



Estimated Costs of Prematurity in the United States

The costs of prematurity are considerable, and the March of Dimes has worked with multiple partners to estimate the magnitude of these costs in the United States.

Financial Impact of Preterm Birth

In 2006 the Institute of Medicine (IOM) published *Preterm Birth: Causes, Consequences, and Prevention*, a report partially funded by the March of Dimes. The report defines and addresses health-related and economic consequences of premature birth, and specifically outlines some of the associated major economic costs. The main findings of the IOM study include:

- In 2005, the annual societal economic cost (medical, educational, and lost productivity) associated with preterm birth in the US was at least \$26.2 billion, or \$51,600 per infant born preterm.
 - This includes \$16.9 billion (65%) for medical care services, \$1.9 billion (7%) for maternal delivery costs, \$611 million (2%) for early intervention services, 1.1 billion (4%) for special education services, and \$5.7 billion (22%) for lost household and labor market productivity.
- Average first year medical costs, including both inpatient and outpatient care, were about 10 times greater for preterm (\$32,325) than for term infants (\$3,325).
- The average length of an inpatient hospital stay for a preterm infant (13 days) was 9 times as long as the average length of stay for an infant born at term (1.5 days).

The Cost of Prematurity to Employers

A separate study of the costs of prematurity for large self-insured employers was initiated by the March of Dimes in 2008. Thomson Reuters conducted the study using data from 2005. Main findings include:

- Nearly ten percent of newborns covered by employer health plans are born prematurely. Direct health care costs to employers for a premature baby during the first year of life average \$46,004 – more than 10 times higher than \$3,859 for an uncomplicated full-term delivery.
- Health care utilization (inpatient hospital stays, outpatient visits, prescriptions filled) is also greater during the 12 months following birth for premature infants compared to uncomplicated newborns.
 - On average, premature babies covered by employer plans spend 14.2 days in the hospital during the 12 months following birth, compared to 2.3 days for uncomplicated full-term babies.
 - Premature babies make an average of 21.4 outpatient visits during the first year of life, compared to 13.9 visits to uncomplicated full-term babies.
- Combined infant and maternity medical costs for a premature infant averaged \$64,713, nearly four times as high as those for an uncomplicated full-term infant (\$15,047), and health plans paid over 90% of these costs (\$60,417 per premature infant).

The IOM and Thomson Medstat studies have different strengths, and are not directly comparable. The IOM study estimates medical, educational and lost productivity costs for the entire U.S., while the latter estimates costs specific to large self-insured U.S. employers. Despite their differences, they both show that the costs associated with prematurity are substantial, and with the U.S. preterm birth rate on the rise, these costs are likely to increase.

Sources:

Institute of Medicine. 2006. *Preterm Birth: Causes, Consequences, and Prevention*. National Academy Press, Washington, D.C. Published and unpublished analyses.
Employer research conducted by Thomson Reuters. 2008.
Prepared by the March of Dimes Perinatal Data Center, 2009.