Nottinghamshire County Joint Strategic Needs Assessment
Evidence Summary 2020

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INTRODUCTION

This evidence summary presents an overview of the health and wellbeing needs in Nottinghamshire County using the key findings from Nottinghamshire's Joint Strategic Needs Assessment and associated reports. This evidence summary will be regularly updated as JSNA chapters are published.

Joint Strategic Needs Assessments (JSNAs) are local assessments of current and future health and social care needs. The aim of the JSNA is to improve the health and wellbeing of the local community and reduce inequalities for all ages through ensuring commissioned services reflect need. It is used to help to determine what actions local authorities, the NHS and other partners need to take to meet health and social care needs and to address the wider determinants that impact on health and wellbeing. The evidence within the JSNA is used to inform the priorities within the Health and Wellbeing Strategy for Nottinghamshire.

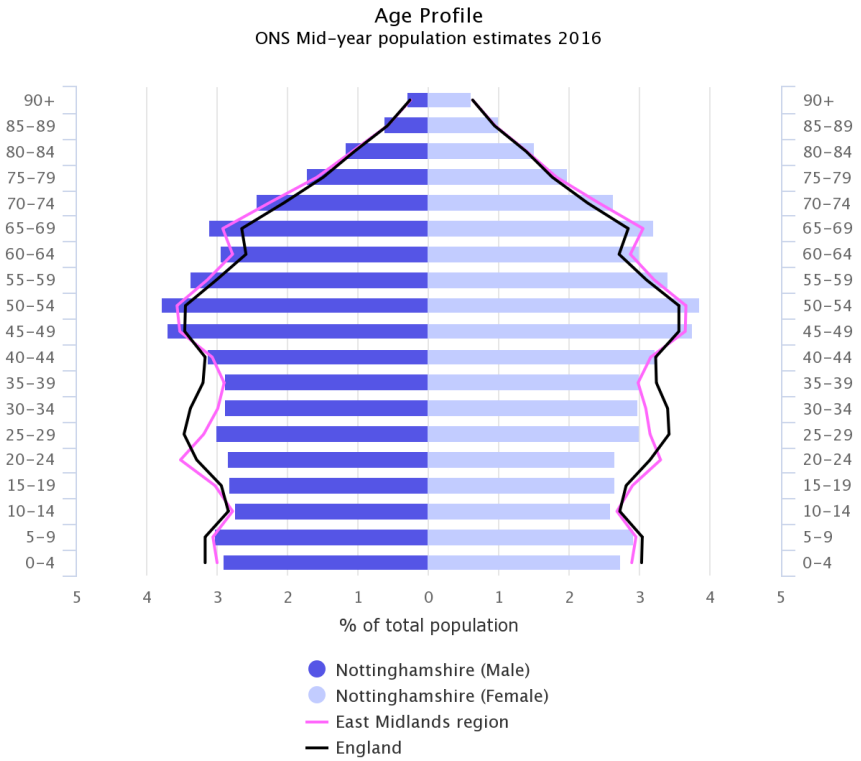
Nottinghamshire County's JSNA contains 40 chapters each considering a particular health and social care issue or the health and social care needs of specific groups. The full JSNA and related documents and data can be accessed at www.nottinghamshireinsight.org.uk . It is only possible to present a brief overview of this information in this Evidence Summary and so it should be used in conjunction with the full JSNA. All supporting data and information for this evidence summary including references can be found in individual chapters or other reports (hyperlinks included). Where possible, updated data has been presented in this evidence summary and this may differ from the data presented in the original JSNA chapter.

DEMOGRAPHY

When broad sociological, demographic and health and wellbeing characteristics of Nottinghamshire County's population are compared to national figures, our population can appear somewhat average. However, more detailed information reveals that our population is diverse and has wide ranging health and wellbeing needs.

The latest estimate of the County's resident population is 817,900 (ONS mid-year estimate 2017). The number of people living in Nottinghamshire increased by 5% between the Census of 2001 and 2011 to 785,800 and is expected to increase to 840,700 by 2021. Projections estimate that this is due primarily to an increase in net migration of people from both other areas of the UK and abroad and an increase in life expectancy.

Figure 1: Nottinghamshire Age Profile (2016)



Source: Public Health England (PHE) Fingertips

Overall the age structure of Nottinghamshire is slightly older than the national average, with 21% of the population aged 65+ in 2017 compared with 18% in England. Our population is predicted to continue to age over the next fifteen years with the number 65-84 year olds increasing by over 30% and 85+ year olds by over 76%. Older people are more likely to experience disability and limiting long-term illnesses. The majority of carers who provide 50 or more hours of care per week are aged 65+, often caring for a partner. Those carers themselves are more likely to experience poorer health than those of a similar age who do not provide care.

An increasing number of older people in Nottinghamshire are anticipated to live alone (increasing by 41% between 2015 and 2030). Older people living alone and without access to a car in the more rural areas of Nottinghamshire, which also have poorer access to public transport (notably Newark and Sherwood and Bassetlaw) are particularly vulnerable. Our aging and increasingly isolated population has implications for future planning and delivery of services in order to meet their health and wellbeing needs. This is considered in detail in the JSNA chapters Click here for all JSNA Chapters.

Children and young people make up 20% of the population. This population is expected to show a moderate increase of 9% by 2030, with the greatest increases in Broxtowe (15%) and Gedling (11%). In Nottinghamshire, localities where there are higher numbers of families on low incomes are those localities where children and young people are less healthy and do less well at school. Some children and young people may face particular disadvantages and so need more support to fulfil their potential. The needs of these young people are considered in more detail in the Children and Young People section of this report and individual JSNA chapters.

Disability affects a large proportion of our population. Approximately one in ten adults in Nottinghamshire aged 18-64 live with moderate/severe physical disabilities and approximately one in five people aged 65+ in Nottinghamshire are unable to manage at least one daily activity[i]. For older people the numbers are expected to increase from 29,000 in 2015 to 43,000 by 2030.

Although black and minority ethnic (BME) populations are relatively low in Nottinghamshire as a whole, 4% compared with 15% nationally, within the districts of Broxtowe, Gedling and Rushcliffe there are larger population groups (7% each district), mainly Asian and Mixed/Multiple Ethnic groups. BME populations in Nottinghamshire have a younger age profile than the general population. In Nottinghamshire a relatively low proportion of residents were born outside the UK, 5% compared with 10% in the region in 2011 but this varies across the County. A higher proportion of non-UK born residents live in Broxtowe (8%) and Rushcliffe (7%).

To access the latest population figures on Nottinghamshire Insight click here for area profiles and here for The people of Nottinghamshire (2017) chapter.

Annual Nottinghamshire health profiles produced by PHE fingertips can be found here.

DEPRIVATION, SOCIO-ECONOMIC STATUS AND WIDER DETERMINANTS OF HEALTH

Research shows that many health and wellbeing outcomes are linked to socio-economic factors and the 'wider determinants of health' (figure 1). It is therefore important to understand the socio-economic context of the County when trying to understand and improve health and health inequalities[ii]. Health and wellbeing outcomes arise from the interaction of all the factors over time as people grow up, live their lives and grow old, rather than being directly attributable to any one factor.

Figure 1: The wider determinants of health. Source: Barton and Green (2006)



The Index of Multiple of Deprivation (most recently published in 2015) gives a good summary measure of a range of wider determinants and allows comparison of the County with England and other areas, and also identification of inequalities[iii] within the County.

Deprivation levels for Nottinghamshire are comparable with England. However, within Nottinghamshire there are communities with both some of the highest levels of deprivation in the country and some of the lowest levels of deprivation.

In Nottinghamshire (excluding Nottingham City) there are 25 lower super output areas (LSOAs)[iv] in the 10% most deprived LSOAs in England. The most deprived LSOAs are concentrated in the districts of Ashfield (9 LSOAs), Mansfield (6), Bassetlaw (6) and Newark & Sherwood (3).

People living within the more deprived areas of Nottinghamshire have higher levels of unemployment, lower levels of qualifications, less healthy lifestyle choices and poorer health and wellbeing outcomes.

Claimant count unemployment rates in Nottinghamshire were 1.6% in March 2017 compared with 2.0% nationally and have fallen over the past 4 years from 3.4% in March 2013. For those aged 18-24 years, Job Seekers Allowance (JSA) unemployment rates have generally been higher than national levels for the past 10 years but were 1.1% in March 2017, the same as the national figure.

Wholesale and retail is the largest industry sector of employment in Nottinghamshire (18%), followed by health and social work and manufacturing with 14% of jobs in each sector. This compares with 8% of jobs in the manufacturing sector nationally. The manufacturing sector is a particularly important employer in the districts of Ashfield (20%) and Bassetlaw (17%). NOMIS – Official Labour statistics, 2015.

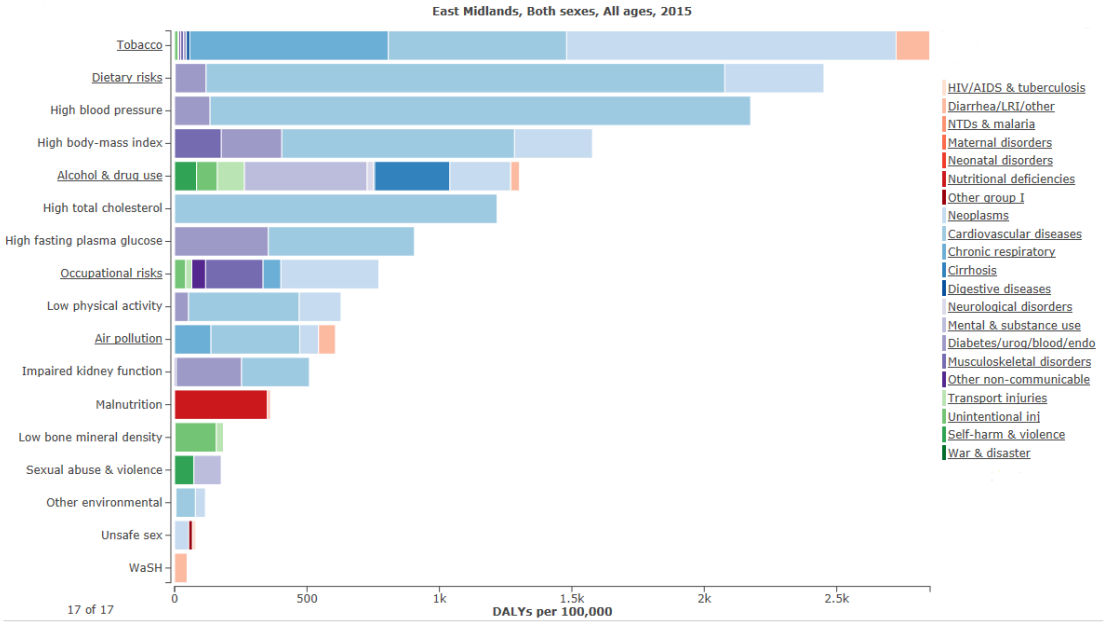
Levels of support within communities varies across Nottinghamshire. In the 2016 residents' survey the highest proportion of residents who felt that people from different backgrounds get on were from Rushcliffe (64%) and Broxtowe (58%). The lowest proportions were reported from people living in Newark and Sherwood (34%). Generally residents felt safer to go out during the day than the night time, particularly in Bassetlaw, Mansfield and Ashfield.

Click here for The people of Nottinghamshire (2017) chapter.

LIFESTYLE FACTORS

Individual lifestyle choices are shaped by a range of factors, including health awareness and the physical and social environment in which we live. They both cause and affect the consequences of many major illnesses (see figure below). More deprived groups are affected proportionally more by such risk factors than less deprived groups and they therefore represent a major driver of health inequalities. Supporting individuals and populations to maintain healthy lifestyles will result in both the primary and secondary prevention of disease improving both life expectancy and healthy life expectancy in the County.

Figure 1: Disability adjusted life years (DALY[v]) by risk factors and causes, East Midlands



Source: Global Burden of Disease, Public Health England

Smoking (2015)

Smoking causes 80,000 deaths in England each year, more than any other preventable cause. Smoking is the single biggest cause of inequalities in death rates and life expectancy between the richest and poorest in our communities. On average in Nottinghamshire County this difference in life expectancy is 8.5 years and tobacco contributes to half of this difference.

Smoking prevalence in Nottinghamshire has fallen from 21.7% in 2010 to 15.7% in 2015. This mirrors the change in national smoking prevalence rates. Nottinghamshire has similar rates of deaths due to smoking related illnesses such as cancers, respiratory disease and cardiovascular disease compared to England. There are strong correlations between smoking prevalence and deprivation. Smoking prevalence varies between districts; Bassetlaw (23.5%), Ashfield and Gedling (17.4%), Newark and Sherwood (17.1%), Mansfield (15.6%), Rushcliffe 7.5%. Amongst certain groups, smoking prevalence is also higher. For example, both nationally and locally routine and manual workers have a higher smoking prevalence at 26.5% and 26.2% respectively.

The high smoking rates during pregnancy in the County (14.5%), compared to England (10.6%) in 2015/16, are of particular concern. Smoking in pregnancy increases risk of complications, which affect mothers and babies health, and increase risk of miscarriage and maternal death. Children who grow up in families and communities with a high proportion of smokers are more likely to become smokers themselves.

The Nottinghamshire JSNA chapter highlights a focus on: stopping smoking, particularly for higher risk groups; preventing the uptake of smoking by young people and; reducing harm from tobacco use by tackling illegal tobacco and reducing exposure to second hand smoke.

Click here to open the JSNA for Tobacco.

Click here to access the Tobacco theme page on Nottinghamshire Insight

Excess weight (2016)

Being overweight or obese significantly increases the risks of developing and dying from cardiovascular disease, kidney and liver disease and cancer and the risk increases as BMI increases. It is the fourth largest contributor to Disability-Adjusted Life Years (DALYs) the number of "healthy years" lost due to ill health, disability or early death in England.

9% of Nottinghamshire children aged 4-5 years old and a 17% of 10-11 year olds are obese. Children aged 10-11 years living in the most deprived areas in the country are more than twice as likely to be obese compared with those living in the least deprived areas. Approximately two thirds of the adult population are overweight or obese. Estimates of adult obesity show that it is expected to be significantly higher than England in all districts apart from Broxtowe and Rushcliffe. Four in ten pregnant women are estimated to be overweight or obese with nearly two in ten being obese.

Current trends suggest that 80% of children who are obese at age 10–14 will become obese adults. The number of children who are overweight or obese is expected to increase by 5% between 2015-2019 and in adults by 4% over the same period. Morbid obesity in adults is expected to increase by 16% during this same period.

JSNA recommendations include:

- Work with partners across the system to ensure there is no duplication or gaps in obesity prevention and weight management service provision targeting areas and groups with the highest levels of excess weight to maximise health outcomes, monitoring uptake by protected groups;
- Improving access to local intelligence for higher risk groups;
- Ensure local obesity and weight management services are outcomes based and target those with the greatest need.

Click here to open the JSNA for Excess Weight

Diet and nutrition and physical activity (2015)

An individual's diet and nutrition status has both a direct impact on health status as well as an indirect one through the maintenance of a healthy weight.

Poor diet and nutrition are recognised as major contributory risk factors for ill health and premature death. A poor diet is the biggest contributor to the number of "healthy years" lost due to ill health, disability or early death. Good nutrition has a key role to play both in the prevention and management of diet-related diseases such as cardiovascular disease (CVD), cancer, diabetes and obesity.

In Nottinghamshire it is estimated that just over a quarter of adults are consuming the recommended 5 or more portions of fruit and vegetables per day, with women eating more than men and the lowest consumption in the 16-24 and over 75 age groups.

Table 1: Estimated number and percentage of adults aged 16 and over in Nottinghamshire County and Districts consuming 5 portions or more of fruit and vegetables per day. Modelled estimate based on national (deprivation, gender) rates 2013.

5 portions or more Organisation	Aged 16+ Estimated number	Total residents	*Estimated percent*
Bassetlaw	23,769	93,641	*25.4*
Mansfield	21,676	86,133	*25.2*
Ashfield	25,127	98,536	*25.5*
Newark and Sherwood	25,507	95,796	*26.6*
Gedling	25,840	94,282	*27.4*
Broxtowe	25,300	92,276	*27.4*
Rushcliffe	26,793	92,148	*29.1*
Nottinghamshire County	**174,012**	**652,812**	***26.7***

Source: HSE2013 national fruit and vegetable consumption (IMD Deprivation, Gender) rates for those aged 16+, ONS Mid-Year population estimates 2013

Physical inactivity directly contributes to one in six deaths in the UK. Physical activity can prevent or help manage over 20 chronic conditions including type 2 diabetes mellitus, heart disease and some cancers. These conditions incur a huge cost to the health and wellbeing of the individual, the NHS and the wider economy.

Around a quarter of adults in Nottinghamshire self-report being inactive, failing to achieve a minimum of 30 minutes of activity a week. Approximately 60% of adults in Nottinghamshire self-report meeting the recommended 150 minutes a week of physical activity. Participation in physical activity decreases with age and is higher in males than females. Residents in Rushcliffe, Gedling and Bassetlaw are most likely to meet the physical activity guidelines and those in Mansfield are least likely to meet them (see figure 1).

Figure 1: Estimated proportion of adults aged 16 and over achieving at least 150 minutes of physical activity per week

Percentage of physically active adults 2015

Area	Recent Trend	Count	Value
England	–	-	57.0
Nottinghamshire	–	-	59.5
Rushcliffe	–	-	65.2
Gedling	–	-	64.8
Bassetlaw	–	-	62.6
Newark and Sherwood	–	-	60.1
Ashfield	–	-	57.4
Broxtowe	–	-	54.7
Mansfield	–	-	50.8

Source: Active People Survey, Sport England

Source: PHE Health Profiles

Key recommendations include:

- Strengthening awareness through social marketing;
- Improving local intelligence to understand why healthy eating locally is below expected levels, current levels of physical activity and obesity, maternal obesity, how obesity tracks through childhood;
- Addressing prevention by working within communities across the life course;
- Improving integrated commissioning to ensure services are joined up;
- Developing closer relationships between planners regarding access to affordable healthy food and re-designing environments to encourage active lifestyles;
- Auditing services to ensure they meet quality standards and are equitable by targeting those with the greatest needs and;
- Building capability of the workforce to ensure benefits of physical activity and a healthy diet are shared with patients and service users.

Click here to open the JSNA for Diet and Nutrition

Click here to open the JSNA for physical activity

Substance misuse (alcohol and drugs, 2018)

'Substance misuse' is defined here as 'intoxication by – or regular excessive consumption of and/or dependence on – psychoactive substances, leading to social, psychological, physical or legal problems. It includes problematic use of both legal and illegal drugs'. Substance misuse is associated with a wide range of health and social issues and has enormous health and social care financial costs. Alcohol alone contributes to more than 60 diseases and health conditions and represents 10% of the burden of disease and death in the UK, placing it in the top three lifestyle risk factors after smoking and obesity.

Risk factors increase an individual's chances for substance misuse while protective factors can increase the resilience of an individual when faced with a risk factor, thereby reducing the risk of substance misuse. Some of the populations most at risk of substance misuse are young people exposed to Adverse Childhood Experiences (ACE's), people living in more deprived areas, those with mental health issues, offenders and those currently in recovery.

Estimated figures suggest that there could be in the region of at least 172,725 individuals in Nottinghamshire who use substances frequently, with 26,068 dependent on substances (21% of the population of Nottinghamshire). Alcohol represents the greatest need (noting that a significant proportion of the drug using population are also likely to be drinking). Ashfield has a significantly higher rate of under 18 alcohol-specific hospital admissions and adult alcohol-related hospital admission episodes are higher than the national average in Mansfield and Ashfield. They are also higher for females, particularly in Ashfield and Bassetlaw.

Effectively addressing a community's substance misuse issues means addressing the wider determinants of health and considering substance misuse in the context of the causes of broader health and risk-taking behaviour.

Key JSNA recommendations include:

- Reducing demand through resilience programmes in targeted schools, engagement in national campaigns, a 'Making Every Contact Count' (MECC) approach within all services and Identification and Brief Advice (IBA) offered by frontline workers.
- Reducing supply through lobbying at a national level, Licensing Authorities using data to inform policy and decision making and closer working with Trading Standards.
- An agreed long term solution to meeting the complex needs of the most vulnerable, implementation of the new Mental Health/Substance Misuse Pathway, exploring and addressing Nottinghamshire's poorer alcohol related admissions and high levels of adult self-referrals, exploring frontline services being more trauma smart and including substance misuse in risk assessments.
- Addressing data gaps and improving data and information sharing between agencies

Click here to access the JSNA chapter for substance misuse

Sexual health and HIV (2019)

Sexual health is defined by the World Health Organisation as: 'a state of physical, mental and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity. Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence. Sexual health is a broader topic than sexually transmitted infections and includes areas such as contraception, abortion, sexual assault, healthy relationships and the wider reproductive health of men and women. Promoting good sexual and reproductive health, exploring healthy relationships, encouraging self-management and having the correct sexual health interventions can all have a positive effect on population health and wellbeing.

Some groups within the population are at higher risk of poor sexual health. The highest burden of sexually related ill-health is borne by groups who often experience other inequalities in health, including men who have sex with men, young people, black and minority ethnic groups, and people living in socio-economically deprived areas. They often experience additional stigma, discrimination and obstacles in accessing services.

Nottinghamshire County is similar to the rest of the country when considering key sexual health outcomes. In Nottinghamshire there has been a slight increase in new diagnoses of STIs, similar to the rise seen nationally. The chlamydia detection remains low compared to the rest of the country although the most up to date data indicates that Nottinghamshire is beginning to improve. Nottinghamshire is performing well in relation to the rate of Longer Action Reversible Contraception (LARC) prescribed but there are local differences in demand and provision. Prevalence of HIV amongst Nottinghamshire residents aged 15-59 years is lower than the national rate, although across the county HIV testing coverage has dropped significantly.

In Nottinghamshire in 2017, 5% of abortions were to women under the age of 18. This figure is similar to the England average of 4.1%. Other age bands are broadly similar to the England averages. Generally, although lower than the national rate across the board, abortions rates were highest in the 20-24 year age group in all CCGs. In 2017, across the

county 36.2% of abortions of all ages were repeat abortions compared to 38.8% across England. There were higher levels of repeat abortions in the Nottingham West CCG.

Key JSNA recommendations include:

- **Enhancing sexual health promotion** through understanding needs of vulnerable groups and those who don't access services and supporting stakeholders to prepare Nottinghamshire schools for the implementation of statutory RSE.
- **Preventing poor sexual health outcomes** through greater understanding of Nottinghamshire's varying outcomes, demand and unmet need, and collaborative working to address the pressures in the sexual health system.
- **Ensuring good sexual health treatment outcomes** through considering evaluating the online chlamydia testing service, planning for issues on the sexual health horizon and ensuring that Men who have Sex with Men (MSM) are tested regularly.

Click here to access the JSNA chapter for sexual health and HIV

Click here to access the Nottinghamshire Insight sexual health theme page

Oral Health (2020)

The World Health Organisation (WHO) defines oral health as "a state of being free from chronic mouth and facial pain, oral and throat cancer, oral infection and sores, periodontal (gum) disease, tooth decay, tooth loss, and other diseases and disorders that limit an individual's capacity in biting, chewing, smiling, speaking, and psychosocial wellbeing." Oral health problems include tooth decay, gum disease, oral cancers, injuries and trauma, and tooth loss. Tooth decay (dental caries) is the most common dental disease, affecting most of the population, but is highly preventable. It results from the destruction of the hard tissues of the tooth by acids produced in the mouth when bacteria in dental plaque metabolises dietary sugars.

The population as a whole is at risk of developing poor oral health. The table below sets out the main risk factors for specific oral health problems.

Table 1: Risk factors for oral diseases

Oral Diseases	Risk factors
Tooth decay (dental caries)	• Diet – especially where high in sugars • Poor oral hygiene • Lack of fluoride exposure e.g. not using fluoride toothpaste • Socio-economic status
Gum (periodontal) disease	• Poor oral hygiene • Smoking / tobacco use • Other medical conditions e.g. diabetes • Stress responses

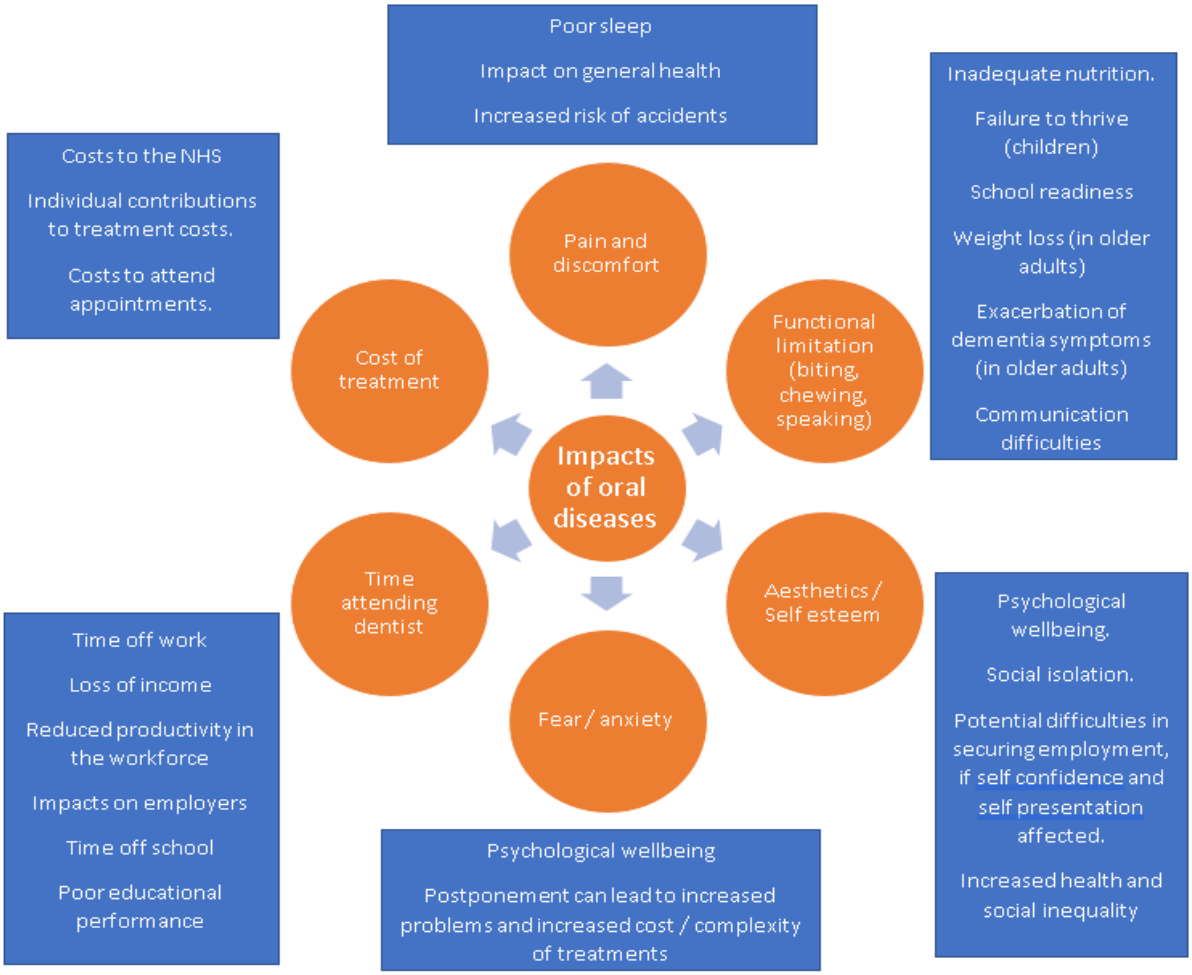
Oral cancers - cancers of the tongue, lips, inside lining of the mouth and cheeks and the oropharynx	• Smoking / tobacco use • Alcohol use ○ When both smoking and alcohol use occur together, the risk is increased. Heavy drinkers and smokers have 38 times increased risk of developing oral cancer compared with those who abstain from both products. • Human papillomavirus (HPV) infection • Sun exposure (for cancers of the lips)
Oral injuries / trauma	• Accident and injury (e.g. in playgrounds, or when undertaking activities which carry a risk of injury such as. contact sports) • Violence
Tooth loss	• Untreated tooth decay or gum disease • Access to dental services • Trauma to teeth • Severe tooth wear

Some vulnerable groups have increased risk of poor oral health, specifically:

- people with a learning disability or with serious mental illness. These groups tend to have fewer teeth, more untreated decay and more periodontal disease
- people who are homeless or who frequently relocate, such as gypsy, Roma and traveller communities
- people who misuse drugs or who drink alcohol at levels posing a risk to health
- prisoners
- frail older people who may have difficulties maintaining good oral hygiene or who have difficulties accessing oral health services

A healthy mouth enables not only nutrition of the physical body, but also enhances social interaction and promotes self-esteem and feelings of well-being. Poor oral health impacts on not just the individual's health but also on their wellbeing and that of their family. It also has wider social and economic consequences, as summarised in Figure 1 below.

Figure 1: Summary of impacts of oral diseases, modified from Daly et al, 2013



National surveys of both adults' and children's oral health indicate improvements in dental health over time, shown by reductions in decayed, missing and filled teeth in children, and by adults keeping teeth longer as they age. However, inequalities persist associated with socio-economic background.

Overall Nottinghamshire County is generally similar or better than the rest of the country when considering oral health outcomes; however, there are variations at a sub-county level. For example, five-year-old children in Broxtowe and Rushcliffe had better oral health than the England average. Five-year-old children in Mansfield and Ashfield showed greater prevalence of tooth decay compared with other districts in Nottinghamshire (National Dental Epidemiology Programme, 2017). There were larger numbers of child admissions for hospital dental extractions for districts in the north of the County than for the districts in the south (PHE, 2018).

There is a lack of local data related to adult oral health. Based on national surveys, some vulnerable adults have worse than average oral health. Some local information was available from the 2016 PHE oral health survey of mildly dependent older people – those who living in the community but have chosen supported housing. Results for the Nottinghamshire respondents in the survey were lower than the England average for presence of visible plaque and calculus. 51.3% of Nottinghamshire respondents had visible plaque (England

average 69.9%). 39.1% of Nottinghamshire respondents had visible calculus (England average 61.3%).

Oral health diseases continue to be widespread despite being highly preventable. Simple measures such as improved oral hygiene practices, improved diet, use of and access to fluoride, along with attending the dentist for regular check-ups to identify problems early, can all help to prevent, or at least reduce, the burden of oral diseases. A common risk factor approach also supports oral health improvement, because the most common oral diseases – tooth decay and gum disease – as well as oral cancers, share many of the same common risk factors (e.g. smoking, alcohol misuse, obesity and poor diet) as other common diseases, such as cardiovascular disease and other cancers – so addressing these risk factors can benefit more than one aspect of health.

Key JSNA recommendations include:

- Integrating oral health within all health policies across adults and children's services and various care pathways.
- Oral health promotion interventions must consider reducing inequalities in our most vulnerable groups by taking a proportionate universalism approach.
- The need to plan for anticipated changes in demography e.g. an increasing number of older people and operating context.
- Improve the oral health care of older people living in care homes through working with care homes to promote the use of NICE and CQC guidance and to improve access.
- Scope how systematic processes for following up children who experience hospital admission because of tooth decay could be established.
- Examining the effectiveness of oral health questions in evaluation of Learning Disability Health Checks.

Click here to access the Oral Health JSNA (2020)

LIFE EXPECTANCY AND HEALTHY LIFE EXPECTANCY

Life expectancy is a measure of the estimated length of life for a particular population based upon current mortality rates. In Nottinghamshire, life expectancy at birth is 79 years for males and 83 years for females (2013-15). Life expectancy is increasing both nationally and locally in both men and women; in Nottinghamshire for men it has increased by 2.3 years in the last 10 years and by 1.8 years for women.

Locally within the districts of Nottinghamshire life expectancy varies considerably with more deprived districts having a shorter life expectancy than less deprived districts, for example in 2013-2015, life expectancy in Bassetlaw, Ashfield and Mansfield was significantly lower than for the England where a both males and female would be expected to live 1.5 years less. In contrast life expectancy in Rushcliffe was significantly higher than for England, where both males and females in Broxtowe could expect to live an additional 2 years longer. In Broxtowe males could expect to live 1 year longer than the national average.

Figure 1: Life expectancy for males and females across Nottinghamshire's districts, 2013-2015

Life expectancy at birth (Male) 2013 - 15

Area	Recent Trend	Count	Value
England	–	-	79.5
Nottinghamshire	–	-	79.4
Rushcliffe	–	-	81.4
Gedling	–	-	79.4
Broxtowe	–	-	80.4
Newark and Sherwood	–	-	79.8
Bassetlaw	–	-	78.6
Ashfield	–	-	78.1
Mansfield	–	-	78.0

Source:
https://www.ons.gov.uk/releases/healthstatelifeexpectanciesuk2013to2015

Life expectancy at birth (Female) 2013 - 15

Area	Recent Trend	Count	Value
England	–	-	83.1
Nottinghamshire	–	-	82.8
Rushcliffe	–	-	85.1
Gedling	–	-	83.6
Broxtowe	–	-	83.2
Newark and Sherwood	–	-	82.9
Bassetlaw	–	-	81.8
Ashfield	–	-	81.7
Mansfield	–	-	81.6

Source:
https://www.ons.gov.uk/releases/healthstatelifeexpectanciesuk2013to2015

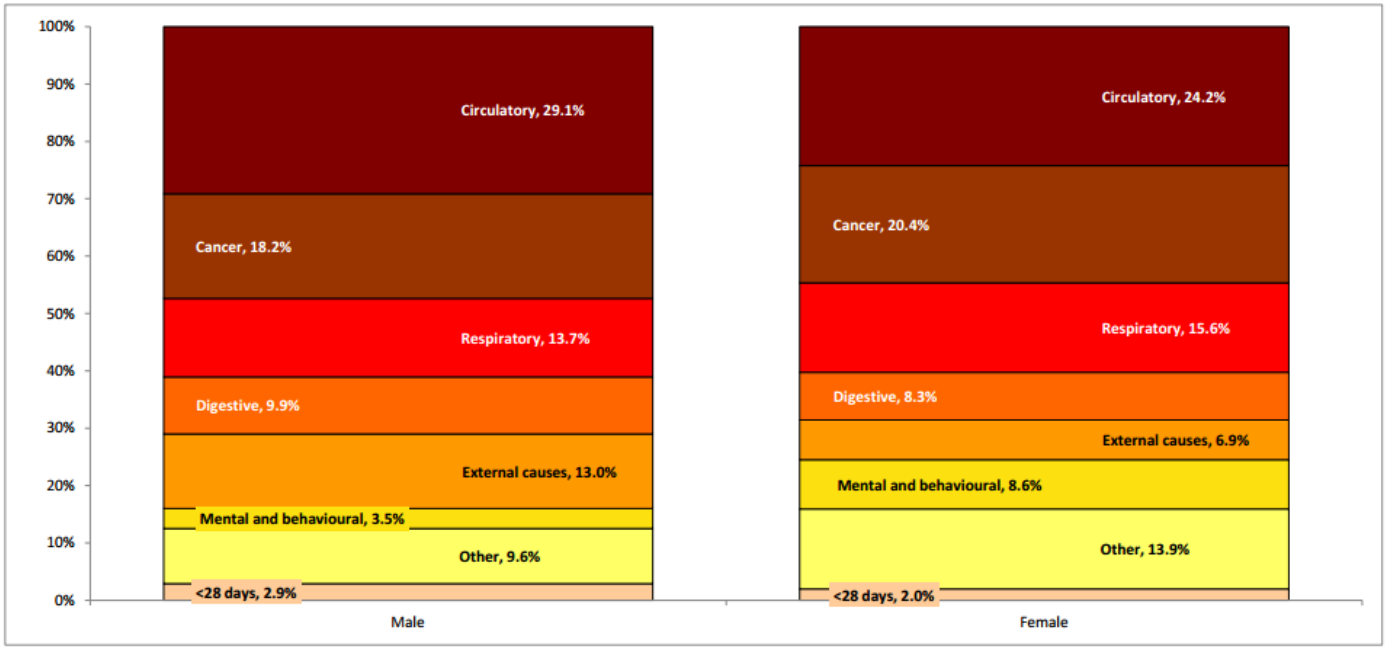
Source: PHE local Health Profiles 2016

Although overall life expectancy in the County has improved, this masks substantial inequalities within the County. In 2011-2013 life expectancy varied across Nottinghamshire by nine years in males and seven years in females.

The broad causes of premature death (deaths under 75 years) which contribute the greatest proportion to this 'gap' in life expectancy are explored in figure 4 and show that for males and females the top four causes are the same: circulatory, cancer, respiratory, digestive and external causes, however the proportion that each of these contributes to the gap in life expectancy varies between genders. Understanding which factors contribute to the gap in life expectancy across Nottinghamshire's population can help to target evidence-based interventions which aim to prevent illness and death in the short and longer term.

If approximately 340 male deaths and 350 female deaths were prevented from the causes in figure 5 below, the gap in life expectancy across Nottinghamshire would be eliminated.

Figure 2: Contribution to the life expectancy gaps between the most and least deprived areas in Nottinghamshire, by cause of death, 2012-14.



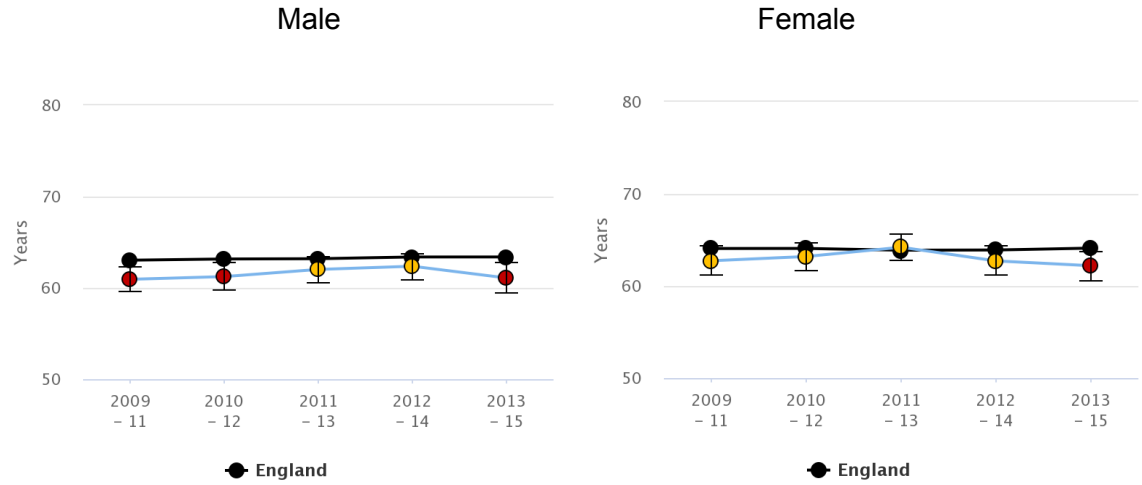
Footnote: Circulatory diseases includes coronary heart disease and stroke. Digestive diseases includes alcohol-related conditions such as chronic liver disease and cirrhosis.
Source: The Segmentation Tool, Segmenting life expectancy gaps by cause of death, Public Health England (Jan 2015)

With the steady rise of life expectancy in the UK and the rising number of older, and very old people, there is a need to capture quality as well as quantity of remaining years lived. Healthy life expectancy describes how long a person might be expected to live in 'good health'. Both life expectancy and healthy life expectancy have increased nationally over recent years; however, life expectancy is increasing at a faster rate meaning that the population is spending a greater proportion of its total life in poor health. This has implications for both individuals – due an increased proportion of life spent with illness and disability – and society due to associated health and social care costs.

Locally in Nottinghamshire healthy life expectancy was 62.2 years for females and 61.1 years for males in 2013-2015. Both males and females had similar healthy life expectancy compared with the England (Figure 3).

When life expectancy and healthy life expectancy are compared it shows that in Nottinghamshire men spend around 18 years of their life in poor health and women 21 years in poor health. This emphasises a need for a focus on the prevention of diseases to maximise time individuals can live in good health.

Figure 3: Healthy Life expectancy at birth in Nottinghamshire (2013-15)



Source: Public Health England, Public Health Profiles.

HEALTH AND WELLBEING IN OUR COMMUNITIES (WIDER DETERMINANTS)

Health care associated infections in community settings (2015)

Healthcare associated infections (HCAIs) are caused by a wide range of different infectious micro-organisms. HCAIs are those associated with healthcare delivery in any setting, including hospital settings, long-term care facilities such as nursing homes or a person's own home. Despite recent successes in reducing incidence rates, HCAIs remain a cause of significant illness and early mortality.

Risk of infection increases with increased contact with health and social care interventions. The very old and very young are most at risk due to a poorer immune response. Effective infection control requires a whole health economy approach and infection control services need to be viewed in the context of the wider health and social care system.

Antimicrobial medicines such as antibiotics are the mainstay of treating infections. Anti-microbial prescribing practices have played a role in development of antibiotic resistance in organisms causing HCAIs. Maintaining good infection control practice in all care settings, to prevent infection and the need for use of antibiotics, remains critical.

Rates of MRSA (Meticillin-Resistant Staphylococcus Aureus) bacteraemia nationally have decreased by nearly 60% between 2009/10 and 2015/16, similar reductions are seen in Nottinghamshire County. In contrast, infection rates for MSSA (Methicillin-Susceptible Staphylococcus Aureus) and E.coli bacteraemia increased significantly between 2013/14 and 2014/15. In addition, whilst overall significant improvements have been made in lowering the rates of Clostridium Difficile (CDI) infection locally and nationally, this reduction has slowed over recent years.

Key recommendations include: widening of infection prevention and control beyond MRSA and CDI; review the implementation of prescribing guidelines on antibiotic prescribing; embed risk assessment for infection control within the standard care processes of healthcare professionals in community settings; and consider a comprehensive infection prevention and

control support package for all care providers, including care in the home, learning disabilities residential units and residential care homes.

Click here to open the JSNA for Community Healthcare Infection Prevention and Control

Health impacts of air quality (2015)

Despite great improvements in air quality in the UK since the Clean Air Act of 1956, current background levels of air pollution still pose a significant risk to health, particularly for those living in more deprived neighbourhoods. Long term exposure to air pollution at the levels experienced in many urban centres in the UK is now known to cause respiratory and cardiovascular disease and lung cancer. Short term exposure to episodes of elevated air pollution also leads to a worsening of symptoms for those with existing asthma, respiratory or cardiovascular disease, and can trigger acute events such as heart attacks in vulnerable individuals.

Human-made air pollution comes from a number of different sources, but the leading contributor in urban centres is road traffic emissions.

In Nottinghamshire County 5.7% of all adult mortality (430 deaths) was attributable to long term exposure to human-made particulate air pollution in 2010[1].

Key recommendations include: considering evidence of effectiveness and cost effectiveness of various interventions such as active travel, public transport, low emission vehicles; continuing to strengthen joint working across planning, transport and environmental health to identify shared opportunities to improve air quality; and providing key messages on air quality to the public.

Figure 1: Air pollution: fine particulate matter (PM2.5 with a metric of micrograms per cubic metre (µg/m3), 2015.

Area	Value
England	8.3
Nottinghamshire	8.9
Newark and Sherwood	9.5
Rushcliffe	9.3
Broxtowe	9.1
Bassetlaw	8.9
Gedling	8.7
Ashfield	8.5
Mansfield	8.3

Source: Public Health England, Wider Determinants of Health Profile.

Click here to open the JSNA for Air Quality

[1] Estimating Local Mortality Burdens associated with Particulate Air Pollution, Public Health England, 2014

Health and Homelessness (2019)

Shelter defines homelessness as not having a home. You are homeless if you have nowhere to stay and are living on the streets, but you can be homeless even if you have a roof over your head. You count as homeless if you are:

- staying with friends or family
- staying in a hostel, night shelter or B&B
- squatting (because you have no legal right to stay)
- at risk of violence or abuse in your home
- living in poor conditions that affect your health
- living apart from your family because you don't have a place to live together

Homelessness is a far wider a problem than the aspect that is most visible to the public – rough sleeping which is considered the tip of the iceberg.

The causes of homelessness and who is most at risk of homelessness and rough sleeping is complex and warrants action to both address those that are at risk of and who are currently homeless as well as attention to how we can prevent homelessness in the future. This can only be done by agencies from across the public sector working together in a more systematic and joined up way over an extended period.

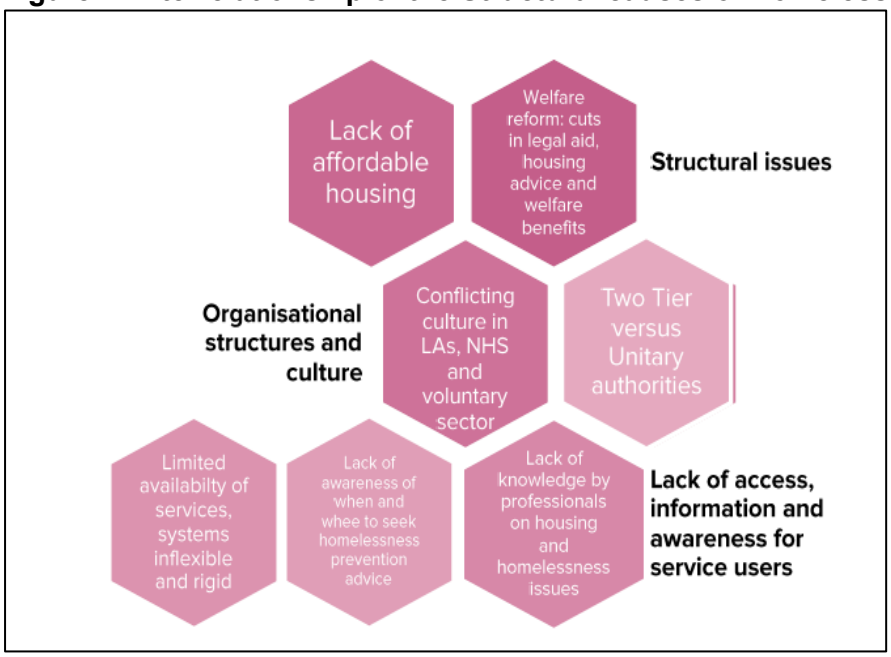
Several multi-faceted factors are driving the recent rise in homelessness in England, which include:

- **Individual circumstances - health, social and behavioural risk factors** including complex and overlapping needs, substance misuse, mental ill health, certain groups such as veterans, care leavers and or those being released from prison and offenders. Socioeconomic factors, such as; relationship breakdown, unemployment, rising relative poverty and problematic debt.

- **Wider forces -** the **supply** of affordable housing and changes to the **welfare system.**

- **Complex interplay** -Structural and individual factors are often interrelated; individual issues can arise from structural disadvantages such as poverty or lack of education and/or poor quality housing that can lead to worsening of health conditions, such as; respiratory conditions. While personal factors, such as family and social relationships, can also be put under pressure by structural forces such as poverty.

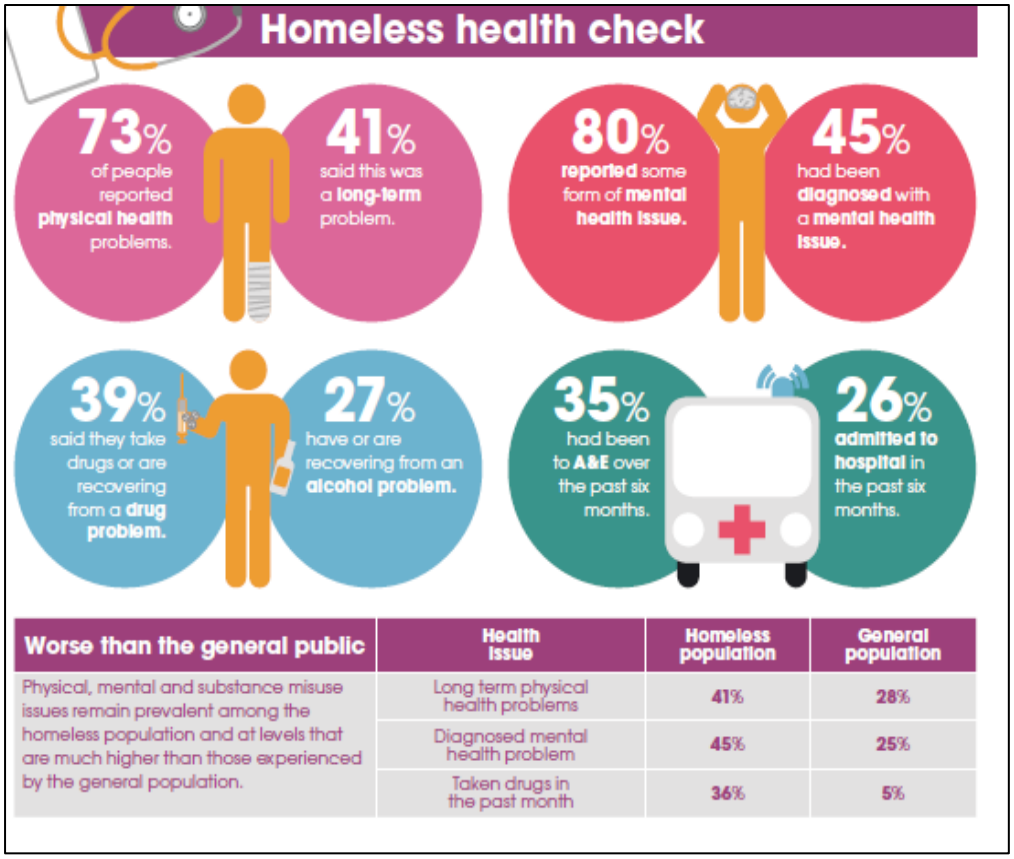
Figure 1: Interrelationship of the Structural causes of Homelessness



Source: Homeless Link (2015) Preventing homelessness to improve health and wellbeing

People who are homeless experience worse health outcomes than the general population. Homeless people aged 16-24 years are at least twice as likely to die as their housed contemporaries; for 25-34 year olds the ratio increases to four to five times, and at ages 35-44, to five to six times.

Figure 2: Comparison of key health issues between homeless and general population



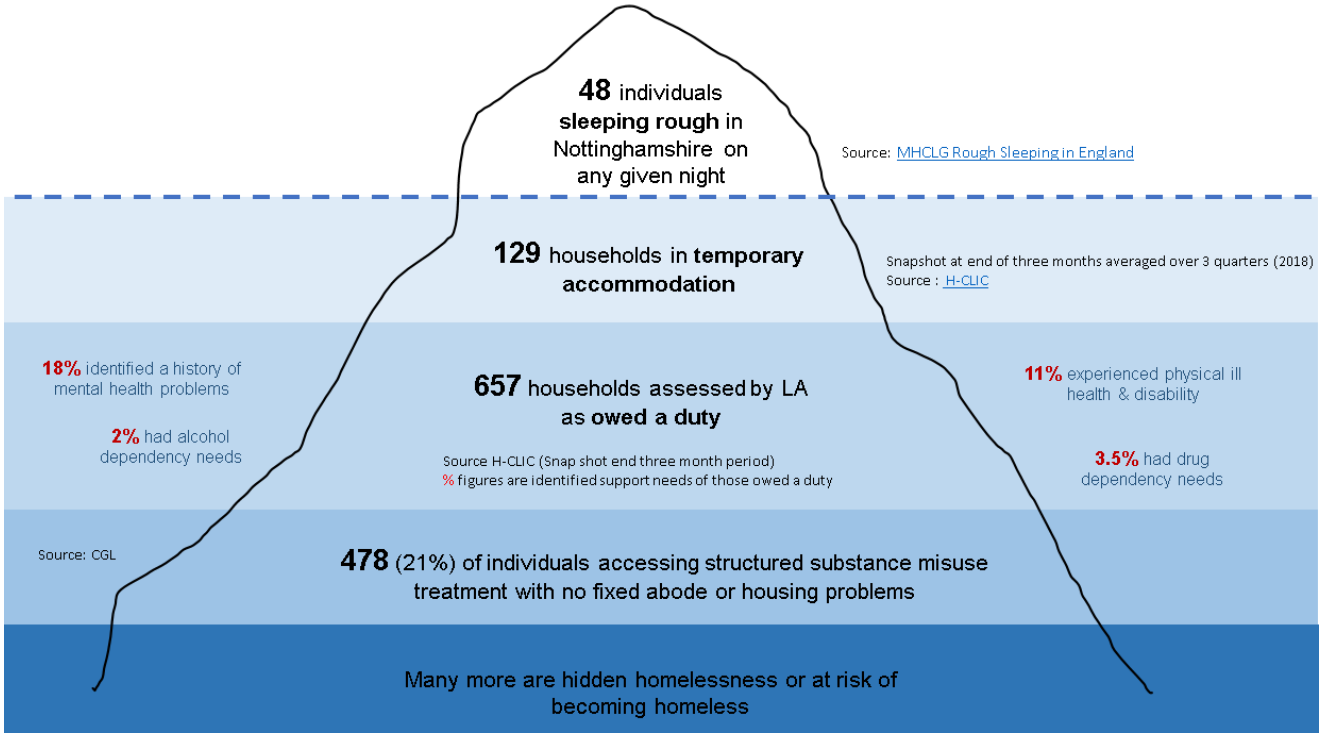
Worse than the general public	Health issue	Homeless population	General population
Physical, mental and substance misuse issues remain prevalent among the homeless population and at levels that are much higher than those experienced by the general population.	Long term physical health problems	41%	28%
	Diagnosed mental health problem	45%	25%
	Taken drugs in the past month	36%	5%

Source: Homeless Link (2014)

Homelessness and poor mental health often go hand in hand. Having a mental health problem can create the circumstances which can cause a person to become homeless in the first place. Yet poor housing or homelessness can also increase the chances of developing a mental health problem or exacerbate an existing condition. In turn, this can make it even harder for that person to recover – to develop good mental health, to secure stable housing, to find and maintain a job, to stay physically healthy and to maintain relationships.
The prevalence of serious mental illness (including major depression, schizophrenia and bipolar disorder) is reported as 25–30% in the street homeless population and those living in direct-access hostels. Homelessness is also associated with higher rates of personality disorder, self-harm and attempted suicide.

The estimated number of homeless people in Nottinghamshire at any one point is outlined below in the iceberg diagram.

Figure 3: Estimate of homeless population in Nottinghamshire at any one point in time



Adapted from Shelter https://twitter.com/shelter/status/1092147212069556225

Key JSNA recommendations include:

- The need and for strong governance and leadership at a strategic level to develop the local system to enable better health outcomes for those at risk of homeless and to prevent homelessness, including setting up a Homelessness Reduction Board
- Developing a care pathway for critical time intervention with specific high-risk groups, the overall healthcare offer and identifying and implementing strategies for opportunistic screening and treatment for communicable diseases.
- To align funding to evidence based primary prevention and to strengthen effectiveness of Street Outreach and Rapid Rehousing Pathway initiatives.

- To embed evidence based psychological approaches to managing and recovering from complex trauma into front line delivery of service, including Psychologically Informed Environments and trauma informed services (ReACH)

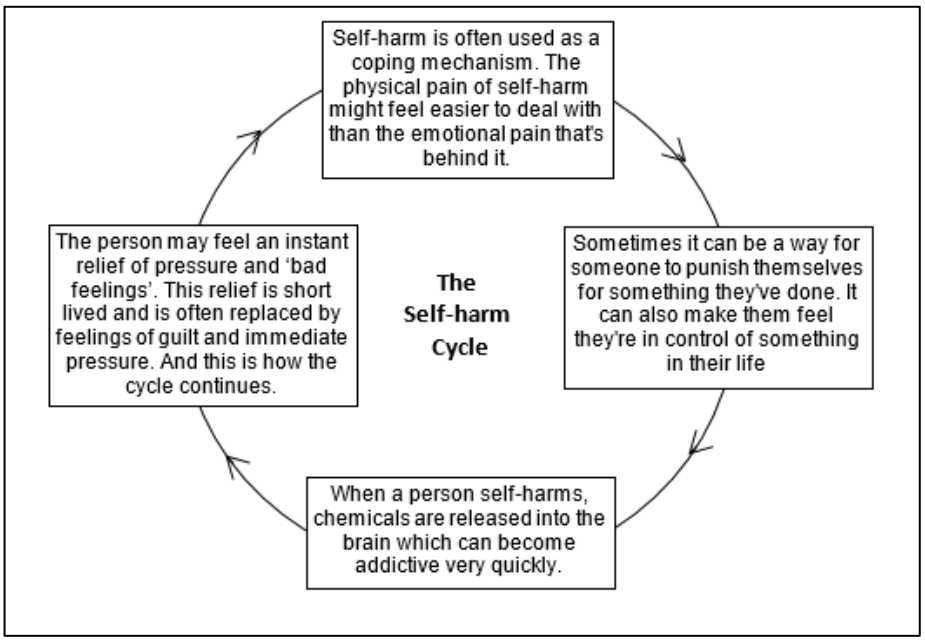
Click here to access the full JSNA chapter for Health and Homelessness

Self-harm (2019)

Self-harm is defined as an intentional act of self-poisoning or self-injury irrespective of the type of motivation or degree of suicidal intent. It covers a wide spectrum of behaviours which include: self-cutting, burning, banging and punching, self-poisoning and hair-pulling (trichotillomania). Self-harm is a behaviour rather than a primary or mental health disorder. It is an indicator of underlying emotional/psychological distress. Self-harm is not necessarily a suicide attempt, it may be a coping mechanism for dealing with intolerable situations.

Self-harm is cyclical in nature and usually occurs in the context of multiple life problems. It is likely that there are both psychological and physiological processes and factors preceding and following the behaviour that help to mask the pain associated with physical injury.

Figure 1: The self-harm cycle



Source: Adapted from NSPCC self-harm cycle

It has been reported that the UK has the highest self-harm rate in young people of any country in Europe, with a rate of 400 per 100,000 population. Self-harm is more common in females than males with a girl to boy ratio of as much as 5 or 6 to 1 between ages 12 to 15 years. Not everyone who self-harms will die from suicide and not every suicide is preceded by an act of non-fatal self-harm, however research suggests that self-harm increases the probability of someone dying by suicide within 12 months, by between 50 and 100 times above the rest of the population, with adults over 60 years particularly at risk.

Between 2011 to 2015, there were approximately 220 recorded actual self-harm hospital events in young people between the ages of 12 to 17 years in Nottinghamshire. In addition we have estimated that there may potentially be over 2,500 12 to 17 year olds in Nottinghamshire who self-harm and are unknown to clinical services. Public Health Outcomes indicators indicate that Nottinghamshire may have higher total rates of hospital admissions relating to self-harm compared to England in 2016/17 for 10 to 14 year olds and similar rates for 15 to 19 year olds and 20 to 24 year olds. These rate should be treated with caution however due to hospital coding issues. Between 2013 and 2016, Nottinghamshire Healthcare Foundation Trust recorded 2,141 self-harm adult referrals.

The true picture of local needs is likely to be underestimated due to the incompleteness and inconsistency of data and the largely unreported nature of self-harm in the community.

Key JSNA recommendations include:

- Focusing on reducing emotional distress/increasing resilience in children and young people and promoting a community assets approach to support improved population emotional health and wellbeing
- Developing trauma/ACE informed practice across the health, care and education system and youth services
- Improving data quality and recording in commissioned services
- Developing system wide multi-agency (all ages) co-ordinated pathway/s recognising self-harm as a primary presenting need

Click here to access the JSNA chapter for Self-harm

CHILDREN AND YOUNG PEOPLE

We know that, on average, children and young people in Nottinghamshire often do as well as those in similar places elsewhere. However, there are large inequalities across the County, and some children and young people face greater disadvantages. National and local data shows that children and young people living in poverty are disadvantaged in many ways.

In Nottinghamshire, the localities where there are higher numbers of families on low incomes are often those localities where children and young people are less healthy, do less well at school and are more likely to need the support of Children's Social Care. Some other children and young people may face particular disadvantages and so need more support. This includes disabled children and children in local authority care.

Priorities in our Children, Young People and Families Plan are based on evidence from our Joint Strategic Needs Assessment and are aimed at reducing inequalities in health and wellbeing across the County.

Children and young people comprised around 22% of the population in 2017 (181,100 aged 0-19 years). This population is expected to show a moderate increase of 7% by 2027 with the greatest increases in Broxtowe (11%) and Gedling (10%). 12.0% of school children are from a minority ethnic group.

Click here to open the JSNA for Children and Young People

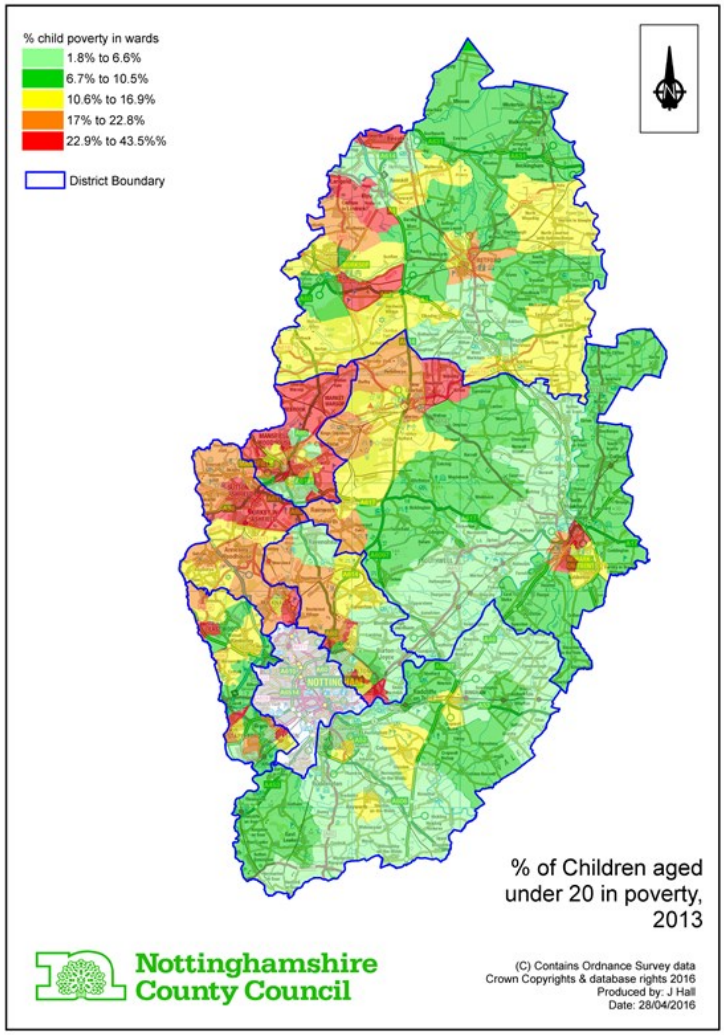
Child Poverty (2016)

Growing up in poverty can affect every area of a child's development and future life chances. We know that the most disadvantaged children are less likely to achieve their academic potential, secure employment and gain a sense of future financial security. They are more likely to suffer from poor health, live in poor quality housing and unsafe environments. Breaking the cycle of poverty is therefore a priority for Nottinghamshire; and work to reduce child poverty levels and reduce the impact of poverty is critical to achieve a wide range of positive outcomes for children, their families and future generations.

In 2014 across Nottinghamshire 24,565 children and young people aged 0-15 were identified as living in poverty, which equates to 17.7% of the 0-15 population. There are fewer children in poverty in Nottinghamshire compared to England (19.1%) and the East Midlands (20.1%).

The spread of child poverty across Nottinghamshire is not equal with greater levels of child poverty located in central and northern districts. There are 12 'hot spot' wards in Nottinghamshire where child poverty exceeds 30%. Nine of these are located in Mansfield.

Figure 1: 2013 % of children living in poverty across Nottinghamshire wards.



Click here to open the JSNA for Children and Young People – Child Poverty

1001 days: From conception to age 2 (2019)

The first 1001 days - from conception to the age of 2, are widely recognised as a critical period of development. This is because the earliest experiences, starting in pregnancy, shape a baby's brain development: during the first two years of life the brain develops a remarkable capacity to absorb information, and adapt to its surroundings, and by 2 years of age the brain will be about 80% of its adult size.

A child's physical, social, emotional, and brain development from conception to the age of 2 is shaped by these key factors:

- good maternal mental health
- parent-infant interaction: sensitive and attuned parents
- secure attachment
- healthy pregnancies and the protection and promotion of health in infancy
- quality of the home learning environment

A parent's ability to support their child's health and development can be adversely affected by a range of issues, including:

- domestic abuse
- maternal stress
- level of income
- teenage parenthood
- their own adverse childhood experiences
- having multiple vulnerabilities or complex social needs

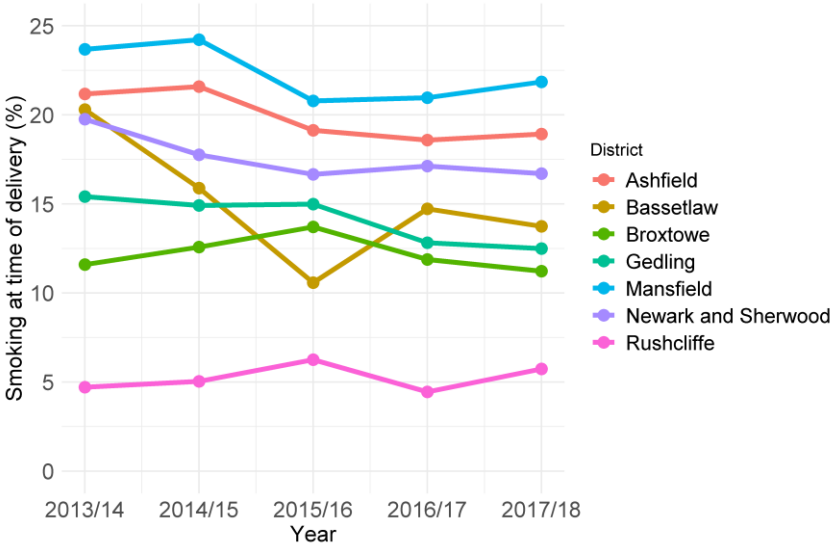
Children and young people make up around 23% of the population in Nottinghamshire and in general, outcomes for children and young people are similar to the national average, however, there are large disparities within the county with some facing greater disadvantage than others.

In Nottinghamshire the birth rate, as measured by the General Fertility Rate (GFR), has fluctuated slightly but overall remained constant, at 61.3 births per 1,000 in both 2013 and 2016. The birth rate is below the national average which in 2016 was 62.5 per 1,000 population. Based on Office of National Statistics data from 2016, the birth rate in Nottinghamshire is projected to increase by 2.3% between 2019 and 2023 from 8,700 to 8,900 births per year. The still birth rate in Nottinghamshire, pooled across 2015-17, was 3.6,

lower than, but not significantly different to the England average of 4.3. In recent years still birth rates in England have fallen, however, they remain the highest in Europe and therefore a key priority to tackle.

Smoking in pregnancy is of particular concern in Nottinghamshire as 14.7% of mothers are smokers when their babies are delivered compared with 10.8% nationally (2017-18), with more pregnant women smoking in areas of greater need such as Mansfield and Ashfield.

Figure 1: Smoking at the time of delivery



Source: Public Health Outcomes Framework

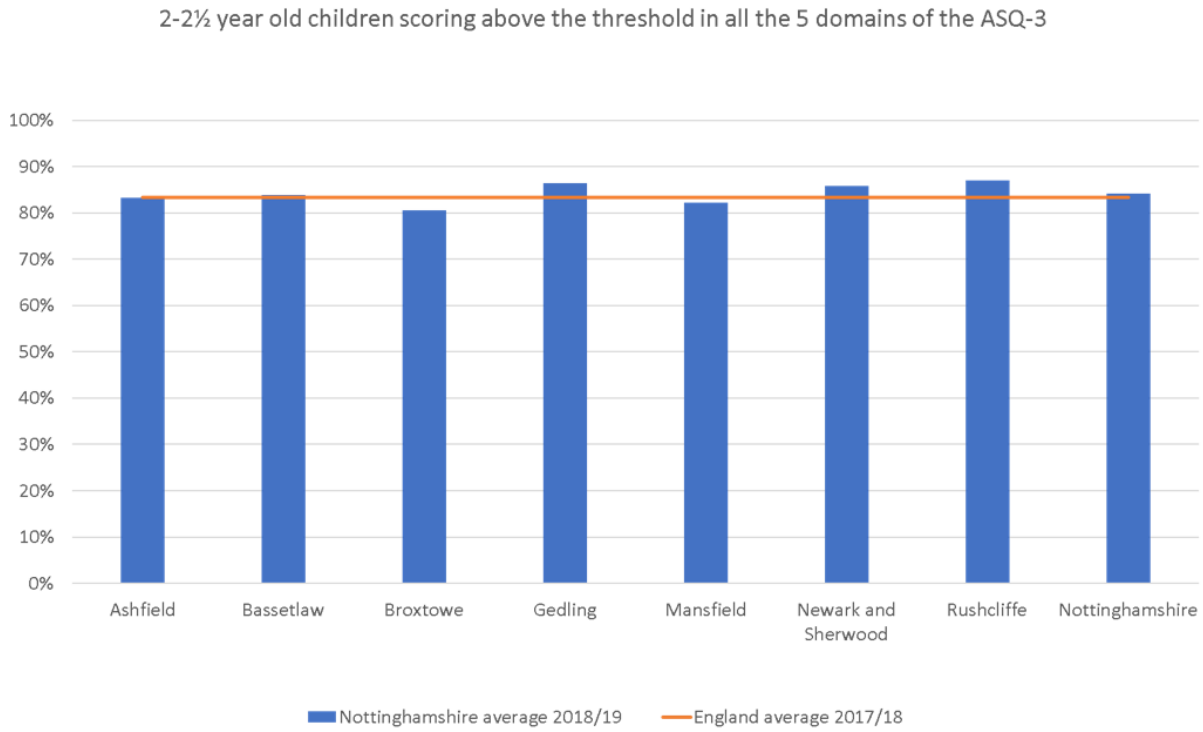
Prevalence of breastfeeding in Nottinghamshire at 6-8 weeks in 2017-18 was slightly lower than the England average at 38.8% compared to 42.7%. Ashfield (32%), Bassetlaw (32%) and Mansfield (34%) have a vastly lower prevalence of breastfeeding at 6-8 weeks than elsewhere in the county, with Newark and Sherwood (40%) also significantly lower.

In Nottinghamshire, vaccine coverage at ages 12 months and 24 months exceeds the England average for all vaccines, though there is variation by CCG.

An important developmental milestone in every child's life is the formation of an attachment bond to the parent. Secure attachment relationships have a long-lasting impact on development, the ability to learn, capacity to regulate emotions and form satisfying relationships.

The evidence-based Ages and Stages Questionnaire is used at age 2 to 2.5 years to determine whether children are meeting the expected levels of development in five key domains: communications, gross motor skills, fine motor skills, problem solving and personal-social skills. In 2018-19 84% of children met the expected level of development in all five areas. Of the 16% of children not meeting the expected level of development in all five areas, some children will not meet the expected level in more than one area. The primary areas of need are communication, with 10% of children not meeting the expected level of development, followed by gross motor at around 7%, and personal-social at around 5%.

Figure 1: Percentage of children meeting a good level of development at age 2-2.5



Source: Nottinghamshire Healthcare NHS Foundation Trust

The JSNA recommendations fall under four key areas:

- The system including establishing a multi-agency, strategic Best Start Group and accompanying strategy to ensure every child in Nottinghamshire has the best possible start in life, beginning in pregnancy and across their early years.
- Health promotion
- Maternal, mental health, attachment and parent-infant interaction
- Child development

Click here to open the 1001 Days: From conception to age two chapter (2019)

Clink to child health profile for Nottinghamshire – PHE fingertips

Early Years and School Readiness (2019)

How we treat young children shapes their lives – and ultimately our society. If we get the early years right, we pave the way for a lifetime of achievement. Despite early education being better than it has ever been, it is still not benefiting our poorest children compared to their peers.

School readiness is measured by the level of development of a child when they reach Foundation Stage at school. A measure called the good level of development (GLD) is used. A child with a GLD at the Early Years Foundation Stage (from birth to five years old) will have reached the expected level in all the prime areas of learning. School readiness is a strong indicator of how prepared a child is to succeed in school cognitively, socially and emotionally.

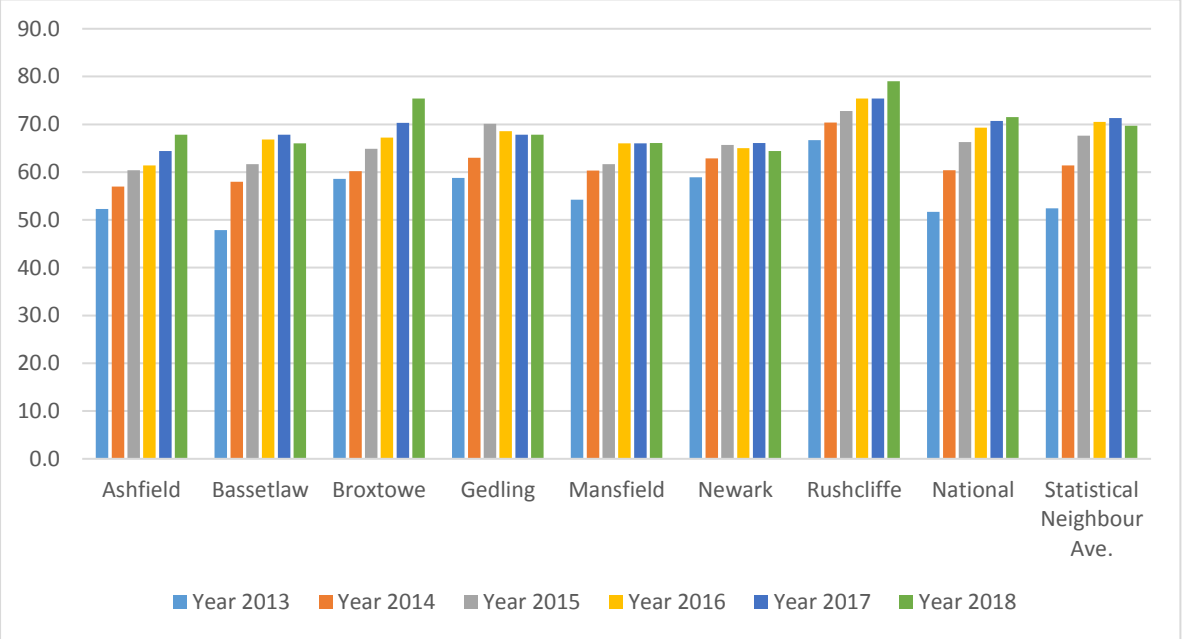
Educational attainment is one of the main markers for wellbeing through the life course making it extremely important that no child is left behind at the beginning of their school life.

Some groups at increased risk of poor educational outcomes are:

- Families living in poverty
- Children and families known to Social Care and those Looked After
- Children with SEND
- Teenage Mothers and their Children
- Children with English as an Additional Language (EAL)
- Some Black and Minority Ethnic Groups
- White British boys
- Children with language delay
- Children and parents affected by Adverse Childhood Experiences (ACEs)
- Gypsy, Roma and Traveller (GRT) Families
- Summer born children
- Children with speech, language and communication needs
- Children affected by Post Natal Depression
- Children affected by Domestic Abuse
- Children with poor sleep routines

In 2018, there was a small increase in the percentage of children who achieved a good level of development both nationally and locally. However, in 2018, 69.7% of Nottinghamshire pupils achieved a good level of development, compared to 71.5% across England. Nottinghamshire also performs poorly in comparison with statistically similar Local Authorities. Progress in Nottinghamshire is slow and despite improvements in many other outcome measures; addressing school readiness remains a challenge and therefore a local priority.

Figure 1: % Children Achieving a Good Level of Development – district progress 2013-2018



Data Source: Nottinghamshire County Council Early Years Foundation Stage results 2018

Children from low income households do less well than their peers. In 2018, only 49.9% of children eligible for free school meals in Nottinghamshire achieved a good level of development. Around 25% are unable to communicate effectively, control their own feelings

and impulses of make sense of the world around them to ensure they are ready to learn. Furthermore, many have reduced opportunities for home learning and parental engagement.

Some key groups susceptible to poorer educational outcomes in Nottinghamshire are:

Boys - In 2018, 76.8% of girls achieved a good level of development compared to 62.8% for boys. Analysis of the Early Years Foundation score by gender identifies a 14% point gap between boys and girls. This gap has narrowed from 15.6% in 2017.

Summer born – in 2018, 80% of all children across Nottinghamshire born in the autumn term achieved a good level of development compared to 59% of children born in the summer term. The lowest consistently performing group across the early years foundation stage are boys born in the summer term. Summer born boys perform less well with 51.1% achieving a good level of development compared to 71.2% for autumn born boys.

Ethnicity – 65.9% of Children in Nottinghamshire from BME groups achieved a good level of development compared to 70.9% for non BME groups, and the attainment gap is narrowing.

English as an Additional Language – in 2018, 56.2% of children with English as an Additional Language (EAL) achieved a good level of development, compared with 71% of non EAL children.

Early Education and Special Educational Needs and Disability - In 2018 in Nottinghamshire, 16.4% of SEN children achieved a good level of development compared to 72.9% for their peers; this is also reflected nationally.

Key JSNA recommendations include:

- the need to engage families much earlier
- to target resources to children and families most at risk of poor development
- to better engage parents in home learning and to improve parenting skills
- to increase the skills of early years practitioners
- to increase take up of funded high-quality early education by low income groups.

Click here to access the full JSNA chapter for Early Years and School Readiness

Emotional and Mental Health of CYP (2021)

One in ten children aged 5-16 years has a clinically diagnosable mental health problem and, of adults with long-term mental health problems, half will have experienced their first symptoms before the age of 14. Self-harming and substance abuse are known to be much more common in children and young people with mental health disorders – with ten per cent of 15-16-year olds having self-harmed. Failure to treat mental health disorders in children can have a devastating impact on their future, resulting in reduced job and life expectations.

The factors that affect mental and emotional health are complex, ranging from individual biological factors to complex societal issues. Certain groups of children and young people are at higher risk of developing mental health problems e.g. those with learning disability, Special Educational Needs (SEN), physical illness, homeless, lesbian, Gay, Bisexual, and Transgender (LGBT), young offenders, looked after children and children of prisoners.

Information on risk factors for mental and emotional health indicates that in Nottinghamshire most are in line with the national average and are stable or decreasing (click here to access child health profile).

The hospital admission rate for mental health conditions in young people aged under 18 years has increased in Nottinghamshire over the past 5 years. In 2015/16 there were 641 admissions as a result of self-harm for young people aged 10-24 years in Nottinghamshire. These figures are likely to underestimate the true burden of self-harm among children and young people, as the data excludes those individuals seen in primary care or within Child and Adolescent Mental Health Services (CAMHS). Information from local CAMHS service providers indicates an increase in the number and complexity of referrals for self-harm.

Also see the section in this report on suicide prevention.

Nottinghamshire has developed strong, evidence-based strategies to support CYP, particularly through improving access to mental health services. These include the recent introduction of a policy to allow self-referrals, Child and Adolescent Mental Health Services (CAMHS), the Avoidant Restrictive Food Intake Disorder (ARFID) pilot in the CAMHS Eating Disorder Service, and two pilots specific to the youth justice cohort which include the addition of speech and language therapy and clinical psychology. In addition, there has been significant investment in the workforce across a wide range of public sector roles. However, despite the good progress there are still significant unmet needs and gaps in both the understanding of CYP mental health and services provided in Nottinghamshire.

During the COVID-19 lockdown period between March and June 2020, there was a significant reduction in referrals to mental health services, partly due to school closures and restrictions on GP services, but also related to face to face work ceasing for all but the most vulnerable. Referrals have increased since then, but there is further work being undertaken to understand the impact of the reduction of referrals on CYP mental health and the impact of the reduction in face to face services.

Unmet needs and gaps

The **1001 days JSNA** identified the need to better identify and support women with mild to moderate mental health needs and those with parent-infant interaction difficulties. National prevalence data suggests that 5.5% of 2- 4-year olds have mental health needs but there are currently no dedicated infant mental health services commissioned in the County.

The **Self Harm JSNA** (2019) identifies that there is a gap in support for people of all ages who self-harm or who are at risk of self-harm, but do not meet acceptance criteria for clinical/mental health services.

Reductions in funding to early intervention services across the system have resulted in a reduction of universal provision and of parenting support, particularly around the skills they need to help support the positive mental and emotional development of their children.

Additionally, whilst there has been progress made to improve transition from youth to adult services, the question of the quality of transition remains an issue for our young adult service users, and there is potential to tackle this through the development of a comprehensive pathway for those aged 0-25.

More emphasis is needed on targeting inequalities seen in mental health and wellbeing particularly for looked after children, young carers, children with a special educational needs and disabilities and Lesbian Gay Bisexual Transgender, queer (or questioning) and others (LGBTQ+) young people.

The precise prevalence of mental health and wellbeing in CYP in Nottinghamshire is, however, still unknown. Data on the prevalence has been extrapolated based on NHS Digital estimates. Since April 2018 all NHS commissioned providers have been developing their systems to be able to provide service level data to the Mental Health Services Data Set (MHSDS). Therefore, we are now in a better position to understand local need and further develop services to meet this need. Further work is also required to understand the impact of inequalities within Nottinghamshire.

There are also gaps around mental health support for children and young people in schools. Whilst there is additional investment in Mental Health Support Teams for Schools, the national ambition for rollout is coverage of 25% of schools by 2023/24. This means that a significant number of schools in Nottinghamshire will not have access to these teams.

Key JSNA recommendations include:

- Review access to services by minority groups.
- ensure services meet the needs of the 0-25 age group.
- Expand parent education and training programmes to support preventative work around mental health and wellbeing.
- Ensure that mental health and emotional wellbeing are considered in all policies relating to both staff, service users and pupils.
- Embed a whole family approach to tackling children and young people's mental health needs.

Click here to access the full JSNA chapter for Emotional and Mental Health of Children and Young People

Avoidable injuries in children and young people (2019)

Avoidable injuries refer to injury that occurs as a result of 'accidents', whereby the injury is not deliberately caused and could have been avoided. Avoidable injuries tend to occur either in the home, on the roads, or during leisure activities. In children and young people (CYP), avoidable injuries are a serious public health issue and a leading cause of death and hospital admission in the United Kingdom. Avoidable injuries in the home for under 5's are most commonly, choking, suffocation and strangling, falls, poisoning, burns and scalds and drowning.

There is an association between increasing deprivation and likelihood of hospital admission. Children and young people whose parents have never worked or are long-term unemployed have injury death rates 13 times higher than those whose parents are managers/professionals. Other risk factors are children who have a disability or impairment (physical or learning), children from some minority ethnic groups and those who live in accommodation which potentially puts them at increased risk.

The Department of Health calculated the average cost of A&E attendances for under 5's to be £140m per year, with the cost to society being £7.4 billion. There are long-term impacts associated with avoidable injuries, with data suggesting that those who have suffered injury in childhood are at greater risk of physical disability, psychological morbidity, cognitive or social impairment, lower educational achievement and poorer employment prospects.

Nottinghamshire has had significantly lower hospital admissions rates than the England average for the 0-4 and 0-14 age bands since 2010/11. Rates for 15-24 year olds have been statistically similar or lower that the England average rate during this time period. There are some geographical differences, with districts in the North of the County having higher rates of admission to districts in the south.

Since 2009 there has been a decline in killed or seriously injured (KSI) for 0-15 year olds similar to that of the England rate. Ashfield, however has the highest rate of KSI in the County and is significantly higher than regional and national rates. Nottinghamshire KSI rates for pedestrians are significantly higher than for other modes of transport.

Key JSNA recommendations include:

- Strategic leadership and coordination between agencies contributing to preventing avoidable injuries for children in the home, on the roads and in leisure time which includes delivering a range of interventions
- Interventions must consider reducing inequalities
- Consideration for how best to incorporate local views in future strategies
- Addressing unavoidable injuries in the home through:
    - Implementing evidence based, standardised, age appropriate home safety messages across the system
    - Re-establishment of home safety sub group of the Children's Avoidable Injury Strategic Group
- Addressing unavoidable injuries on the road through continuing to support the delivery of a range of local interventions e.g. road safety education programme

- Development of a Leisure Safety Action plan pulling together established working groups

Click here to access the JSNA chapter for avoidable injuries in children and young people

Youth Offenders (2014)

Young people aged 10-17 who find themselves in contact with the Youth Justice Service (YJS) and accessing Youth Offending Services are known to experience poorer health and consequent increased complex health needs than young people in the wider non-offending population. Their health needs are often missed at an earlier stage, despite many of these young people being known to children's social care, and despite a sharp incline in offending behaviour during adolescence, health services and criminal justice responses often fail to reflect these changes. Poor self-reported health, low body mass index, and mental health disorder co-morbidities are much more common amongst this cohort, and medical interventions are vital to mitigate against worsening health outcomes.

The national strategy *Healthy Lives, Brighter Future* (DH, 2009b) referenced a number of risk factors that affect young people who enter the criminal justice system, including

- Three-quarters have a history of temporary or permanent exclusion from school
- Approximately half have problems with peer and family relationships
- Two-thirds come from homes where the family structure has broken down
- A third have severe or complex mental health problems
- A quarter have learning disabilities and 30% have a physical disability, whilst over half have communication, speech, language and literacy problems.
- A third have been looked after by the Local Authority
- A high proportion have histories that include high levels of smoking, alcohol and illegal drug misuse and amongst this group, whilst high levels of health problems including sexually transmitted infections, dental health problems and blood-borne virus infections exist.

The total number of young offenders in Nottinghamshire fell between 2010/11 and 2012/13; in 2011/12 just over three quarters of these were male, whilst three quarters were over the age of 15. Ninety four percent of those young offenders in 2011/12 were white.

The 'recent use' of a number of drugs, at the point of entering the YJS, has increased between 2011 and 2013. Alcohol, cannabis and tobacco are the substances most commonly used by the cohort. There has been a steady increase in the proportion of young people entering the local YJS who consider their daily functioning to be significantly affected by past, current and future concerns. This demonstrates the increased mental health needs of young people amongst this cohort.

Key JSNA recommendations:

- Develop opportunities to undertake preventative work and engagement with groups including looked after children and excluded children, with regard to both health

provision and wider social provision including alternative educational or employment provision.

- Develop an electronic information sharing system to enable the secure and efficient sharing of patient information between targeted community health services.
- Establish protocols for the sharing of information between community health services and custodial settings.
- Develop strategies to increase the capacity of the clinical nurse specialist to ensure that the physical health needs of young offenders are met.

Click here to access the JSNA chapter for Youth Offenders

Teenage pregnancy (2017)

Click here to access the 2017 draft chapter.

ADULTS AND VULNERABLE GROUPS

There are a significant number of adults in the County who have diverse needs and may require considerable input from health and social care services. This group includes those with mental health conditions, long term conditions, the vulnerably housed, as well as those with physical and/or sensory impairments or learning disabilities.

The number of adults in these groups is increasing. For instance, we know homelessness is increasing, as well as the incidence of learning disability (as well as increased life expectancy of those with learning disabilities). The number of carers has increased by 7,517 between the 2001 and 2011 Census. The health and wellbeing of carers is important as this group provide an essential informal support system to local health and social care services and are also more likely to have increased health needs of their own.

Mental health (adults and older people, 2017)

Mental health is defined by the World Health Organisation (WHO) as a "state of wellbeing in which the individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community." Mental health is fundamental to our physical health, our relationships, our education and our work. There is no health without mental health.

Mental health problems[±] impact on individuals, families, communities and society as a whole. Mental illness is an important cause and consequence of social inequality. The causes and influences of mental health problems are wide ranging and interacting. They are often associated with adverse events in our lives and other circumstances, such as poverty, unemployment, levels of supportive networks, levels of education and the broader social environment.

[±] The phrase 'mental health problem' mirrors the terminology used in the National Strategy.

Mental health problems are extremely common. It is widely reported that one in four people will experience mental health problems each year[vi] and up to one in two people at some point in their lives.

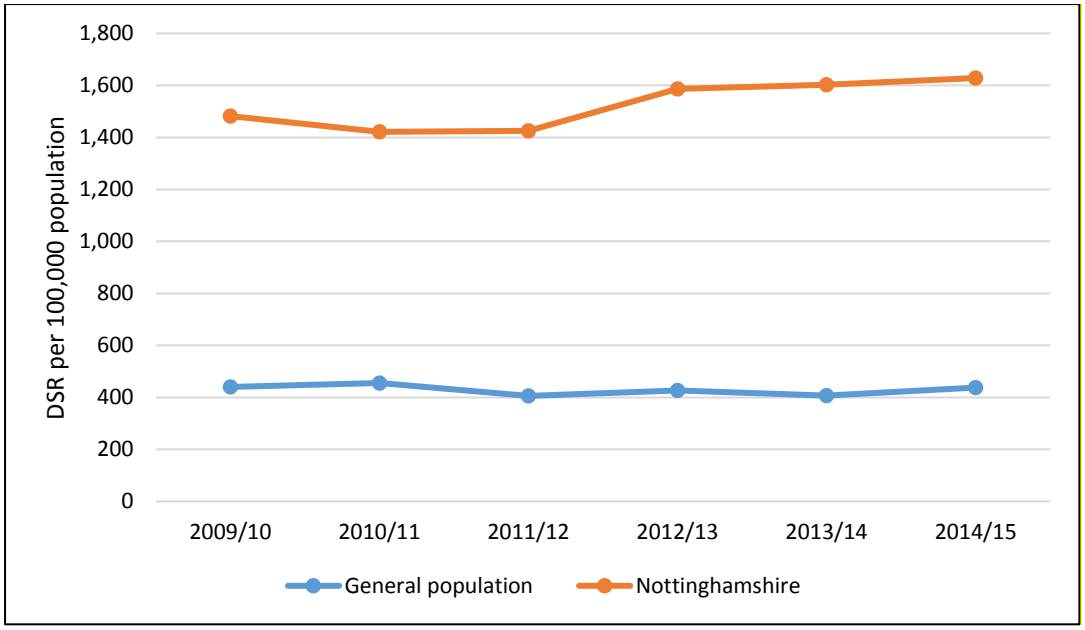
Self-reported wellbeing in Nottinghamshire is similar to East Midlands and England with 19% of people reporting high levels of anxiety, 8% of people reporting low happiness and 4% of people reporting low levels of satisfaction and worthwhile.

It is estimated that 91,155 adults in Nottinghamshire are estimated to have a common mental health disorder (CMD -excluding Post Traumatic Stress and Eating Disorders). Mixed anxiety and depression are the most prevalent of the CMD. There are also estimated to be approximately 2,236 adults with a severe mental illness.

Mental health and physical health are inextricably linked. One in three of the 100,000 people who die prematurely each year in England have a mental illness: On average, men with mental health problems die 20 years earlier, and women die 15 years earlier, than the general population. The majority of deaths in this group arises largely from preventable and treatable conditions associated with modifiable risk factors such as smoking, obesity, substance misuse, poor diet and a lack of physical activity.

Figure 15 shows the estimates of the excess early deaths in people with mental health problems. From 2009 there has been an increase in the Nottinghamshire rate for excess under 75 mortality in adults, with a DSR ranging from 1,482 per 100,000 population in 2009/10 to 1,628 per 100,000 population in 2014/15. This means that in 2014/15 people known to mental health services in Nottinghamshire are over 3.8 times more likely to die before the age of 75 than the general population.

Figure 1: Excess premature mortality in adults aged with serious mental illness: Directly Standardised Mortality Rate <75 years, Nottinghamshire and General Population, 2009-2014



Source: Data.gov.uk

Key recommendations include:

- **Mental health promotion**: promotion of physical health for those with a mental illness, improve mental health knowledge and skills to build social and emotional resilience.
- **Mental health prevention**: work-based mental wellbeing programmes, target higher risk groups such as homeless people and older people and offer holistic packages of support for physical, mental and social care.
- **Mental health treatment**: improve physical health support for those with severe mental illness and to conduct a health equity audit to assess whether mental health services are targeting higher risk groups.

Click here to open the JSNA chapter on mental health (adults and older people)

Click here to access the Nottinghamshire Insight mental health theme page

Suicide prevention (2016)

The impact of every suicide can be devastating – economically, psychologically and spiritually – for all affected. The cost of a completed suicide for someone of working age in the UK exceeds £1.6 million. Suicidal thoughts at some point in a person's life are relatively common: in 2007 16.7% had thought about suicide, 5.6% reported attempting suicide and 4.9% had harmed themselves without suicidal intent.

Death rates from suicide and undetermined injury fell both nationally and locally between 2004-06 and 2009-11 but have since increased. In 2013-2015 there were 200 suicides across Nottinghamshire.

National research has identified that the following groups are at high risk of suicide:

- Men aged 35-59 years
- People in the care of mental health services, including inpatients
- People with a history of self-harm, untreated depression, misuse of alcohol, facing economic difficulties, going through divorce or separation, have a history of sexual or domestic violence or have long-term physical illnesses
- People in contact with the criminal justice system (police, probation, the courts and prisons)
- Specific occupational groups, such as doctors, nurses, veterinary workers, farmers and agricultural workers as well as men aged 24 years and younger who have left the Armed Forces
- Children and Young People who have experience abuse and/or neglect
- Lesbian, Gay, Bisexual or Transgender people
- Older people aged 65+ experiencing social isolation and loneliness

Groups with a higher risk of suicide in Nottinghamshire reflect the national picture, for example men aged 35-64 and people aged 65+ are at higher risk locally. The rate of emergency admissions for intentional self-harm was lower in Nottinghamshire (175 per 100,000) compared with England (193 per 100,000) in 2014-2015. Local data is not available on the all higher risk suicide groups for Nottinghamshire.

Key recommendations include: improving information around suicide in order to identify local risk factors, rapidly identify suicide hotspots and enable suicide investigations; Improve information and communication regarding suicide prevention; suicide prevention training programme; commission mental health services aimed at early identification, intervention and crisis support.

Click here to access the Nottinghamshire Insight mental health theme page

Click here to open the JSNA chapter on suicide prevention

Autism (2019)

Autism is “a lifelong neurodevelopmental condition, the core features of which are persistent difficulties in social interaction and communication and the presence of stereotypical (rigid and repetitive) behaviours, resistance to change or restricted interests”. The way that autism is expressed in individual people differs at different stages of life. There is strong evidence to suggest that autism can be caused by a variety of physical factors, all of which affect brain development. It is not caused by a person's upbringing or their social circumstances and is not the fault of the individual with the condition. Five times as many males as females are diagnosed with autism. Research suggests that autism spectrum disorders are under-diagnosed in females, and therefore the male to female ratio of those who are on the autism spectrum may be closer than the 5:1 ratio.

Everyone with autism experiences difficulties across social communication and interaction and restricted, repetitive patterns of behaviour, interests or activities with varying severity and presentation. Accordingly, some people with autism are able to live relatively ‘unsupported’ lives while others need a lifetime of specialist support. Other effects may be:

- Limited language skills and/or difficulty understanding
- Unusually low or high sensitivity in one or more senses

- Epilepsy, Attention Deficit Hyperactivity Disorder (ADHD), gastro-intestinal problems, mental health issues, motor difficulties, sensory issues and sleep problems in children and young people.

Given these effects having the appropriate support and services in place will have a positive effect upon education, employment, a healthy lifestyle, independence and future relationships. This in turn will have a substantial impact upon overall wellbeing.

Based on the application of national prevalence rates to the local population estimated figures for the number of people with Autism Spectrum Disorders (ASD) across the county are shown in the table below.

Table 2: Estimated prevalence of autistic spectrum disorders in Nottinghamshire

District	Males	Females	Total
Ashfield	862	102	964
Bassetlaw	819	94	913
Broxtowe	813	93	906
Gedling	812	98	910
Mansfield	747	87	834
Newark and Sherwood	844	98	942
Rushcliffe	810	95	905
Total	5715	667	6382

Source: PANSI v.10 and POPPI v. 10

Key JSNA recommendations include:

- Create a multi-agency task and finish group for autism
- At transition stage, build support, resources and employer capacity for people with ASD and their families.
- Build community capacity and responsibility to support people with autism along with building employment opportunities for individuals with autism
- Providing appropriate training for staff and volunteers and attempting to monitor and evaluate training within all agencies
- Address the medical and lifestyle issues which result in poorer health outcomes and increased mortality
- Investigate how diagnostics and the autism pathway could be improved
- Set up and improve data collection across agencies around autism

Click here to access the JSNA chapter for Autism

Learning Disabilities (2019)

A learning disability affects the way a person learns new things, understands information and how they communicate. Valuing People defined learning disability as:

- a significantly reduced ability to understand new or complex information, to learn new skills (impaired intelligence), with;
- a reduced ability to cope independently (impaired social functioning) which started before adulthood with a lasting effect on development

Evidence shows that more males are born with learning disabilities, with estimates suggesting the ratio of people with learning disabilities is approximately 60% male and 40% female.

People with learning disabilities are among the most vulnerable in our society, generally having greater and more complex health needs than the general population, and often these needs are not identified or treated. Research shows life expectancy of people with learning disabilities is increasing, but is lower than the general population. People with a learning disability are at increased risk of stigma, discrimination, and violent physical contact in the communities they live, making them more prone to lower self-confidence and increased vulnerability.

It is estimated that in 2018 approximately 16,000 adults in Nottinghamshire were predicted to have a learning disability. This is expected to increase from 15,227 in 2017 to 16,600 in 2035. The largest proportionate increase is predicted to be in those aged 65 and over.

Nottinghamshire GP records show that breast cancer screening rates remain low for people with a learning disability, in comparison with adults with no recorded learning disability. For those eligible, 58.5% received a GP health check which exceeds the regional and national averages. There are differences at CCG level, with Bassetlaw and Nottingham West reporting the highest level of checks. Type 2 diabetes rates remain higher for people with a learning disability.

In 2018 there were 2,178 adults with a learning disability receiving a support package from Adult Social Care services. Employment figures in Nottinghamshire for adults with a learning disability (2.7%) are below regional and national comparisons.

Key JSNA recommendations include:

- Ensuring that future strategies across a range of multi-disciplinary areas take into account the current and future needs of people with learning disabilities and that there are accessible health promotion and prevention initiatives
- Ensuring health and care services are joined up to support people with learning disabilities, particularly during transitional periods between services
- Involving a range of stakeholders in the co-design and co-production of provision and replicating where possible best practice identified within the Transforming Care Partnership
- Explore methods to increase the uptake of learning disability health checks and further develop the LeDeR programme
- Working towards maximising employment opportunities in Nottinghamshire.

Click here to access the JSNA chapter for Learning Disabilities

Carers (2016)

Carers look after family, partners or friends in need of help because they are ill, frail or have a disability. The care they provide is unpaid. Most people have caring responsibilities at some stage in their lives: 1 in 8 adults provide care nationally[vii]. Both the predicted demographic change as a result of people living longer and with long term health conditions and the move towards providing care and support at home and in the community are anticipated to have an impact on carers.

People with caring responsibilities experience a range of health and wellbeing issues including mental and physical health problems, social isolation and lowered social functioning, and increased mortality as a result of mental or emotional distress, especially in more elderly carers.

The National Carers Strategy 2010 provides a vision for carers with an expectation that carers will have access to support services they need; have a life of their own alongside their caring role; stay mentally and physically well; and children and young people will be protected from inappropriate caring. The Care Act 2014 provides an ideal opportunity to capitalise on the new focus of working more closely with carers and the responsibility placed on Local Authorities to undertake a Carer's Assessment which will identify whether the carer has support needs.

In Nottinghamshire there has been a significant shift in the way carers are identified and supported. There has been a move away from all carers being assessed by Social Care staff at home, towards a more proactive and cost effective approach, which includes more choice for the carer: telephone and on-line carer assessments; community based carer clinics. Carers can also contact the Nottinghamshire Carers Hub for free information, advice and support.

The 2011 Census identified an increase in the number of carers in the last decade by 7,517 across Nottinghamshire County. There are now an estimated 57,426 carers providing between 1-19 hours of care per week and the number of carers providing over 50 hours of care per week reached 21,680 in 2011.

In 2015/16 there were 4735 carers assessed in Nottinghamshire, 319 of which were aged under 18 years. 74% of those assessed were given a Carers Personal Budget. The number of carer assessments carried out has not increased notably in the past 3 years. The Nottinghamshire Carers Hub have been in contact with 1,245 carers from August 2015-March 2016 with most referrals to the service coming from the voluntary sector. It is likely, however, that there are existing carers in Nottinghamshire with unmet needs.

Click here to open the JSNA on Carers.

Please note the JSNA chapter was written in 2014 but the above section includes some updated data.

Domestic abuse (2019)

Domestic abuse is defined as any incident or pattern of incidents of controlling, coercive or threatening behaviour, violence or abuse between those aged 16 or over who are or have been intimate partners or family members regardless of gender or sexuality. This can encompass but is not limited to the following types of abuse: psychological, physical, sexual, financial and emotional abuse. The definition also includes so called 'honour- based' abuse (HBA), which includes female genital mutilation (FGM) and forced marriage (FM).

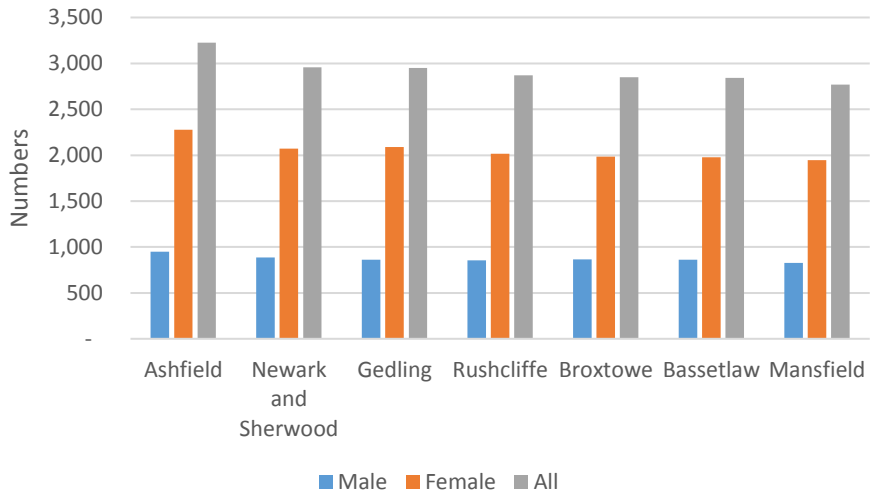
Whilst men do experience domestic abuse, it is a gendered crime, with women much more likely to experience abuse. An estimated 4.6m women (28% of the adult population) have experienced domestic abuse at some point since the age of 16.

Domestic abuse has a significant impact on health and wellbeing including physical injury and in extreme cases homicide, survivors are at increased risk of chronic health problems including gynaecological disorders, chronic pain and gastro-intestinal disorders. Women who have experienced intimate partner violence were almost twice as likely to experience depression and problem drinking and have approximately twice the level of usage of general medical services and between three and eight times the level of usage of mental health services. Domestic abuse is also the single most quoted reason for becoming homeless. It is estimated that the cost of domestic abuse in England and Wales is around £66 billion with the biggest proportion being attributed to the physical and emotional costs of supporting victims.

Approximately 75% of children living in households where domestic abuse occurs are exposed to actual incidents. These children have an increased risk of developing acute and long term physical and emotional health problems.

For the year ending March 2018, in Nottinghamshire 20,464 people will have experienced domestic abuse in the previous 12 months and 79,362 persons over their lifetime, 56,756 women and 22,606 men. This is likely to be an underestimate as it does not include those aged 60 and above.

Figure 1: Estimated numbers (age 16-59) prevalence of domestic abuse by District in previous 12 months



Source CSEW and ONS mid-year population estimates 2018

Domestic abuse recorded crime increased from 5,808 between July 2016 – June 2017 to 6,645 between July 17 and June 18 equating to a 14.4% increase in reporting. Between 2015-2018 there have been 13 Domestic Homicide Reviews (DHRs) in Nottinghamshire.

The recommendations in the JSNA are set out in line with the Nottinghamshire Framework for Tackling Domestic & Sexual Abuse in Nottinghamshire 2016-2020. Given the number of recommendations the Domestic and Sexual Abuse (DSA) Exec will need to prioritise.

Key JSNA recommendations include:

- To maintain strong partnership working and co-ordinated commissioning informed by engagement with survivors.
- For agencies to develop and promote policy and procedures for work with survivors, children and perpetrators and to acknowledge the importance of maintaining provision of refuge and other specialist services.
- Preventative measures which promote healthy relationships, gender equality, and awareness of domestic abuse especially in schools and developing targeted inventions to support at risk victims and young people who harm.
- To improve identification and response across healthcare settings
- Maintaining specialist services e.g community, housing and refuge and developing support for survivors of harassment and stalking and capacity to support children impacted by domestic abuse.

Click here to open the JSNA chapter for Domestic abuse

Sexual abuse (2016)

Nationally, sexual abuse is experienced by 19% of women and 4% of men over the course of their lives. Sexual abuse is often a feature of domestic or intimate partner abuse and has the same common feature: that of perpetrators achieving power and control over their victims. Most of the time, victims know the person perpetrating the abuse and despite this fact, sexual offences are crimes with low levels of reporting and low levels of conviction through the courts.

In Nottinghamshire it is estimated that around 11% of sexual offending in Nottinghamshire in 2013-14 was reported to the Police. The proportion of serious offences reported is much higher 38% than that for other sexual offences 3%. Reporting of serious sexual offences has increased in Nottinghamshire but it is not clear whether this is due to an increase in the prevalence of sexual offences or an increase in the reporting of such offences. Young people aged 10-25 years were most likely to report a sexual offence to the police in Nottinghamshire.

Recommendations include: reduce levels of sexual abuse in the population through education and awareness raising; improved awareness and identification of sexual abuse by mainstream services; support and access to services for survivors of recent or current sexual abuse and for survivors of historical sexual abuse; and improvements to criminal justice procedures to ensure effective investigation and prosecution of sexual assault and rape.

Click here to open the JSNA chapter for sexual abuse

Click here to open the Nottinghamshire Domestic and Sexual Abuse Framework for Action

Please note the JSNA chapter was written in 2014 but the above section includes some updated data.

Long term conditions and cancer

In general, people are living longer but with greater levels of ill health and disability. It is therefore important to understand the chronic illness experienced by people living in Nottinghamshire.

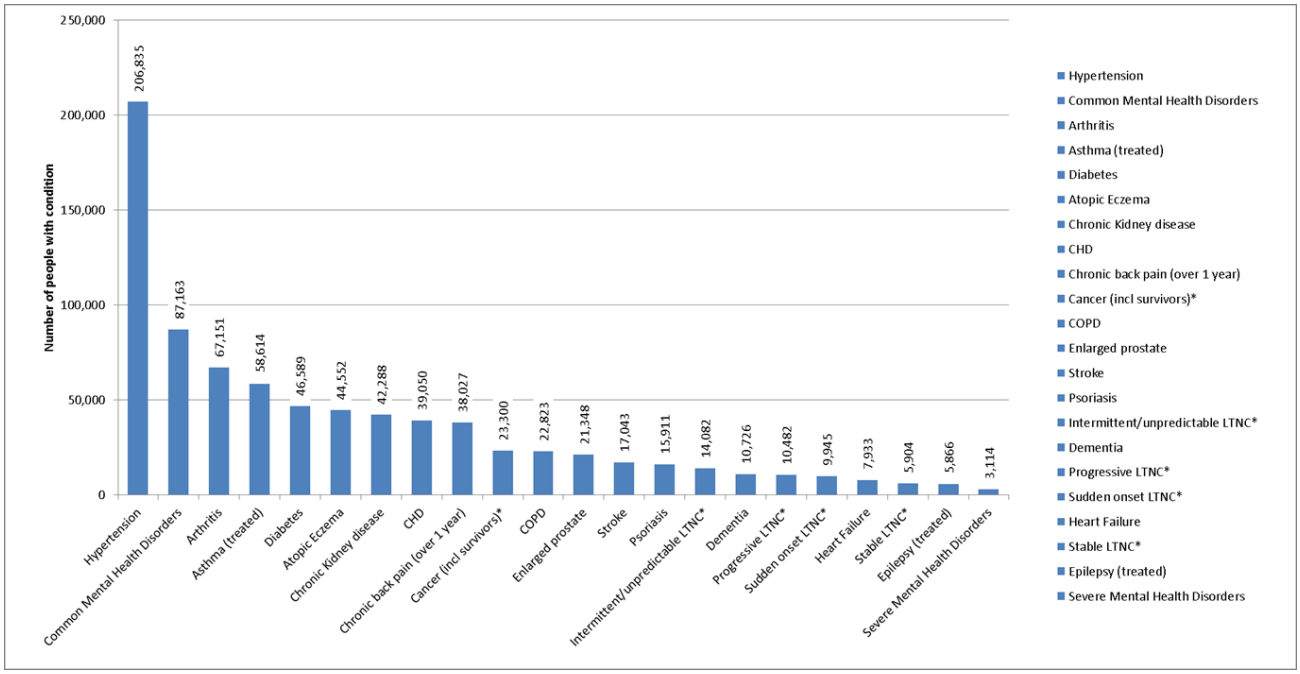
A long term condition is one that cannot be cured but can be managed through medication and/or therapy. There is no definitive list of long term conditions – diabetes, asthma and coronary heart disease can all be included.

People with long term conditions experience differing needs at different stages of their life and as their condition(s) progress. They may have complex health and social care needs which require integrated support through self-care, clinical care, supporting independence, psychological support and other relevant social factors.

In the Census 2011, those people who reported a long term health problem or disability (including those related to age) that limited their day-to-day activities. The percentage of people for whom their day-to-day activities were limited a lot was significantly higher in Nottinghamshire (9.7%), Ashfield (11.2%), Bassetlaw (10.8%) and Mansfield (12.2%) compared with the East Midlands (8.7%) or England (8.3%).

Figure 1 below gives an overview of the relative burden of the most common long-term conditions in Nottinghamshire's population. It does not include multi-morbidities, where a person may suffer from more than one condition at the same time. The most common long-term conditions are hypertension, common mental health disorders, asthma, chronic kidney disease, diabetes and coronary heart disease.

Figure 1: Estimates of relative burden of long-term conditions in NHS Nottinghamshire and NHS Bassetlaw: numbers of people suffering from long-term conditions *Note: these numbers do not include multi-morbidities*



*Sources: different prevalence models , Notts registered population July 2014 *prevalence estimates include children LTNC=long term neurological conditions CHD=coronary heart disease COPD=chronic obstructive pulmonary disease*

Cancer (2019)

Cancer is a disease caused by normal cells changing so that they grow in an uncontrolled way. There are more than 200 different types of cancer. With it being one of the biggest health challenges in the UK, estimates suggest one in three people will develop some form of cancer in their lifetime. Medical developments and an ageing population is resulting in an increasing number of cancer diagnoses.

This is a disease that is largely related to ageing. Nearly two thirds (65%) of cancer diagnoses occur in the over 65s. When a cancer is identified in someone under the age of 75 year it is considered ‘premature’ in the context of the nation’s health overall. Premature death from cancer is an important marker of health inequality within and between communities.

Along with age, an individual’s risk of developing cancer is linked with exposure to a breadth of factors including lifestyle, socio-economic status, occupation and genetic make-up. An estimate is that four in every ten cancers can be prevented by lifestyle change (Cancer Research UK). Other vulnerabilities which people have no or limited abilities to address through lifestyle changes include exposure to certain infections, life course patterns and occupational exposure. Sex, genetics and geographic place of residence also all bring differences in risk exposure. Place differences are related to socio-economic status and experiences of poverty and culture. Ethnicity can impact on an individual’s risk of a diagnosis.

Cancer remains a challenge to diagnose and treat, with treatment and care being complicated, traumatic and expensive. The impact of a diagnosis for an individual and those close to them remains an overwhelming experience. Estimates are that NHS cancer costs, for example, are increasing by 9% a year and are projected to be around £13bn by 2020/21 in England.

Nationally cancer service and cancer health outcome improvement is directed through the strategy, 'Achieving World Class Cancer Outcomes (AWCCO) 2015 – 2020' (Independent Cancer Taskforce (ICT), 2015). In Nottinghamshire strategic direction and coordination of AWCCO delivery is undertaken by the Nottinghamshire STP Cancer Programme Board. This group brings together a range of stakeholders engaging with patients and cancer services. The East Midlands Cancer Alliance, formed in 2017, now provides regional leadership and access to the national transformation funding.

In Nottinghamshire, in 2014, 4,910 people were diagnosed with cancer and 2,299 (2013) people died from the disease. The most common cancers diagnosed in Nottinghamshire are breast (756), prostate (670), lung (645) and bowel (567). The number of new cases of cancer being diagnosed shows an increasing trend. In contrast to rising incidence rates, mortality (death) rates are falling in Nottinghamshire and overall in England. This widening gap between the incidence and mortality rate indicates a growing population who are living with and beyond cancer treatments.

Early detection is vital in optimising health and survivor outcomes. Nationally recognised initiatives for improving early diagnosis include public awareness raising of key signs and symptoms, facilitating access to GP surgeries and encouraging attendance for the NHS national cancer screening services. Screening uptake for breast, cervical and bowel in Nottinghamshire are above average, yet each of the programme have a good proportion of eligible individuals not attending.

The health situation of people living after cancer treatments is an important health need. Treatments themselves can have long-term health impacts, 'late effects', such as chronic pain, crippling fatigue, incontinence and psychological distress.

Key JSNA recommendations are:

- Completion of the ninety-six recommendations in AWCCO (ICT, 2015). Many of these will be implemented at the national and regional level. Successful local implementation, however, will require local engagement including the participation in pilot schemes.
- Addressing the health inequalities and social determinants that increase the risk factors for cancer and full implementation of the Equality Act 2010 throughout cancer prevention and treatment provision.
- To continue to develop the local partnerships and within this establishing a clarity of vision for addressing key service workforce issues across health, social, and the third sector and voluntary provision.
- Ongoing and improving developments in the provision of a supportive environment for the third/voluntary sector to flourish.

Click here to access the JSNA chapter for cancer

Stroke (2017)

Stroke is the largest cause of disability and the fourth largest cause of death in the UK after cancer, heart disease and respiratory disease. The term 'stroke' refers to a sudden change to the blood supply to the brain, often as a result of a blocked artery, depriving it of oxygen and potentially leading to brain damage or death. Of those who survive a stroke, half have a

degree of disability such as weakness on one side of the body, communication problems or visual problems.

Non-modifiable risk factors for stroke include age over 65 years, male gender and African or African-Caribbean origin all of which increase the likelihood of experiencing a stroke. Modifiable risk factors from stroke include atrial fibrillation (AF) (erratic heart rhythm), hypertension (high blood pressure), diabetes, deprivation, smoking, obesity, diet, physical activity, and alcohol consumption.

16,179 people were diagnosed with stroke or transient ischaemic attack (mini stroke) in Nottinghamshire in 2015/16. Premature mortality rates (under 75 years of age) for stroke were significantly higher in Gedling, Mansfield, Newark and Sherwood when compared with the England average in 2013-2015.

Although mortality rates following a stroke have been falling over the past 5 years, the number of people living with a longstanding health condition caused by stroke is projected to increase by 27% in Nottinghamshire between 2015 and 2030. This is due to an increasingly ageing population and improving rates of survival following a stroke.

Recommendations include: commissioners planning for an expected increase in the number of people having strokes in the future; understanding equity issues in relation to access to services; improving detection and management in primary care of conditions which increase the risk of strokes; addressing variability across the county in terms of both access to intra-arterial (thrombectomy) treatment and the use of intermittent pneumatic compression devices; ensuring there is specialist stroke support and rehabilitation including psychological support and support to return to work; and support for carers of stroke survivors.

Click here to open the JSNA chapter on stroke

Viral Hepatitis (2017)

Viral hepatitis is inflammation of the liver due to a viral infection. There are several types of hepatitis viruses including types A, B, C, D and E. Hepatitis B and C are known as blood borne viruses (BBVs) as they are spread via blood or other body fluids. They can both result in chronic disease which can lead to liver cirrhosis and failure. This can lead to considerable cost to the individual's health and cost to health care services. Hepatitis C is considered a major Public Health threat in the UK. Hepatitis D requires hepatitis B for its replication and is transmitted through contact with blood or other body fluids of an infected person.

Hepatitis A and E are spread through consumption of food or water contaminated with faeces of an infected person. Hepatitis A and E usually resolve on their own, however outbreaks of the condition can lead to economic loss. A small number of people may develop more serious health complications.

It is difficult to ensure local data for viral hepatitis is accurate or representative because often those infected do not have any symptoms and are not diagnosed. If they do have symptoms they are often transient or non-specific.

Across Nottinghamshire in 2015 Newark and Sherwood had the highest rate of hospital episodes for viral hepatitis, followed by Gedling, Mansfield, Broxtowe, Ashfield and Rushcliffe with the lowest. Over the past few years hospital admissions for people with a primary diagnosis of chronic hepatitis C has been increasing annually. Between July 2016 and January 2017 there were 12 reported cases of Hepatitis A within the East Midlands

making it the area with the second highest number of reported cases across10 regions in England and Northern Ireland. The under 75 mortality rate from both Hepatitis B and C related end-stage liver disease and/or hepatocellular carcinoma in Nottinghamshire is similar to the England average.

Key JSNA recommendations include:

- Promoting harm reduction and awareness of viral hepatitis in different health settings and amongst the general population.
- Promoting hepatitis A and B vaccination for all at risk and eligible groups.
- Educate professionals and healthcare workers who come into contact with people who are at increased risk of viral hepatitis so they can promote testing opportunities.
- Support prison staff in continued opt-out testing of BBVs within prisons.
- Address the barriers to testing for hepatitis B and C within substance misuse services within Nottinghamshire
- Develop computer software for GPs to help identify patients at risk and prompt for testing.
- Continue to monitor and retest individuals who further put them-selves at risk.
- Improve engagement in hepatitis treatment services through providing geographically appropriate services. This may include pharmacies, substance misuse services and hostels.
- Support for addiction services, sexual health services and GPs from commissioners to support people who need active help in engaging with hepatitis treatment services.
- Consideration within viral hepatitis services and for discussion with CCGs for improved viral hepatitis services and access to services from those in Nottinghamshire
- Continued oversight from NUH Hepatology and ODN leadership with regards to progress made within this area
- Close communication with neighbouring areas within the shared operational delivery network (ODN) to ensure fair and effective reaching of hepatitis C treatment targets

Click here to open the JSNA chapter on Viral Hepatitis.

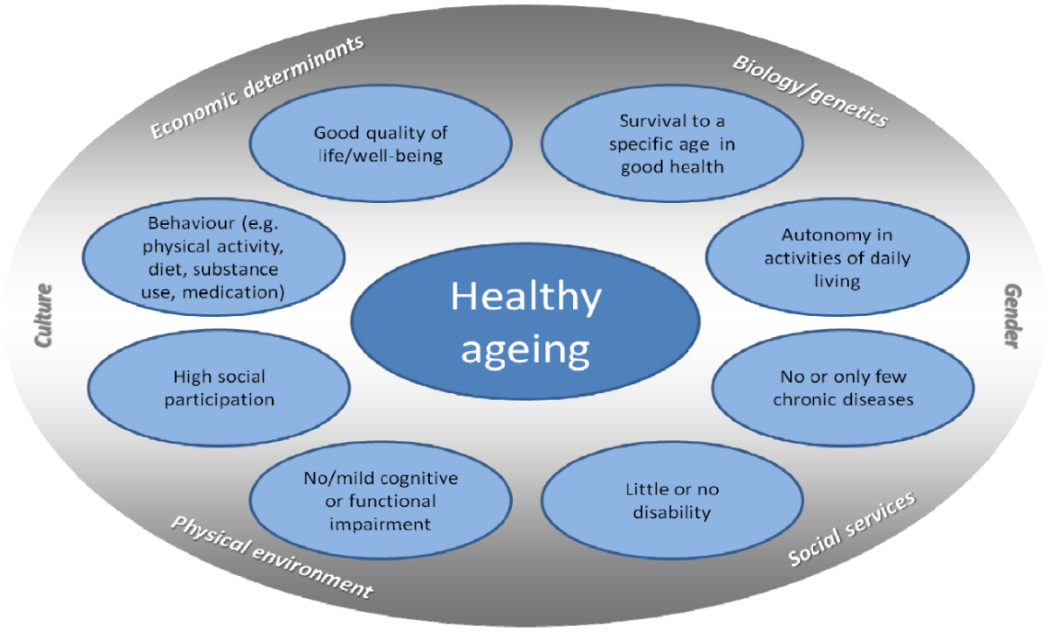
OLDER PEOPLE

In order to age well, older people need to be empowered to live active, healthy lifestyles and limit decline in health and wellbeing and associated reduction is the quality of like. The effects of ageing begin to manifest themselves, particularly after the age of 50 and these effects are influenced in part by people's earlier lifestyles. In order to help people age well, it is important to target prevention or delay of illness, disability and long term conditions; and when such conditions do arise, to try and minimise their impact so that people can remain in

their own homes and independent for as long as possible in in order to avoid the need for acute health treatment or social care.

The figure below summarises a number of key themes associated with ageing well. This section brings together evidence from JSNA chapters covering a number of these themes.

Figure 1: Key themes associated with ageing well



Source: J. Fuchs et al, Indicators for Healthy Ageing — A Debate. Int. J. Environ. Res. Public Health 2013, 10(12), 6630-6644

The demography of our ageing population is considered earlier in the report. For the latest population figures on Nottinghamshire Insight click here.

Dementia (2017)

Dementia is a term used to describe a range of brain disorders that have in common a loss of brain function that is usually progressive and eventually severe. Dementia is one of the main causes of disability in later life and the number of people with dementia is rising yearly as the population ages.

Dementia can affect people of any age but is most common in older people, particularly those aged over 65 years – overall 5% of people over 65 may have dementia. The most

common type of dementia is Alzheimer's disease (62%) followed by Vascular dementia (17%). A further 10% of people have a combination of Alzheimer's and vascular dementia and the remaining 11% have more rare forms of the disease.

Over time dementia significantly affects people's ability to live independently, as a result of:

- Decline in memory, reasoning and communication skills
- Inability to carry out activities of daily living
- Behavioural problems such as aggression, wandering and restlessness
- Continence problems
- Problems with eating and swallowing

Dementia places a particular burden on carers and family members. Timely diagnosis and intervention is helpful, as it enables the person with dementia and their carer/s to come to terms with the disease and make plans for the future.

Many of the carers of older people with dementia are elderly and experience physical and mental health problems themselves. However carer support and education can enable more people to live at home for longer and prevent carer breakdown, which is a major cause of people needing to move into long-term care.

The number of people aged over 65 living with dementia in Nottinghamshire is predicted to rise from 10,900 in 2015 to 15,000 in 2025 primarily due to an increase in the number of people living in Nottinghamshire aged 65 an over.

Table 1: Over 65 dementia prevalence by district 2015 and 2035

People aged 65 and Over	**2017**	**2020**	**2025**	***2030***	***2035***
Ashfield	1,527	1,665	2,023	*2,436*	*2,788*
Bassetlaw	1,652	1,819	2,130	*2,507*	*2,919*
Broxtowe	1,604	1,718	1,997	*2,318*	*2,590*
Gedling	1,620	1,762	2,046	*2,386*	*2,701*
Mansfield	1,389	1,492	1,734	*2,016*	*2,328*
Newark and Sherwood	1,754	1,889	2,231	*2,696*	*3,142*
Rushcliffe	1,770	1,942	2,272	*2,695*	*3,134*

Source: POPPI (2017)

Timely diagnosis is important to ensure patients and carers have access to the support they need. In Nottinghamshire, diagnosis rates have risen steadily since and all 6 Nottinghamshire CCGs exceeded the national average in 2015/16 (0.96 and 0.76 respectively).

The Health and Wellbeing Board approved the Nottinghamshire County Dementia Framework for Action 2016–2020 in May 2016 which aims provide services which work together better to support individuals with dementia and their carers.

Click here to open the JSNA chapter for Dementia

Please note the JSNA chapter was written in 2014 but the above section includes some updated data.

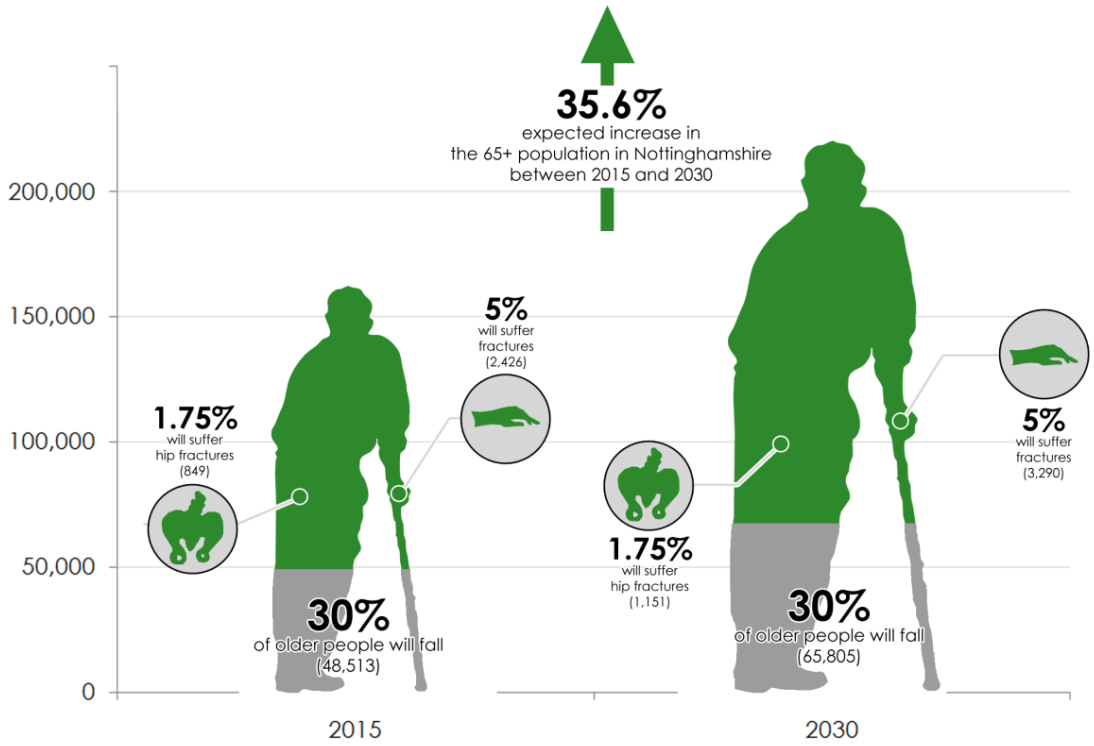
Falls and bone health (2016)

Falls and fall-related injuries are a common and serious problem for older people. People aged 65 and older have the highest risk of falling, with 30% of people older than 65 and 50% of people older than 80 falling at least once a year. It is also important to consider bone health alongside falls because osteoporosis increases bone fragility and susceptibility to fracture, particularly as a result of a fall. In addition to age, gender (post-menopausal increase in osteoporosis), existing medical conditions, medication, unsafe environment, impaired mobility and sensory impairment are all factors which increase the risk of a fall and associated injury.

The human cost of falling includes distress, pain, injury, loss of confidence, loss of independence and mortality. Falling also affects the family members and carers of people who fall. Falling has an impact on quality of life, health and healthcare costs.

In Nottinghamshire approximately 30% of older people will fall each year (48,513), some more than once, of these, approx. 5% suffer fractures and 1.75% suffer hip fractures. The expected increase in falls and associated injuries between 2015 and 2030 is shown below and is primarily a result of an ageing population.

Figure 1: Numbers of people experiencing a fall in Nottinghamshire in 2015 and 2030



Hospital admissions for falls in Nottinghamshire have increased over the past few years, particularly for women aged 80 and over.

Recommendations include: the implementation of a comprehensive falls prevention programme; reduction of home hazards; staff training in falls risk identification; osteoporosis assessment; local falls and bone health co-ordinators, integration of pathway across primary and secondary care; and integrated community crisis response services.

In April 2016 the Health and Wellbeing Board supported the adoption of the partnership-based Falls Pathway and approved the Falls Framework for Action.

Click here to open the JSNA chapter for Falls and bone health

Please note the JSNA chapter was written in 2015 but the above section includes some updated information.

Excess winter mortality (2015)

There were an estimated 43,900 excess winter deaths (EWDs) in England and Wales in 2014/15, representing 28% more deaths compared with the non-winter period and the highest since 1999/00. It is too soon to say if the sharp increase in EWDs in 2014/15 is the beginning of an upward trend. Excess winter deaths in England are historically at a level that surpasses that experienced by other colder, Northern European countries, suggesting that many of these deaths could be prevented.

The majority of excess winter deaths occur in people aged 75 years or older, with women more affected than men. Reasons for this are multifactorial; including the increased amount of time spent indoors, a higher prevalence of fuel poverty, a reduction in fat to retain body heat and an increased likelihood of having underlying health conditions.

The majority of excess winter deaths are due to cardiovascular disease, respiratory illnesses including flu. For every 1 degree Celsius decrease in average winter temperature there is a resultant 8,000 additional deaths in England.

The latest figures for 2014/15 show that In Nottinghamshire there were 806 excess winter deaths recorded, the highest since 1999/00, mirroring national trends.

Recommendations include: the development of a local winter warmth strategy and action plan to address the needs of higher risk groups; development of a communication plan to increase public awareness; training staff from public sector, voluntary and private organisations to support people who have cold homes; ensuring homes meet building standards; and single point of contact for health and housing referral service.

Click here to open the JSNA chapter on Excess winter deaths

Please note the JSNA chapter was written in 2014 but the above section includes some updated data.

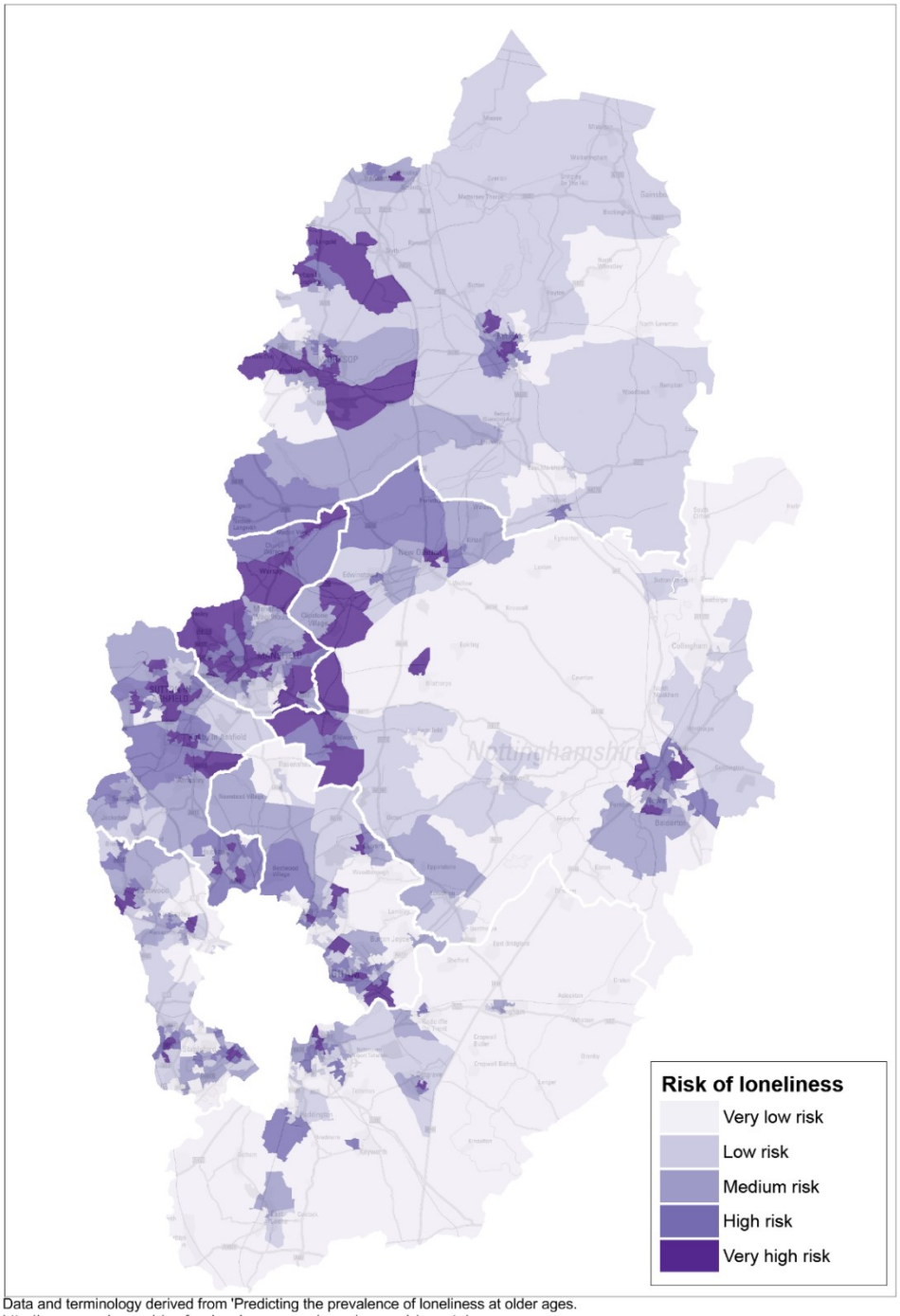
Loneliness (2016)

Loneliness is an individual's sense that they lack the depth and quality of relationships with others that they feel they want or need. People can be alone and not feel lonely, or they may be with others and feel very lonely, as many people do who live in care homes.

The causes of loneliness are multi-factorial and complex and therefore difficult to address. Factors that contribute to loneliness include life events, personal circumstances, social group membership, personality, psychological response, environment factors and long-term conditions, particularly dementia.

Older people are particularly at risk, affecting 10-20,000 older people in Nottinghamshire. Whilst there are people living in loneliness across the County, loneliness index mapping for small areas across Nottinghamshire shows that there are expected to be higher levels of need in the north and west of the County.

Figure 1: Risk of loneliness



Data and terminology derived from 'Predicting the prevalence of loneliness at older ages. http://www.ageuk.org.uk/professional-resources-home/research/reports/ health-wellbeing/predicting-the-prevalence-of-loneliness-at-older-ages/ Accessed 15/04/2016

Loneliness is bad for your physical and mental health. People who are lonely exercise less, are at higher risk of dementia and depression and heart disease, have a reduced immune response and are more likely to be admitted to hospital or a nursing home. "Being isolated and living alone shortens life and increases disability – it's equivalent to smoking 15 cigarettes a day." Duncan Selbie, Chief Executive, Public Health England, March 2013

Poorer physical and mental health and increased use of health and social care services, mean that commissioners have a significant interest in loneliness and social isolation. Key recommendations are listed below.

Key recommendations include: incorporate actions to address loneliness into plans and strategies; ensure co-ordinated response across the County targeted in areas of need; effective communication with older people; consider Age-friendly Communities; consider impact of planning; and improve data around loneliness.

Click here to open the JSNA chapter on Loneliness and Social Isolation in Older People

End of life care for adults (2017)

A "good death" is not easily defined given subjectivity, however *The End of Life Care Strategy* defines it as being treated as an individual, with dignity and respect, being free of pain and other symptoms, being in familiar surroundings with your family and friends.

End of Life Care (EOLC) aims to offer individuals choice around symptom control, their care and their preferred place of care (PPC) and death. Offering patients care centered on their preferences, psychological, spiritual and social needs is the cornerstone, as is involving family, friends and carers of dying individuals.

Directly age standardised mortality rates (DASMR) for all ages in Nottinghamshire match that of England over 2014-2015, however the overall rate is 4.8% higher at 1049/100,000 as opposed to 1001 of England. Top causes of death in Nottinghamshire are dementia (13%) and ischemic heart disease (11%). Cerebrovascular disease (stroke), chronic respiratory disease and respiratory cancers each made up roughly 6%. Other causes made up 58%. The Office for Primary Care Mortality Database shows in 2015 (54), 7615 people died in Nottinghamshire (excluding the City). This is 0.94% of the whole Nottinghamshire population which roughly matches the figure of 1% of the population dying nationally each year. Applying the proportion of three quarters expected to die with an End of Life (EOL) phase, this equates to around 5711 persons annually who could benefit from EOL services.

Many of the shortcomings in EOLC are related to a culture that does not see EOLC as a priority. This can result in individuals not receiving prompt recognition of their dying, but also a lack of quality EOLC regarding ACP, palliative care registration, EOL discussions, access to services (especially non-cancer/dementia patients) and holistic, patient centric care.

Key JSNA recommendations include:

- **Improving holistic and effective care** through ensuring end of life care is everyone's business and something that is discussed openly among healthcare professionals, greater referrals to specialist palliative care for patients with dementia/non cancer diagnoses, those in EOL having a named responsible clinician and care coordinator and obtaining qualitative user feedback.
- **Better information sharing** through improved data collection and provider access to Electronic Palliative Care Co-ordination Service (EPaCCS), development of Gold Standards Framework (GSF) EOLC measures to be used by all localities to improve EOLC benchmarking and adopting the Recommended Summary Plan for Emergency Care and Treatment (ReSPECT) tools in hospitals and community.

- **Enhancing education and training** through improving palliative care training, promoting care staff training schemes, introduction of ReSPECT tool promoting education and a positive culture and encouraging compassionate communities.

Click here to open the JSNA chapter on End of Life Care for Adults

[i] Activities include: going out of doors and walking down the road; getting up and down stairs; getting around the house on the level; getting to the toilet; getting in and out of bed

[ii] Health inequalities are preventable and unjust differences in health status experienced by certain population groups. People in lower socio-economic groups are more likely to experience chronic ill-health and die earlier than those who are more advantaged. Health inequalities are not only apparent between people of different socio-economic groups – they exist between different population groups.

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[iv] LSOA is a small geographical area. They give an improved basis for comparison across the country because the units are more similar in size of population than, for example, electoral wards. They have an average of roughly 1,500 residents and 650 households.

[v] The **disability**-**adjusted life year** (DALY) is a measure of overall disease burden. One DALY can be thought of as one lost year of 'healthy' life. The sum of these DALYs across the population, or the burden of disease, can be thought of as a measurement of the gap between current health status and an ideal health situation where the entire population lives to an advanced age, free of disease and disability.

[vi] McManus S, Meltzer H, Brugha T et al (2009) Adult psychiatric morbidity in England, Results of a household survey (Health and Social Information Centre, Social Care Statistics 2007) http://www.ic.nhs.uk/pubs/psychiatricmorbidity07

[vii] Carers UK. www.carersuk.org accessed 11/08/2016