

Investment in research saves lives and money



facts about:

Prematurity

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

— Mary Lasker 1901–1994

Today:

- One in eight babies is born prematurely in the U.S.
- The rate of prematurity has increased more than 30% since 1981, due in part to the rising number of multiple births.
- Prematurity is the greatest risk factor for infant mortality. In 2002, 65% of infants who died before age one were born prematurely.
- Black women are nearly twice as likely to have their babies prematurely compared to white women.
- Half of all premature births have no known cause.

SOURCE: CENTERS FOR DISEASE CONTROL AND PREVENTION (WWW.CDC.GOV)
MARCH OF DIMES (WWW.MARCHOFDIMES.COM)

The Cost:

- Hospital charges for premature infants total \$18.1 billion a year in the U.S.
- The average cost of initial hospital care for babies born 13 weeks early is \$202,700 compared to \$1,100 for babies born at full term.*

SOURCE: MARCH OF DIMES
*GILBERT, W.M. ET AL. OBSTETRICS AND GYNECOLOGY 2003; 102: 488-92.

SAVING LIVES
SAVING MONEY

HOW RESEARCH SAVES LIVES:

- Research funded by the National Institutes of Health has shown that weekly treatments with the hormone progesterone significantly decrease premature births among women at high risk for delivering early.*
- Premature babies with respiratory distress syndrome lack a substance called surfactant in their lungs. After this discovery and the development of artificial surfactant, deaths of newborns from respiratory distress syndrome in the U.S. decreased from more than 10,000 a year in the 1950s to less than 1,000 in 2002.**

SOURCE: *MEIS, P.J. ET AL. NEW ENGLAND JOURNAL OF MEDICINE 2003; 348: 2379-85.
**FEDERATION OF AMERICAN SOCIETIES FOR EXPERIMENTAL BIOLOGY. BUBBLES, BABIES, AND BIOLOGY: THE STORY OF SURFACTANT 2004.

HOW RESEARCH SAVES MONEY:

- Preventing premature births could save U.S. employers and other private insurers \$7.9 billion a year in hospital bills.
- Premature infants are at greater risk for developmental disabilities. The U.S. could save average lifetime costs for each case prevented or treated of \$1,014,000 for mental retardation, \$921,000 for cerebral palsy, \$417,000 for hearing loss and \$566,000 for vision impairment.*

SOURCE: MARCH OF DIMES
*HONEYCUTT, A. ET AL. MORBIDITY AND MORTALITY WEEKLY REPORT 2004, 53(3): 57-59.

survivor

NAME: EMMA HENDERSON
AGE: 10
CONDITION: BORN 3 MONTHS EARLY



Susan Henderson of Oklahoma City, Oklahoma never thought she would go into labor six months into her pregnancy. As a volunteer for the March of Dimes, she took preventive measures to ensure a healthy pregnancy, including prenatal vitamins and folic acid. But for Susan, like 50% of women who deliver prematurely, the reason her daughter, Emma, was born three months early is unknown.

Emma was given a one in ten chance of survival, but beat the odds thanks to research and the specialized care she received. By age one, Emma had endured five neurosurgeries, including one to implant a shunt that drains fluid from her brain into her abdomen. Emma's doctors used a new technique that avoids the need for painful procedures to extend the shunt. Among other therapies, Emma was given a substance called surfactant for respiratory distress syndrome and a drug to treat a heart disorder that at one time could only be repaired surgically.

Despite challenges from mild cerebral palsy, Emma is an active ten year old and served as the 2003 National Ambassador for the March of Dimes. Susan says, "Emma knows how lucky she is, but she also realizes she can't do everything. I would like to see research improve quality of life for children born prematurely." Susan also expects that researchers will "get a better handle on the causes of prematurity so that we can educate people and find ways to prevent premature birth."

facts about: } Prematurity

Hope for the Future:

- Researchers have identified some key factors in the development of cerebral palsy and learning problems in children born prematurely. This knowledge may lead to new ways to prevent brain damage.*
- Research has revealed that some maternal infections can increase the risk of premature birth. Since traditional antibiotics have proven ineffective, researchers are working on new ways to detect and treat these infections.

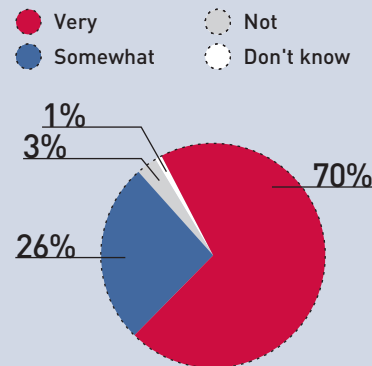
SOURCE: * BACK, S.A. ET AL. NATURE MEDICINE 2005; 11: 966-72.
NATIONAL INSTITUTES OF HEALTH (WWW.NIH.GOV)

The Bottom Line:

The rate of prematurity continues to rise, while the cause for half of these premature births remains unknown. More research on the underlying causes and prevention of premature birth is needed to stop the startling trend that is putting more babies at risk for a lifetime of medical problems.

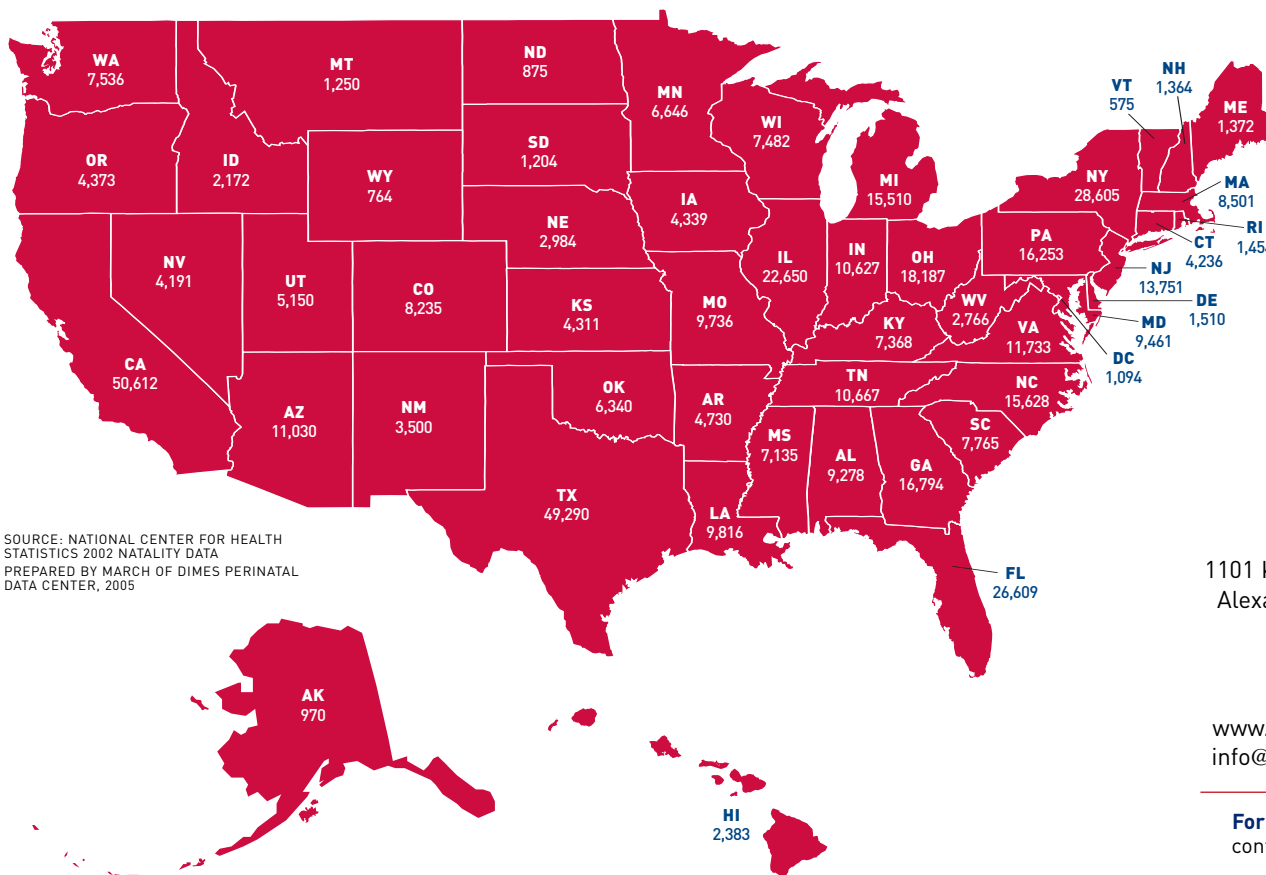
Investment in Research Important to Scientific Base for Health Care

How important do you think it is that we invest in more research to assure that there is a solid scientific base for health care?



SOURCE: NATIONAL SURVEY, 2005 CHARLTON RESEARCH COMPANY FOR RESEARCH!AMERICA

Number of Premature Births 2002



SOURCE: NATIONAL CENTER FOR HEALTH STATISTICS 2002 NATALITY DATA
PREPARED BY MARCH OF DIMES PERINATAL DATA CENTER, 2005

Research!America

1101 King Street, Suite 520
Alexandria, Virginia 22314
703.739.2577
1.800.366.CURE
Fax 703.739.2372
www.researchamerica.org
info@researchamerica.org

For additional information,
contact the March of Dimes
at 202-659-1800;
www.marchofdimes.com.