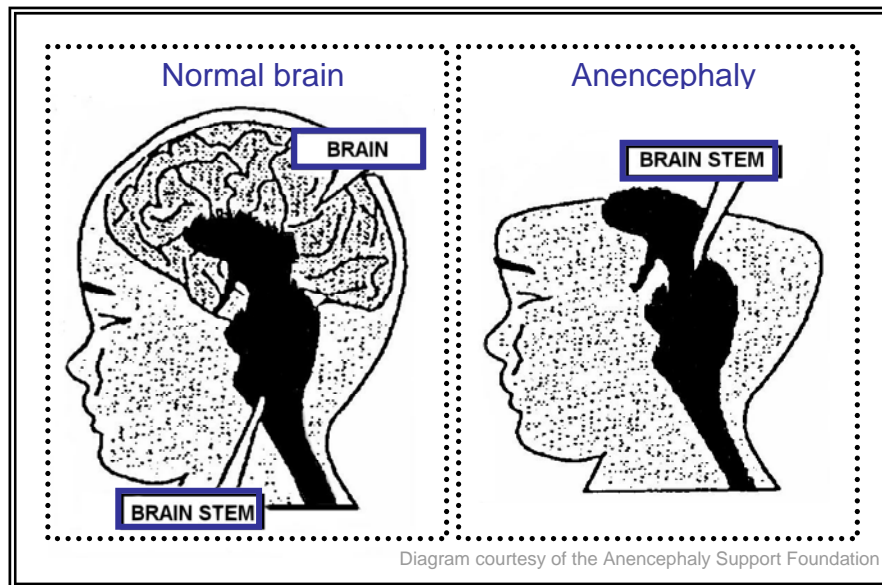


# Anencephaly

## What is anencephaly?

Anencephaly is a defect in the closure of the neural tube during fetal development. The **neural tube** is a narrow channel that folds and closes to form the brain and spinal cord of the embryo. Anencephaly occurs when the cephalic (closest to the head) part of the neural tube fails to close, resulting in the absence of a large portion of the brain, skull, and scalp. Infants with anencephaly are born without a **forebrain** (the front part of the brain) and a **cerebrum** (the thinking and coordinating part of the brain).

A baby born with anencephaly is usually blind, deaf, unconscious, and unable to feel pain. Some individuals with anencephaly may have a partial brain stem, which means that certain reflex actions (such as breathing or responding to touch or sound) may occur. However, the lack of a working cerebrum entirely rules out the possibility of ever gaining consciousness.



## What causes anencephaly?

The exact cause of anencephaly is unknown. Anencephaly is most likely a “multifactorial” birth defect, meaning that multiple causes (including genetic, nutritional, and/or environmental factors) contribute to the development of anencephaly.

Recent studies have shown that adding **folic acid** (vitamin B<sub>9</sub>) to the diets of women of childbearing age significantly **decreases the incidence of neural tube defects**. Therefore, it is recommended that all women of childbearing age consume 0.4 milligrams of folic acid daily, even before becoming pregnant.

**Women who have had a child with anencephaly or another neural tube defect are recommended to take 4.0 milligrams (mg) of folic acid each day, even before becoming pregnant.**

## How is anencephaly treated?

There is no treatment or cure for anencephaly.

## For more information

**Anencephaly Support Foundation** - <http://www.asfhelp.com>

**Children’s Hospital of Boston** - <http://www.childrenshospital.org>

**National Institute of Neurological Disorders and Stroke (NINDS)** - <http://www.ninds.nih.gov/disorders/anencephaly/anencephaly.htm>

**Source:** Anencephaly Support Foundation