

Adult outcomes of extremely preterm or extremely low birthweight infants

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Survival rates for extremely preterm (<28 weeks' gestational age) or extremely low birthweight (<1000 g) infants have increased dramatically over the past few decades. Consequently their long-term outcomes become more important, as they will potentially contribute more to the burden of disease in adult life.

In young adulthood, extremely preterm or extremely low birthweight survivors have only slightly lower rates of educational achievement, employment and independent living than those born at term. Despite the high rates of neurodevelopmental disabilities, and educational and behavioural problems encountered during their early years, most subjects adapt to roles of adult functioning and do better than might have been anticipated.

Other areas of ill-health for extremely preterm or extremely low birthweight survivors into adulthood include more abnormalities in respiratory function, with variables reflecting airflow being substantially diminished compared with controls, particularly in those who had bronchopulmonary dysplasia in the newborn period. The blood pressure of extremely preterm or extremely low birthweight subjects is significantly higher than controls, which is not related to intrauterine growth restriction. Despite their small size at birth extremely preterm or extremely low birthweight survivors tend to achieve adult heights consistent with their genetic potential.

As mortality rates have fallen, the focus for perinatal interventions must be to develop strategies to reduce long-term morbidity. In addition, follow-up to middle age and later adulthood is warranted to determine the risks, especially for cardiovascular, respiratory and metabolic problems, and other lifestyle issues likely to be confronted by extremely preterm or extremely low birthweight survivors.