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Health and wellness tips for your work, home and life—brought to you by the insurance and health care specialists at Bouchard Insurance.

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 1 in every 33 babies (or 120,000) 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/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.

Treatment

Some birth defects can be diagnosed and even treated before birth. Ultrasound, amniocentesis and chorionic villus sampling (CVS) are all tests for defects. Biotin dependence and methylmalonic academia (two life-threatening inherited body chemistry disorders) have been successfully treated in the womb, as well as spina bifida, urinary tract blockages and tumors of the lung – via prenatal surgery.

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 change the cat's litter box; the animal may have toxoplasmosis.
- 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 level under control.

Source: *The March of Dimes*



Did you know...?

Cleft lip/palate and Down syndrome are among the most common birth defects in the United States. Nearly 7,000 babies are born with cleft lip/palate each year, while about 5,500 are born with Down syndrome.