

Teenage Conceptions and Births

North Lincolnshire JSNA

North Lincolnshire Public Health Intelligence Team 2022

Version 1.6

**North
Lincolnshire
Council**

www.northlincs.gov.uk

Context – Why are Teen Conceptions an issue?

Teenage conceptions and births have a strong relationship with deprivation⁽¹⁾, lower health literacy and poorer educational outcomes. A high proportion are unplanned⁽²⁾, and nationally, in 2020, 52.8% of conceptions under 18 years ended in abortion⁽³⁾.

Deprivation and low educational attainment are associated not only with teen conceptions, but also within the longer-term effects of teen pregnancy, propagating on to future generations and potentially leaving young children trapped in poverty during the crucial early years of life. Without further support, it can also limit the future potential of young parents.

Teenage mothers under 20 are 3 times more likely to smoke during pregnancy and in the 3 years after birth have higher rates of poor mental health.

There are higher rates of still birth, low birth weight and infant mortality for children born to women under 20. Mothers under 20 are half as likely to be breast feeding at 6 to 8 weeks and at 2 to 2.5 years old children of teenage mothers are more likely to have developmental delays⁽⁴⁾.

While it is true that many teenage parents do a good job of parenting, others will struggle. 60% of children featured in serious case reviews nationally between 2009 and 2011 were born to mothers under the age of twenty-one⁽⁵⁾.

The challenge of both motivating and enabling young people to avoid early pregnancy has been considered a public health issue since the late 1990s and further progress in both reducing the under-18 conception rate and improving the outcomes for young parents is considered central to improving young people's sexual health and achieving health and educational equity for young parents and their children.

National Policy

In 1999 The Teenage Pregnancy Strategy for England was published (SEU), with the aim of halving under 18 conception rate by 2010, from a national baseline of 46.6 per 1,000 females aged 15-17*.

Whilst this was not achieved nationally by 2010, the rate of conceptions has fallen consistently since then from 34.3 conceptions per 1000 women under 18 in 2010 to 13.1 in 2020.

In 2018 the teenage pregnancy prevention framework⁽⁴⁾ was published by PHE and was designed to help local areas assess their local programmes to see what's working well, identify any gaps, and maximise the assets of all services to strengthen the prevention pathway for all young people.

Elements of this framework have been incorporated into this pack.

* Only about 5% of under-18 conceptions are to girls aged 14 or under, and to include younger age groups in the base population would produce misleading results. The 15 to 17 age group is effectively treated as the 'population at risk'. For more information, see the [Conception statistics Quality and Methodology Information report](#).

Population

Population estimates by ONS (2020) state that an estimated 9607 females aged between 10-19 years live in North Lincolnshire. This 10 year age group was chosen as the cohort moving into risk, and currently at risk within the next 5 years.

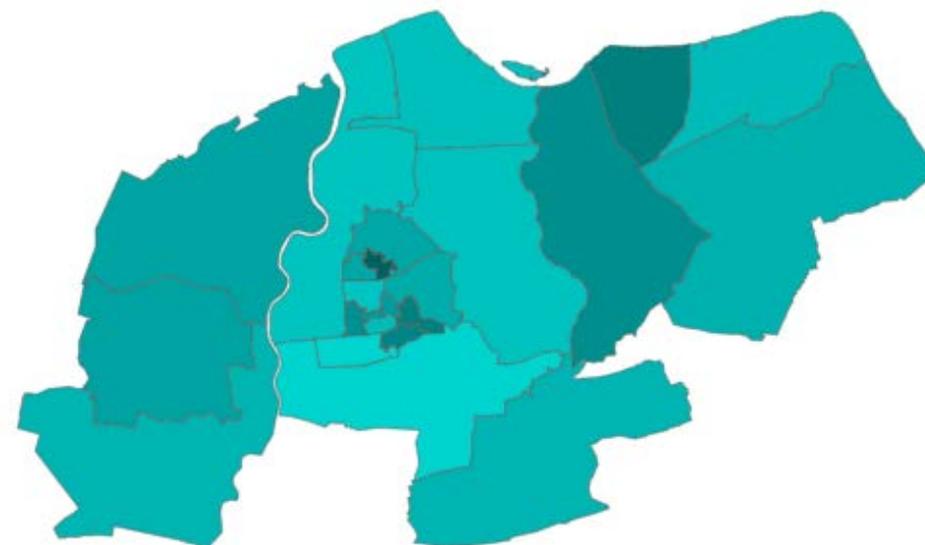
the below graphics show the distribution of 10-19 year old girls in North Lincolnshire by number per area.

Urban areas of Scunthorpe, such as Ashby, Brumby, Crosby and Park, Frodingham, Kingsway with Lincoln Gardens and Town.

Females aged 10-19 by Ward in North Lincolnshire (number)

Wards in North Lincolnshire	girls 10-19 yrs	% of all females
Ashby	889	12.4%
Axholme Central	438	11.1%
Axholme North	436	10.5%
Axholme South	376	10.3%
Barton	569	9.4%
Bottesford	440	8.1%
Brigg and Wolds	642	10.9%
Broughton and Appleby	328	9.8%
Brumby	820	13.4%
Burringham and Gunness	121	6.1%
Burton upon Stather and Winterton	539	9.4%
Crosby and Park	948	13.2%
Ferry	606	10.4%
Frodingham	542	13.0%
Kingsway with Lincoln Gardens	699	12.3%
Ridge	640	9.9%
Town	574	12.9%
Grand Total	9607	11.0%

Females aged 10-19 by MSOA area in North Lincolnshire (number)



© Crown copyright and database rights 2022 Ordnance Survey 0100023560

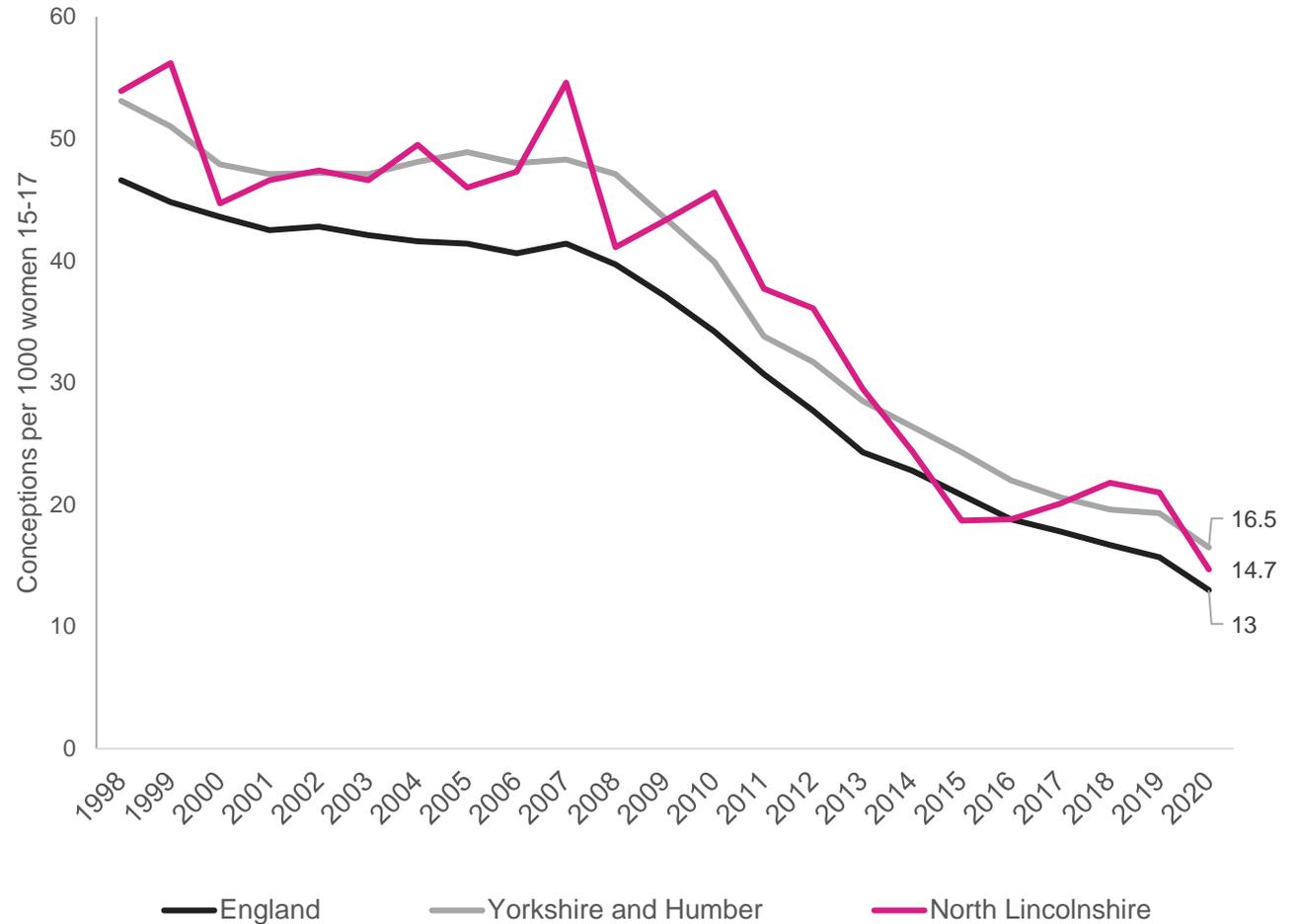
Current Picture

The conception rate in under 18's declined by over 72% nationally between 1998 and 2020, locally declining 73% in the same period. (Chart 1). The steepest period of decline locally occurred between 2010 and 2015, between which the conception rate in under 18s fell by over half from 45.6 per 1000 to 18.7 in North Lincolnshire; more rapidly than occurred nationally at the time. This took North Lincolnshire from a position of significantly higher conceptions to just below the England average.

In 2016 the North Lincolnshire rate stopped falling, (18.8 per 1000) and began to increase, then plateaued in 2019 whilst nationally, the rate has continued to constantly decline.

In 2020 under the backdrop of COVID-19, the rate in North Lincolnshire fell abruptly, a pattern shared to a lesser extent in England and Yorkshire and Humber as a whole.

Chart 1: Under 18 conceptions – England, Yorkshire and Humber and North Lincolnshire 1998 - 2020



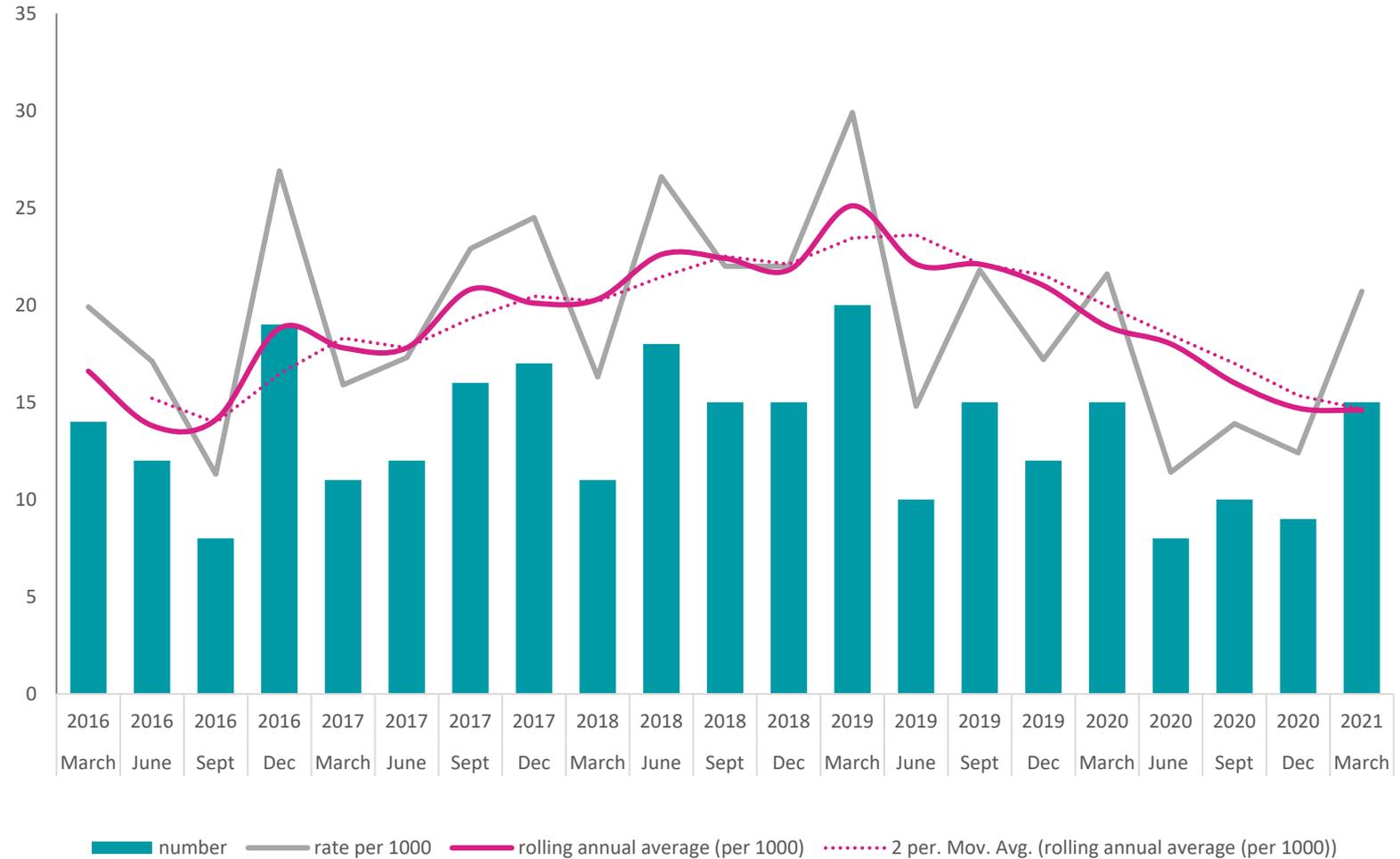
Quarterly conceptions under 18 years

Quarterly rolling annual conception rates in North Lincolnshire increased quarter on quarter from Q1 2016, to Q1 2019. Chart 2 shows quarterly data between 2016 and Q1 2021.

The number of conceptions fell in September 2016, but then began to rise. After Q1 2019, the total number of conceptions each quarter was between 10 and 15 until Q2 2020 where numbers dropped below 10 for the first time since Sept 2016.

Q2 to Q4 of 2020 data are in context of the COVID-19 pandemic restrictions / lockdowns which may have affected rates nationally. The England rolling annual rate stood at 13.7 per 1000 in Q3 2020, A 14.9% decrease on Q3 last year or an absolute 2.4 per 1000 decrease in rate, which is over twice the usual year on year rate decrease.

Chart 2: Quarterly under 18 conceptions in North Lincolnshire - number, rate and rolling annual rate 2016-2021



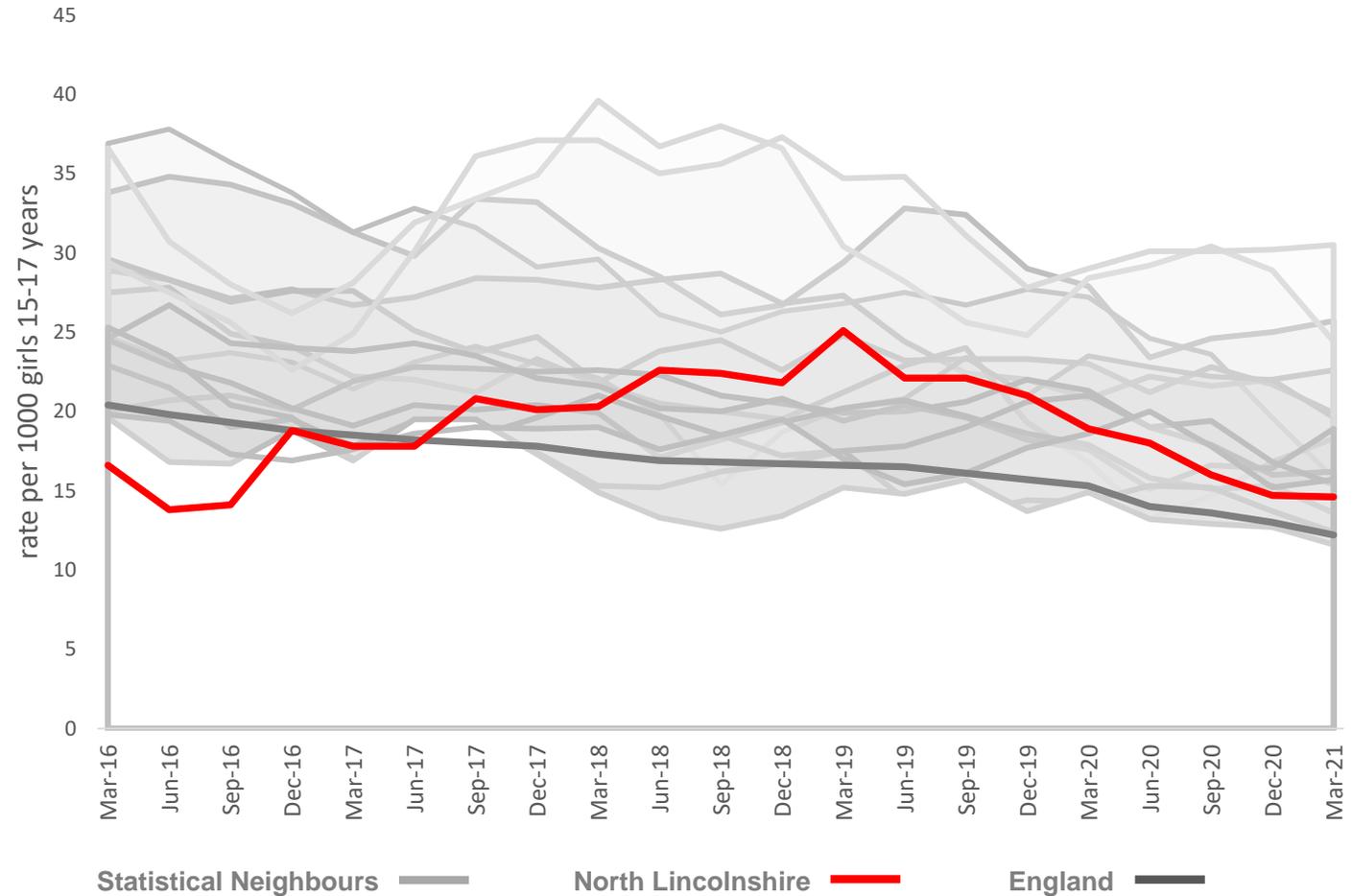
Statistical Neighbours

When compared to statistical neighbours, North Lincolnshire (red) spent the first three quarters of 2016 much lower in rate than it's statistical neighbours and below the national average (shown in dark grey).

Since June 2016 the gradual increase brought North Lincolnshire to the middle of this group by mid 2019. Since then the rate has fallen, bringing North Lincs closer to the national average and in the bottom quarter of the group.

All LA charted adjacent saw an overall decline over the whole period Mar 2016- Mar 2021 except one, North Lincolnshire saw an overall marginal decline in the period.

Chart 3: Under 18 conceptions North Lincolnshire and CIPFA statistical neighbours, rolling annual rate, 2016 – Mar 2021 (rate per 1000 females 15-17 yrs)



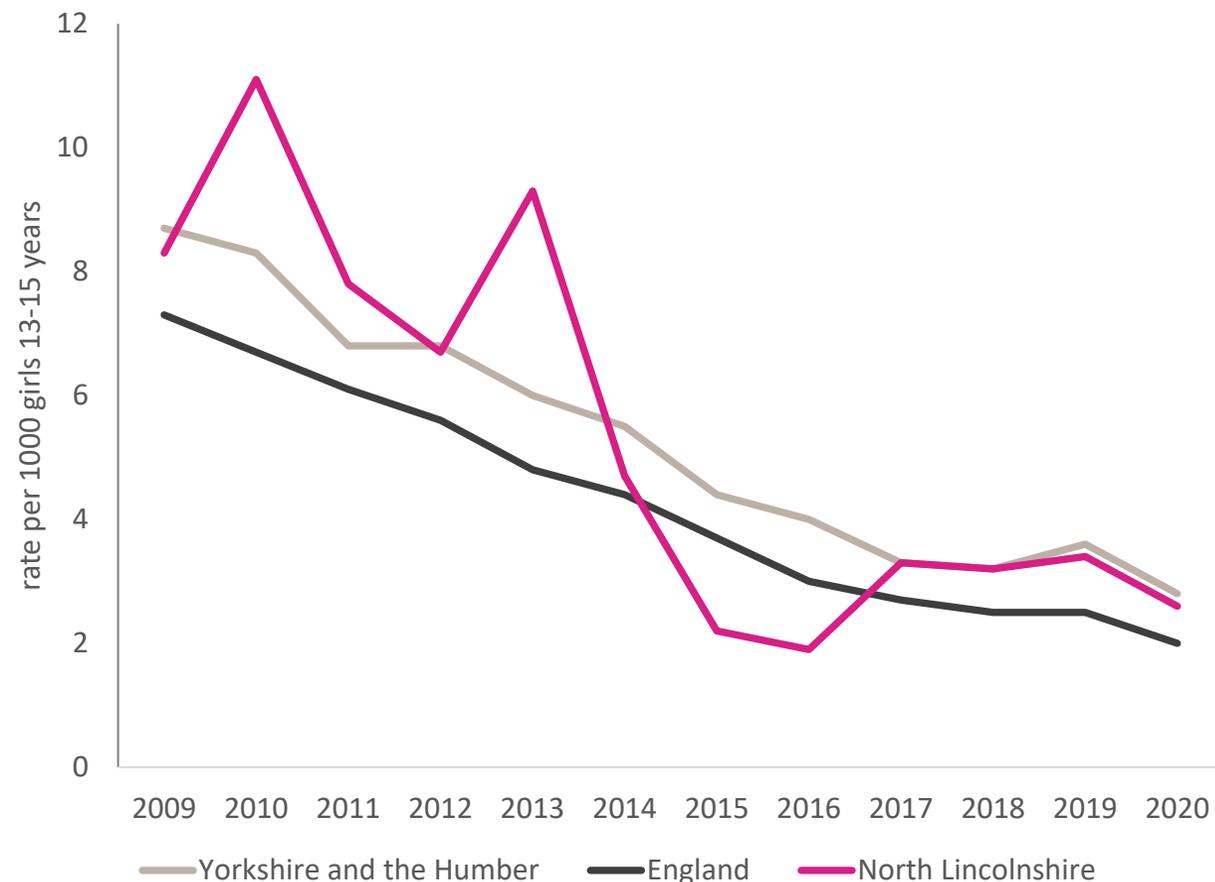
Conceptions to under 16s

Relatively few conceptions occur to under 16s in North Lincolnshire, the rate per 1000 girls 13-15 years is higher than England (2.0 per 1000), but currently just below the Yorkshire and Humber rate (2.8 per 1000)

The North Lincolnshire rate in 2020 (2.6 per 1000) is based on 8 conceptions within that year, this was 18% of under 18 conceptions in that year.

The lowest number of under 16 conception was in 2016 (5). There have been 10 or fewer conceptions in this age group every year since 2014.

Chart 4: Under 16 conceptions – England, Yorkshire and Humber and North Lincolnshire 2009 - 2020



Conceptions leading to Abortion

In North Lincolnshire, more young women carry from conception to delivery than seen overall in England.

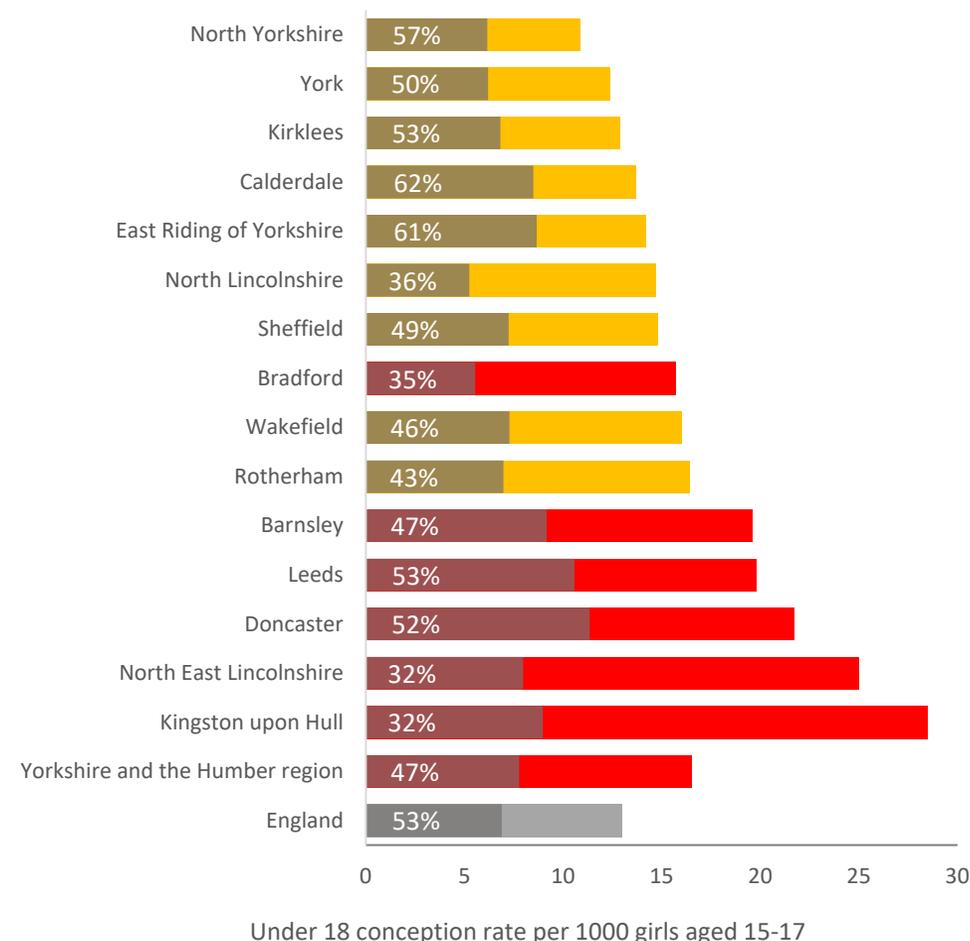
The proportion of conceptions leading to abortion in under 18s is significantly lower than the national average and is fourth lowest in the region. (35.7%).

Although fluctuations occur, partly due to the relatively low numbers, the rate of conceptions leading to abortion has largely fallen over the last 12 years, in an opposite trend to seen nationally.

In the years between 2008 and 2020, the proportion of conceptions leading to abortion generally stayed below 40%, and was only above 40% of the total conceptions in 4 of the 12 years. In contrast, between 1998 and 2007, only once was the proportion of conceptions leading to abortion less than 40%.

Nationally between 1998 and 2020, the proportion of conceptions leading to abortion has increased (42.4% - 53%)

Chart 5: Conceptions u18, regional and national comparison by LA; rate, abortion proportion and trend (2020)



Comparison by LA: abortion proportion shown in darker shading, statistical significance (95% CI) to England, Red significantly worse, yellow no significant difference

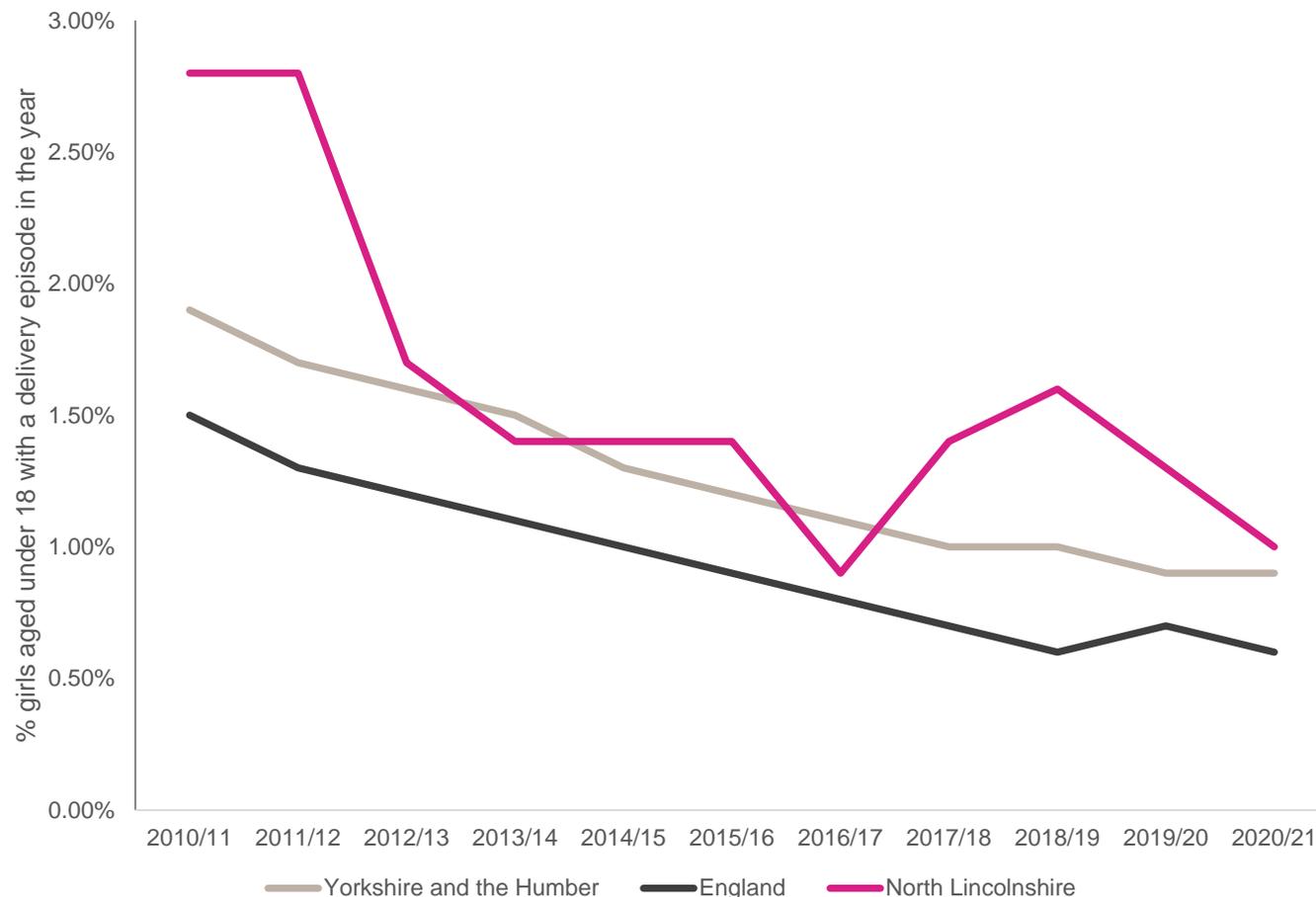
Deliveries to under 18s

Deliveries describe where a birth event has occurred, in this case to girls and young women aged under 18.

The percentage of girls and young women aged under 18 with a delivery episode in the year reached a low in 2016/17. In 2017/18 and 2018/19 the percentage increased and has since fallen again to 1%, which is still higher than the regional average, and significantly higher than the England average (0.6% in 2020/21).

1% represents 15 delivery events in year – though this number is rounded to the nearest 5.

Chart 6: Delivery episodes to under 18 year olds - 2010/11- 2020/21 in North Lincolnshire, Yorkshire and Humber and England⁽⁷⁾



Deliveries to under 20s by ward

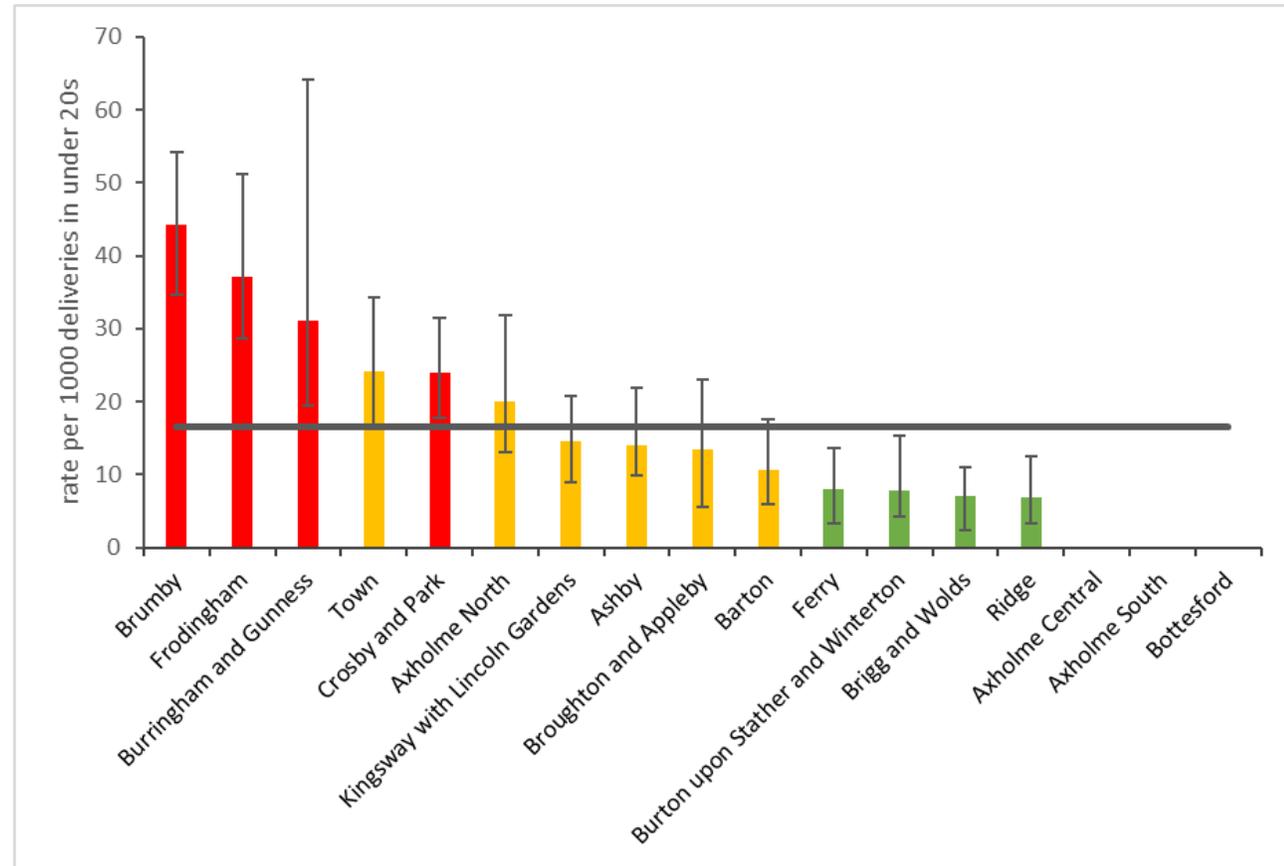
Annual delivery events to under 18s contains too few events to analyse effectively at ward level. For this reason, a 5 year pool of events to under 20s is used adjacent.

In terms of statistical significance, the 5-year maternal delivery rates in under 20s within Brumby and Frodingham and were significantly higher than the local authority average. In Ferry ward, Brigg and Wolds and Ridge wards it was significantly below the North Lincolnshire average.

The majority of births to under 20s occurred to 18-19 year olds, with over 70% of the maternity episodes in this time period occurring to girls over the age of 17.

The rates for Axholme Central, Axholme South and Bottesford are all suppressed due to low underlying figures.

Chart 7: Rate and statistical significance compared to North Lincolnshire average, under 20 delivery rate, (5 year rates) by ward 2016/17 – 2020/21 (some wards suppressed)



Delivery episodes from HES data. Numerators and denominators rounded to nearest 5, and counts under 8 suppressed as per NHS Digital regulations on HES data use. Population estimates MYE 2016-2020, point value 16.6 per 1000 used to calculate significance (CI 95%).

Deliveries to under 20s by deprivation quintile

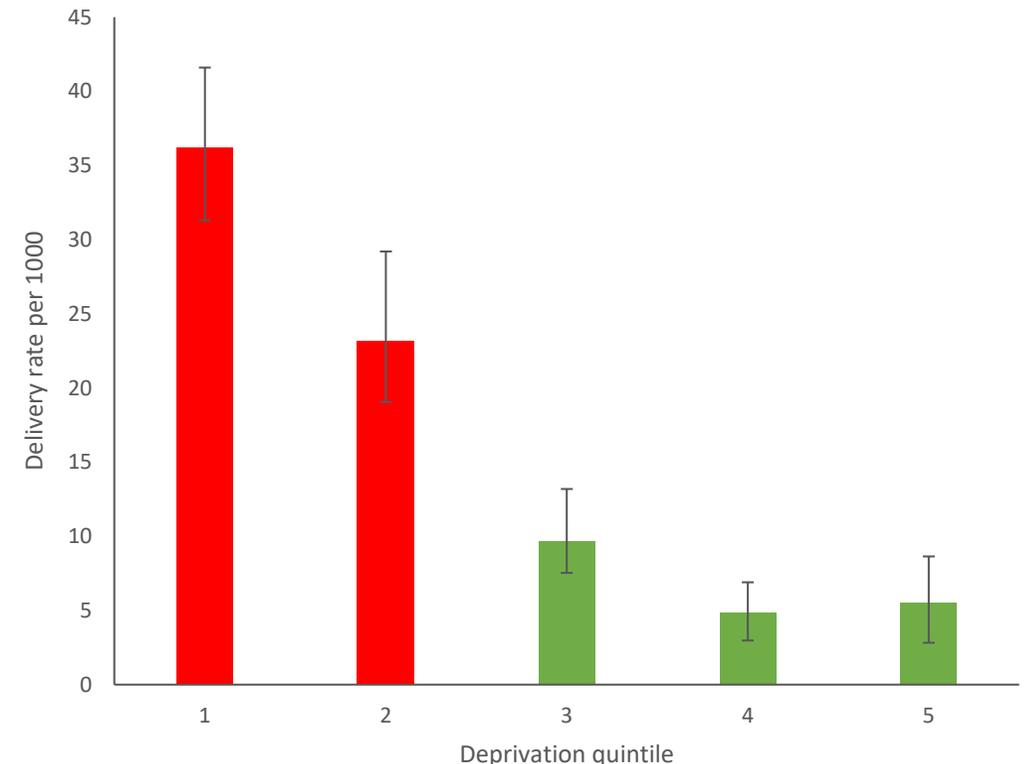
There is a positive correlation between increased teenage births and increased levels of deprivation in North Lincolnshire. The 40% most deprived populations locally have statistically significant rates of under 20s deliveries compared to the overall North Lincolnshire rate (16.6 per 1000).

Quintiles 3,4,5 are all in comparison, significantly lower.

This indicates a relatively large local inequality in teenage deliveries relating to deprivation

The rate of teenage delivery episodes was just under 7 times higher in the most deprived quintile compared to the least deprived in this time period.

Chart 8: Delivery episodes to under 20 year olds - 5 year rate per 1000 aged 15-19 years (2016/17 - 2020/21) by deprivation quintile in North Lincolnshire



Delivery episodes from HES data. Numerators and denominators rounded to nearest 5, and counts under 8 suppressed as per NHS Digital regulations on HES data use. point value 16.6 per 1000 used to calculate significance (CI 95%).

Social determinants of Teenage Conceptions:

Child poverty and youth unemployment are the two deprivation related indicators with the strongest association with under-18 conception rates. ^(9,10,11)

In North Lincolnshire, for young people aged under 16 years, 23.1% lived in relative low income households in 2020/21. This compares to 25.2% regionally and 18.5% nationally.

5.1% of young people aged 16 to 18 years in North Lincolnshire were not in employment, education or training in 2020. This compares to 6.3% regionally, and 5.5% nationally.⁽⁸⁾

Risk factors for the individual

- Free school meals eligibility
- Persistent school absence by age 14
- Poorer than expected academic progress between ages 11-14
- First sex before 16
- Being looked after or a care leaver
- Experience of sexual abuse or exploitation
- Alcohol
- ACEs – adverse childhoods experiences
- Experience of a previous pregnancy
- Young women with lesbian or bisexual experience are also at increased risk of unplanned pregnancy

Risk factors adapted from North Lincolnshire CHIMAT profile (6)

Risk factors continued:

Free school meals

In the 2021/22 school year, 25.2% of state funded secondary school pupils in North Lincolnshire were eligible for free school meals, compared to 20.9% in England.

The percentage of children eligible for free school meals has increased 60.5% in the last 4 school years. ⁽¹²⁾

Absence

In 2018/19 15.9% of secondary school enrolments were considered to be 'persistent absentees' in North Lincolnshire, compared to 13.7% in England. ⁽¹³⁾

(2018/19 data used due to absence categories being affected to a large extent by COVID-19 related absence.)

Academic progress

Information is not published on average progress between key stages 2 and 3. A measure at key stage 4, called 'Progress 8' measures the average progress of pupils from average key stage 2 positions in the school, to the GCSE grades achieved at key stage 4. This is compared to other pupils in England with comparable results to get the progress measure.

In 2019 the average progress 8 for North Lincolnshire schools was 0, meaning that on average, expected progress from KS2 was achieved. This compared to -0.03 in England as a whole. ⁽¹⁴⁾

In England:

- Pupils from the White and Mixed ethnic groups made lower than average progress
- In every ethnic group, pupils eligible for free school meals made less progress than those not eligible ⁽¹⁵⁾

Care leavers:

In 2020, there were 111 care leavers between the ages of 17 and 21 in North Lincolnshire ⁽¹⁶⁾

96% were assessed to be in suitable accommodation and 69% were in Education, Employment or training. ⁽¹⁷⁾

Adverse Childhood Experiences (ACEs)

Within a 2013 UK study, 47.1% of the adult population sample (aged 18-70) had experienced at least one ACE, The most common of which was parental separation. (23.7%)

12.3% had experienced 4+ ACEs. ACEs involving sexual abuse, imprisonment of household members, and drug abuse were most highly associated with a higher number of overall ACEs an individual experienced. Additionally, a higher number of ACEs were experienced by individuals living in the most deprived 5th of all neighbourhoods in England. ⁽¹⁸⁾

Sexual abuse and Exploitation

Child sexual exploitation is a type of sexual abuse in which children are sexually exploited for money, power or status. Children may be tricked into believing they are in a consensual, loving relationship.

Comprehensive national statistics on CSE are not yet readily available, and current information comes from a variety of small studies. It is also thought the issue is under reported nationally. ⁽¹⁹⁾

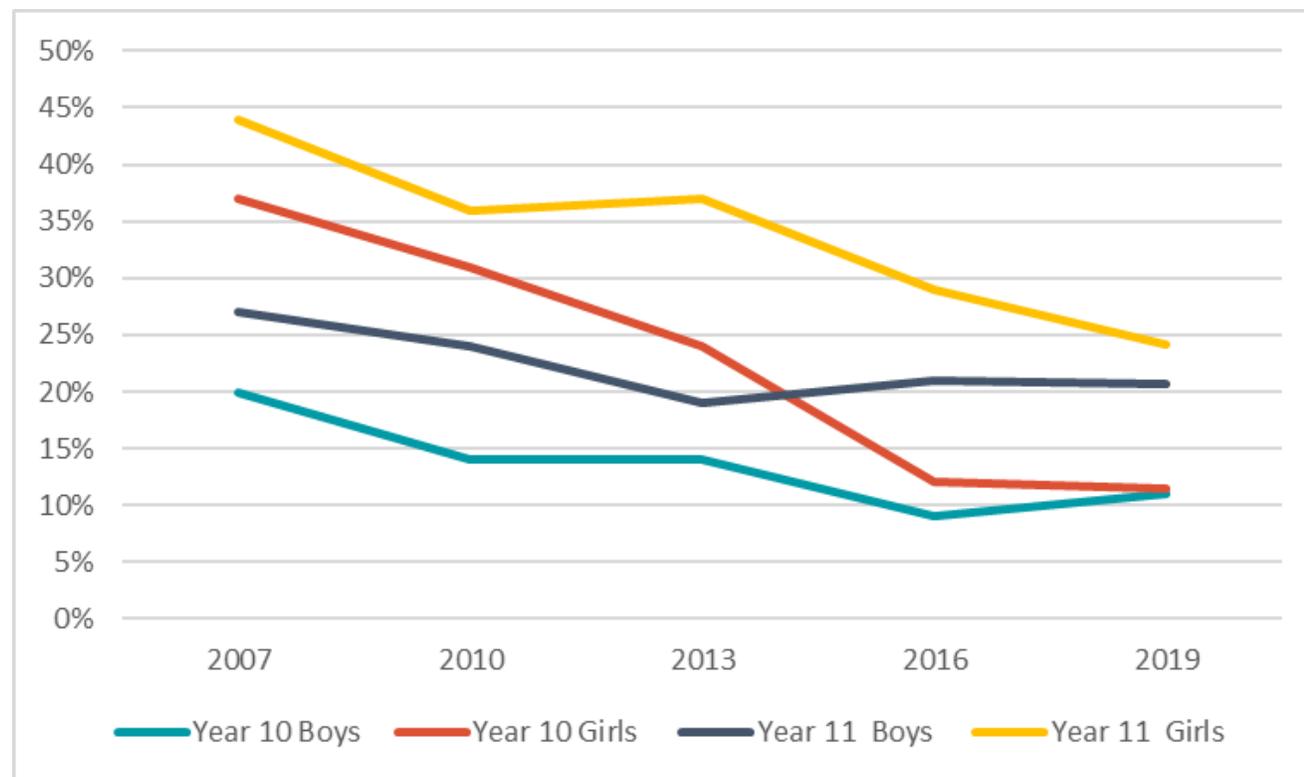
Children and Young Peoples Lives Surveys

The Children and Young Peoples Lives Surveys aim to sample as many pupils as possible within North Lincolnshire schools on a rolling programme so that each group is surveyed once every 3 years, from Primary, Secondary and College. Sexual health and sexual experience questions are asked to pupils in Y10 and above.

Sexually Active

A large majority of young people surveyed are not sexually active, even though a high proportion of young people perceive their peers to be. In the most recent surveys, 16% of the Year 10-11s (2019) and 39% of the Y12-13 (16-18 year olds) surveyed (2018) claimed to be sexually active. These figures have declined over the years, particularly in girls, as shown in the graph below.

% pupils in Years 10-11 who claim to have had sex, 2007- 19



Contraception

Effective contraception use can have a big impact on teenage conceptions. A 2016 study of the decline in US teenage conceptions between 2007-2012 concluded it could be attributed to more effective contraception use. ⁽²⁰⁾

Over three quarters of young people surveyed within North Lincolnshire who said they had sex said they used some form of contraception, 84% of 16-18 year olds (Y12/13) and 75% of 14-15 year olds (Y10/11). Although condom use is the most common method, under half say they use a barrier method of contraception either in combination with other contraceptives, or alone, the last time they had sex. This means that at least half of those young people who are sexually active are potentially exposed to and at risk of contracting a STI.

When you last had sex, what forms of contraception did you/your partner use?

(% of those who said they'd had sex)

	Condom	Condom & other contraception	Implant/ LARC	Injection	Pill	Nothing
Y10/11 (14-16 year olds)	36%	12%	5%	1%	13%	22%
Y12/13 16-18 year olds	27%	15%	16%	2%	25%	14%

**Y12/13 based on 39% of overall sample, Y10/11 based on 16% of overall sample*

A Whole System Approach

Implementation of the previous Teenage Pregnancy Strategy identified ten key factors for an effective local approach to translating evidence into practice and developing a whole systems approach (see figure).

In North Lincolnshire, A new strategic framework has been created to reduce teenage pregnancy and build resilience in young people, in a rolling programme to 2025.

The framework is built around the national Teenage Pregnancy Strategy, using the 10 factors adjacent as a foundation. Progress made towards meeting the aims of the framework will be monitored via a working group

The aims of the framework are given on the next slide.

The ten factors for effective local action



Graphic from Chimat profile (6)

Aims of the Strategic Framework

1. To sustain a downward trend in rates of under 18yrs conceptions
2. To support young people to build resilience by developing the knowledge skills & confidence they need to make positive decisions, making active choices based on what matters to them and stay well, healthy, connected and safe

To achieve this we will:

1. support young people to be health literate to increase confidence in making active and appropriate choices
2. place children and families at the centre of all we do by utilising the One Family Approach
3. provide support for parents to discuss relationships and sexual health
4. implement targeted prevention for young people at risk
5. continue to develop access to advice and contraception in non-health care settings
6. continue to develop youth friendly sexual health service provision
7. make the best use of practise wisdom and identify gaps in our data and intelligence
8. ensure that RSE and PHSE in education is relevant and of the highest quality
9. deliver consistent messages and service publicity to young people, parents and practitioners
10. improve young people's resilience to unintentional under 18yr conception by supporting those most at risk to develop the knowledge skills & confidence they need to make positive decisions, choices to stay well, healthy, connected and safe.

Sources:

- 1) Teenage conception rates highest in the most deprived areas. Short story published in Conceptions-Deprivation Analysis Toolkit. ONS. 2014
- 2) The prevalence of unplanned pregnancy and associated factors in Britain: findings from the third National Survey of Sexual Attitudes and Lifestyles (Natsal-3). Lancet. Wellings, K et al. Vol 382. November 2013.
- 3) Conception Statistics, England and Wales, 2017. ONS. 2019.
- 4) Teenage Pregnancy Prevention Framework [*Teenage Pregnancy Prevention Framework \(publishing.service.gov.uk\)](https://www.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/61111/teenage_pregnancy_prevention_framework.pdf) (selected statistics referenced from page 11)
- 5) Department for Education. New learning from serious case reviews: a two-year report for 2009-11. 2012
- 6) Chimat [Teenage pregnancy and young parents report for North Lincolnshire](#) (accessed 15/08/2022)
- 7) [Sexual and Reproductive Health Profiles - Data - OHID \(phe.org.uk\)](#) (accessed 15/08/2022)
- 8) [Child and Maternal Health - Data - OHID \(phe.org.uk\)](#) (accessed 15/08/2022)
- 9) [Factors associated with teenage pregnancy in the European Union countries: a systematic review](#) 2007 (accessed 05/10/2022)
- 10) [Teenage pregnancy: strategies for prevention – ScienceDirect](#) 2020 (accessed 05/10/2022)

Sources:

- 11) The management of teenage pregnancy [The management of teenage pregnancy | The BMJ](#) 2014 (accessed 05/10/2022)
- 12) Free School meals data 2021/22 - [Schools, pupils and their characteristics, Academic Year 2021/22 – Explore education statistics – GOV.UK \(explore-education-statistics.service.gov.uk\)](#) (accessed 15/08/2022)
- 13) Absence data 2018/19 - [Pupil absence in schools in England: 2018 to 2019 - GOV.UK \(www.gov.uk\)](#) (accessed 15/08/2022)
- 14) Progress 8 - [All schools and colleges in North Lincolnshire - GOV.UK - Find and compare schools in England \(compare-school-performance.service.gov.uk\)](#) (accessed 15/08/2022)
- 15) Pupil progress [Pupil progress between 11 and 16 years old \('Progress 8'\) - GOV.UK Ethnicity facts and figures \(ethnicity-facts-figures.service.gov.uk\)](#) (accessed 15/08/2022)
- 16) [Children looked after in England including adoptions, Reporting Year 2020 – Explore education statistics – GOV.UK \(explore-education-statistics.service.gov.uk\)](#) (accessed 15/08/2022)
- 17) [Care leavers in suitable accommodation aged 19, 20 or 21 in North Lincolnshire | LG Inform \(local.gov.uk\)](#) (accessed 15/08/2022)

Sources:

18) Adverse childhood experiences: retrospective study to determine their impact on adult health behaviours and health outcomes in a UK population - M. Belis et al. Journal of PH 2013

19) [Characteristics of group-based child sexual exploitation in the community: literature review \(accessible version\) - GOV.UK \(www.gov.uk\)](#)

20) Understanding the decline in adolescent fertility in the United States, 2007-2012 [Understanding the Decline in Adolescent Fertility in the United States, 2007–2012 - Journal of Adolescent Health \(jahonline.org\)](#) (2016) accessed 7/10/2022