

Celebrating 75 Years of  
Research  
Education  
Vaccines  
& Breakthroughs



Did you know you are a March of Dimes baby?  
Improving the health of all babies has  
been our business for 75 years.

## 1930s

### January 1938

President Franklin Delano Roosevelt establishes **National Foundation for Infantile Paralysis** - a unique partnership of scientists and volunteers - to conquer polio.

Eddie Cantor creates the **first grassroots fund-raiser** for the National Foundation, asking the public to send dimes to President Roosevelt at the White House. The effort was called the March of Dimes, which later became part of the official name of the foundation.

March of Dimes first research grant goes to Yale University.

### 1939

March of Dimes first chapter is established in Coshocton, Ohio.

## 1940s

### 1941

March of Dimes provides **first iron lung to assist polio victims**.

### 1949

March of Dimes selects **Dr. Jonas Salk to lead research on classifying polio viruses**.

## 1950s

### 1950

First **Mothers March** launches in Phoenix, Arizona to raise emergency funding during a serious polio outbreak.

### 1952

Virginia Apgar, M.D., develops the **Apgar Score**, a clinical system for evaluating an infant's physical condition at birth. By the end of the decade, it becomes the standard practice in obstetrical care throughout the world, and remains so today. Dr. Apgar worked from 1959 until her death in 1974 for March of Dimes.

## 1953

James Watson and Francis Crick announce the **discovery of the double-helical structure of DNA**, a monumental breakthrough in molecular genetics. Watson's research in this study was funded by March of Dimes. Watson and Crick's breakthrough about DNA double helix opened up the entire field of molecular genetics. It led to deeper understanding about information transfer in living materials as well as how to treat and prevent genetic diseases.

Dr. Salk confirms the feasibility of a **killed-virus vaccine for polio**.

## 1960s

### 1960

March of Dimes establishes **The Salk Institute for Biological Studies** in La Jolla, Calif.

### 1961

Earlier March of Dimes work pays off in the **development of the PKU test**. This allows some forms of mental retardation to be prevented.

### 1962

**Oral polio vaccine**, developed by Dr. Albert Sabin with funding from the March of Dimes is licensed.

### 1968

March of Dimes funds the **first successful bone marrow transplant to correct a birth defect**.

## 1970s

### 1970

**First WalkAmerica** events take place in San Antonio, Texas and Columbus, Ohio.

### 1973

March of Dimes **researchers discover that alcohol consumption during pregnancy causes birth defects**.

March of Dimes funds **first in utero treatment for a birth defect**.

### 1976

March of Dimes creates **a regional system of newborn intensive care units** to save sick babies.

### 1978

March of Dimes funds **first prenatal diagnosis of sickle cell anemia**.

## 1980s

### 1981

March of Dimes funds **first successful surgery to correct a urinary blockage in an unborn baby**.

## 1982

March of Dimes launches *Babies & You* to bring **prenatal education to the workplace**.

## 1984

March of Dimes funds development of a newborn screening test for biotinidase deficiency, which can cause mental retardation and death unless treated promptly.

## 1985

March of Dimes funds research leading to the use of surfactant to treat respiratory distress syndrome (RDS).

## 1990s

### 1991

March of Dimes funds **research showing that delivering babies with spina bifida by cesarean section may save them from paralysis**.

March of Dimes **grantees identify genes responsible for Marfan syndrome**—an inherited disorder of connective tissue, and fragile X syndrome—the most common known familial cause of mental retardation.

### 1992

March of Dimes **grantee locates a gene connected with 70 to 80 percent of cases of acute leukemia in infants**.

### 1993

March of Dimes **grantees clone gene responsible for X-linked adrenoleukodystrophy** — a rare and often fatal hereditary disease characterized by adrenal failure and paralysis.

### 1994

March of Dimes launches **nationwide campaign urging women to take the B vitamin folic acid** to help prevent neural tube birth defects.

### 1995

March of Dimes **grantees share Nobel Prize for research on fruit flies** that identified master genes that control the early structural development of the body.

March of Dimes funds **research showing that treating certain infections with antibiotics reduces the risk of preterm delivery**.

### 1996

March of Dimes-supported research on nitric oxide leads to a **new treatment to save premature babies from persistent pulmonary hypertension, a deadly lung disorder**.

March of Dimes volunteers help secure passage of the **Mothers' and Newborns' Health Protection Act**, guaranteeing a minimum hospital stay of 48 hours following delivery.

With March of Dimes support, the **FDA approves fortification of grain products with folic acid**.

## 1997

March of Dimes **grantee successfully uses deactivated HIV viruses as delivery systems for healthy genes in gene therapy.**

March of Dimes **grantee finds that gene abnormalities in the development of certain enzymes involved in folic acid metabolism may contribute to susceptibility to neural tube defects.**

March of Dimes **grantee identifies a gene for Alagille syndrome**, a rare inherited disorder that causes abnormalities in different parts of the body.

March of Dimes volunteers help secure **passage of the State Children's Health Insurance Program**, to provide health care coverage for up to 5 million children.

## 1998

March of Dimes volunteers help secure **passage of the Birth Defects Prevention Act**, establishing a nationwide network of birth defects monitoring and research programs.

March of Dimes research leads to one of the **first successful surgeries to treat spina bifida before birth.**

## 1999

March of Dimes **grantees successfully use gene therapy to treat hemophilia and retinitis pigmentosa** in the lab.

## 2000s

### 2000

March of Dimes volunteers develop key provisions and work to enact **The Children's Health Act of 2000**. The law creates a National Center on Birth Defects and Developmental Disabilities at the Centers for Disease Control and Prevention, and helps states to expand newborn screening.

### 2001

March of Dimes launches a partnership with the Dutch-based de Waal Foundation to provide prenatal care and birth defects prevention information to women in Ecuador, Honduras and Nicaragua.

### 2002

March of Dimes **grantees win the Nobel Prize in Medicine or Physiology** for their discoveries on genetic regulation of organ development and programmed cell death (apoptosis).

**March of Dimes promotion of folic acid fortification and awareness contributes to a 21% decline in the occurrence of neural tube birth defects between 1995 - 2000.**

### 2003

March of Dimes launches five-year, \$75 million **campaign to prevent premature birth and raise awareness of its serious consequences.**

March of Dimes designates November as **Prematurity Awareness Month** as a strategy to raise awareness about the problem of prematurity.

## 2004

A **Prematurity Research Initiative** (PRI) augments the general research grant program of the Foundation, focusing on genetics and gene-environment interactions relating to the causes and mechanisms of prematurity. PRI discoveries have included a determining a gene variant related to increased risk of premature rupture of fetal membranes (2006), the relationship between prematurity and cholesterol metabolism (2007), and finding an important pathway to preeclampsia (2008) among other significant research findings.

March of Dimes President Dr. Jennifer Howse testifies before a Senate subcommittee in support of the **Premature Research Expansion and Education Act for Mothers (PREEMIE) Act** to expand research, education, and services to fight premature birth.

## 2005

March of Dimes establishes **Share Your Story** website, an online community for NICU families.

March of Dimes convenes a **symposium of prematurity experts** and others to chart new research strategies to combat prematurity, including championing the concept of a shared databank to support research targeting the factors that cause prematurity.

March of Dimes launches **NICU Family Support** in three pilot projects in 2002. Implemented by March of Dimes chapters, over 20 hospitals offer this service by 2005, and it expands to hospitals in all 50 states in 2007. By 2010, the program is available in 105 hospitals nationwide.

## 2006

March of Dimes launches the Prematurity Prevention Initiative in Kentucky known as **"Healthy Babies Are Worth the Wait,"** in collaboration with the Johnson & Johnson Pediatric Institute and the Department of Public Health of Kentucky. The purpose of the three-year partnership is to prevent preterm birth and reduce the preterm birth rate in the state.

March of Dimes advocacy leads to **passage of the PREEMIE Act** to bring together experts from the private and public sectors to speed development of prevention strategies for preterm labor and delivery.

## 2008

March of Dimes **extends the Prematurity Campaign to 2020**, to extend the campaign globally, and to take a more outspoken public stance on the problem of prematurity.

One important provision of the PREEMIE Act authorizes a **Surgeon General's Conference on Prevention of Preterm Birth** to develop a national agenda for action to accelerate prevention strategies for preterm birth.

The Foundation issues the first of three annual national and state-by-state **Premature Birth Report Cards** in conjunction with Prematurity Awareness Month to grade individual states on the incidence of prematurity in each state.

Congress passes the **Newborn Screening Saves Lives Act** which establishes national guidelines on what conditions should be tested in newborn screening programs. Nearly 90% of all babies born in the U.S., more than double the percentage in 2005, live in states that require screening for at least 21 of 29 life-threatening but treatable disorders defined as essential by the March of Dimes and the American Academy of Pediatrics in 2004.

## 2009

March of Dimes holds a **Symposium for Quality Improvement to Prevent Prematurity** as an outcome of the Surgeon General's Conference on Prematurity to focus on critical interventions to prevent preterm birth.

March of Dimes releases its White Paper, **The Global and Regional Toll of Preterm Birth**, describing the first global estimates of preterm birth. The report was done in collaboration with the World Health Organization and announced at the 4th International Conference on Birth Defects and Disabilities in the Developing World held in New Delhi, India.

## 2010

**Data from 2007 and 2008 shows a reduction in the rate of premature births by 4%.** This is the first two-year decline in history for this problem which has increased by 30% since 1981.

## 2012

A report containing the **first-ever estimates of preterm birth rates by country**, is published by The March of Dimes Foundation, The Partnership for Maternal, Newborn & Child Health, Save the Children, and The World Health Organization, and represents almost 50 United Nations agencies, universities, and organizations. **Born Too Soon** finds that 15 million babies worldwide are born preterm each year, and more than one million die due to preterm complications. Of these babies, the report notes, three-quarters could be saved if current cost effective interventions were made available to all.

# Want to Know More?

