

Trends in the incidence and survival of births at 22 to 26 weeks in England: A population based study

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Abstract

Objective: To assess recent trends in incidence and survival of births at 22-26 weeks gestation in England

Design: Population based cohort study

Participants: All births in 2006 and 2014

Main outcome measure: Incidence and survival of births at 22+0-26+6 weeks gestation

Results: The birth rate at 22 to 26 weeks gestation reduced by 10% over time from 49.0 per 10000 births in 2006 to 44.3 per 10000 births in 2014. The largest difference was seen at 22 weeks gestation, decreasing from 7.5 to 6.1 per 10000 births. The difference lessened with increasing gestation, with similar rates at 26 weeks (11.5 and 11.7 per 10000 births in 2006 and 2014). Extended perinatal mortality and neonatal mortality improved significantly over time. The largest improvements were seen for babies at 23 weeks with live births surviving the neonatal period increasing from 26.0% to 38.8%, and at 24 weeks increased from 51.1% to 71.3%. The reduced incidence and improved survival led to a reduction over time of 7 deaths per 10000 births, a reduction of around 8% of the extended perinatal mortality rate for all births. Regional variation across England will also be explored.

Conclusions: There has been a decrease in the incidence of births at 22 to 26 weeks gestation and also improvements in neonatal mortality since 2006. This reduction in mortality will impact on service costs for both neonatal and longer term care. Up-to-date survival rates are also vital in counselling parents regarding outcomes for extremely preterm babies.