Long-term implications of being born Low Birth Weight (LBW)

The months a baby spends in the womb, along with the first 12 months after birth, are arguably the most important time of all for brain development. During this period, brain cells called neurons are forming connections with each other, creating the networks that underlie thinking, learning, and feeling. Low birth weight can disrupt early brain development. Low birth weight babies are at increased risk for developmental problems related to physical health, psychological adjustment, and intellectual functioning.

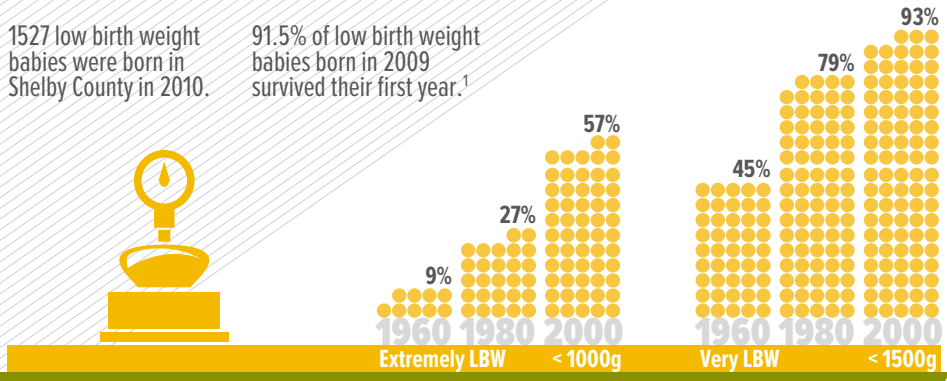
More low birth weight babies are surviving.

< 2500g / 5lb 8oz
Low Birth Weight

Medical advancements are succeeding in reducing infant mortality. Fragile infants are now more likely to survive.

1527 low birth weight babies were born in Shelby County in 2010.

91.5% of low birth weight babies born in 2009 survived their first year.[1]



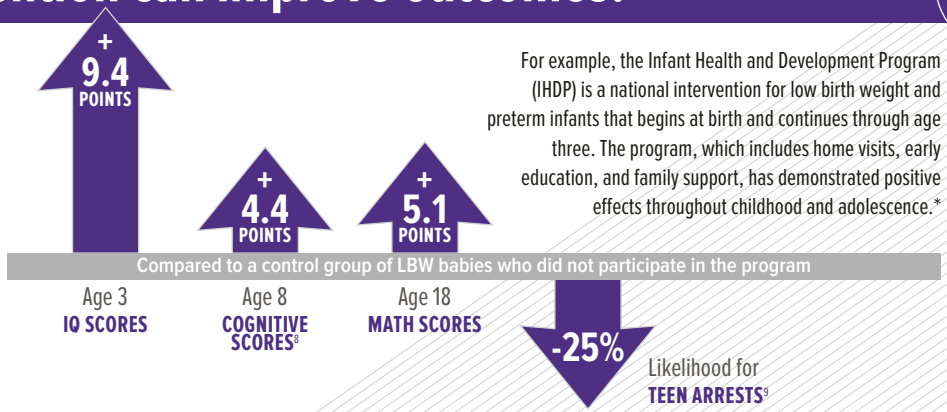
Nationwide, low birth weight survival rates have continuously increased.[2]

Low birth weight places infants at risk.

Long-term difficulties related to low birth weight have remained relatively unchanged.

6x LONGER INITIAL HOSPITAL STAYS	**≥ 15%** NEUROLOGICAL IMPAIRMENTS[4] i.e. cerebral palsy	**≈ 20%** LOW IQ SCORES[6] 20% of LBW children have scores below the average range
25x HIGHER INITIAL HOSPITAL COSTS[3] 42% covered by Medicaid	**≤ 60%** HEALTH COMPLICATIONS[5] i.e. chronic lung disease or brain hemorrhaging	**≥ 40%** DEVELOPMENTAL PROBLEMS[7] i.e. language delays, attention disorders, emotional disorders

Early intervention can improve outcomes.



For example, the Infant Health and Development Program (IHDP) is a national intervention for low birth weight and preterm infants that begins at birth and continues through age three. The program, which includes home visits, early education, and family support, has demonstrated positive effects throughout childhood and adolescence.*

*The effects of low birth weight are not uniform. Generally, the lower the birthweight, the greater the risk of negative outcomes. Some of the specific health outcomes and intervention effects discussed here may apply only to certain subgroups.

References: **1.** *Tennessee Department of Health; Office of Health Statistics; Linked Birth and Death Statistical System* **2.** Reichman NE. Low birth weight and school readiness. *The Future of Children.* 2005; 15: 91-116. **3.** Russell R, et al. Cost of hospitalization for preterm and low birth weight infants in the United States. *Pediatrics.* 2007;120(1): e1-e9. **4.** Stephens BE, Vohr Br. Neurodevelopmental outcome of the premature infant. *Pediatric Clinics of North America.* 2009; 56: 631–646. **5.** Lemons J, et al. Very low birth weight outcomes of the National Institute of Child Health and Human Development Neonatal Research Network, January 1995 through December 1996. *Pediatrics.* 2001;107(1):E1. **6.** Goldenberg RL, Culhane JF. Low birth weight in the United States. *American Journal of Clinical Nutrition.* 2007; 85: 583S-90S. **7.** Bennett FC. Low birth weight infants: Accomplishments, risks and interventions. *Infants and Young Children.* 2002; 15: vi-ix. **8.** McCarton C, et al. Results at age 8 years of early intervention for low-birth-weight premature infants: The Infant Health and Development Program. *The Journal of the American Medical Association.* 1997; 277: 126-132. **9.** McCormick M, et al. Early intervention in low birth weight premature infants: Results at 18 years of age for the Infant Health and Development Program. *Pediatrics.* 2006; 117(3): 771-779.

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