Microcephaly

What is it?

Microcephaly is a birth defect where a baby's head is smaller than normal. During pregnancy a baby's head grows because his or her brain

grows. If the brain does not develop normally or stops growing, then microcephaly can occur. It can be present at birth or may develop in the first few years of life. Most babies with microcephaly continue to have a head that is smaller than normal as they get older. Some children with microcephaly have normal intelligence and a head size that gradually gets bigger as they get older.

Babies with microcephaly may have other problems. These problems can include:

- Seizures
- Not meeting developmental milestones such as sitting, standing, and walking
- Intellectual disability
- Problems with movement and balance
- Difficulty feeding
- Hearing loss
- Vision problems

How common is it?

About 2-12 babies per 10,000 live births have microcephaly each year.



The cause of microcephaly in most babies is not known. Some babies have changes in their genes. Some babies may be exposed to harmful substances during

pregnancy. These exposures may include:

- Infections during pregnancy, such as rubella, toxoplasmosis, cytomegalovirus, and Zika virus
- Not getting enough food
- Exposure to alcohol, certain drugs, or other chemicals
- Disruption of the blood supply to the baby's brain



Baby with Typical Head Size



Baby with Microcephaly



Baby with Severe Microcephaly

Image courtesy of the Centers for Disease Prevention, National Center on Birth Defects and Developmental Disabilities

How is it diagnosed?

Microcephaly can be diagnosed during pregnancy or after birth. Screening tests during pregnancy can check for birth defects. After birth the doctor will measure the distance around the baby's head, called the **head circumference**. That measurement is compared to the standard for babies of the same age and sex. If the measurement is significantly less than other babies of the same age and sex, the baby may have microcephaly. Special tests to view the brain also may be done to check for any brain conditions.

How is it treated?

There is no standard treatment for microcephaly that will result in a normal head size. Most treatment options help decrease the impact of any associated birth defects or developmental delays that may be present. Speech, occupational, and physical therapy services as soon as possible can help. Your child's doctor should discuss all treatment options with you.



For more information:

Centers for Disease Control and Prevention https://www.cdc.gov/ncbddd/birthdefects/microcephaly.html

National Institute of Neurological Disorders and Stroke https://www.ninds.nih.gov/disorders/alldisorders/microcephaly-information-page