



Live Well, Work Well

Cleft lip/palate are among the most common birth defects in the United States.

CHILDREN'S HEALTH: BIRTH DEFECTS

A birth defect is a problem that occurs while the baby is developing in the mother's womb. It may affect how the baby's body looks, works, or both. Birth defects affect about 120,000 babies born in the United States each year. The causes of about 70 percent of birth defects are currently unknown. However, what is known is that both genetic and environmental factors can influence them.

Main Causes

A single gene change can cause birth defects. Children get half of their genes from each parent. A child can inherit a genetic disease when one parent (who may or may not have the disease) passes along a single defective gene, called "dominant inheritance." Examples include achondroplasia (a form of dwarfism) and Marfan syndrome (a connective tissue disease). Many other genetic diseases are inherited when both parents, who do not have the disease, carry an abnormality in the same gene and pass it on to a child, called "recessive inheritance." Examples include Tay-Sachs disease (a fatal nervous system disorder) and cystic fibrosis (a serious disorder of the lungs and other organs). Yet another form of inheritance, called "X-linked," is where sons inherit a genetic disease from a mother who carries the gene. Such examples are hemophilia (a blood-clotting disorder) and Duchenne muscular dystrophy (progressive muscle weakness).

Other causes of birth defects:

- Chromosomal abnormalities

- Environmental factors - Alcohol, certain drugs or medications, infections, and certain chemicals can all be contributing factors.
- Multi-factorial - Some birth defects appear to be caused by a combination of one or more genes and some environmental factors. Examples are cleft lip/palate, neural tube defects, and heart defects.

Diagnosis and Treatment

Some birth defects can be diagnosed and even treated before birth, including spina bifida, urinary tract blockages, and tumors of the lung. Ultrasound, amniocentesis, and chorionic villus sampling (CVS) are all tests for diagnosing defects.

Prevention

Not all birth defects are preventable, but there are some steps a woman can take to reduce her risk of having a baby with a birth defect:

- Visit the doctor if planning to get pregnant for a pre-pregnancy checkup.
- Obtain prenatal care.
- Quit smoking.
- Avoid alcohol and drugs.
- Take a daily multivitamin which contains 400 mcg of folic acid.
- Do not eat undercooked meat.
- Check with the doctor or pharmacist before taking any medication, including over-the-counter products.
- If suffering from diabetes, keep blood sugar levels under control.

Source: The March of Dimes

