

PUBLIC HEALTH

East Riding of Yorkshire Teenage Pregnancy Summit November 2017

Supporting information document



EAST RIDING
OF YORKSHIRE COUNCIL



Contents

Section	Page
1. Introduction and purpose of this document	4
2. Why is teenage pregnancy an important issue?	4
3. Key findings	5
4. Conceptions	6
4.1 Under 18 year old conceptions at a local authority level	6
4.2 Under 18 year old conceptions at ward level	8
4.3 Under 16 year old conceptions at a local authority level	9
5. Abortion: percent of under 18s conceptions leading to abortion	11
6. Births (mothers under the age of 18)	13
6.1 Live births (mothers under the age of 18) at local authority level	13
6.2 Births (mothers under the age of 18) at ward level	14
6.3 Teenage births as percent of all births	15
7. Contraception	16
8. Appendix	18



Teenage Pregnancy Summit supporting information document

1. Introduction and purpose of this document

This document has been produced in advance of the November 2017 'Teenage Pregnancy Summit', organised by East Riding of Yorkshire (ERY) Public Health team. By providing a summary of quantitative information about teenage conceptions, abortion and births, the document aims to inform readers of the key facts and aide discussion amongst stake holders at the event.

2. Why is teenage pregnancy an important issue?

Reducing the rate of teenage conceptions (generally measured as the rate of "under 18 conceptions") is a national priority. Public Health England describes why this is so:

"Most teenage pregnancies are unplanned and around half end in an abortion. As well as it being an avoidable experience for the young woman, abortions represent an avoidable cost to the NHS. And while for some young women having a child when young can represent a positive turning point in their lives, for many more teenagers bringing up a child is extremely difficult and often results in poor outcomes for both the teenage parent and the child, in terms of the baby's health, the mother's emotional health and well-being and the likelihood of both the parent and child living in long-term poverty.

Research evidence, particularly from longitudinal studies, shows that teenage pregnancy is associated with poorer outcomes for both young parents and their children. Teenage mothers are less likely to finish their education, are more likely to bring up their child alone and in poverty and have a higher risk of poor mental health than older mothers. Infant mortality rates for babies born to teenage mothers are around 60% higher than for babies born to older mothers. The children of teenage mothers have an increased risk of living in poverty and poor quality housing and are more likely to have accidents and behavioural problems."

(Public Health England, <http://www.phoutcomes.info>)

To summarise, teenage pregnancy has a significant impact on health outcomes, including:

- increasing risk of low birth weight
- infant mortality
- sudden infant death
- children of teenage mothers more likely to be in poverty
- teenage mothers more likely to smoke in pregnancy
- teenage mothers are less likely to breastfeed.

The national Teenage Pregnancy Strategy has been associated with a halving in the rate of under 18 conceptions over the last 18 years. It is crucial that progress is maintained, with a focus on both reducing rates of teenage conception and improving outcomes for young parents and their babies. Further, there is also a growing recognition that socio-economic disadvantage and poor health can be both a cause and a consequence of negative effects of teenage motherhood.



3. Key findings

3.1 Conceptions (residents under 18 years of age)

- Under 18 conception rates in the ERY have been declining since 2009, but 2015 saw an increase in the rate against recent trends.
- Between 1998 and 2015, ERY had a lower rate compared to England.
- In 2015, ERY had the 3rd lowest rate in the Yorkshire and Humber (Y&H) region, however, other 'similar' local authorities to ERY had significantly lower rates.
- There are significantly higher rates within the most deprived wards of ERY, in stark contrast to the rates within the least deprived wards.
- Between 2003-5 and 2013-15, four specific ERY wards had the highest rates.

3.2 Conceptions (residents under 16 years of age)

- Under 16 conception rates are falling in ERY.
- The ERY rate in 2015 was lower than the England average.

3.3 Abortion: percent of under 18s conceptions leading to abortion

- Nationally, the percent of under 18 conceptions leading to abortion is slowly rising.
- ERY percent also very slowly increasing, but actual number of abortions is decreasing.
- In 2015 ERY had the highest percent of under 18 conceptions leading to abortion in the Y&H region.

3.4 Births (mothers under the age of 18)

- In 2015, ERY had a lower rate of under 18 mothers giving birth, compared to England and Y&H.
- ERY had the second lowest rate of under 18 births in the Y&H region.
- The most deprived wards of ERY had the highest rate of births by under 18 mothers.
- Births by under 18 year old mothers as a percent of all ERY births, has generally decreased and in 2015/16 ERY had a lower percentage than both England and Y&H. ERY had the lowest percentage of all local authorities in Y&H.



4. Conceptions

4.1 Under 18 year old conceptions at a local authority level

Key points:

- Under 18 conception rates in the ERY have been declining since 2009
- 2015 saw an increase in the rate, against recent trends
- Between 1998 and 2015, ERY had a lower rate compared to England (mostly significantly)
- In 2015, ERY had the 3rd lowest rate in the Yorkshire and Humber region
- However, other 'similar' local authorities to ERY had significantly lower rates of under 18 conceptions

In 2015 there were 106 conceptions to ERY females aged under 18, the second lowest number since 1998. The first row in table 1.1 displays the numbers of under 18 conceptions in ERY by individual year from 2005, with the highest number of conceptions in this age group occurring between 2008 and 2009, when there were 213 and 214 respectively.

Table 1.1 Under 18 conceptions. ER numbers and crude rate per 1,000 females. Source: Public Health England (PHE)

Period	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
ERY count	195	199	205	213	214	175	164	125	121	100	106
ERY rate	31.9	32.9	33.3	34.4	34.7	29.2	27.4	21.2	20.3	17.2	18.7
England rate	41.4	40.6	41.4	39.7	37.1	34.2	30.7	27.7	24.3	22.8	20.8

The 106 ERY conceptions in 2015, converted to a rate of 18.7 per 1,000 females, lower (but not significantly) than the equivalent England rate of 20.8. The rates for ERY and England are also displayed in table 1.1, but chart 1.2 provides more historical information and visually illustrates the past trends for ERY and England more clearly. For ERY, the highest rates per 1,000 population of under 18 conceptions occurred in 1998 and then rose again between 2004 and 2009. Whereas for England, the highest rates were in the earliest years displayed and have generally experienced a year on year decline ever since. The ERY rate is shown to have consistently decreased since 2009, with only an upturn against trend witnessed in 2015 (an increase of 6 conceptions between 2014 and 2015). The chart also shows that for most periods, ERY had a significantly lower rate compared to England.

In comparison with the other local authorities within the Yorkshire and Humber (Y&H) region, ERY had the 3rd lowest rate in 2015. The region itself had a significantly higher rate than the national average, with 7 of its 15 local authorities significantly higher than England; only one (North Yorkshire) was significantly lower.

It's also useful to make a comparison against 'similar' local authorities to ERY from a social-economic perspective than just a comparison to the rest of the region (most local authorities in Y&H are very different in character to ERY, for example most are predominantly urban). The CIPFA (Chartered Institute of Public Finance and Accountancy) methodology categorises local authorities by certain traits (e.g. population, socioeconomic, household and mortality characteristics).



Chart 1.2 Crude rate of under 18 conceptions, ERY compared to England, 1998-2015. Source: PHE

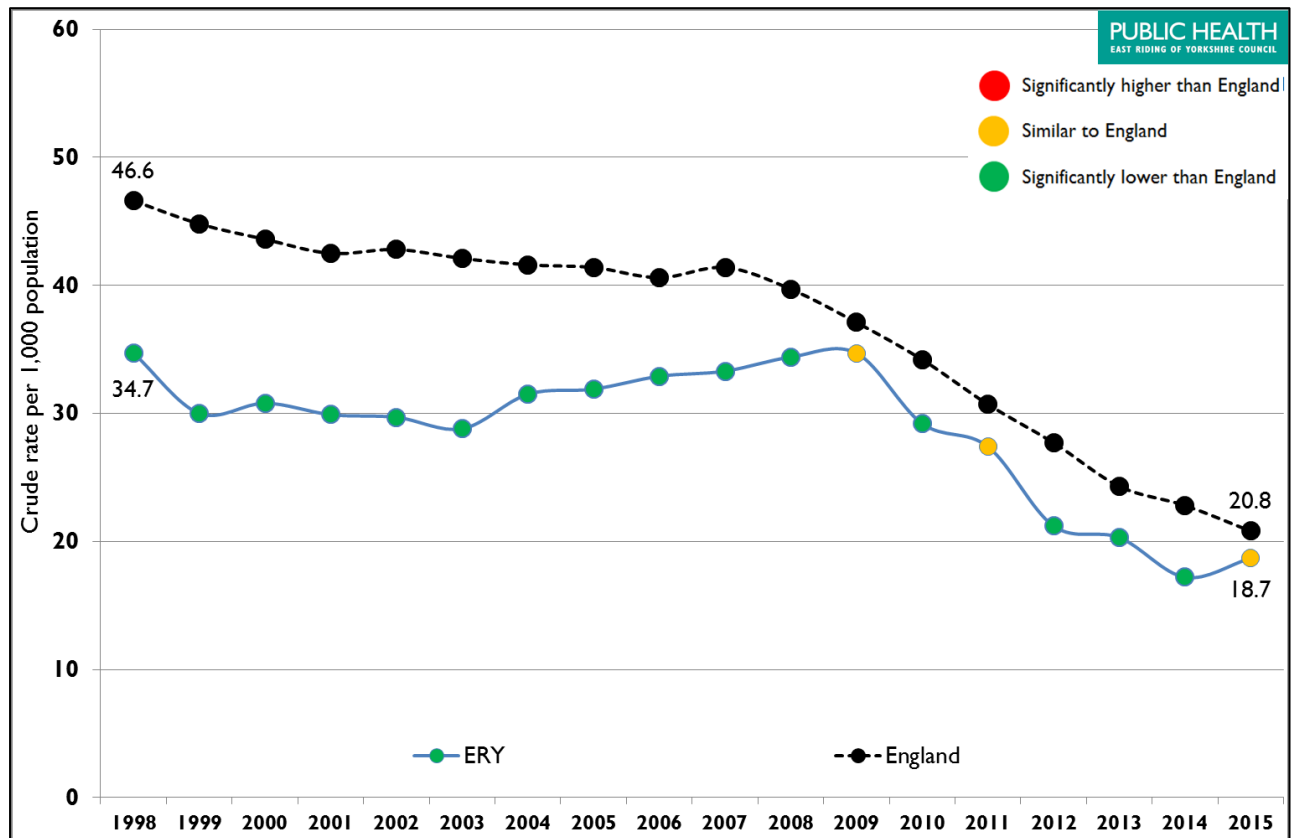
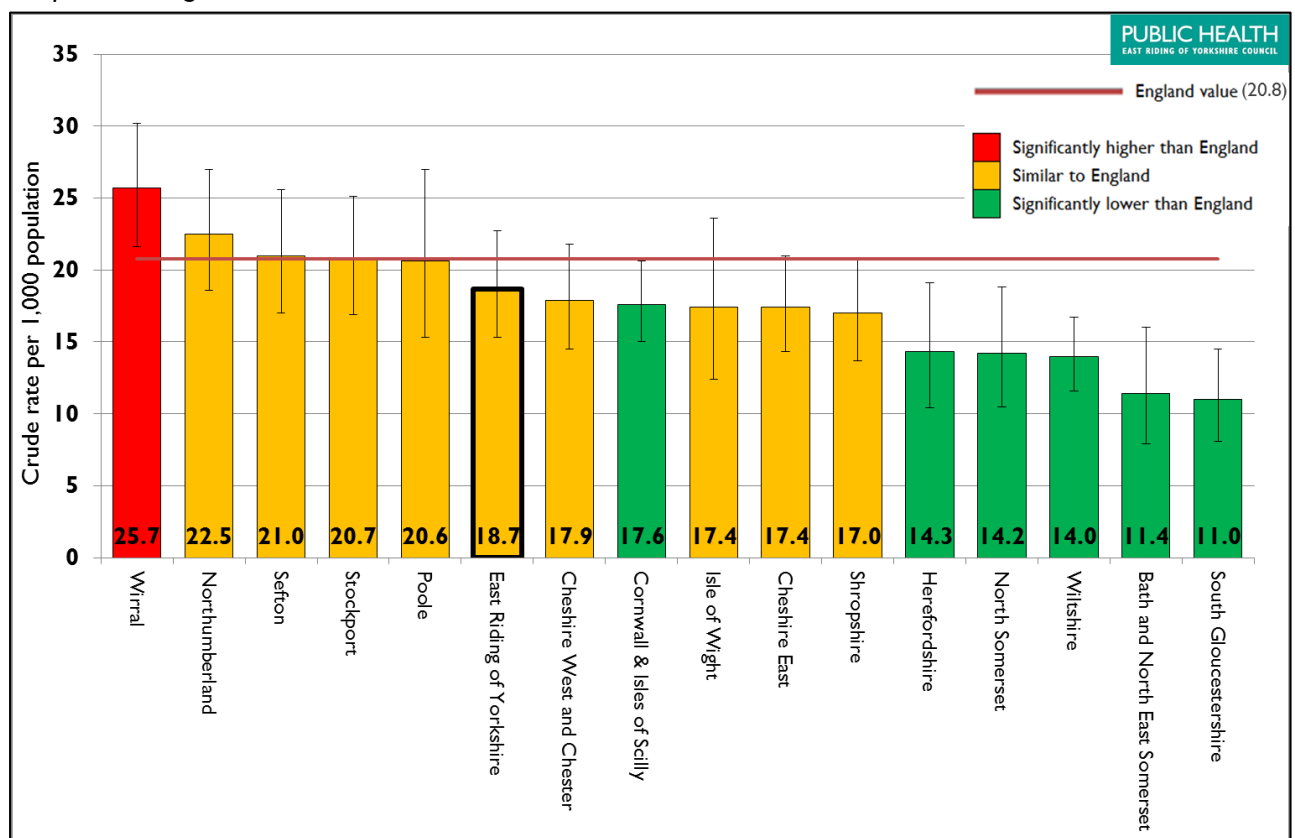


Chart 1.3 Under 18 conceptions crude rate per 1000 population. ERY and its nearest 15 CIPFA neighbours compared to England. 2015. Source: PHE



The nearest 15 'neighbours' to ERY using this methodology are displayed in chart 1.3. Unlike the Y&H local authorities, in this chart only one local authority experienced a significantly higher rate than England and five were significantly lower. The ERY rate was found to sit within the top half of values presented in the chart. Therefore, whilst ERY is lower than the England rate, there are similar local authorities around the country which have significantly lower rates of under 18 conceptions than England.

4.2 Under 18 conceptions at ward level

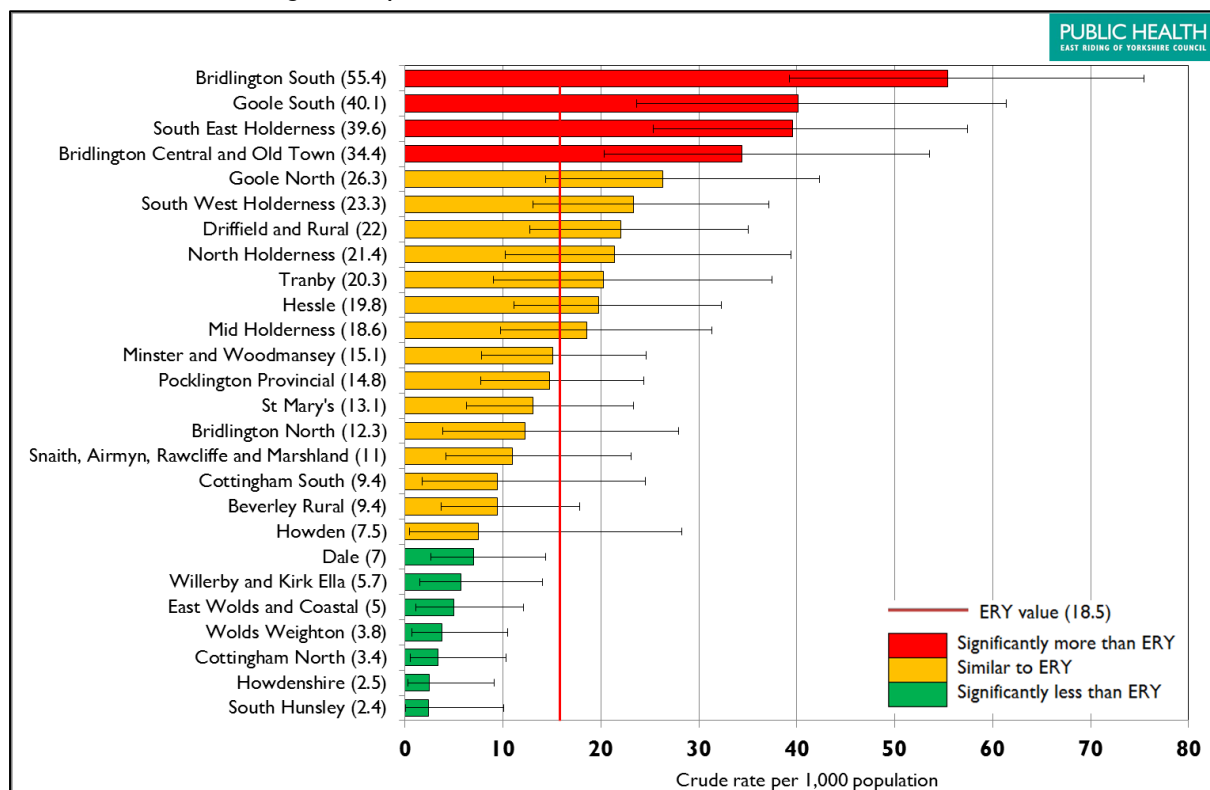
Key points:

- Significantly higher rates of under 18 conceptions within the most deprived wards of ERY, in stark contrast to the rates with the least deprived wards of ERY
- Between 2003-5 and 2013-15, four specific ERY wards have had the highest rates

It is possible to analyse under 18 conception data at a more granular level, in this case estimated rates by each ERY ward are displayed in chart 1.5 for the three year pooled period of 2013-15.

The ward rates vary from the lowest value in South Hunsley (2.4 per 1,000) through to Bridlington South (55.4 per 1,000); coincidentally the former has been calculated to be the East Ridings *least* deprived ward, whilst the latter is the *most* deprived ERY ward. There are four wards with significantly higher rates than the ERY average (indicated by the red bars), these wards are East Ridings' four most deprived wards. At the opposite end of the chart, there are seven wards with a significantly lower rate than the ERY average (shown as green bars), these are generally the East Riding's least deprived wards.

Chart 1.5 Estimated crude rate per 1,000 population of under 18 conceptions in ERY wards, 2013-15.
Chart sorted in descending order by rate value. Source: ONS



The wards with the four highest estimated counts of conceptions are the same as those with the four highest rates: Bridlington South (39 estimated conceptions in 2013-15), South East Holderness (26 conceptions), Bridlington Central and Old Town (19 conceptions) and Goole South (19 conceptions).

Historical data for wards (not provided in this document) goes back to 2003-05 and it was noticeable that since 2009-11 conception rates were decreasing across all wards. It is difficult to pinpoint the ward areas that contributed to the increase in the ERY under 18 conception rate increase during 2015, as ward based information is not available during single years. However, between the two latest periods of 2012-14 and 2013-15 there were sizeable increases in conception rates in the Bridlington Central and Old Town and South East Holderness Wards. Caution must be taken in comparing these two time periods as the former (2012-14) are actual conception rates, whilst the latter are estimated rates.

In every three year period (except one) between 2003-05 and 2013-15, it was the same four wards which had the highest conception rates. These were: Bridlington South, Bridlington Central and Old Town, Goole South and South East Holderness, which (as already mentioned) are also the four most deprived wards within ERY.

The appendix, on page 18, displays a map of the location of the wards within ERY.

4.3 Under 16 conceptions at a local authority level

Key points:

- Under 16 conception rates are dropping in ERY
- The ERY rate in 2015 was lower than the England average (but not significantly)

There is no ward based conception information available for under 16 year olds, but PHE does provide local authority level data for this age group, between 2009 and 2015. During this time the actual number of under 16 year old conceptions dropped from 39 to 16 and the corresponding crude rate reduced from 6.6 to 3.0 per 1,000 females. Please refer to table 4.7.

Table 4.7 Under 16 year old conceptions. ERY numbers and crude rate per 1,000 females. Source: PHE

Period	2009	2010	2011	2012	2013	2014	2015
ERY count	39	39	33	34	22	19	16
ERY rate	6.6	6.7	5.6	5.9	3.9	3.5	3.0
England rate	7.3	6.7	6.1	5.6	4.8	4.4	3.7

Chart 4.8 visually displays the crude rates of ERY and England from 2009 to 2015, both clearly showing a declining trend over time and in all periods the ERY rate was statistically similar to England.

A comparison with the nearest 15 CIPFA neighbours is shown in chart 4.9, all but one experienced a similar rate to England in 2015 and ERY is found to be centrally placed amongst its peers. For the same period, the Y&H region under 16 conception rate was significantly higher than that of England (ERY had the 4th lowest local authority rate within it).



Chart 4.8 Under 16 year olds: conceptions crude rate per 1,000 population, ERY compared to England.

Source: PHE

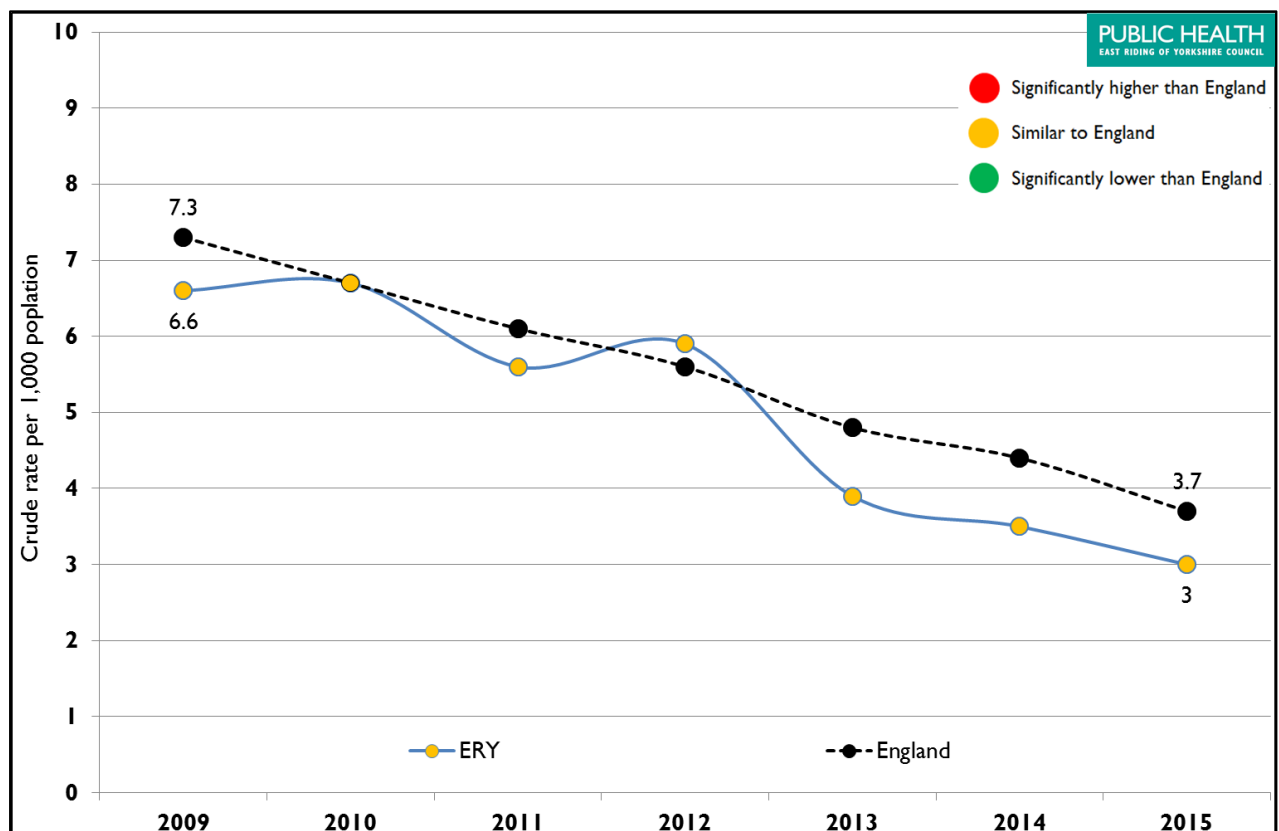
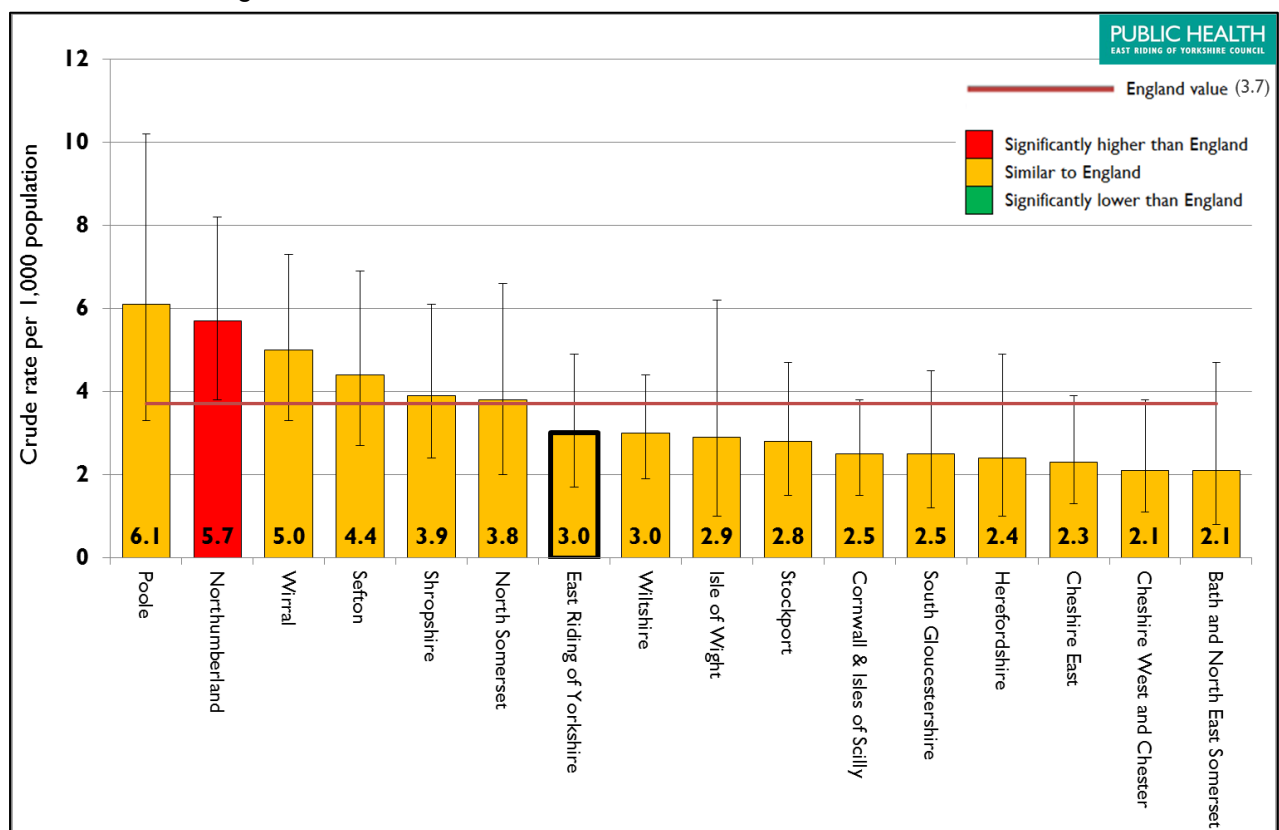


Chart 4.9 Under 16 year olds: conceptions crude rate per 1,000 population, ERY compared to England and nearest 15 CIPFA neighbours. 2015. Source: PHE



5. Abortion: percent of under 18s conceptions leading to abortion

Key points:

- Nationally, the percent of under 18 conceptions leading to abortion is gently rising
- ERY percent also very slowly increasing, but actual number of abortions is (generally) decreasing
- ERY has the highest percent of under 18 conceptions leading to abortion in the Y&H region

In 2015, according to PHE, 56.6% of conceptions to under 18 year olds in ERY led to an abortion. This was a higher percentage (but not significantly) than the England average of 51.2%. Table 5.1 displays both the percent and count of under 18 abortions for ERY and England, between 20015 and 2015.

Table 5.1 Under 18s % of conceptions leading to abortion. Source: PHE

Period	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
ERY count	102	102	116	107	105	85	81	55	60	49	60
ERY %	52.3	51.3	56.6	50.2	49.1	48.6	49.4	44	49.6	49	56.6
England %	46.8	48.8	50.5	49.7	49.1	50.3	49.3	49.1	51.1	51.1	51.2

The count of ERY under 18 abortions during 2015, numbered 60. This was higher than the previous year but considerably less than the amount recorded in 2007, which at 116 abortions had the highest count over the past 18 years. The actual number of ERY abortions in this age group, has been (generally) decreasing since 2007.

Chart 5.2 shows that the national percentage of under 18 conceptions leading to abortion has been steadily increasing between 1998 and 2015 (from 42.4% to 51.2%). The ERY percent has also increased during this period (43.4% to 56.6%) but, as expected, with much more variation during the individual years. Smoothing the ERY data (by using 3 year pooled averages instead of single years) found the percentage rise between the first and last periods to be less steep from 48.5% (during 1998-00) to 51.7% (during 2013-15).

In 2015, a comparison with the nearest 15 CIPFA neighbours found the ERY percentage of under 18 conceptions leading to abortion was centrally placed amongst the values of the other local authorities (please refer to chart 5.3). The ERY percentage was significantly higher than the Y&H average and was the highest compared to all other local authorities within the Y&H region (not shown in this document).



Chart 5.2 Under 18s conceptions leading to abortion (%). ERY v England. Source: PHE

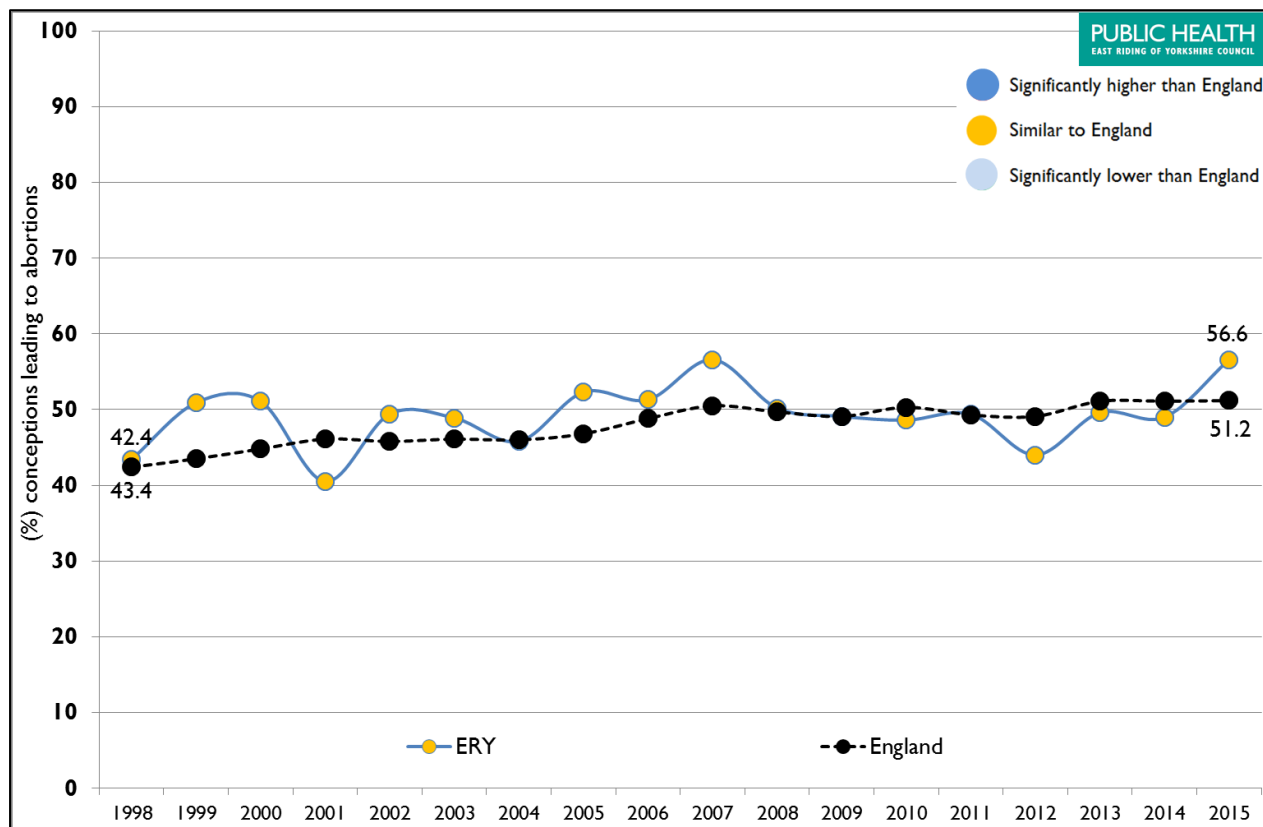
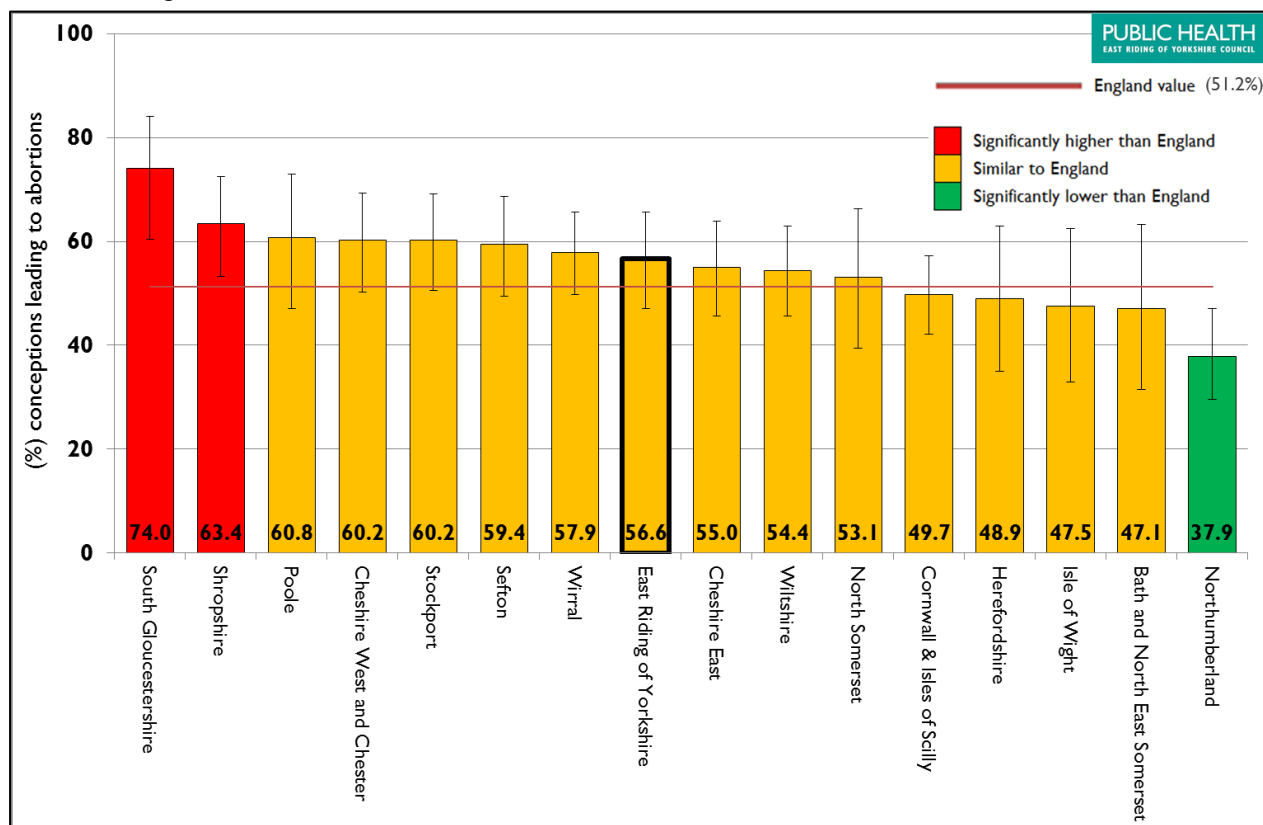


Chart 5.3 Under 18s conceptions leading to abortion (%). ERY compared to nearest 15 CIPFA neighbours & national average. 2015. Source: PHE



6. Births (mothers under the age of 18)

Key points:

- In 2015, ERY had a lower rate of under 18 year old mothers giving birth, than both England and Y&H.
- ERY had the second lowest rate of births by under 18 year old mothers in the Y&H region.
- The most deprived wards of ERY had the highest rate of births by mothers aged under 18

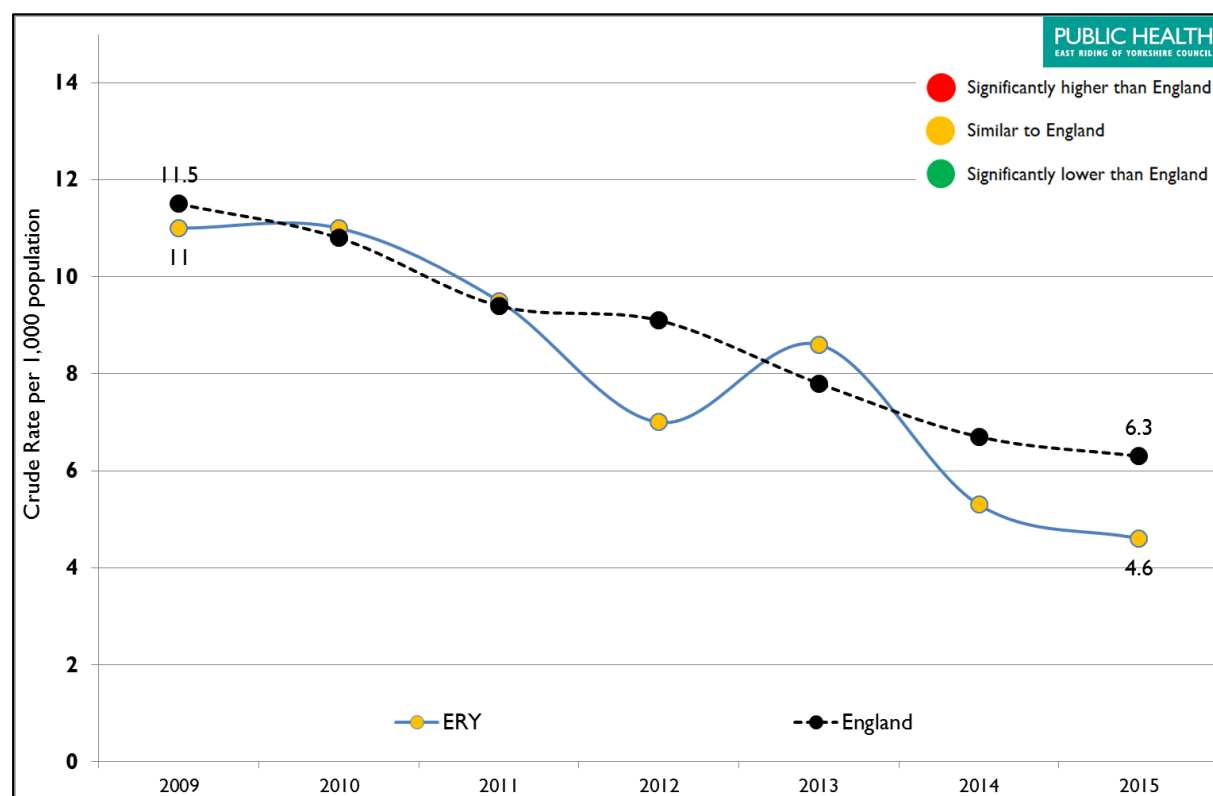
6.1 Live births (mothers under 18) at local authority level

Table 6.1 illustrates that both the count and rate of births to ERY mothers under 18, has decreased between 2009 and 2016. In this time numbers of births have fallen from 68 to 21 and the crude rate reduced from 11 to 3.8 per 1,000 population. Were it not for a one-off increase in 2013, the ERY rate would have fallen consistently year on year, as experienced nationally. Chart 6.2 displays the decreasing rate more clearly. In 2015 the ERY rate (4.6 per 1,000) was lower than the England rate (6.3 per 1,000) but was classed as statistically similar.

Table 6.1 Count & crude rate per 1000 population of live births (under the age of 18). Source: PHE

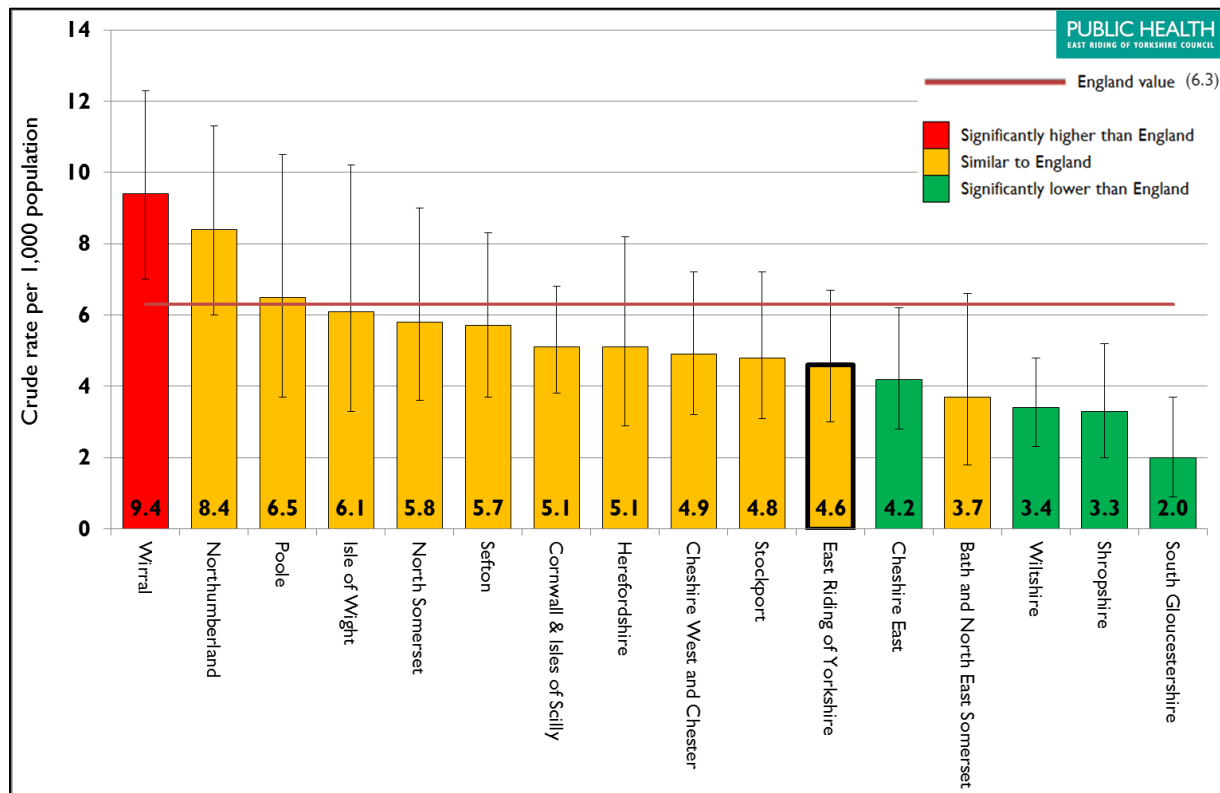
Period	2009	2010	2011	2012	2013	2014	2015	2016
ERY count	68	66	57	41	51	31	26	21
ERY rate	11.0	11.0	9.5	7.0	8.6	5.3	4.6	3.8
England rate	11.5	10.8	9.4	9.1	7.8	6.7	6.3	N/A

Chart 6.2 Crude rate per 1000 population of live births (mothers under the age of 18), ERY v England. 2009-2015. Source: PHE



A comparison with the nearest 15 CIPFA neighbours, finds the ERY rate within the lower half of local authority values, which ranged from South Gloucestershire (a significantly lower than England rate of 2 births per 1,000 population) to Wirral (a significantly higher rate than England of 9.4 per 1,000 population). Please refer to chart 6.3 for further detail.

Chart 6.3 Mothers under the age of 18, Crude rate of live births per 1000 population (ERY v nearest 15 CIPFA neighbours). 2015. Source: PHE



The ERY rate was significantly lower than the Y&H average and had the second lowest rate of all the regions local authorities (behind North Yorkshire). The regional comparison is not illustrated within this document.

6.2 Births (mothers under the age of 18) at ward level

Within the wards of ERY, the numbers of births during 2014-16 to mothers aged under 18 varied considerably, from 0 births in some wards to 12 births in Bridlington South. Table 3.3 displays those wards with a count of 5 births or more during this period.

The five wards presented in the table all had a significantly higher rate than the ERY average, and are amongst the most deprived within ERY.



Table 6.4 Number and crude rate per 1,000 population of under 18 year olds giving birth by ERY ward*, 2014-16. Source: ONS

Ward	Count of <18 births	Rate per 1,000 population**
Bridlington South	12	17.1
South East Holderness	10	16.6
Bridlington Central and Old Town	8	15.9
Goole South	8	15.6
Goole North	7	12.5
ERY Total	78	4.6

* wards with small numbers have been withheld from table 6.4

** denominator population = females aged 15-17

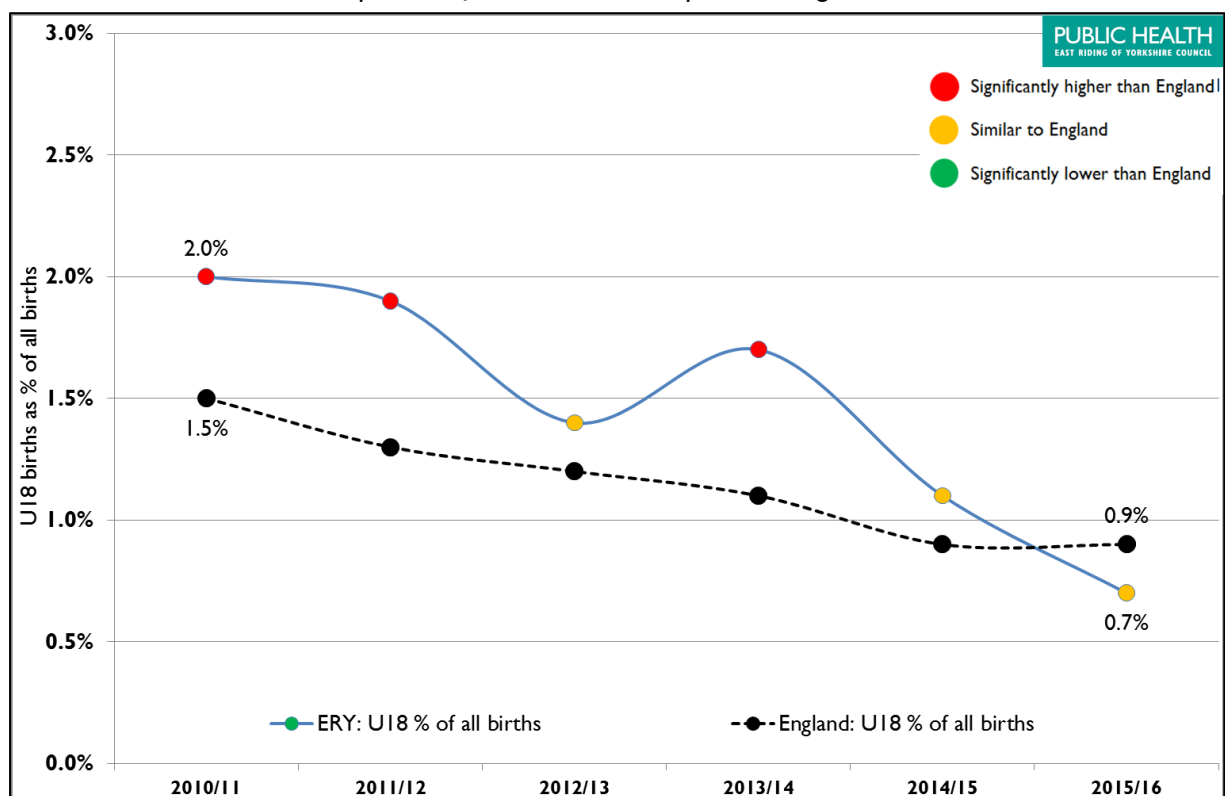
6.3 Teenage births as percent of all births

Key points:

- Births by mothers under 18 as a percent of all ERY births, has generally decreased over the past 6 years.
- In 2015/16, ERY had a lower percentage than both England and Y&H.
- In the same year, ERY had the lowest percent of under 18 births of all local authorities in Y&H.

Chart 6.5 displays births to mothers under 18 as a percent of all births, during 2010/11 to 2015/16. During this period, the ERY percentage has decreased, as has the national average.

Chart 6.5 Under 18 births as a percent of all births. ERY compared to England. Source: PHE



In 2010/11 under 18 births in the East Riding accounted for 2% of all ERY births, higher than Y&H (1.9%) and significantly higher than the national average (1.5%). By 2015/16 the percent of ERY



births to mothers under 18 dropped to 0.7%, lower than the national average (0.9%) and significantly lower than Y&H (1.2%). Please refer to table 6.6.

Table 6.6 Under 18 births as a percent of all births. Source: PHE

Period	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
ERY: under 18 % of all births	2.0%	1.9%	1.4%	1.7%	1.1%	0.7%
Y&H: under 18 % of all births	1.9%	1.7%	1.6%	1.5%	1.3%	1.2%
England: under 18 % of all births	1.5%	1.3%	1.2%	1.1%	0.9%	0.9%

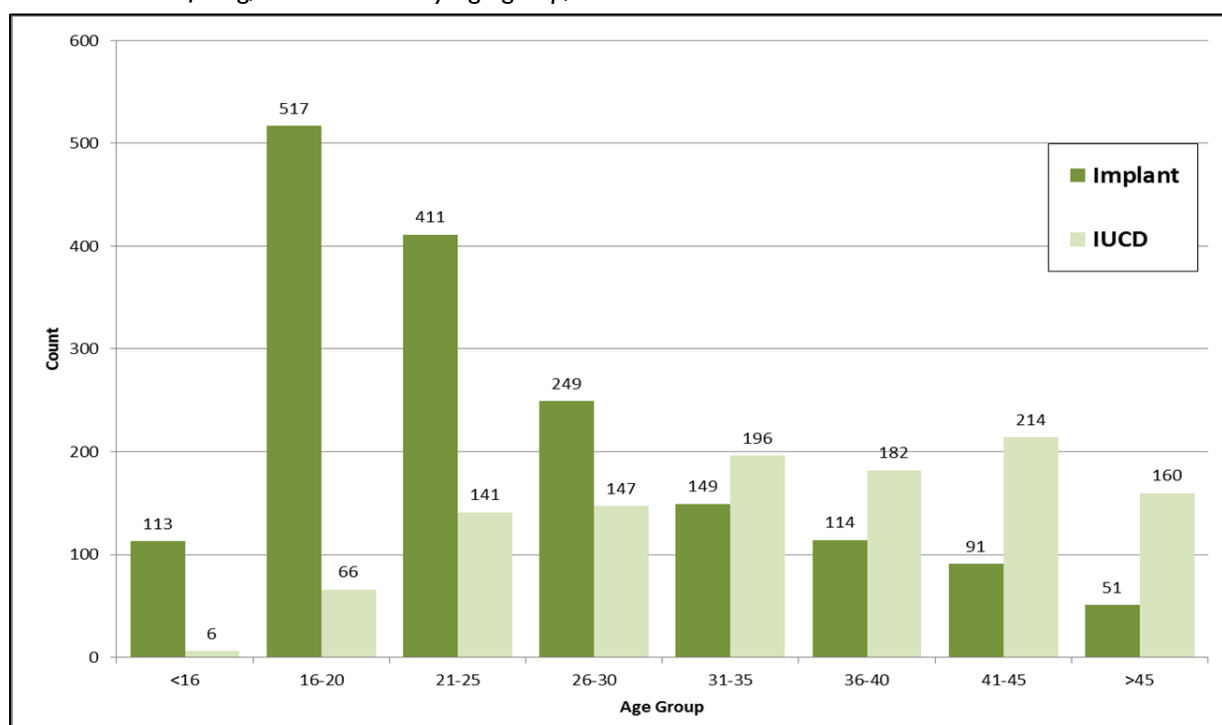
A comparison with the other local authorities within Y&H during 2015/16, finds ERY to have the lowest percentage (joint with North Yorkshire, at 0.7%). Out of the 15 local authorities within Y&H, nine have a significantly higher percentage than the England average; ranging from Leeds (1.2%) to North East Lincolnshire (2.2%). In the same year, the nearest 15 CIPFA neighbours had a narrower range of values than Y&H (from 0.2% in South Gloucestershire to 1.6% in Wirral), ERY was fifth lowest.

7. Contraception

7.1 Long-acting reversible contraception (LARC)

Long-acting reversible contraception (LARC) is the most effective method of contraception. The all-ages rate of LARC take up in ERY is higher than the national average, 57.5 per 1,000 population compared to 48.2 per 1,000 in 2015. It can be seen from chart 7.1 that implants are much preferred by under 20s, probably because they are less invasive than IUDs. Increasing take up of LARC will help reduce unplanned pregnancy.

Chart 7.1 LARC fitting, ERY residents by age group, 2015/16. Source: Outcomes4Health

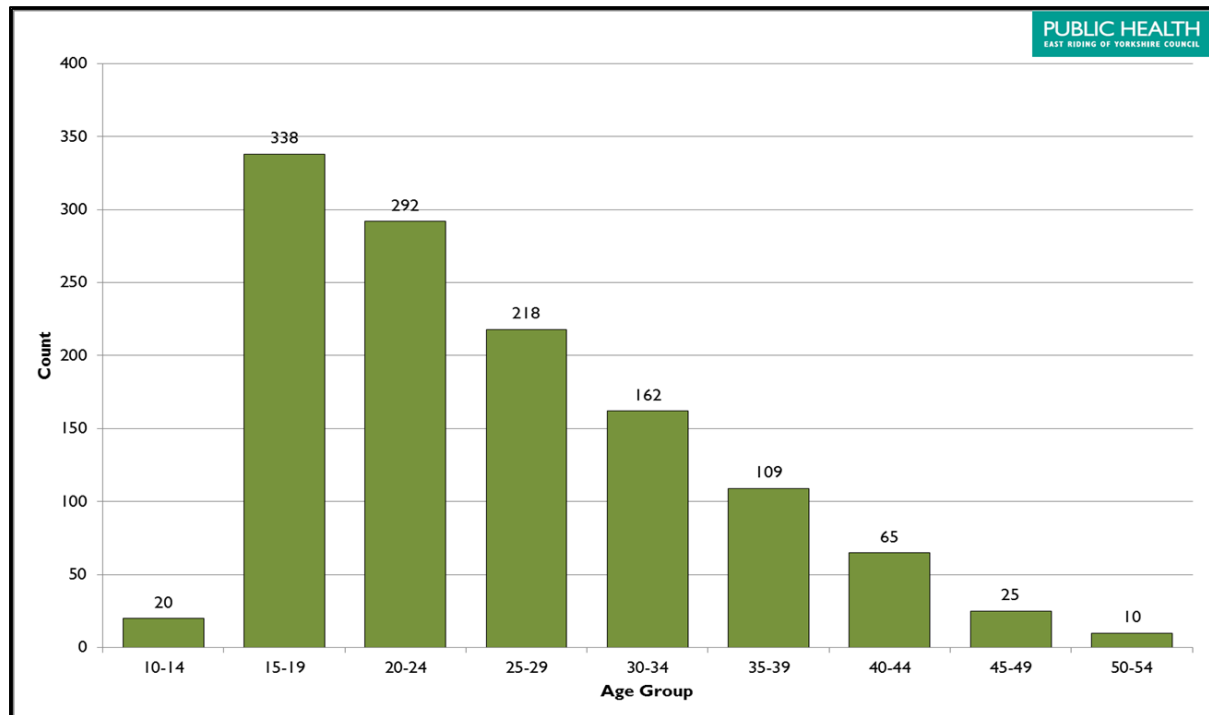


7.2 Emergency hormonal contraception (EHC)

Under 20s are the biggest users by number of EHC. Encouraging women who present for EHC (particularly repeat attenders) to consider take up of LARC will help reduce the risk of unplanned pregnancy.

Chart 7.2 Emergency hormonal contraception, ERY residents by age group, 2016/17.

Source: Outcomes4Health



8. Appendix

Map 8.1 Map of ERY wards. Source: East Riding of Yorkshire Data Observatory

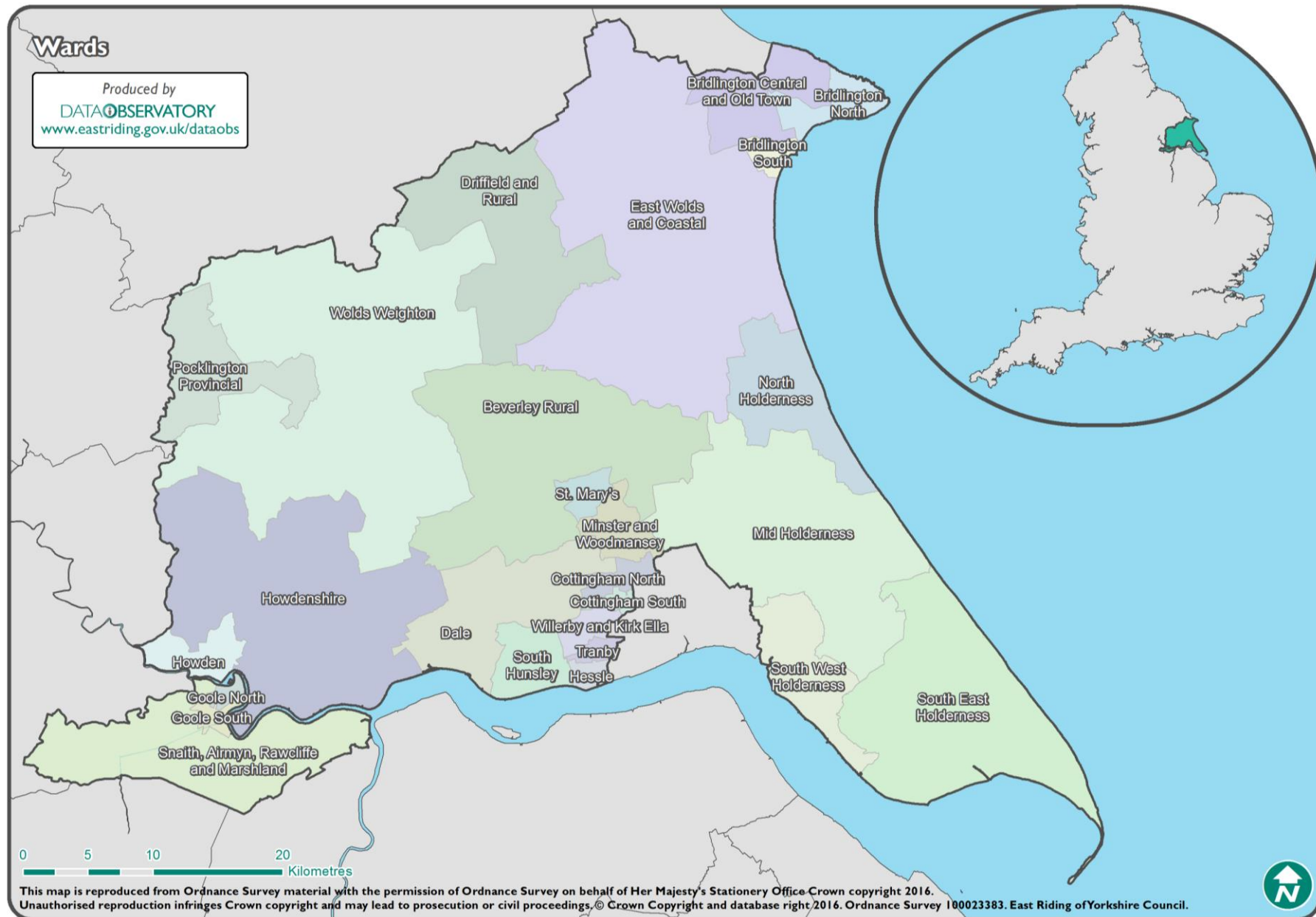


Table 8.2 Glossary

- **Under 18 conceptions:** the number of pregnancies that occur to women aged under 18, that result in either one or more live or still births or a legal abortion under the Abortion Act 1967.
- **Under 18 conception crude rate:** the count of all conceptions to females under the age of 18 per 1,000 females aged 15-17.
- **Under 16 conceptions:** the number of pregnancies that occur to women aged under 16, that result in either one or more live or still births or a legal abortion under the Abortion Act 1967.
- **Under 16 conception crude rate:** the count of all conceptions to females under the age of 16 per 1,000 females aged 13-15.



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