



Infant Mortality in Leicester: briefing note

Report for : Health & Wellbeing Scrutiny Commission

Report Date: 21st June 2017

Lead Director : Ruth Tennant, Director of Public Health

Useful information

■ Ward(s) affected: All

■ Report author: Clare Mills

■ Author contact details: clare.mills@leicester.gov.uk, 0116 454 4617

Suggested content

1. Purpose of report

This is the first report to the Health & Wellbeing Scrutiny Commission and provides:

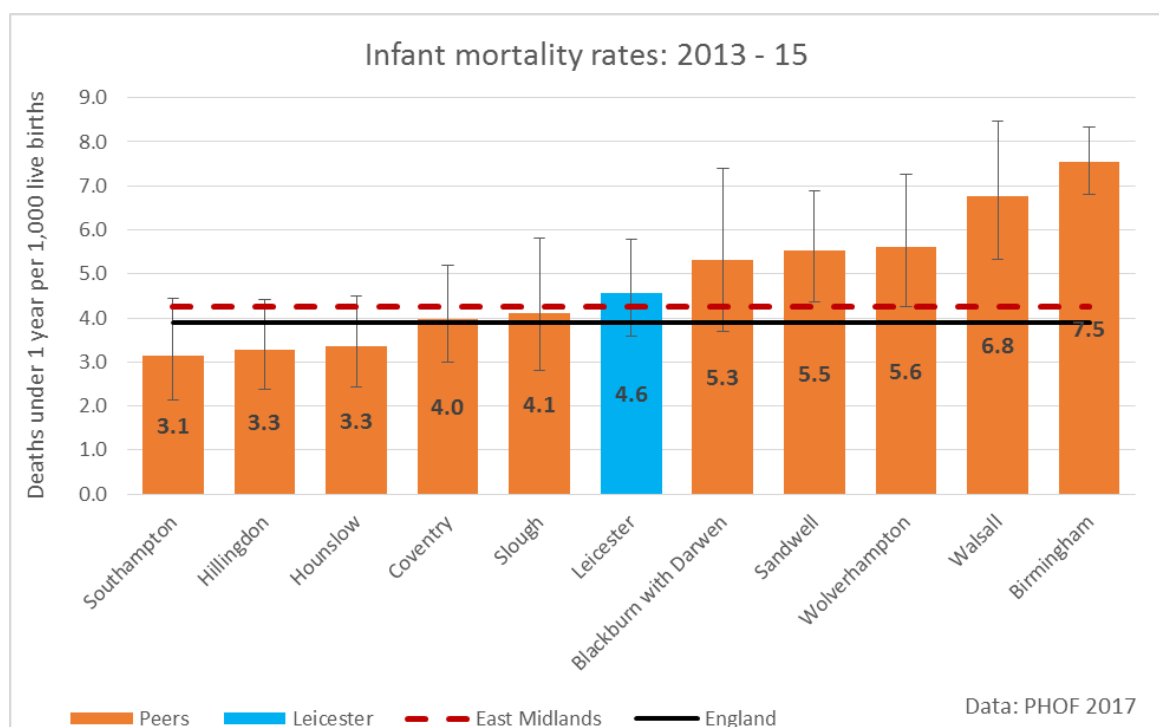
- An introduction to Infant Mortality in Leicester City (a more detailed picture is available in the strategy **Reducing Infant Mortality In Leicester, Leicestershire and Rutland:2016 – 2019**).
- A summary of actions being taken to reduce infant mortality in Leicester.

2. Summary

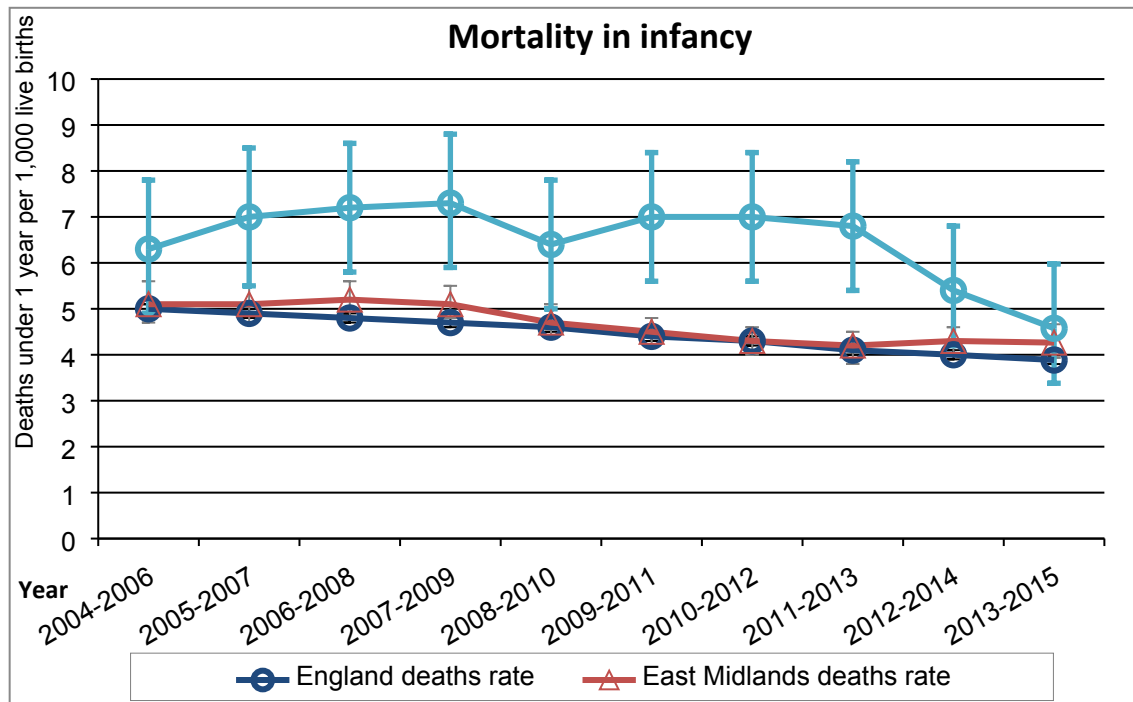
The loss of any baby has a devastating effect on family, friends and the community and while infant mortality is low, this continues to be an important area of focus for public health, working with partners.

2.1 The context

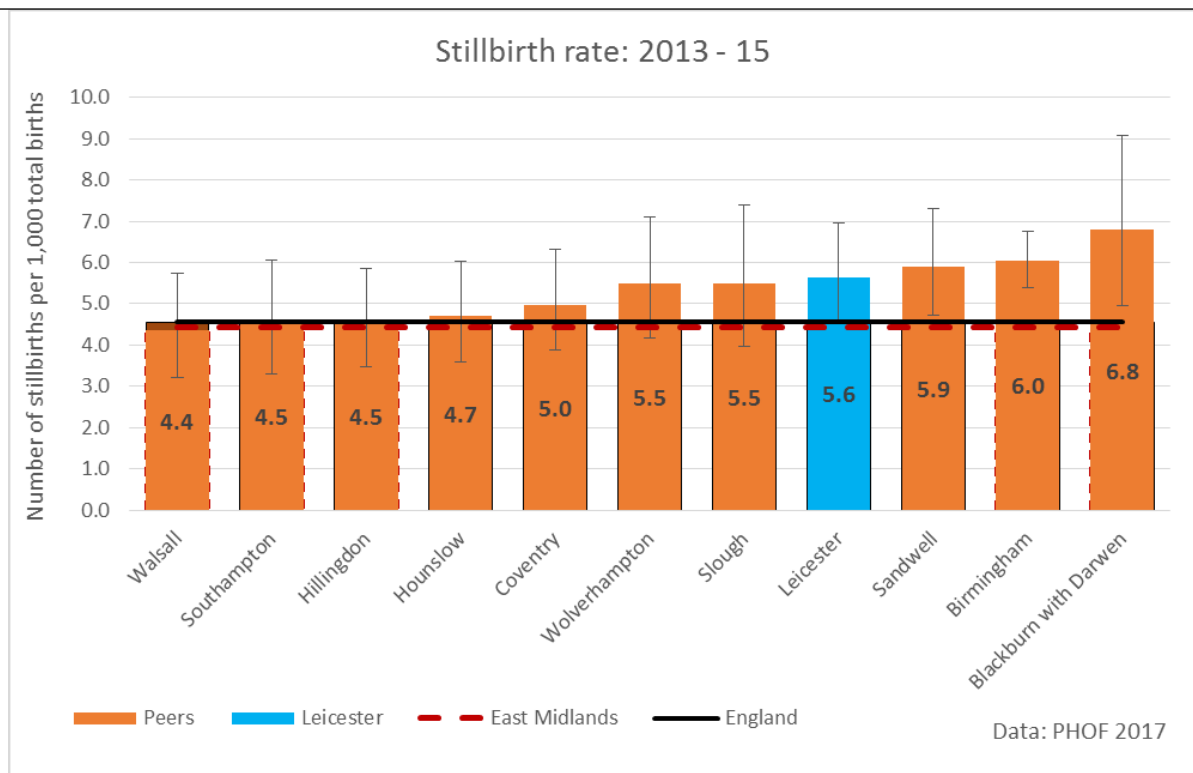
Infant mortality is defined as the number of deaths before the age of 1 per 1,000 live births. The graph below shows that the Leicester City rate (4.6 per 1,000 live births) is not significantly higher than the national and regional rates (3.9 and 4.3 respectively). In comparison with peer comparators, most of the local authorities are similar to Leicester with the exception of Birmingham which is significantly higher.



The graph below depicts the trend in infant mortality rate in Leicester City over a ten year period. It shows that over the period Leicester's infant mortality rate has been significantly higher than nationally, improving in the last 2 periods to show a rate similar to England. Because of the small number of deaths in each year, rates are reported as pooled over 3 years. Since the high point in 2007-2009, where there was an average of 34 deaths per year, this figure has fallen and between 2013-15 there was an average of 24 deaths per year.



Many of the modifiable and preventable risk factors for infant mortality also have an impact on still births. The rate of stillbirth in Leicester was 5.6 deaths per 1,000 total births in 2013-15, equivalent to an average of 29 stillbirths per year. This is not significantly higher than the national average rate of 4.6 per 1,000 and the regional average of 4.4 per 1,000 births. The chart below shows that Leicester has the fourth highest rate of stillbirths when compared with its peer comparators



2.2 The causes

Factors related to the mother:

- **Maternal age:** high rates of infant mortality are among women aged 40 and over and women under the age of 20. Reducing under-18 conceptions would decrease the infant mortality gap by 1%. Teenage pregnancy rates have shown a continued decline but this decline is showing some signs of levelling off.
- **Smoking:** it is well documented that smoking in pregnancy has serious consequences including stillbirth and low birth weight. Reducing the smoking in pregnancy rates would decrease the gap by 2%. It is important to note that passive smoking also contributes to infant deaths. The prevalence of smoking during pregnancy in Leicester in 2015/16 was 11.4%, which is comparable to the national rate
- **Maternal obesity:** is associated with increased risk of congenital anomalies and increased rate of infant deaths. Reducing the prevalence of obesity would decrease the infant mortality gap by 2.8%. There is not reliable information on local maternal obesity rates but anecdotal information suggests this is increasing.
- **Maternal education:** there is clear association between mother's education and infant mortality. Improving maternal educational attainment reduces the risk of infant mortality.
- **Domestic violence:** it is estimated that 30% of domestic violence cases start or escalate during pregnancy and domestic violence is associated with increases in rates of miscarriage, low birth weight, premature birth, foetal injury and foetal death.
- **Maternal ethnicity:** Mothers from the Asian or Asian British ethnic groups are reported to have significantly higher proportions of low birth weight births and infant deaths.

Factors related to the infant:

- a. **Low birth weight:** the main risk factors associated with low birth weight include: maternal age, multiple birth, smoking (including passive) in pregnancy, language barriers and delay in accessing the antenatal care pathway, maternal infection, and poor maternal nutrition.

- b. **Breastfeeding:** increasing the rate of breastfeeding initiation in the Routine and Manual (R&M) group to nationally recommended levels would reduce the infant mortality gap by 4%.
- c. **Infections:** childhood immunisations reduce the risk of infections in infancy. Leicester has a good uptake of childhood immunisation of more than the recommended 95% coverage.
- d. **Congenital anomalies:** serious birth defects are not always preventable. However, there are some measures that can increase the chances of having a healthy baby, such as folic acid intake and avoiding smoking during pregnancy.

Wider determinants related to infant mortality:

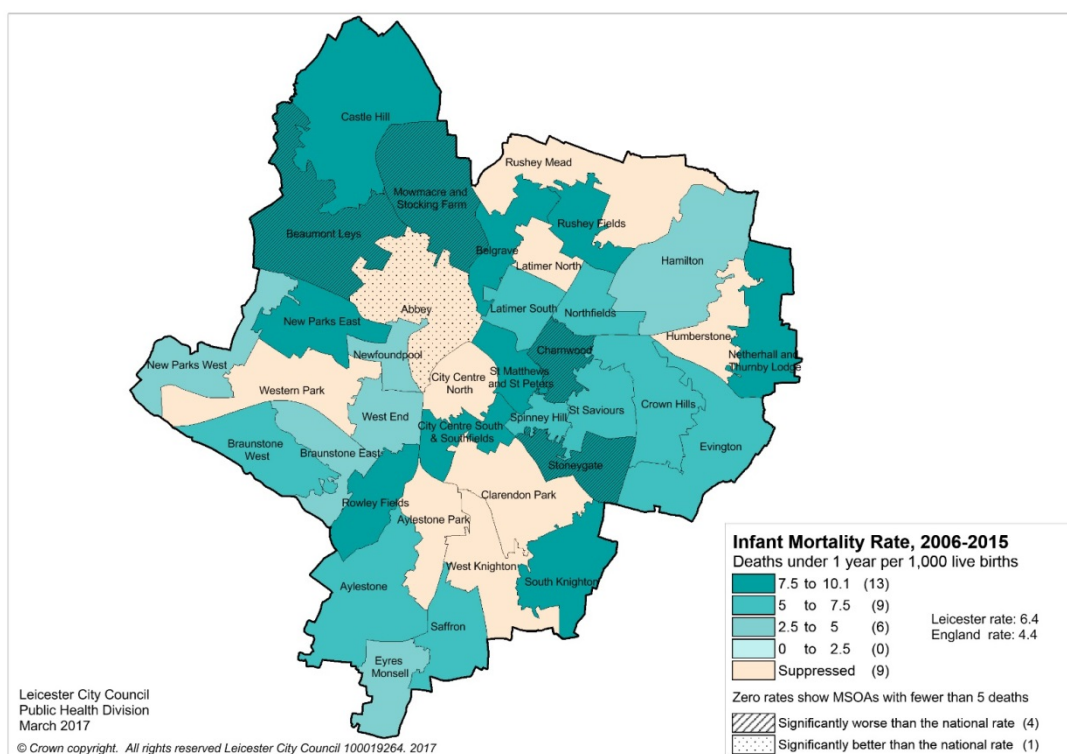
- a. **Poverty and deprivation:** reducing child poverty would reduce the infant mortality gap by 3%.
- b. **Housing and overcrowding:** improving housing conditions and reducing overcrowding would reduce the infant mortality gap by 1.4%.
- c. Targeted interventions to **prevent SIDS** would decrease the gap by 1.4%.

Factors related to preconception care, pregnancy and delivery:

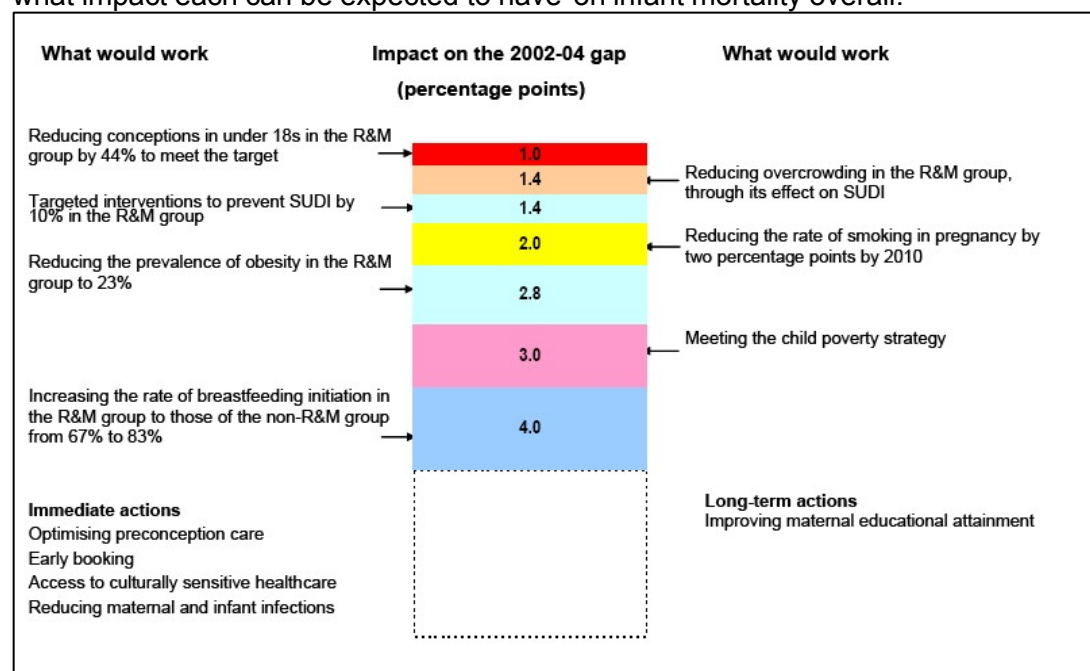
- a. Early booking for antenatal care
- b. Screening for infections and congenital anomalies
- c. Maternal immunisation, such as MMR, whooping cough and flu vaccination
- d. Medical conditions during pregnancy, such as diabetes and hypertension
- e. Nutritional status, such as folic acid supplements
- f. Difficult and complex labour, such as use of instruments

Infant mortality and deprivation

Infant mortality is more likely to occur in households living in poverty and national research has shown that there are higher rates in families from some ethnic minority groups such as Pakistani, Bangladeshi and Black Caribbean groups. Leicester City currently has the ninth highest level of child poverty in the country with 37% of children living in poverty.. However, the graph below shows that there is no significant difference in the rates of infant mortality in Leicester by deprivation quintiles



The diagram below shows the key causes of infant mortality, what actions can be taken, and what impact each can be expected to have on infant mortality overall.



2.3 The way forward

Reducing infant mortality requires a combination of health interventions and actions on the wider social determinants of health by the NHS, local authorities and voluntary organisations, charities and social enterprises. These interventions must start before birth. Giving every child the best start in life through interventions to reduce health inequalities in infancy is central to reducing health inequalities across the life course.

The IMMSG (Infant Mortality Strategy Group) work to reduce the incidence of infant mortality and stillbirth in Leicester, Leicestershire and Rutland. The work is guided by the following principles:

- to make it everybody's business to support reduction in infant mortality and stillbirth
- to provide strategic leadership and accountability for the delivery against the agreed actions
- to ensure a multi-agency partnership approach across the region is used to deliver the action plan
- to promote the safety and welfare for all children and young people – implementing sound safeguarding practices and procedures and always adhering to the Local Safeguarding Children's Board Child Protection Procedures

The regional Infant Mortality Strategy and Action Plan was launched in October 2016, with the endorsement of the City's Health and Well-being Board. Since then a range of work has taken place to:

- Promote safe sleeping through a local campaign run with the Lullaby Trust.
- Share messages about smoking and increase referrals to the smoking service, including playing a STOP (smoking) DVD in GP surgeries.
- Develop links between infant feeding clinics and STOP.

The IMMSG reports to the Health and Well-being Board and further updates on what action is being taken to reduce infant mortality can be provided to future Scrutiny meetings.

3. Recommendations

Health & Wellbeing Scrutiny Commission are asked to note the contents of this update and support the work taking place.

4. Financial, legal and other implications

4.1 Financial implications

N/A

4.2 Legal implications

N/A

4.3 Climate Change and Carbon Reduction implications

N/A

4.4 Equalities Implications

N/A

4.5 Other Implications (You will need to have considered other implications in preparing this report. Please indicate which ones apply?)

N/A

5. Background information and other papers:

NA

6. Summary of appendices:

None

7. Is this a private report (If so, please indicated the reasons and state why it is not in the public interest to be dealt with publicly)?

No

8. Is this a “key decision”?

No