

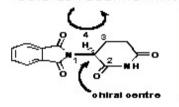
here are two ways to live your life.
One is as though nothing is a miracle.
The other is as though everything is a miracle.

Albert Einstein (1879-1955)

## Contergan (Thalidomide)

#### Thalidomide story ...

Marketed in early 60s to curing morning sickness in pregnant women
-sold as racemic mixture



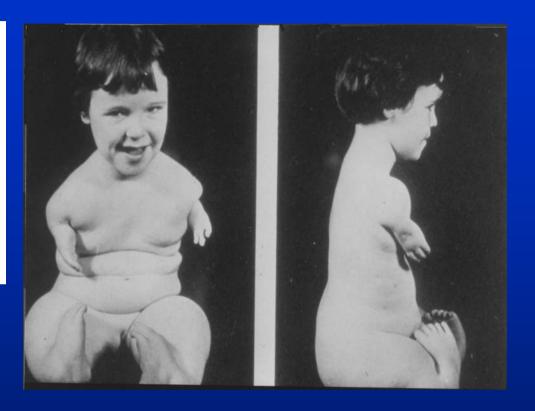
 $0 = \underbrace{\begin{array}{c} 3 & 4 & 0 \\ H & N & 2 \\ 0 & 0 & 0 \end{array}}_{H}$ 

- (S)-isomer
  - teratogen
  - causes birth defects
- (R)-isomer
  - sedative
  - cures moming sickness



Widukind Lenz

1919-1995









## Birth Defects are Mysterious

- Women of all ages, races and income levels have babies with birth defects
- Causes of most birth defects are unknown
- Very few causal factors have been well studied







#### Birth Defects can be Deadly

- Birth defects are the leading cause of infant mortality
- 1 in 4 babies who die has a birth defect







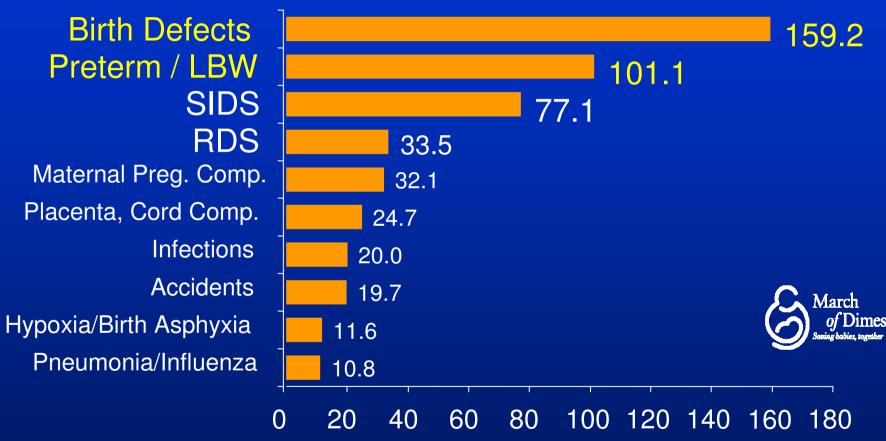
#### Birth Defects are Costly

- Birth defects are a major cause of disability
- Combined lifetime medical costs for a child with a birth defect: >\$500,000





#### Ten Leading Causes of Infant Mortality United States, per 100,000 live births, 1997



Source: National Center for Health Statistics, 1997 final mortality data Prepared by March of Dimes Perinatal Data Center, 1999





# U.S. infant survival lags, report finds

By LINDSEY TANNER
Associated Press

Chicago — America may be the world's superpower, but its survival rate for newborn babies ranks near the bottom among modern nations, better only than Latvia.

Among 33 industrialized nations, the United States is tied with Hungary, Malta, Poland and Slovakia with a death rate of nearly 5 per 1,000 babies, according to a new report. Latvia's rate is 6 per 1,000.

a country that prides itself on having such advanced medical care and developing new technology ... and new approaches to treating illness. But at the same time not everybody has access to those new technologies," said Dr. Mark Schuster, a Rand Co. researcher and pediatrician with the University of California, Los Angeles.

In the analysis of global infant mortality, Japan had the lowest newborn death rate, 1.8 per 1,000 and four countries tied for second place with 2 per

other industrialized countries, making it more challenging to provide culturally appropriate health care.

About half a million U.S. babies are born prematurely each year, data show. African-American babies are twice as likely as white infants to be premature, to have a low birth weight, and to die at birth, according to Save the Children.

While the gaps for infants and mothers contrast sharply with the nation's image as a world leader, Emory Univer-

AJC, 2006



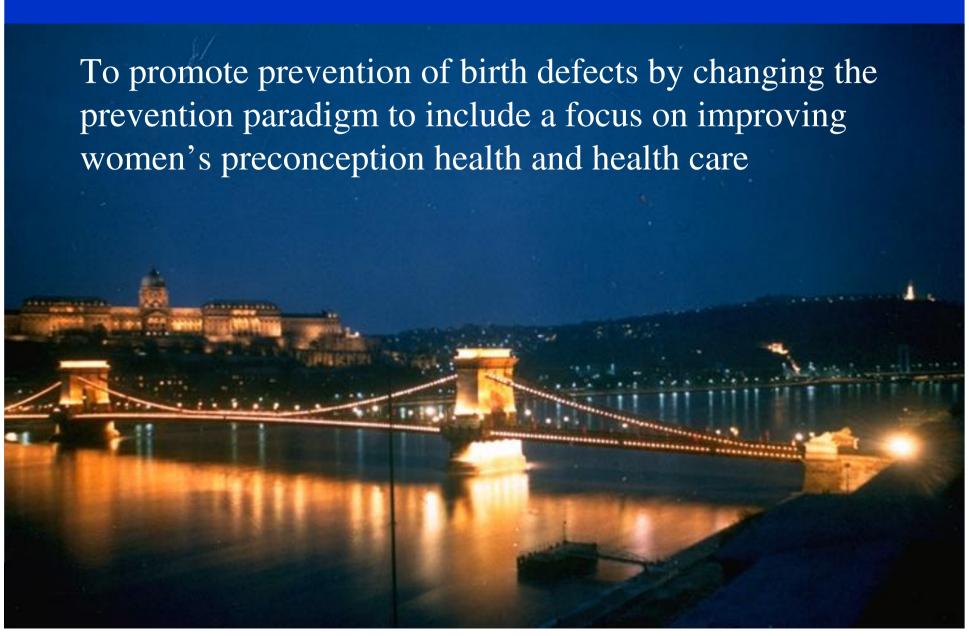
#### **CONFERENCE GOAL**

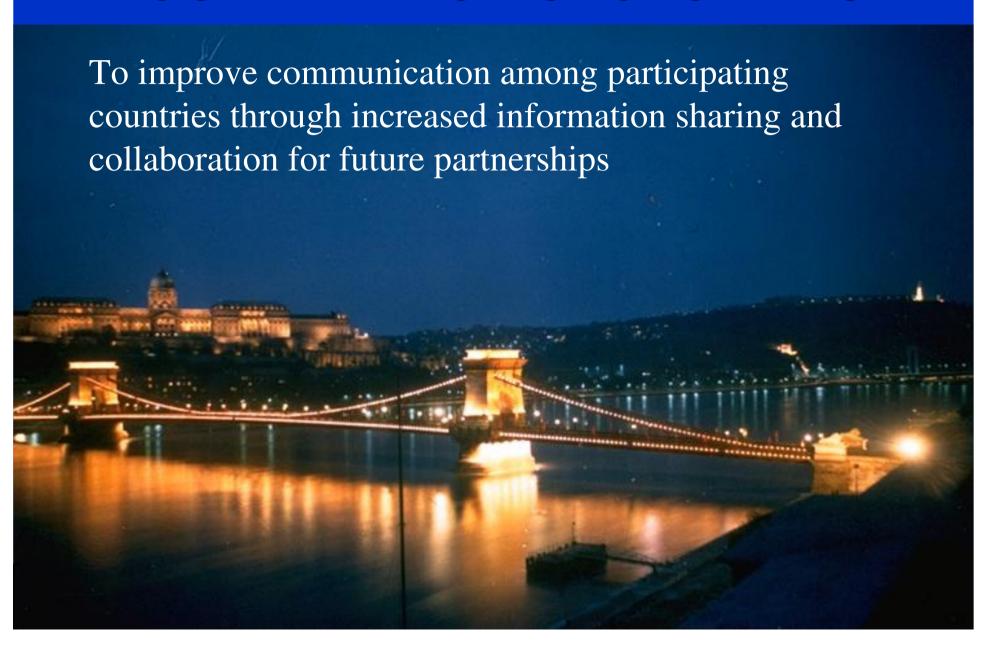
To provide a platform for review, analysis and discussion of the promotion of women's health before, during and beyond pregnancy, and the role of preconception health and health care in the prevention of birth defects in the Central and Eastern European region.



To review current demographics and trends of reproductive outcomes, state of preconception health and health care, and surveillance programs of birth defects in Central and Eastern European countries











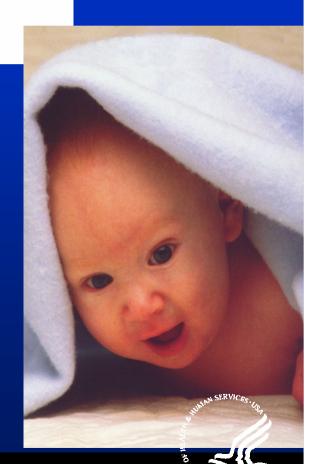
#### National Center for Environmental Health



#### Folic Acid Prevents Spina Bifida and Anencephaly

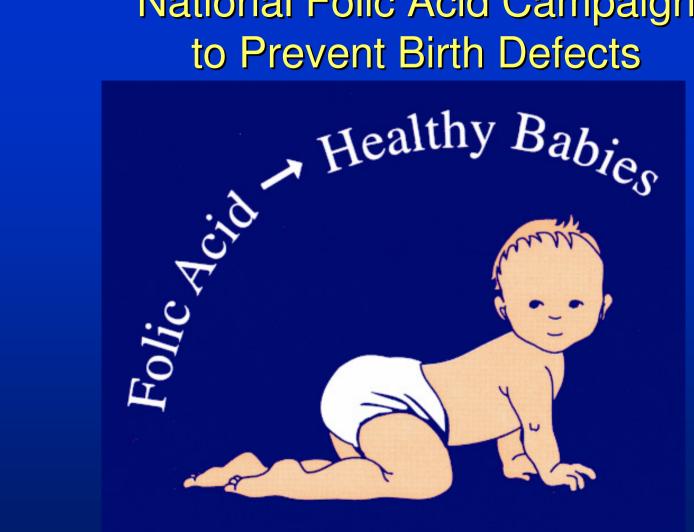
U.S. Public Health Service recommends 400 mcg daily to prevent these serious and common birth defects.







# National Folic Acid Campaign







# March of Dimes Birth Defects Prevention Campaign, 1996





Folic acid supplementation and food fortification, an inexpensive and effective intervention can be a unique opportunity to prevent major human diseases.

Why is there a delay in implementation?





#### **PREVENTION**

- P reconception care
- P romotion
- P olicies / recommendations







