MARCH OF DIMES
GLOBAL REPORT ON BIRTH DEFECTS
THE HIDDEN TOLL OF DYING AND DISABLED CHILDREN

Every year, an estimated 39 million children—6 percent of total births worldwide—are born with a serious birth defect of genetic or partially genetic origin.

About 3.3 million children under the age of five die each year from birth defects. For those who survive, these disorders can cause lifelong mental, physical,学术, or visual disabilities.

Hundreds of thousands more are born with serious birth defects of post-conception origin, the result of exposure to environmental factors, including alcohol, rubella, syphilis, and iodine deficiency.

The MARCH Global Report on Birth Defects addresses for the first time the scope, and previously hidden, toll of birth defects, highlighting the extent of this serious and vastly underappreciated global public health problem.

The report shows that birth defects exact a particular hard toll in mid- and low-income countries where 98 percent of the births with serious birth defects and 95 percent of the deaths of these children occur.

Also, the report provides the first systematic, country-by-country summary of annual births of infants with serious birth defects of genetic or partially genetic origin.

Besides poverty, the main reasons for the variations among rich and poor countries in birth prevalence rates of serious birth defects include: (1) survival advantage against malaria or certain of malaria cell and thalassemia genes; (2) frequency of consanguineous marriages; (3) differences in the percentages of illiteracy; and (4) sharp disparities in maternal and child health services.

Five common serious birth defects of genetic or partially genetic origin in 1200 births:

- Congenital heart defects—1,048,869 births
- Neural tube defects—1,048,869 births
- Hemoglobin disorders (thalassemia and sickle cell disease)—372,845 births
- Down syndrome (trisomy 21)—271,695 births
- Glucose-6-phosphate dehydrogenase (G6PD) deficiency—17,252 births

Combined, these five conditions accounted for about 25 percent of all birth defects of genetic or partially genetic origin. To date, more than 2,860 different birth defects of genetic or partially genetic origin have been identified.

Countries have been grouped by Gross National Income (GNI) per capita.

Low-Income Countries have a GNI per capita per year of less than $826 and accounted for an estimated 47 million serious birth deaths in 2003, 95 percent of the world’s total.

Middle-Income Countries have a GNI per capita per year of $826-$10,208 and accounted for an estimated 2.67 million serious birth deaths, 3.5 percent of the world’s total.

High-Income Countries have a GNI per capita per year of more than $10,208 and accounted for an estimated 0.52 million serious birth deaths, 0.6 percent of the world’s total.

The country names in this chart are taken from UNICEF, 2003.