



# Joint Strategic Needs Assessment

---

*Health in Knowsley - 2022*

# Start Well

A child's experience during their early years of life is critical to their physical, cognitive and social development. During this development phase the groundwork is laid for the rest of the child's life. Many of the issues facing young children in their early years can be influenced by deprivation, nutrition, access to good quality early education, immunisation, and access to health services, which all have a long-term impact on children as they progress into adulthood.

## Starting Well in Knowsley

While most children live happy, healthy and fulfilled lives throughout the Borough, there is a higher proportion of children who face greater challenges and inequalities throughout their lives in Knowsley than in other local authorities.

Those children in Knowsley who face the greatest inequalities and poor health outcomes are often the most vulnerable. Knowsley has a higher than national proportion of the child population who live in poverty, and who have experienced adverse childhood experiences, both of which further increase inequalities and disparities. For children who grow-up in poverty, and for children who grow-up in disordered families, they face enormous challenges that children elsewhere in Knowsley and in other parts of the country do not face. The corrosive nature of poverty during childhood can lead to persistent disruptions to child development and stress responses, in addition to the physical impact of poorer quality housing, worse nutrition and less access to books, computer and school trips.

Health disparities and inequalities have been exacerbated during the COVID-19 pandemic, and without an integrated approach to addressing health inequalities, reducing poverty and mitigating against the impact of child poverty, poor health and wellbeing will continue inhibit the lives of Knowsley residents.

Investment in early childhood, child and adolescent health and development, and preconception, pregnancy and childbirth care can yield a 10-to-1 benefit to cost ratio in health, social and economic benefits. It can also reduce rates of mental health disorders and noncommunicable diseases in later life.

## Long Term Risks to Health and Wellbeing

There are a number of clear health concerns identified for children in Knowsley:

- **How healthy habits are formed** – fewer children are enabled to develop healthy habits around nutrition, exercise and self-care, which has long-term implications throughout their lives
- **Impact of COVID** – making a clear difference in decision-making, with lower uptake on childhood immunisations, and also risks to long-term development following two-years of disrupted services and education
- **Wellbeing and mental health** – higher proportions of children with emotional, social, and mental health needs, and a higher proportion of the population who require support from children's social care.

## Maternal/Pre-birth health

Pregnancy, the birth, and the early weeks of a child's life are a crucial period for the future of the family and of the child. For babies, this period has a major influence on their physical, social, emotional and language development.

The earliest experiences, starting in the womb, shape a baby's brain development. For mothers and the wider family, pregnancy may be the first time they have sustained contact with health services and so presents the ideal opportunity to provide support and encourage healthy lifestyle choices to maximize their life chances.

Prevention and public health have an important role to play in maternal and pre-birth health. Smoking is still the single biggest identifiable risk factor for poor birth outcomes. Obesity among women of reproductive age is increasingly linked to risk of complications during pregnancy and health problems of the child.

### **In Knowsley:**

Knowsley has a high general fertility rate, in 2020 there were 61.4 live births for every 1,000 women aged 15 to 44 years living in Knowsley; this is higher than both the North West (55.9) and England (55.3) Like most other local authorities in the North West, Knowsley's birth rate reduced between 2019 and 2020 (second highest reduction in the region).

It remains to be seen whether this is a trend or the result of 2020 being an unexceptionally unusual year due to the COVID-19 pandemic. Prior to the COVID-19 pandemic, birth rates in the UK had already declined to historically low levels. The most recent data published by the Office for National Statistics suggests a short-term decline in births in England and Wales following the first COVID-19 lockdown.

ESRC Centre for Population Change found that the influence of the COVID-19 pandemic on fertility depends on a woman's age and whether she already has children, making predicting future childbearing complex. Historical evidence of fertility rates following the 2008 recession suggests that it is young people who are most likely to delay or stop having children in response to social and economic 'shocks' and contemporary events. Younger women have more time to be able to delay having children in response to uncertainties.

First time mothers in Knowsley tend to be younger than the England average, however, as a result of the pandemic Knowsley may experience an increase in the age of first-time mothers and a reduction in the number of babies being born, at least in the short-term.

Another factor that may contribute to this trend is the economy, the cost of living is expected to increase significantly in 2022 and this may be a compounding factor in younger women in choosing to delay having children.

ESRC Centre for Population Change found that the influence of the Covid-19 pandemic on fertility depends on a woman's age and whether she already has children, making predicting future childbearing complex. Historical evidence of fertility rates following the 2008 recession suggests that it is young people who are most likely to delay or stop having children in response to social and economic 'shocks' and contemporary events. Younger women have more time to be able to delay having children in response to uncertainties, which considering both the two years of pandemic and the uncertainties of a cost-of-living crisis, and a current war in Europe – are significant at present.

Knowsley has the highest levels of abortions in England, and is an outlier, with other local authorities with high rates being predominately London authorities. The full reasons for this are not currently understood, but links to income poverty, education (sexual health education in particular) availability of housing, and prevalence of social issues (including domestic abuse and exploitation), will be factors in understanding this higher rate.

## Obesity in Pregnancy

### Overview of issues

Complication rates for women with obesity are substantially higher than in those without obesity.

Obesity among women of reproductive age not only influences their health, but also increases the risk of complications during pregnancy and is likely to compromise the health of their children.

For the mother they are at high risk of decreased fertility, increased risk of miscarriage, gestational diabetes, thrombosis, high blood pressure, pre-eclampsia and perinatal complications. For the foetus, there is an increased risk of stillbirth, metabolic abnormalities, and developmental abnormalities.

For the child, there is an increased risk of obesity, diabetes, and hypertension (high blood pressure).<sup>i</sup>

### In Knowsley:

24.7% of pregnant women in Knowsley were obese at the time of booking appointment with a midwife, this is higher than the England average, 22.1% 2018/19. Whilst Knowsley has a higher proportion of women obese during early pregnancy compared to the North West average is not significantly different.

In 2018/19 Knowsley was ranked the 41st highest in England (out of 137 Upper tier Local Authorities) and 5th highest (out of 20) in the North West for the proportion of women with obesity during early pregnancy. The local authority with the highest proportion had 30.5%, compared to 24.7% of pregnant women in Knowsley.

Obesity carries particular risks in pregnancy for both mother and foetus, including miscarriage, foetal abnormality, gestational diabetes, hypertension, delivery problems and infection. These risks pose particular challenges for maternity services, including the cost of care, to meet the needs of this population.

Problems of obesity are not confined to pregnancy and impact adversely on a women's health throughout their lives such as type 2 diabetes and coronary heart disease. Pregnancy is a time when women will encounter health professionals possibly for the first time; this is an opportunity not only to provide advice on the

risks in pregnancy and but improve pregnancy outcomes and potentially effect change that will be of lifelong benefit to both mother and child.

Maternal obesity also an impact on healthcare services and resources, managing the care of obese women in pregnancy safety requires extra resources, often involving multidisciplinary care because of coexisting morbidities, it also restricts care options and patient choice, as well as incurring extra costs.

**Obesity is a preconception risk factor**  
Maternal obesity (BMI over 30)

**Impact on women:**

- increased risk of miscarriage
- Gestational diabetes and perinatal complications
- lower breastfeeding rates

**Impact on foetus:**

- increased risk of stillbirth
- metabolic abnormalities
- developmental abnormalities

**Impact on children:**

- increased risk of obesity
- diabetes

The infographic features a blue silhouette of a pregnant woman on the left with a white heart on her abdomen. To the right, there are three orange rounded rectangular boxes containing text. Above the top-right box is a pink circle with a white fetus icon. Below the bottom-right box is a green silhouette of a child sitting.

## Under-18 Conceptions

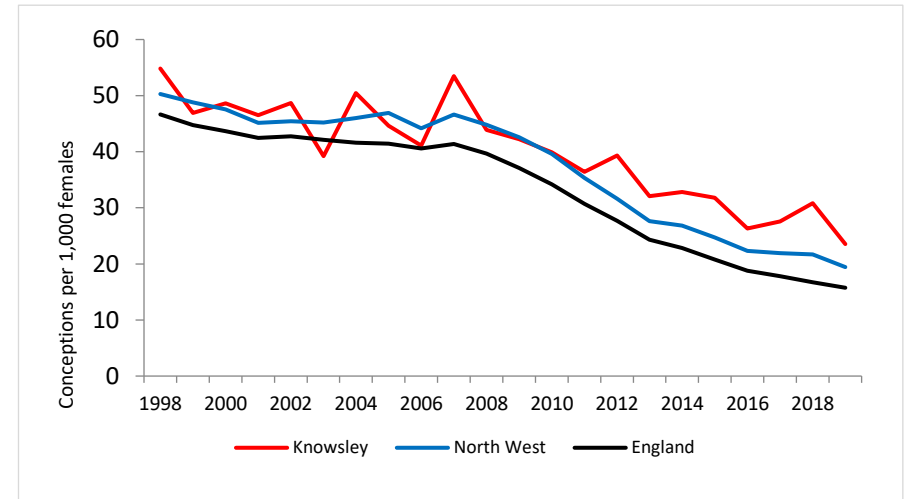
The rate of under-18 conceptions has fallen over the years especially from 2007, both locally and nationally. Knowsley rates tend to fluctuate more from year to year due to a smaller population than North West and England. In recent years (2012 onwards) Knowsley rates have consistently been statistically higher than the England average. The latest data for 2019 indicates there were 57 conceptions in females aged 15 to 17 years old, living in Knowsley.

## Abortions

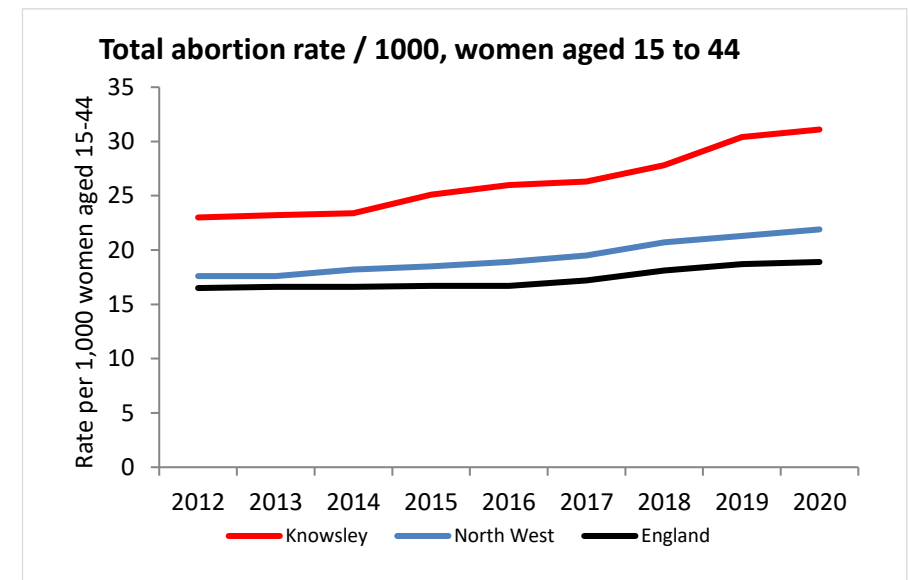
There were 915 abortions in Knowsley during 2020, giving an abortion rate of 31.1 per 1,000 females aged 15-44. This rate has increased over recent years and Knowsley is significantly higher than the North West region (21.9) and England (18.9). The rate in 2020 in Knowsley is the highest rate in the country out of 150 upper-tier Local Authority areas. Between 2012 and 2020, the abortion rate in Knowsley has increased by 35.2%. This compares with a rise of 24.4% in the North West and 14.4% across England.

Knowsley rates of Abortion are higher in all age groups compared to the North West and England. Rates are particularly high in the Under 18 age group, where the Knowsley rate is over double the England average in this age group. The 20-24 age group is also very high and is over 75% higher than England in this age group.

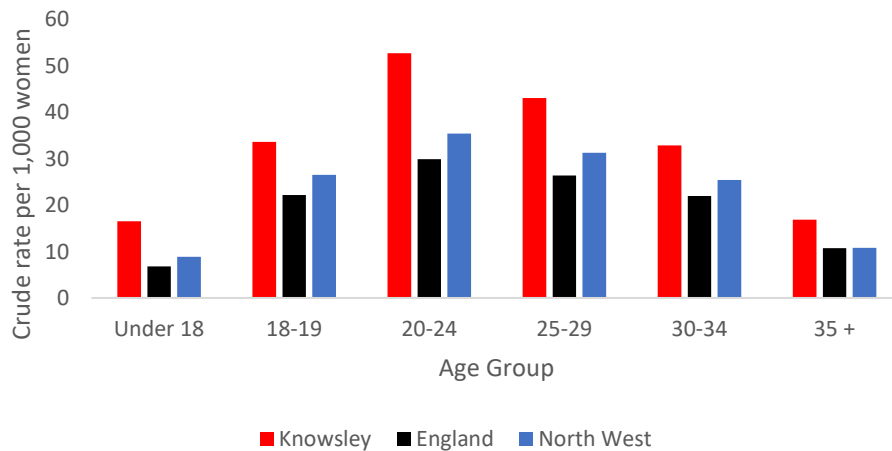
Under- 18 conception rates, conceptions per 1,000 females 15-17 years



Total abortion rate / 1000, women aged 15 to 44



Abortions 2020 - Crude rate per 1,000 women

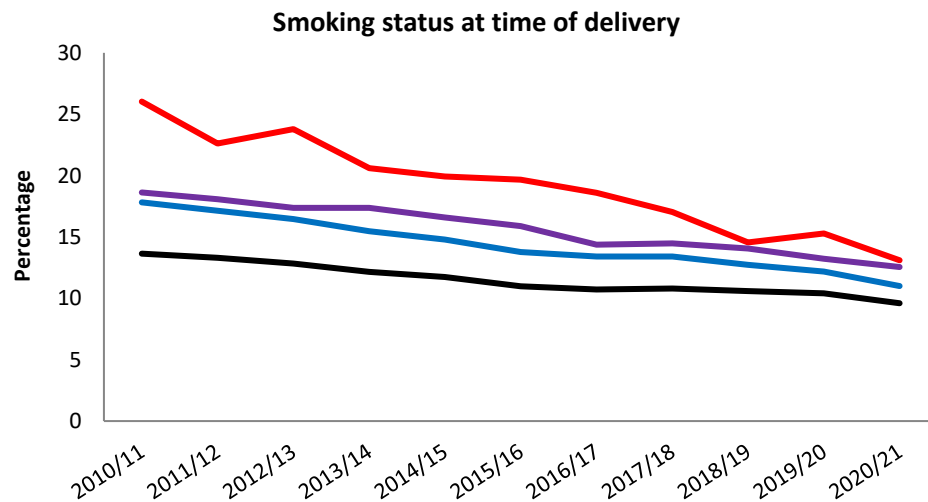


## Smoking during pregnancy

### Overview of issues

Smoking in pregnancy has well documented detrimental effects on the growth and development of the baby and the health of the mother. Those who smoke during pregnancy are more likely to be younger, single, and of lower socioeconomic status, to drink alcohol or use other substances, and to have psychiatric comorbidities<sup>1 2</sup>.

There is strong evidence that reducing smoking in pregnancy reduces the likelihood of stillbirth. It also impacts positively on many other smoking-related pregnancy complications, such as preterm birth, miscarriage, low birthweight and Sudden Infant Death Syndrome (SIDS). Whether or not a woman smokes during her pregnancy has a far-reaching impact on the health of the child throughout his or her life.<sup>ii</sup>



### ANALYSIS

Since 2010/11, there has been steady improvement in the prevalence of expectant mothers who smoke during pregnancy in Knowsley. From 2010/11 there has been a reduction from 26% to 13.1% in 2020/21. Knowsley however remains higher for smoking status at time of delivery (13.1%) in comparison to the England and North West average which is 9.6% and 11.0% respectively.

Knowsley is still significantly above the England and North West averages but the gap between these two comparators have narrowed significantly over the past 10 years

In 2020/21, Knowsley is ranked the 33<sup>rd</sup> highest (out of 151) Upper tier LA in England for prevalence of Smoking at Time of Delivery. Knowsley is 5<sup>th</sup> Highest (out of 23) in the North West. The LA with the highest prevalence in the country is Blackpool with 21.4%  
Summary of key maternal health indicators here – or could have some insight?

There are a number of health concerns identified for pregnant and women in the post-natal period in Knowsley:

- Knowsley has the highest level of abortions in England and whilst they are generally very safe, they are not without risk. Reducing unwanted pregnancies and the need for terminations by ensuring good access to contraceptive services and sexual health education are likely to have a positive impact, not only on reducing the need for abortions but improving women's sexual health.

Understanding why women in Knowsley are seeking abortions is fundamental to making sure they are supported and are achieving the best possible health outcomes. Gaining further insight will help ensure the right services are being provided for example women seeking abortions for unwanted pregnancies will have different needs and require different support to those seeking terminations for medical reasons.

- Healthy habits and choices – There are higher rates of women with obesity and who smoke in Knowsley compared to the national average. Helping and supporting women to make healthy lifestyle choices prior to becoming pregnant as well as during pregnancy will improve pregnancy outcomes for both mother and child but also potentially create change that will be of lifelong benefit.

- Wellbeing and mental health – Pregnancy and the post-natal period are a high risk period for women to experience mental health problems. The COVID-19 pandemic has increased anxiety and disrupted services and support for pregnant women, partners and their child/ren.

## Perinatal and Postnatal Mental Health

The physical and mental health of mothers, and the family environment during pregnancy, infancy and childhood is of fundamental importance to mental health. A parent's ability to bond with and care for their baby, their parenting style and the development of a positive relationship can predict a number of physical, social, emotional and cognitive outcomes through to adulthood.

Pregnancy and the transition to parenthood include significant biological, psychological, and social changes that have been associated with increased anxiety and depressive symptoms and discomfort. Having a baby is a major life event that can be a stressful, exhausting, and overwhelming.

Perinatal mental health (PMH) problems are those which occur during pregnancy or in the first year following the birth of a child. Perinatal mental illness affects up to 20% or 1 in 5 new and expectant mums and covers a wide range of conditions. If left untreated, mental health issues can have significant and long-lasting effects on women, their children, and their wider family. A national inquiry into maternal deaths showed that mental health problems are the leading cause of death in pregnancy and 12 months after birth. During the first week after giving birth mother's often experience 'the baby blues' when they feel mildly depressed, they may experience mood swings, burst into tears easily, feel irritable, low and anxious. Whilst this does not require treatment it may mask postnatal depression, which is thought to affect around 1 in 10 women. Perinatal mental health problems included Perinatal: depression, anxiety, Obsessive Compulsive Disorder (OCD), postpartum psychosis and Post Traumatic Stress Disorder (PTSD).

There are many reasons why women might develop or be at risk of developing mental health problems, some may have clear causes such as postnatal PTSD caused by difficult experiences whilst giving birth. For most women however it may be a combination of factors such as: previous experience of mental health, biological causes (for example changes to hormones), lack of support, difficult childhood experiences (such as abuse, neglect, loss of a loved one), low self-esteem, stressful living conditions (poor housing, money problems, insecure employment), domestic violence, substance abuse, unplanned or unwanted pregnancies and major life events (relationship break-ups, losing a job, illness or death of a loved one)

The COVID-19 pandemic has been an additional source of uncertainty and has created additional fear in pregnancy. The early uncertainty around vaccination and maternity care may have impacted on women's mental health.

43.5% of women on the pregnancy register are unvaccinated in Knowsley, the highest rate of Cheshire and Merseyside Local Authorities and well below above the Cheshire and Merseyside average of 32.0%.

NHS Mersey Care are responsible for the Cheshire and Mersey Specialist Perinatal Service which provides important mental health assessment and support for local women experiencing moderate to severe mental health issues during the perinatal period. This service provides one-to-one assessment and ongoing support for women who are pregnant or have a baby who is under 24 months and are currently experiencing complex or severe mental health problems and/or have a history of or are at risk of developing severe or complex mental health problems during the perinatal period, even if they are currently well. Preconception advice is also available at a one-off appointment which provides advice, guidance and signposting to support women who are thinking about or planning to have a baby.

In Knowsley:

Historically, there has been a lack of data which identifies women with mental health problems in the perinatal period. This is being addressed nationally but more work is needed to find data at a more local level. Whilst local data is scarce national data suggests that perinatal and postnatal mental health problems are common affecting up to 1 in 5 women. The risk factors are also a cause of concern in Knowsley based on its demographics and health profile. For example, Knowsley saw the largest national increase in 2020 of prevalence of depression in the adult population, an 83% increase in mental health referrals to adult social care and 26% increase in demand for domestic abuse services. Knowsley's mortality rate from alcohol has risen by 3.2% in the last 9 years and has significantly higher rates of alcohol related hospital admissions.



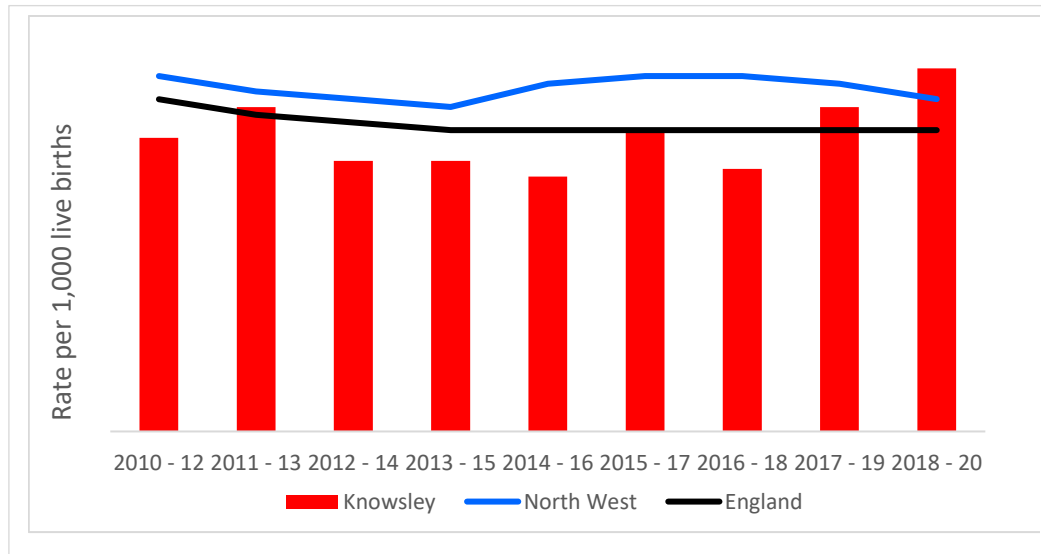
## Infant Mortality

Infant mortality is an indicator of the general health of a population. It reflects the relationship between causes of infant mortality and determinants of population health, for example economic, social, and environmental conditions.

Deaths occurring during the first 28 days of life (the neonatal period) in particular, are considered to reflect the health and care of both mother and baby. Reducing infant mortality overall and closing the gap between the richest and poorest groups are part of the Government's strategy for Public Health.

Despite the strong correlation between deprivation and infant mortality, Knowsley's rate of infant mortality has often been lower than the national and North West average rate.

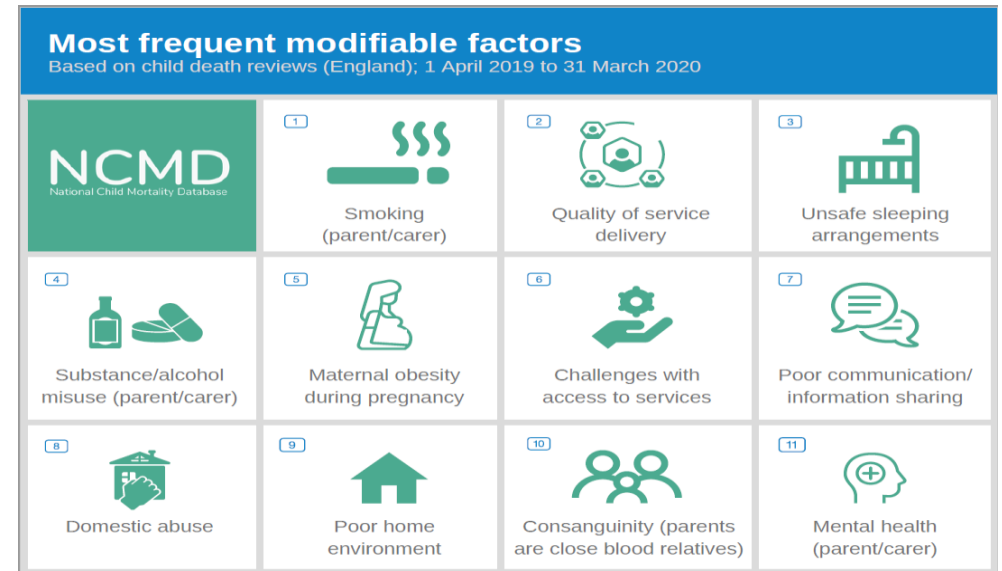
Infant mortality rate - deaths under 1 year of age per 1,000 live births



The rate has started to increase from 3.4 per 1,000 live births in 2016-18 to 4.7 in 2018-20; this rate is now higher than both the North-West and England. It should be noted however, that it is not considered significantly different from the North West and England averages. Caution is needed with interpreting this data at Local Authority level as there is small numbers and data can vary significantly

from year to year. The latest period equates to 28 infants in Knowsley in the three-year period 2018-20 period, this was an increase from 20 infants in 2016-18, on graph opposite this however shows a significant increase.

Although the infant mortality rate is similar to the England average, the child mortality rate in Knowsley is higher than national rates.





## Premature/Preterm Births

Preterm is defined as babies born alive before 37 weeks of pregnancy are completed. There are sub-categories of preterm birth, based on gestational age. Approximately 8% of births in the UK are pre-term.

Preterm birth complications are the leading cause of death among children under 5 years of age (World Health Organisation). The overall percentage of preterm live births decreased from 7.8% in 2019 to 7.4% in 2020 for England and Wales, (ONS).

Preventing deaths and complications from preterm birth starts with a healthy pregnancy. Quality care before, between and during pregnancies will ensure all women have a positive pregnancy experience.

WHO's antenatal care guidelines include key interventions to help prevent preterm birth, such as counselling on healthy diet, optimal nutrition, tobacco and substance use. Foetal measurements including use of ultrasound to help determine gestational age and detect multiple pregnancies; and a minimum of 8 contacts with health professionals throughout pregnancy to identify and manage other risk factors, such as infections. Better access to contraceptives and increased empowerment could also help reduce preterm births. Diabetes and High-Blood Pressure in pregnancy are also risk factors; but sometimes there is no known reason for preterm births.

As some babies who were born prematurely develop into children and adults, they may suffer from conditions such as behavioural difficulties, long term health problems or cerebral palsy. Some research has also found that the earlier a baby is born the higher their risk of having special educational needs at school.<sup>iii</sup> There are greater health risks for premature births and the earlier the birth the greater the risk. 1 in 10 of all premature babies will have a permanent disability.

## ANALYSIS

Knowsley has a consistently higher rate of babies born preterm compared to the North-West and England averages.

Since 2011-13 rates of preterm babies in Knowsley as well as the North-West and England have increased, but Knowsley's increase has been larger.

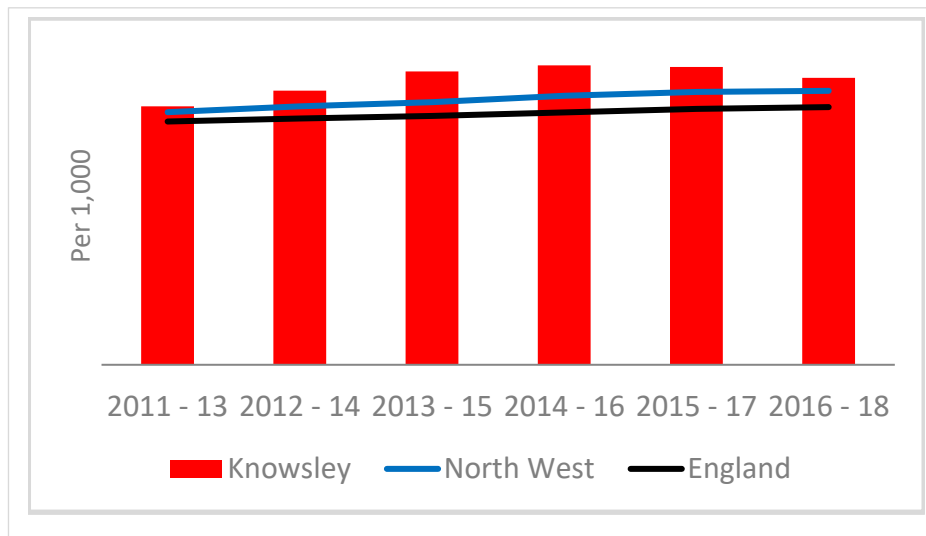
Knowsley had the 7th highest rate in the North-West (of 23 authorities) and compared to statistical neighbours it ranked 2nd out of 5<sup>iv</sup>.

This may be partially linked to risk factors such as higher proportions of women smoking, being obese during pregnancy and Knowsley residents having higher proportions who eat less healthily ( i.e. eating less than the recommended amount of daily fruit and vegetables) . There are also links between Preterm babies and Special Educational Needs and Disability (SEND).

Reducing pre-term births will reduce neonatal deaths and improve health outcomes for babies, mothers and their families. Premature babies may have more health problems at birth and in later life and experience development delays in comparison to babies born full-term.

Whilst sometimes the cause of premature births is unknown, Knowsley's health profile indicates the borough may be at greater risk of having higher rates of babies born prematurely such as higher prevalence of diabetes, high blood pressure, obesity, smoking and drinking alcohol. Supporting mothers to have healthy pregnancies could help reduce the number of pre-term births in Knowsley. o what?

### Premature births (less than 37 weeks gestation) – Crude rate per 1,000



## Breastfeeding – Overview of issues

Breastfeeding improves both infant and maternal health and wellbeing in both the short and longer term. There is extensive evidence of the health benefits such as reducing infant risk of infections, asthma, diabetes, heart disease, obesity and cot death. It also helps protect the mother from ovarian and breast cancers as well as heart disease and hip fractures.

The 2010 National Infant feeding Survey (IFS) shows there are a number of factors which affect rates of breastfeeding, they included age, ethnicity and deprivation. Across the UK breastfeeding initiation was lowest amongst mothers under the age of 20 (58%) and highest among mothers aged 30 and over (87%).

Mothers in the least deprived areas were more likely to initiate breast-feeding and others from White backgrounds less likely.

Although age, ethnicity of mother and their breastfeeding status is not available for Knowsley; we do know the age at which women in Knowsley have their babies is younger than in England as a whole. In addition, Knowsley is one of the most deprived areas in England. Breastfeeding is less likely to be initiated or continued in Knowsley in part due to the age of mothers, ethnic make-up of the area and high levels of deprivation.

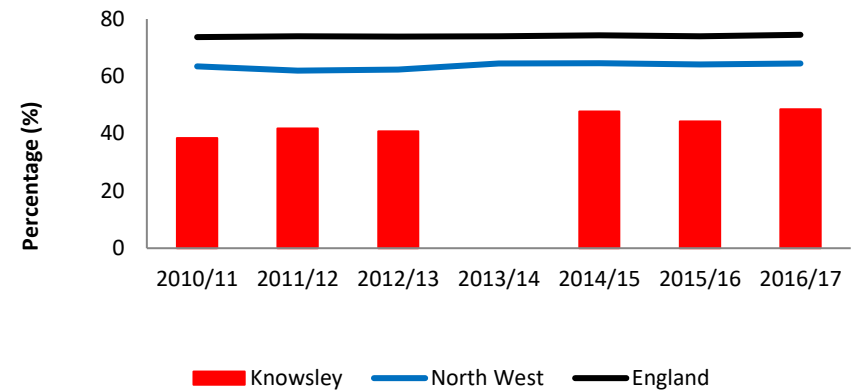
### In Knowsley:

There are three measures all covering different time periods and some data is unavailable due to incompleteness or because of data quality.

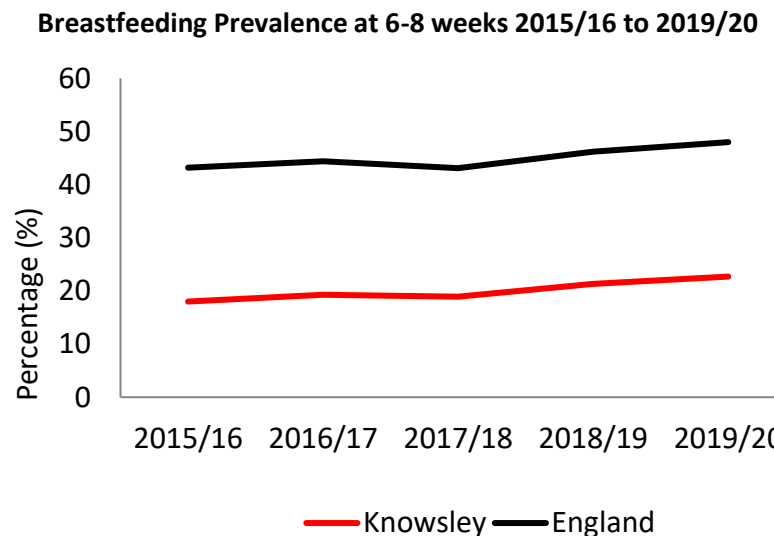
In 2018/19, only 43.6% of babies in Knowsley first feed was breastmilk, compared to 62.4% and 67.4% North-West and England averages.

Knowsley is significantly lower than the national average for breastfeeding prevalence at 6-8 weeks after birth. In 2019/20, 22.7% (or 2 in 10 babies) are breastfed in Knowsley; significantly lower than the national average which was over double this at 48%. Breastfeeding rates have stayed relatively stable in Knowsley over the last few years.

This data suggests that 4 in 10 mothers in Knowsley attempt breastfeeding (first feed/initiation data) but by 6-8 weeks only 2 in 10 babies are still being breastfed.



Barriers to breastfeeding include Mother's ill-health, Influence of sociocultural factors, Inadequate information and support and lack of conducive surroundings outside the home.



## Immunisations in Children

After clean water, vaccination is the most effective public health intervention in the world for saving lives and promoting good health.

Immunisation helps to prevent serious, infectious disease. It not only helps protect individuals but also protects the broader community by minimising the spread of disease. Vaccine-preventable diseases can cause hospitalisation, serious ongoing health conditions and are sometimes fatal. High immunisation rates in the community have led to many of these diseases becoming rare. However, they still exist and the risks of side-effects or complications from these diseases are far greater than the very small risks of side effects from vaccination.

For most immunisations, the WHO states a target of immunising at least 95% of all children because this is the level where 'herd immunity' can be achieved.

Babies receive the in the 6-in-1 vaccine (5 in 1 prior to 1<sup>st</sup> August 2017) at eight, twelve and sixteen weeks old, and this begins their protection against meningitis C. The Hib/MenC booster is given to children on or after their first birthday. The vaccine boosts the protection already gained from the first course of Hib vaccine. Hib and meningitis C infections are serious and potentially fatal. They can both cause meningitis and blood poisoning (septicaemia).

Immunisation coverage in Knowsley has been better than or in line with national levels; however, rates have now begun to drop. This is also the case for North-West and England averages, but the fall has been larger in Knowsley. The Pandemic will explain some of the reduction, but decline had already started prior to 2020.

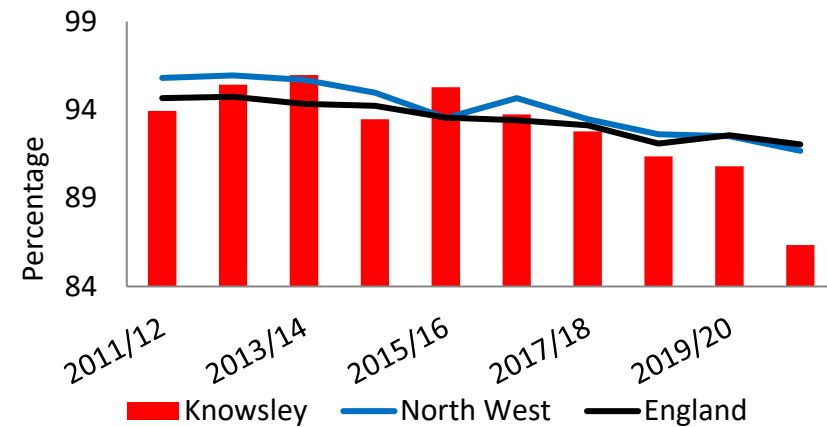
The 6 in 1 vaccination (Dtap/IPV/Hib) at before one year old and HIB/Men C booster are now significantly lower than the England average, as well as being lower than the North-West average too.

For the 6 in 1 vaccination 86.4% of children in Knowsley had been vaccinated compared to 92% in England; by age two this increases to 91.3% and is similar to the England average. 84.9% of children in Knowsley has received their booster vaccination for Hib/Men C compared to an 89.8% England average.

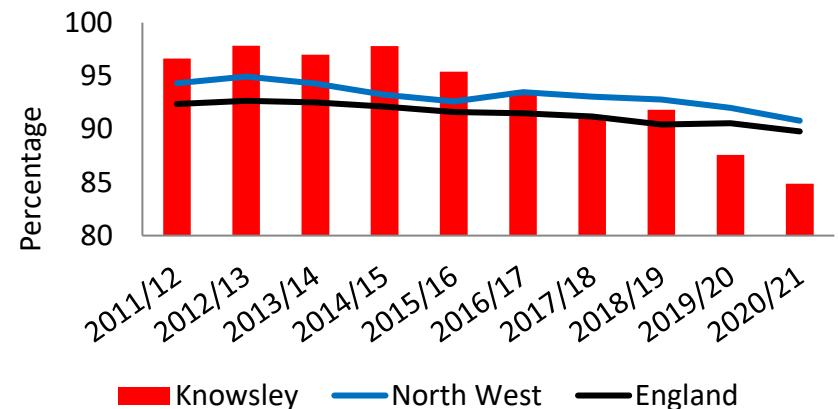
One area that Knowsley performs consistently well on compared to the England and North-West averages is children in care immunisations. This measures the number of looked after children who are up to date with the vaccinations in the

NHS schedule. The coverage is consistently above 90% and often close to or exceeding the 95% target.

**Dtap / IPV / Hib Vaccination (6 in 1) -before 1 year old 2011/12 – 20/21**



**Hib/Men C Booster – Aged 2 2011/12 – 2020/21**



## Immunisations MMR

### Overview of issues

The MMR is a combined vaccine that protects against three separate illnesses: measles, mumps and rubella (German measles) in a single injection. The full course of MMR vaccination requires two doses. The first dose of the MMR vaccine is given to children on or after their first birthday and the second at three years four months old or soon after.

Measles, mumps and rubella are common highly infectious conditions that can have serious and potentially fatal complications, including meningitis, encephalitis and deafness. They can also lead to complications in pregnancy that affect the unborn baby and can lead to miscarriage. Since the MMR vaccine was introduced in 1988, it is rare for children in the UK to develop these serious conditions. However, outbreaks happen, as in Merseyside in 2018 when there was a measles outbreak, so it is important that parents ensure their child is up to date with the MMR vaccination.

The UK initially achieved World Health Organisation (WHO) measles elimination status in 2017, based on data from 2014-2016. However, in 2018, there was a marked increase in the number of confirmed measles cases, based on this, WHO determined that the UK could no longer be considered as 'eliminated' and that transmission of measles had been re-established. Misinformation about the risks of vaccination remain a major factor in declining MMR vaccination rates.

### ANALYSIS

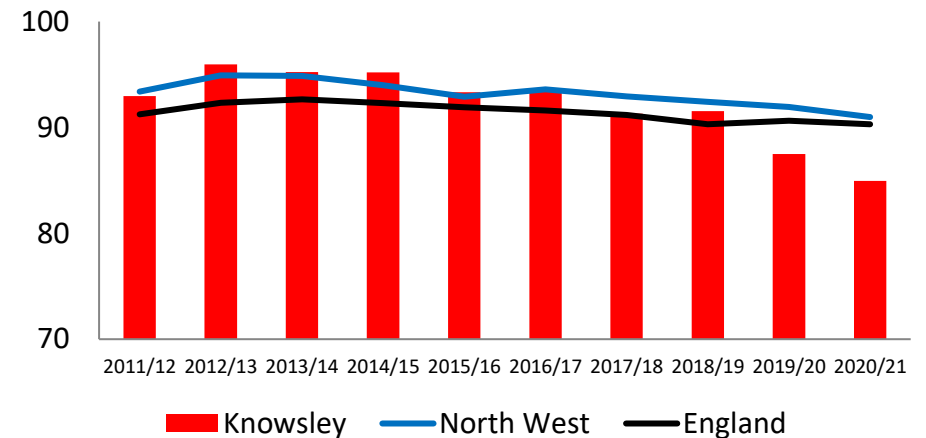
MMR vaccine take up has been high in Knowsley often exceeding the England and North-West averages. The 95% target has been reached on occasion; however, rates have been lowering in the last couple of years.

Knowsley reached the 95% target for MMR 1 dose by 2 years old between 2012/13 and 2014/15, from 2015/16 rates began to decline until 2019/20 when rates fell below 90% to 84.9% in 2020/21.

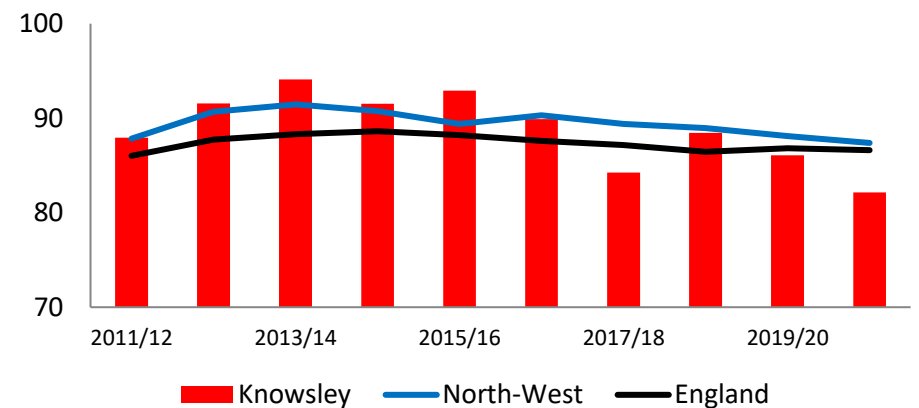
Knowsley reached or exceeded the 95% target for MMR 1 dose by 5 years old (in 2011/12 the target was missed by 0.5%), achieving better coverage than England and often the North-West region. Unfortunately, these gains do not continue for two doses by age 5. Knowsley doesn't achieve the 95% target for any year between 2011/12 and 2020/21, however coverage is better than England and often the North-West region up to 2019/20.

NICE makes a number of recommendations for improving access such as: providing longer appointment times, walk-in vaccination clinics, services offering extended hours and mobile or outreach services.

MMR for one dose (2 years old) 2011/12 – 2020/21 (percentage)



MMR for two doses (5 years old) 2011/12 – 2020/21 (percentage)



## Immunisations Flu vaccinations

### Overview of issues

Immunisation is one of the most effective healthcare interventions available and flu vaccines can prevent illness and hospital admissions. Increasing the uptake of flu vaccine should also contribute to easing winter pressure on primary care services and hospital admissions.

The children's nasal spray flu vaccine is safe and effective. It has been given to millions of children worldwide and has an excellent safety record. It's offered every year to children to help protect them against flu. The vaccine is offered to children aged 2-3 years and then takes place annually and is offered at primary and secondary schools. The nasal spray offers the best protection for children aged 2 to 17 years, if this is not suitable for individuals an injection will be offered.

Flu is caused by the influenza virus. It can be a very unpleasant illness for children. It can also lead to serious problems, such as bronchitis and pneumonia. Children under the age of 5 years have the highest rate of hospital admissions due to flu.

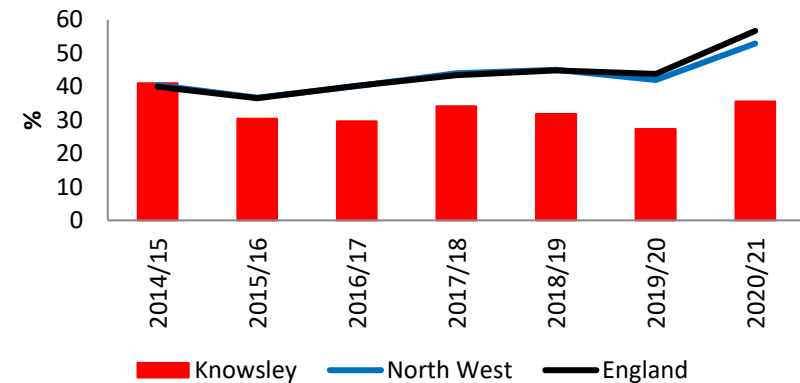
Children can catch and spread flu easily. Vaccinating them also protects others who are vulnerable to flu, such as babies and older people.

The 5 reasons given to parents and carers for their children to have the flu vaccine are: 1. It protects your child, 2. Protect you, your family and friends 3. No injection needed, 4. It's better than having flu and 5. Avoid costs, if your child gets flu, you may have to take time off work or arrange alternative childcare.

### ANALYSIS

Uptake of the flu vaccine for 2–3-year-olds was above the regional (40.5%) and national (39.9%) averages in 2014/15 at 41.0%. Unfortunately, unlike the regional and national averages, uptake began to decline. However, whilst vaccine coverage in Knowsley is still below the national and regional averages in 2020/21 it increased by 8.3% to 35.6%, compared to 52.9% North-West and 56.7% England averages. This is a positive step to improving coverage in Knowsley and achieving the goal of having over 65% take up.

Population vaccination coverage - Flu 2-3 years old (%)



## School Readiness and Early Years

The years from birth to age 5 are viewed as a critical period for developing the foundations for thinking, behaving, and emotional well-being. Child development experts indicate it is during these years that children develop linguistic, cognitive, social, emotional, and regulatory skills that predict their later success in many areas of life.

School readiness is a measure of how prepared a child is to succeed in school cognitively, socially and emotionally. A child (at the end of reception year, typically aged 5) achieves a 'Good Level of Development' (at the end of the Early Years Foundation Stage) if they have achieved at least the expected level for the Early Learning Goals in the prime areas of learning and the specific areas of mathematics and literacy.

The North East, North West and Yorkshire and Humber have the lowest levels of school readiness. Children experiencing multiple forms of adversity are least likely to achieve good levels of development (The Child of the North: Building a fairer future after COVID-19). National research shows a direct correlation between socio-economic background and educational attainment. In Knowsley, there is significant variation in the attainments of groups of pupils, especially between those who are eligible for free school meals and their national peers at all stages of education. This gap begins in early years and is already evident when children enter an educational setting at age two or start school at age five.

Tooth decay is mainly a preventable disease. However, significant levels of decay remain, resulting in pain, sleep loss, time off school, and in some cases, treatment under general anaesthetic.

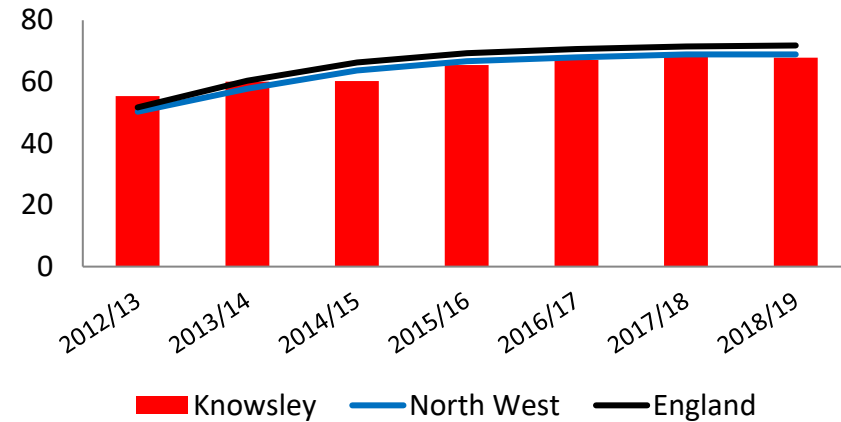
## Tooth Decay in Children

Tooth decay is a preventable disease. Significantly prevalence exists currently, resulting in pain, time off school, with some treatment needed using general anaesthetic.

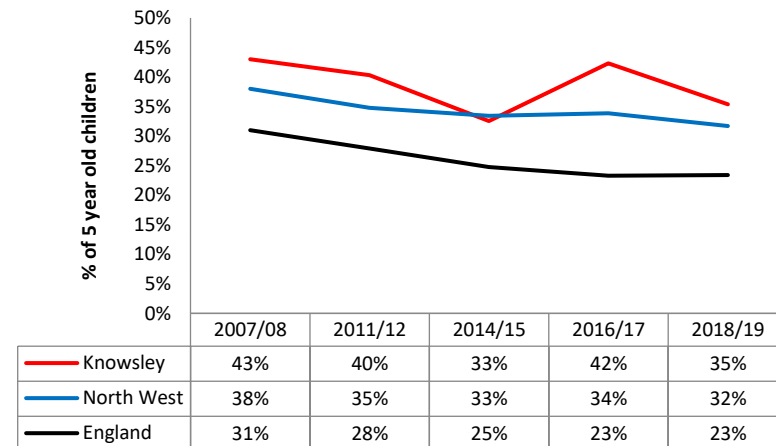
- The latest 2018/19 dental survey for five-year-olds found that more than one third of local children (35%) were suffering from tooth decay. Locally and nationally there has been a fall in levels of tooth decay since 2007/08. Current

levels of tooth decay in Knowsley remain significantly higher than the national average of 23%, with the gap between Knowsley and England being similar in 2018/19 to that of 2007/08.

## The percentage of children achieving a good level of development



## Children with one or more decayed, missing or filled teeth



## Hospital admissions caused by unintentional and deliberate injuries in children

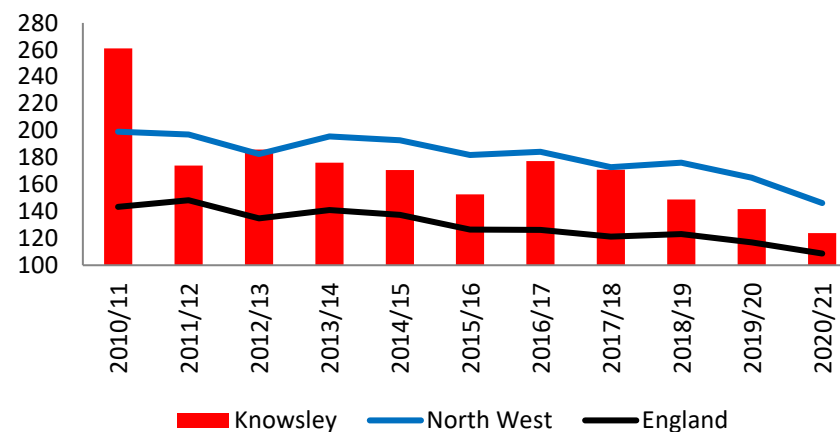
Injuries are a leading cause of hospitalisation and represent a major cause of premature mortality for children and young people. Reducing injuries has clear benefits for children and their families. Childhood injuries, especially severe injuries, can have long-term health, educational, social and occupational consequences. These include physical disability, long-lasting psychological impact, cognitive or social impairment, lower educational achievement and poorer employment prospects (Public Health England). Non-intentional injuries in children under five years of age are a leading cause of death and disability; especially from falls, poisonings and drowning, which can all be prevented with improved child safety measures.

There is also a strong link between child injuries and social deprivation - children from the most disadvantaged families are far more likely to be killed or seriously injured due to accidents. Children from the most deprived areas have hospital admission rates 45% higher than children from the least deprived areas (Preventing accidents in children under five UK Health and Security Agency). Children whose parents have never worked (or are long-term unemployed) are 13 times more likely to die from an unintentional injury compared to children whose parents are in higher managerial or professional occupations. (NICE.org).

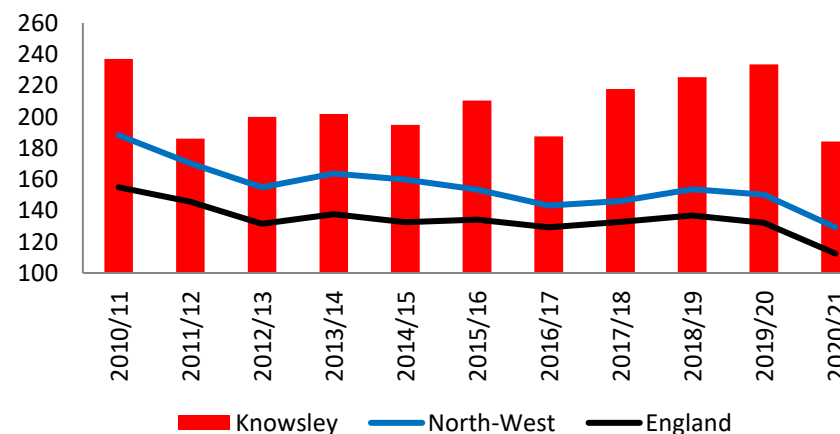
Knowsley has a high rate of hospital admission caused by unintentional and deliberate injuries in children (0 to 4 years), compared to the England average. However, Knowsley has seen a reduction, in 2010/11 the rate was 261.2 per 10,000 residents under 5 years, compared to 2020/21 when the rate was 123.9. Knowsley's rate has been below the North-West average since 2013/14, but it is worth noting the North-West has the highest regional rate in England (146.2 2020/21).

In the older age group 15-24 years, Knowsley has seen not significant changes in rate which is much higher than the 0-4 age group at 184.1 per 10,000 population for 2020/21. The rate is significantly higher than the national average (112.4) and higher than the North-West average too (129.2).

## Hospital admissions caused by unintentional and deliberate injuries in children 0 to 4 years (crude rate per 10,000)



## Hospital admissions caused by unintentional and deliberate injuries in children 15 to 24 years (crude rate per 10,000)







### ANALYSIS continued

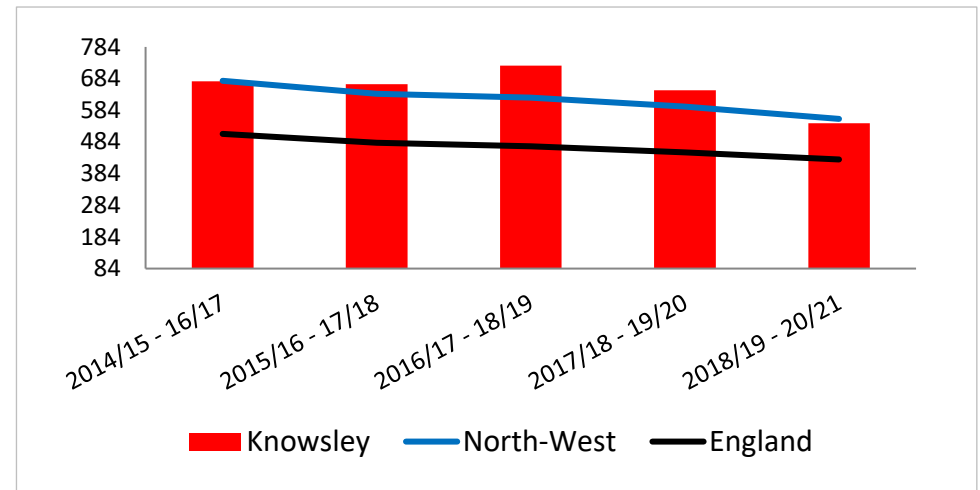
Falls are the leading cause of injury related hospital admissions in the under-fives, with falls from furniture causing the highest number in this category. Deaths are infrequent, but even a fall from a highchair can have serious consequences including brain damage.

Knowsley also had high rates of Emergency admissions for falls in children aged 0-4 and has seen some improvement since 2014/15-2016/17, however the rate is higher than the England<sup>v</sup> average but is now just under the North West average; Knowsley ranks 30<sup>th</sup> out of 148 other Counties and Unitary authorities. Falls from furniture has been reducing in Knowsley (although there was a slight increase 2016/17-20/21 but the actual number was small) and are now lower than the North-West average although the rate remains significantly higher than the England average.

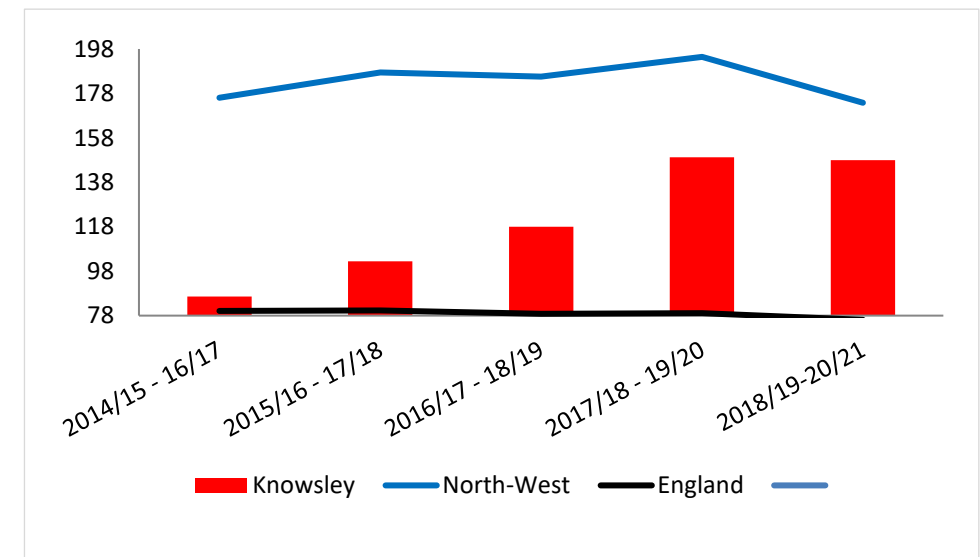
Emergency admissions for exposure to heat and hot substances in children aged 0-4 is high in Knowsley and has been getting worse. The rate has increased from 86.6 (2014/15-16/17) to 148.0(2018/19-2020/21). Actual numbers are small, but these injuries can result in hospitalisation and sometimes serious long-term disability. Knowsley's ranks 5<sup>th</sup> compared to Statistical Neighbours (of 16). The North-West average is significantly higher than Knowsley and is also increasing.

EHA due to poisoning from medicines aged 0-4 years has also increased in Knowsley from 99.1 rate per 100,000 (2010/11 – 14/15) to 120 (2016/17 – 20/21) the rate is now significantly worse than the England average and similar the North-West average. Medicines cause almost 70% of poisoning admissions in this age group.

**Emergency admissions for falls in children aged 0-4 (Crude rate per 100,000)**



**Emergency admissions for exposure to heat and hot substances in children aged 0-4 (crude rate per 100,000)**



## Topic – Children and Young People’s Mental Health

**Overview of Issues** - Untreated mental health disorders in children and young people are linked to poor academic outcomes and poor health, including drug abuse, self-harm, and suicidal behaviour. They often persist into adulthood and can have substantial socioeconomic consequences.

Children and young people’s mental and emotional wellbeing is a significant public health priority. Three in 4 mental illnesses start before a child reaches the age of 18, while 50% of mental health problems in adult life (excluding dementia) take root before the age of 15 (Chief Medical Officer, 2012).

Building resilience, the ability to be able to bounce back from adversity, in young people can support better outcomes for them whatever challenges they face.

Adolescence is a critical period of development, and a window of opportunity. What happens at this age will have a long-lasting impact. Human brains develop and change more during the teenage years than at any other time apart from the first 3 years of life. This means that this is a time when there is huge potential for the development of new skills and capabilities. Environment plays a key role for teenage brain development, enriching environments can enhance development while restrictive ones do the opposite. Young people who are not resilient will be more likely to respond to stress by developing anxiety and depression.

The mental health of children and adolescents was deteriorating prior to COVID-19, but there was significant rise during the pandemic, particularly in the North of England.

Before COVID-19, evidence highlighted important determinants of child mental health, including family socioeconomic conditions, parental mental health, family stress levels, loneliness, and sleep quality. Some of these same determinants posed a greater threat to mental health during the COVID-19 pandemic. Children in the North of England spent more time in lockdown and were more exposed to severe financial and digital vulnerabilities during the pandemic compared to the rest of the UK. (Child of the North Building a Fairer Future After Covid-19- NHS)

Rates of probable mental disorders have increased since 2017. In 2020, one in six (16.0%) children aged 5 to 16 years were identified as having a probable mental disorder, increasing from one in nine (10.8%) in 2017. The increase was evident in both boys and girls (Mental Health of Children and Young People in England, 2020: Wave 1 follow up to the 2017 survey- NHS Digital). Inequality underlies many risk factors for mental health problems in children and young people and needs to be addressed through the wider determinants of health (PHE). Finding from an NHS Digital Study found that mental health problems appear to be higher for some children and young people than others. Symptoms of probable mental disorder among children and young people aged between 6 and 23 years old were more likely to be reported in White British and the mixed or other groups, than in the Asian/Asian British and Black/Black British groups in 2021 (although sample sizes are small so need to be treated with caution). Further, symptoms of mental disorder were higher in children aged between 6 and 16 years old with special educational needs, compared to those without. Source -NHS digital’s second follow up study to their 2017 Mental Health and Young People Survey (MHCYP). Data has shown that from the start of the pandemic through to March 2021 there was an increase in children with SEND experiencing worsening mental health. This includes higher levels of anxiety, feeling unhappy and being more isolated. This is of particular importance to Knowsley given the demographic make-up of the borough and the higher-than-average level of school children in Knowsley with diagnosed SEN, meaning that Knowsley could see higher than average proportion of children and young people struggling with their mental health and wellbeing.

## ANALYSIS

Children's health and wellbeing was significantly impacted by Covid in Knowsley. Referrals to children's mental health services increased in number and complexity during the pandemic (Listening Ear, CAMHS and CEDS) and increased activity in preventative services (Kooth). There were increases in referrals for more general anxieties related to COVID (e.g., Isolation and health) as well as for bereavement and loss. School closures and lockdowns meant that children's support networks declined, and services had reduced access to children and young people through school and clinic settings, to enable support and therapeutic interventions to take place. A range of mental health and emotional wellbeing services for children and young people were commissioned by the Whole Life Commissioning Team and enhanced in response to Covid pandemic (Knowsley SEND Partnership Board).

There is limited, reliable and robust data on the prevalence of mental health disorders in Children and Young People. The charts in this section contain some indicators of mental health prevalence that can be benchmarked against regional and national averages.

Hospital admissions for under mental health conditions for under 18-year-olds, has remained fairly stable in Knowsley in the last ten years, with a peak in admissions in 2019/20 (147.92 per 100,000). Knowsley's admissions remain higher (116.2) than the North-West and England averages (106.9 and 87.5 per 100,000 respectively for 2020/21).

The proportion of school children with social, emotional, and mental health needs, continues to increase in Knowsley as well as the North-West and England. Knowsley remains above both the North-West and England averages; with 3.3% of pupils with having social, emotions and mental health needs compared to 2.9% in the North-West and a 2.8% England average.

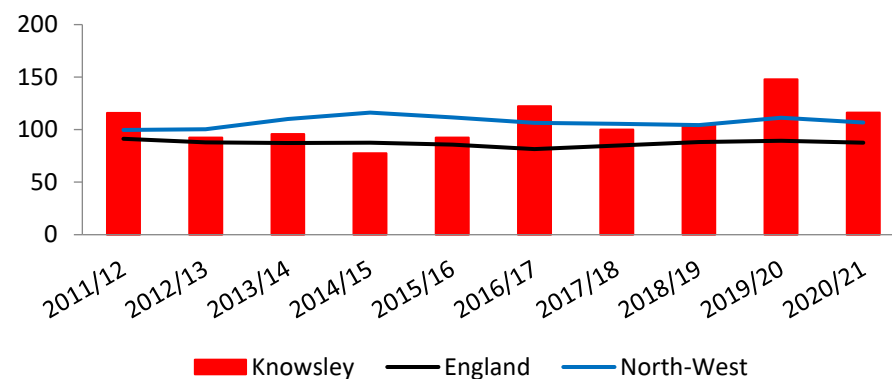
There is no significant change in hospital admissions because of self-harm for children and young people aged 10-24 years in Knowsley (703.13 rate per 100,000 2020/21), rates are significantly worse than the North-West (497.5) and England averages (421.87).

For the youngest age group 10-14 years rates have begun to increase again, from 227.7 in 2018/19 to 488.1 in 2020/21, rates are significantly higher than the England average (213) and higher than the regional average too (336.1).

Rates for those aged 10 to 19 peaked in 2019/20 at 1,234 almost double the England average of 664.7, it is worth noting this represents a small number of young people in Knowsley (around 100). The rate per 100,000 people is now 974 in 2020/21, compared to a North-West average of 726 and a national average of 652.6.

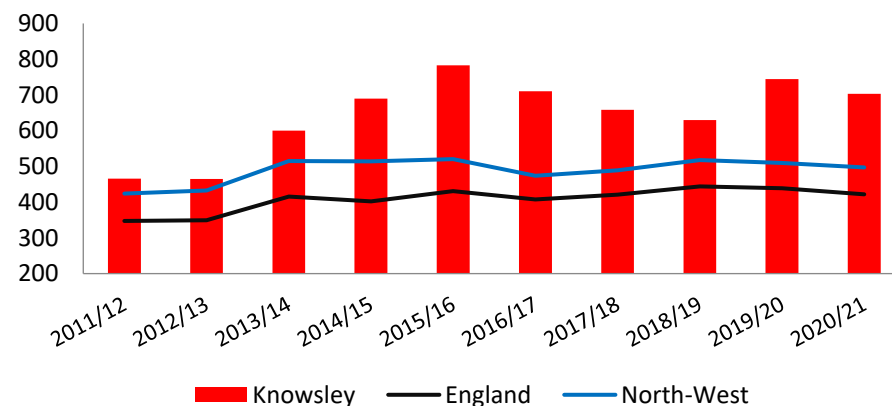
### Hospital admissions for mental health conditions (under 18 years)

Crude rate per 100,000



### Hospital Admissions as a Result of Self-Harm (10-24 years)

Crude rate per 100,000



## Special Educational Needs and Disabilities

As of 2021, 19% of Knowsley's school-age population have a special educational need, and while this marks a significant reduction from 2010, when 27% of children had a special educational need, it remains high. Generations of children in Knowsley have experienced education with a special educational need, and national evidence shows that those with special educational needs are the most disadvantaged socially and economically and face greater inequalities throughout their lives.

In Knowsley, 1,718 (4.9%) children have an Education, Health and Care Plan for their Special Educational Needs. This is higher than the national average (3.7%), the North West average (3.8%), and statistical neighbours (3.8%). This number has grown since 2017 when there were 1,072 (3.8%) children with an EHCP. 14.1% of children have SEN Support.

Amongst Knowsley's primary school special educational needs children cohort, the most common SEN identification is for Speech, Language and Communication Needs accounting for 35.6% of children with SEN.

For Secondary School pupils with SEN, the most common identification is Moderate Learning Difficulty. In both the local and national levels, Social, Emotional and Mental Health has grown and is now the second highest rate of diagnosis, with Knowsley seeing a steady increase from 16.8% in 2018, to 21% in 2021 which is in line with the national rate of 21.5%.

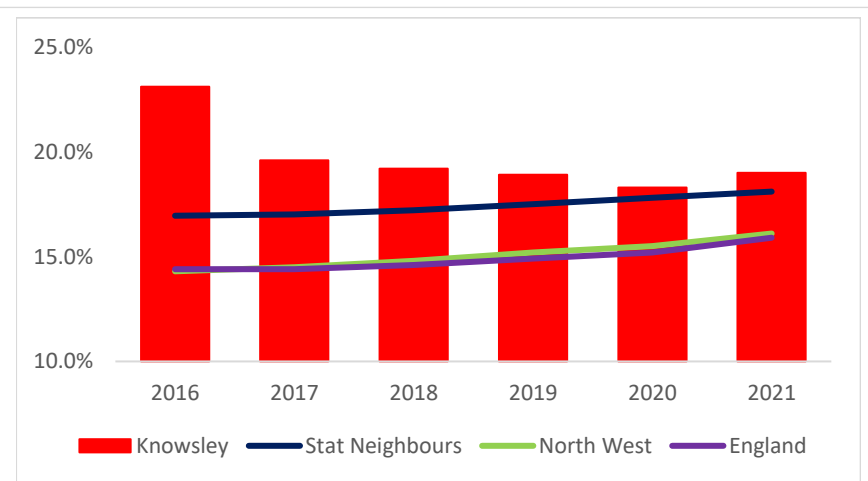
The impact of COVID-19 on children with SEND, is not yet fully understood or known, but there are significant risks in the future. This includes the impact of disruptions in education and whether this widens the inequalities experienced between children, and how this affects longer term confidence and prospects for children. The impact on reduced opportunities for socialisation for children may well be significant, alongside the more limited opportunities that families had for interaction with professionals at early stages in child development, could lead to greater lags in identification and support at lower levels of need.

People with learning difficulties and special educational needs are more likely to have worse health than those without and are more likely to experience a number of health conditions.

In Knowsley, we know that the higher concentrations of children with SEND live in the more deprived parts of the Borough and recognise that the high levels of SEND in Knowsley are part of the cycle of deprivation and poverty as both a cause and an effect.

In the long-term, and children with SEND transition to adulthood, Knowsley's higher than average rate of SEND is significant in understanding inequalities, in addition to challenges in accessing good quality employment and security, those with learning disabilities are less likely to respond to annual health checks, immunisation take up and cancer screening, alongside common health conditions, such as mental health difficulties, unhealthy weight and dementia.

**Percentage of Children with EHCP and SEN Support**



## Child Poverty

In addition to being recognised as the second most deprived borough in England according to the 2019 Indices of Multiple Deprivation, Knowsley also ranks as the third highest borough in England for deprivation affecting children (IDACI).

6,496 children (aged under 15) in Knowsley are in relative low-income families (20.8% of children), which means they were in households where family income is below 60% of the current median income. This compares to a rate of 18.7% in England. The three wards with the most children in this group were Northwood (752), Page Moss (649) and Stockbridge (567). The number of children in this group in the Borough has increased by 25% between 2015/16 and 2020/21.

Children in lone parent households make up 58% of children in poverty in the Borough. There are 3,745 children (aged under 15) living in relative low-income lone parent households in Knowsley. This contrasts with England overall, where lone parent households account for 39% of children in relative low-income households.

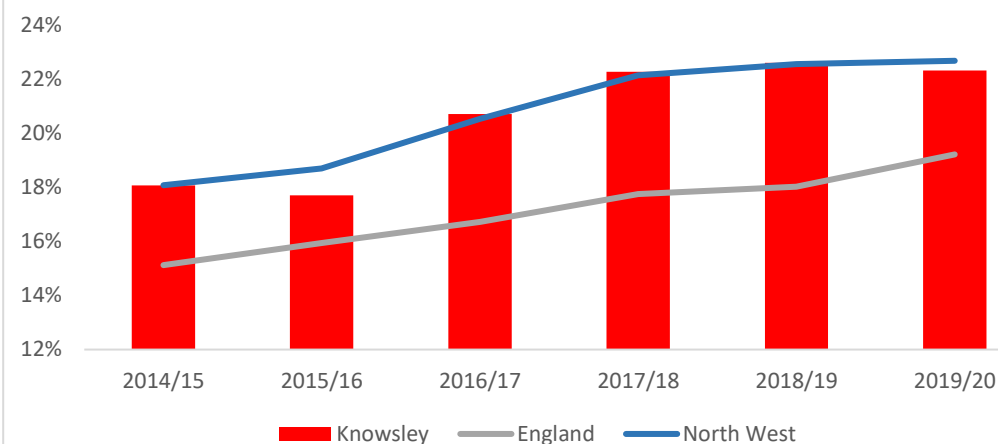
Free school meals (FSM) are available to children in some low-income families, and therefore the rate of eligibility helps us understand levels of deprivation. 34.5% of primary school pupils in the Borough were eligible for and claiming Free School Meals in 2021, which is higher than the North West (24.4%) and England (21.6%) rates. The rate is higher for secondary school pupils, with 43.3% eligible for and claiming FSM. Compared to 22% in the North West and 18.9% in England.

Poverty in Knowsley is increasingly a problem affecting children where at least one family member is in-work. In 2014/15, less than half of children in low-income households were in an in-work household, but this share has gradually increased and has remained above 50% since 2017/18. In England overall, around two thirds of children in low-income households are in *in work* households. In 2020, there were 2,000 workless households in Knowsley, which is 8.3% of the total; this compares to England overall where 9.4% of households were workless.

Although the impact of the pandemic on unemployment was limited by the furlough scheme, there has still been a significant increase in the rate of people eligible for Universal Credit – which is paid to people on low incomes, who are out of work, or who cannot work. In February 2020, there were 4,738 households in

Knowsley with children claiming Universal Credit, which increased by 37% to 7,478 by November 2021. This compares with an increase of 43% in England over the

Percentage of children aged 0-15 in relative low-income households



same period.

Child poverty is known to have a lasting impact on life chances. On average, children growing up in the deprived areas have worse health than those who grow up in the least deprived areas, do not perform as well academically, and are more likely to develop mental health issues by the age of 11.

Poverty impacts on health. Evidence shows that for infants, living in fuel poverty leads to a 30% increase in the risk of hospital admission. Children experiencing poverty and disadvantage are more likely to die within the first year of life, more likely to perform poorly at school and more likely to go on to be unemployed or earn low wages.

In line with the trend for England, children in Knowsley from disadvantaged backgrounds have lower levels of educational attainment at both Key Stage 2 and Key Stage 4. At KS4, the gap between advantaged and disadvantaged pupils in Knowsley is smaller than the gap in England, but in both cases, this widened between 2017-2021.

---

<sup>i</sup> Better Births: Improving outcomes of maternity services in England 2016. National Maternity Review.

<sup>ii</sup> Chamberlain, C. (2017). Psychosocial interventions for supporting women to stop smoking in pregnancy. Cochrane Database of Systematic Reviews.

<sup>2</sup> Baron, R. et al. (2013). Socio-demographic and lifestyle-related characteristics associated with self-reported any, daily and occasional smoking during pregnancy PLoS One, 8(9): e74197

Statistical data unless otherwise stated is from <https://fingertips.phe.org.uk/> BLISS and <https://www.nice.org.uk/guidance/ng72/resources/developmental-followup-of-children-and-young-people-born-preterm-pdf-1837630868677>

<sup>iv</sup> Children's Services Statistical Neighbour Benchmarking Tool (CSSNBT)

<sup>v</sup> There are data issues with the last two data periods for England due to missing data from one healthcare trust.