



Mission and Advocacy Newsletter

Issue 14

Third Quarter 2006

INSIDE THIS ISSUE:

NICU Family Support	2
What is a Mission Family?	2
MOD Researchers in the News	2
Officials Call for Passage of Preemie Bill	3
MOD Advocates for FDA Approval	3
What's New at the March of Dimes?	3

Preconceptional Health

It's important to recognize that not all babies are born healthy. In 2002, Michigan lost 192 babies due to premature birth and 189 babies died from birth defects. It is also important to recognize that some of these problems can be prevented. By taking precautions before a woman becomes pregnant, and throughout her pregnancy, she can reduce the risks of birth defects, prematurity and low birthweight.

Since approximately 50% of pregnancies are unplanned, there is an urgent need to incorporate prevention messages that foster healthy preconceptional behaviors into every aspect of health care for women in their reproductive years.

As mentioned, there are steps a

woman can take to achieve good preconceptional health;

- Consuming 400 mcg of folic acid daily (as in a multivitamin)
- Knowing one's family history
- Receive a check-up from your healthcare provider prior to conceiving
- Seek genetic counseling if appropriate
- Manage chronic maternal illnesses such as diabetes, hypertension, lupus, PKU or seizure disorders
- Healthy diet and exercise choices
- Updated immunizations

- Ensure prescriptions and herbal supplements are safe during conception and pregnancy
- Protection from domestic violence
- Avoiding consumption of alcohol, nicotine and recreational drugs
- Avoid exposure to infection
- Avoiding harmful occupational and environmental exposures.

For more information regarding preconception health and birth defects, contact the Michigan Department of Community Health at 866-852-1247 or BDRFollowup@michigan.gov.

Prematurity Facts:

- The Institute of Medicine estimates the national cost of premature birth in 2005 exceeded \$26 billion.
- A study published in the *Journal of the American Medical Association* found that children born prematurely were at greater risk for lower cognitive test scores and behavioral problems when compared to full-term children.

Former March of Dimes Grantees in the News

Studies published in August in *The New England Journal of Medicine* from how large clinical trials offer new insight into the use of nitric oxide. Nitric Oxide is a chemical that is naturally produced in the body, can be effective in treating certain breathing disorders, and preventing some of their worst consequences, in premature babies. In addition, an editorial in the issue reviews the recent history of nitric oxide research. The former March of Dimes research

grantees and research advisors involved were:

-John P. Kinsella, M.D., of the Pediatric Heart Lung Center of the University of Colorado School of Medicine and Children's Hospital in Denver. Dr. Kinsella received MOD funding from 1993-1996.

-Stephen Abman, M.D., also of the Pediatric Heart Lung Center of the University of Colorado School of Medicine and Children's Hospital in

Denver. Dr. Abman received MOD funding between 1989-1994 and 2000-2003.

-Roberta A. Ballard, M.D., of Children's Hospital of Philadelphia. Dr. Ballard received Mod funding between 1987-1991.

-Ann R. Stark, M.D., of Baylor College of Medicine and Texas Children's Hospital in Houston. Dr. Stark is a recent MOD research advisor.

March of Dimes NICU Family Support

The Michigan NICU Family Support pilot project is gaining momentum! Amy Nyberg, MOD NICU Family Support Specialist, is working with her committee at DeVos Children's Hospital in Grand Rapids to provide support services for the families with babies in the NICU.

Recently, the committee conducted a "Sibling Hour". Babies with siblings admitted to the NICU gather twice a month for an hour session specifically focused on them. The goal of these meetings is to make the siblings feel special and a part of the families' experience in the NICU.

The most recent Sibling Night involved medical play. An isolette and a preemie doll were brought to the sibling hour to make the children more comfortable with their surroundings. The siblings got a chance to experience, much like

their parents and nurses, changing their sibling's diaper through the isolette portholes. The dolls are hand-crafted by a former NICU Mom to a realistic size and weight due to different gestational ages.

The feedback from the medical play exercise was wonderful. "These kids were so proud of themselves...", said Amy Nyberg. A parent in the NICU noted, "It made me feel like people do care about what you and your family

are going through."



The next sibling hour will showcase craft activities for the children. The siblings will be decorating a picture frame to hold family pictures, or perhaps their picture to stay with their sibling in the NICU.

For more information on the NICU Family Support project, visit www.marchofdimes.com or call Amy Nyberg at (616) 391-5039.

What is a March of Dimes Mission Family?

Just as the March of Dimes mobilized a grassroots army to fight polio, another grassroots mobilization has begun through the Prematurity Campaign. Mission Family volunteers are unique as they have been touched personally by our

"These volunteers bring first-hand, highly emotional experiences with prematurity, birth defects and infant death..."

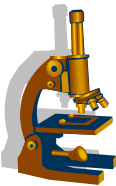
mission. These volunteers bring first-hand, highly emotional experiences with prematurity, birth defects and infant death therefore feel and instant kinship with the March of Dimes. Mission Families can be, but are not lim-

ited to, WalkAmerica Family Teams, Ambassador Families and folks that volunteer their time due to a personal and emotional story.

If you are interested in becoming a March of Dimes Mission Family or know of someone who may be, please contact Kara Brennan at (248) 359-1577.

March of Dimes Researchers in the News

New research is uncovering genetic links that may help explain some of the mystifying premature births among women who start pregnancy with no known risk factors. Working separately, Dr. Jerome F. Strauss III, Dean of the Virginia Commonwealth University's School of Medicine, and Dr. Xiaobin Wang, at Children's Memorial Hospital in Chicago, found two different inherited traits that can help predict the risk of premature birth. The March of Dimes supported both researchers' work through the Prematurity Research Grants, which total more than \$4 million.



While there are several factors that can help predict the risk of preterm birth, there is no known cause for half the cases, leading researchers to focus on inherited genetic markers. Dr. Strauss found that African American babies are three times more likely than babies of European descent to have genetic variation of the SERPIN1 gene that caused it to produce a reduced amount of the protein, collagen, which may lead to weakened fetal membranes. Because the membranes are weakened, there is an increased chance of premature rupture of the membranes and premature birth. Dr. Wang's research found that a genetic

variant of the Prolyclorboxypeptidase gene had a significant association with preeclampsia, characterized by high blood pressure and high levels of protein in the urine. The only known cure for preeclampsia is delivery of the baby, often prematurely. Women who have the gene variant, and had chronic hypertension before becoming pregnant, had the greatest risk of developing preeclampsia. "This genetic association could be a highly sensitive and specific early predictor of preeclampsia among women with chronic high blood pressure even before pregnancy," said Dr. Wang.

Officials Call for Passage of Federal Preemie Bill

The March of Dimes has called for passage of proposed federal legislation to address the nation's skyrocketing rate of premature birth. The severe health consequences and extraordinary medical costs associated with prematurity are documented in a new report, "Preterm Birth Causes, Consequences, and Prevention," released July 13, 2006 from the Institute of Medicine (IOM).

Dr. Jennifer L. Howse, President of March of Dimes, says the Foundation supports three major IOM recommendations contained in the report, which are 1) establish multidisciplinary research centers; 2) set priorities for research; and 3) study and inform public policy on preterm birth.

The March of Dimes agrees that prenatal care is vital to identifying risks associated with preterm birth, and supports the IOM suggestion that routine ultrasound be performed early in pregnancy

to accurately establish gestational age in order to improve obstetric care and avoid inadvertent early deliveries.

The IOM report estimates preterm birth cost the United States more than

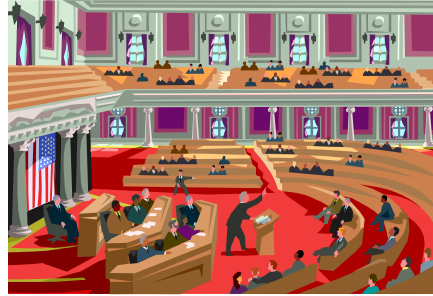
\$26.2 billion in 2005 in terms of medical care, lost household and labor market productivity, and

early intervention and education services. An earlier, separate study by the March of Dimes estimated that the first-year in-patient hospital charges alone were \$18.1 billion in 2003.

While the two estimates were derived using different methods and are not directly comparable, they both convey the significant economic burden of preterm birth in the United States.

The IOM report reiterates the urgency of the enactment of the PREMIE Act (H. R. 2861/S. 707). This legislation calls for the development of a comprehensive national research plan that will focus attention on identifying the underlying causes of prematurity and how to prevent it. The bill also would increase funding to support education of parents and health professionals. Please call your U.S.

Representative and ask for their support of the PREMIE Act. For more information call Kara Brennan at (248) 359-1577.



March of Dimes Advocates for Prompt FDA Approval

The March of Dimes urged the Food and Drug Administration officials to promptly approve a commercial progesterone therapy, "Gestiva", that appears to prevent some premature births. Dr. Nancy Green, March of Dimes medical director said, "studies of progesterone injections offer promise that the risk of recurrent preterm births will be reduced in a select group of women who already had a baby born too soon."

Progesterone is given as weekly injections during the second half of pregnancy. FDA approval is needed before

the drug can be widely available in pharmacies and covered by Medicaid. Obstetricians who treat women with a high risk pregnancy, such as those with a history of spontaneous preterm birth, often offer progesterone treatments.

A large study found that for women who had a previous premature baby 17-P (alpha-hydroxyprogesterone) reduced the preterm birth rate by 33% compared to a control group. The March of Dimes estimated that if all women eligible for the progesterone therapy had received it, nearly 10,000 premature births might have been pre-

vented in 2003.

While there is no evidence that 17-P has an adverse effect on infants, the March of Dimes remains cautious about its use and is concerned that women without a previous premature baby are receiving injections. Dr. Green asked the FDA to monitor the drug for possible adverse effects on infants and direct that "Gestiva" should only be used by women with a history of spontaneous premature birth.

What's new at the March of Dimes?

The March of Dimes National Education & Health Promotion Department announced new and revised material available for purchase. The following materials can be ordered by calling the March of Dimes fulfillment center at 800.367.6630.

Consumer Education Products:

Conozca March of Dimes (#09-2034-06): This revised brochure explains the mission of the March of Dimes and how it's shared via the Preg-

nancy & Newborn Health Education center at nacersano.org.

Vaccinations (#09-1989-05): These revised brochures explain the importance of immunizing children.

Professional Education Products:

Breastfeeding the Infant with Special Needs, 2nd Edition (#33-1994-05): Revised nursing module providing evidence-based practice guidelines to promote successful

breastfeeding for infants with special needs. It includes the needs of children that were born preterm, infants with cleft lip and palate, congenital heart disease, Down Syndrome and hypotonia.

The Premature Infant: Nursing Assessment and Management, 2nd Edition (#33-1995-05): A revised nursing module that focuses on the most common physiologic problems seen in premature infants after birth.





March
of Dimes[®]
Saving babies, together[®]

The mission of the March of Dimes is to improve the health of babies by preventing birth defects, premature birth and infant mortality.

“Every day holds the possibility of a miracle.”

-Elizabeth David

Michigan Prematurity Campaign Sponsor:



Blue Cross
Blue Shield
Blue Care Network
of Michigan

Nonprofit corporations and independent licensees
of the Blue Cross and Blue Shield Association

We're on the web!
www.marchofdimes.com/michigan