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http://doi.org/10.1136/bmj.r1053 Published: 22 May 2025 Infant mortality is rising in the UK—reducing modifiable risks can help reverse reverse the trend

Public health support focused on reducing risks of infant mortality is needed for vulnerable families, especially those with preterm babies, write **Tilly Pillay**, **Kelvin Dawson**, and **Mike Trenell**

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The death of a baby in the first year of life is tragic and heartbreaking. At 4.1 infant deaths per 1000 live births, the UK's infant mortality rate is among the highest of countries in the Organisation for Economic Cooperation and Development.¹² Japan, Norway, Sweden, and Finland have some of the lowest rates, below 2 per 1000.³ In England infant mortality has risen for three consecutive years, with widening geographical, socioeconomic, and ethnic inequalities.⁴ Rates are more than double in the most deprived areas compared with the least deprived,⁵⁶ and a third of all infant deaths occur in the 20% most deprived neighbourhoods of England.⁵ Urgent measures are needed to reduce the infant mortality rate and underlying risk factors for vulnerable families, including babies born preterm.⁴⁷⁸

Babies born prematurely are at the greatest risk of neonatal and infant death. The 2024 MBRRACE report ⁹ and a BMJ editorial from December 2024¹⁰ highlighted the heightened risk of death for preterm babies in the neonatal period—the first 28 days of life. Child death overview panels contributing to England's National Child Health Mortality Database (NCMD) ⁵ emphasise the ongoing dangers during the first year for preterm infants who survive the neonatal period. Of the reviewed deaths among preterm babies, 22% occurred after discharge from neonatal care.⁵ In total, 83% of all childhood deaths in the first year are in babies who received neonatal medical care after birth, with 57% attributable to prematurity.⁶

Adverse social determinants¹¹ and higher modifiable risks often contribute to preterm birth and higher infant mortality rates. While ongoing and accelerated government support for programmes that reduce the socioeconomic determinants of infant mortality are required,¹¹ these may be impractical to achieve in the short term. Innovative, effective interventions targeted at reducing modifiable risks of death for this population are urgently needed. The most recent NCMD analysis identified that 48% of infants who die because of prematurity have potentially modifiable contributory factors identified at review.⁵

Modifiable factors encompass avoidable behaviours and conditions that increase the risk of infant mortality. These include choosing not to breastfeed when it is possible, smoking during pregnancy or around the baby (including passive smoking), teenage pregnancies, unsafe infant sleep practices, domestic violence, poor vaccination rates, delayed recognition of illness, maternal obesity, maternal depression, and limited access to and engagement with healthcare services.¹¹¹² Despite the efforts of the NHS, local maternity and neonatal systems, and public health services, analysis of child death review data indicates that the prevalence of vulnerabilities, including prematurity, is increasing in infants dying of sudden infant death syndrome.¹³¹⁴ Unsafe sleeping practices, a modifiable contributory factor, has not reduced over two decades.¹⁵

More targeted and holistic public health support around reducing risks of infant death for vulnerable families is required,¹ especially those taking home a preterm baby. Premature birth limits valuable antenatal time for education, social support, and public health messaging and disrupts critical midwifery support after birth, especially if the baby remains in hospital.

To overcome these challenges, public health programmes need to connect effectively with vulnerable families with interventions to reduce risks for infant mortality throughout pregnancy, the neonatal period, and beyond. These efforts should not be limited to healthcare settings. They should extend to all professionals involved in family and community care-including health professionals, family care practitioners, health visitors, public health services, community organisations, nurseries, schools, and broader society. Efforts to reduce risks of infant mortality must target parents, extended family, and friends who provide critical support structures. These practices must be embedded into our social fabric and be replicable and sustainable for future generations. This approach is necessary for long term change. Promoting essential health practices across all ages can create a supportive environment for families, reinforcing positive health behaviours across generations.

Countries with similar practices on life sustaining support as the UK, such as Japan, have low infant mortality rates, which shows that further reductions are achievable.^{3 16} The reasons for lower rates elsewhere may be multifactorial, but reductions are likely to require not just socioeconomic improvements but a shift in perspective. We need to prioritise comprehensive public health support around reducing risks for infant mortality for vulnerable families, especially those with babies born preterm.

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OPINION

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