Infant Mortality

Introduction

Infant mortality is defined as death before the child reaches the age of one year. It represents a particularly distressing category of premature death and is an indicator of the general health of an entire population.

Summary

In the two years between 2012 and 2014 there were 120 infant deaths in Norfolk. The infant mortality rate in Norfolk is not significantly different to the national average.

Headlines

In the two years between 2012 and 2014 there were 120 infant deaths in Norfolk. [1] Infant deaths account for around 60% of the all deaths of children and young people in the county (0-19).

Nationally the rate of infant mortality has been declining steadily since the 2001/03 period. This has not been the trend in Norfolk where the infant mortality rate increased from 4.4 per 1,000 births in 2001/03 to 4.9 per 1,000 in 2005/07, declined to a low of 3.9 per 1,000 in 2008/10 and has since risen again to 4.3 per 1,000 (see Figure 1), this is slightly above that national average of 4.0 per 1,000. However, it is worth noting that these fluctuations cannot be considered statistically significant, and Norfolk is not statistically significantly higher than the national average.[2]
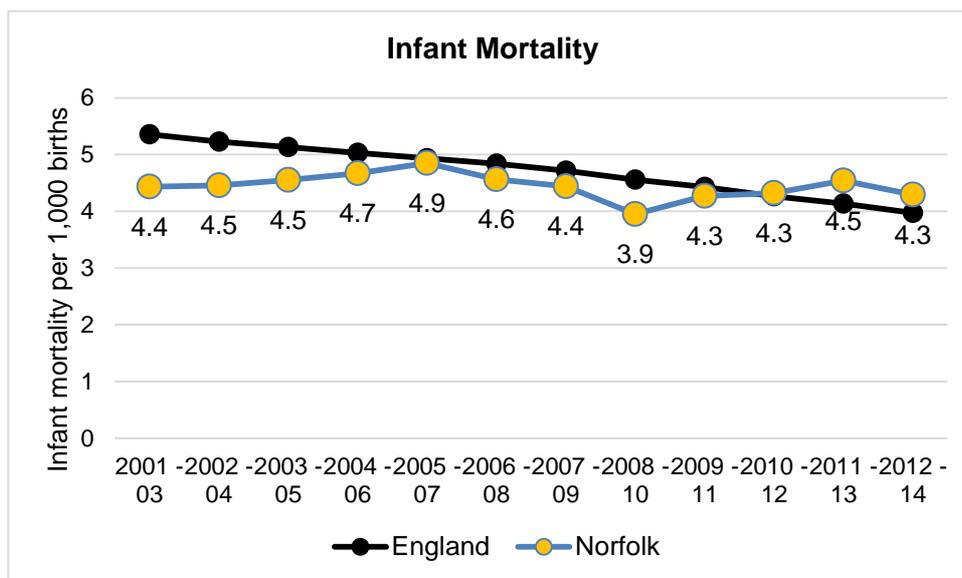

Figure 1: Infant Mortality (death below one year of age) per 1,000 births. Source: Public Health England.[3]
Note: Data points are coloured red if they are statistically significantly worse than the England average, yellow if not significant difference and green if statistically significantly better.

The infant mortality rate consists of two components:
• Neonatal mortality rate: The number of neonatal deaths (those occurring during the first 28 days of life)
• Post-neonatal mortality rate: The number of infants who die between 28 days and less than one year

Two thirds (68%) of infant deaths in Norfolk occur in the neonatal period (81 deaths in 2012-14), the leading cause of neonatal deaths are "disorders relating to short gestation and low birth weight". A third of infant deaths (33%) occur between 28 days and one year (32 cases in 2012-14) and the leading cause is "sudden infant death syndrome" (12 cases in 2012-14).

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[1] Public Health England Public Health Outcomes Framework:
http://www.phoutcomes.info/public-health-outcomes-
framework#page/4/gid/1000044/pat/6/par/E12000006/ati/102/are/E10000020/iid/20101/age/235/sex/4
[2] As above
[3] As above

Influences on Health and Wellbeing

Infant mortality is an indicator of the general health of an entire population. The rate of infant mortality reflects the relationship between determinants of population health such as economic, social and environmental conditions and causes of infant mortality. Deaths occurring during the first 28 days of life (the neonatal period) in particular, are considered to reflect the health and care of both mother and newborn. There is a recognised correlation between higher infant mortality rates and deprivation. Reducing infant mortality overall and the gap between the richest and poorest groups are part of the Government's strategy for public health.

Social, environmental, population context

The UK has higher infant mortality rates than comparable European countries, a high percentage of which is driven by the fact that nearly two thirds of the children who die before their first birthday were born preterm, and/or with low birth weight. Infant mortality is also 10% higher for infants in the lower social group than the average.[4] Infants in the poorest families have an almost ten times greater chance of dying suddenly in infancy (a nine-fold increased risk) than those in the highest income group. The reasons for this are complex, for example, risk of sudden unexpected infant death is increased by maternal smoking, which is higher in poorer households.[5]

Current services, local plans and strategies

There is a systematic multiagency process for gathering data after every childhood death, known as a Child Death Review, which attempts comprehensively to gather information on potentially avoidable factors in order to make recommendations on changes in practice. In Norfolk Child Death Reviews are carried out by Norfolk Safeguarding Children Board Child Death Overview Panel. In 2015/16 the panel completed 26 reviews into infant deaths and found that 31% had 'modifiable factors', which means that something could have been done to prevent the death.

Sudden infant death syndrome (SIDS) remains the leading cause of death between one month and one year of age (also known as 'cot death'). The main risk factors are being born prematurely, low birthweight, parental smoking while pregnant and always not placing the baby on their back when they sleep. There's also an association between co-sleeping (sleeping with the baby on a bed, sofa or chair) and SIDS.

Midwives, Health Visitors, Children's Centre staff and GPs work together to promote safe sleeping, reduce smoking during pregnancy and to support parents to quit smoking. Breastfeeding also decreases the risk of SIDS and therefore action to promote breastfeeding may also reduce infant mortality.[6]

Considerations for HWB and commissioner

Infant mortality rates should be monitored as they an indicator of the success of the health and care system in general with neonatal deaths particularly being an indicator the health and care of mothers and newborns.

Key actions to reduce infant mortality are promoting safe sleeping for infants, reducing smoking during pregnancy, reducing parents smoking around their children (e.g. the 'Take 7 steps' campaign') and promoting breastfeeding.

All services that come into contact with pregnant women and parents of young children (including health services, voluntary sector organisations, libraries, playgroups and children's centres) should be aware of the need - and properly supported to - promote a healthy early start for children. Commissioners can highlight responsibilities in service specifications, and ensuring that appropriate training and materials (posters/leaflets) are available.

[4] Barnardos Child poverty statistics and facts.
http://www.barnardos.org.uk/what_we_do/our_projects/child_poverty/child_poverty_what_is_poverty/child_poverty_statistics_facts.htm (Accessed July 2014).
[5] Spencer, N. (2008) Health Consequences of Poverty of Children. End Child Poverty.
[6] Horne, R., Hauck, F. and Moon, R. (2015) Sudden infant death syndrome and advice for safe sleeping *BMJ* 2015; 350 doi: http://dx.doi.org/10.1136/bmj.h1989

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BMJ 2015; 350 doi: http://dx.doi.org/10.1136/bmj.h1989

NHS Choices – Sudden Infant Death Syndrome
http://www.nhs.uk/conditions/sudden-infant-death-syndrome/pages/introduction.aspx

The Lullaby Trust
https://www.lullabytrust.org.uk/safer-sleep

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