Cost of Hospitalization for Preterm and Low Birth Weight Infants in the United States

In 2001:

- 8% of all infant stays nationwide included a diagnosis of preterm/low birth weight.
- Cost for these diagnoses totaled $5.8 billion
  - Represented 47% of the costs for all infant hospitalizations and 27% of all pediatric stays
- PT/LBW stays averaged $15,100 with a mean LOS= 12.9 days
  - Vice: $600 with 1.9 days for uncomplicated births
- Extremely premature infants (<28 weeks/BW <1000g) averaged $65,600
  - Very LBW (<1500g) averaged $52,300

Adjusted for inflation, in 2012 dollars the costs would be as follows:

- Uncomplicated birth: $912.07
- Preterm/Low birth weight: $22,953.76
- Extremely premature/Extremely LBW: $99,719.68
  - Very LBW: $79,502


The Cost of Prematurity to U.S. Employers
Analyses included cost of medical care for infants from birth through the first year of life and for mothers including delivery, prenatal service during the nine months prior and three months postpartum. The study was conducted on births in 2005 and adjusted for the article to 2007 dollars.

- All births: $21,328 ($25,208 in 2012 medical dollars)
- Uncomplicated: $15,047 ($17,785)
- Premature/LBW: $64,713 ($76,487)

Preterm Birth: Causes, Consequences, and Prevention

In 2005, the annual, societal economic cost (medical, educational and lost productivity) associated with preterm birth in the U.S. was

- At least $26.2 billion
- $51,600 per infant born preterm ($66,218 in 2012 medical dollars)

Of this total,

- Medical care services = $16.9 billion ($33,200 per infant)
- Maternal delivery costs = $1.9 billion ($3,800 per infant)
- Special education services = $1.1 billion ($1,200 per infant)
  - Associated with higher prevalence of four major disabling conditions among preterm infants
    - Cerebral palsy
    - Intellectual disability
    - Vision impairment
    - Hearing loss
- Lost household labor and labor market productivity = $5.7 billion ($11,200 per infant)

Average annual total medical care costs by gestational age during the birth year (first year of life), U.S., 2005

- <28 weeks: $190,467 ($244,427 in 2012 medical dollars)
- 28-31 weeks: $94,785 ($121,638)
- 32-36 weeks: $13,621 ($17,480)

Cases and Prevalence of Developmental Disabilities by Gestational Age Among Survivors to Age 3 Years, Table 12-8. Focusing on extremely premature births:

- Birth at 20-23 weeks
  - Cerebral palsy: 49.9%
  - Mental retardation: 76.0%
  - Hearing loss: 14.3%
  - Vision impairment: 11.9%
- Birth at 24-28 weeks
  - Cerebral palsy: 49.9%
  - Mental retardation: 60.9%
  - Hearing loss: 6.3%
  - Vision impairment: 16.1%

Estimates of Per-Person Lifetime Incremental Direct Medical Costs by Developmental Disability (costs are in year 2000 dollars and assume a 3% discount rate) Table 12-9

- Mental retardation: $123,205 ($195,901 in 2012 medical dollars)
- Cerebral palsy: $83,169 ($132,242)
- Hearing loss: $23,209 ($36,903)
- Vision impairment: $32,058 ($50,974)

Additional cost per child to the annual cost of schooling for children ages 6 through 15 years born with LBW (<2500 grams)

- $1,240 per annum ($1,972 in 2012 medical dollars)
Preterm Birth and Low Birth Weight

Low birth weight places infants at risk:
- 6 times longer initial hospital stays
- 25 times the initial hospital costs
- ≥ 15% neurological impairments
- 20% of LBW children have scores below the average IQ range
- ≥ 40% developmental problems


The Direct Cost of Low Birth Weight

Low birth weight children:
- Ages 6-15 who were born LBW were almost 50% more likely to be enrolled in a special education program than children who were born at a normal weight.
- About 31% of LBW children will repeat a grade by grade 10 compared with about 26% of normal birth weight children.