

Decision Maker: HEALTH AND WELLBEING BOARD

Date: 29th March 2018

Title: INFANT MORTALITY IN BROMLEY

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Ward: Borough-wide

1. Summary

1.1 The 2018 JSNA showed an increase in infant mortality rates in Bromley.

2. Reason for Report going to Health and Wellbeing Board

2.1 It is possible that the Infant Mortality Rate in Bromley really is rising and that the recent increase represents a significant change in life chances of babies born in Bromley.

2.2 However there are several reasons to conclude that this is not currently a significant problem:

- The variations due to small numbers of infant deaths in Bromley;
- The recent data on infant deaths in Bromley which indicate that numbers are falling again
- The evidence from comparison with statistical partners that the deaths in infancy in Bromley are still very low.

2.2 Infant mortality is kept under close scrutiny by the Public Health team as part of health surveillance, and also by the multi-agency Child Death Overview Panel who scrutinise every child death in Bromley. Details of every case have been pulled together in a report to the Child Death Overview Panel and also the Serious Case Review Subgroup of the Bromley Safeguarding Children Board.

3. **SPECIFIC ACTION REQUIRED BY HEALTH AND WELLBEING BOARD AND ITS CONSTITUENT PARTNER ORGANISATIONS**

None. This report is for information.

Health & Wellbeing Strategy

1. Related priority: Not Applicable

Financial

1. Cost of proposal: No Cost:

2. Ongoing costs: No Cost:

3. Total savings: Not Applicable:

4. Budget host organisation: Not Applicable

5. Source of funding: Not Applicable

6. Beneficiary/beneficiaries of any savings: Not Applicable

Supporting Public Health Outcome Indicator(s)

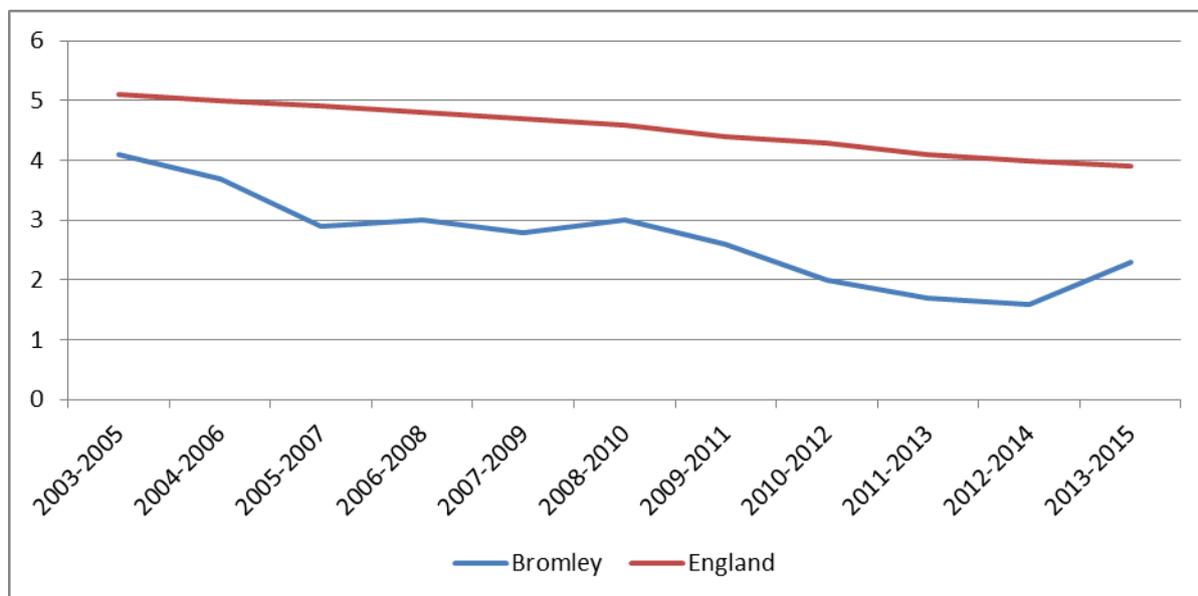
Yes:

4. COMMENTARY

4.1 Infant deaths¹ in Bromley 2008-2018

4.2 Deaths of infants in the first year of life, as demonstrated by the infant mortality rate, continues to be lower in Bromley than the rate for all England. This rate has been falling for many years before a recent upturn (Figure 1).

Figure 1. Infant Mortality Rate trend in Bromley and England, 2003-2015.

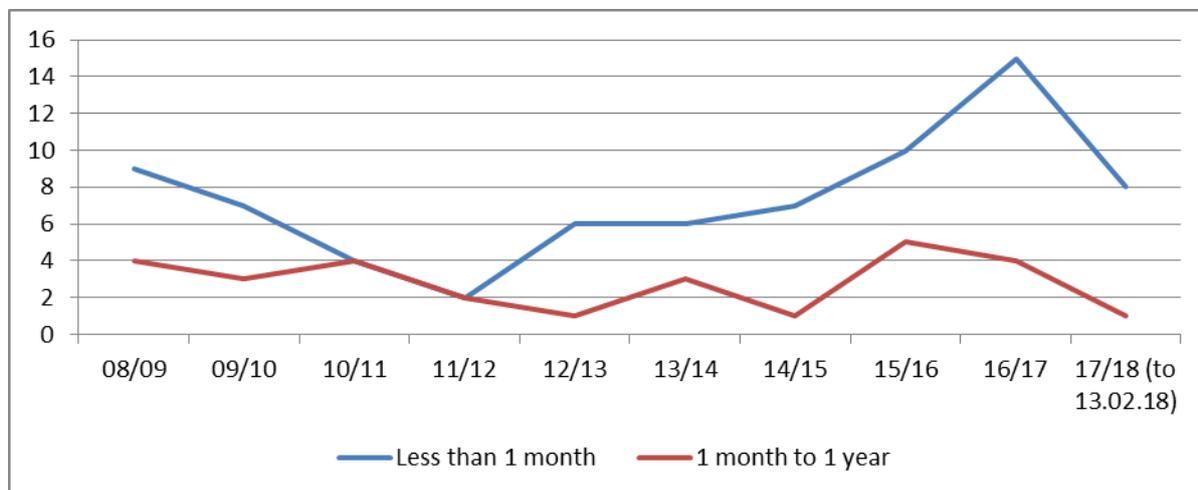


4.3 Infant mortality can be divided into neonatal mortality rates (deaths under 28 days) and post-neonatal mortality rates (deaths between 28 days and 1 year).

4.4 Deaths occurring during the first 28 days of life in particular are considered to reflect the health and care of both mother and newborn and are often largely caused by perinatal and biologic conditions (endogenous causes).

4.5 In contrast, post-neonatal deaths are more likely to be linked to non-perinatal conditions such as injuries and socio-environmental causes (exogenous causes).

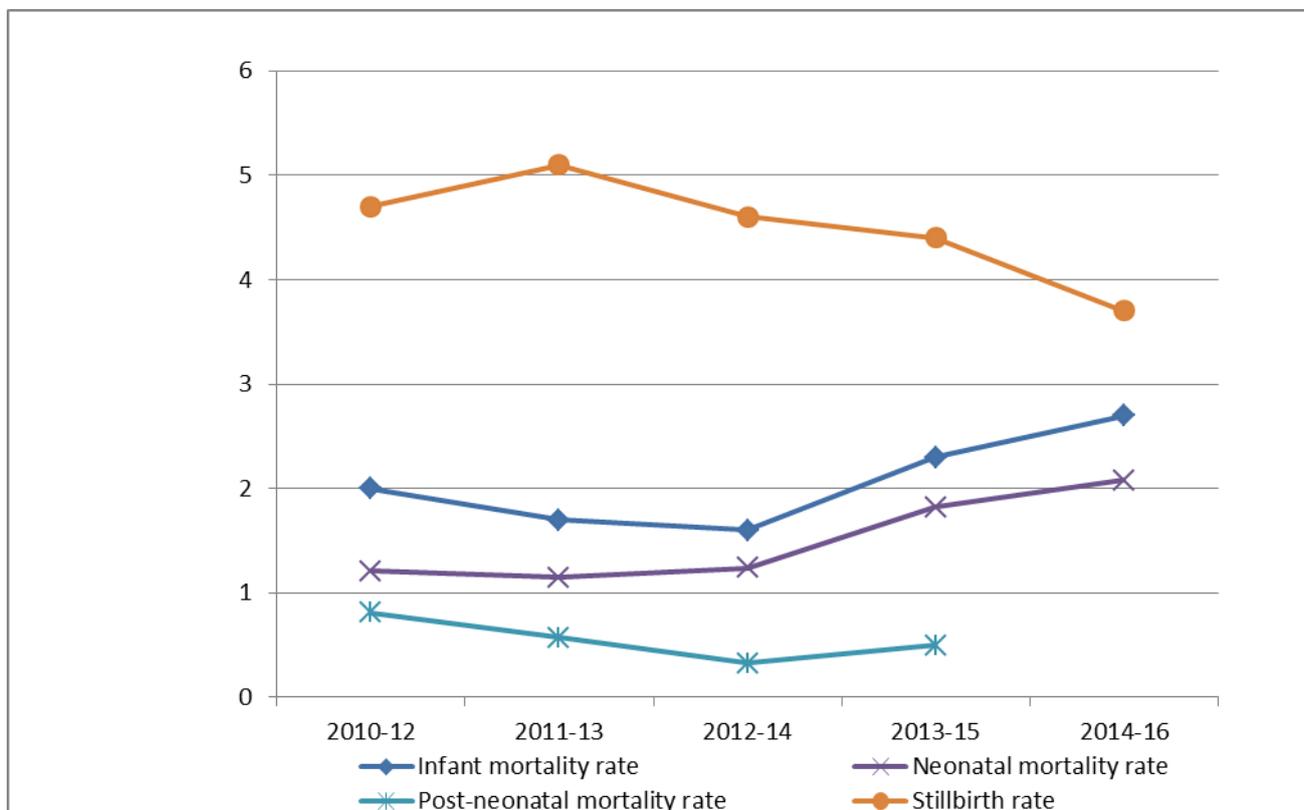
Figure 2. Number of neonatal and post-neonatal deaths, Bromley, 2008-2018



¹ Definitions of infant mortality, neonatal mortality, post-neonatal mortality and stillbirths in Appendix A

4.6 Figure 2 shows the actual number of deaths in Bromley to mid-February 2018. This shows not only that the number of infant deaths in Bromley is very low, but also that it appears to have reduced again recently. The small number of deaths are the reason for analysis using pooled data over three years rather than annual data.

Figure 3. Analysis of infant deaths and stillbirths 2010-2016 using rolling three year averages



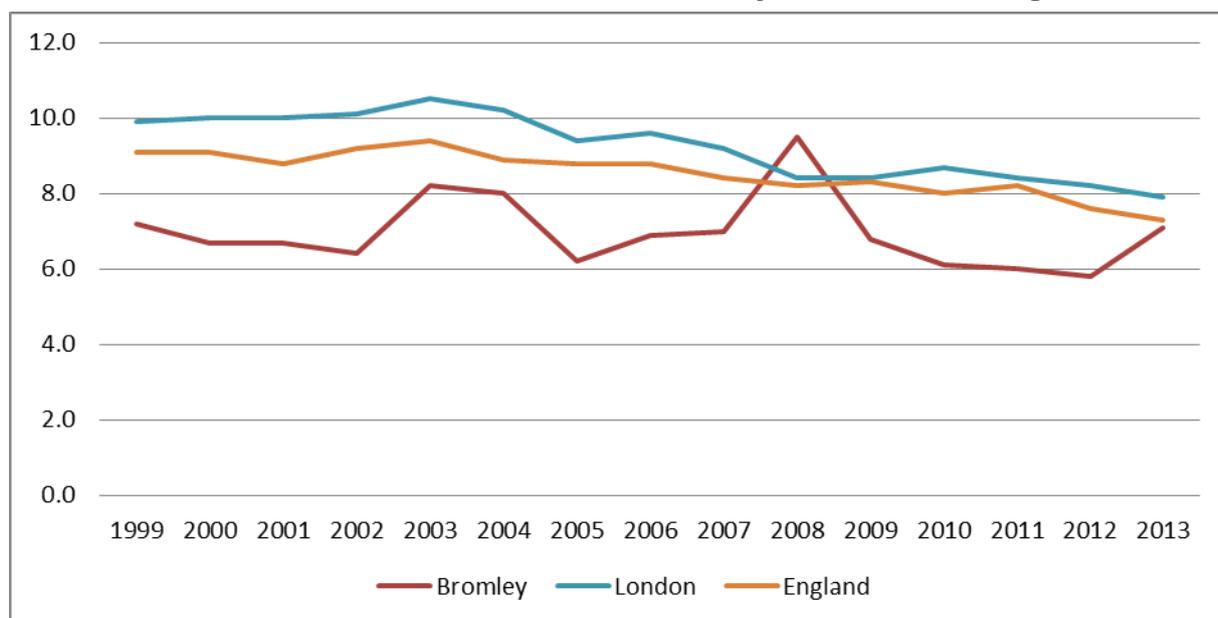
4.7 Figure 3 does indicate that the increase in infant mortality rates shown in Figure 1 is largely due to neonatal mortality.

4.8 However it is interesting to note the falling stillbirth rate which mirrors the rising neonatal mortality rate.

4.9 There is potential overlap between the descriptors “stillbirth” and “neonatal death”. If a newborn baby shows any sign of life it should be described as a neonatal death rather than a stillbirth. In practice, it may be classified as a stillbirth rather than a neonatal death, especially if the baby is very premature.

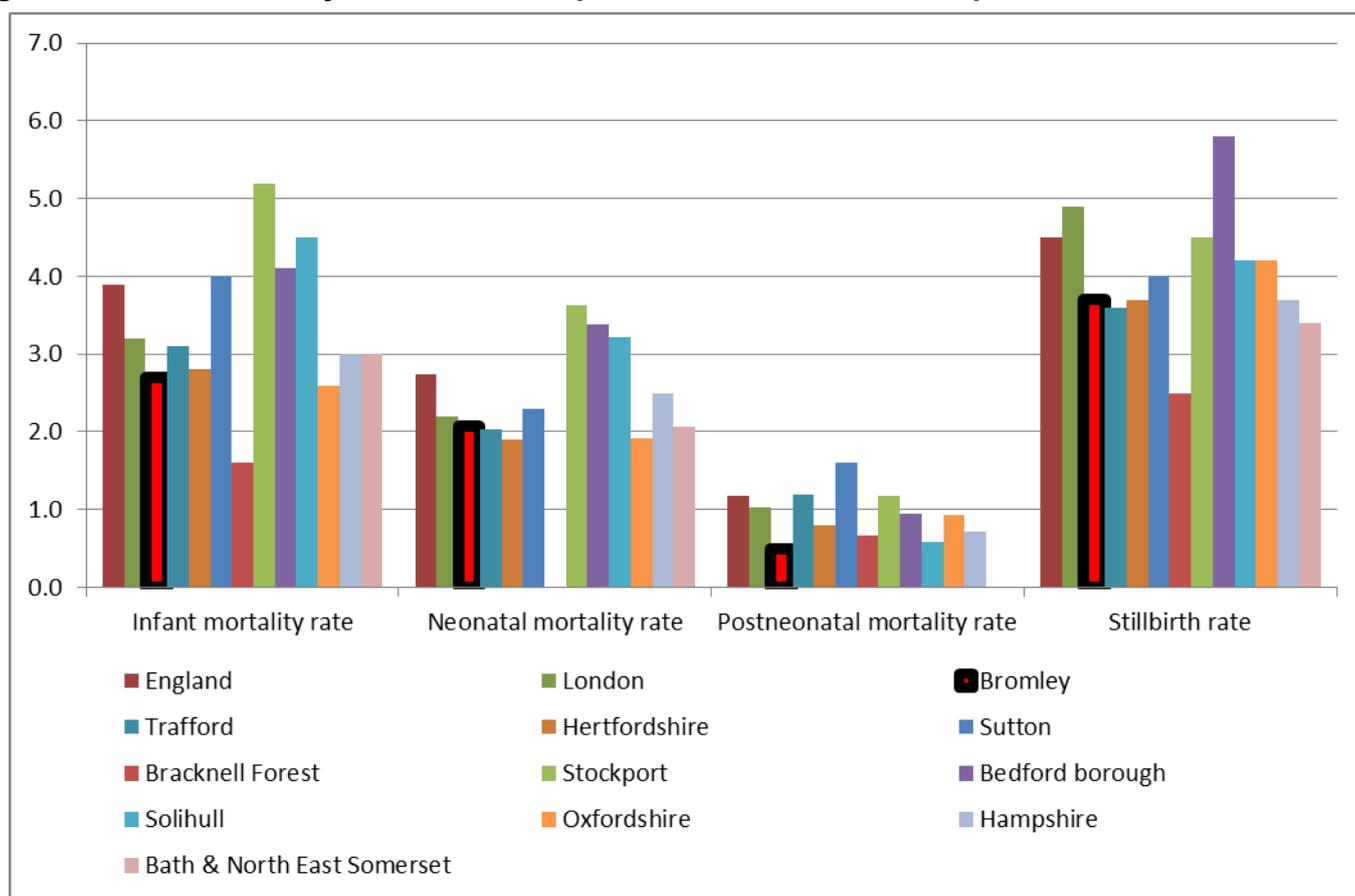
4.10 A combined analysis of stillbirth and neonatal deaths together is published by Public Health England. Figure 4 shows the long term trends of this combined indicator. As expected there is more variability in the Bromley rates because of small numbers. However the overall picture is that the combined rate is below the rate for England and London, which would be expected for Bromley. What it is not possible to say at the moment is whether the recent upturn is a short-term change as in 2008 or a general trend.

Figure 4. Combined neonatal and stillbirth rates, Bromley, London and England, 1999-2013.



4.11 Another key analysis to interpret a possible rise in infant mortality rates is to compare all infant mortality measures with statistical partners for health across England. The measures in Figure 5 all relate to the period 2014-16 apart from the post-neonatal measure which is currently only available for the period 2013-15.

Figure 5. Infant mortality measures compared to health statistical partners



4.12 Figure 5 shows that Bromley still compares very favourably with similar areas for all measures of infant mortality.

5. IMPACT ON VULNERABLE PEOPLE AND CHILDREN

5.1 At a national level, infant mortality is higher in deprived and vulnerable populations. There are too few deaths to identify whether this is the case in Bromley.

6. COMMENT FROM THE DIRECTOR OF AUTHOR ORGANISATION

6.1 Infant mortality rate (deaths occurring in the first year of life) is a fair reflection of the health of a population generally and as such is routinely monitored both locally and nationally. The Public Health team analyses the data and considers potential cause of any variations in the infant mortality as presented in this paper. Every child death is also scrutinised by the Child Death Overview Panel. Both processes provide assurance to the Council that appropriate action is taken if necessary.

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| Non-Applicable Sections: | Financial and Legal Implications, and Implications for other Governance Arrangements, Boards and Partnership Arrangements, including any Policy and Financial Changes Required to Process the Item |
| Background Documents: (Access via Contact Officer) | Not Applicable. |

DEATH RATES IN BROMLEY AND COMPARATORS

| | Period | England | London | Bromley | Trafford | Hertfordshire | Sutton | Bracknell Forest | Stockport | Bedford borough | Solihull | Oxfordshire | Hampshire | Bath & North East Somerset |
|------------------------------|---------|---------|--------|---------|----------|---------------|--------|------------------|-----------|-----------------|----------|-------------|-----------|----------------------------|
| Infant mortality rate | 2014-16 | 3.9 | 3.2 | 2.7 | 3.1 | 2.8 | 4.0 | 1.6 | 5.2 | 4.1 | 4.5 | 2.6 | 3.0 | 3.0 |
| Neonatal mortality rate | 2014-16 | 2.74 | 2.20 | 2.08 | 2.04 | 1.90 | 2.30 | | 3.63 | 3.38 | 3.22 | 1.92 | 2.50 | 2.07 |
| Post-neonatal mortality rate | 2013-15 | 1.18 | 1.03 | 0.50 | 1.20 | 0.80 | 1.60 | 0.67 | 1.18 | 0.94 | 0.59 | 0.93 | 0.72 | |
| Stillbirth rate | 2014-16 | 4.5 | 4.9 | 3.7 | 3.6 | 3.7 | 4.0 | 2.5 | 4.5 | 5.8 | 4.2 | 4.2 | 3.7 | 3.4 |

Source: PHE Fingertips. Some data missing for neonatal and post-neonatal mortality rates

Definitions of terms used:

- Infant mortality rate: Infant deaths under 1 year of age per 1000 live births
- Neonatal mortality rate: The number of deaths under 28 days, per 1,000 live births.
- Post-neonatal mortality rate: The number of deaths between 28 days and 1 year, per 1,000 live births.
- Stillbirth rate: Rate of stillbirths (fetal deaths occurring after 24 weeks of gestation) for all maternal ages occurring in the respective calendar years per 1,000 births.
- Neonatal mortality and stillbirths: The number of stillbirths and deaths under 28 days, per 1,000 live births and stillbirths