

# Overview of key routine maternal and infant population health measures

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## Overview of Key Maternal and Infant Health Measures

	Telford & Wrekin		Shropshire		England
	No.	% / rate	No.	% / rate	% / rate
<b>Demographic &amp; socio-economic indicators</b>					
Population: Total (2015)	171,200		311,400		
Population: 0-4 years (2015)	11,300	6.6%	15,100	4.8%	6.2%
Population: 16-44 females (2015)	31,300	36.3%	47,400	30.2%	37.1%
Children and young people (under 20) living in poverty (2013)	8,690	22.0%	6,970	12.0%	18.0%
Children (under 16) in low income families (2013)	7,760	23.0%	6,180	12.7%	18.6%
Women of childbearing age (15-44 years) living in deprived areas (2015)	8,900	28.6%	2,700	5.8%	21.9%
<b>Fertility and conception rates</b>					
General fertility rate (live births per 1,000 women aged 15-44 years) (2015)	2,075	64.1	2,795	56.9	62.5
Teenage pregnancy rates (under 18 conceptions per 1,000 females aged 15-17 years) (2014)	105	32.6	85	15.1	22.8
<b>Maternal health and lifestyle</b>					
Excess weight in adults (all ages <sup>1</sup> ) (2013-15)	22,250	71.1%	30,900	65.2%	64.8%
Smoking at time of delivery (2015/16)	367	18.1%	297	12.3%	10.6%
Breastfeeding initiation (2014/15)	1,361	67.5%	1,844	75.3%	74.3%
Breastfeeding at 6-8 weeks (2014/15)	742	36.3%	1,272	45.9%	43.2%
<b>Infant mortality and related indicators</b>					
Births to mothers born outside UK (2013-15)	990	16%	813	10%	
Stillbirths in mothers born outside the UK (% of total stillbirths) (2013-15)		26%		14%	
Low birth weight of term babies (2014)	46	2.5%	69	2.6%	2.9%
Infant mortality rate (No. of deaths under one year per 1,000 births) (2013-15)	41	6.5	26	3.1	3.9
Stillbirth rate (No. of stillbirths per 1,000 total births) (2013-15)	12	4.3	9	4.2	4.4
Perinatal mortality rate (No. of stillbirths and deaths under one week per 1,000 total births) (2013-2015)		8.1		6.0	8.2
Neonatal mortality rate (No. deaths of under 4 weeks per 1,000 live births) (2013-2015)	10	4.6	6	2.2	2.7

For detailed indicator descriptions, RAG rating definition and data sources see Page 1 and related report sections.

<sup>1</sup> Data for excess weight in women of childbearing age are not routinely available so the prevalence figure for all adults (male and female) is presented in this report as a proxy

## Key Messages: Maternal and Infant Health

### Demography

- The age profile of Telford and Wrekin is comparatively younger than the national picture, with larger proportions of people in the 0-19 years age groups and middle aged groups between 40 and 54 years and lower proportions in age groups above 75 years than across England as a whole.
- The age profile of Shropshire is comparatively older than the national picture, with larger proportions of people in all age groups over 45-49 years and lower proportions in all age groups under 45 years than across England as a whole.
- The population of Telford and Wrekin and Shropshire are both projected to increase by approximately 4% overall by 2025 according to national figures, to 177,500 in Telford & Wrekin and 324,900 in Shropshire. However, locally produced figures which are considered more robust, expect the overall population in Telford & Wrekin to be higher at 188,100 by 2025. By 2035 it is expected that both local authority populations will grow by around 8% to 182,700 in Telford and Wrekin and to 335,700 in Shropshire.
- The infant population is also expected to remain static based on national population figures in both Telford & Wrekin and Shropshire. However, local projections indicate that the 0-4 year old population will be 1,500 more than the national estimate at 24,300 children under 5 years in Telford & Wrekin
- Just over a third of Telford and Wrekin's total female population (36%) are of child bearing age, which is similar to the national average (37%), this compares to 30% in Shropshire.
- Projections, based on national data, indicate that the numbers of women of childbearing age will remain relatively static in the next two decades. However, local data suggests that in Telford & Wrekin the female population aged 16-44 years will be almost 3,000 greater than the national expectations.

### Socio-economic deprivation

- Just over a fifth (22%) of children and young people (aged under 20 years) live in poverty in Telford and Wrekin, which equates to 8,700 children. This is significantly worse than the average for England (18%). This compares to 12% in Shropshire (6,970 children and young people under 20).
- Although the levels of child poverty and low income families have reduced marginally in Telford and Wrekin over the past decade, it is a persistent issue which impacts on health inequalities.
- The patterns of women of child bearing age living in deprived areas are distinctly different across Telford and Wrekin and Shropshire. In Telford and Wrekin, over a quarter (28.6%) of women (8,900 females) aged 16-44 years live in communities classified within the most deprived fifth of areas in England. This compares to 5.8% in Shropshire (2,700 women).

## Key Messages: Maternal and Infant Health

### Fertility and Conceptions

- There were 2,075 live births in Telford and Wrekin in 2015, compared to 2,795 in Shropshire. The general fertility rate in Telford and Wrekin is similar to the England average compared to the lower than average rate in Shropshire.
- Teenage conception rates in Telford and Wrekin have historically been significantly<sup>2</sup> higher than the England average, whereas in Shropshire rates have been significantly lower. Under 18 conception rates halved in Telford and Wrekin between 1998 and 2014, equating to 78 fewer under 18 conceptions each year (105 compared to 183 conceptions).
- The highest fertility rates in both Telford and Wrekin and Shropshire are seen in women aged 25-29 years, whereas in England as a whole the highest fertility rates are in women aged 30-34 years.
- Fertility rates in women aged under 25 are higher in Telford and Wrekin compared to Shropshire, whereas rate in Shropshire in women aged between 30-39 years are slightly higher than those in Telford and Wrekin.

### Maternal Health and Lifestyle

- It is estimated that a significantly high level of adults (71%) in Telford and Wrekin carry excess weight (i.e. overweight or obese), which is significantly worse than the national average (64.8%). This equates to circa 22,250 women of child bearing age (15-44 years) in Telford and Wrekin, compared to 65.2% in Shropshire (30,900 women of child bearing age).
- Maternal smoking is significantly high in Telford and Wrekin, although in the past two years smoking at the time of delivery has started to decline. The rate of smoking in pregnancy in Telford and Wrekin was 18.1% in 2015/16, compared to 12.3% in Shropshire and 10.6% in England as a whole. A total of 367 women were still smoking at delivery in 2015/16, which compares to 297 women smoking at delivery in Shropshire.
- Levels of breastfeeding (both initiation at birth and duration at 6-8 weeks) have been historically low in Telford and Wrekin. Although rates have been improving slowly, almost a third (32.5%) of infants (655 babies) were not breastfed at birth, which is significantly<sup>2</sup> worse than the average for England 25.7%. In Shropshire just under a quarter, 24.7% of infants (605 babies) were not breastfed at birth in 2015/16, which is similar to the national average.

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<sup>2</sup> Statistical testing, using 95% confidence intervals, has been undertaken and the difference has been interpreted as statistically significantly different, see page 1 for further details

## Key Messages: Maternal and Infant Health

### Low Birth Weight

- The low birth weight rates for term babies ( $\geq 37$  weeks gestation) in Shropshire and Telford and Wrekin (2.6 per 1,000 and 2.5 per 1,000 respectively) are similar to the England average
- Low birth weight rates in all births (of any gestational age), both under 2500g and very low (under 1500g) are not significantly different to the England average in either Telford and Wrekin or Shropshire.

### Infant Mortality and Mother's Country of Birth

- There are on average 14 deaths per year of infants under 12 months in Telford and Wrekin (2013-15). The infant mortality rate (6.5 per 1,000 live births) was significantly<sup>3</sup> worse than the England average between 2011 and 2015. In Shropshire there are on average nine deaths under one year annually, the infant mortality rate (3.1 per 1,000 live births) is not significantly<sup>3</sup> different to the England average.
- Trends in infant mortality rates fluctuate due to the small number involved, but since the mid 1980s in Telford and Wrekin rates have been declining overall over the decades. However, since 2011 numbers have increased slightly, by one additional death each period on average. The three year rolling average rates for infant deaths under 12 months have been significantly<sup>3</sup> higher than the England average.
- The number of deaths during the first 4 weeks of life (neonatal deaths) in Telford & Wrekin has been increasing slowly in recent years by one case per year. The neonatal mortality rates in Telford & Wrekin from the period 2012-14 and 2013-15 were significantly<sup>3</sup> worse than the England average. In Shropshire the number of neonatal deaths remains static and rates are similar to the England average.
- 16% of mothers in Telford and Wrekin were born outside of the UK compared with 10% in Shropshire. The percentage of stillbirths occurring in these mothers in Telford and Wrekin was disproportionately high, accounting for 26% of all stillbirths, compared to 14% in Shropshire.
- The highest proportion of stillbirths amongst mothers born outside the UK delivering their babies in Telford and Wrekin were seen in women born in Poland and Ghana. Births in these two groups accounted for 6% of all births during 2013-15 but represented 21% of the total stillbirths
- In Shropshire during 2013-2015 10% of births were among mothers born outside the UK. In terms of stillbirths 14% occurred in mothers born outside the UK. The highest proportion of stillbirth to non-UK born women were seen in mothers from Poland (3% of all stillbirths)

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<sup>3</sup> Statistical testing, using 95% confidence intervals, has been undertaken and the difference has been interpreted as statistically significantly different, see page 1 for further details



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## 1. Purpose

This report, which is part of the Joint Strategic Needs Assessment, describes routinely available maternal and infant health indicators in Telford and Wrekin at a population-level. The findings may help the commissioning plans for maternal and infant health services which are funded by Telford & Wrekin Council and NHS Telford & Wrekin Clinical Commissioning Group. The intelligence in the report can contribute to a more in-depth local needs assessment process for maternity services. It includes comparative information for Shropshire County so that it can be used as part of the Future Fit programme of planning healthcare services.

## 2. Introduction

A variety of economic, social and environmental factors are known to contribute to and impact on infant health and mortality<sup>4</sup>. The main underlying determinants include the following: socio-economic deprivation, maternal age, low birth weight, smoking in pregnancy, teenage pregnancy, breastfeeding, mother's country of birth, congenital abnormalities. Deaths in the first 28 days of life (the neonatal period) in particular, help to reflect the health and care of both mother and newborn populations.

This report uses a variety of data and information sources to examine trends and patterns in maternal and infant population groups and the key risk factors, within the following sections:

- Demography - population and ethnicity
- Socio-economic circumstances and deprivation
- Fertility and conception
- Maternal health
- Infant health
- Infant mortality

The data described in this report have been predominately derived from nationally available data sources, published by Public Health England and the Office for National Statistics. Comparisons are made with the neighbouring local authority Shropshire County and national averages and trends over time are explored where data are available.

When any comparisons are made, between measures and estimates, over time or between areas, the term “significantly different” is only used within this report when statistical testing, using 95% confidence intervals, has been undertaken and the difference has been interpreted as statistically significantly different<sup>5</sup>. The red, amber green ratings are used to describe figures as “significantly worse”, not statistically different” and “significantly better” as the comparator.

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<sup>4</sup> Public Health England Infant and Perinatal Mortality in the West Midlands (2016)  
[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/515800/InfantMortalityInTheWestMidlandsFinal.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/515800/InfantMortalityInTheWestMidlandsFinal.pdf)

<sup>5</sup> See the PHE Technical Briefing 3: Commonly Used Public Health Statistics and their Confidence Intervals for further information <http://www.apho.org.uk/resource/item.aspx?RID=48457>

### **3. Demography**

#### **3.1. Overall population**

- The resident population for Telford and Wrekin was estimated to 171,200 people in 2015, the Shropshire population is estimated to be 311,400 people.
- The age profile of Telford and Wrekin is comparatively younger than the national picture, with larger proportions of people in the 0-19 years age groups and middle aged groups between 40 and 54 years and lower proportions in age groups above 75 years than across England as a whole (Figure 1).
- The age profile of Shropshire is comparatively older than the national picture, with larger proportions of people in all age groups over 45-49 years and lower proportions in all age groups under 45 years than across England as a whole (Figure 2).
- Telford and Wrekin has been one of the fastest growing local authorities in the country in the past decade. The population of Telford and Wrekin and Shropshire are both projected to increase by 4% overall by 2025. By 2035 it is expected that both local authority populations will grow by around 7% to 182,700 in Telford and Wrekin and to 335,700 in Shropshire.

#### **3.2. Maternal population**

- An estimated 31,300 women of childbearing age (16-44 years) live in Telford and Wrekin, this group accounts for 36% of the total female population which is similar to the national average (37%).
- In Shropshire there are an estimated 47,400 women aged 16-44 years, this represents 30% of the total female population, which is lower than the 37% national average.
- Projections indicate that the numbers of women of childbearing age will be relatively static, by 2035 in Telford and Wrekin there will be an estimated 31,400 women aged 15-44 years and in Shropshire an estimated 46,800.

#### **3.3. Infant and child populations**

- An estimated 11,300 infants (0-4 years) live in Telford and Wrekin, which accounts for 6.6% of the total population and is similar to the national average.
- In Shropshire there are an estimated 15,100 0-4 year olds, which represents 4.8% of the total population and is slightly below the national average (6.2%).

- Projections indicate that the proportions of the population which are aged 0-4 years old will remain broadly similar in Telford and Wrekin and Shropshire in 2025 and 2035, with numbers only fluctuating slightly.

### **3.4. Local population projections**

- Local population projections, estimated by the Council to inform the Telford and Wrekin local plan, show a marginally different profile in terms of population growth by 2025. (Table 2)
- Overall, these figures suggest the total population will be 10,000 people larger compared to the national estimates. The child population is expected to be 1,500 – 1,900 greater for 0-4 and 5-14 year old groups, indicating there is likely to be 12,300 and 24,300 children in these age groups. For the women of child bearing age cohort local figures suggest 2,900 further women, indicating there will be 34,600 women aged 15-44 years by 2025.

### **3.5. Population density**

- Telford and Wrekin is a geographically diverse area covering 112 square miles. 7% of the population live in areas classified as rural, with the remaining 93% living in urban areas. Population density varies greatly from 0.2 to 130.9 persons per hectare with areas in the north and west of the Borough more sparsely populated than the urban south.
- Shropshire is a rural county which covers a large area of 1, 235 square miles. Around 66% of the population living what is classified as a rural area and 34% of the population reside in areas classed as being urban. Much of the south west of Shropshire is classified as being sparsely populated. Travel times and distances are long in Shropshire compared to urban areas, which has an impact on the cost of delivering services and many rural areas in the county do not have access to public transport.
- Although compared to the national average Shropshire has lower levels of deprivation, significant pockets of deprivation exist. Measuring deprivation by national indices is difficult in rural areas due to less concentrated populations compared to urban areas which can mean that pockets of deprivation can be missed. Rural deprivation can impact on people in a number of ways, for example the affordability of accessing transport to health services or difficulty in buying fuel as many rural properties are not on the mains, which can increase the likelihood of living in a cold home and suffering related ill health as a consequence.
- Public Health England acknowledge the fact that current models of deprivation do not adequately recognise deprivation in rural areas. There is an ongoing programme of work to develop of indicators which better highlight deprivation in rural areas.

**Table 1 Population Estimates and Projections**

	Telford and Wrekin		Shropshire		England
	Number	% of total	Number	% of total	% of total
<b>Population: Total (2015)</b>	<b>171,200</b>		<b>311,400</b>		
Population: 0-4 years (2015)	11,300	6.6%	15,100	4.8%	6.2%
Population: 5-14 years (2015)	21,500	12.5%	33,100	10.6%	11.5%
Population: 15-19 years (2015)	10,900	6.4%	18,000	5.8%	5.9%
Population: 16-44 females (2015)	31,300	36.3%	47,400	30.2%	37.1%
<b>Projected Population: Total (2025)</b>	<b>177,500</b>		<b>324,900</b>		
Projected population: 0-4 years (2025)	10,800	6.1%	15,000	4.6%	5.9%
Projected population: 5-14 years (2025)	22,400	12.6%	33,600	10.3%	12.0%
Projected population: 15-19 years (2025)	11,400	6.4%	17,400	5.4%	5.9%
Projected population: 15-44 females (2025)	31,700	35.5%	47,500	29.1%	36.5%
<b>Projected Population: Total (2035)</b>	<b>182,700</b>		<b>335,700</b>		
Projected population: 0-4 years (2035)	10,700	5.9%	14,400	4.3%	5.9%
Projected population: 5-14 years (2035)	21,800	11.9%	33,300	9.9%	11.9%
Projected population: 15-19 years (2035)	11,200	6.1%	17,000	5.1%	6.0%
Projected population: 15-44 females (2035)	31,400	34.3%	46,800	27.8%	36.4%

Source: Office for National Statistics 2015 base subnational population estimates, Office for National Statistics 2014 based subnational population projections © Crown Copyright.

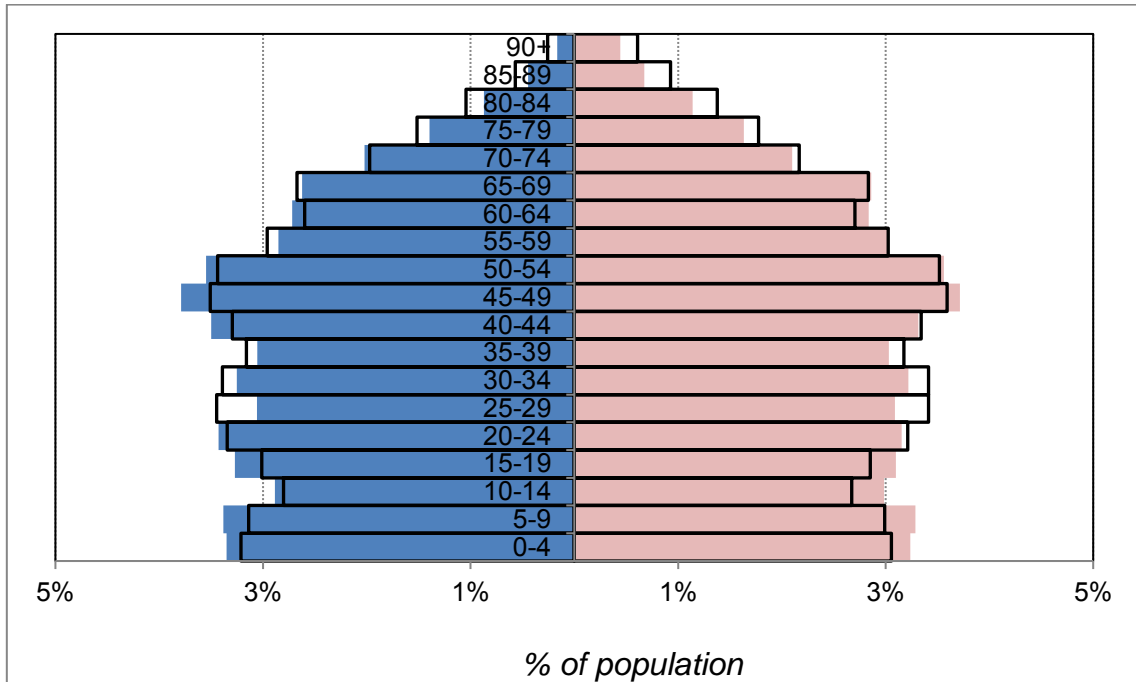
**Table 2 Telford & Wrekin 2025 Population Projections  
(local v national estimates)**

	Population (local plan estimate)	Difference in estimates (local v national)
Projected Population: Total (2025)	188,100	+10,600
Projected population: 0-4 years (2025)	12,300	+1,500
Projected population: 5-14 years (2025)	24,300	+1,900
Projected population: 15-19 years (2025)	11,900	+500
Projected population: 15-44 females (2025)	34,600	+2,900

Source: Telford & Wrekin Council, Organisational Delivery and Planning Team

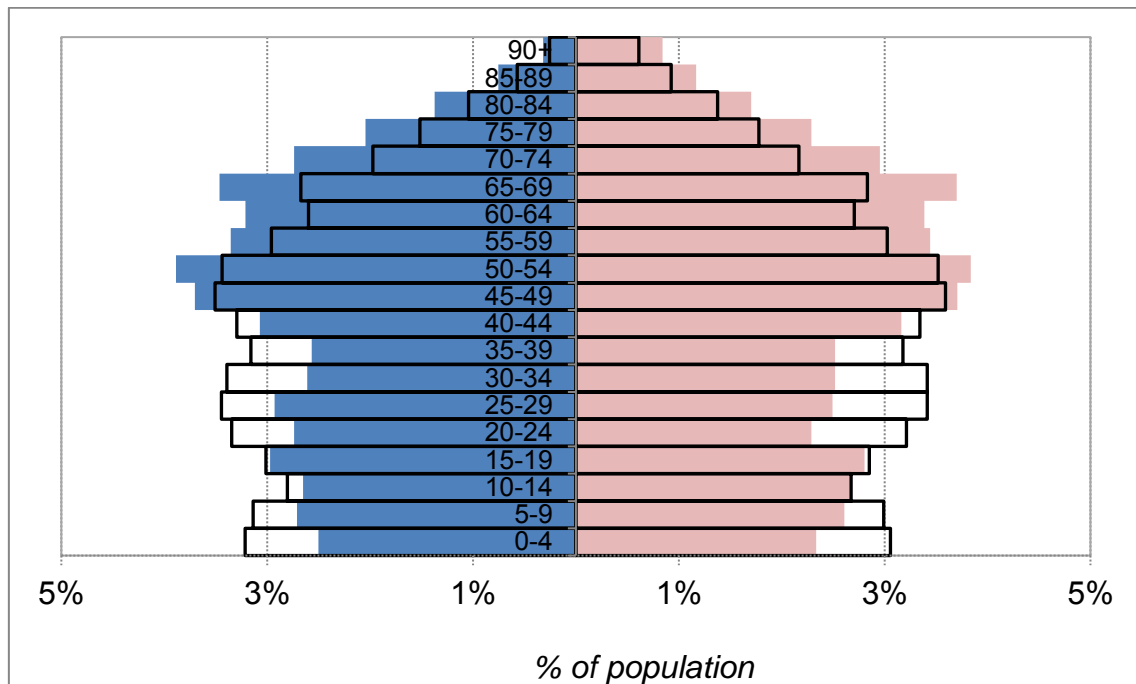
**Figure 1 Telford and Wrekin Population Structure (2015)**

The age profile of Telford and Wrekin is comparatively younger than the national picture, with larger proportions of people in the 0-19 years age groups and middle aged groups between 40 and 54 years and lower proportions in age groups above 75 years than across England as a whole



**Figure 2 Shropshire Population Structure (2015)**

The age profile of Shropshire is comparatively older than the national picture, with larger proportions of people in all age groups over 45-49 years and lower proportions in all age groups under 45 years than across England as a whole



Black outline bars represent the comparative England average proportions

Source: Office for National Statistics 2015 base subnational population estimates © Crown Copyright.

## 4. Deprivation

### 4.1. Overall deprivation


- The overall multiple deprivation score in Telford and Wrekin is 24.9, compared to 16.7 in Shropshire and 21.8 in England as a whole.
- In Telford and Wrekin 27% of the total population (46,300 people) live in communities classified within the fifth most deprived in England. This compares to 5% in Shropshire (7,100 people).


### 4.2. Children living in poverty and low income households

- Just over a fifth (22%) of children and young people (aged under 20 years) live in poverty<sup>6</sup> in Telford and Wrekin, which equates to 8,700 children. This is significantly worse than the average for England (18%).
- In Shropshire, 6,970 of children and young people under 20 years live in poverty, this equates to 12% of all children and young people which is significantly better than the England average.
- Trends in child poverty over the past decade indicate slow improvement between 2006 and 2013, decreasing from 22.3% to 22.0% in Telford & Wrekin and from 12.7% to 12.0% in Shropshire.
- The picture for children living in low income households<sup>7</sup> is a similar one. Almost a quarter (23%) of children aged under 16 live in low income households in Telford and Wrekin, which equates to 7,760 children. This is significantly worse than the average for England (18.6%).
- In Shropshire, 6,180 children under 16 live in low income households, this equates to 12.7% of under 16 year olds which is significantly better than the national average.
- Trends in children (under 16) living in low income households over the past decade indicate slow improvement in both Shropshire and Telford and Wrekin from 2006 to 2013, decreasing from 24.6% to 23.0% in Telford & Wrekin and from 13.5% to 12.7% in Shropshire.

**Table 2 Child Poverty Indicators**

	Telford and Wrekin		Shropshire		England
	No.	% of total	No.	% of total	% of total
Children and young people living in poverty <sup>6</sup> (under 20s)	8,690	22.0%	6,970	12.0%	18.0%
Children in low income families <sup>7</sup> (under 16)	7,760	23.0%	6,180	12.7%	18.6%

 Significantly<sup>8</sup> worse than the England average

 Significantly<sup>8</sup> better than the England average

<sup>6</sup> Children and young people living in relative poverty - % of all dependent children under 20 living in households where income is less than 60 per cent of median household income before housing costs

<sup>7</sup> Children living in low income families - % of all children under 16 living in families in receipt of out of work benefits or tax credits where their reported income is < 60% median income

<sup>8</sup> Statistical testing, using 95% confidence intervals, has been undertaken and the difference has been interpreted as statistically significantly different, see page 1 for further details

**Table 3 Trends in Child Poverty (under 20s)**

% of all dependent children under 20 in relative poverty (living in households where income is less than 60 per cent of median household income before housing costs)

	Telford and Wrekin			Shropshire			England
	No.	% of total	RAG rating	No.	% of total	RAG rating	% of total
2006	8,950	23.3%	●	7,455	12.7%	●	20.8%
2007	9,375	24.4%	●	7,585	12.8%	●	21.6%
2008	9,305	24.1%	●	7,545	12.8%	●	20.9%
2009	9,895	25.2%	●	7,895	13.3%	●	21.3%
2010	9,750	24.8%	●	7,675	13.0%	●	20.6%
2011	9,470	24.2%	●	7,680	13.0%	●	20.1%
2012	8,960	22.8%	●	7,075	12.1%	●	18.6%
2013	8,690	22.0%	●	6,970	12.0%	●	18.0%

● Significantly<sup>9</sup> worse than the England average

● Significantly<sup>9</sup> better than the England average

Source: HM Revenue and Customs (Personal Tax Credits: Related Statistics - Child Poverty Statistics) © Crown Copyright.  
<http://www.phoutcomes.info/public-health-outcomes-framework#page/4/gid/1000041/pat/6/par/E12000005/ati/102/are/E06000051/iid/90630/age/199/sex/4>

**Table 4 Trends in children in low income families (under 16s)**

% of children under in low income families (children living in families in receipt of out of work benefits or tax credits where their reported income is < 60% median income)

	Telford and Wrekin			Shropshire			England
	No.	% of total	RAG rating	No.	% of total	RAG rating	% of total
2006	8,255	24.6%	●	6,760	13.5%	●	21.8%
2007	8,490	25.6%	●	6,750	13.4%	●	22.4%
2008	8,330	25.2%	●	6,655	13.3%	●	21.6%
2009	8,820	26.4%	●	6,955	13.9%	●	21.9%
2010	8,615	25.9%	●	6,755	13.6%	●	21.1%
2011	8,390	25.1%	●	6,745	13.6%	●	20.6%
2012	8,020	23.9%	●	6,295	12.8%	●	19.2%
2013	7,760	23.0%	●	6,180	12.7%	●	18.6%

● Significantly<sup>9</sup> worse than the England average

● Significantly<sup>9</sup> better than the England average

Source: HM Revenue and Customs (Personal Tax Credits: Related Statistics - Child Poverty Statistics) © Crown Copyright.  
<http://www.phoutcomes.info/public-health-outcomes-framework#page/6/gid/1000041/pat/6/par/E12000005/ati/102/are/E06000020/iid/10101/age/169/sex/4>

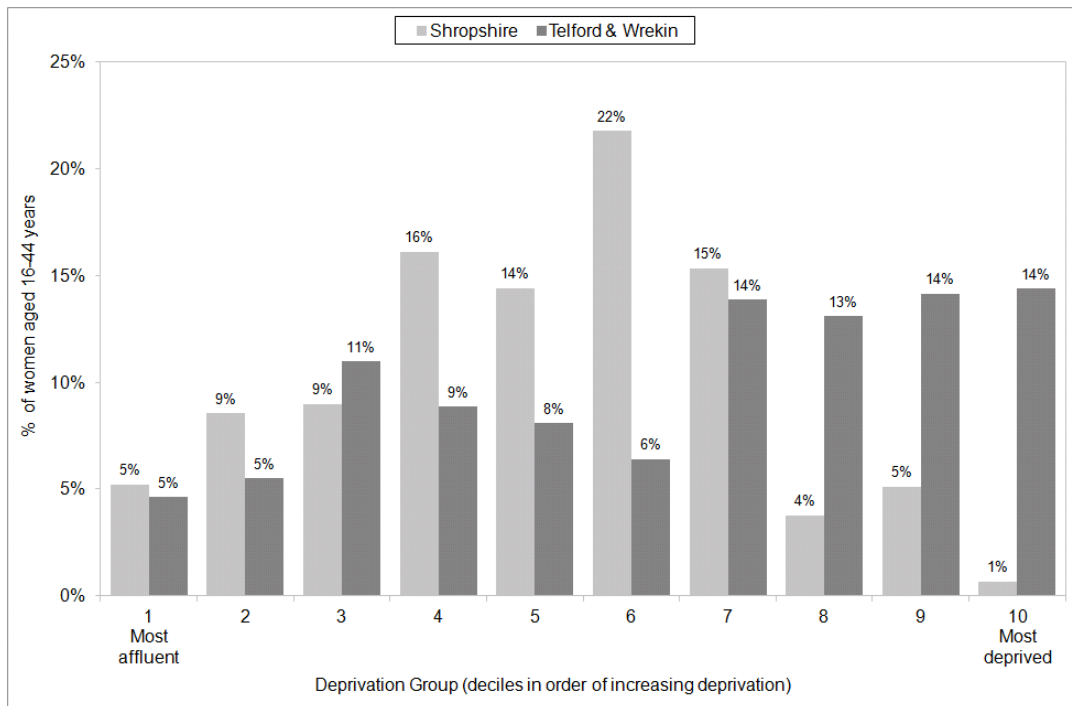
<sup>9</sup> Statistical testing, using 95% confidence intervals, has been undertaken and the difference has been interpreted as statistically significantly different, see page 1 for further details



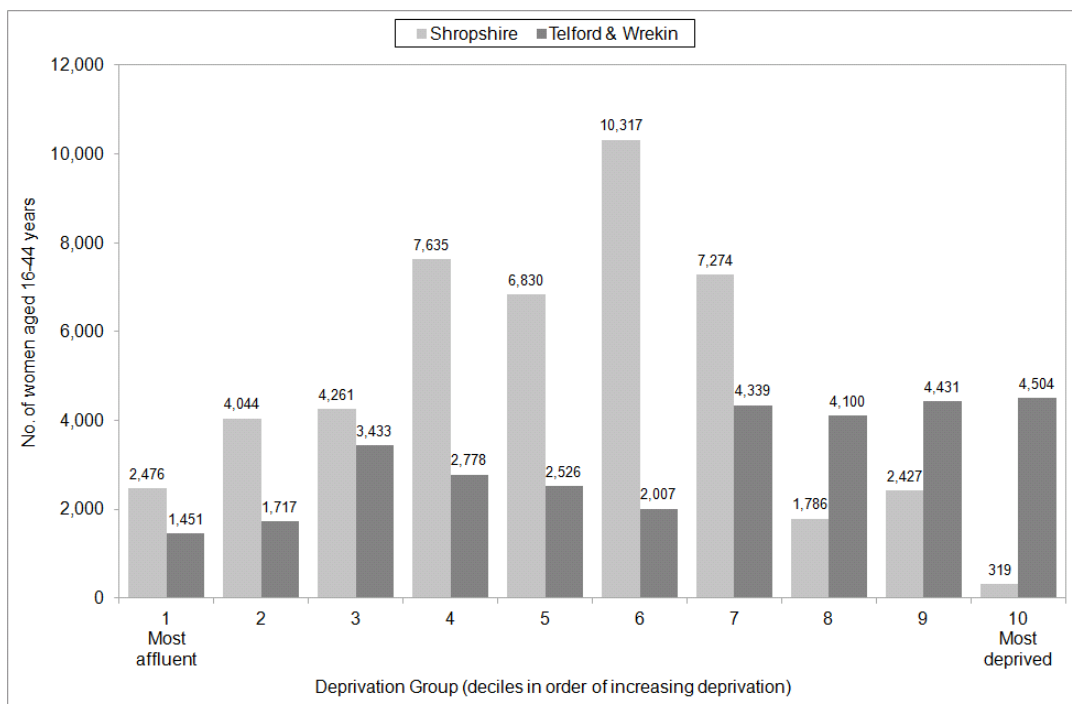
### 4.3. Women of child bearing age living in deprived areas

The patterns of women of child bearing age living in deprived areas are distinctly different across Telford and Wrekin and Shropshire. In Telford and Wrekin, over a quarter (28.6%) of women (8,900 females) aged 16-44 years live in communities classified within the most deprived fifth of areas in England. This compares to 5.8% in Shropshire, equating to 2,700 women aged 16-44 years. (Figure 3 and Figure 4)

**Figure 3 Women of child bearing age deprivation pattern: % of women**



**Figure 4 Women of child bearing age deprivation pattern: number of women**



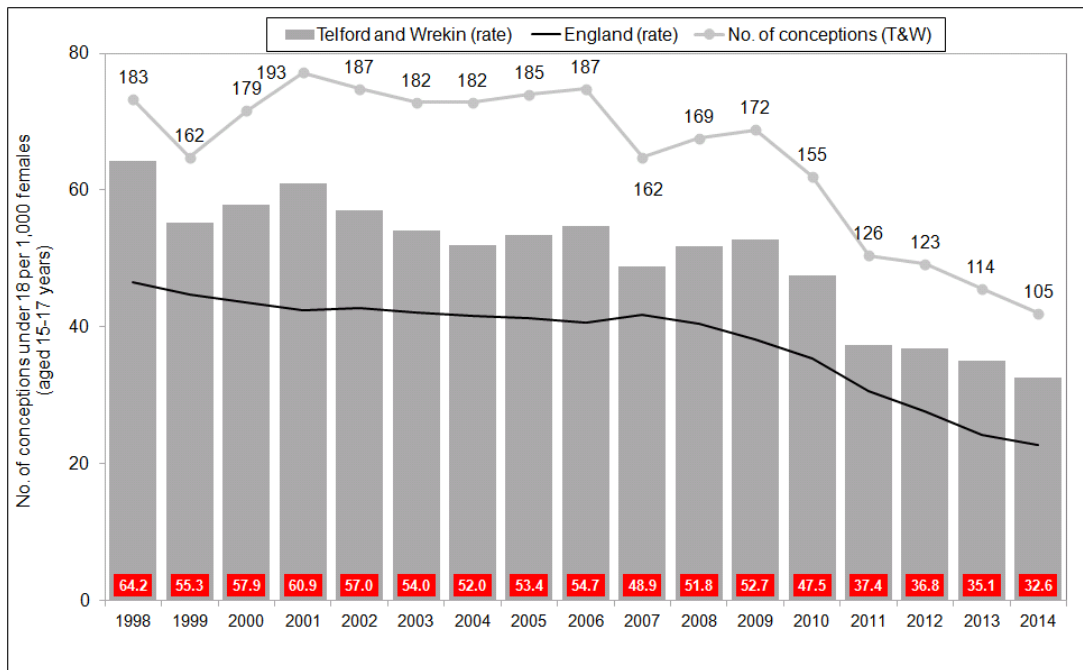
Source: DCLG Indices of Deprivation 2015 © Crown Copyright.

## 5. Fertility and conceptions

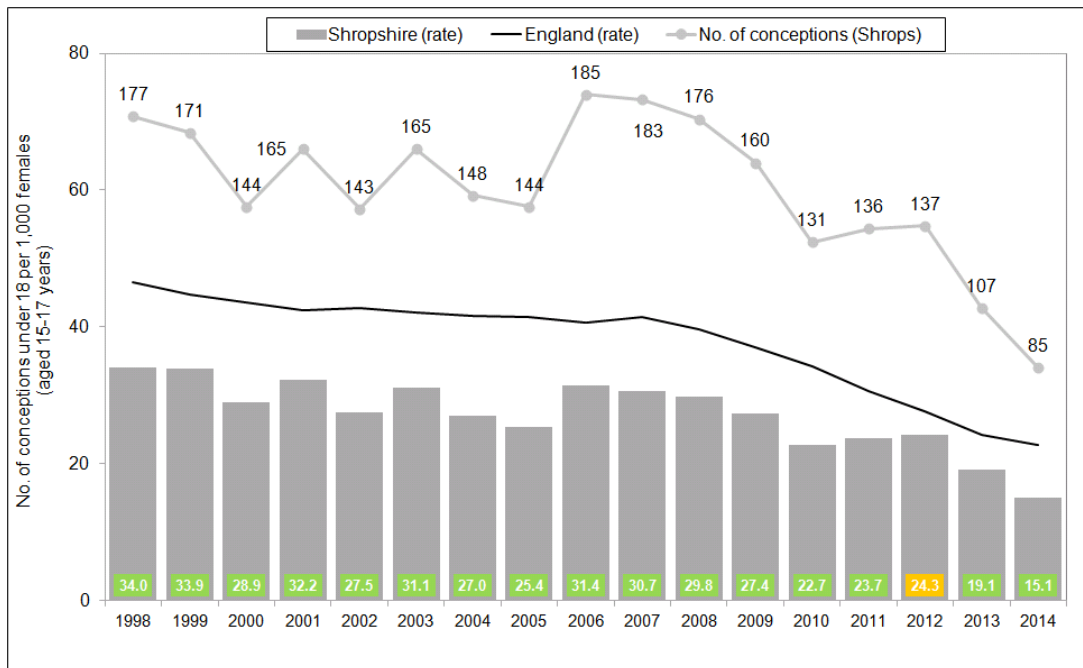
### 5.1. Conceptions

- In Telford and Wrekin there are on average 2,615 conceptions in women of all ages every year. Just over a fifth, 21% (550 conceptions) end in termination, which is similar to the England average (21%).
- In Shropshire there are on average 3,400 conceptions in women of all ages each year, 18% (615 conceptions) end in termination, which is lower than the national average.
- In 2014 in Telford and Wrekin there were 105 conceptions amongst females under 18 years, the rate of under 18 conceptions (32.6 per 1,000) was significantly higher than the England average (22.8 per 1,000) and double the rate in Shropshire (15.1 per 1,000 – 85 conceptions).
- Teenage conception rates in Telford and Wrekin have historically been significantly higher than the England average, whereas in Shropshire rates have been significantly lower.
- Trends indicate that under 18 conception rates halved in Telford and Wrekin between 1998 and 2014, falling from 64.2 per 1,000 females aged 15-17 years to 32.6 per 1,000. This equates to 78 fewer under 18 conceptions each year (105 compared to 183 conceptions).
- Amongst teenagers under 16 years there were 18 conceptions in 2014, in each Telford and Wrekin and Shropshire. In 2014 the under 16 conception rates per 1,000 females aged 13-15 years (5.9 per 1,000 for Telford and Wrekin and 3.5 per 1,000 for Shropshire) were not significantly different to the England average of 4.4 per 1,000).

**Figure 5 Trends in Teenage Pregnancy: Telford and Wrekin**



**Figure 6 Trends in Teenage Pregnancy: Shropshire**



Source: Office for National Statistics (ONS), Conception Statistics © Crown Copyright.

<http://fingertips.phe.org.uk/profile/health-profiles/data#page/4/qid/8000073/pat/6/par/E12000005/ati/101/are/E06000020/iid/20401/age/173/sex/2>

Key to RAG rating for under 18 conception rates:

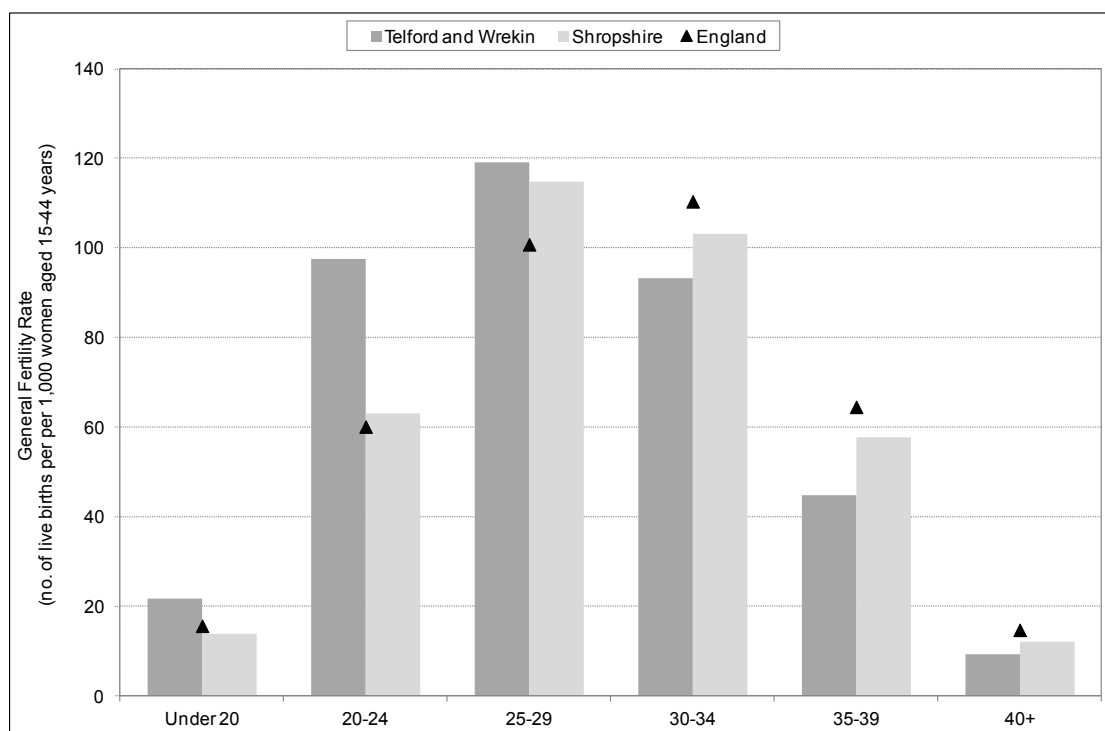
- Significantly<sup>10</sup> worse than the England average
- Significantly<sup>10</sup> better than the England average
- Not significantly<sup>10</sup> different to the England average

<sup>10</sup> Statistical testing, using 95% confidence intervals, has been undertaken and the difference has been interpreted as statistically significantly different, see page 1 for further details

## 5.2. Fertility

- There are on average 2,100 live births in Telford and Wrekin each year, compared to on average 2,820 in Shropshire.
- The general fertility rate in 2015 in Telford and Wrekin was 61.4 live births per 1,000 women aged 15-44 years. This compared 56.9 per 1,000 in Shropshire and 62.5 per 1,000 in England as a whole.
- Key features of the local patterns of fertility (Figure 7) are as follows:
  - The highest fertility rates in both Telford and Wrekin and Shropshire are seen in women aged 25-29 years, whereas in England as a whole the highest fertility rates are in women aged 30-34 years
  - Fertility rates in women aged under 25 are higher in Telford and Wrekin compared to Shropshire, whereas rate in Shropshire in women aged between 30-39 years are slightly higher than those in Telford and Wrekin
- Historic trends in fertility rates (Figure 8 and Figure 9) indicate the following:
  - fertility rates declined in both Telford and Wrekin and Shropshire in the decade between 1992 and 2002
  - from the early 2000s fertility rates rose steadily in Telford and Wrekin, peaking in 2011 at 70.0 per 1,000 (2,316 live births), but in the past three years fertility rates have fallen slightly
  - in Shropshire fertility rates have been relatively static since 2009.

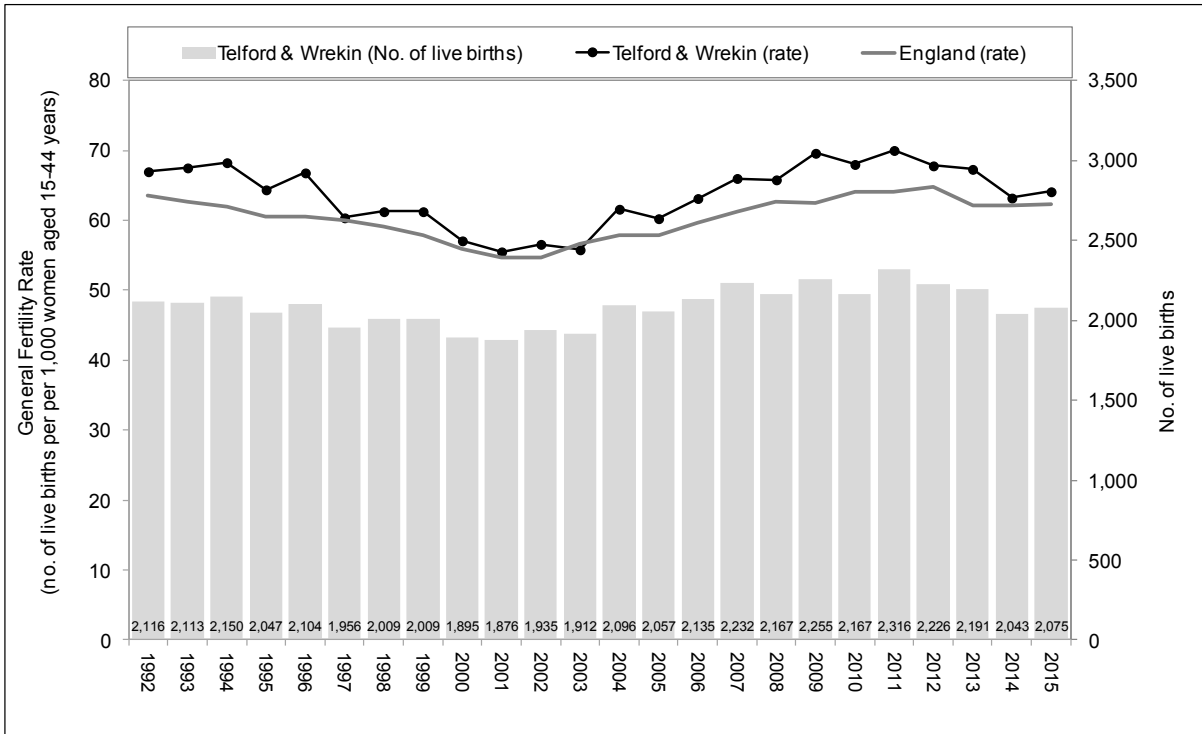
**Figure 7 Age Specific Fertility Rates (2013)**



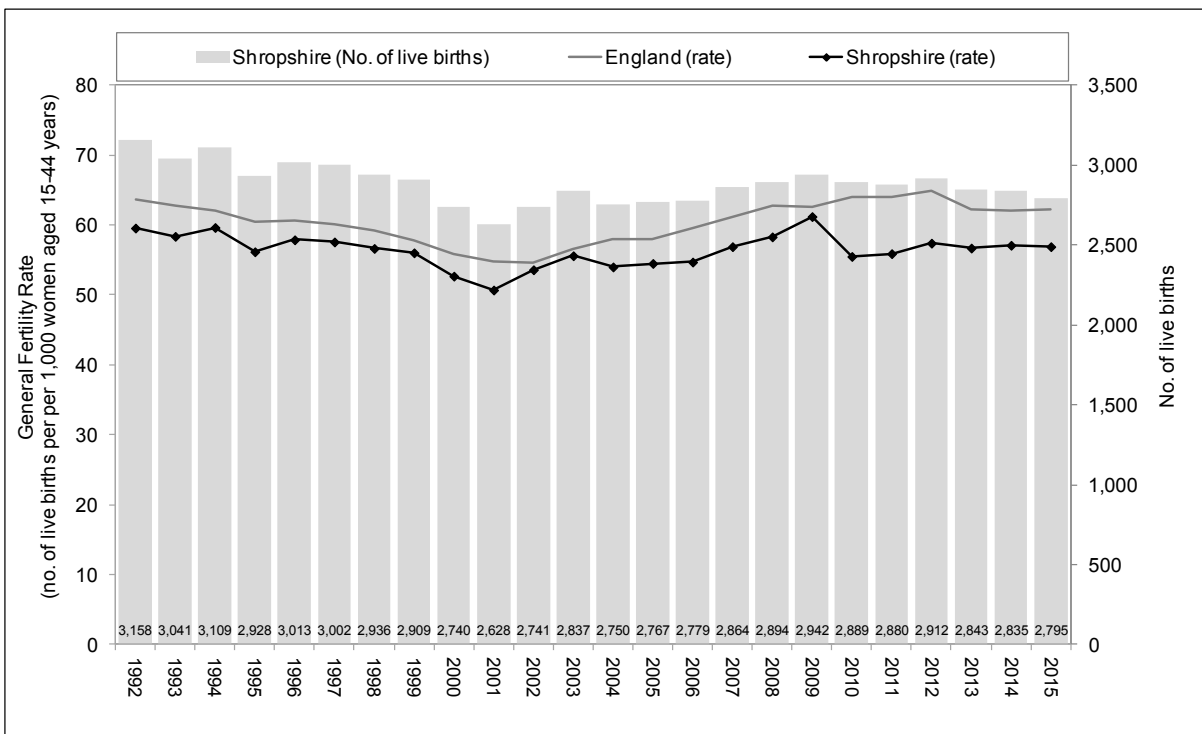
Source: Office for National Statistics 2014 Local Authority ASFRs, England and Wales, © Crown Copyright.

<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/conceptionandfertilityrates/adhocs/0054942010to2013localauthorityagespecificfertilityratesasfrsenglandandwales>

**Figure 8 General Fertility Rate Trends: Telford and Wrekin**



**Figure 9 General Fertility Rate Trends: Shropshire**



Source: Office for National Statistics - Birth Statistics © Crown Copyright.

## 6. Maternal Health and Lifestyle

### 6.1. Excess weight

- It is estimated that 71% of all adults in Telford and Wrekin carry excess weight (i.e. overweight or obese). This is significantly<sup>11</sup> worse than the national average of 64.8%. It is estimated, that circa 22,250 women of child bearing age (15-44 years) carry excess weight in Telford and Wrekin.
- In Shropshire 65.2% of all adults are estimated to be overweight or obese, which is not significantly<sup>11</sup> different to the England average. It is estimated that 30,900 women of child bearing age are overweight or obese in Shropshire.









### 6.2. Smoking in Pregnancy


- A total of 367 women smoked at delivery in 2015/16, compared to 295 women in Shropshire. Maternal smoking is significantly<sup>11</sup> high in Telford and Wrekin. However rates have started to decline in the past two years, falling below 20%. The rate of smoking in pregnancy in Telford and Wrekin was 18.1% in 2015/16, compared to 12.3% in Shropshire and 10.1% in England as a whole. (Figure 10 and Figure 11)


### 6.3. Breastfeeding

- Levels of breastfeeding (both initiation at birth and duration at 6-8 weeks) have been historically low in Telford and Wrekin, but rates have improved slowly.
- In 2015/16 almost a third, 33.5% of infants (655 babies) were not breastfed at birth, which is significantly<sup>11</sup> worse than the average for England 25.7%. In Shropshire just under a quarter, 24.7% of infants (605 babies) were not breastfed at birth in 2015/16, which is similar to the national average.
- By 6-8 weeks of age breastfeeding has dropped further. In 2015/16 63.7% of infants were not receiving any breast milk in Telford and Wrekin (2,044 babies), which is significantly<sup>11</sup> worse than the England average of 56.8%. In Shropshire 54.1% of infants (2,771 babies) were not breastfed at 6-8 weeks.

**Table 5 Maternal Health and Lifestyle Overview**

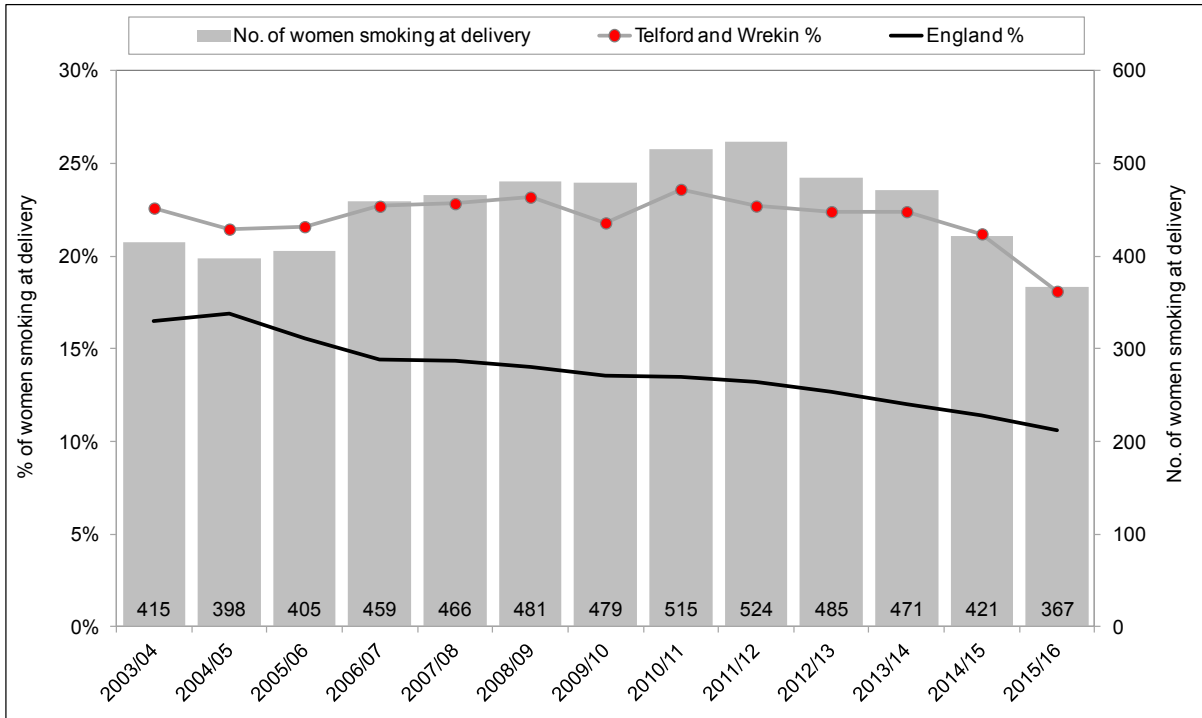
	Telford and Wrekin		Shropshire		England
	Number	%	Number	%	%
Excess weight in adults (2013-15)	22,250 	71.1%	30,900 	65.2%	64.8%
Smoking at time of delivery (2015/16)	367 	18.1%	297 	12.3%	10.6%
Breastfeeding initiation (2014/15)	1,361 	67.5%	1,844 	75.3%	74.3%
Breastfeeding at 6-8 weeks (2014/15)	742 	36.3%	1272 	45.9%	43.2%

 Significantly worse than the England average

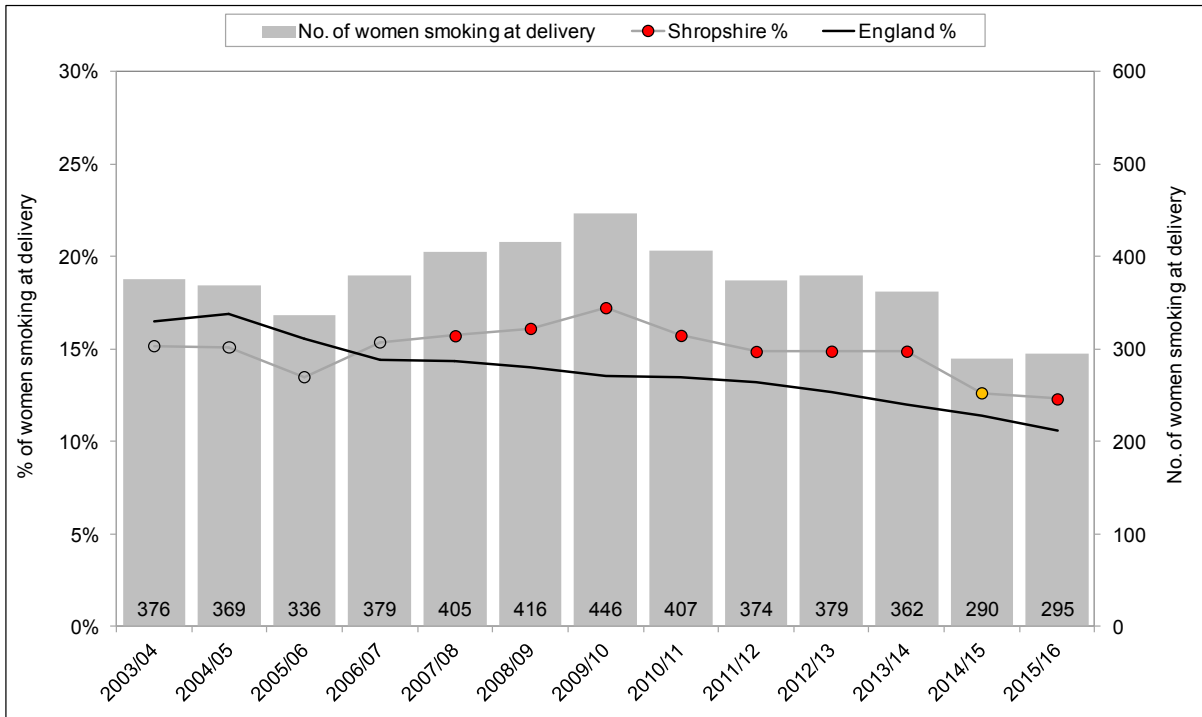
 Not significantly different to the England average

<sup>11</sup> Statistical testing, using 95% confidence intervals, has been undertaken and the difference has been interpreted as statistically significantly different, see page 1 for further details

**Figure 10 Trends in Smoking in Pregnancy: Telford and Wrekin**



**Figure 11 Trends in Smoking in Pregnancy: Shropshire**



Source: Department of Health, NHS IC Omnibus, Health and Social Care Information Centre Smoking Status at Time of Delivery © Crown Copyright. <http://www.phoutcomes.info/public-health-outcomes-framework#page/4/gid/1000042/pat/6/par/E12000005/ati/102/are/E06000020/iid/20301/age/1/sex/2>

● Significantly<sup>12</sup> worse than the England average    ● Not significantly<sup>12</sup> different to the England average

<sup>12</sup> Statistical testing, using 95% confidence intervals, has been undertaken and the difference has been interpreted as statistically significantly different, see page 1 for further details

## 7. Low birth weight babies

- The low birth weight rates for term babies ( $\geq 37$  weeks gestation) in Shropshire and Telford and Wrekin (2.6 per 1,000 and 2.5 per 1,000 respectively) are similar to the England average (Table 6).
- Low birth weight rates in all births (of any gestational age), both under 2500g and very low (under 1500g) are not significantly<sup>13</sup> different to the England average in either Telford and Wrekin or Shropshire. (Table 6)

**Table 6 Low Birth Weight Summary (2014)**

	Telford and Wrekin		Shropshire		England
	No. per year	Rate	No. per year	Rate	Rate
Low birth weight all babies (% of live births with low birth weight (<2500g) of all live births with a birth weight record) (2014)	147	7.2	190	6.7	7.4
Low birth weight all babies (% of live births with very low birth weight (<1500g) of all live births with a birth weight record) (2014)	25	1.2	29	1.0	1.3
Low birth weight of term babies (% of live births at $\geq 37$ gestation weeks, with low birth weight (<2500g) of all live births with a birth weight record) (2014)	46	2.5	69	2.6	2.9

Source: Office for National Statistics Birth Statistics © Crown Copyright. <http://www.phoutcomes.info/public-health-outcomes-framework#page/4/gid/1000042/pat/6/par/E12000005/ati/102/are/E06000051/iid/20101/age/235/sex/4>

- Significantly<sup>13</sup> worse than the England average
- Significantly<sup>13</sup> better than the England average
- Not significantly<sup>13</sup> different to the England average

**Table 7 Trends in Low Birth Weight – Term Babies**

% of live births at  $\geq 37$  gestation weeks, with low birth weight (<2500g) of all live births with a birth weight record

	Telford and Wrekin			Shropshire			England
	No.	%	RAG rating	No.	%	RAG rating	%
2005	47	2.5%		54	2.1%		3.1%
2006	66	3.3%		52	2.0%		3.0%
2007	50	2.4%		54	2.0%		2.9%
2008	62	3.1%		62	2.3%		2.9%
2009	56	2.7%		55	2.0%		2.9%
2010	92	4.6%		103	3.8%		2.9%
2011	70	3.3%		71	2.6%		2.8%
2012	57	2.8%		45	1.7%		2.8%
2013	61	3.1%		69	2.6%		2.8%
2014	46	2.5%		69	2.6%		2.9%

<sup>13</sup> Statistical testing, using 95% confidence intervals, has been undertaken and the difference has been interpreted as statistically significantly different, see page 1 for further details



## 8. Infant Mortality

- There are on average 14 deaths of infants under 12 months in Telford and Wrekin (2013-15). The infant mortality rate (6.5 per 1,000 live births) was significantly<sup>14</sup> worse than the England average between 2011 and 2015. In Shropshire there are on average nine deaths under one year annually, the infant mortality rate (3.1 per 1,000 live births) is not significantly<sup>14</sup> different to the England average (Table 8 and Table 9).
- During 2013-2015 the number of deaths of infant under 4 weeks (neonatal deaths) was on average 10 per year. The neonatal death rate in Telford and Wrekin for this period was 4.6 per 1,000 live births, this was significantly<sup>14</sup> higher than the England average (2.7 per 1,000 live births). (Table 8)
- Trends in infant mortality rates fluctuate due to the small number involved, but since the mid 1980s in Telford and Wrekin and Shropshire rates have been declining overall across the decades (Table 9 and Table 9, and Figure 13, Figure 12). The three year rolling average rates have been significantly<sup>14</sup> higher than the England average for the past five years. (Table 9)
- There are a similar number of perinatal deaths (stillbirths and deaths before 1 week) in Telford & Wrekin and Shropshire – on average 17 per year and rates are similar to the England average (Table 8, Figure 14 and Figure 15)
- There are on average 10 neonatal deaths within the first 4 weeks of life in Telford & Wrekin. The neonatal mortality rates in Telford & Wrekin from the period 2012-14 and 2013-15 were significantly<sup>14</sup> worse than the England average. In Shropshire there are there are on average 6 neonatal deaths per year and rates are similar to the England average. (Table 8, Figure 16 and Figure 17)

**Table 8 Infant Mortality Indicator Summary**

	Telford and Wrekin		Shropshire		England
	No. per year	Rate	No. per year	Rate	Rate
Infant mortality rate (No. of deaths under one year per 1,000 births) (2013-15)	14	6.5	9	3.1	3.9
Stillbirth rate (No. of stillbirths per 1,000 total births) (2013-15)	12	4.3	9	4.2	4.6
Perinatal mortality rate No. of stillbirths and deaths under one week per 1,000 total births (2013-2015)	17	8.1	17	6.0	6.7
Neonatal mortality rate No. deaths of under 4 weeks per 1,000 live births (2013-2015)	10	4.8	6	2.2	2.7

Sources: Public Health England Knowledge and Intelligence Service

- Significantly<sup>14</sup> worse than the England average
- Significantly<sup>14</sup> better than the England average
- Not significantly<sup>14</sup> different to the England average

<http://www.phoutcomes.info/public-health-outcomes-framework#page/0/qid/1000042/pat/6/par/E12000005/ati/102/are/E08000025/iid/20101/age/235/sex/4>

<sup>14</sup> Statistical testing, using 95% confidence intervals, has been undertaken and the difference has been interpreted as statistically significantly different, see page 1 for further details

**Table 9 Trends in Infant Mortality Rates**

Number of infant deaths (under 1 year of age) per 1,000 live births

	Telford and Wrekin			Shropshire			England
	No. per year	Rate per 1,000	RAG rating	No. per year	Rate per 1,000	RAG rating	Rate per 1,000
2001 - 03	11	5.6	●	16	5.7	●	5.4
2002 - 04	9	4.6	●	15	5.4	●	5.2
2003 - 05	10	4.9	●	13	4.7	●	5.1
2004 - 06	11	5.2	●	11	4.1	●	5
2005 - 07	9	4.2	●	12	4.3	●	4.9
2006 - 08	12	5.5	●	13	4.7	●	4.8
2007 - 09	11	5.1	●	14	4.9	●	4.7
2008 - 10	13	5.8	●	13	4.4	●	4.6
2009 - 11	11	4.7	●	11	3.8	●	4.4
2010 - 12	12	5.4	●	9	3.1	●	4.3
2011 - 13	13	5.9	●	9	3.2	●	4.1
2012 - 14	13	6	●	9	3.3	●	4
2013 - 15	14	6.5	●	9	3.1	●	3.9

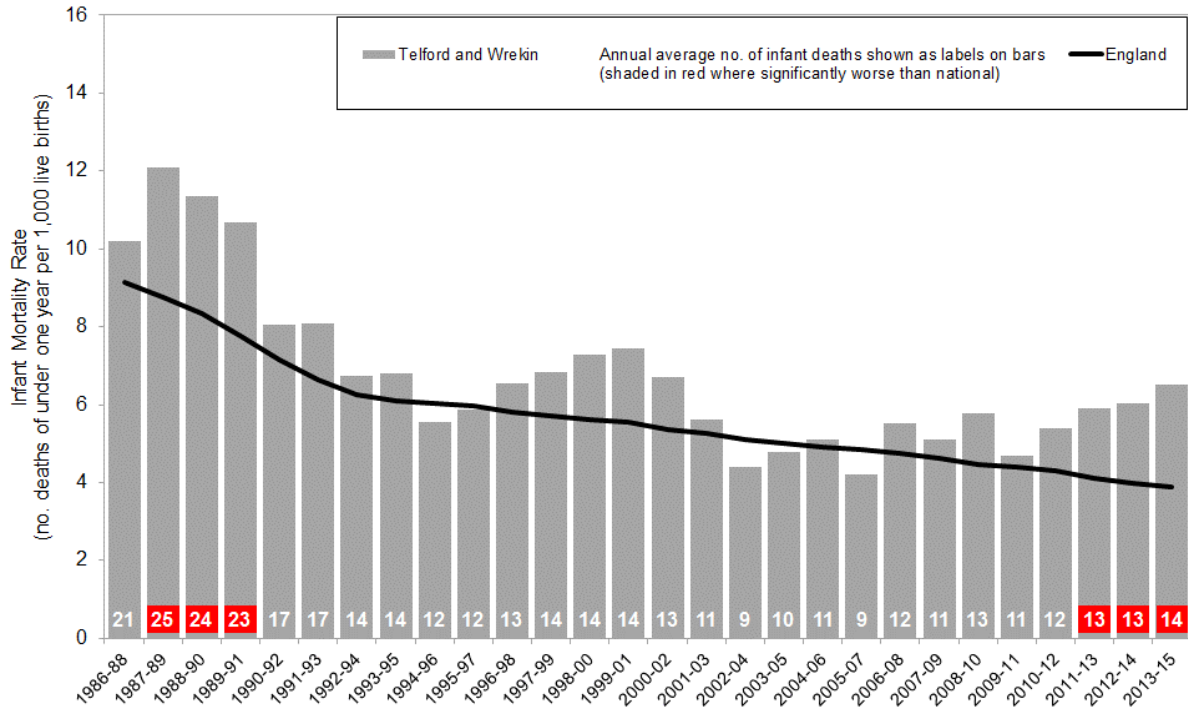
Source: Office for National Statistics (ONS) births and deaths statistics © Crown Copyright.

<http://www.phoutcomes.info/public-health-outcomes-framework#page/4/gid/1000044/pat/6/par/E12000005/ati/102/are/E06000020/iid/92196/age/2/sex/4>

- Significantly<sup>15</sup> worse than the England average
- Significantly<sup>15</sup> better than the England average
- Not significantly<sup>15</sup> different to the England average

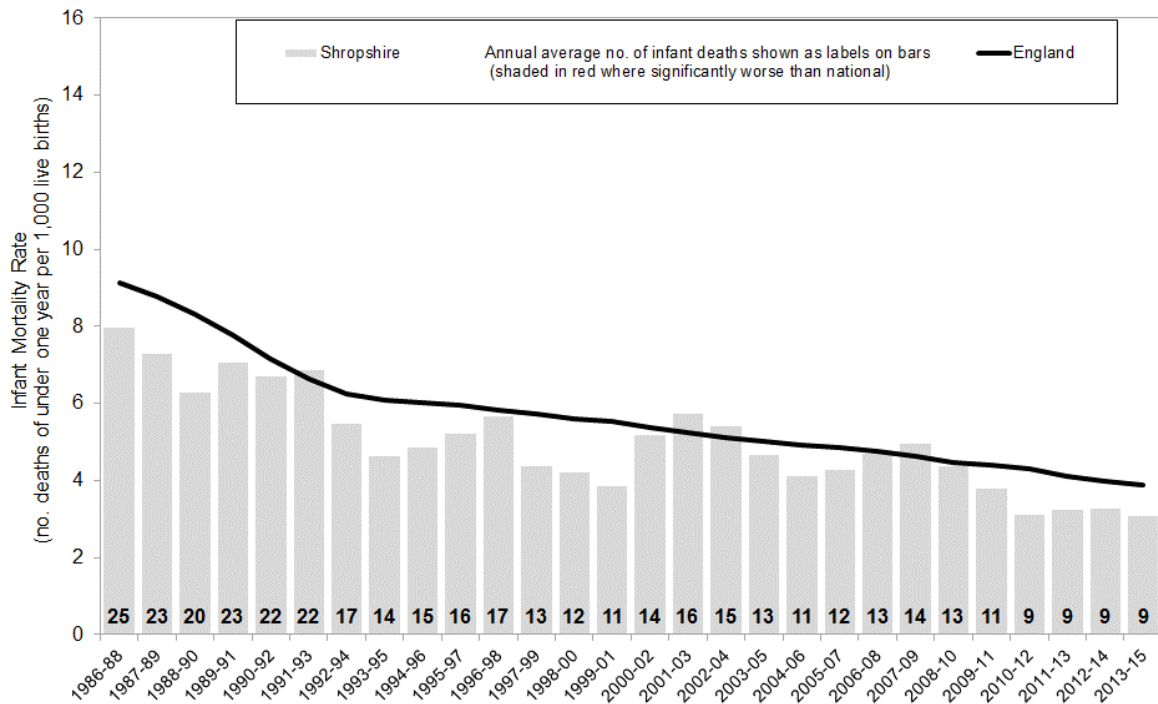
<sup>15</sup> Statistical testing, using 95% confidence intervals, has been undertaken and the difference has been interpreted as statistically significantly different, see page 1 for further details

**Figure 12 Trends in Infant Mortality Rates: Telford and Wrekin**



● Significantly<sup>16</sup> worse than the England average

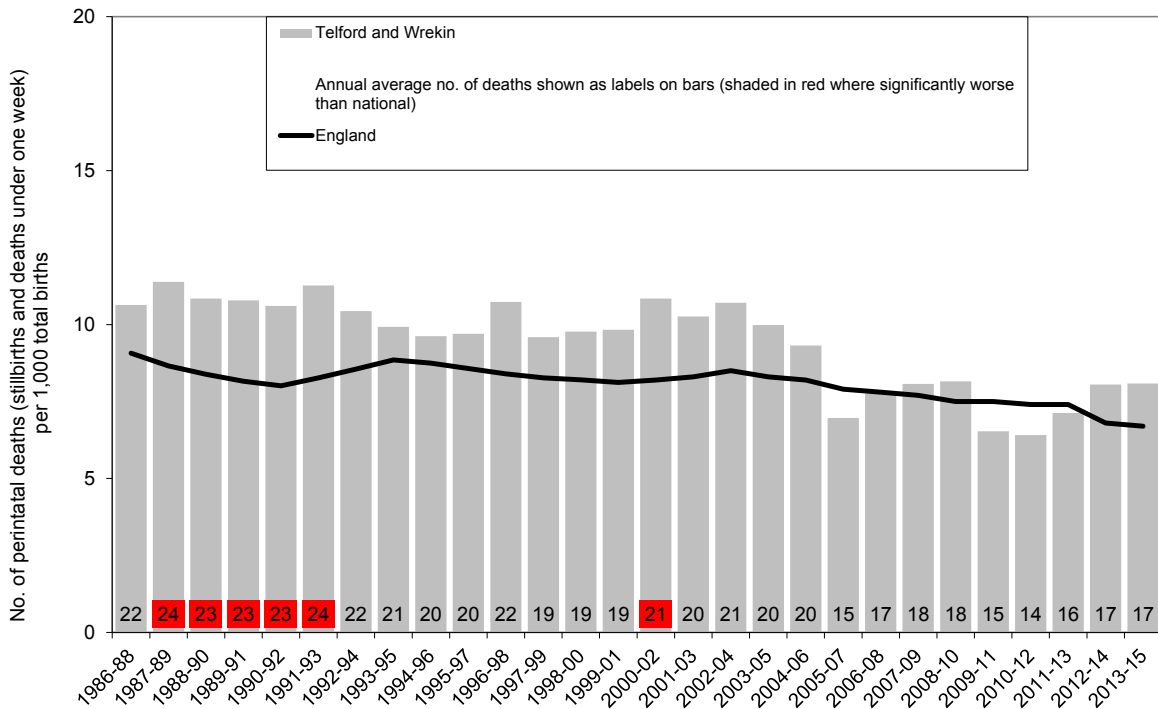
**Figure 13 Trends in Infant Mortality Rates: Shropshire**



Sources: Office for National Statistics (ONS) births and deaths statistics and Public Health England Knowledge and Intelligence Service © Crown Copyright.

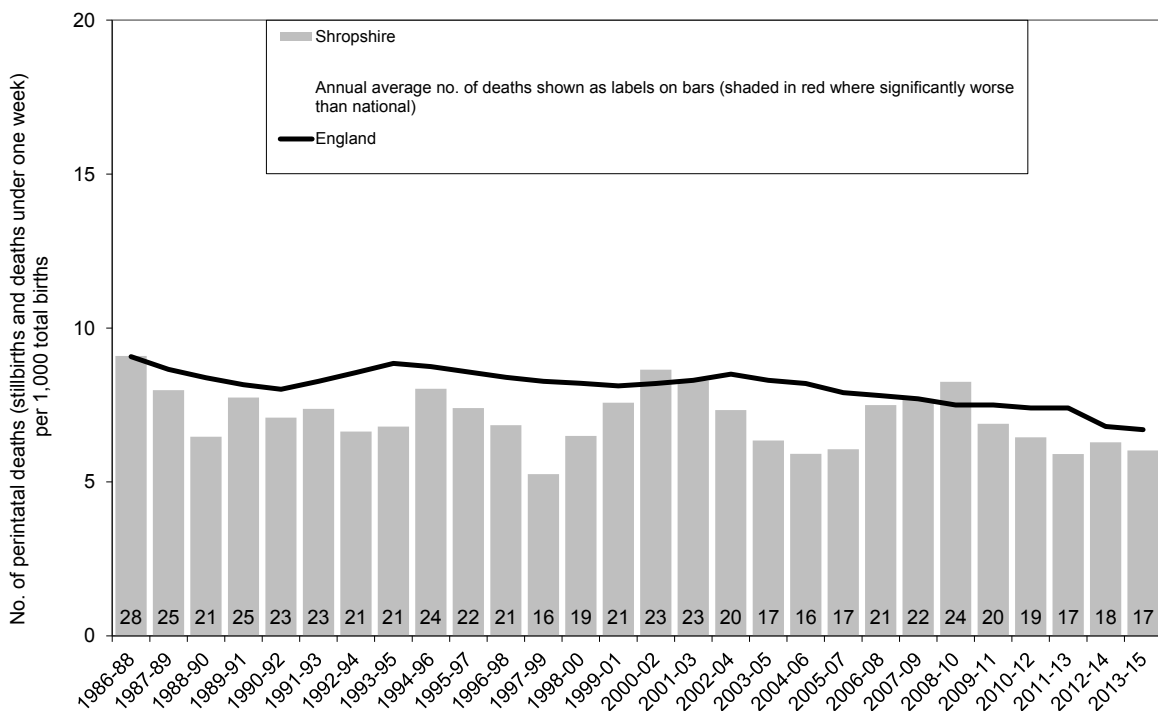
<sup>16</sup> Statistical testing, using 95% confidence intervals, has been undertaken and the difference has been interpreted as statistically significantly different, see page 1 for further details

**Figure 14 Trends in Perinatal Mortality Rates: Telford & Wrekin**



● Significantly<sup>17</sup> worse than the England average

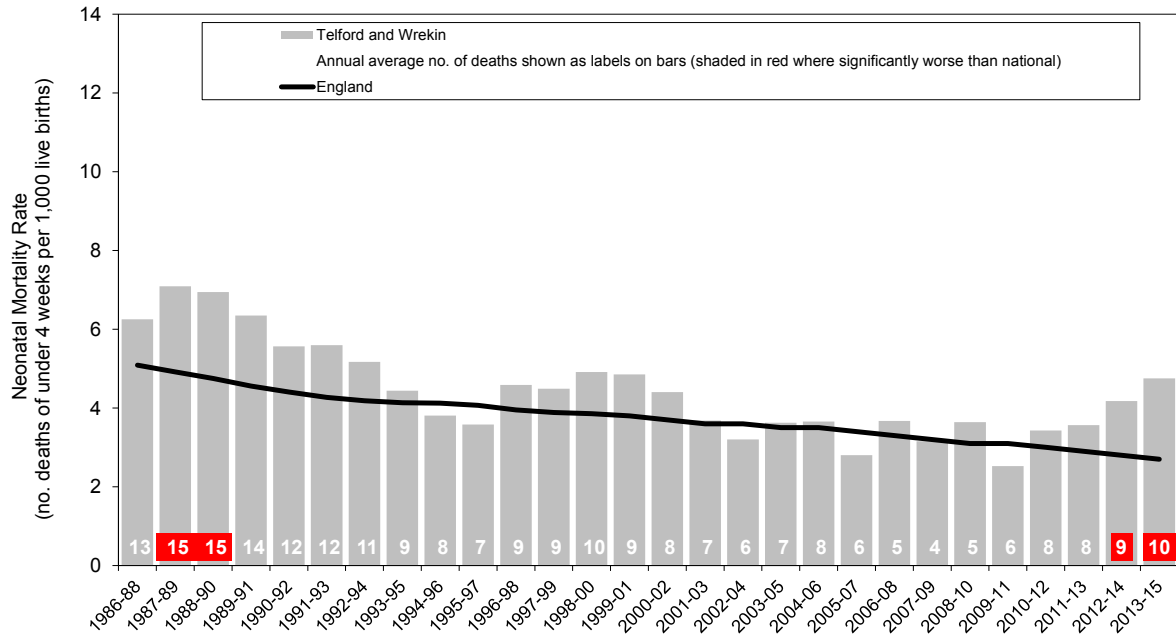
**Figure 15 Trends in Perinatal Mortality Rates: Shropshire**



Sources: Office for National Statistics (ONS) births and deaths statistics and Public Health England Knowledge and Intelligence Service © Crown Copyright.

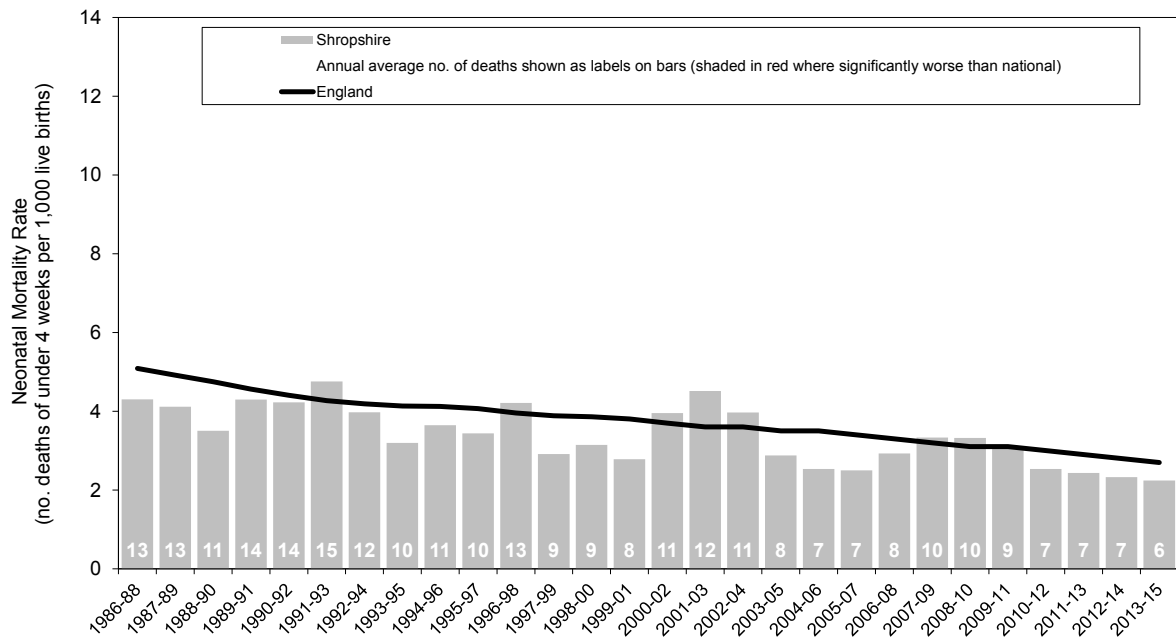
<sup>17</sup> Statistical testing, using 95% confidence intervals, has been undertaken and the difference has been interpreted as statistically significantly different, see page 1 for further details

**Figure 16 Trends in Neonatal Mortality Rates: Telford & Wrekin**



● Significantly<sup>18</sup> worse than the England average

**Figure 17 Trends in Neonatal Mortality Rates: Shropshire**



Sources: Office for National Statistics (ONS) births and deaths statistics and Public Health England Knowledge and Intelligence Service © Crown Copyright.

<sup>18</sup> Statistical testing, using 95% confidence intervals, has been undertaken and the difference has been interpreted as statistically significantly different, see page 1 for further details

## 9. Mother's country of birth

The mother's country of birth has the potential to impact the health of their babies. Nationally infant mortality rate for babies of mothers born outside the UK are higher than for mothers born inside the UK. The highest infant mortality rates are generally seen amongst babies of mothers born in the Caribbean and in Central Africa respectively.<sup>4</sup> At a West Midlands level relatively high proportions of stillbirths are seen among mothers from Pakistan, Poland and India.

- In Telford and Wrekin during 2013 to 2015 84% of births were to mothers born in the UK and 16% amongst mothers born outside the UK. Over a quarter (26%) of stillbirths occurred in infants of mothers born outside the UK. (Table 1)
- The highest proportion of stillbirths amongst mothers born outside the UK delivering their babies in Telford and Wrekin were seen in women born in Poland and Ghana. Births in these two groups accounted for 6% of all births during 2013-15 but represented 21% of the total stillbirths
- In Shropshire during 2013-2015 10% of births were among mothers born outside the UK. In terms of stillbirths 14% occurred in mothers born outside the UK. The highest proportion of stillbirth to non-UK born women were seen in mothers from Poland (3% of all stillbirths)

**Table 10 Mother's Country of Birth**

Country of birth of mother	Telford and Wrekin			Shropshire		
	No. of births (2013-15)	% of live births	% of stillbirths	No. of births	% of live births	% of stillbirths
Poland	270	4%	15%	185	2%	3%
Pakistan	131	2%				
Ghana	127	2%	7%			
India	71	1%		23		
Germany	53	1%		77	1%	
Latvia	42	1%				
Lithuania	26					
Romania	25			21		
South Africa	22			37		6%
Slovakia	21			22		
Bulgaria				51	1%	
Ireland				22		
United States				21		
Australia				21		3%
Philippines				27		
<b>Total Mothers born outside the UK</b>	<b>990</b>	<b>16%</b>	<b>26%</b>	<b>813</b>	<b>10%</b>	<b>14%</b>
<b>Total Mothers born in UK</b>	<b>5,347</b>	<b>84%</b>	<b>74%</b>	<b>7,695</b>	<b>90%</b>	<b>86%</b>