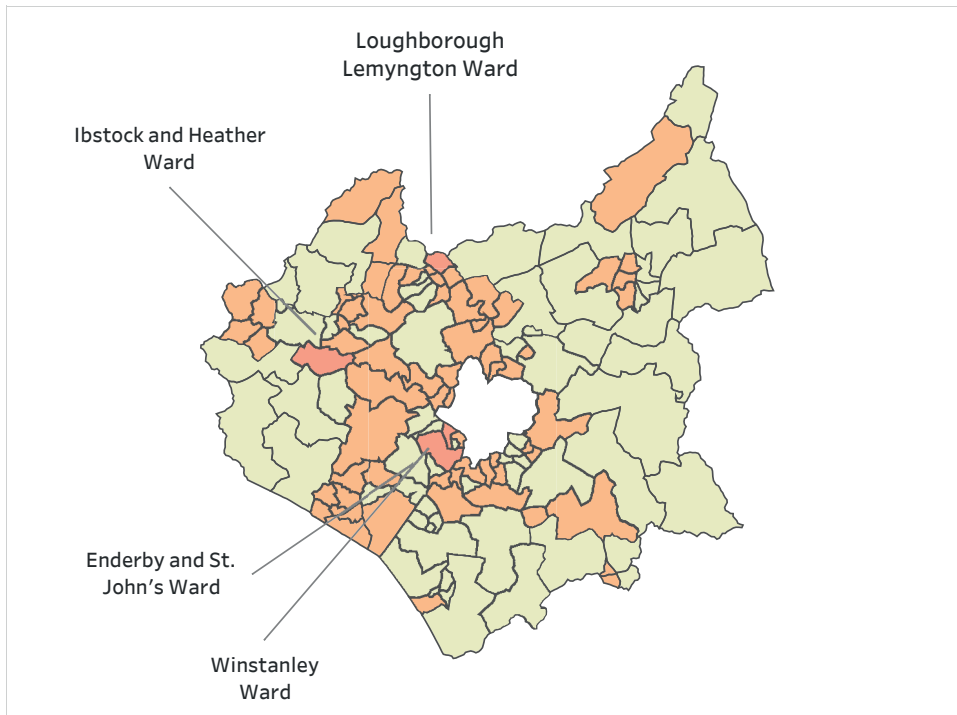
# Teenage pregnancy in Leicestershire

Since 2007, the rate of teenage conceptions has decreased year on year in Leicestershire and throughout this time, has continued to perform significantly better than the national average. The maps for 2012-14 highlight areas in Leicestershire with a significantly higher rate of under 18 conceptions compared to the England average. These are in Blaby, Loughborough and Ibstock. When we examine the rate of teenage conceptions compared to the Leicestershire average, areas in Market Harborough, Melton and North West Leicestershire also have a rate significantly higher than the county average.

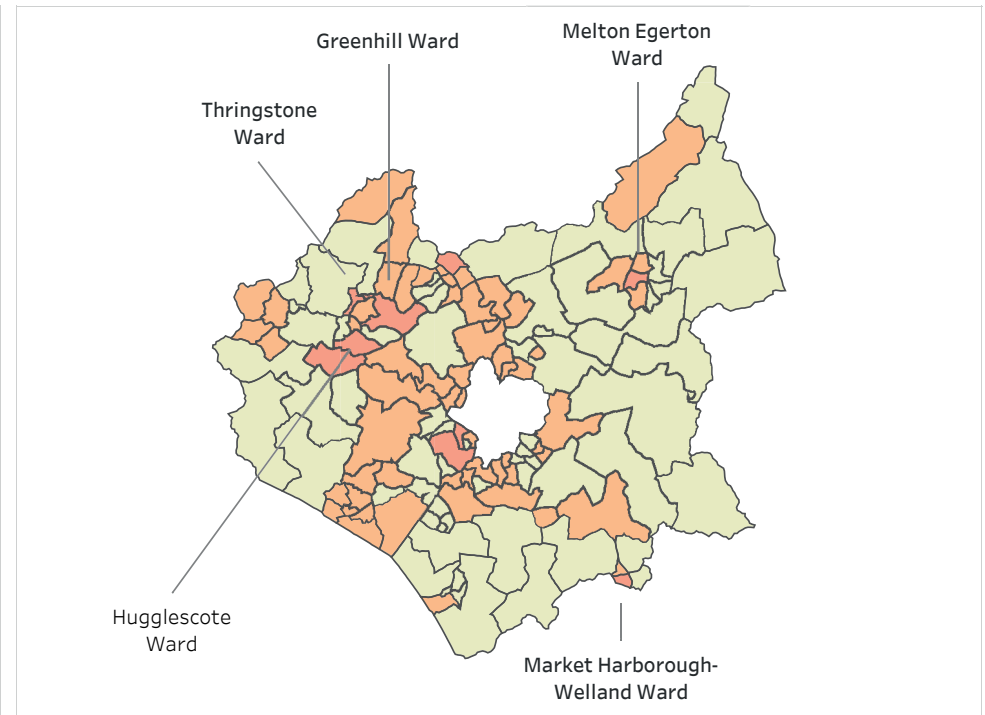
Trend in Under 18 Conceptions in Leicestershire



Comparison to the England Average



Comparison to the Leicestershire Average



**Significance**

- Significantly Higher than England/Leicestershire Average
- Similar to England/Leicestershire Average
- Suppressed due to small count

Source: ONS and Fingertips, Public Health England

Produced by the Strategic Business Intelligence Team, Leicestershire County Council, 2017.

## 4.4 Life and death and illness

### Life expectancy

Average life expectancy has increased in recent decades. Chronic non-communicable diseases are now the leading cause of death and long periods of moderate and severe ill health often precede death.

Average life expectancy and healthy life expectancy are both important headline measures of the health of the population.

Choices and behaviours during adulthood can have profound impacts on people's health for the rest of their lives. A number of factors such as socioeconomic, environmental (including working conditions), education and lifestyle factors may impact the average age of life expectancy. In Leicestershire, life expectancy for males is 80.5 years and for females is 83.9 years, both significantly higher than the national average.<sup>x</sup> The infographic highlights that throughout the county, variation in life expectancy exists for both males and females. There is a ten year difference in life expectancy between males who live in the Loughborough Lemington Ward (74.6 years) and Bosworth Ward (84.8 years). In females these difference are also apparent, with life expectancy varying by ten years between females who live in the Lubenham Ward (78.4 years) and Wigston Meadowcourt Ward (88.4 years).<sup>xxiii</sup>



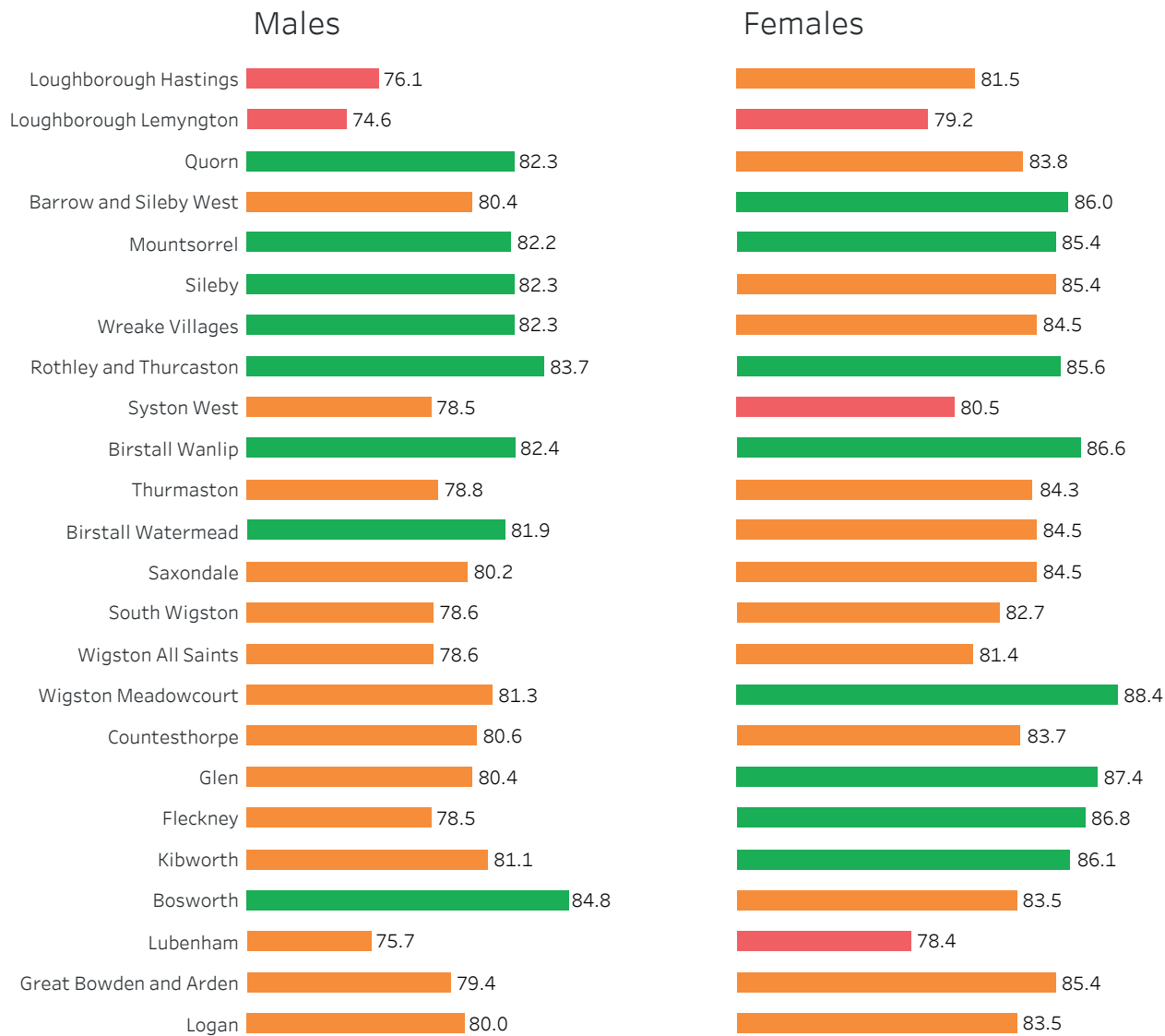
# Life expectancy at birth along the Grand Union Canal through Leicestershire



## The Leicester Line of the Grand Union Canal

The charts highlight the variations in life expectancy that exists along the canal route for the residents of Leicestershire. The data reflects mortality of those living in these wards between 2010-2014.

Source: Local Health, PHE



Statistical Significance compared to England  
 Better (green) Similar (orange) Worse (red)

Produced by the Strategic Business Intelligence Team, Leicestershire County Council, 2017.

## Healthy life expectancy

The healthy life expectancy measure adds a quality of life dimension to estimate of life expectancy by dividing it into time spent in different states of health. The number of years in poor health is also important as it relates more closely to the demand for health and social care and the associated costs.

Healthy life expectancy (HLE) measures the average number of years a person would expect to live in good health based on contemporary mortality rates and prevalence of self-reported good health. In Leicestershire, HLE is 63.6 years for men and 65.8 years for females, whereas life expectancy (LE) for males is 80.5 years and for females is 83.9 years.<sup>x</sup> On average, this equates to males and females in Leicestershire spending 16.9 years and 18.1 years in poor health before death. Currently, there are 56,000 males and 58,000 females in Leicestershire living in the age gap between HLE and LE.<sup>xviii</sup>

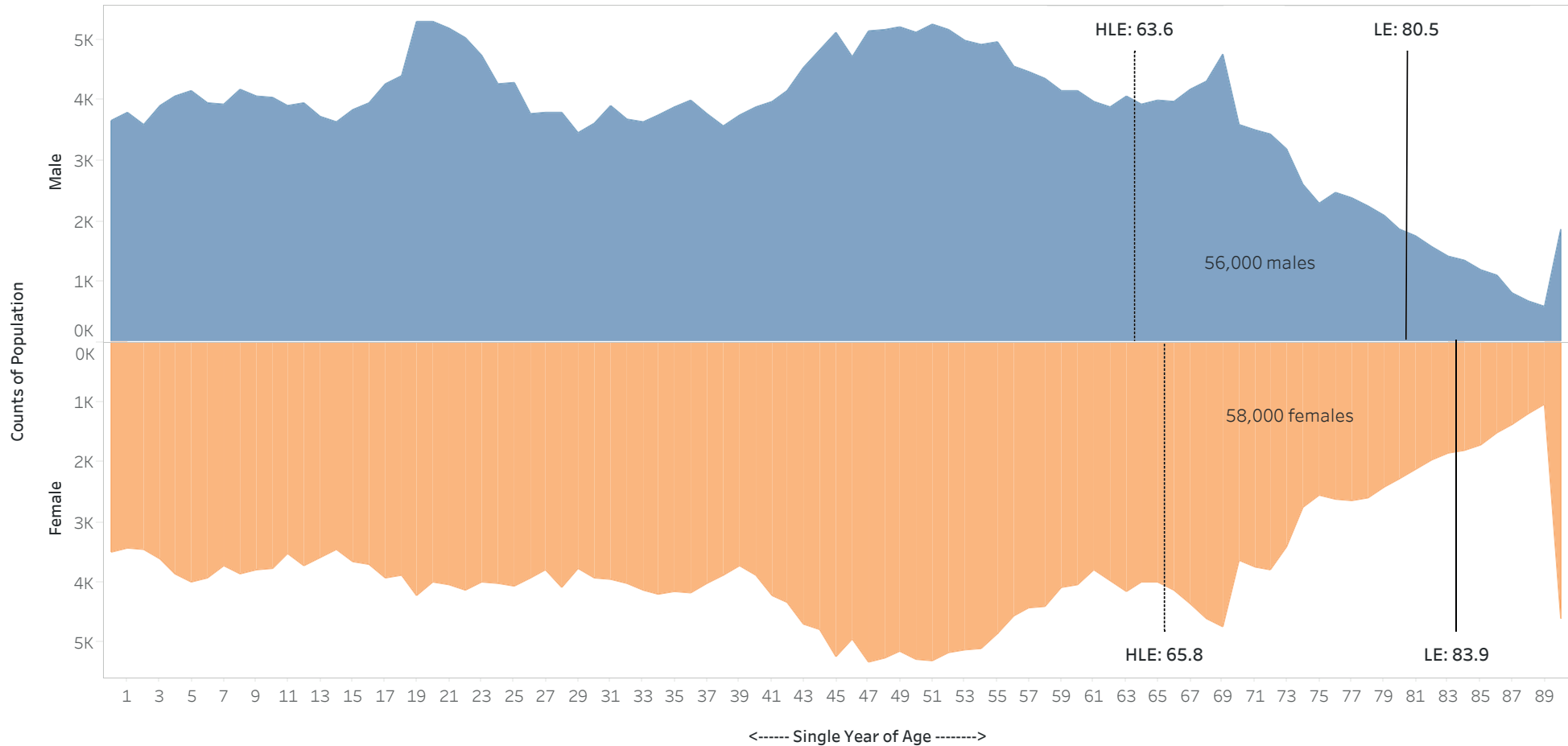
Although Leicestershire has above average figures for life expectancy, it fares comparatively less well compared to the national average for health life expectancy. Given a projected increase of over 8000 older people by 2037, It is important that central government funding formulas reflect the drivers on demand for services such as adult social care.





# Gap between healthy life expectancy and life expectancy in Leicestershire

Healthy life expectancy measures the average number of years a person would expect to live in good health whereas life expectancy measures the average number of years a person would expect to live. These indicators are based on contemporary mortality rates and prevalence of self-reported good health. Please note, the figures reflect the prevalence of good health and mortality among those living in an area in each time period, rather than what will be experienced throughout life among those born in the area. These two indicators are extremely important summary measures of mortality and morbidity. The graph examines the population of Leicestershire in 2016 by single year of age. It estimates that 56,000 men and 58,000 women are living in the age gap between healthy life expectancy and life expectancy, potentially in poor health. This accounts for 17% of the population in the county.



HLE: Healthy Life Expectancy in 2013-15

LE: Life Expectancy in 2013-15

Please note, the population estimates presented for 90 includes all individuals aged 90 and above.

Source: Mid-year 2016 population estimates, ONS.

Produced by the Strategic Business Intelligence Team, Leicestershire County Council, 2017.

## Premature death

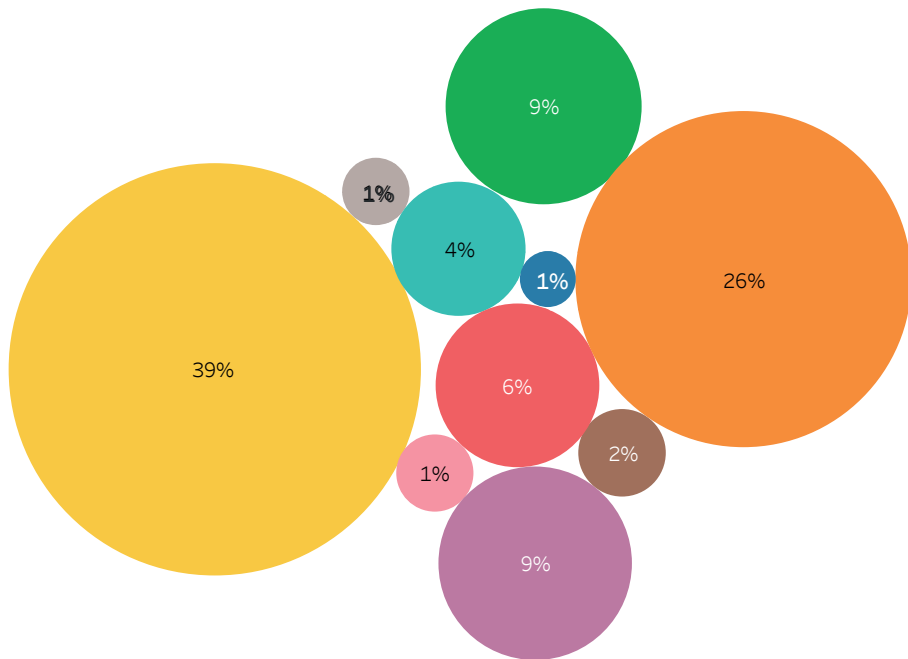
Approximately 1 in 3 deaths (29%) in Leicestershire occur among people under the age of 75. Around two-thirds of deaths among the under 75s are caused by diseases and illness that are largely avoidable, including cancer and diseases of the circulatory system. In females, over half of all premature deaths are caused by cancer, compared with 39% in males. Circulatory diseases account for a quarter of all premature deaths in males compared with 17% in females. Many of the direct causes are due to lifestyle related factors and are preceded by long periods of ill-health.<sup>xix</sup>



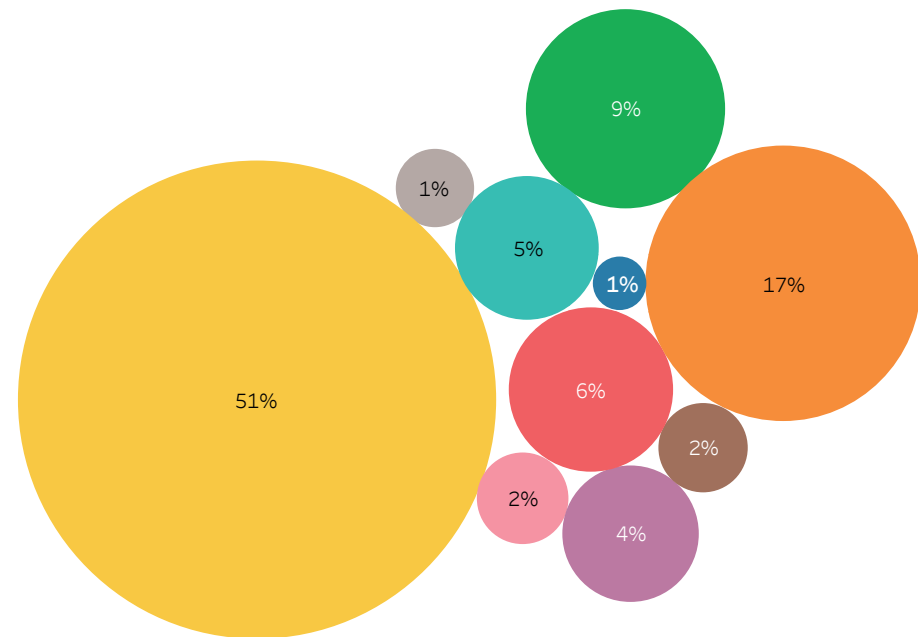
# Causes of premature death in Leicestershire

Approximately 1 in 3 deaths in Leicestershire occur among people under the age of 75. Around two-thirds of deaths among the under 75s are caused by diseases and illness that are largely avoidable, including cancer and diseases of the circulatory system.

Males



Females



- Disease**
- Certain infectious and parasitic diseases
  - Diseases of the respiratory system
  - Neoplasms
  - Diseases of the circulatory system
  - Endocrine, nutritional and metabolic diseases
  - Unknown
  - Diseases of the digestive system
  - External causes of morbidity and mortality
  - Diseases of the nervous system
  - Mental and behavioural disorders

Source: Public Health Mortality Files, 2014-16

Produced by the Strategic Business Intelligence Team, Leicestershire County Council, 2017.

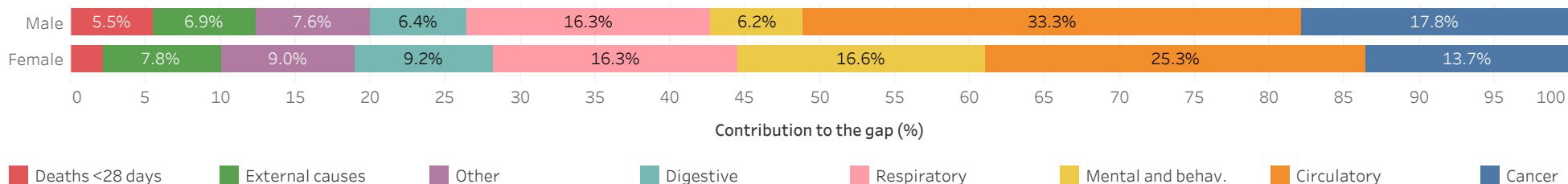
## Difference in life expectancy

This infographic provides information on the causes of death that are driving differences in life expectancy between different groups in Leicestershire. Targeting the causes of death which contribute most to the life expectancy gap could have a large impact on reducing inequalities. The absolute gap in life expectancy between the most and least deprived areas in Leicestershire is 5.3 years in males and 3.9 years in females. The broad causes of death that contribute to difference have been examined in the infographics. In males, half of the gap in life expectancy between the most and least deprived areas in Leicestershire is due to excess deaths from circulatory disease (heart disease and stroke) and cancer. In females, over half of the gap is due to excess deaths from circulatory disease (heart disease and stroke), mental and behavioural disorders and respiratory diseases. This means that if people in the most deprived areas in Leicestershire had the same mortality rate for these causes as in the least deprived areas, the gap in life expectancy would reduce by over a half.

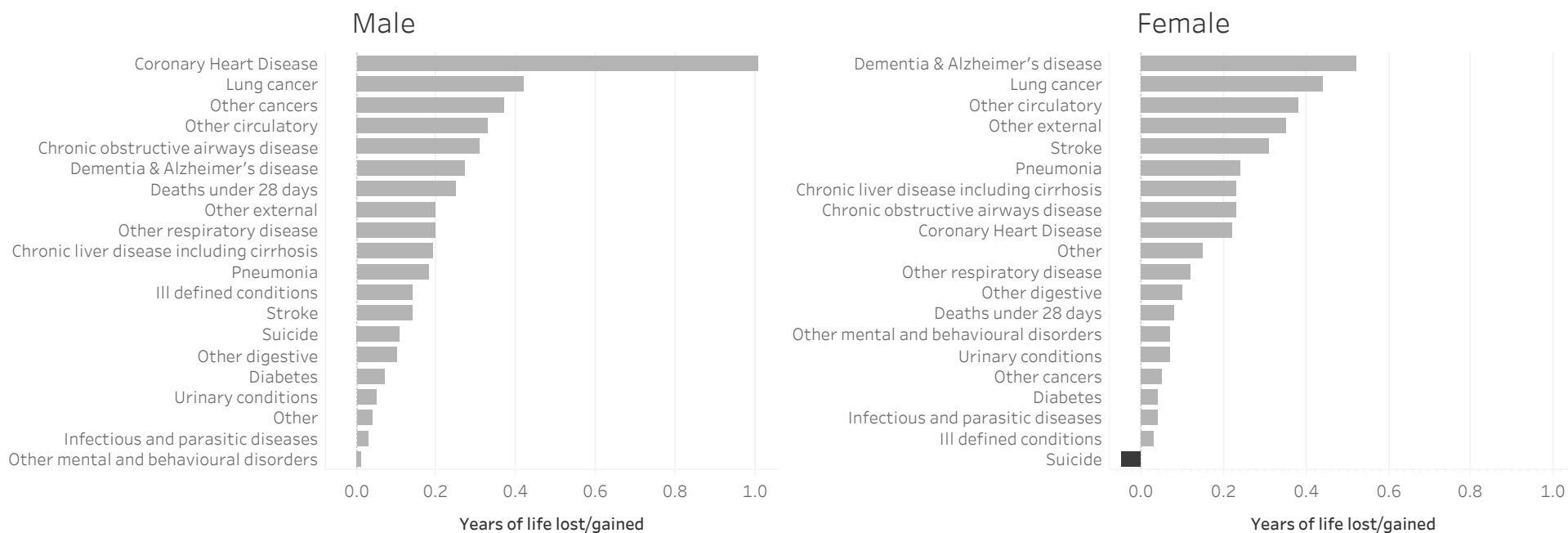
The specific cause of death that accounts for the difference in life expectancy throughout Leicestershire has also been examined. The chart shows males in Leicestershire would gain 1.01 years of life expectancy if Leicestershire's most deprived quintile had the same mortality rate for Coronary Heart Disease as Leicestershire's least deprived quintile. Females in Leicestershire would gain 0.52 years in life expectancy if Leicestershire's most deprived quintile had the same mortality rate for Dementia and Alzheimer's disease as Leicestershire's least deprived quintile. Suicide in females is the only cause of death where life expectancy years would be lost (-0.05 years) if Leicestershire's most deprived quintile had the same mortality rate as Leicestershire's least deprived quintile.<sup>xx</sup>

## Difference in life expectancy by cause of death in Leicestershire

The gap in life expectancy between the most and least deprived areas in Leicestershire can be broken down by the broad causes of death that contribute to difference. In males, half of the gap in life expectancy between the most and least deprived areas in Leicestershire is due to excess deaths from circulatory disease (e.g. heart disease and stroke) and cancer. In females, over half of the gap is due to excess deaths from circulatory disease (e.g. heart disease and stroke), mental and behavioural disorders and respiratory diseases. This means that if people in the most deprived areas in Leicestershire had the same mortality rate for these causes as in the least deprived areas, the gap in life expectancy would reduce by over a half.



The graphs examine the specific diseases that account for the difference in life expectancy throughout Leicestershire. A positive figure indicates that life expectancy years would be gained and a negative figure indicates that life expectancy years would be lost if Leicestershire's most deprived quintile had the same mortality rate as Leicestershire's least deprived quintile.



Source: PHE Segment Tool, 2012-14

Produced by the Strategic Business Intelligence Team, Leicestershire County Council, 2017.

## Depression

Depression affects people in different ways and can cause a wide variety of symptoms. They range from lasting feelings of unhappiness and hopelessness, to losing interest in the things you used to enjoy and feeling very tearful. One in ten adults in Leicestershire had a diagnosis of depression during 2015/16, which equates to over 53,000 adults. All districts in Leicestershire, apart from Oadby and Wigston, have a significantly worse rate of recorded depression compared to the national average. Of the 77 GP practices in Leicestershire, half (39) have a recorded depression prevalence significantly worse than the England average. One-fifth of GP practices have a recorded depression prevalence significantly better than the England average.<sup>xxi</sup>



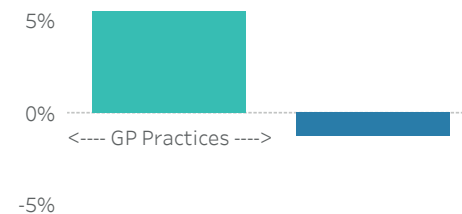
# Depression in Leicestershire

One in ten people aged over 18 years in Leicestershire have a recorded diagnosis of depression. All districts in Leicestershire, apart from Oadby and Wigston, have a significantly higher rate of recorded depression compared to the national average. The graphs for each district examines the prevalence of depression by GP practice. The percentage point difference from the England average is presented with the statistical significance compared to England.

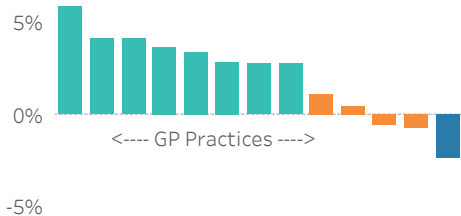
## Charnwood



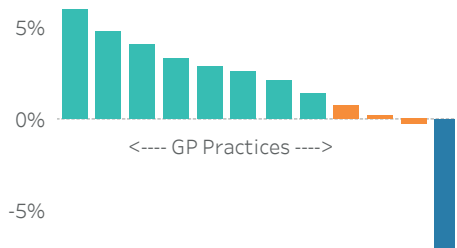
## Melton



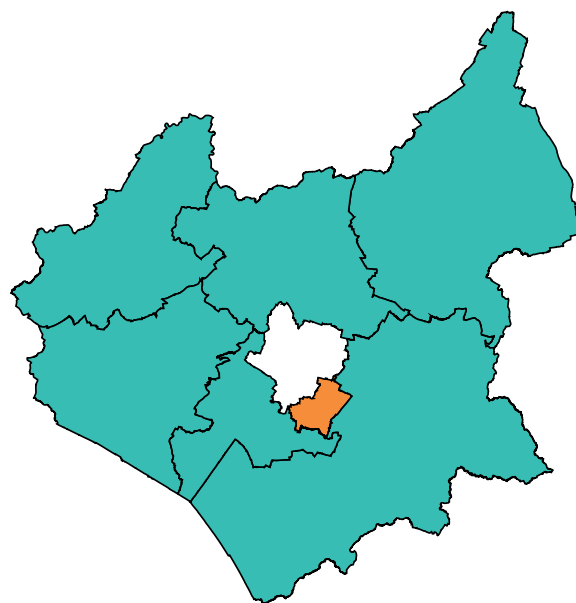
## North West Leicestershire



## Hinckley & Bosworth



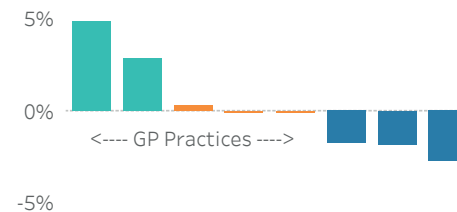
## Blaby



## Oadby & Wigston



## Harborough



### Statistical Significance compared to England

Higher Lower Similar

## Suicides

Suicides and injury undetermined is seen as an indicator of underlying rates of mental ill-health. The definition of suicide includes all deaths from intentional self-harm for persons aged 10 and over, and deaths where the intent was undetermined for those aged 15 and over. In 2013-15 there were 164 suicides in Leicestershire, from 129 males and 35 females. Males are three times more likely to commit suicide than females and suicide is a significant cause of death in young adults. The latest shows the average of death from suicide in Leicestershire is 46 years in males and 43 years in females.

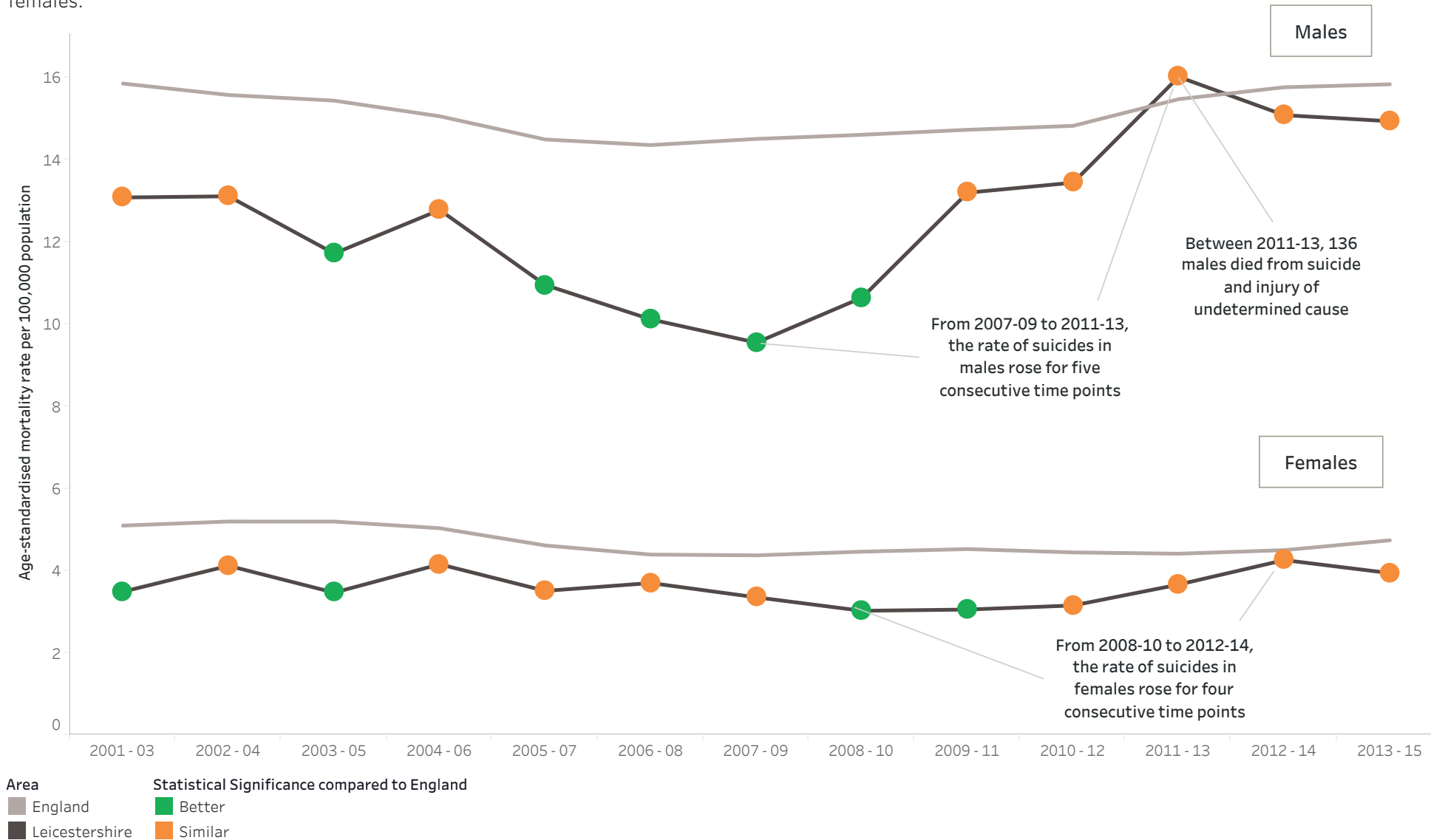
Suicide rates are measured across three-year time periods, due to the small numbers involved. From 2007-09 to 2011-13, the rate of suicides rose for five consecutive time periods. Since 2011-13, the rate of suicides in Leicestershire decreased marginally, from 169 deaths in 2011-13 to 164 deaths in 2013-15. Out of all the districts in Leicestershire, Blaby has the highest rate of suicides, followed by North West Leicestershire.<sup>x</sup>





# Suicides in Leicestershire

In Leicestershire between 2013-15, there were 164 deaths from suicides. Males are three times more likely to commit suicide than females and suicide is a significant cause of death in young adults. The latest data shows the average age of death from suicide in Leicestershire is 46 years in males and 43 years in females.



Source: Public Health Outcomes Framework, Public Health England

Produced by the Strategic Business Intelligence Team, Leicestershire County Council, 2017.

## 4.5 Prescribing

### Prescribing – Items

The data presented in the infographic examines details of prescribing for East Leicestershire and Rutland Clinical Commissioning Group and West Leicestershire Clinical Commissioning Group (combined) for each section of the British National Formulary (BNF) in 2016/17. Where prescriptions are written by a prescriber located in a particular CCG but dispensed in a different CCG, the data will be included by the CCG where the prescriber is based. It is important to note that the data does not include prescriptions written in hospitals or hospital clinics that are dispensed in the community, prescriptions dispensed in hospitals, prescribing by dentists and private prescriptions. Some BNF sections include medicines which have a high proportion of prescriptions written in hospitals that are dispensed in the community.

The infographic presents the twenty drugs (by BNF Section Names) with the highest number of items prescribed in 2016/17 throughout Leicestershire and Rutland. It shows Hypertension and Heart Failure drugs have the most items prescribed, followed by Lipid-Regulating drugs and Antidepressants. Drugs for the Cardiovascular System account for seven out of the top twenty items prescribed. Out of all these drugs, Corticosteroids have the highest cost per item at £29.24, followed by Antiepileptics at £22.10 and drugs used in Diabetes at £18.38 per item.<sup>xxii</sup>



# Number of items prescribed throughout Leicestershire and Rutland

This infographic examines the twenty drugs with the highest number of items prescribed in East Leicestershire and Rutland Clinical Commissioning Group and West Leicestershire Clinical Commissioning Group between April 2016 to March 2017. The size of the box relates to the total number of items prescribed and the cost per item is stated.



British National Formulary (BNF) Chapter Name:

- Cardiovascular System
- Endocrine System
- Infections
- Nutrition And Blood
- Respiratory System
- Central Nervous System
- Gastro-Intestinal System
- Musculoskeletal & Joint Diseases
- Obstetrics, Gynae and Urinary Tract..

Source: Commissioning Group Prescribing Data, NHS Digital

Produced by the Strategic Business Intelligence Team, Leicestershire County Council, 2017.

## Prescribing – Costs

Locally in Leicestershire, Clinical Commissioning Groups (CCG's) spend £99 million on prescribed drugs (excluding specialised drugs such as chemotherapy). Prescribing practice mirrors the burden of illness locally and the evidence suggests that the conditions that have the biggest and most sustained impact on residents and services are heart disease, high blood pressure, diabetes, respiratory disease and depression.

Many of these problems and their associated drug treatments require close monitoring and support from primary care. People with these long-term conditions now account for about 50 per cent of all GP appointments, 64 per cent of all outpatient appointments and over 70 per cent of all inpatient bed days.<sup>i</sup>

The infographic presents the twenty drugs (by BNF Section Name) with the highest actual cost in 2016/17 throughout Leicestershire and Rutland. It shows drugs used in diabetes have the highest actual cost (£11,389,701), followed by Corticosteroids (£7,817,354) and Antiepileptics (£5,752,035). In this financial year, the actual cost of Oral Nutrition and Vitamins to both Clinical Commissioning Groups was almost £6million in Leicestershire and Rutland.<sup>xxii</sup>

Many patients get considerable health benefits from prescribed medication for long term conditions. However we also know that adopting and maintaining a healthy lifestyle will reduce the risk of many illnesses and thereby diminish or eliminate the need for medication in many cases.

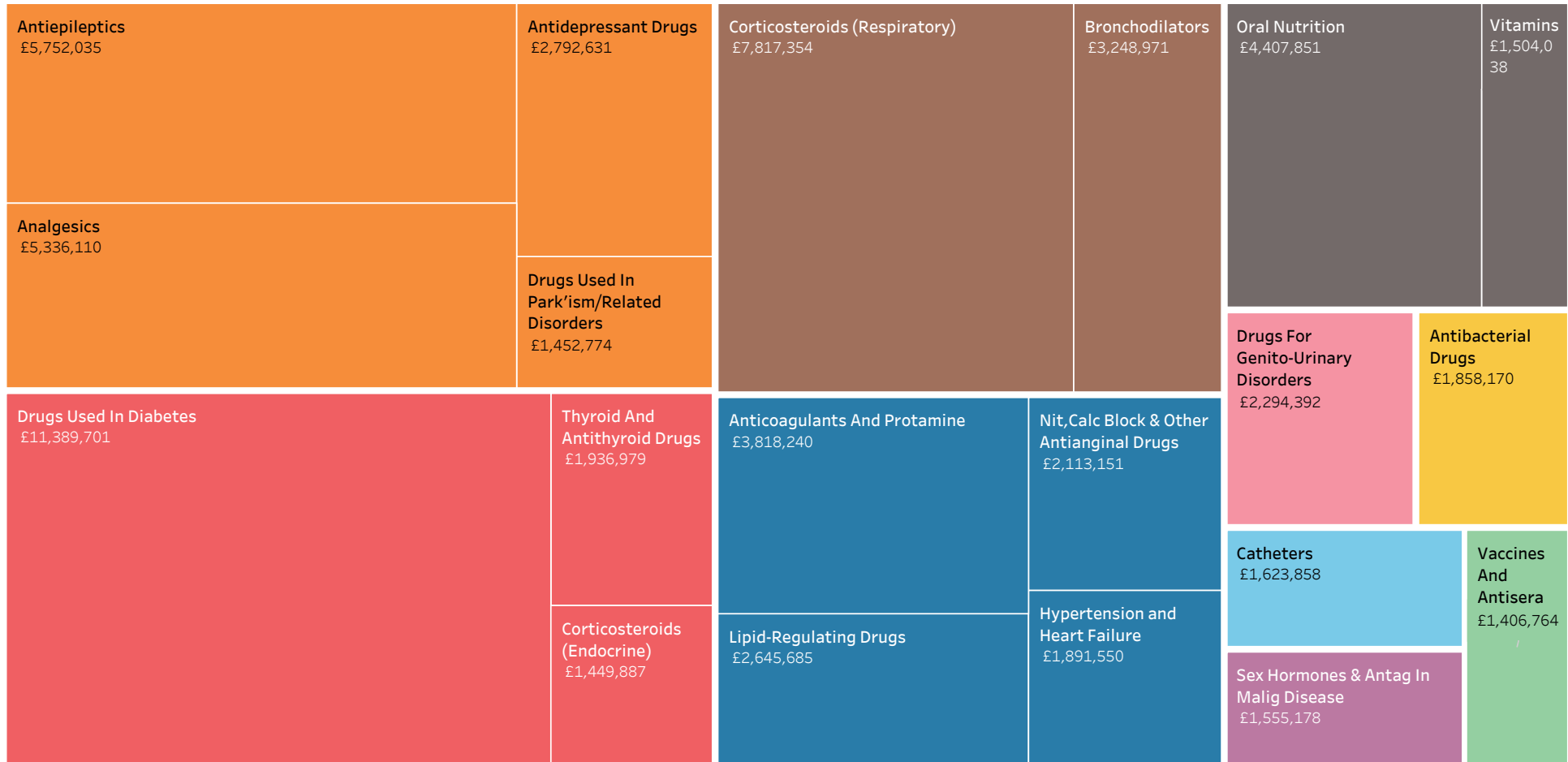
Maintaining a healthy weight and taking regular exercise reduces the risk of developing or worsening a whole host of medical conditions including diabetes, heart disease and cancer. Type 2 Diabetes affects 5-10% of the population and treating it costs 10% of total UK NHS expenditure.<sup>ii</sup> Type 2 Diabetes was previously perceived to be progressive and incurable but evidence is emerging that it can in fact be 'reversed' and sent into 'remission'. Weight loss is associated with extended life expectancy for people with diabetes, and that weight loss of around 15 kg often produces total biochemical remission of type 2 diabetes.

Exercise is also known to improve mental health and wellbeing and to make people less prone to mental illness. Mental health problems account for almost one quarter of the ill health in the UK.

Healthy lifestyles reduce the impact of long term conditions and can help us free up our scarce healthcare resources in the form of medication and doctor and nurse time, enabling us to use our resources in a targeted way, and helps us deliver maximum health gain and benefit for our whole population.

# Actual costs of prescribing throughout Leicestershire and Rutland

This infographic examines the twenty drugs with the highest actual cost of prescribing in East Leicestershire and Rutland Clinical Commissioning Group and West Leicestershire Clinical Commissioning Group between April 2016 to March 2017. The size of the box relates to the total actual cost of prescribing in the financial year, this figure is stated.



British National Formulary (BNF) Chapter Name:

- Appliances
- Cardiovascular System
- Central Nervous System
- Endocrine System
- Immunological Products & Vaccines
- Infections
- Malignant Disease & Immunosuppression
- Nutrition And Blood
- Obstetrics, Gynae and Urinary Tract Disorders
- Respiratory System

## 4.6 Hospital admissions

These infographics demonstrate inequalities in important high-burden diseases throughout Leicestershire. They show each hospital admission indicator is strongly associated with income deprivation locally.

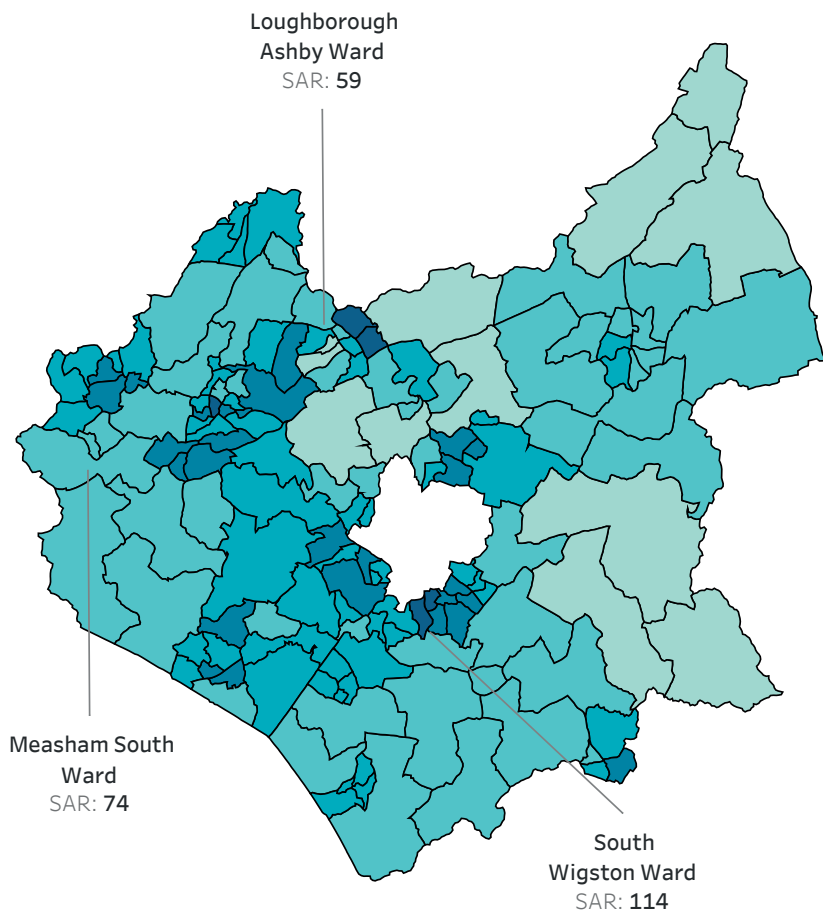
### Emergency hospital admissions

The scatter graph shows there is a statistical linear relationship with income deprivation and emergency hospital admissions at ward level in Leicestershire; this relationship is also witnessed nationally. High levels of emergency admissions may be due to a variety of causes such as high levels of injury within a population or poor management of chronic conditions within Primary Care. It should be viewed as an indication of the levels of unplanned secondary care use within Leicestershire. Throughout the county, Loughborough Ashby Ward has the lowest Standardised Admission Ratio (SAR) for emergency admissions and South Wigston Ward, the highest. Measham South Ward is the fourth most income deprived ward in Leicestershire but has a significantly lower SAR of 74.4 (95% CI 69.6-79.5).<sup>25</sup> Investigations into why this ward is an exception to the trend witnessed both locally and nationally may be worthwhile.



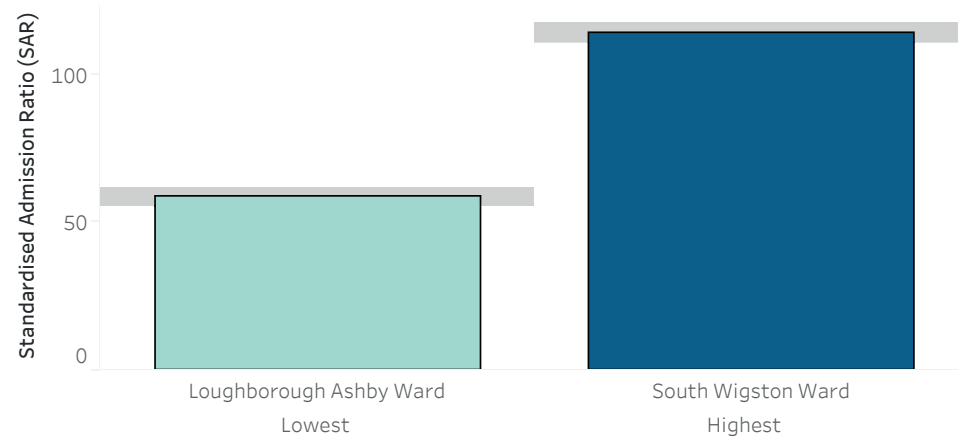
# Emergency hospital admissions for all causes

High levels of emergency admissions may be due to a variety of causes such as high levels of injury within a population or poor management of chronic conditions within primary care. It should be viewed as an indication of the levels of unplanned secondary care use within Leicestershire. The scatter graph shows there is a statistical linear relationship with income deprivation (2015) and emergency hospital admissions for all causes (2010/11-2014/15) in Leicestershire by ward. The bar chart (with 95% confidence intervals) highlights the wards with the highest and lowest admission ratios in Leicestershire.



Standardised Admission Ratio (SAR)  
59 114

Source: Local Health, PHE



Produced by the Strategic Business Intelligence Team, Leicestershire County Council, 2017.

## Emergency hospital admissions – COPD

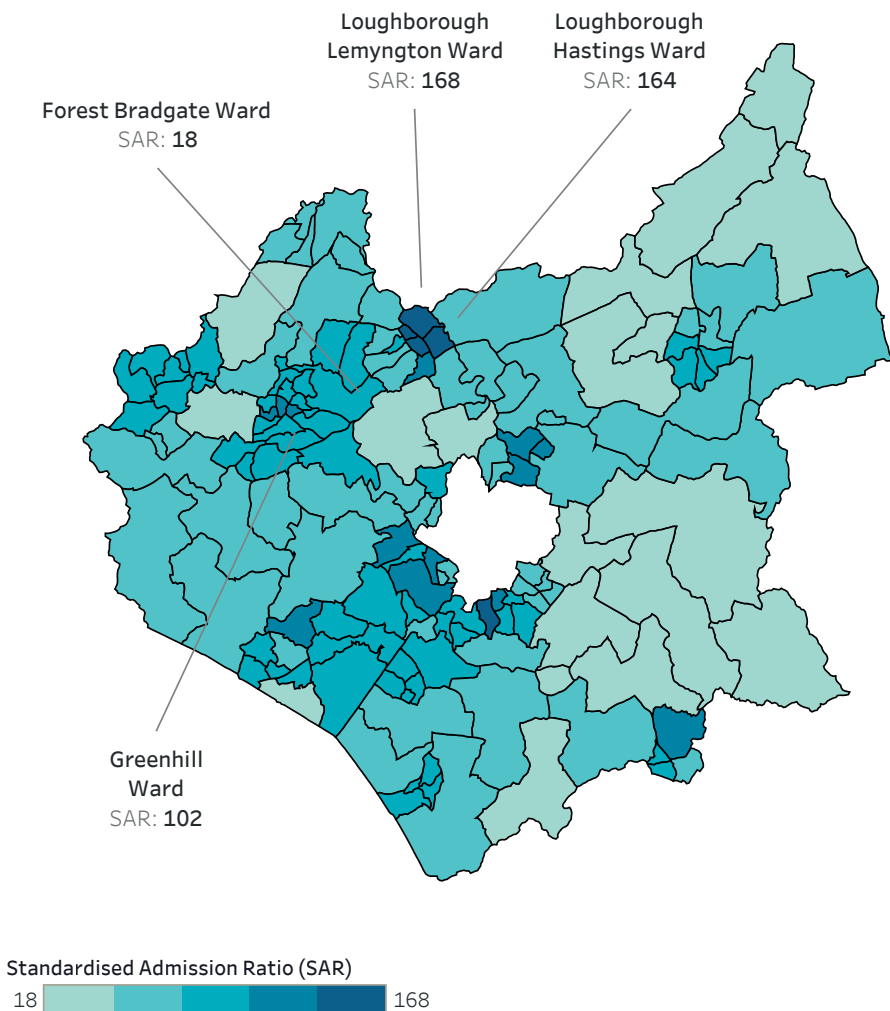
The scatter graph shows there is a statistical linear relationship with income deprivation and emergency hospital admissions for Chronic Obstructive Pulmonary Disease (COPD) at ward level in Leicestershire; this relationship is also witnessed nationally. COPD is one of the most common respiratory diseases in England, usually affecting people over the age of 35. The main risk factor for COPD is smoking; with the risk increasing the longer a person has smoked. Lifestyle changes, such as stopping smoking, can have a marked improvement on the condition and there is therefore a need to identify areas where public health interventions may be targeted for prevention and management of the condition. Throughout the county, Forest Bradgate ward has the lowest Standardised Admission Ratio (SAR) for emergency admissions for COPD and Loughborough Lemington Ward, the highest. Greenhill Ward has the highest percentage of people living in income deprivation in Leicestershire but has a similar SAR of 102.1 (95% CI 74.2-135.6) for emergency hospital admissions for COPD.<sup>xxiii</sup> Investigations into why the most income deprived ward in Leicestershire does not have a significantly high SAR for COPD may be worthwhile.



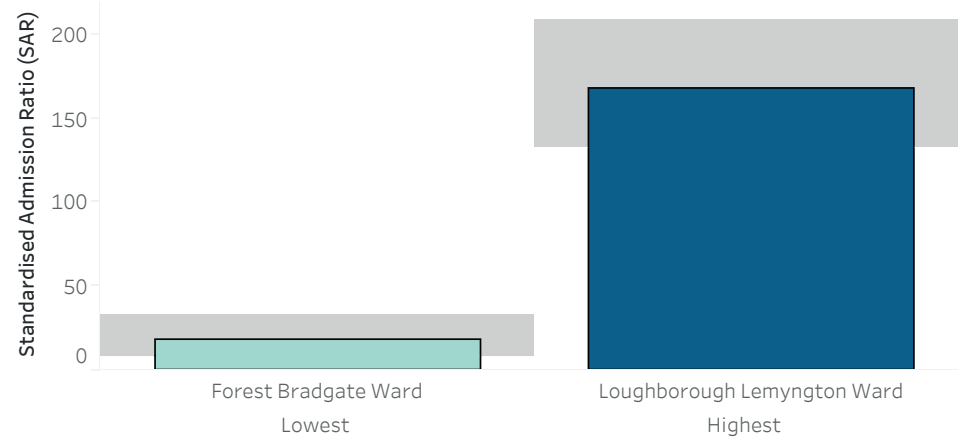


# Emergency hospital admissions for Chronic Obstructive Pulmonary Disease (COPD)

COPD is a common respiratory disease, usually affecting people over the age of 35. The main risk factor for COPD is smoking, with the risk increasing the longer a person has smoked. Lifestyle changes, such as stopping smoking, can have a marked improvement on the condition and there is therefore a need to identify areas where public health interventions may be targeted for prevention and management of the condition. The scatter graph shows there is a statistical linear relationship with income deprivation (2015) and emergency hospital admissions (2010/11-2014/15) for COPD in Leicestershire by ward. The bar chart (with 95% confidence intervals) highlights the wards with the highest and lowest admission ratios in Leicestershire.



Source: Local Health, PHE



Produced by the Strategic Business Intelligence Team, Leicestershire County Council, 2017.

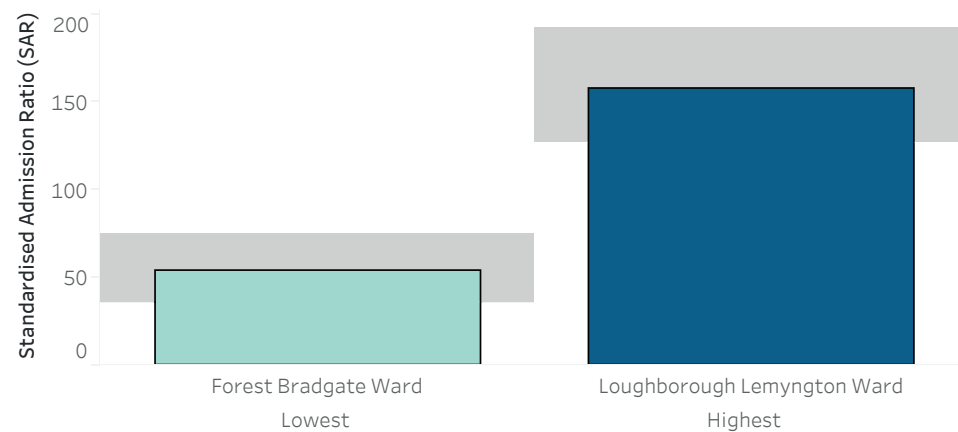
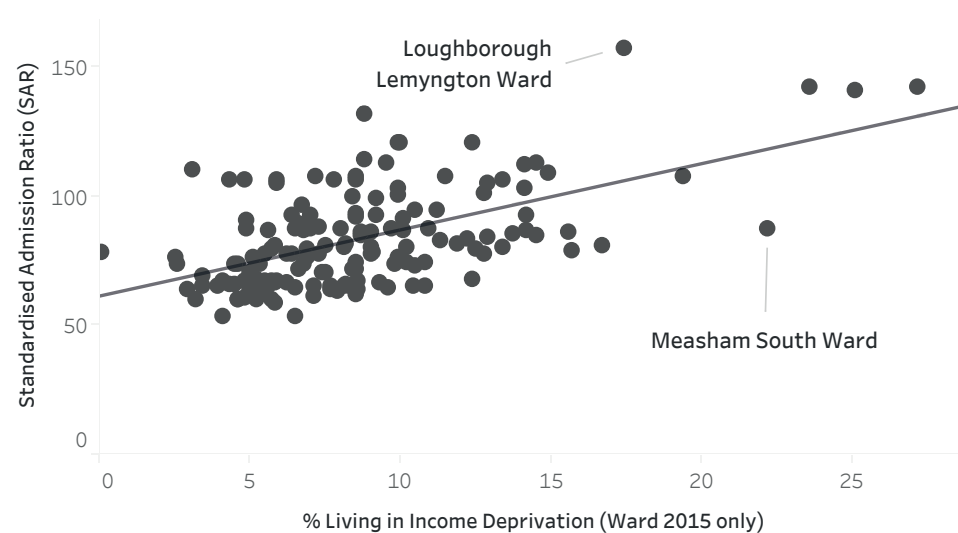
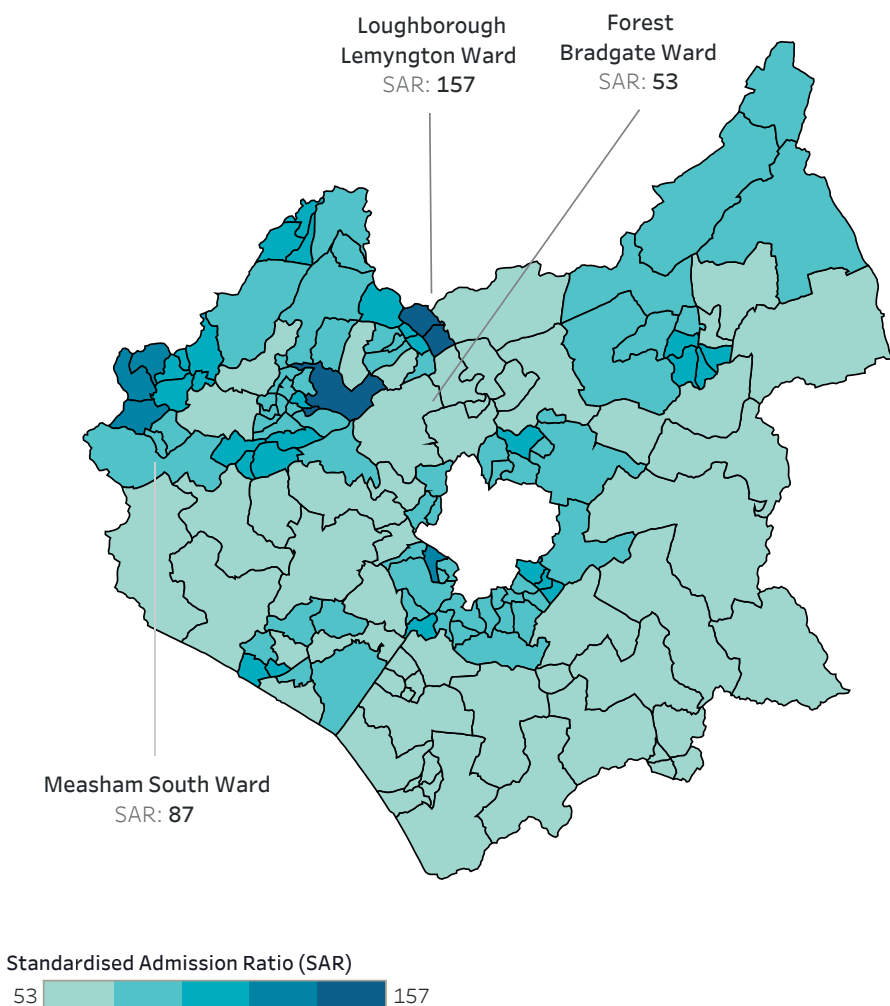
## Emergency hospital admissions – CHD

The scatter graph shows there is a statistical linear relationship with income deprivation and emergency hospital admissions for Coronary Heart Disease (CHD) at ward level in Leicestershire; this relationship is also witnessed nationally. In 2015, heart disease was England's second biggest killer causing around 61,000 deaths, it is therefore important to understand variation in the level of CHD in the community and the resulting demand upon local secondary healthcare services. High levels of emergency admissions for CHD may reflect high levels of disease within a population or may be indicative of unsatisfactory primary healthcare. Throughout the county, Forest Bradgate Ward has the lowest Standardised Admission Ratio (SAR) for emergency admissions for CHD and Loughborough Lemyngton Ward, the highest. Understanding why Loughborough Lemyngton Ward has the highest SAR for CHD despite not being the most income deprived ward may be useful.



# Emergency hospital admissions for Coronary Heart Disease (CHD)

In 2015, heart disease was England's second biggest killer causing around 61,000 deaths. It is therefore important to understand variation in the level of CHD in the community and the resulting demand upon local secondary healthcare services. High levels of emergency admissions for CHD may reflect high levels of disease within a population or may be indicative of unsatisfactory primary healthcare. The scatter graph shows there is a statistical linear relationship with income deprivation (2015) and emergency hospital admissions for CHD (2010/11-2014/15) in Leicestershire by ward. The bar chart (with 95% confidence intervals) highlights the wards with the highest and lowest admission ratios in Leicestershire.



Source: Local Health, PHE

Produced by the Strategic Business Intelligence Team, Leicestershire County Council, 2017.

## 5. Feedback on recommendations for 2016

*We will refresh our strategic work on tobacco control, in the light of the new Health and Wellbeing Strategy and the findings of the health profiles 2016.*

### Response

A draft action plan for tobacco control has been developed using the Joint Health and Wellbeing Strategy, Health Profiles 2017 and Tobacco Profiles 2017. They confirm the priority areas for the work on tobacco control as:

1. Stop smoking in pregnancy
2. Targeting routine and manual workers by Quit Ready, the Stop Smoking Service
3. Smoke free cars and homes
4. Smoke free parks and play areas
5. Targeting people with mental health issues

*We will continue to lead County Council progress on developing our approach to social value, recognising the impact this can have on economic development, and in turn health outcomes.*

### Response

The County Council Communities Board has approved, in principle, the launch of a Social Value Policy that will support delivery of the proposed Single Outcomes Framework (including health related outcomes and sub outcomes). As part of this Policy, face to face Social Value training will be rolled out across the Council in early 2018 that will include promotion of internal tools and resources available to support delivery of the new Outcomes Framework, such as Health Impact Assessments.

***Alongside Corporate Resources we will lead the implementation of the workplace wellbeing strategy within Leicestershire County Council.***

### **Response**

The Workplace Health Strategy Group has agreed a Workplace Health and Wellbeing Strategy. Action for this year will focus on:

1. Supporting the network of Departmental Coordinators and Champions including holding an event in early 2018
2. Developing and implementing action plans focused on the 4 strategic priority areas:
  - Physical activity
  - Mental health and wellbeing
  - Healthy eating
  - Substance misuse (including tobacco and alcohol)

***District and borough councils in Leicestershire have a key role to play in our work on the wider determinants of health. We will continue to provide specialist expertise on approaches to health impact assessment and health in all policies, working in partnership with district and borough councils.***

### **Response**

PH have continued to undertake Health Impact Assessments for major projects, plans and developments across the County. This has included Hinckley West Housing Development, and current work on the Melton Distributor Road. We have also designed and run a one day training course to build capacity to deliver Health Impact Assessments in future.

***As a partner to the NHS, we will work with University of Hospitals of Leicester Trust and Leicestershire Partnership Trust on joint approaches to workforce health as part of the Leicester, Leicestershire and Rutland (LLR) response to the NHS 5 Year Forward View.***

### **Response**

Workforce health has been identified as a priority in the prevention work stream of the Sustainability and Transformation Partnership (STP) across LLR. A clinical research fellow is leading a 12 month piece of work across LLR to coordinate and provide opportunities for health amongst the UHL, LPT and partner organisations workforces.

Through 2017/18, a different focus each month will increase awareness in organisations, particularly around mental health awareness. This aligns with work in Leicestershire led by Leicestershire and Rutland Sport.

***The Public Health Department will work with the public and private sector organisations to advocate the use of the Wellbeing Charter by employers, as part of approach to workplace health.***

### **Response**

Using the County Council as a 'worked example' has shown that the Wellbeing Charter is useful but that it can be seen as overly bureaucratic. The STP and Leicestershire work described above will enable us to take forward this recommendation in a different way

## Endnotes

- i Office for National Statistics (C) Crown Copyright. ONS Mid-2015 Population Estimates. at < <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates> >
- ii Population Projections Unit; Office for National Statistics. 2014-based Subnational Population Projections for Local Authorities in England. (2016). at <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/datasets/localauthoritiesinenglandz1>
- iii Department for Communities and Local Government. English indices of deprivation 2015. www.gov.uk (2015). at <https://www.gov.uk/government/publications/english-indices-of-deprivation-2015>
- iv Office of National Statistics. Census 2011. (2013) at <https://www.nomisweb.co.uk/census/2011>
- v Office of National Statistics. Local Area Migration Indications, 2016. (2017) <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/migrationwithintheuk/datasets/localareamigrationindicatorsunitedkingdom>
- vi Office of National Statistics. Birth Summary Tables (2016). at <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/livebirths/datasets/birthsummarytables>
- vii World Health Organization. Ambient (outdoor) air quality and health (2016). At <http://www.who.int/mediacentre/factsheets/fs313/en/>
- viii Department for Environment Food & Rural Affairs. Background Mapping data for local authorities 2013. At: <https://uk-air.defra.gov.uk/data/laqm-background-home>
- ix Leicestershire Police. Crime Statistics 2016/17 (2017)
- x Public Health England. Public Health Outcomes Framework. (2017). at <http://www.phoutcomes.info/>
- xi Public Health England. Child obesity and excess weight: small area level data (2017) at <https://www.gov.uk/government/statistics/child-obesity-and-excess-weight-small-area-level-data>
- xii Public Health England. Physical Activity profile in Fingertips (2017) at <https://fingertips.phe.org.uk/profile/physical-activity>
- xiii Leicestershire Nutrition and Dietetic Service. Lifestyle Eating and Activity Programme (LEAP) service level data, 2016/17.
- xiv Public Health England. Local Alcohol Profiles for England (2017) at <https://fingertips.phe.org.uk/profile/local-alcohol-profiles>

- xv Quit Ready Leicestershire. Service Users data, January – June 2017.
- xvi Local Government Association. Good Progress but more to do. Teenage pregnancies and young parents. (2016).  
At <https://www.local.gov.uk/sites/default/files/documents/good-progress-more-do-tee-68d.pdf>
- xvii Office of National Statistics. Aggregated Conceptions Statistics 2012 to 2014 (2016)
- xviii Office for National Statistics (C) Crown Copyright. ONS Mid-2016 Population Estimates. at < <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates>>
- xix Public Health Mortality Files, 2014-16.
- xx Public Health England. Segment Tool. (2017). at <https://fingertips.phe.org.uk/profile/segment>
- xxi NHS Digital. Quality and Outcomes Framework 2015/16 at <http://www.content.digital.nhs.uk/catalogue/PUB22266>
- xxii NHS Digital. Commissioning Group Prescribing Data. (2017) at <http://content.digital.nhs.uk/article/2021/Website-Search?productid=25160&q=prescribing+ccg&sort=Relevance&size=10&page=1&area=both#top>
- xxiii Public Health England. Local Health. (2017). At <http://www.localhealth.org.uk>