

Neural Tube Defect Fast Facts

Q: What are birth defects?

A: Birth defects are structural or functional abnormalities present at birth that cause physical or mental disability. Researchers have identified thousands of different birth defects, some fatal.

Q: How prevalent are birth defects?

A: About 2% to 3% of babies born have some type of major birth defect. The risk of some problems due to abnormal separation of genetic material (chromosomes) increases with the mother's age. Currently, birth defects are the leading cause of death for infants during the first year of life.

Q: What causes birth defects?

A: Birth defects have a variety of causes, including genetic problems when a genes or genes don't work properly or part of a gene is missing; problems with chromosomes such as having an extra one or missing part of one; environmental factors a woman is exposed to during pregnancy such as rubella or German measles; or using drugs or alcohol during pregnancy.

Q: What are neural tube defects?

A: Neural tube defects (NTDs) are birth defects that affect the brain (anencephaly) and/or spinal cord (spina bifida). NTDs occur when the tissues that form the brain and spinal cord fail to develop properly.

Q: When do NTDs occur?

A: NTDs occur during the first four weeks after conception – before most women even know they're pregnant – but ensuring sufficient intake of folic acid at least three months before pregnancy and during the first trimester can significantly reduce the risk.

Q: Can NTDs be detected before birth?

A: Some NTDs can be detected before birth. Talk to your health professional to find out about the prenatal blood test (maternal serum screening, triple test) or ultrasound that can give you more information about whether your developing baby has an NTD.

Q: Who is at risk of having a baby with an NTD?

A: Any woman who could become pregnant is at risk of having a baby with an NTD. About 1 in every 1,300 pregnancies in Canada is affected. Women at a greater risk include those who aren't getting enough folic acid, have had a previous pregnancy affected by an NTD, have (or have a partner who has) a family history of NTDs, have insulin-dependent diabetes, use certain anti-seizure medications, have clinically diagnosed obesity and/or are of Celtic, Northern Chinese, Cree or Sikh heritage.

For more information, visit www.folicacid.ca.