

Investment in research saves lives and money



facts about:

Prematurity

"If you think research is expensive, try disease."

— Mary Lasker 1901–1994

Today:

- Each year, more than half a million babies are born premature (gestation period of less than 37 weeks) in the U.S. That's one in every eight births.*
- Of the nearly 30,000 babies who die each year before their first birthday, 68% are born preterm.*
- Preterm infants (less than 37 weeks) are 15 times as likely to die as full-term babies during the first year of life, and very premature infants (less than 32 weeks) are 73 times as likely to die during this same period.*
- Preterm infants are at significantly higher risk for cognitive deficiencies, cerebral palsy, respiratory problems, vision and hearing loss, and feeding and digestive problems.**

*SOURCE: CENTERS FOR DISEASE CONTROL AND PREVENTION (WWW.CDC.GOV)

**SOURCE: MARCH OF DIMES (WWW.MARCHOFDIMES.COM)

The Cost:

- In 2005, preterm births in the United States cost more than \$26 billion for medical care, delivery, early intervention services, special education and lost productivity.*
- First-year average medical costs totaled more than \$32,000 for preterm infants compared to about \$3,300 for term infants in 2005.**
- The cost of saving a life of a very low weight (less than 3 lbs., 5 oz.) preterm newborn is nearly \$550,000.***

*SOURCE: INSTITUTE OF MEDICINE (WWW.IOM.EDU)

**SOURCE: MARCH OF DIMES (WWW.MARCHOFDIMES.COM)

***SOURCE: ALMOND D, ET AL. QUARTERLY JOURNAL OF ECONOMICS. 2010. 125: 591-634.

SAVING LIVES
SAVING MONEY

HOW RESEARCH SAVES LIVES:

- Medical research has played a significant role in decreasing infant death rates fourfold since 1950.*
- The use of steroids to improve fetal lung development has been successful in reducing potentially fatal infant respiratory distress syndrome in premature babies.**
- Research funded by the National Institutes of Health found that the hormone hydroxyprogesterone reduces the risk of preterm birth by up to 42% in high-risk women.***

*SOURCE: DEPARTMENT OF HEALTH AND HUMAN SERVICES (WWW.HHS.GOV)

**SOURCE: WEBMD (WWW.WEBMD.COM)

***SOURCE: MEIS PJ, ET. AL. NEW ENGLAND JOURNAL OF MEDICINE. 2003. 348: 2379-2385

HOW RESEARCH SAVES MONEY:

- By preventing preterm births, hydroxyprogesterone is estimated to save more than \$450 million in medical costs each year and may save more than \$2 billion over the lifetimes of those babies who would have otherwise been born premature by preventing major health problems associated with prematurity.*
- NIH-funded research has developed noninvasive respiratory assistance procedures, like Continuous Positive Airway Pressure (CPAP) for use in preterm infants with respiratory distress. CPAP is less expensive and easier to operate than mechanical ventilation, can shorten length of hospital stays, requires less intensive care, and can save \$10,000 for every six infants treated.**

*SOURCE: AGENCY FOR HEALTHCARE RESEARCH AND QUALITY (WWW.AHRQ.GOV)

**SOURCE: BUCKMASTER AG, ET. AL. PEDIATRICS. 2007. 120: 509-518.

survivor:

NAME: LAUREN FLEMING

AGE: 7

CONDITION: BORN 3 MONTHS EARLY



Lauren Fleming was born in 2004 at just 26 weeks, weighing 2 pounds, 1 ounce, and doctors prepared her parents for the worst. During her 5-month stay in newborn intensive care, Lauren was treated for respiratory distress and underwent multiple surgeries related to a damaged vocal cord and a heart defect. Today, in many ways, she acts like a typical 7-year old, but because of her premature birth Lauren has asthma and ongoing gastrointestinal and receptive language issues. The cost of Lauren's medical care is nearly \$1 million and counting. Doctors prepared the Flemings for the worst, Densel says, but "Lauren did everything doctors said she wouldn't be able to do — like cry and breathe on her own. I knew she was saying to me, if I'm willing to fight, then, Daddy, you better be man enough to fight as well." Today, Lauren is a warm and loving 7-year old who makes friends easily and loves to dance, draw, create storybooks and read.

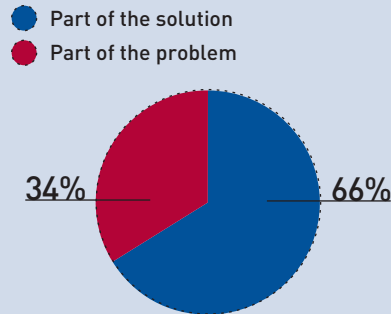
The Flemings are grateful for the March of Dimes research and treatment that helped Lauren beat the odds and helped their other two children, Erin and Corbin, be born healthy.

As the 2011 March of Dimes National Ambassador, Lauren and her family traveled the country, sharing her inspiring story to help raise awareness of premature birth and encourage families and companies to walk with them in March for Babies.®

facts about: } Prematurity

Research is Part of the Solution to Rising Health Care Costs

When it comes to rising health care costs, would you say research to improve health is a part of the problem or part of the solution?



SOURCE: NATIONAL PUBLIC OPINION POLL, 2011
CHARLTON RESEARCH COMPANY FOR RESEARCH!AMERICA

Hope for the Future:

- Research by the NIH and Wayne State University has found that a progesterone gel can reduce the risk for preterm birth for women with a short cervix.*
- Research has indicated that thyroid dysfunction during pregnancy puts mothers at risk for preterm pregnancy. Proper treatment of thyroid conditions may significantly reduce the risk of a premature birth.**

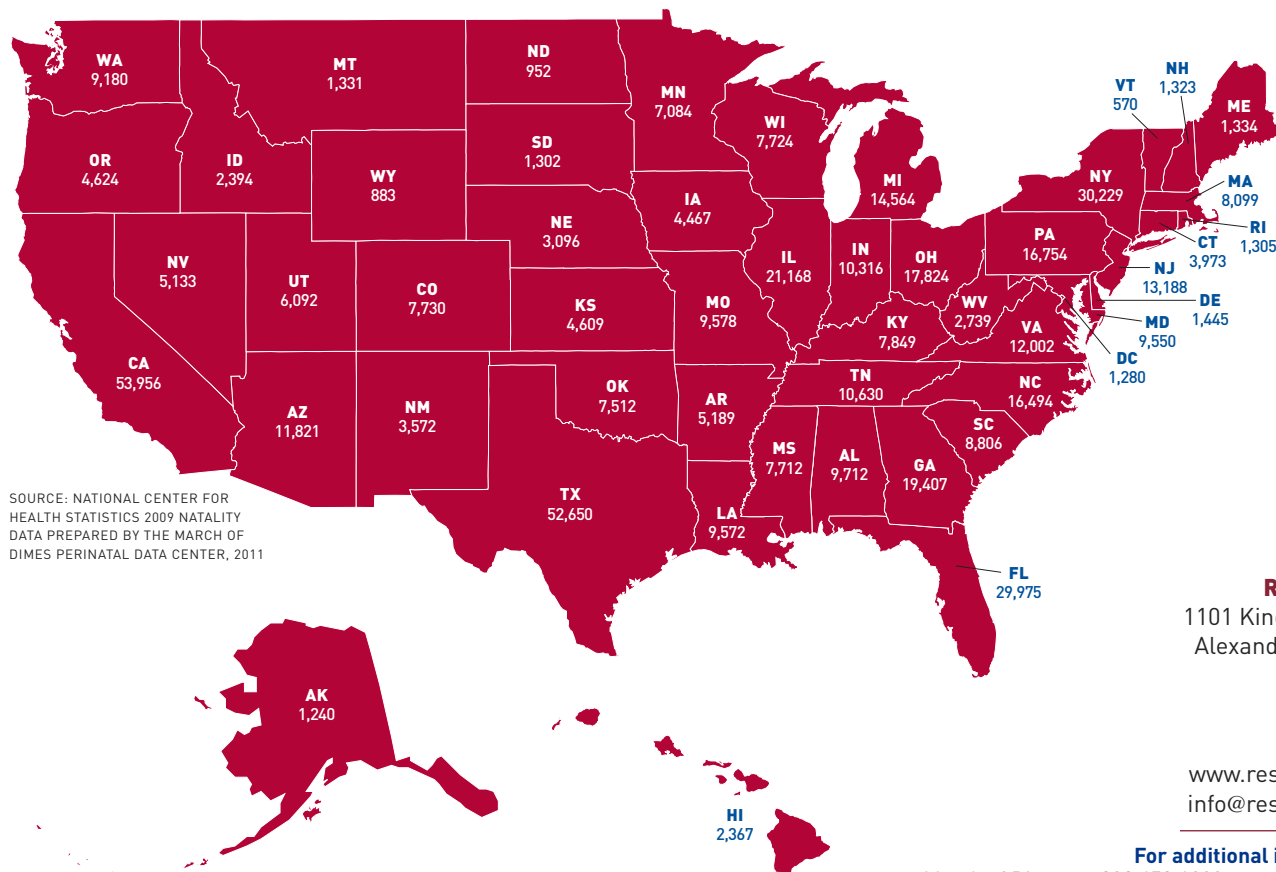
*SOURCE: HASSAN SS, ET. AL. ULTRASOUND IN OBSTETRICS & GYNECOLOGY. 2011. 38: 18-31.

**SOURCE: NATIONAL INSTITUTES OF HEALTH (WWW.NIH.GOV)

The Bottom Line:

Medical research has identified effective strategies for the prevention of preterm births and the treatment of premature babies. These advances have made a remarkable difference, saving lives and preventing serious disabilities. However, the high incidence of preterm births and resulting complications remain a major health concern in the U.S. The complex nature of preterm birth requires additional research on the biological and psychosocial causes of, and treatments for, prematurity to address this serious medical problem.

Number of Premature Births 2009



SOURCE: NATIONAL CENTER FOR HEALTH STATISTICS 2009 NATALITY DATA PREPARED BY THE MARCH OF DIMES PERINATAL DATA CENTER, 2011

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