

# Health and Wellbeing in Lincolnshire

## Joint Strategic Needs Assessment Summary Report 2017



Report produced on behalf of the Lincolnshire Health and Wellbeing Board  
May 2017

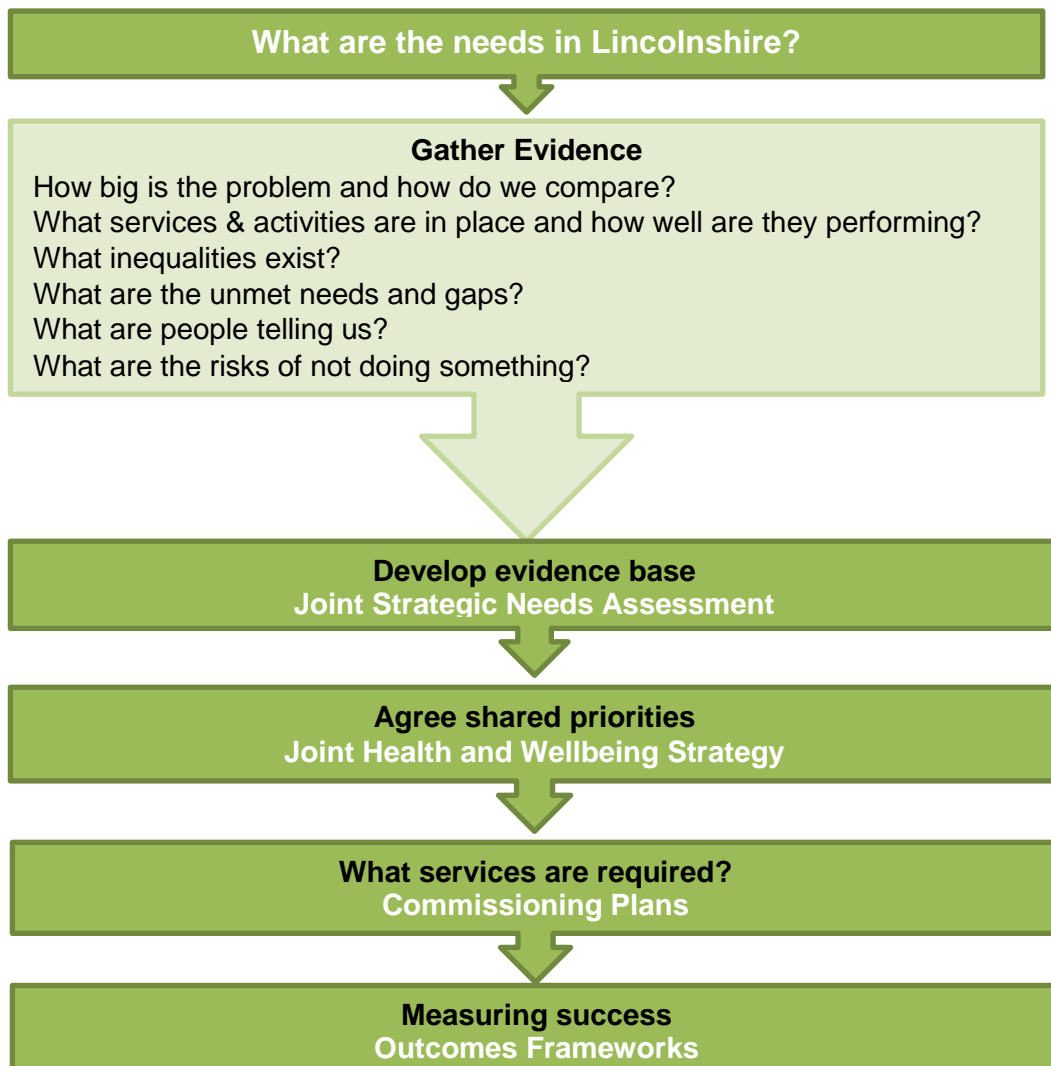
# 1. Introduction

## 1.1 Background

The Joint Strategic Needs Assessment (JSNA) for Lincolnshire reports on the health and wellbeing needs of the people of Lincolnshire. It brings together detailed information on local health and wellbeing needs and looks ahead at emerging challenges and projected future needs.

The Health and Care Act (2012) places equal and joint duties on Local Authorities and Clinical Commissioning Groups (CCGs) to publish a JSNA through the Health and Wellbeing Board (HWB). The JSNA is a shared evidence base to inform the planning and commissioning of services and is used by the Board to identify the priorities in the Joint Health and Wellbeing Strategy (JHWS). Figure 1 illustrates this relationship.

**Figure 1: Relationship between the Joint Strategic Needs Assessment, the Joint Health and Wellbeing Strategy and Service Commissioning**



## 1.2 How has the 2017 JSNA been developed?

Following formal agreement at the Lincolnshire Health and Wellbeing Board, the process of reviewing the JSNA for Lincolnshire began in April 2016. A multi-agency Steering Group was established to oversee the review process made up of representatives from each of the Clinical Commissioning Groups (CCGs), Adult Care, Children's Services, Public Health, Healthwatch Lincolnshire, District Councils and the voluntary and community sector.

The 35 topics in the 2011 JSNA formed the basis of the review programme. Expert Panels, made up of a cross section of partners, were set up for each of the topic areas. The Panels, with the support of specialist data analysts and the JSNA Team, were responsible for conducting the review and developing the new topic commentaries. The commentaries bring together a wide range of data, information and research providing a narrative on the level of need in Lincolnshire. They also describe what services and activities are currently provided and if there are any gaps. Finally, they set out the risks of not doing something and suggest what needs to happen next.

Each commentary has been peer reviewed by a 'topic expert' to check the information provided is accurate and does not contain irrelevant facts, unwarranted claims or personal views. Final assurance has been provided by a JSNA Editorial Board which has reviewed all the topics against a quality standard prior to recommending each topic to the Steering Group for approval.

Following feedback from stakeholders five topics from the 2011 JSNA have been removed as they are services rather than needs, or because the needs have been incorporated into another topic area. The five topics are Personalisation, Residential & Nursing Care, Life Expectancy, Childhood Obesity & Weight Problems (*now included in an all age Obesity Topic*) and Youth Work.

During the course of the review four new topics areas have been identified and are included in the 2017 JSNA. These are Autism, Dementia, Domestic Abuse and Financial Inclusion. Finally, the Mental Health topic has been split into two topics, one covering children and young people and a separate topic for adults.

The JSNA is published as an interactive web resource on the [Lincolnshire Research Observatory](#) (LRO). Each topic page contains the commentary and hyperlinks to a range of national and local evidence sources. Whilst efforts have been made to reduce the use of jargon or highly technical terminology, it is not always possible when dealing with complex issues. Therefore, this summary report has been produced for stakeholders and partners, in addition to the online resource. A 'Topic on a Page' document has been produced for each topic; these provide an overview of the key facts and figures in an 'easier to read' format. These can be found in Section Three of this report and as PDF documents on the LRO.

In addition, a one page summary detailing key facts about health and wellbeing in Lincolnshire based on a life course approach has been developed for partners and stakeholders to use as a reference document. This can be found at the end of this summary report and can also be download from the LRO.

### 1.3 Keeping the JSNA Current

The JSNA is the 'go to' shared evidence base for Lincolnshire. It not only underpins the Joint Health and Wellbeing Strategy but is also a crucial commissioning tool to support service planning and delivery across the health and care sector. It is therefore essential that the JSNA is kept under constant review and improvements are made to ensure it contains the latest information and evidence which reflects the changing needs of Lincolnshire's population. In order to do this we have set ourselves the following principles:

- **Current** - the JSNA needs to be a continuous process of review. We will therefore put in place a rolling programme of review to ensure each topic area is refreshed and updated as new data and evidence becomes available.
- **Accessible** – we will continue to make the JSNA available to all stakeholders by publishing it on the Lincolnshire Research Observatory (LRO). We have listened to feedback and improved the way people access information on the LRO, and we will continue to seek feedback to identify ways of further improving access to the JSNA.
- **Relevant** – the recent review has resulted in some changes in topic areas to reflect the changing needs of Lincolnshire's population. To ensure the JSNA remains relevant we will work with partners to fill any gaps in our knowledge by identifying new topic areas or undertaking calls for evidence.
- **Partner Driven** – the JSNA is a shared evidence base and not the sole responsibility of one organisation – partnership working is crucial. We will actively seek feedback and provide opportunities for partners to engage in the JSNA process, including the voluntary and community sector. Partners will be kept informed through a range of mechanisms including infographic summaries, an annual update report, regular newsletter and updates on the LRO website.
- **Embedded** – for the JSNA to be effective it needs to be embedded within organisational processes and for there to be a clear link between the use of the JSNA and commissioning decisions. To share learning and promote greater engagement in the JSNA we will encourage partners to share case studies and examples on how the JSNA was been used.

## 2. Key Facts and Figures about Lincolnshire

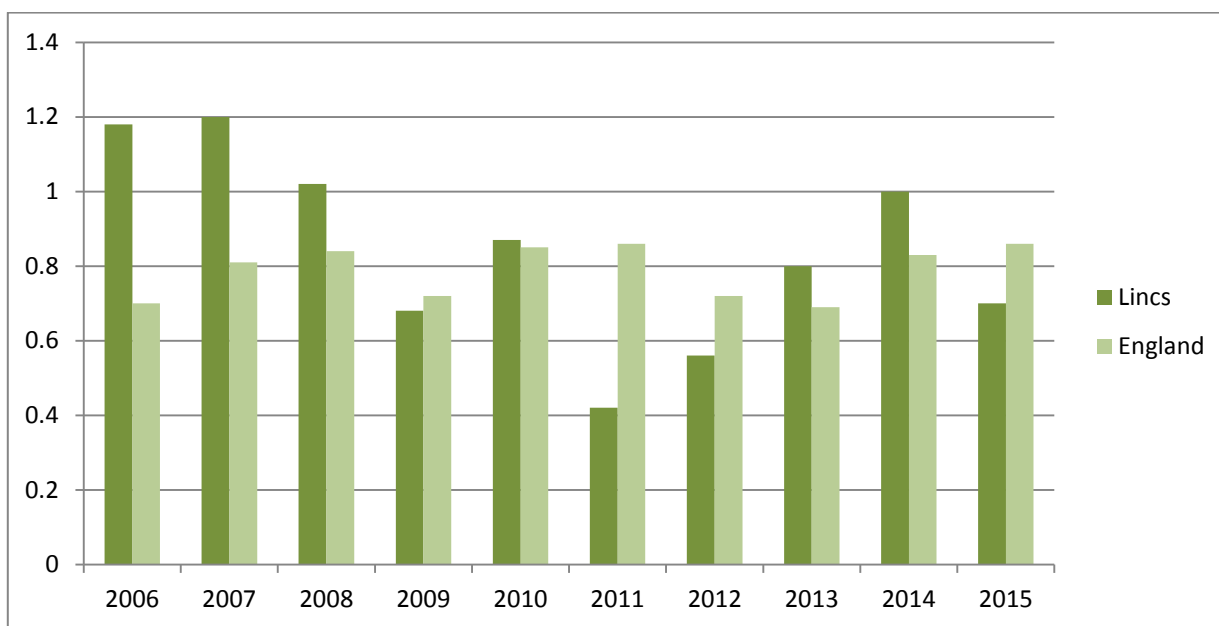
Lincolnshire is one of the largest counties in England, with a land area of 5,937 square kilometres. The county has a diverse geography, comprising large rural and agricultural areas, urban areas and market towns, and a long eastern coastline. The population density in Lincolnshire is approximately 124 persons per square kilometre, less than a third of the average for England and Wales.

### 2.1 Population

#### **Population Estimates**

- The population of Lincolnshire is currently estimated to be 736,700 (based on ONS 2015 Mid-Year Population Estimates), a rise of 0.7% (5,200 persons) on the previous year.
- Over the past ten years Lincolnshire's population increased by 8.8%, which is higher than both the East Midlands (8%) and England (8.3%). Although the rate of Lincolnshire's population growth has increased in recent years, latest figures show it is below the national rate of growth (See Figure 2).

**Figure 2: Annual Percentage Change in Population, Year on Year**



Source: Office of National Statistics

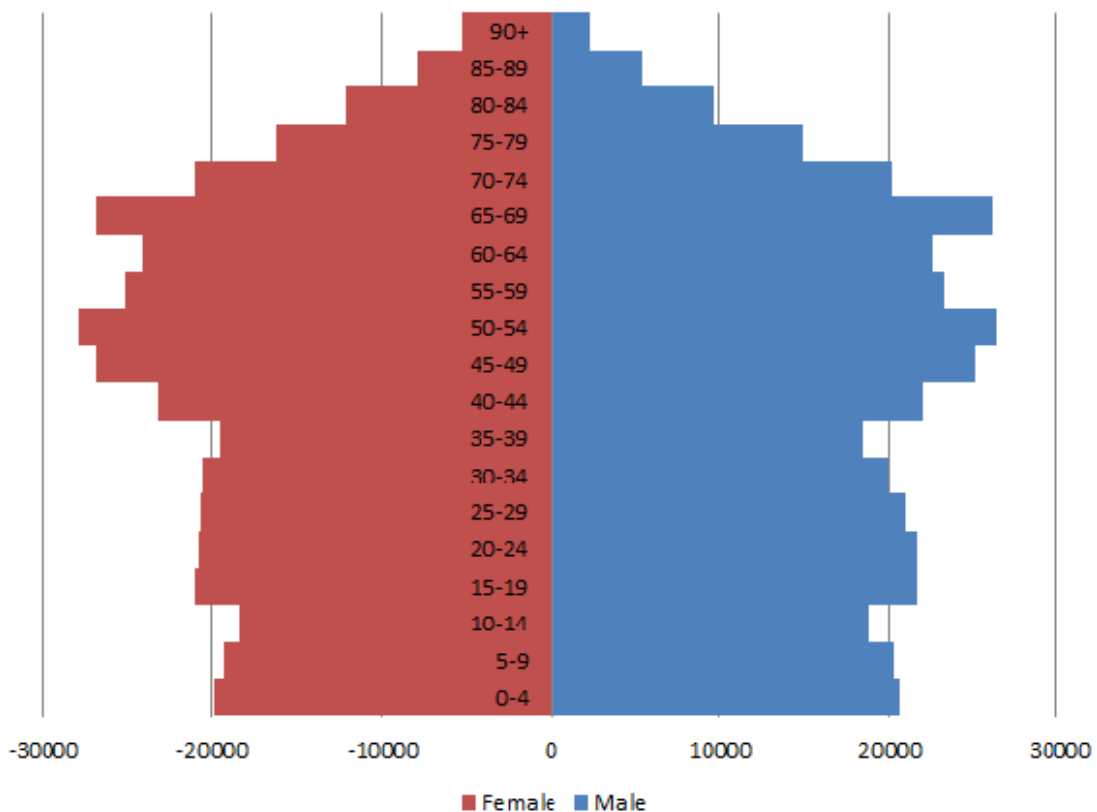
#### **Age Profile**

- The proportion of young people in Lincolnshire (aged 0-19) has fallen from approximately 23% of the total population in 2005 to 22% in 2015.
- In contrast, over the same period the number of people aged 65+ has increased by 3% to 22% in 2015 (compared to a 2% increase nationally to 18%). This information highlights the fact that Lincolnshire has a declining younger population and a growing older population (See Figure 3)

## Population Projections

- Projections indicate that by 2039 the population growth in Lincolnshire will be 14% which is below the projected national growth rate of 17%, the population in Lincolnshire is projected to increase by approximately 103,000.
- The rate of change is not uniform across the county. Between 2014 and 2039 South Kesteven's population is projected to see the largest growth at 18%, followed closely by South Holland (17%). East Lindsey, however, has a much lower predicted growth rate of 10% (See Table 1).

**Figure 3: Age Profile of Lincolnshire (mid-year 2015)**



Source: Office of National Statistics

- The trend towards an ageing population profile will continue, with the proportion of people aged 65 and over projected to increase from 22% in 2014 to 30% in 2039.
- Most of the districts will also see a change in the proportion of older people, although figures will vary significantly. Nationally, the number of older people is projected to rise from 18% in 2014 to 24% by 2039. In Boston 21% of the population was aged 65 or over in 2014 and this will rise to 25% in 2039, whilst in West Lindsey 23% of the population was aged 65 or over in 2014, projected to rise dramatically to 32% in 2039.

**Table 1: Population Projection Summary**

	2014	2019	2029	2039	Change (%) from 2014		
					2019	2029	2039
<b>Lincolnshire</b>	731,500	755,800	801,200	834,700	3	10	14
<b>Boston</b>	66,500	69,600	73,700	76,800	5	11	16
<b>East Lindsey</b>	137,600	140,100	146,200	150,800	2	6	10
<b>Lincoln</b>	96,200	98,600	103,000	106,900	2	7	11
<b>North Kesteven</b>	111,000	115,200	122,700	127,900	4	10	15
<b>South Holland</b>	90,400	94,100	100,700	106,100	4	11	17
<b>South Kesteven</b>	138,000	143,600	154,400	162,400	4	12	18
<b>West Lindsey</b>	91,800	94,700	100,400	103,800	3	9	13

Source: Office of National Statistics

- The number of working age people is projected to fall from 61% of the population in 2014 to 52% in 2039, nationally the trend is 63% to 58%.
- Similarly all local district areas of Lincolnshire are predicted to experience a decrease in the percentage of the population who are working age.

Further information regarding population can be found on the Population Theme Page on the LRO website at [www.research-lincs.org.uk/Population.aspx](http://www.research-lincs.org.uk/Population.aspx)

## 2.2 Deprivation

The Index of Multiple Deprivation 2015 (IMD) is the official measure of relative deprivation for small areas (or neighbourhoods) in England.

- Lincolnshire has areas that are ranked amongst the most deprived in the country, but also has areas that are ranked amongst the least deprived in the country.
- The general pattern of deprivation across Lincolnshire is in line with the national trend, i.e. that urban and coastal areas show higher levels of deprivation than other areas. Areas that are most deprived tend to be, but are not restricted to, Lincoln and other market towns (e.g. Boston, Gainsborough, Grantham, Sleaford and Spalding). The Lincolnshire coastline, particularly the towns of Mablethorpe and Skegness are amongst the most deprived 10% of neighbourhoods in the country.
- A higher proportion of people in Lincolnshire are now officially ranked as living in England's most deprived areas compared to the previous data release in 2010.

Further information regarding population can be found on the Deprivation and Poverty Theme Page on the LRO website <http://www.research-lincs.org.uk/Deprivation-and-Poverty.aspx>

## 2.3 Life Expectancy

- In Lincolnshire, life expectancy at birth has continued to increase. Between 2012 and 2014 life expectancy for both males and females were comparable with the England averages of 79.6 years and 83.2 years respectively. However, the gap in life expectancy between males and females is narrowing. (Source ONS).
- There are variations across the county, for example, female life expectancy at birth is lowest in Lincoln at 82 years and highest in South Kesteven at 84 years, a gap of 2 years. For men, life expectancy at birth is again lowest in Lincoln at 78.2 years and highest in North Kesteven at 81.5 years, a gap of 3.3 years.
- In 2012-2014, healthy life expectancy, which estimates lifetime spent in 'Very Good' or 'Good' health based on how individuals perceive their health, is higher in women in Lincolnshire (65.8 years) than England (64 years). For men, the figure for Lincolnshire (63 years) is similar to the England average (63.4 years).

## 2.4 Mortality Rates

- The infant mortality rate in Lincolnshire is 3.2 deaths per 1000 live births. This is lower than both the East Midlands and England averages. There is however variation across the county with the highest infant mortality rates experienced in West Lindsey and South Kesteven, with 5.3 and 4.4 deaths per 1000 live births respectively. By contrast Boston, East Lindsey and Lincoln all have infant mortality rates below the Lincolnshire average.
- Since 2011 there has been a slight fall in the number of people in Lincolnshire dying from causes considered preventable, the current rate is 179.2 deaths per 100,000. This is better than both the East Midlands and England averages. However, there is a significant variation across the county with the highest rates being in Lincoln (227.7), Boston (209.1) and East Lindsey (203.6), whilst the lowest rate is in North Kesteven at 138.9 deaths per 100,000.



### 3. JSNA Topic on a Page

This section provides an overview of the key messages for each of the 35 topics in the 2017 JSNA. The topics have been grouped under six theme headings as shown below. The full JSNA can be found on the [Lincolnshire Research Observatory](#).

#### Children and Young People



- Breastfeeding
- Educational Attainment (Foundation)
- Educational Attainment (Key Stage 4)
- Looked After Children
- Maternal Health, Pregnancy & the first few weeks of life
- Mental Health & Emotional Wellbeing (Children & Young People)
- Special Educational Needs & Disability
- Teenage Pregnancy
- Young People in the Criminal Justice System

#### Adult Health and Wellbeing



- Alcohol (Adults)
- Autism
- Carers
- Domestic Abuse
- Drug Misuse
- Learning Disabilities
- Mental Health (Adults)
- Physical Disabilities & Sensory Impairment
- Smoking Reduction in Adults
- Suicide

#### Older People



- Dementia
- Falls

#### Healthy Lifestyles



- Food & Nutrition
- Immunisation (All Ages)
- Obesity (All Ages)
- Physical Activity
- Sexual Health

#### Major Diseases



- Cancer
- Chronic Obstructive Pulmonary Disease
- Coronary Heart Disease
- Diabetes
- Stroke

#### Wider Determinants of Health



- Excess Seasonal Deaths & Fuel Poverty
- Financial Inclusion
- Housing & Health
- Road Traffic Collisions



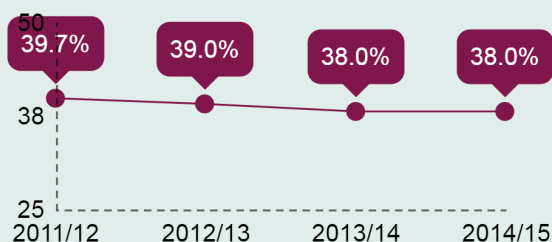
# Breastfeeding

## Why is this important?

- The World Health Organisation recommends babies should be fed only on breast milk from birth to six months of age.
- Maternal health benefits of breastfeeding include protection against ovarian and breast cancer and reduced risk of osteoporosis.
- Breastfed babies have better health outcomes including lower risk of diabetes, obesity and allergies.

## What has changed?

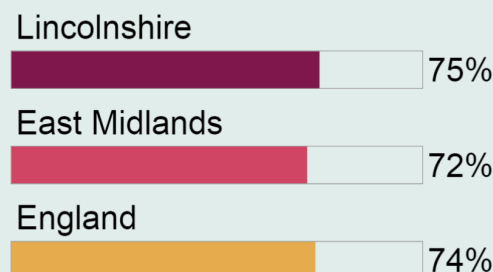
Babies totally or partly breastfed at 6-8 weeks in Lincolnshire



Source: Public Health Pregnancy and Birth Profile

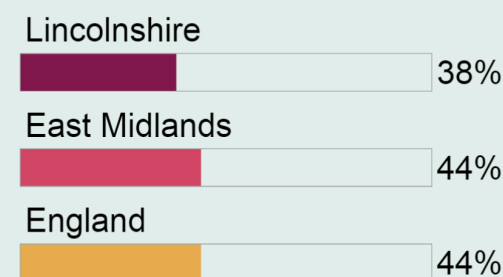
## How do we compare?

Women starting breastfeeding in the first 48 hours after birth (2013/14)



Source: Public Health Pregnancy and Birth Profile

Babies totally or partly breastfed at 6-8 weeks (2014/5)



Source: Public Health Pregnancy and Birth Profile

## The picture in Lincolnshire



In 2013/14 the lowest breastfeeding start rates were in Lincoln (67%) and West Lindsey (69.7%); the highest were in Boston (84.5%).



In 2014/15 the lowest numbers still breastfeeding at 6-8 weeks were in East Lindsey (33%) and West Lindsey (35%); the highest were in North and South Kesteven (both 41%).



Breastfeeding rates at 6-8 weeks may be linked to areas of deprivation, with women in less deprived areas like North and South Kesteven more likely to continue breastfeeding than in the Boston and Lincoln areas.

## Key message

With a wealth of national evidence to support the health benefits of breastfeeding for both mother and baby, there are clear benefits to supporting mothers in the most deprived areas to breastfeed their babies.

It is estimated that nationally the cost to the NHS of treating just 5 illnesses linked to babies not being breastfed is at least £48 million per year, and approximately £6 million per year in Lincolnshire.



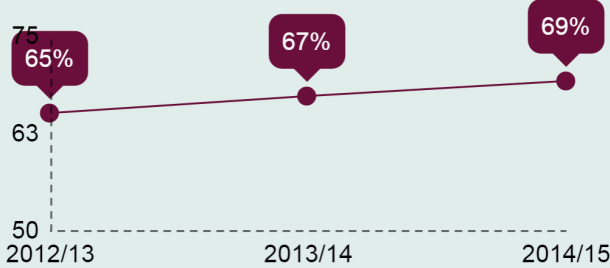
# Educational Attainment (Foundation)

## Why is this important?

- Lincolnshire County Council Children's Services vision is 'that every child in every part of the county should achieve their full potential'.
- Access to good quality early or pre-school education makes children better prepared and ready to start school.
- Not having access to early or pre-school education means a child can lack basic speech and language skills, and have limited physical wellbeing and motor development compared to their peers.

## What has changed?

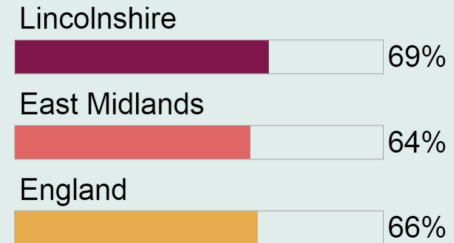
Children reaching a good level of development at the end of the Early Years Foundation Stage



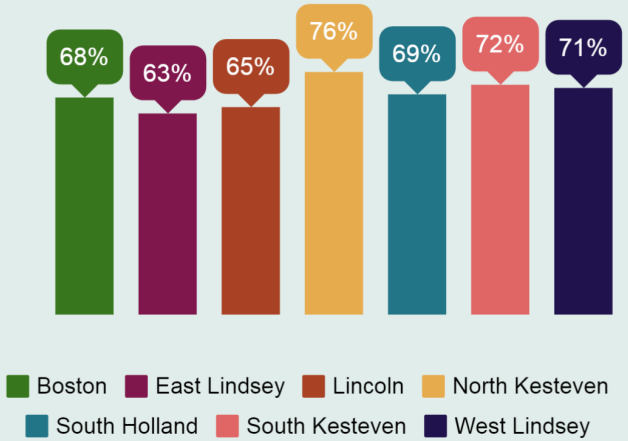
Source: Department for Education

## How do we compare?

Children reaching a good level of development at the end of the Early Years Foundation Stage (2014/5)



Breakdown by district (2014/15)



Source: Department for Education

## The picture in Lincolnshire



98% of 3 and 4 year olds access their 15 hours per week free early years education place.



Lincolnshire children do better than their regional and national peers in the Early Years Foundation Stage.



Children with English as an Additional Language and children with SEND do not do as well as their peers.



More girls (77%) reached a good level of development at the end of the Foundation Stage compared to boys (62%).

## Key message

There is a clear link between Early Years development and future life prospects, therefore it is important to ensure early years provision gives children the best possible start.

It is generally more cost effective to invest in early years interventions that will improve outcomes for children than try to improve outcomes later in life.



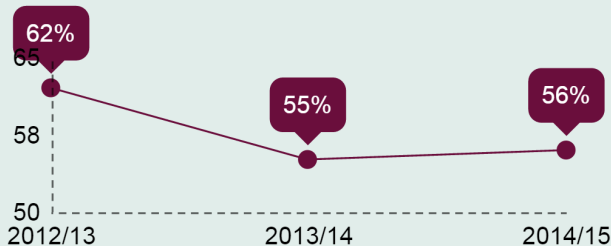
# Educational Attainment (Key Stage 4)

## Why is this important?

- Raising attainment in secondary schools is important in order to maintain and improve the economic benefits for, and productivity of, communities in Lincolnshire.
- Achieving GCSEs, A levels and completing apprenticeships improve earnings, employability and lifetime productivity.
- There is a strong link between poor educational attainment and increased inequalities.

## What has changed?

Pupils achieving at least 5 good grades at GCSE, including English and Maths

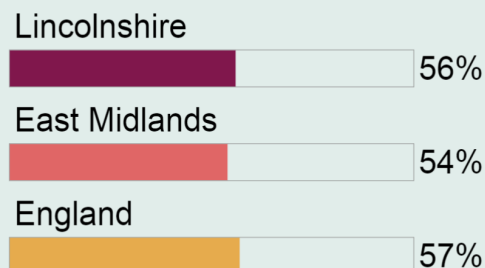


Source: Department for Education

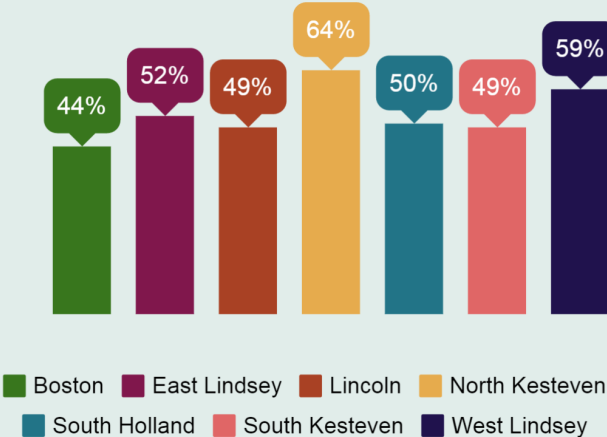
Note - the significant drop between 2012/3 and 2013/14 is due to changes in curriculum in the 2014 exam year.

## How do we compare?

Pupils achieving at least 5 good grades at GCSE, including English and Maths (2014/15)



Breakdown by district (2014/15)



Source: Department for Education

## The picture in Lincolnshire



30% of children eligible for Free School Meals achieve good GCSE levels compared to 62% of their peers.



Almost two thirds of girls achieve 5 good GCSEs compared to half of boys.



Locally, GCSE attainment for children with English as an Additional Language (45%) was significantly worse than national rates (57%).



Children with SEND achieve similar levels of GCSEs to their peer group nationally, though still not as well as non-SEND students.

## Key message

A good basic education is fundamental to a person's ability to make a positive contribution to society. Failure to provide this education has significant social and financial consequences.

Achieving 5 or more good GCSEs has a lifetime productivity impact of £100,000 above average earnings in comparison to someone with no qualifications.



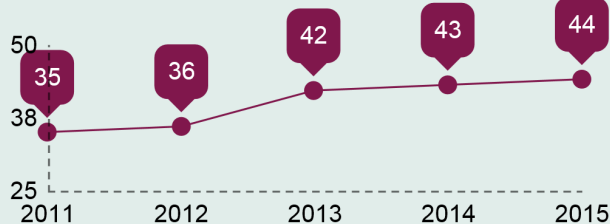
# Looked After Children

## Why is this important?

- Most children are looked after as a result of neglectful parenting and will have experienced trauma in their lives.
- Looked After Children represent a particularly vulnerable group, at high risk of social exclusion, health inequalities, and poor educational attainment.
- Looked After Children show significantly higher rates of mental health issues, emotional disorders, hyperactivity and autistic spectrum disorder conditions.

## What has changed?

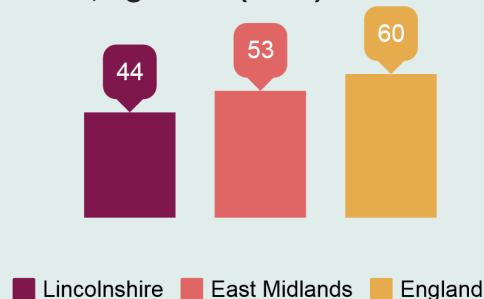
Rate of looked after children in Lincolnshire per 100,000 of 0-18 year old population



Source: Local Authority Interactive Tool (LAIT)

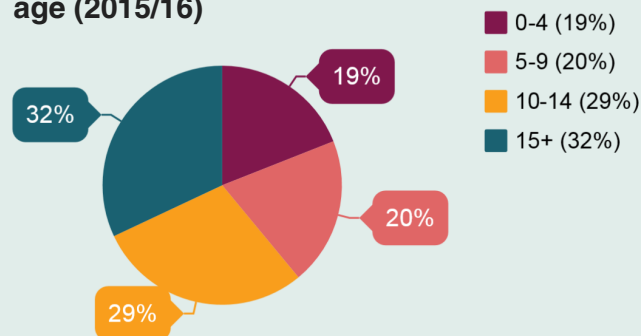
## How do we compare?

Looked After Children per 100,000 population, age 0-18 (2015)



Source: Local Authority Interactive Tool (LAIT)

Looked After Children in Lincolnshire by age (2015/16)



Source: Lincolnshire County Council children's social care data

## The picture in Lincolnshire



10% of Looked After Children achieved at least 5 good GCSEs compared to 65% of their peers.



In 2015, 84% of care leavers were living in suitable accommodation compared to 81% nationally.



In 2014/15, 96.5% of Looked After Children had an annual Health Assessment compared to 89.7% nationally.



In 2016, 6.8% of Looked After Children have had three or more placements compared to 10% nationally.

## Key message

The social and financial costs associated with increased numbers of Looked After Children are very significant, with each placement costing hundreds of pounds per week.

The Local Authority has statutory responsibility as corporate parent to ensure Looked After Children are provided with the best health, education and social opportunities to ensure they fulfil their potential and leave care equipped for adult life.



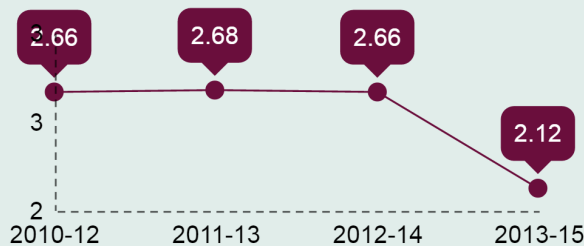
# Maternal Health, Pregnancy & the First Few Weeks of Life

## Why is this important?

- Good maternal health and wellbeing during pregnancy is essential for a child's health, wellbeing and educational outcomes.
- Access to good quality care reduces the risk of miscarriage and stillbirth, infant and maternal death, low birth weight and premature birth.
- Depression and anxiety are the most common mental ill-health problems during pregnancy and 12 months after the birth.

## What has changed?

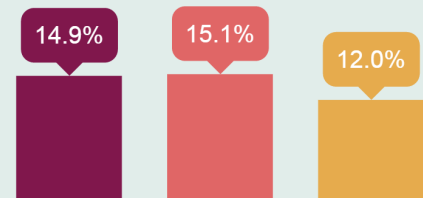
Infant deaths in Lincolnshire within the first 28 days after birth, per 1,000 live births



Source: Public Health Infant Mortality Profiles

## How do we compare?

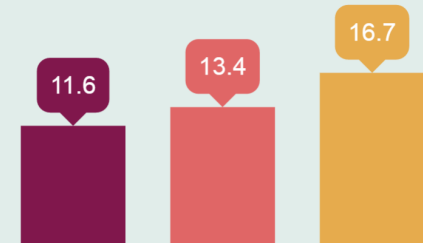
Smoking rates at time of delivery (2013/14)



■ Lincolnshire ■ East Midlands ■ England

Source: Public Health Pregnancy and Birth Profiles

Abortion rate per 1,000 women aged 15-44 (2015)



■ Lincolnshire ■ East Midlands ■ England

Source: Public Health Sexual and Reproductive Health Profiles

## The picture in Lincolnshire



The General Fertility Rate (GFR) has fallen from 63.2 live births per 1,000 in 2010 for women aged 15-44 in 2014 to 61.1, reflecting regional and national trends.



In 2014 Boston has the highest GFR rate at 71.4 per 1,000 women aged 15-44, and Lincoln City the lowest at 54.4.



Full term babies with low birth weight make up 2.2% of births in Lincolnshire; the England average is higher at 2.9%.



Stillbirth rates are 4.8 per 1,000 births, similar to the England rate of 4.9.

## Key message

Good support during pregnancy and early life can help lay foundations for individual health, wellbeing, cognitive development and emotional security for life. Failing to support families during pregnancy and early life to lay the best foundations they can for their children risks increasing levels of obesity, childhood injury, mental ill-health and low educational attainment.



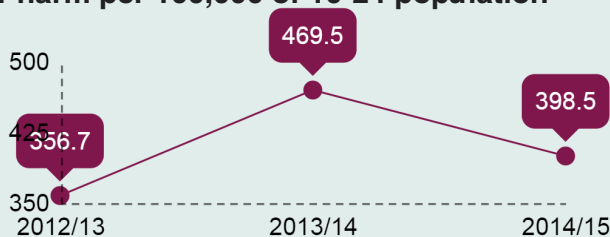
# Mental Health & Emotional Wellbeing (Children & Young People)

## Why is this important?

- One in ten young people have a mental health problem; the equivalent of three in every classroom.
- Young people with emotional disorders are more likely to smoke, drink and misuse drugs, miss school and fail in their education. As adults they are more likely to earn less money and experience unemployment.
- Young people attending A&E due to a psychiatric condition has more than doubled nationally since 2010.

## What has changed?

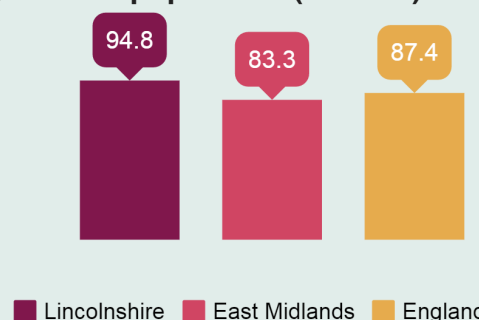
Lincolnshire hospital admissions as a result of self-harm per 100,000 of 10-24 population



Source: Public Health Child and Young People's Mental Health and Wellbeing Profiles

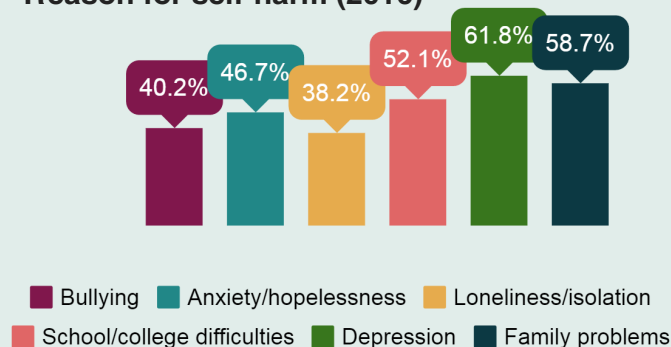
## How do we compare?

Child admissions for mental health per 100,000 0-17 population (2014/15)



Source: Public Health Child and Young People's Mental Health and Wellbeing Profiles

## Reason for self-harm (2016)



Source: Healthwatch Lincolnshire Mental Health Services survey

## The picture in Lincolnshire



Over 3,000 children aged 5-10 years and over 5,000 aged 11-16 years have mental ill-health disorders - 9.4% of 5-16 year olds.



The 2016 Healthwatch Mental Health survey found that 20.5% of young people have self-harmed.



4,427 referrals were made to Lincolnshire Children and Adolescent Mental Health Service (CAMHS) between April 2015 and March 2016.

## Key message

Half of all mental health problems have been established by the age of 14, rising to 75% by the age of 24.

A child with good mental health is much more likely to have good mental health as an adult, and to be able to take on adult responsibilities and fulfil their potential. As well as the impact on the individual child and their family, the estimated long term cost to the economy of mental health problems in children and young people is £105 billion a year.



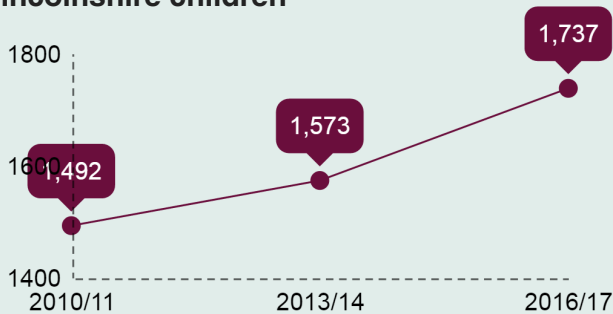
# Special Education Needs & Disability

## Why is this important?

- Children with Special Educational Needs and Disabilities (SEND) are more likely to live in poverty, achieve educationally below their peers, more likely to be excluded from school, less likely to go on to further or higher education and more likely to be unemployed.
- The annual cost of bringing up a child with SEND is 3 times greater than a child without SEND.

## What has changed?

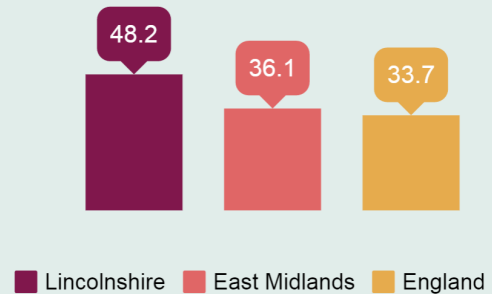
Commissioned special school places for Lincolnshire children



Source: Lincolnshire County Council SEND team

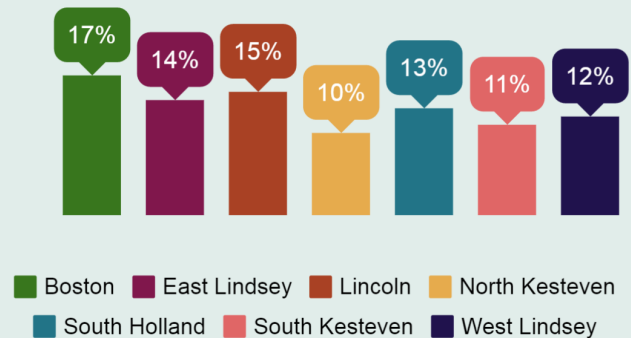
## How do we compare?

Children with learning disabilities known to schools per 1,000 population (2014)



Source: Public Health Learning Disability Profiles

Number of Lincolnshire pupils with SEN Support (2016)



Source: Schools Census January 2016 / Lincs Geographical Information System

## The picture in Lincolnshire



In 2013/14 just over a third of Looked After Children had a Statement of SEND or EHC plan, compared to 3.1% of the general population.



East Lindsey has the highest percentage (3.4%) of pupils with a Statement of SEND or EHC Plan; South Kesteven has the lowest (2.28%).



In 2011, almost 18% of 0-19 year olds had a long-standing illness, disability or were severely disabled.



16% of children on school registers in 2014/15 were receiving support for their SEND.

## Key message

If the needs of children and young people with SEND are not identified, the result would be that children and young people will not have access to the services and support in education, training and employment they need to succeed in adult life.





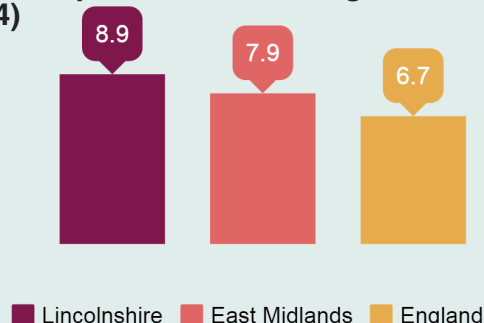
# Teenage Pregnancy

## Why is this important?

- Young parents are at risk of significantly poorer health and educational outcomes than their peers and in turn, their children may have worse outcomes than their peers.
- Teenagers are ten times more likely to become a parent if they are the daughter of a teenage parent.
- Teenage mothers may be emotionally vulnerable and 2 in 3 experience relationship breakdown during pregnancy or during the 3 years after birth.

## How do we compare?

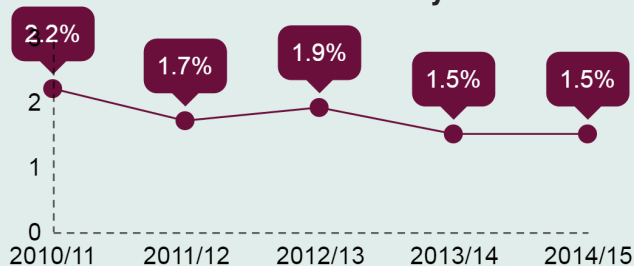
Birth rate per 1,000 women aged 15-17 (2014)



Source: Public Health Teenage Pregnancy Profiles

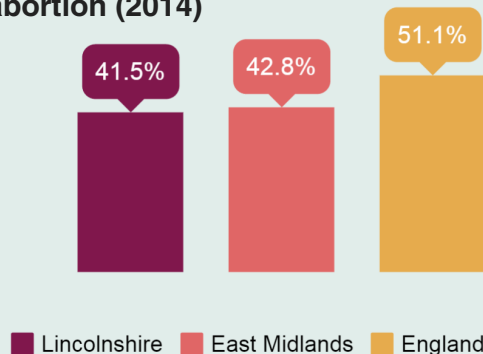
## What has changed?

Percentage of total births in Lincolnshire where the mother is under 18 years old



Source: Public Health Teenage Pregnancy Profiles

Conceptions by under 18 year olds leading to abortion (2014)



Source: Public Health Teenage Pregnancy Profiles

## The picture in Lincolnshire



Under-18 conceptions have halved since 1998, the greatest decrease is in Lincoln city, which still remains the highest in the county.



Young people who take risks with sexual health are also likely to demonstrate other risk taking behaviour such as substance and alcohol misuse.



Over 20% of under-18 conceptions occur in the most deprived communities.



1 in 5 girls aged 16-18 not in education, employment or training are teenage mothers and 22% more likely to be living in poverty by the age of 30.

## Key message

National research shows children born to teenage mothers have higher rates of infant mortality and have increased risk of low birth weight. Young mothers are less likely to breastfeed than older mothers, which can impact on the child's long term health.

The cost of teenage pregnancy to the NHS is estimated at £63 million a year.



# Young People in the Criminal Justice System

## Why is this important?

- Children and young people in the youth justice system often have more complex health and wellbeing needs than others in their age group.
- About one third of the Youth Offending Service (YOS) cohort are in contact with Children's Services.
- Young offenders may experience high levels of health needs, a wide range of social problems and the effects of deprivation.

## What has changed?

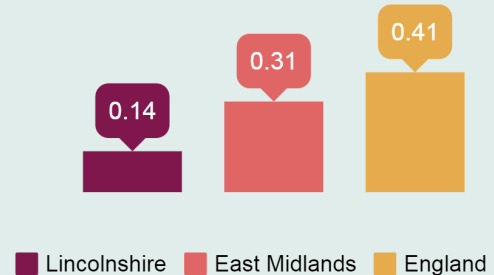
Young people in Lincolnshire receiving their first warning, reprimand or conviction per 100,000 of the 10-17 population



Source: National Child and Maternal Health Intelligence Network - Youth Justice Profiles

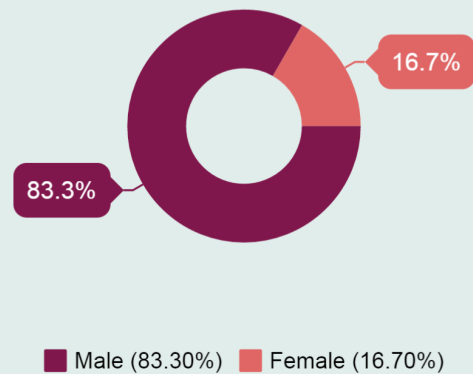
## How do we compare?

Young people given a custodial sentence per 1,000 of the 10-17 population (2014/15)



Source: Local Authority Interactive Tool (LAIT)

Lincolnshire young people sentenced by gender (2014/5)



Source: Lincolnshire Youth Offending Team

## The picture in Lincolnshire



YOS mainly support white British males aged 15 to 18 years.



Nearly three quarters of young offenders had recently smoked tobacco (3 times the national average). Just over half reported misusing drugs.



In 2014/5, the most common offences by young offenders were violence (28%), theft (17%) and criminal damage (13.7%)

## Key message

Children and young people in the youth justice system are more likely to have experienced a range of life challenges which if left unresolved, can lead in later life to mental ill-health problems, unemployment, teenage parenthood, domestic problems, suicide and self-harm and further offending behaviour.

The costs to society are immense - the lifetime cost of crime committed by a single prolific offender is approximately £1.5 million.



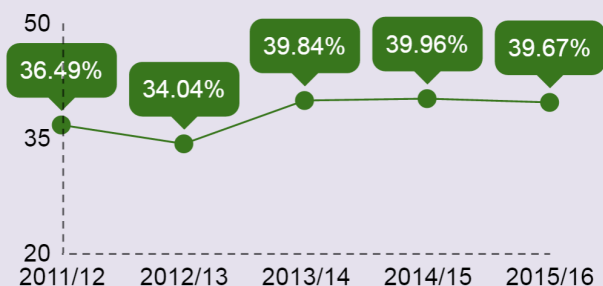
# Alcohol (Adults)

## Why is this important?

- Excessive drinking by a minority causes significant health and social problems.
- Alcohol misuse contributes to 48 health issues, such as long-term conditions, mental health conditions and accidental injuries.
- Alcohol is linked to almost 1 million violent crimes per year – 44% of all violent crime.

## What has changed?

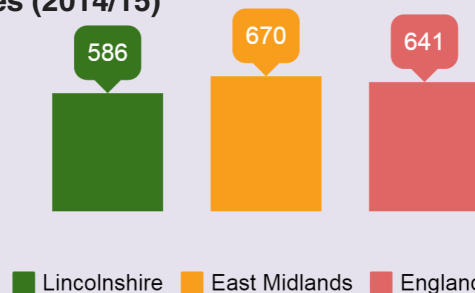
Successful completion of alcohol treatment in Lincolnshire (inc. no return within 6 months)



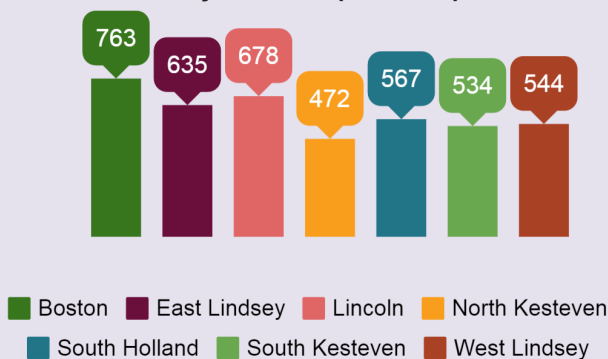
Source: National Drug Treatment Monitoring System (NDTMS)

## How do we compare?

Admission episodes for alcohol related conditions per 100,000 population, all ages (2014/15)



Breakdown by district (2014/15)



Source: Public Health Outcomes Framework

## The picture in Lincolnshire



The rate of 7.3 per 100,000 alcohol-specific deaths is significantly lower compared to the national rate of 11.6 per 100,000.



It is estimated that almost 19% of adults regularly binge drink.



The highest admission rates for men for alcohol related ill-health are in Boston and East Lindsey. Women are more likely to be admitted in Boston, East Lindsey and South Holland.



Almost two thirds of alcohol-related deaths in 2014 were men.

## Key message

Alcohol supply, use and misuse has crime and disorder, economic, excise, family, health, legal and social implications that impact substantially on public services and the population.

Alcohol-related harm is estimated to cost £41.6 million per year in Lincolnshire, and nationally £21 billion per year, with about 17 million working days lost per year due to the effects of alcohol misuse.



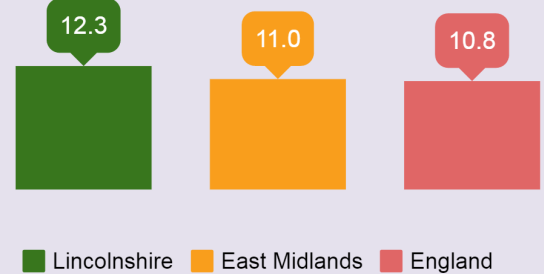
# Autism

## Why is this important?

- It is estimated that autism affects the lives of 2.8 million people and their families daily.
- Autism costs the UK £32 billion per year; more than the combined costs of heart disease, cancer and strokes.
- Nationally, 85% of autistic people of working age are unwaged.
- Nationally, 50% of autistic people also have a learning disability.

## How do we compare?

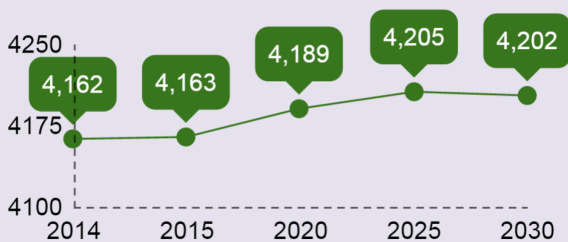
Children known to schools with autistic spectrum disorder per 1,000 pupils (2014)



Source: Public Health Learning Disability Profiles

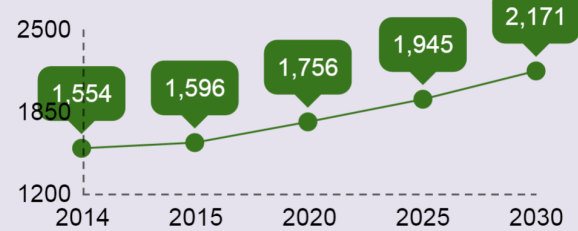
## What could change?

Number of people aged 18-64 predicted to have autistic spectrum disorders in Lincolnshire, projected to 2030



Source: www.pansi.org.uk

Number of people aged 65+ predicted to have autistic spectrum disorders in Lincolnshire, projected to 2030



Source: www.poppi.org.uk

## The picture in Lincolnshire



Lincolnshire West CCG has the highest prevalence of autism in Lincolnshire.



Less than 5% of adults with autism receive support from Adult Social Care.



80% of all people with autism are male.



72% of people with autism are under the age of 18.



66% of school age children with autism go to mainstream schools.

## Key message

The nature of autism means many autistic people have, and continue to experience, anxiety, trauma and other psychological conditions as a consequence of the difficulties they encounter in everyday life.

It is estimated that autism costs the country at least £32 billion per year in treatment, lost earnings, care and support for children and adults with this condition.



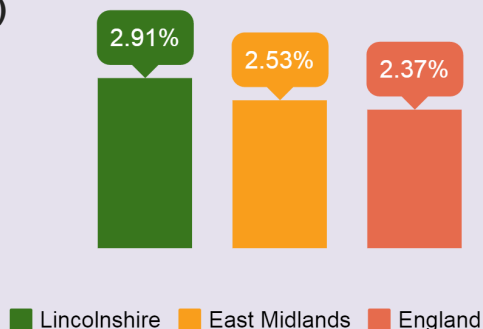
# Carers

## Why is this important?

- In the UK three out of five people will become a carer in their lifetime.
- Carers provide unpaid support for people living with a range of long term health conditions.
- Lincolnshire has about 84,000 unpaid family carers aged from 5 to 100, who may care for a few hours a week on top of work or education or care full time.

## How do we compare?

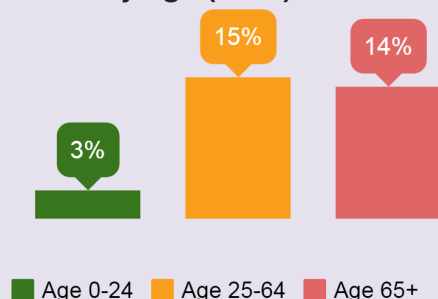
Unpaid carers - percentage of the population (2011)



Source: Public Health Crisis Care Profiles

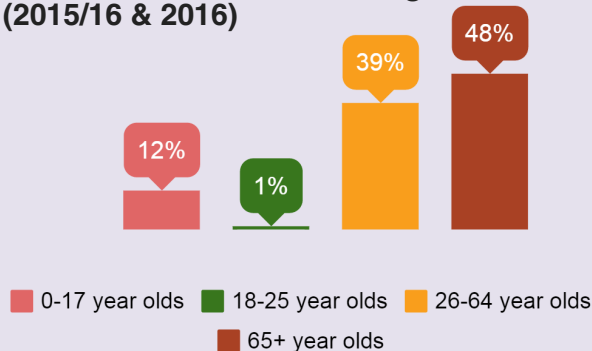
## The local picture

Lincolnshire's population who provide unpaid care by age (2011)



Source: 2011 Census

Lincolnshire carers receiving a service (2015/16 & 2016)



Source: 2015/16 SALT data & Oct 2016 Young Carers Register

## The picture in Lincolnshire



There are 1,800 young carers aged under 15, and 3,500 young adult carers aged 16-24.



Three quarters of carers say their physical and/or mental health is at risk and 69% report a significant impact on their personal wellbeing.



58% of carers are women, significantly more than the 42% of men.



Carers contributions were 7.6% higher in 2015 than in 2011, reflecting the increasing care needs of the population.

## Key message

The value of Lincolnshire's unpaid hours of care is also increasing: estimated at £1,677 million. Nationally, carers provide care to the value of £132 billion every year in the UK – equivalent to spending on the National Health Service.

Leaving carers unsupported increases the personal risk of crisis and breakdown, and increasing costs to health, social care, educational and economic systems.



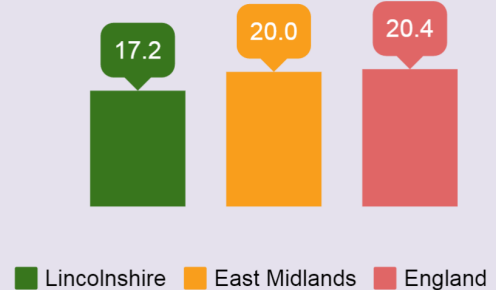
# Domestic Abuse

## Why is this important?

- Women, young people and people with a disability or long-term illness are more likely to become victims of domestic abuse.
- 2 women are killed every week by a current or former partner and 30 men are killed each year in England.
- Domestic abuse victims are 10 times more likely to attempt suicide and 3 women each week commit suicide after experiencing domestic abuse.

## How do we compare?

Incidents of domestic abuse recorded by the police per 1,000 of population (2014/15)



Source: Public Health Outcomes Framework

## What has changed?



Reported incidents of domestic violence have increased in Lincolnshire by 36% between 2008/9 and 2014/15.



70% of the increase in incidents reported to the Police since 2011 have occurred in the eastern districts (Boston, South Holland and East Lindsey), despite those districts only accounting for 40% of all domestic abuse incidents in the county in 2011.

## The picture in Lincolnshire



In 2015-2016 over 10,000 incidents of domestic abuse were reported to Lincolnshire Police.



1 in 10 Looked After Children have domestic abuse as a factor in their initial assessment.



30% of people affected by domestic abuse are aged 25-34 years old.



In 2015, the highest levels of reported domestic abuse were in Lincoln and East Lindsey, Lincoln being 3 times higher than North Kesteven.



1 in 5 reported police incident domestic abuse victims are male.

## Key message

Violence doesn't just have an immediate effect on victim's health, which in some cases is fatal; physical, mental and behavioural health consequences can persist long after the violence has stopped

Including the cost to public services, economic output and the human and emotional costs, domestic abuse is estimated to cost society £15.73 billion per year (based on a 2009 report).



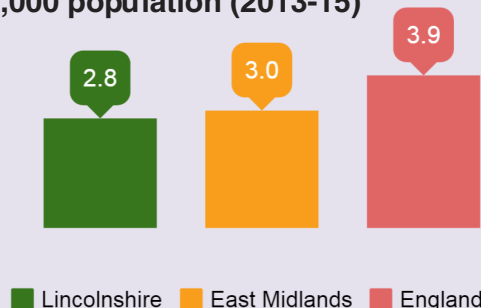
# Drug Misuse

## Why is this important?

- Drug misuse is a major cause of premature death in the UK. Drug misuse disorder is ranked the third highest cause of death in the 15–49 age group.
- Class A drug use alone generates an estimated £15.4 billion annually in crime and health costs.
- 60% of drug related deaths are people who have had not had treatment and for every £1 spent on drug treatment £2.50 is saved from the public purse.

## How do we compare?

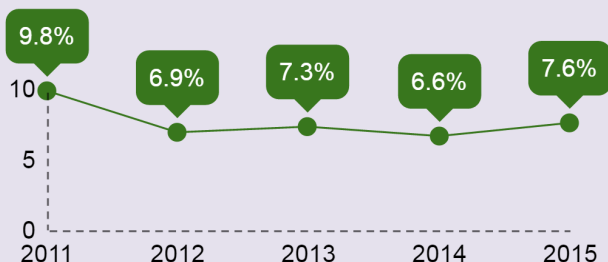
Deaths attributed to drug misuse per 100,000 population (2013-15)



Source: Public Health Profiles

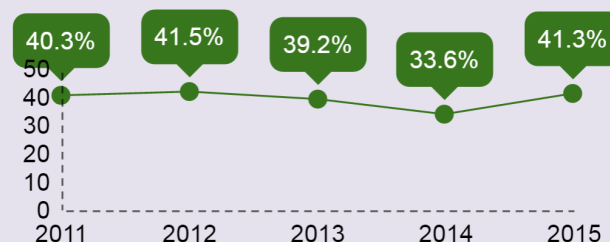
## What has changed?

Lincolnshire rates of successful drug treatment (opiate users)



Source: Public Health Profiles

Lincolnshire rates of successful drug treatment (non-opiate users)



Source: Public Health Profiles

## The picture in Lincolnshire



Many adults enter drug treatment using multiple substances e.g. heroin and crack (53%) and cannabis (17.5%).



Young people entering drug treatment also use multiple substances e.g. cannabis (81%), alcohol (69%) and Novel Psychoactive Substances (34%).



Men are twice as likely to misuse drugs as women.

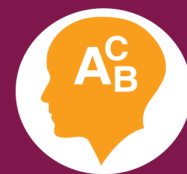


Drug related hospital admissions are 321 per 100,000 population in the most deprived areas compared to 67.9 per 100,000 in the least deprived areas.

## Key message

It is estimated that drug misuse costs the UK £10.7 billion each year in health service costs, drug-related crime and economic costs such as premature deaths.

In families where substance misuse is an issue there may be multiple and complex needs which include housing, unemployment, education and domestic violence, all of which can create ongoing and lasting problems.



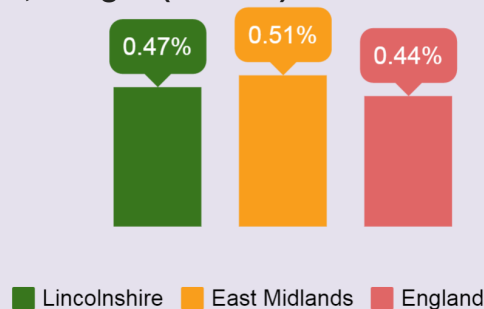
# Learning Disabilities

## Why is this important?

- It is estimated that there are over 15,000 individuals with a learning disability in Lincolnshire.
- Many people with learning disabilities also have other conditions such as mental ill-health or a physical disability.
- Learning disabilities are not learning 'difficulties'. Learning difficulties includes conditions such as dyslexia which do not affect intellectual ability.

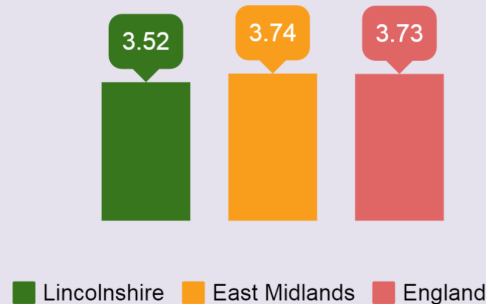
## How do we compare?

People with learning disabilities known to GPs, all ages (2014/15)



Source: Public Health Learning Disability Profile

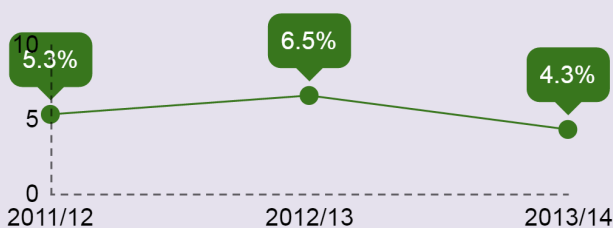
Adults with learning disabilities getting long-term support from Local Authority, per 1,000 of 18-64 year olds (2014/15)



Source: Public Health Learning Disability Profile

## What has changed?

Adults with learning difficulties in Lincolnshire in paid employment



Source: Public Health Learning Disability Profile

## The picture in Lincolnshire



Less than 30% of people registered with a GP as having a learning disability had a health check during the previous year.



Individuals with a learning disability that may require community supported living services is predicted to rise from 647 in 2015/16 to around 850 by 2020.



There are currently over 500 adults with learning disabilities supported in long term residential care, at a cost of about £22 million per year.

## Key message

Children with more complex needs are coming into the education system; provision needs to be adequate to meet their social care needs in future years.

The likely increase of 3.2% in adults with learning disabilities by 2020, as well as a predicted 11.1% rise in older people, is likely to put considerable pressure on health and social care provision.





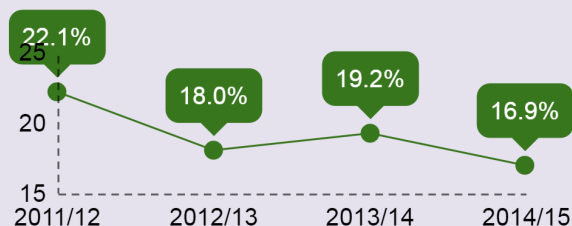
# Mental Health (Adults)

## Why is this important?

- At any one time, one in six adults has a mental health condition, and those with a long term physical condition or learning disability are most at risk.
- Mental health accounts for almost a quarter of NHS activity but only around 11% of the total expenditure.
- Half of mental health issues are established by the age of fourteen, rising to three quarters by the age of twenty four.

## What has changed?

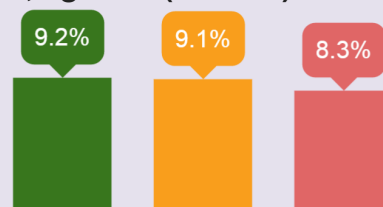
Lincolnshire self-reported wellbeing - people with high anxiety levels



Source: Public Health Profiles (Common Mental Health Disorders)

## How do we compare?

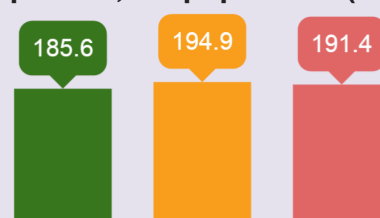
Patients on GP registers with diagnosis of depression, age 18+ (2015/16)



Lincolnshire East Midlands England

Source: Public Health Profiles (Mental Health JSNA)

Emergency admissions for intentional self-harm per 100,000 population (2014/15)



Lincolnshire East Midlands England

Source: Public Health Outcomes Framework

## The picture in Lincolnshire



17% of adults aged 16 and over suffer from a common mental disorder, women being more likely to suffer than men.



In 2014/15, there were 2,010 inpatient admissions due to mental health conditions, a rate of 344.2 in every 100,000 adults aged 16 and over.



Rates of depression in Lincolnshire are above average at 9.1% of the population, compared to 8.3% nationally.



Depression, anxiety and self-harm are commonly associated with smoking, substance and alcohol misuse.

## Key message

Poor mental health is known to contribute to existing inequalities and can result in negative outcomes for those in need, particularly in relation to education, employment, housing, substance and alcohol dependence and the criminal justice system.

The cost to the economy is estimated at £105 billion a year. This demonstrates the financial implications of not taking mental ill-health seriously.



# Physical Disability & Sensory Impairment

## Why is this important?

- 15% (60,000) of adults aged 18 to 64 living in Lincolnshire have a long term illness or physical disability.
- 38,000 of adults over 65 have a long term illness or disability that significantly limit their day-to-day activities, whilst a further 44,000 people experience a lesser impact on their day-to-day activities.
- Risk of sensory impairments including hearing and sight loss increase with age.

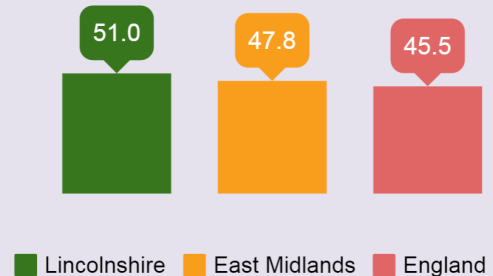
## What are the gaps?

There is a significant gap between the 98,000 people over 18 living with a long-term illness or physical disability and the 8,356 who are supported by council-arranged social care services.

Local groups highlight that appropriate infrastructure and access to opportunities are not being fully met across the county.

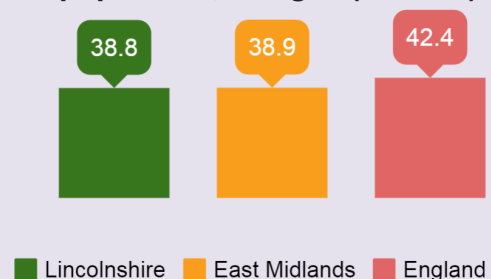
## How do we compare?

People in receipt of Disability Living Allowance per 1,000 working age population (2014)



Source: Public Health Adult Social Care Profiles

Preventable sight loss certifications per 100,000 population, all ages (2014/15)



Source: Public Health Outcomes Framework

## The picture in Lincolnshire



In 2016, 6,000 new requests for support from people aged 18-64, and 25,000 new requests from people aged over 65 were made.



15,000 adults have a moderate or severe visual impairment, projected to rise to 21,000 by 2030, with 32% having a registrable eye condition as listed by the RNIB.



It is estimated 148,500 people live with hearing loss. By 2019, this number is set to grow to 164,000.



19% of families with at least one disabled member live in relative income poverty compared to 15% families with no disabled member.

## Key message

People with physical or sensory impairments are more likely to live in poverty and experience problems with housing, transport, hate crime and harassment as well as a lack of support to access opportunities to improve the quality of their life.

The predicted increase in people with a physical disability or a sensory impairment over the next 15 years will have a significant impact on health and social care budgets.



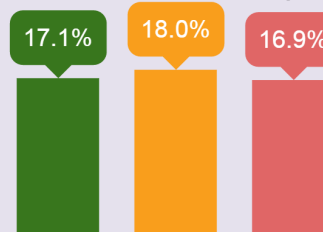
# Smoking Reduction in Adults

## Why is this important?

- Smoking is the biggest cause of premature death in England, accounting for about 80,000 deaths yearly and approximately 1,300 in Lincolnshire.
- Smoking rates differ across the county as do diseases and deaths linked to smoking.
- There are around 103,000 smokers in Lincolnshire - 17.2% of the population.

## How do we compare?

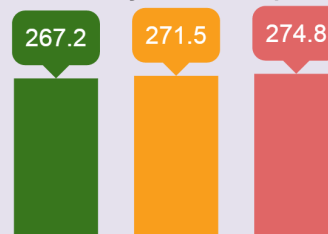
### Smoking prevalence in adults (2015)



■ Lincolnshire ■ East Midlands ■ England

Source: Public Health Local Tobacco Control Profile

### Deaths attributable to smoking per 100,000 population over 35 years old (2012-14)

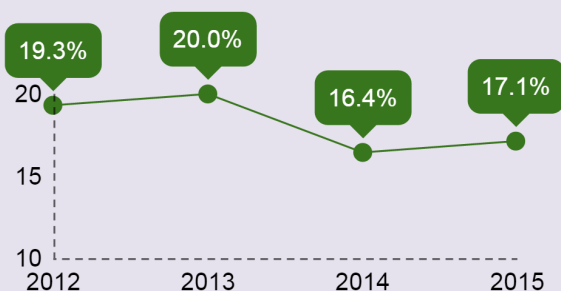


■ Lincolnshire ■ East Midlands ■ England

Source: Public Health Local Tobacco Control Profile

## What has changed?

### Smoking rates in Lincolnshire for over 18 year olds



Source: Public Health Local Tobacco Control Profile

## The picture in Lincolnshire



In 2013/14, United Lincolnshire Hospital Trust (ULHT) estimate 18% of women smoked at the start of pregnancy, dropping to 15% at delivery.



A quarter of adults employed in manual and routine jobs smoke, which is the same as England.



Smoking related hospital admissions are lower than nationally, at 1,567 per 100,000 population compared to 1,671 per 100,000.



About 6% of 15 year olds in Lincolnshire say they smoke regularly.

## Key message

Smoking in Lincolnshire is estimated to cost £191.2 million; that is £1,853 per smoker per year. Loss of productivity due to smoking breaks at work represents £77.7 million yearly.

If we ceased provision of stop smoking support and tobacco control activities, the numbers of people presenting with diseases linked to smoking and smoking rates could increase, putting a further burden on our health and social care system.



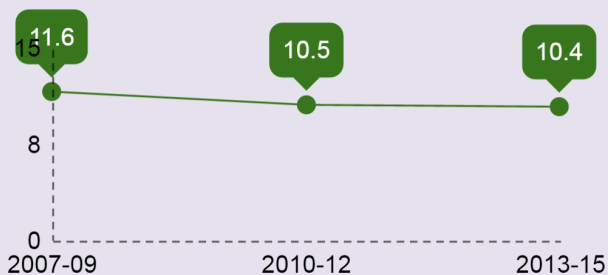
# Suicide

## Why is this important?

- The likelihood of a person taking their own life depends on many factors. Major risk factors include mental ill-health, being male, isolation, unemployment, alcohol and drug misuse.
- 3% of premature deaths in Lincolnshire in under 75 year olds are due to suicide, making this the fifth most common cause of premature death in the county.

## What has changed?

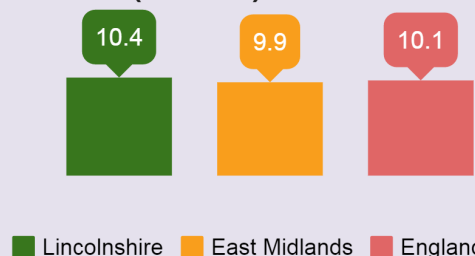
Suicide rate in Lincolnshire per 100,000 population, 10+ year olds



Source: Public Health Suicide Prevention Profile

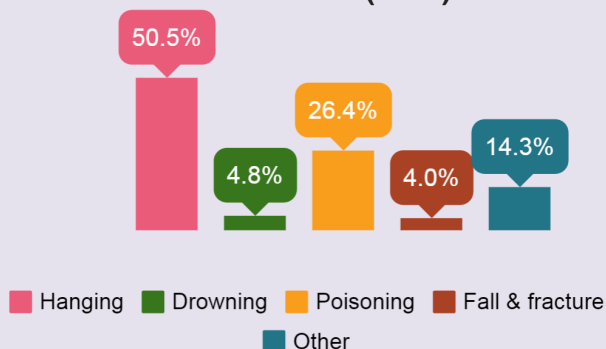
## How do we compare?

Rates of suicide per 100,000 population, 10+ year olds (2013-15)



Source: Public Health Suicide Prevention Profile

Method of suicide in England, averaged across males and females (2015)



Source: Office of National Statistics, Suicides in the UK

## The picture in Lincolnshire



Suicide is significantly more common amongst males than females - in 2014, 75% of suicides were male.



The majority of deaths due to suicide and undetermined injury were by people aged 40-44.



Suicide rates during 2012-2014 were highest in the 20% most deprived areas at 12.5 per 100,000 population compared to 7.3 per 100,000 population in the least deprived areas.



A quarter of those who completed suicide in 2014/15 had previously attempted suicide.

## Key message

Every death by suicide is a tragic loss of life and has a widespread impact. The emotional cost to those affected by a death by suicide is high, with the average cost of a completed suicide by a working age adult in the UK estimated to be £1.67 million (2009 rates).

According to HM Government 'Prevention suicide in England Strategy 2012', "family and friends of people who have taken their own life are at increased risk of mental health and emotional problems and may be at higher risk of suicide themselves."



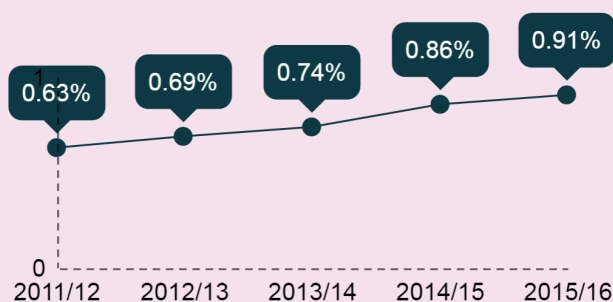
# Dementia

## Why is this important?

- Dementia is a progressive, terminal disease caused when brain tissue is damaged. Symptoms include: loss of memory, mood changes, and communication and reasoning difficulties.
- Dementia is one of the top five underlying causes of death.
- Dementia is the leading cause of death for men and women over 80 years old.

## What has changed?

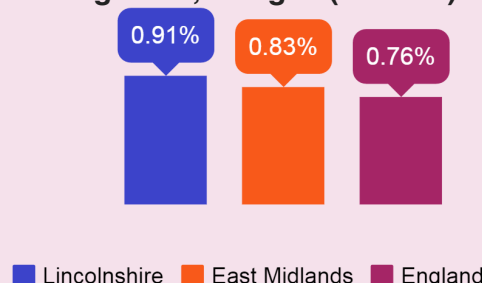
Rates of dementia in Lincolnshire (all ages)



Source: Public Health Dementia Profile

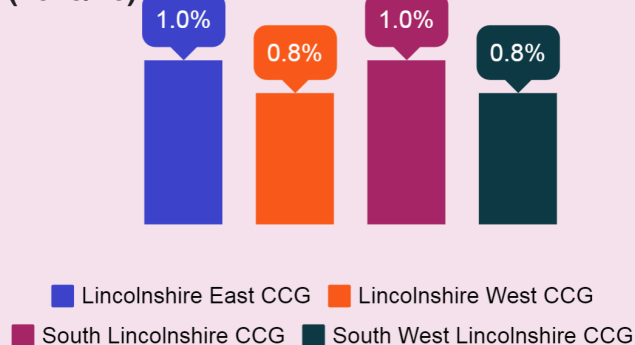
## How do we compare?

People with dementia recorded on GP practice registers, all ages (2015/16)



Source: Public Health Dementia Profile

Dementia by Lincolnshire CCG, all ages (2015/16)



Source: Public Health Dementia Profile

## The picture in Lincolnshire



6.7% of people over 65 in Lincolnshire were living with dementia in 2015, 1.5% of the population.



By 2030, the numbers with dementia aged over 65 are projected to increase by 65%.



Two thirds of people suffering from dementia are female.



Women are slightly more at risk of developing Alzheimer's disease but are at lower risk of vascular dementia than men.



Older people who are lonely are 1.63 times more likely to have dementia.

## Key message

Dementia costs society an estimated £26 billion a year, more than the costs of cancer, heart disease or stroke. This includes over £4 billion in healthcare costs and over £10 billion in social care costs. Unpaid carers save the UK economy £11 billion per year.

Research has also estimated that by 2030, dementia will cost companies more than £3 billion, with the number of people leaving employment to care for people with dementia set to rise by a quarter by 2030.



# Falls

## Why is this important?

- According to the National Institute for Health and Care Excellence (NICE) about one third of people aged over 75, and half of those over 80, will fall at least once a year.
- Falls destroy confidence, increase isolation, reduce independence and can hasten a move into residential care.
- Preventing people from falling is a key challenge for an ageing population.

## How do we compare?

Injuries due to falls in people aged over 65 per 100,000 population (2014/15)

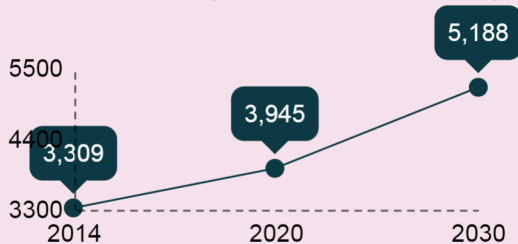


Lincolnshire East Midlands England

Source: Public Health Outcomes Framework

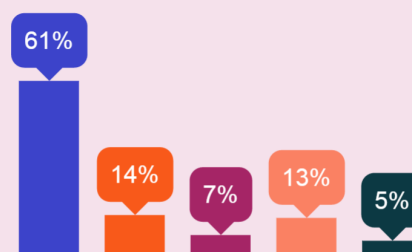
## What is happening locally?

Number of Lincolnshire residents aged 65 and over predicted to be admitted to hospital as a result of falls (based on ONS data)



Source: www.poppi.org.uk

Location of fall leading to emergency hospital admission, over 65 years (2011-15)



At home Residential home Other  
Unspecified place Street/highway

Source: HSCIC, Hospital Episode Statistics

## The picture in Lincolnshire



In 2014/15, falls accounted for 9% of emergency hospital admissions for people aged 65 and over, and 12% for those aged over 80.



Twice as many females as males are admitted to the hospital as the result of a fall.



Hospital admissions in 2014/15 for females aged 65-79 were higher in Lincoln and North Kesteven than in England.



Around 44,000 individuals over 65 years old had at least one fall in 2015; this is estimated to rise to 63,000 by 2030.

## Key message

The human cost of falling includes distress, pain, injury, loss of confidence, loss of independence and mortality. Falling also affects family members and carers. NICE estimate that falls cost health and social care organisations more than £23.3 billion per year. This is likely to increase in the future, reflecting the ageing population.



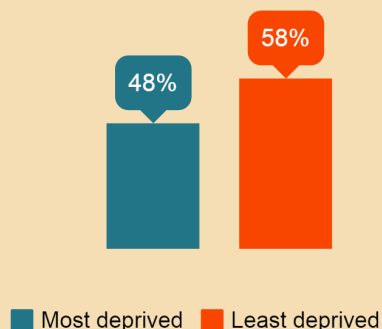
# Food and Nutrition

## Why is this important?

- Poor diet is a risk factor for stroke, coronary heart disease and some cancers, and a major cause of obesity/excess weight. Being overweight is the main risk factor for type 2 diabetes.
- The factors leading to poor diets are complex; cultural norms, busy lifestyles, marketing practices, food labelling, ability to cook and taste choices.
- Good diet has additional benefits other than losing weight: reduced risk of illness and disease, lowered cholesterol and improved mental wellbeing.

## Getting your 5-a-day

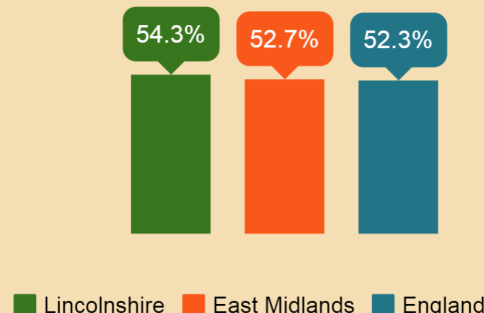
Proportion of children likely to eat at least 5 portions of fruit and vegetables per day



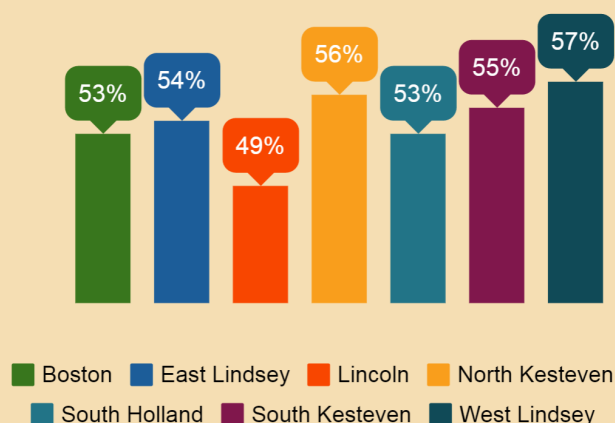
Source: What About YOUth? Survey 2014

## How do we compare?

People eating at least 5 portions of fruit and vegetables per day (2014)



Breakdown by district (2014)



Source: Active People Survey – England 2014, Sport England

## The picture in Lincolnshire



Half of people in Lincolnshire meet their 5-a-day target for eating fruit and vegetables.



The average number of portions of fruit eaten daily is 2.49 and vegetables 2.37.



Nearly a quarter of children aged 4-5 and over a third of 10-11 year olds in the county are overweight or obese.



For all age groups, at least twice the recommended amount of sugar is consumed. For children aged 4-18 this rises to 3 times the recommended amount.

## Key message

Excess calorie intake is the main cause of adult and childhood obesity.

Public Health England estimates the annual national cost of obesity at £27 billion, including £13.3 billion for obesity medication and £5.1 billion in NHS costs. NICE project that the overall cost of obesity could rise to £50 billion by 2050.



# Immunisation (All Ages)

## Why is this important?

- Immunisation is one of the most cost-effective public health interventions. Children and vulnerable adults can be protected from serious illness and death. Little lifestyle change is needed for it to be effective.
- Immunisation uptake needs to achieve 95% population coverage to be effective in preventing an epidemic.

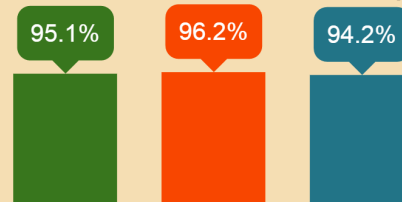
## Main inequalities

Immunisation uptake is lower in:

- asylum seekers and migrant workers
- homeless families
- Looked After Children (in Lincolnshire uptake is high)
- children with physical disabilities or learning difficulties
- children of teenage or lone parents
- children not registered with a GP
- younger children from large families
- children in hospital

## How do we compare?

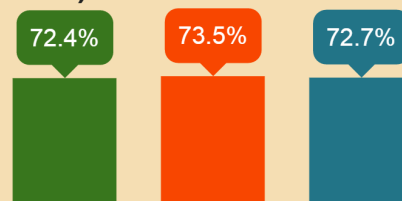
Vaccination rates at 12 months old (2014/15)



■ Lincolnshire ■ East Midlands ■ England

Source: NHS Immunisation Statistics, England, 2014/15

Adult flu vaccination uptake for +65 year olds (2014/15)



■ Lincolnshire ■ East Midlands ■ England

Source: Public Health Outcomes Framework

## The picture in Lincolnshire



Lincolnshire East CCG has the lowest uptake of routine vaccinations for 12 month old children, while South Lincolnshire CCG has the highest rate and exceeds the national average.



MMR uptake is 84.7%, below the rate for East Midlands (91.2%) and England (88.6%) and below the 90% threshold needed for herd immunity.



Uptake of the HPV vaccination for girls aged 12-13 is 93.7%, the second highest in the East Midlands.



Lincolnshire East CCG has the only full GP practice participation for shingles vaccination; but its vaccination rates are the lowest in the county.

## Key message

If vaccination levels fall lower than the national vaccine coverage target there is a risk of vaccine-preventable disease occurring.

Direct costs include: outbreak control and outpatient and inpatient care. Indirect costs include: productivity losses from number of sick days, work missed to care for sick children or resulting disability.





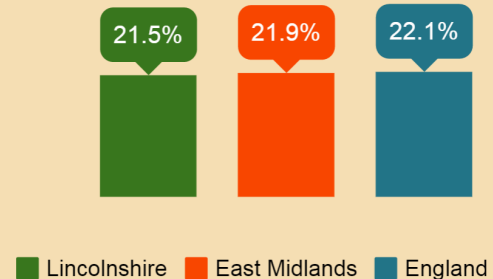
# Obesity (Children)

## Why is this important?

- Childhood obesity presents immediate and long-term negative effects on a child's physical and social wellbeing, educational attainment and mental health.
- Obese children and adolescents are more likely to be obese in adulthood, consequently at greater risk of adult health problems such as heart disease and Type 2 diabetes, stroke and cancers.

## How do we compare?

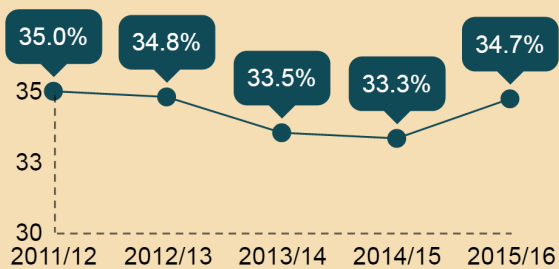
Reception age children overweight or obese (2015/16)



Source: Public Health Outcomes Framework

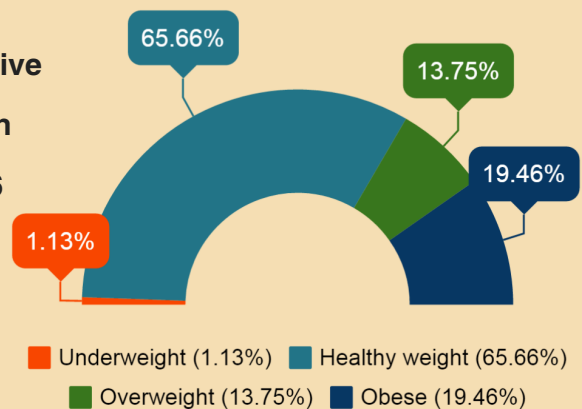
## What has changed?

Children in Year 6 who are overweight or obese in Lincolnshire



Source: Public Health Outcomes Framework

Comparative weight of children in Year 6 in 2015/16



Source: National Child Measurement Programme, HSCIC

## The picture in Lincolnshire



8% of 4-5 year olds and 19% of 10-11 year olds are reported to be obese.



Boys are more likely to be obese than girls. Children living in the most deprived areas are twice as likely to be obese as those in the least deprived areas.



East Lindsey is worse than the national average for obesity in both 4-5 year old and 10-11 year old cohorts.



In 2014/15 North and South Kesteven had the lowest obesity rates for 10-11 year olds in Lincolnshire.

## Key message

Tackling childhood obesity is vital to improve life chances and health outcomes into adulthood.

Public Health England estimates the annual national cost of obesity to be £27 billion including £13.3 billion for obesity medication and £5.1 billion in NHS costs. NICE project that the overall cost of obesity could rise to £50 billion by 2050.



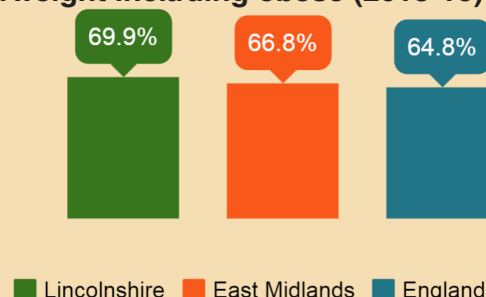
# Obesity (Adults)

## Why is this important?

- Being overweight or obese is a major public health crisis through its link with serious long-term conditions including: Type 2 diabetes, heart disease, stroke, liver disease and cancer.
- Obesity is estimated as the third largest risk factor for premature death.
- The risk of poor health and well-being outcomes increases sharply with increasing Body Mass Index (BMI).

## How do we compare?

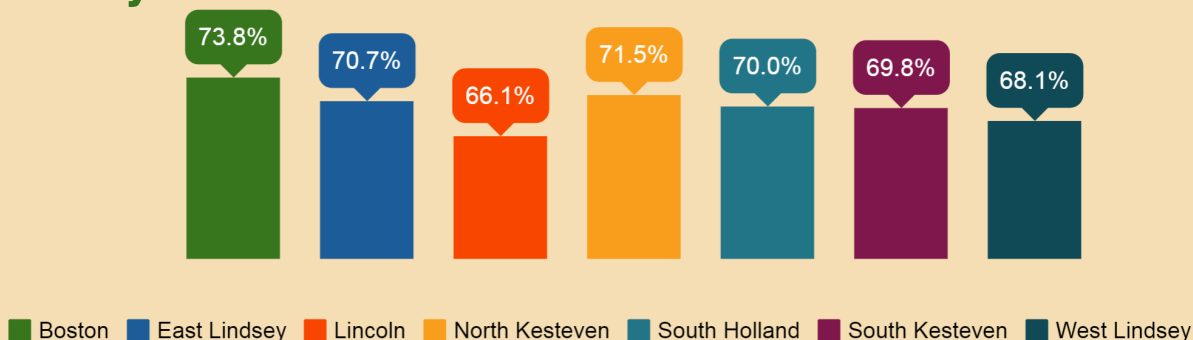
Adults with a BMI over 25.0 classified as overweight including obese (2013-15)



Source: Public Health Outcomes Framework

## Breakdown by district

Adults with a BMI over 25.0 classified as overweight including obese (2013-15)



Source: Public Health Outcomes Framework

## The picture in Lincolnshire



Lowest rates of obesity are in the 16-24 year age group. Generally the older age groups (both men and women) are higher.



National estimates of levels of morbid obesity suggest that there may be 11,500 adults with a BMI over 40 and nearly 800 with a BMI over 50 in Lincolnshire.



Levels of overweight or obese adults in Boston, South Holland and West Lindsey are among the highest rates in the East Midlands.



There were nearly 6,000 hospital admissions in Lincolnshire related to adult obesity (directly or indirectly) in 2014/15.

## Key message

Public Health England estimates the annual national cost of obesity at £27 billion including: £13.3 billion for medication and £5.1 billion NHS costs.

Lincolnshire population trends suggest an increasing mid-life and older population with excess weight. This trend will place an increasing burden upon the NHS locally.



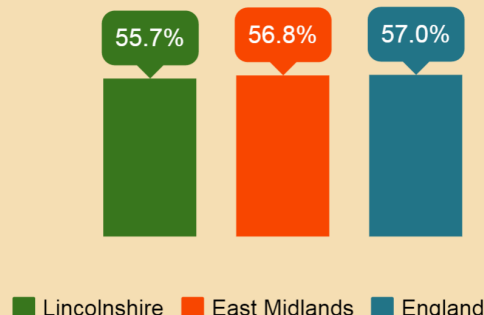
# Physical Activity

## What is the issue?

- Physical inactivity is the fourth greatest risk factor for premature death. It has a bigger impact than obesity. It is responsible for one in six UK deaths.
- Meeting recommended physical activity levels can cut the risks of: Type 2 diabetes, colon cancer, CHD, stroke, falls and hypertension by at least 30%. Being active reduces the risk of Alzheimer's, osteoarthritis, hip fractures and depression by between 20% and 80%.

## How do we compare?

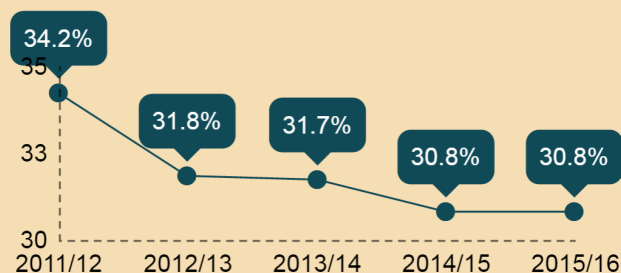
Adults who are physically active (2015)



Source: Public Health Outcomes Framework

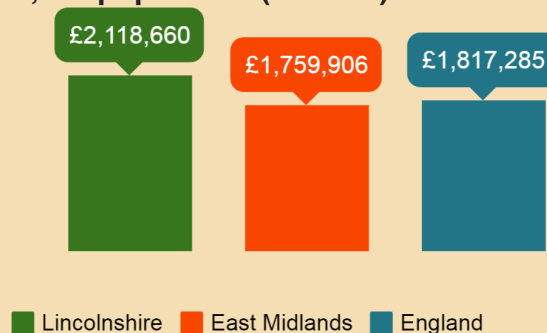
## What has changed?

Lincolnshire adults aged 18+ participating in sport at least once per week



Source: Sport England Local Sport Profile

Health cost of physical inactivity per 100,000 population (2009/10)



Source: Sport England Local Sport Profile

## The picture in Lincolnshire



By age 15, only 8% of girls achieve the daily recommended minimum of one hour of moderate to vigorous activity.



Activity rates are highest in South Kesteven at 59.1% and lowest in South Holland at 49.2%.



Type 2 diabetes, for which inactivity is a major risk factor, is higher in Lincolnshire than nationally (7.5% compared to 6.4%). East Lindsey has one of the highest rates in England at 9.2%.



Almost half of the adult population in Lincolnshire fail to achieve the recommended minimum 150 minutes of weekly activity.

## Key message

Physical inactivity currently costs the NHS and wider society £7.4 billion. These costs will be proportionately higher in Lincolnshire as the local population is less active than that of the country as a whole. Inactivity and hence costs are likely to increase as the population ages.



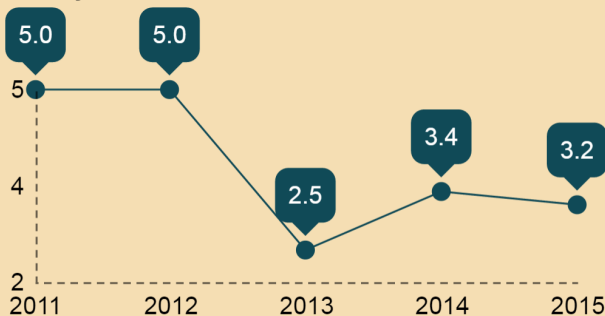
# Sexual Health

## Why is this important?

- The World Health Organisation defines sexual health as "...a state of physical, emotional, mental and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity."
- Lincolnshire has pockets of deprivation where the uptake of sexual health services and diagnoses are below the national and regional picture.

## What has changed?

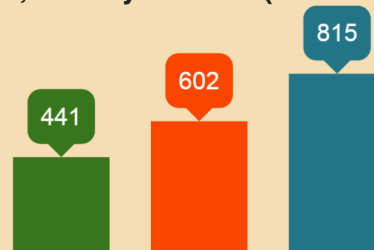
New HIV diagnosis rate per 100,000 population, over 15 year olds



Source: Public Health Sexual and Reproductive Health Profiles

## How do we compare?

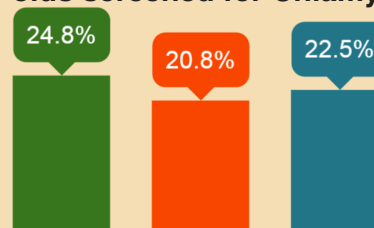
New sexually transmitted infections (STIs) excluding Chlamydia per 100,000 population, 15-64 year olds (2014/15)



■ Lincolnshire ■ East Midlands ■ England

Source: Public Health Sexual and Reproductive Health Profiles

15-25 year olds screened for Chlamydia (2015)



■ Lincolnshire ■ East Midlands ■ England

Source: Public Health Sexual and Reproductive Health Profiles

## The picture in Lincolnshire



STIs in Lincoln in 2015 had risen to 1,245 cases of new infections per 100,000 population, almost double the England rate.



Chlamydia diagnoses continue to be the most commonly diagnosed STI, representing 48% of new STI diagnoses.



In 2015, there were over 21,000 Chlamydia screens carried out in Lincolnshire, a quarter of the target population of 15-24 year olds.



The rate of HIV tests in England is 67.3 per 100,000 population. In Lincolnshire, South Kesteven has a test rate of 73.4 per 100,000, the lowest rate is in East Lindsey at 57.7.

## Key message

Effective sexual health messages that aim to reduce STIs and incidence of HIV will have a positive financial effect, as well as improve mental wellbeing, family life and relationships.

Lack of education and protection messages may continue the trend for people to make poor sexual health choices and increase the transmission of STIs due to practising unsafe sex.



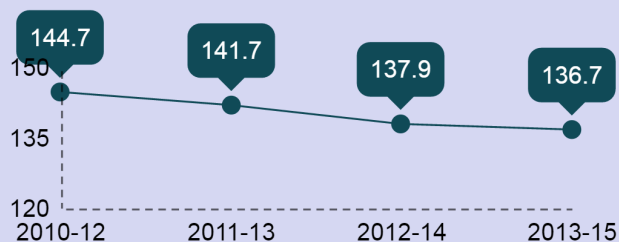
# Cancer

## Why is this important?

- One in two people are likely to develop some form of cancer in their lifetime and it is the most common cause of death in people under 60 years old.
- Cancer survival rates have risen by 70% over the last 20 years.
- 4 in 10 cancer cases could be prevented by lifestyle changes such as not smoking, cutting back on alcohol, maintaining a healthy body weight, keeping physically active and avoiding excessive sun exposure.

## What has changed?

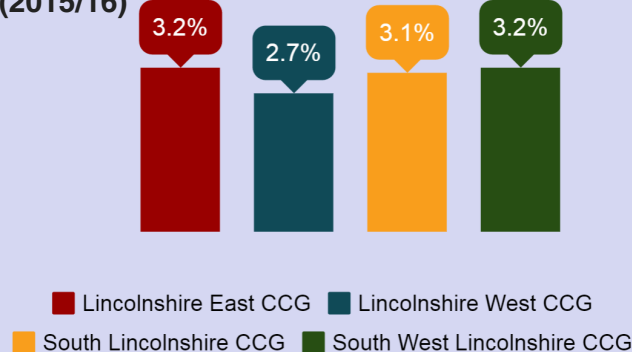
Mortality rate from cancer for under 75 year olds in Lincolnshire per 100,000 population



Source: Public Health Outcomes Framework

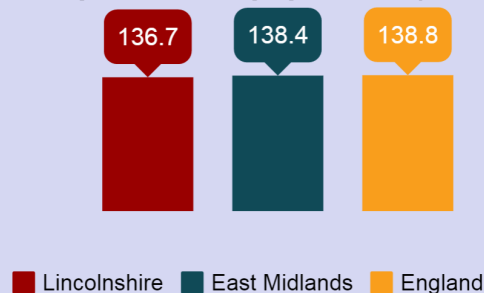
## How do we compare?

Cancer prevalence by CCG, all ages (2015/16)



Source: Public Health Cancer Services Profile

Mortality rate from cancer for under 75 year olds per 100,000 population (2013-15)



Source: Public Health Outcomes Framework

## The picture in Lincolnshire



New cases of lung cancer are low across Lincolnshire (68.9 per 100,000 population) compared to England (79.7 per 100,000).



Nearly 3,000 people under 75 died prematurely from cancer in Lincolnshire during 2012-14; of these 1,700 could have been prevented.



South West Lincolnshire CCG and Lincolnshire East CCG have higher rates of cancer incidence than the national average.



South Lincolnshire CCG, at 13.4%, has the greatest increase in cancer survival rate from 2004 to 2013.

## Key message

More people are presenting late to their doctor with symptoms, leading to poorer outcomes for the patient, resulting in high healthcare costs.

Cancer services cost the NHS approximately £6.7 billion in 2012/13. This growth in cost is projected to rise by about 9% a year, implying a total of £13 billion by 2020/21.



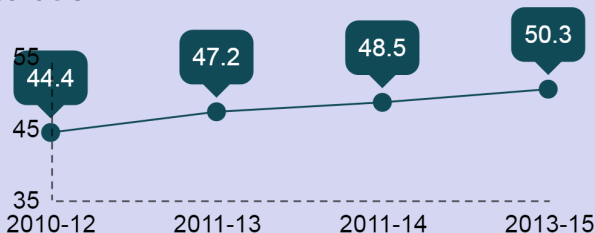
# Chronic Obstructive Pulmonary Disease

## Why is this important?

- The most common cause of COPD is smoking. Rare causes include fumes, dust and genetic disorders.
- It is estimated that over 3 million people in the UK have COPD and it is undiagnosed in about 2 million of these. 10% of people with COPD are only diagnosed when they go to hospital as an emergency.
- COPD kills about 25,000 a year in England and Wales, around 5% of deaths.

## What has changed?

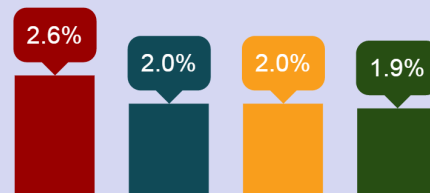
Lincolnshire deaths from COPD per 100,000 population



Source: Public Health Local Tobacco Control Profiles

## How do we compare?

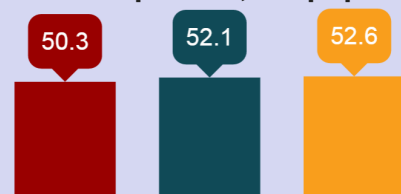
COPD prevalence by CCG, all ages (2015/16)



■ Lincolnshire East CCG ■ Lincolnshire West CCG  
 ■ South Lincolnshire CCG ■ South West Lincolnshire CCG

Source: Inhale - Interactive Health Atlas of Lung conditions in England

Deaths from COPD per 100,000 population (2013-15)



■ Lincolnshire ■ East Midlands ■ England

Source: Public Health Local Tobacco Control Profiles

## The picture in Lincolnshire



The prevalence of COPD is significantly higher than the national average (1.9%) in East Lincolnshire CCG (2.5%).



A single COPD related admission to a Lincolnshire hospital costs on average £2,533, with an average length of stay of 7.3 days (2010-11 PHE data).



COPD is linked to social deprivation and it is more common in men. In recent years the rate in women has increased.



94.1% of COPD patients that continue to smoke are offered smoking cessation support and treatments.

## Key message

COPD is a progressive, irreversible condition that is increasing in prevalence. It is the second most common cause of emergency admission to hospital. About a third of those admitted to hospital as a result of COPD are readmitted within a month of discharge, creating high NHS costs and a significant disruption to the lives of those with the condition.

The total annual cost of COPD to the NHS is over £800 million. The annual COPD costs in lost productivity to employers and the economy have been put at £3.8 billion. 25% of people with COPD are prevented from working due to the disease.



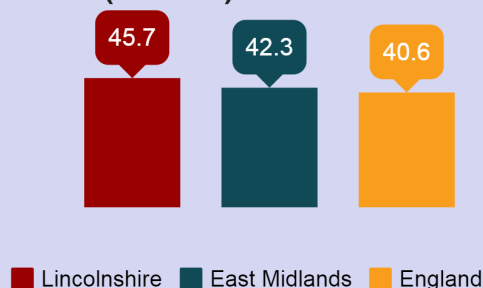
# Coronary Heart Disease

## Why is this important?

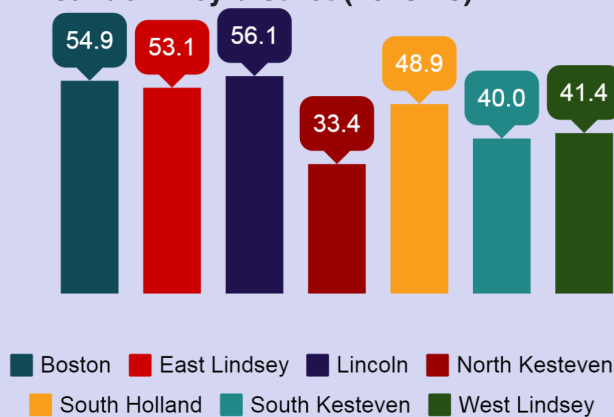
- Cardiovascular disease (CVD) includes diseases of the heart, blood vessels, or both. Coronary Heart Disease (CHD) is the most common cardiovascular disease.
- Deaths from CVD, including CHD, have fallen in recent years, but CVD is still one of the main causes of premature death in the UK.
- Major risk factors of CHD can be changed, treated or controlled including smoking, high blood cholesterol, high blood pressure, physical inactivity, being obese or overweight, and diabetes.

## How do we compare?

Deaths from Coronary Heart Disease in people under the age of 75 per 100,000 population (2013-15)



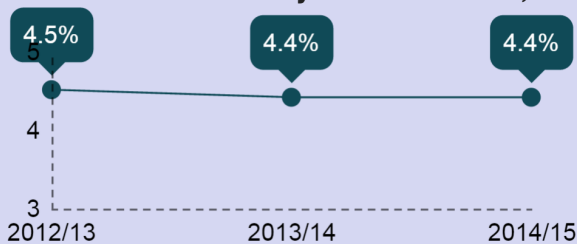
Breakdown by district (2013-15)



Source: Public Health Profiles

## The local picture

Prevalence of Coronary Heart Disease, all ages



Source: Public Health NHS Health Check - Longer Lives

## The picture in Lincolnshire



There were 33,293 people on the CHD register in 2014/15.



Deaths from CHD in under 75 year olds in Lincolnshire has dropped dramatically by more than 40% over the past 12 years.



Rates of all cardiovascular conditions in all 4 CCG areas is higher than regionally or nationally; Lincolnshire East CCG has the highest rate.



Preventable deaths from CVD have decreased from 296.7 per 100,000 population in 2001-03 to 164.2 in 2012-14.

## Key message

Collectively, vascular diseases (heart disease, stroke, diabetes and kidney disease) affect the lives of more than four million people, and kill 170,000 in the UK every year. These conditions also account for more than half of the mortality gap between rich and poor.

An increase in the number of people, who have to live with disability for a longer period of time, would have an impact on health and social care services and related budgets.



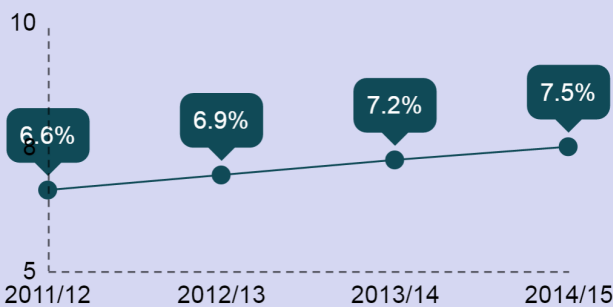
# Diabetes

## Why is this important?

- Diabetes is one of the most common chronic diseases in the UK and rates of people affected are continuing to increase.
- There are different types of Diabetes - Type 1, Type 2, Gestational (during pregnancy) as well as some specific types.
- Obese adults are five times more likely to be diagnosed with Type 2 diabetes as adults of a healthy weight.

## What has changed?

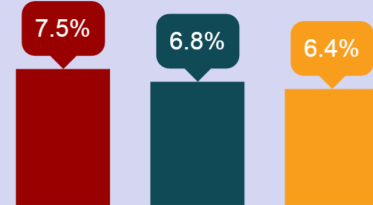
People registered with GP practices in Lincolnshire as having diabetes, 17+ year olds



Source: Public Health Outcomes Framework

## How do we compare?

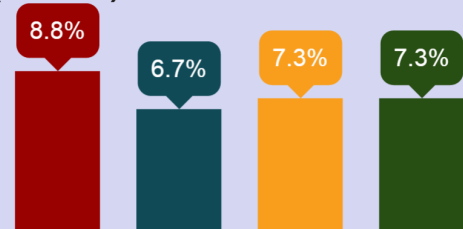
People registered with GP practices as having diabetes, 17+ year olds (2014/15)



Lincolnshire East Midlands England

Source: Public Health Outcomes Framework

Prevalence of diabetes by CCG, 17+ year olds (2015/16)



Lincolnshire East CCG Lincolnshire West CCG South East Lincolnshire CCG South West Lincolnshire CCG

Source: Public Health Diabetes Profile

## The picture in Lincolnshire



Obesity is a major risk factor for Type 2 diabetes; 70% of adults in the county are overweight or obese.



Total adult diabetes prevalence in Lincolnshire could be 10.3% by 2035.



12% of the 16+ population have non-diabetic hyperglycaemia (pre-diabetes) and are at risk of developing diabetes and other cardiovascular conditions.



55 under 75 year olds died in Lincolnshire where diabetes was the underlying cause in 2012-14.

## Key message

Diabetes accounts for a high proportion of NHS expenditure and can lead to serious health complications if the condition is not managed well. Therefore it is essential that people receive good health care along with the skills and knowledge to enable self-care.

Obesity is the main risk factor for the most common type of diabetes (Type 2) and interventions to reduce obesity continue to be important.





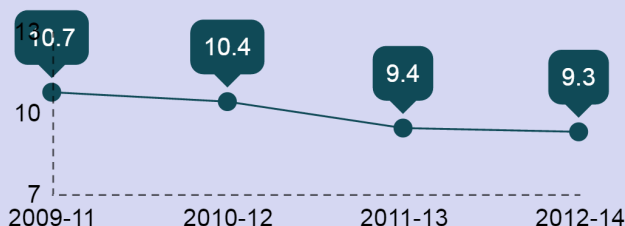
# Stroke

## Why is this important?

- Stroke is the third commonest cause of death and the most common cause of complex disability in the UK.
- A stroke can occur at any age; a quarter of stroke deaths occur in under 65 year olds.
- Strokes vary in severity and impact, ranging from those resulting in immediate death to TIAs resulting in no ongoing motor or sensory loss.
- Around 80% of strokes are attributable to high blood pressure, smoking, obesity, poor diet and lack of exercise.

## What has changed?

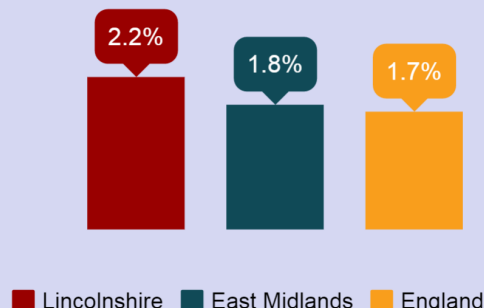
Death rates from stroke in Lincolnshire attributable to smoking per 100,000 population, over 35 year olds



Source: Public Health Local Tobacco Control Profiles

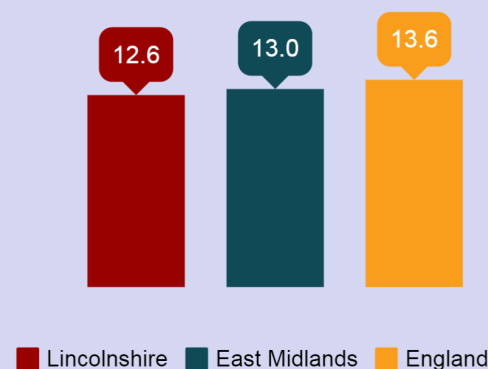
## How do we compare?

Prevalence of stroke, all ages (2014/15)



Source: Public Health NHS Health Check

Rate of deaths from stroke per 100,000 population, under 75 year olds (2013-15)



Source: Public Health Profiles

## The picture in Lincolnshire



Men have 1.25 times greater risk of stroke than women.



Stroke rates have risen slightly since 2012-13 in each Lincolnshire CCG; excepting South West Lincolnshire which has remained constant.



There were 1,540 deaths as a result of a stroke during 2012-14, of which 286 were people aged under 75.



Deaths from stroke for over 75s per 100,000 population is the highest in Lincolnshire West CCG (632.9) and lowest in South West Lincolnshire CCG (542.2).

## Key message

The rate of stroke is expected to increase, rising to 3.1% of the Lincolnshire population living with the consequences of stroke by 2020. This will place a considerable burden not only on health services but on families and carers, and the workforce as a whole.



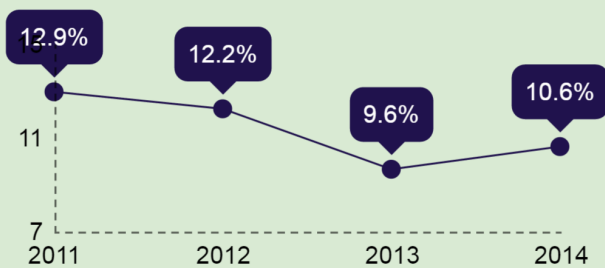
# Excess Seasonal Deaths & Fuel Poverty

## Why is this important?

- Weather has a direct effect on incidences of: heart attack, stroke, respiratory disease, flu, injuries due to falls and hypothermia.
- The World Health Organisation estimates that about 30% of Excess Winter Deaths are because of fuel poverty.
- For those in the coldest 10% of homes, the death rate rises about 2.8% for every degree Celsius drop in the outside temperature.

## What has changed?

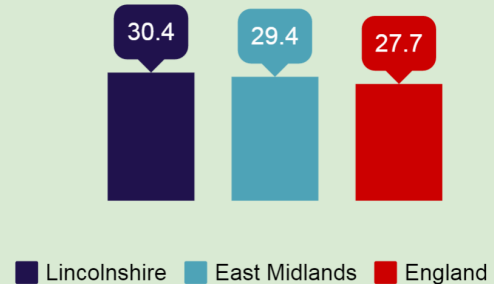
Lincolnshire households experiencing fuel poverty



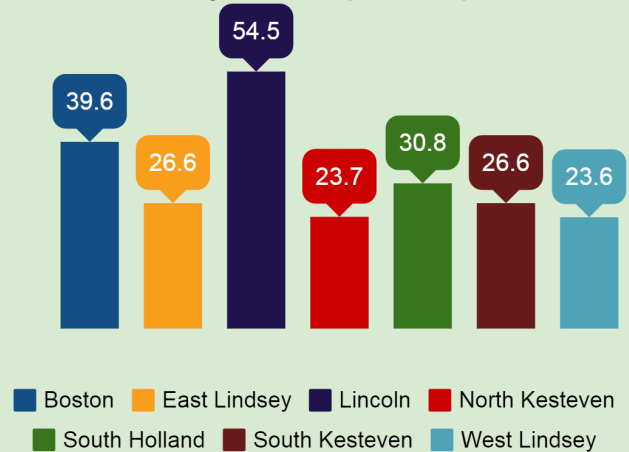
Source: Public Health Outcomes Framework

## How do we compare?

Excess winter deaths, all ages (2014/15)



Breakdown by district (2014/15)



Source: Public Health Outcomes Framework

## The picture in Lincolnshire



The excess winter death rate for females is 22%, greater than the rate for men at 16% (2012-15).



An average 55% increase in deaths from respiratory disease was seen in winter in the period 2012-15.



In 2014, 45% more people died from dementia and Alzheimer's disease in the winter months.



10.6% are in fuel poverty, the same level as the England average and a little above the East Midlands average of 10.1%.

## Key message

Hospital admissions can be increased due to underlying conditions such as chronic obstructive pulmonary disease, heart attacks, stroke and falls, which can be made worse by the cold.

Vulnerable groups such as the elderly, children and people with disabilities are at greater risk from environmental factors which directly impact on their health and wellbeing.



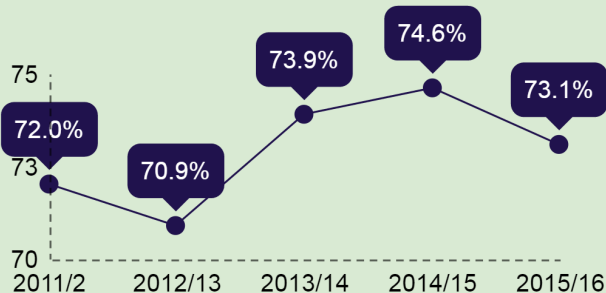
# Financial Inclusion

## Why is this important?

- Financial exclusion is not just about unemployment, welfare benefits or those without a bank account.
- People are vulnerable to financial exclusion during significant life changes or illness that impact on their ability to cope financially.
- Three quarters of people in debt suffer from stress and anxiety.

## What has changed?

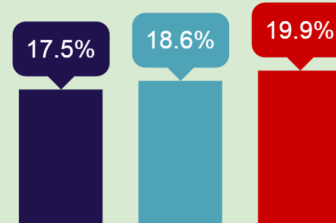
Lincolnshire adults aged 16-64 in employment



Source: Public Health Outcomes Framework

## How do we compare?

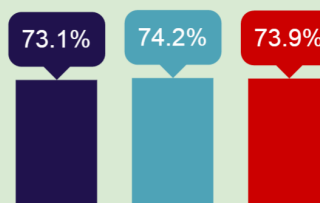
Proportion of children under 20 years old in low income families (2014)



■ Lincolnshire ■ East Midlands ■ England

Source: Public Health Outcomes Framework

Employment rate, age 16-64 (2015/16)



■ Lincolnshire ■ East Midlands ■ England

Source: Public Health Wider Determinants of Health Profiles

## The picture in Lincolnshire



East Lindsey and Lincoln have significantly more children living in low income families than the national average.



Boston and South Holland have the highest proportion of long-term sickness related inactivity.



There is a significant gap of £10,000 between average earnings in the most deprived areas (£15,640) and the least deprived (£25,933).



Numbers of Employment Support Allowance claimants have increased by 14% (2014-16).

## Key message

Not doing something carries potential financial implications for people and support services. Financial advice and support services are cost effective ways to maximise resources in low income households, potentially leading to increased standards of living and reducing poverty.

If financial inclusion support services are not in place there is a risk of homelessness, increase in debt, a rise in fuel poverty, poor nutrition and increased poverty, including child poverty and health and wellbeing.



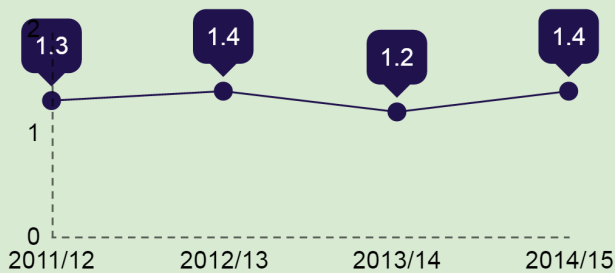
# Housing & Health

## Why is this important?

- Good quality, safe housing and housing related support has a major part to play in improving and maintaining health and wellbeing.
- Lincolnshire has 335,450 households.
- 21% of private housing stock is estimated to have a serious hazard likely to cause illness or harm.

## What has changed?

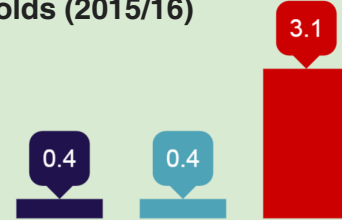
Family homelessness rate in Lincolnshire per 1,000 households



Source: Public Health Child Health Profiles

## How do we compare?

Statutory homeless households in temporary accommodation per 1,000 households (2015/16)



Lincolnshire East Midlands England

Source: Public Health Outcomes Framework

Overcrowded households i.e. having fewer bedrooms than the national bedroom standard for the needs of the household (2011)



Lincolnshire East Midlands England

Source: Office for National Statistics

## The picture in Lincolnshire



7% of private sector housing stock is estimated to be in disrepair. The rate is highest in Lincoln (9%) and lowest in North Kesteven (5%).



10% of Lincolnshire homes do not have a heating boiler and 20% have damp problems.



There are 13,563 individuals or households waiting for council housing.



532 households are accepted as homeless, as well as 334 with dependent children.

## Key message

Poor housing can lead to and exacerbate physical and mental and in some severe instances can also lead to death.

In 2015, the Building Research Establishment (BRE), suggested the cost to the NHS of poor housing in England was £2 billion per year. If action is not taken to improve the quality and availability of homes the pressures on health and social care budgets can only increase.



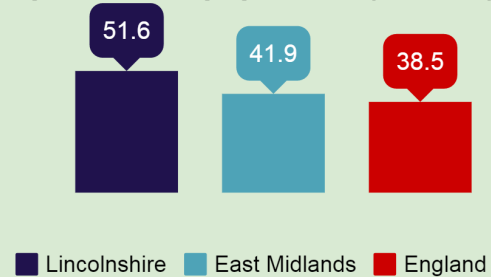
# Road Traffic Collisions

## Why is this important?

- Road traffic collisions are the single biggest cause of accidental death of young people in the UK aged 15-24.
- The number of fatal casualties has fallen from its peak of 104 in 2003.
- In 2015, 39 people were killed and 281 people were seriously injured in Lincolnshire.
- In 2015, the estimated cost of each casualty was £1.7million.

## How do we compare?

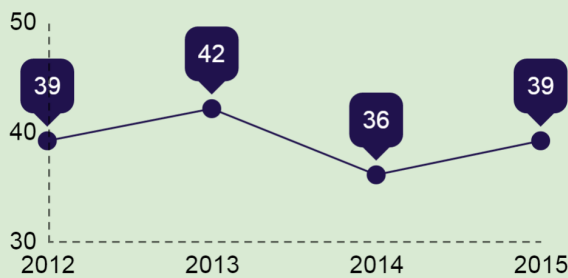
Individuals killed or seriously injured on the roads per 100,000 population (2013-15)



Source: Public Health Outcomes Framework

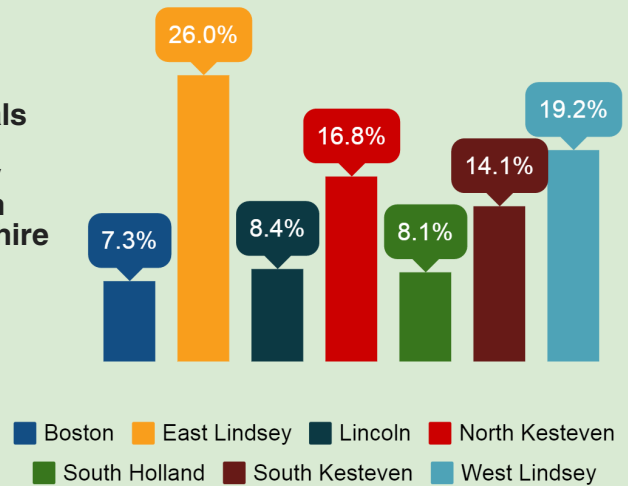
## What has changed?

Number of road deaths per year in Lincolnshire



Source: Department for Transport: Reported Road Casualties Great Britain, Annual Report: 2015

Individuals killed or seriously injured in Lincolnshire (2015/6)



Source: Lincolnshire Road Safety Partnership rolling dashboard to 30/09/2016

## The picture in Lincolnshire



Road traffic casualties are more likely to be male who represented three quarters of fatal casualties in 2016.



The majority (74%) of killed or seriously injured casualties are on the rural road network.



30% of all fatal collisions are motorcycle riders, despite making up only 1% of road traffic.

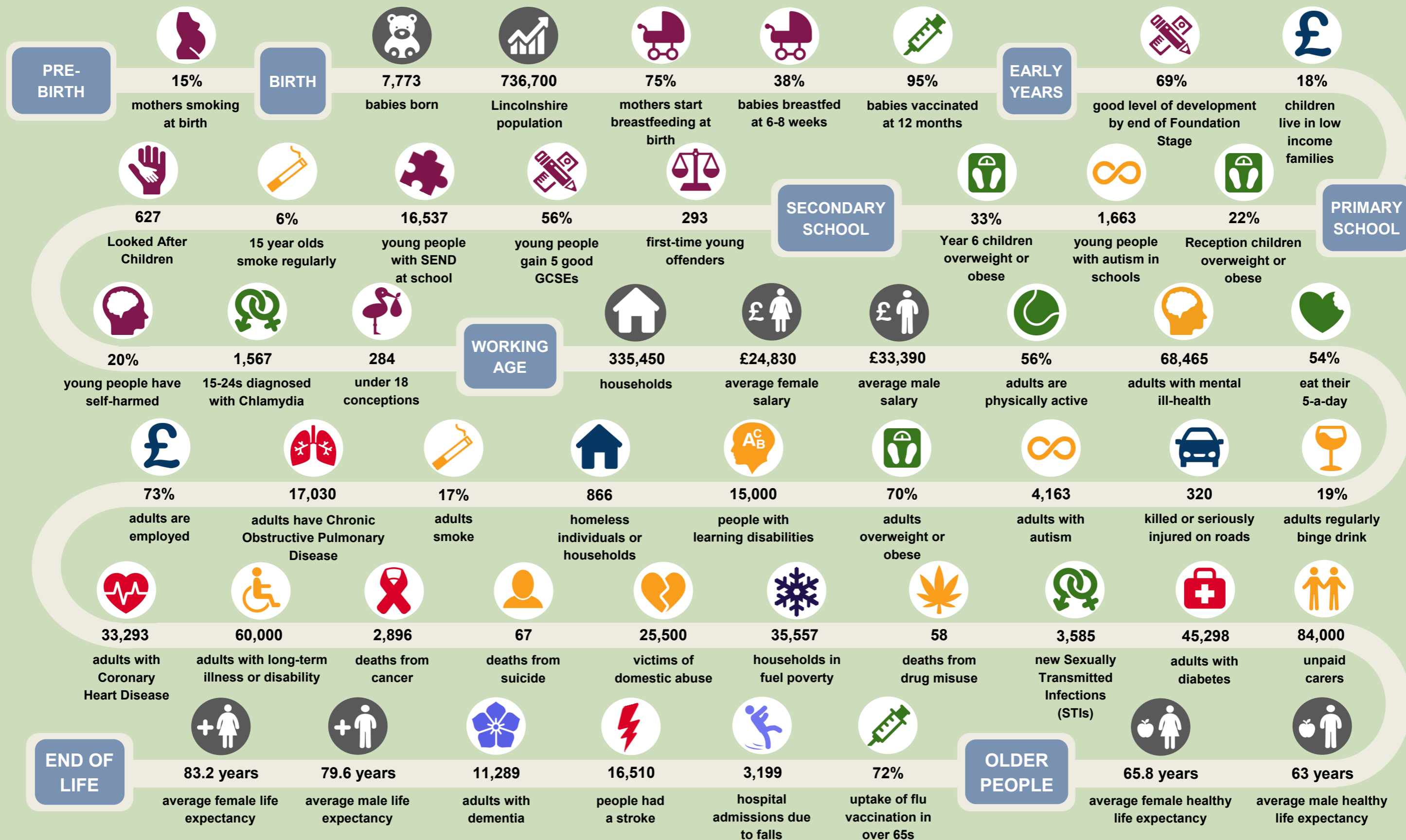


Drivers accounted for the majority (68%) of fatal casualties in 2016, followed by vehicle passengers (19%) and pedestrians (13%).

## Key message

39 fatal casualties and 281 serious injury casualties in 2015 is unacceptable in terms of human and economic costs, representing a cost of around £125 million to Lincolnshire's economy in 2015.

# Health and Wellbeing in Lincolnshire





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