

# Birth rates in East Sussex between 2001 and 2021

# Introduction:

What prompted a review of East Sussex birth rates.

- 1. A reduction in numbers of births in East Sussex year on year
- 2. Reports that birth rates were decreasing nationally
- 3. To gain further understanding of why there was a decrease in East Sussex

# Approach

An initial review was carried out of ONS publications, e.g. Births in England and Wales: summary tables<sup>1</sup>, followed by a review of local Birth Registration data for East Sussex<sup>2</sup>. An examination was then made of national births data to help understand if observations seen nationally were present in East Sussex data. Further detailed analysis was carried on East Sussex data to help us understand more about the specifics of births in East Sussex and where in particular we were seeing the decrease.

# **Key Findings**

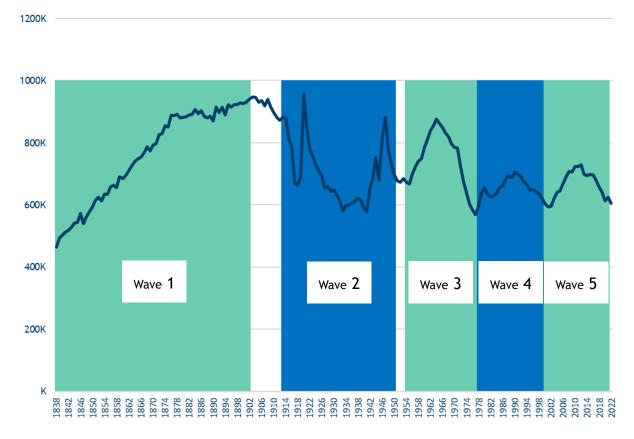
- Fewer younger women having children decreasing age specific rates (in younger ages)
- Smaller families decreasing total fertility rates
- Higher average age of women giving birth increasing year on year
- Birth rates reducing faster in more deprived areas decreasing year on year





## Change in birth rates in England

Chart 1 The number of live births in England between 1838 and 2021<sup>3</sup>



Since records began in 1838 the number of live births for England has varied. Chart 1 shows the number of births in England over the last 173 years. To help examine the data in detail we have divided them into 5 "waves".

- Wave 1 shows an increase in the number of births from approximately 464,000 in 1838 to 948,000 in 1903, one of the largest period of continuous growth over the 173 year period.
- Wave 2 shows two sharp increases and decreases which coincided with the dates for first and second world wars.
- Wave 3 shows a steep increase towards the end of the 1950s, peaking in the mid-1960s before it began to decrease, and continued this decrease up until the late 1970s.
- Waves 4 and 5 are two smaller waves where the number of live births rose slightly and then deceased. Wave 5, which is to be the focus of the East Sussex analysis, and which appears to have been steadily decreasing during the last 10 years.



It is important to note that since the second world war the *population* of England has been rising year on year<sup>4</sup> and so if all other factors remained the same, we would expect an increase in live births in line with the population increase. This has not been the case. There have been some increases and decreases but the waves have levelled off so that any new peaks remain of similar numbers to the previous ones.

Some of the key factors that may explain this include:

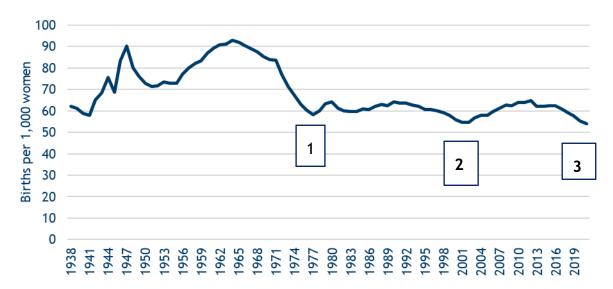
- A significant increase in life expectancy<sup>5</sup>
- A decline in infant mortality since 1900.<sup>6</sup>
- The introduction of female contraceptive (a new form of birth control in the 1960s<sup>7</sup>, when we saw a sharp decrease in the number of births)
- Socio-economic changes e.g. more women in the workforce.<sup>8</sup>

To understand this decrease further we have examined the changes in the general fertility rates and the total fertility rates.

## General Fertility Rates

General Fertility Rate (GFR)

The number of live births per 1,000 women aged 15-44 (a measure of current fertility levels)



#### Chart 2 General Fertility Rate for England between 1938 and 2021<sup>9</sup>

Chart 2 shows the general fertility rate (GFR) for England. It shows the same rise and fall as we observed in the live birth data in Chart 1. However, it shows that each subsequent dip is lower than the one seen in the previous wave, as noted by the labels 1, 2 and 3 in Chart 2. In 1977 the GFR was 58.1 in 2002 it was 54.6 and in 2021 it was 54.1







<sup>🔳</sup> Increase 📕 Decrease 🔳 Total

Chart 3 shows the changes in the GFR for the latest between 2001 and 2021 (wave 5 as depicted in Chart 1). In 2002 the GFR was 54.6 which was the lowest of the previous wave. Over the following 20 years the GFR increased until 2012, after which there was a decrease, the largest being in 2020 where there was a sudden decrease of 2.4 (the year of the COVID-19 pandemic). In 2022 (the latest year data is available for) the GFR decreased to 54.1

## **Total Fertility Rates**

#### Total fertility rate (TFR)

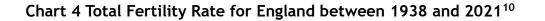
Average number of live children that a group of women would have if they experienced the age-specific fertility rates for the calendar year in question throughout their childbearing lifespan

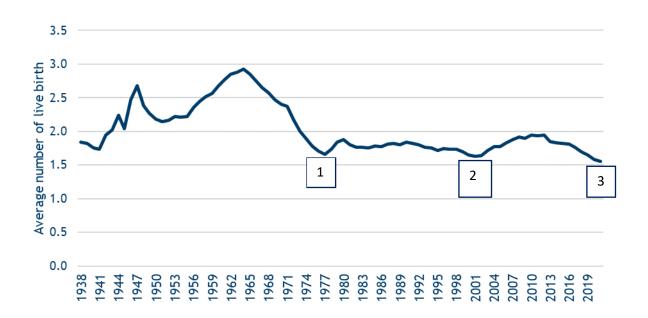
Chart 4 shows the total fertility rate (TFR) for England. It shows the same rise and fall as we observed in the live birth data in Chart 1.

However, it shows that each subsequent dip is lower than the one seen in the previous wave, as noted by the labels 1, 2 and 3 in Chart 2. In 1977 the TFR was 1.66 in 2001 it was 1.63 and in 2021 it was 1.55 This shows a downward trend in births from the peak in the mid-1960s.









According to the United Nations<sup>11</sup> countries where fertility continues to decline and experience below-replacement fertility (lower than 2.1 children per women) will eventually lead to outright reductions in population.<sup>12</sup> Chart 4 shows that the last year when England had a total fertility rate above 2.1 was in 1972.

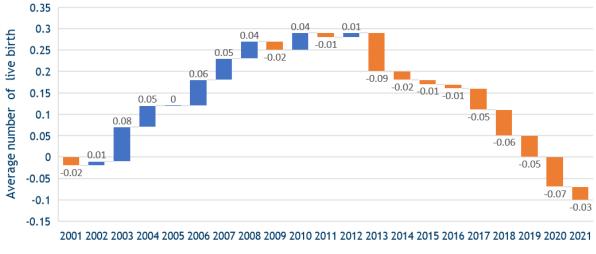


Chart 5 The year on year change of the TFR for England between 2001 and 2021

📕 Increase 📕 Decrease 📕 Total

Chart 5 shows the changes in the TFR for the latest between 2001 and 2021 (wave 5 as depicted in Chart 1). In 2001 the TFR was 1.63 and in 2021 this had decreased to 1.55. The largest decrease was in 2013 where the TFR decreased by 0.09 in one year. The next largest was in 2020 with a decrease of 0.07 (year of COVID-19 pandemic).



## Age of mother

It is known that women's fertility changes with age.

"On average there is a decline in female fertility starting in the mid-thirties, with lower fertility especially after the age of 35. Women's fertility will continue to decrease every year, whether or not she is healthy and fit because the number and quality of the eggs decreases with age."<sup>13</sup>

Chart 6 shows how the standardised mean age of the mother at childbirth. In 1938 it was 29 years. After peaking 29.3 years in 1944 it began to fall to 26.4 years in 1977. Since then, it has steadily increased year on year. In 2021 (the latest years data) it had risen to 30.9 years. It is likely this increase is one of the factors that has impacted on the reduction in the Total Fertility Rate.

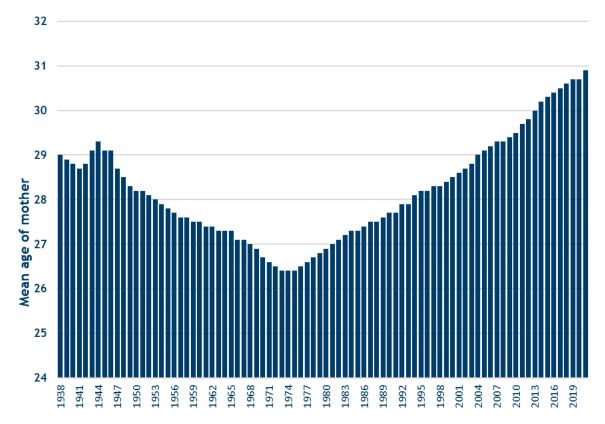


Chart 6 Standardised mean age of mother at childbirth (years)



#### Table 1 England declining fertility rates

	1964	% Change between years	1972	% Change between years	1977	% Change between years	2002	% Change between years	2021
General Fertility Rate	92.9	-15.9	77	-18.9	58.1	-3.5	54.6	-0.5	54.1
Total Fertility Rate	2.93	-0.76	2.17	-0.51	1.66	-0.02	1.64	-0.09	1.55
* Average age	27.3	-0.8	26.5	0.1	26.6	2.1	28.7	2.2	30.9

\* Average age of mother at childbirth



Table 1 shows selected fertility rates that highlight the change over time of the General Fertility Rate and the Total Fertility Rate for England.

The first date in 1964 was the peak for GFR and TFR for the whole period for which ONS have data for England.

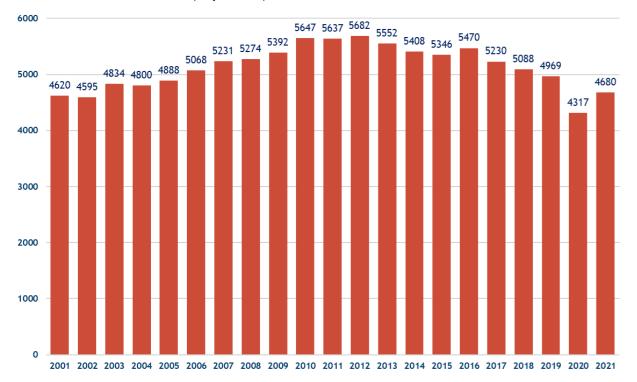
The years 1977, 2002 and 2021 are the years which had the lowest figures for the rise and falls since 1964. What is noticeable is that there was a large fall between 1964 and 1977 with a fall of 34.8 for GFR and 1.27 for TFR. There were smaller falls when comparing the low of 2002 with the 1977 low with a fall of 3.5 for GFR and 0.02 for TFR. There was also a small fall when comparing the low of 2021 with the low of 2002 with a decrease of 0.5 GFR and 0.09 TFR.

# Change in birth rates in East Sussex

Births data for East Sussex does not go back as far as national data so it is not possible to review changes over the same period (i.e. 1838 to 2021). However, East Sussex birth data is available during the period 2001 to 2021 (where we see some of the lowest birth rates, GFR and TFR, in our review of declining birth rates) so we have carried out our analysis over this period.



Chart 7 The number of (reported) live births in East Sussex between 2001 and 2021



From Chart 7 we can see that live birth follow a similar profile to the one we saw nationally at wave 5 in Chart 1. Over this period we can see that live births in East Sussex decreased by 1,002 live births from 5,682 in 2012 (when they were at their highest) to 4,680 in 2021. This is a 18% decrease. Recent 2022 data indicates that birth rates still continue to decline.



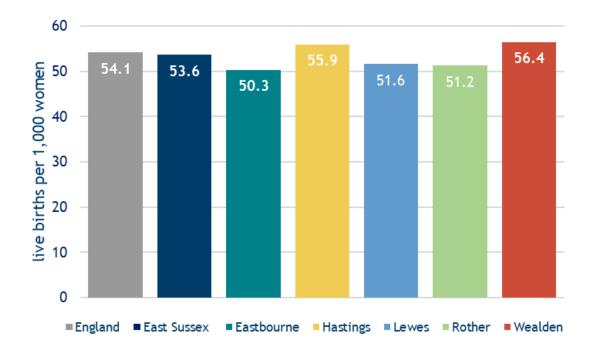




In 2020 there was a large decrease in the number of births, which was also seen nationally, and likely to have been due to the impact of COVID-19.<sup>14</sup>

## **General Fertility Rates**

Chart 9 shows the general fertility rates for each of the district and boroughs in East Sussex. These are the birth rates of women aged 15 to 44 for 2021. The GFR for East Sussex (53.6) and is similar to England (54.1) whereas Wealden (56.4) and Hastings (55.9) have the highest rates and Eastbourne has the lowest rate (50.3) in East Sussex.



#### Chart 9 General Fertility Rate for East Sussex in 2021

## **Total Fertility Rates**

The total fertility rates show the average number of live children that a group of women would have if they experienced the age-specific fertility rates (for the calendar year in question) throughout their childbearing lifespan.

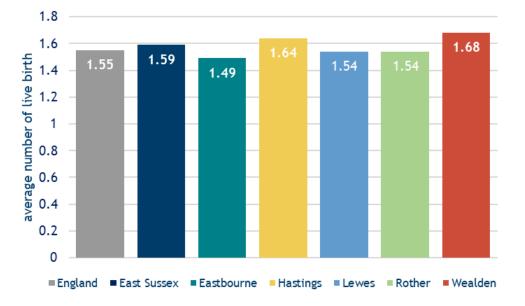




Chart 10 shows the total fertility rates for each of the district and boroughs in East Sussex.

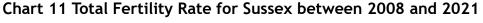


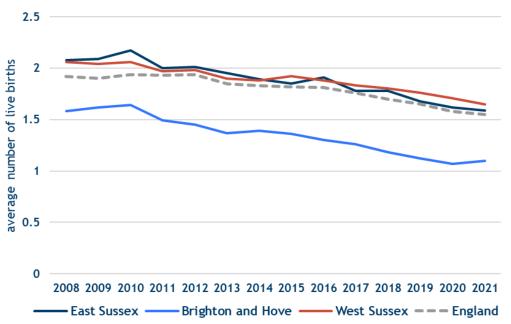
Chart 10 Total Fertility Rate for East Sussex in 2021



We see a similar pattern to the GFRs here with the TFRs, with the TFR for East Sussex (1.59) being similar to England (1.55) and Wealden (1.68) and Hastings (1.64) having the highest rates and Eastbourne having the lowest rate (1.49) in East Sussex.

To see the change in the TFRs over time, we have only been able to examine the period 2008 to 2021 due to the limited availability of the data. However, Chart 11 shows that East Sussex TFRs have decreased in line with what was seen nationally, though rates being slightly higher than England.







TFRs for England have been gradually declining from 1.92 (2008) to 1.55 (2021). That is women in England now gave birth on average to 1.55 children (2021).

East and West Sussex have similar TFRs to England, whereas Brighton, due to its significantly larger university age population, had much lower rates.

In Chart 12 we see the TFRs broken down by district and borough and can see a steady decline as was observed nationally. Hastings generally had the highest TFRs over this period but for most other district or boroughs there was no clear pattern with relative rates fluctuating, but all decreasing over time.

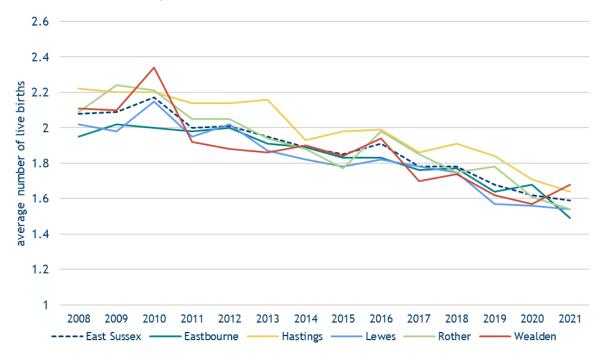


Chart 12 Total Fertility Rate for East Sussex between 2008 and 2021

So, to understand why we are seeing a decrease in births and where this may be happening we have examined the underlying data in more detail.

# Understanding the decrease in birth rates in East Sussex

## The change in age specific rates - the National picture

Fertility is affected by the age of the mother, and so the TFR will also be impacted. We can see that between 1938 and 2021 the birth rates for the different age bands in England have changed. We have seen a decrease in rates overall, see Chart 13, but we have also seen a change in the rates for specific age groups.

During the 1960s women aged 20 to 29 had the highest birth rates and had considerably higher rates than those in the older age groups. However, with the overall decline in



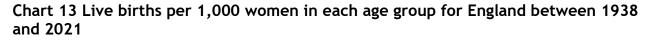
birth rates in the following years, we also saw a shift from high birth rates in younger ages to higher birth rates in older ages.

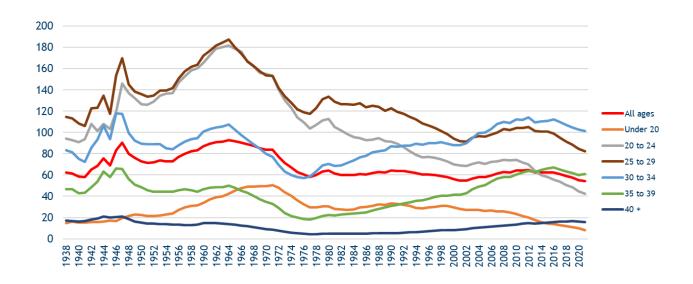
By 2021, the highest birth rates were in women aged 30 to 34, with the younger age women (20 to 24 year olds) now having lower rates than women aged 35 to 39.

It is known that women's fertility changes with age.<sup>15</sup>

"On average there is a decline in female fertility starting in the mid-thirties, with lower fertility especially over the age of 35. Women's fertility will continue to decrease every year, whether or not she is healthy and fit because the number and quality of the eggs decreases with age."<sup>16</sup>

So, this change, along with the overall decrease in birth rates, is likely to have had an impact on the TFR and ultimately the number of live births each year.





### The change in age specific rates - the East Sussex picture

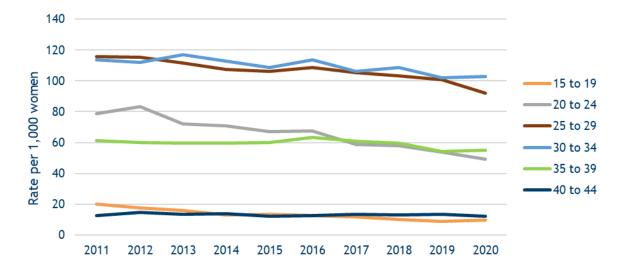
Age specific data is only available for East Sussex for the past 10 years. However, we see a similar profile in East Sussex (see Chart 14) as we saw in England (see Chart 13).

The highest age specific rates in East Sussex are now in those aged 30-34. The age specific rates for those aged 35-39 have now moved from the fourth highest to the third highest. This reflects the trend that women in East Sussex are having children later in life. This means that they are likely to have less children, which is reflected in the decrease in TFRs. The trend has moved to women now more likely to have children in their 30s than their 20s.





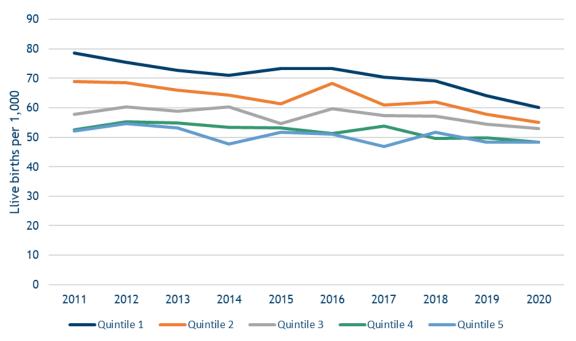
Chart 14 Live births per 1,000 women in each age group for East Sussex between 2011 and 2020



## What is the impact by area deprivation?

Chart 15 shows how the General Fertility Rate for East Sussex by IMD (Index of Multiple Deprivation 2019) quintiles over the past 10 years. It is noticeable that the GFRs for all quintiles have decreased. Generally, the highest GFRs are in the most deprived quintile (Quintile 1) and the lowest rates in the least deprived (Quintile 5).

Chart 15 General Fertility Rate for East Sussex by IMD 2019 quintile between 2011 and 2020





Quintile 1 has decreased from 78 births per 1,000 women (in 2011) to 60 births per 1,000 women (in 2020), a decrease of 23%. Similarly for Quintile 2 the rates have decreased by 14 over the same period, a decrease of 20%. There have been larger decreases in the more deprived areas than the least deprived, as seen in Table 2.

Table 2 The General Fertility Rate for East Sussex by IMD 2019 quintile in 2011 and 2020 and the percentage change

IMD 2019	2011	2020	% change
Quintile 1	78	60	-23%
Quintile 2	69	55	-20%
Quintile 3	58	53	-8%
Quintile 4	53	48	-8%
Quintile 5	52	48	-7%

Map 1 shows the medium super output areas (MSOAs) in East Sussex that had the highest general fertility rates in 2011 to 2013. The highest rates were found primarily in the coastal towns, Hailsham and the more deprived areas. The MSOAs with the highest rates were in:

- Central St Leonards (Hastings)
- Hampden Park North (Eastbourne)
- Broomgrove (Hastings)
- Central Hastings (Hastings)
- Sovereign Harbour (Eastbourne)



Map 2 shows the MSOAs in East Sussex that had the highest general fertility rates in 2018 to 2020. Although the highest rates are still primarily in our coastal towns and deprived areas we are also seeing higher rates in other areas such as:

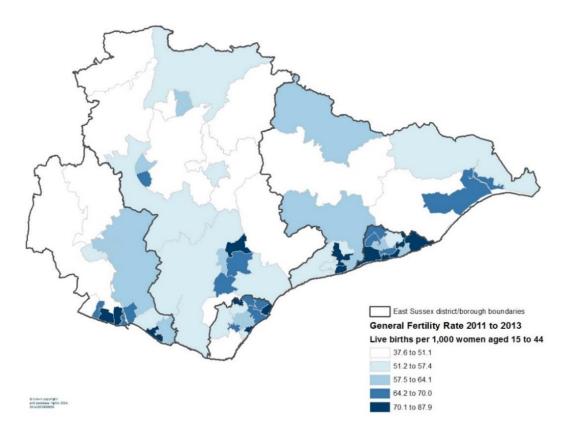
- Ore (Hastings)
- Hollington (Hastings)
- Central St Leonards (Hastings)
- Hampden Park North (Eastbourne)
- Langney East (Eastbourne)

Looking at areas with the highest rates between the two time periods, we can see that the upper rates in 2018 to 2020 have decreased to 81.1 compared to 87.9 in 2011 to 2013.



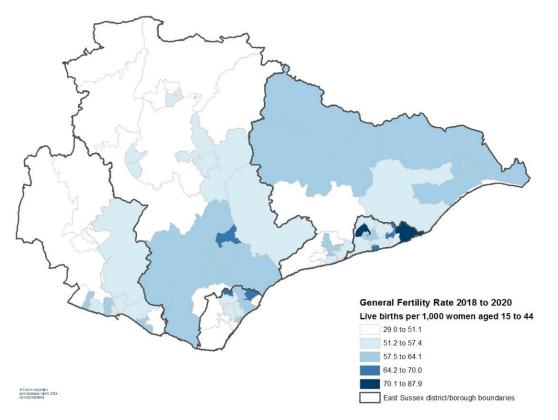
# Geographical changes in general fertility rates

Map 1 General Fertility Rates by MSOA, 2011 to 2013





#### Map 2 General Fertility Rates by MSOA, 2018 to 2020



#### Table 3 Highest General Fertility Rates by MSOAs comparing 2011/13 with 2018/20

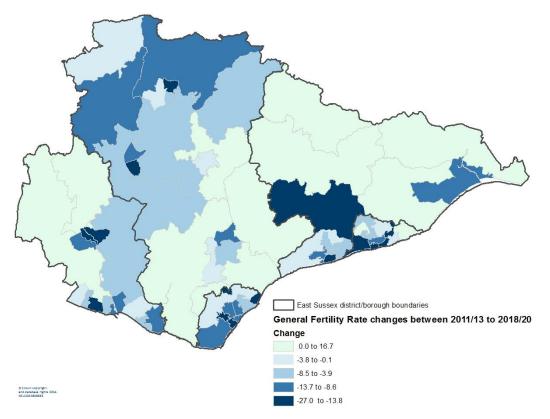
GFR 2011-2013	Rate	District/Borough	GFR 2018-2020	Rate	District/Borough
Central St Leonards	87.9	Hastings	Ore	81.1	Hastings
Hampden Park North	82.1	Hastings	Hollington	70.2	Hastings
Broomgrove	79.9	Hastings	Central St Leonards	69.4	Hastings
Central Hastings	79.1	Eastbourne	Hampden Park North	66	Eastbourne
Sovereign Harbour	77.8	Eastbourne	Langney East	65.7	Eastbourne
Peacehaven East	75.8	Lewes	Hailsham Central & East	64.8	Wealden
Ore	75.4	Hastings	Broomgrove	64.8	Hastings
Hailsham Central & East	73.7	Wealden	Stone Cross, Westham & Pevensey Bay	63.7	Wealden
Pier	73.3	Wealden	Polegate	63	Wealden
Bexhill Central	72	Eastbourne	St Anthony's Hill	62.9	Eastbourne
Seaford Town	70.6	Rother	Northiam, Peasmarsh & Camber	62.4	Rother
Newhaven West	70.2	Lewes	Newhaven West	62.4	Lewes
West St Leonards	70.1	Lewes	Seaford Town	62.1	Lewes
Bexhill North & Sidley	70.1	Rother	Bexhill North & Sidley	62	Rother

Table 3 Shows a comparison of the top 14 MSOAs<sup>1</sup> in 2011 to 2013 with the highest rates and the top 14 in 2018 to 2020. You can see those highlight in bold are in both 2011 to 2013 and 2018 to 2020 highest rates.

<sup>&</sup>lt;sup>1</sup> The reason for showing the top 14 is because this is the number of MSOAs in the highest quintile.



#### General Fertility Rate (GFR) changes from 2011/13 to 2018/20 - MSOA



This map shows the change in rates between the period 2011/13 and 2018/20 organised in quintiles. The GFR for East Sussex was 62 for 2011/13 and it was 55 for 2018/20. A drop of 7 Live births per 1,000 women aged 15 to 44. A number of areas had a significant drop in General Fertility Rates. These areas generally appear in East Sussex towns.

The quintile with the highest decrease ranges from a decrease of 27 to 13.8 Live births per 1,000 women aged 15 to 44. The highest decrease was at Sovereign Harbour with a decrease of 27 Live births per 1,000 from 77.8 (2011/2013) to 50.8 (2018/20).

The areas with the highest decrease in Eastbourne borough are: Sovereign Harbour, Old Town & Motcombe, Hampden Park North, King Edward's Parade. In Hastings Borough: Central Hastings, Central St Leonards, Broomgrove, West St Leonards. In Lewes District -Peacehaven East, Crowborough North East, Lewes Central & East, Uckfield South and the remaining areas are Bexhill Central (Rother), Battle & Catsfield (Rother).

On the other end of the scale there are a number of areas where there has been an increase. These are especially in the rural areas of Rother and Wealden. Burwash - Sedlescombe & Staplecross (Rother) had the highest increase with 16.7 Live births per 1,000 women aged 15 to 44 from a GFR of 41.1 (2011/2013) to 57.8 (2018/20). In Wealden the areas with an increase of 5 or more were: Willingdon, Hailsham North - Alfriston & East Dean, Broad Oak & Horam, Herstmonceux & Ninfield and Stone Cross - Westham & Pevensey Bay.



## Age specific fertility rates

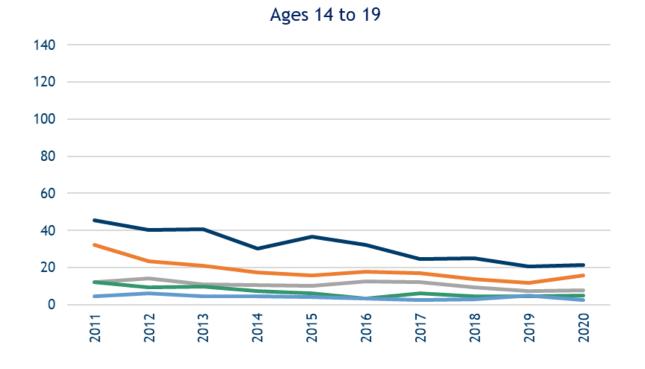
Chart 16 shows the age specific fertility rates for each age group, broken down by deprivation quintile. We can see in the younger age groups, particularly in ages 20 to 24 and 25 to 29 there have been larger decreases in fertility rates in the more deprived areas, though both age groups show a decrease in all areas between 2011 and 2021.

In the older ages, 35 to 44, though the rates are smaller, there has been less change between 2011 and 2021, and hardly any correlation between deprivation and the change in rates was observed.

So, we can see rates are decreasing in the younger age groups, and faster in the more deprived areas.

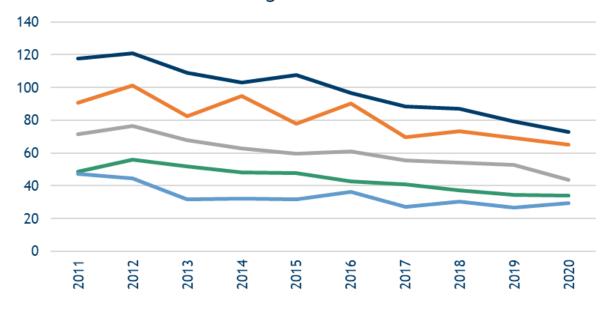
Maps 3 to 8 show the areas within East Sussex which have the highest rates for each of the age groups presented in Chart 16.

Chart 16 Age Specific Fertility Rate (per 1,000 women) in East Sussex, by IMD quintile from 2011 to 2020

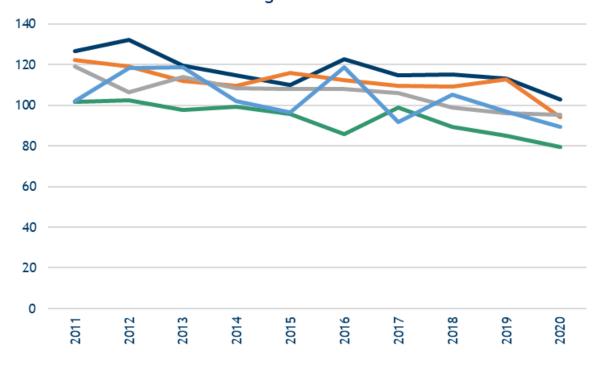




Ages 20 to 24

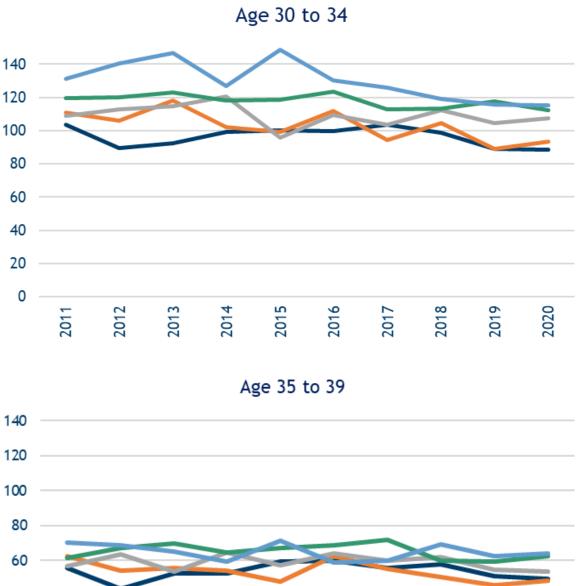


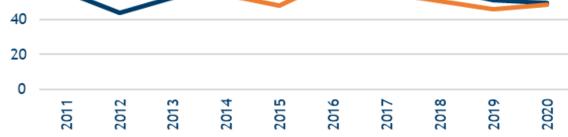
Age 25 to 29



-Quintile 1 (most deprived) -Quintile 2 -Quintile 3 -Quintile 4 -Quintile 5 (least deprived)



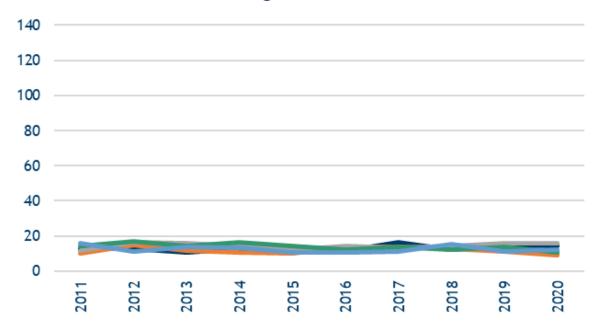




-Quintile 1 (most deprived) -Quintile 2 -Quintile 3 -Quintile 4 -Quintile 5 (least deprived)



#### Age 40 to 44

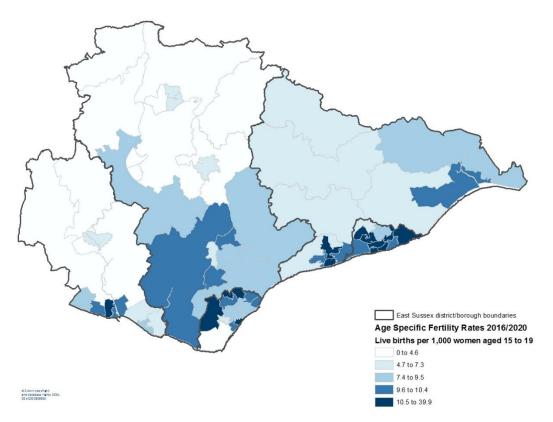


-Quintile 1 (most deprived) -Quintile 2 -Quintile 3 -Quintile 4 -Quintile 5 (least deprived)



## Geographical age specific fertility rates

Map 3 - Age Specific Fertility Rates (ASFR) age 15 to 19 between 2016 and 2020

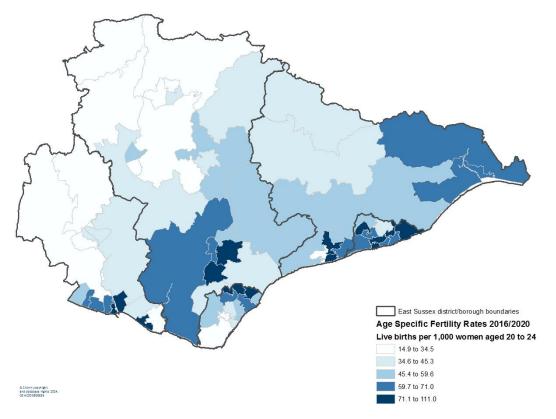


The highest Age Specific Fertility Rates (AGFRs) for women aged 15 to 19 over the period 2016 to 2020 are found in the coastal towns and these are in the most deprived areas.

- Central St Leonards (Hastings)
- Broomgrove (Hastings)
- Ore (Hastings)
- Pier (Eastbourne)
- Bexhill North & Sidley (Rother)



#### Map 4 - Age Specific Fertility Rates (ASFR) age 20 to 24 between 2016 and 2020

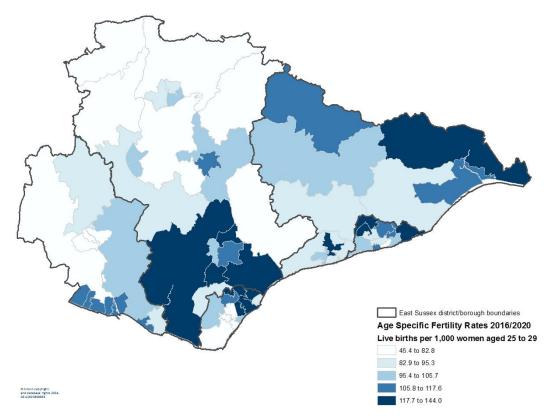


The areas with the highest AGFRs for women aged 20 to 24 over the period 2016 to 2020 are similar to those areas seen in women aged 15 to 19 (9 out of the 14 MSOAs are the same). The areas with the highest rates are found in the coastal towns and Hailsham, and these are generally in the most deprived areas.

- Hollington (Hastings)
- Ore (Hastings)
- Langney East (Eastbourne)
- Northiam Peasmarsh & Camber (Rother)
- Hampden Park North (Eastbourne)



#### Map 5 - Age Specific Fertility Rates (ASFR) age 25 to 29 between 2016 and 2020

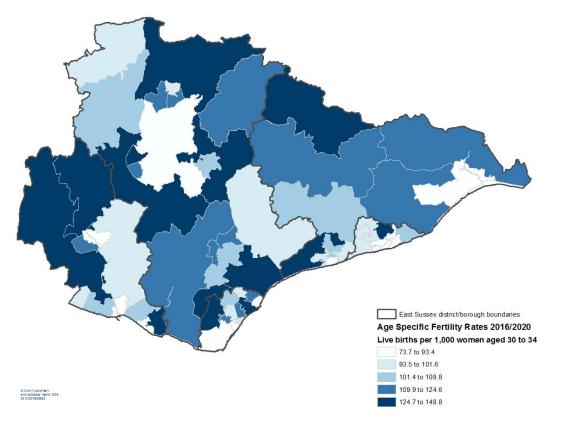


The highest ASFRs for women aged 25 to 29 are found in the North East of Eastbourne, the south of Wealden and parts of Hastings, Bexhill and the East of Rother.

- Hollington (Hastings)
- Ore (Hastings)
- Langney East (Eastbourne)
- Northiam Peasmarsh & Camber (Rother)
- Hampden Park North (Eastbourne)



Map 6 - Age Specific Fertility Rates (ASFR) age 30 to 34 between 2016 and 2020

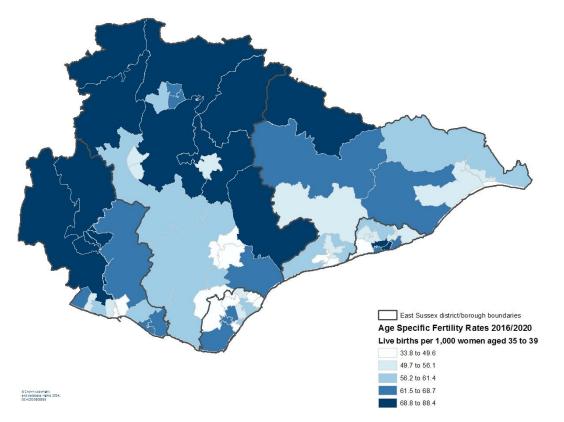


The highest ASFRs for women aged 30 to 34 are spread around East Sussex but are generally in the less deprived areas.

- Ratton (Eastbourne)
- Wivelsfield Green Ditchling & Rodmell (Lewes)
- Collington Cooden & Little Common (Rother)
- Robertsbridge Hurst Green & Ticehurst (Rother)
- Broad Oak & Horam (Wealden)



Map 7 - Age Specific Fertility Rates (ASFR) age 35 to 39 between 2016 and 2020

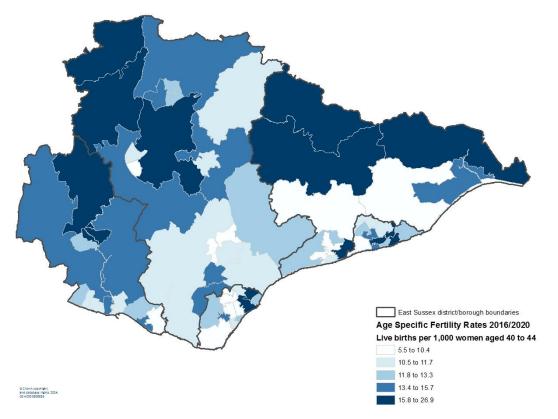


The highest ASFRs for women aged 35 to 39 are in the west and north of the county.

- Frant & Groombridge (Wealden)
- Chelwood & Nutley (Wealden)
- Lewes West (Lewes)
- Robertsbridge Hurst Green & Ticehurst (Rother)
- Wivelsfield Green Ditchling & Rodmell (Lewes)



Map 8 - Age Specific Fertility Rates (ASFR) age 40 to 44 between 2016 and 2020



The highest ASFRs for women aged 40 to 44 are largely in the rural areas and in the north and northeast of the county and parts of the coastal towns.

The top 5 with the highest rates are:

- Northiam Peasmarsh & Camber (Rother)
- Forest Row & Coleman's Hatch (Wealden)
- Chelwood & Nutley (Wealden)
- Braybrooke & Bohemia (Hastings)
- Old Hastings (Hastings)

Table 4 shows the top 14 MSOAs with the highest rates for each age group shown in maps 3 to 8. Here they have been coloured by the deprivation quintile each of the MSOA are in. The highest rates for those mothers in the under 30 age groups, tend to be from the more deprived areas and those 30 to 39 year olds from the least deprived areas.



#### Table 4 Highest Age Specific Rates by MSOAs 2016 to 2020

Ages 15 to 19	Ages 20 to 24	Ages 25 to 29	Ages 30 to 34	Ages 35 to 39	Ages 40 to 44
Central St Leonards (39.9)	Broomgrove (111.1)	Hollington (144)	Ratton (148.8)	Frant & Groombridge (88.4)	Northiam, Peasmarsh & Camber (26.9)
Broomgrove (38.6)	Hollington (107)	Ore (140.7)	Wivelsfield Green, Ditchling & Rodmell (147.7)	Chelwood & Nutley (83.5)	Forest Row & Coleman's Hatch (24.2)
Ore (30.4)	_Ore (106.2)	Langney East (138.9)	Collington, Cooden & Little Common (143.9)	Lewes West (82.1)	Chelwood & Nutley (18.9)
Pier (28)	Langney East (102)	Northiam, Peasmarsh & Camber (135.1)	Robertsbridge, Hurst Green & Ticehurst (142.7)	Robertsbridge, Hurst Green & Ticehurst (78.1)	Old Hastings (18.7)
Bexhill North & Sidley (21.8)	Newhaven Town (98.7)	Hampden Park North (133.3)	Broad Oak & Horam (137.4)	Wivelsfield Green, Ditchling & Rodmell (76.5)	Braybrooke & Bohemia (18.7)
Hollington (20.8)	Polegate (97.7)	Stone Cross, Westham & Pevensey Bay (129.9)	Uckfield Town & North (131)	Mayfield & Wadhurst (74.4)	Lewes Central & East (18.2)
Newhaven West (20.8)	Hampden Park North (90.2)	Bexhill North & Sidley (127.9)	Stone Cross, Westham & Pevensey Bay (130)	Chailey, Newick & Barcombe (74.4)	Burwash, Sedlescombe & Staplecross (17.8)
Langney West (20.2)	Langney West (86.6)	Roselands (124.4)	Willingdon (129.9)	Broad Oak & Horam (73.8)	Broomgrove (17.2)
Bexhill Central (17.8)	Seaford Town (84.7)	- Hailsham North, Alfriston & East Dean (122.8)	St Anthony's Hill (129.3)	Forest Row & Coleman's Hatch (71.9)	Bexhill East & Pebsham (17.1)
Braybrooke & Bohemia (17.5)	Bexhill Central (84)	Polegate (122.3)	Seaford Eastbourne Road (129.1)	Central Hastings (71.6)	Robertsbridge, Hurst Green & Ticehurst (16.8)
Hampden Park North (16.9)	Central St Leonards (83.3)	Langney West (121.2)	Five Ash Down, Horsted & Chiddingly (127.8)	Lewes Central & East (71.5)	Langney East (16.4)
Central Hastings (16.4)	Hailsham East (82.7)	Hailsham Central & East (120.4)	Chailey, Newick & Barcombe (126.9)	Braybrooke & Bohemia (70.5)	St Anthony's Hill (16.4)
Ratton (15.5)	Bexhill North & Sidley (80.4)	St Anthony's Hill (119.8)	Frant & Groombridge (126.9)	Herstmonceux & Ninfield (70.1)	Buxted, Framfield & Rotherfield (16.4)
Silverhill (14.6)	Braybrooke & Bohemia (76.1)	Ashdown (118.3)	Conquest & St Helens (126.8)	Buxted, Framfield & Rotherfield (69.2)	Chailey, Newick & Barcombe (16.2)

Quintile 1 Most deprived	Quintile 2	Quintile 3	Quintile 4	Quintile 5 Least deprived

## Glossary<sup>17</sup>

#### Age-specific fertility rate (ASFR)

The number of live births to mothers of a particular age per 1,000 women of that age in the population. Useful for comparing fertility of women at different ages or women of the same age in different populations.

#### Crude Birth Rate

The number of live births in a year per 1,000 mid-year population.

#### General Fertility Rate (GFR)

The number of live births per 1,000 women aged 15-44. Measure of current fertility levels.

#### Live birth

A baby showing signs of life at birth.

#### Total fertility rate (TFR)

The TFR is the average number of live children a group of women would have if they experienced the age-specific fertility rates for the calendar year in question throughout their childbearing lifespan. TFR is a better measure of trends than the number of livebirths, since it accounts for size and age structure of the female population of childbearing age. The rate provides a timely measure of fertility levels and can be affected by changes in the timing of childbearing, completed family size and the population structure.

#### PIP: Replacement level fertility

is the level of fertility at which a population exactly replaces itself from one generation to the next.

#### Standardised Mean Age

The standardised mean (average) age (for example, at birth or marriage) is a measure which eliminates the impact of any changes in the distribution of the population by age and therefore enables trends over time to be analysed.



Endnotes

<sup>1</sup> Births in England and Wales: summary tables - Office for National Statistics (ons.gov.uk)

<sup>2</sup> East Sussex Public Health Intelligence team receive quarterly the birth registration data for East Sussex from the DARS Data Applications Team (NHS England). It provides individual anonymised data which allow for monitoring birth characteristic statistics.

<sup>3</sup> <u>Births in England and Wales: summary tables - Office for National Statistics (ons.gov.uk)</u> 2021 edition of this dataset

<sup>4</sup> <u>Births in England and Wales: summary tables - Office for National Statistics (ons.gov.uk)</u> 2021 edition of this dataset

<sup>5</sup> <u>United Kingdom: life expectancy 1765-2020 | Statista</u>. See also Figure 1: Life expectancy at birth has steadily increased from 1841, although slower improvements have been seen since 2011 <u>Mortality in England and Wales - Office for National Statistics</u> (ons.gov.uk)

<sup>6</sup> See Figure 4: Infant deaths have steadily declined since 1900 <u>Mortality in England and</u> <u>Wales - Office for National Statistics (ons.gov.uk)</u>

<sup>7</sup> <u>The Contraceptive Pill and Women's Employment as Factors in Fertility Change in</u> <u>Britain 1963-1980: A Challenge to the Conventional View on JSTOR</u>

Demographic effects of the introduction of steroid contraception in developed countries | Human Reproduction Update | Oxford Academic (oup.com)

<sup>8</sup> The rise and rise of women's employment in the UK | The British Library (bl.uk)

<sup>9</sup> <u>Births in England and Wales: summary tables - Office for National Statistics (ons.gov.uk)</u> (Data is only available from 1938 when records began).

2021 edition of this dataset

<sup>10</sup> <u>Births in England and Wales: summary tables - Office for National Statistics</u> (ons.gov.uk) 2021 edition of this dataset

"https://www.un.org/esa/sustdev/natlinfo/indicators/methodology\_sheets/demographi
cs/total\_fertility\_rate.pdf

Replacement level fertility and future population growth - PubMed (nih.gov)

The changing tide of human fertility - PubMed (nih.gov)

<sup>12</sup> <u>Replacement level fertility and future population growth - PubMed (nih.gov)</u>

<sup>13</sup> <u>Delaying childbearing: effect of age on fecundity and outcome of pregnancy. - PMC (nih.gov)</u>

<sup>14</sup> <u>User guide to birth statistics - Office for National Statistics (ons.gov.uk)</u>

Section 3.4 Coronavirus pandemic

Births in England and Wales explained - Office for National Statistics (ons.gov.uk)



Effect of lockdowns on birth rates in the UK | Gavi, the Vaccine Alliance

 $^{\rm 15}$  Delaying childbearing: effect of age on fecundity and outcome of pregnancy. - PMC (nih.gov)

<sup>16</sup> <u>At what age does fertility begin to decrease? - British Fertility Society | BFS</u>

<sup>17</sup> <u>User guide to birth statistics - Office for National Statistics (ons.gov.uk)</u>