What is a congenital diaphragmatic hernia?

A *congenital* (present at birth) diaphragmatic hernia is an abnormal opening in the *diaphragm* (the muscle that controls breathing and separates the chest and the abdomen). Normally, a small hole is present in the diaphragm during a baby’s development; this hole usually closes early in pregnancy. When this hole fails to close during pregnancy, a *congenital diaphragmatic hernia* is the result. A congenital diaphragmatic hernia is also called CDH.

When a CDH is present, the hole in the diaphragm allows some of the abdominal organs (such as the stomach, intestines, and liver) to move into the chest area. This prevents normal development of the lungs. Babies with diaphragmatic hernias usually have *respiratory distress* (breathing problems) after birth because the lungs are smaller than normal. A baby with a CDH may also have *cyanosis* (a blue skin color due to a lack of oxygen) or have a fast heartbeat.

Approximately one out of every 2,200 to 5,000 babies born each year has CDH.

What causes a congenital diaphragmatic hernia?

Currently, the exact cause of CDH is not known.

How are congenital diaphragmatic hernias treated?

Babies with CDH need immediate attention after birth because of their breathing problems. Once the baby’s breathing is stable, surgery can be used to move the abdominal contents out of the chest cavity and to close the hole in the diaphragm. Because most babies with CDH have breathing problems, they may be placed on *extracorporeal membranous oxygenation* (ECMO), a special system that helps with breathing and allows the lungs to recover. Your child’s doctor(s) will discuss appropriate treatment options with you.

For more information

- **Children’s Hospital Boston** - [http://www.childrenshospital.org/az/Site476/mainpageS476P0.html](http://www.childrenshospital.org/az/Site476/mainpageS476P0.html)
- **Cincinnati Children’s Hospital** - [http://www.cincinnatichildrens.org/health/info/chest/diagnose/diaphragmatic-hernias.htm](http://www.cincinnatichildrens.org/health/info/chest/diagnose/diaphragmatic-hernias.htm)

*Source: Cincinnati Children’s Hospital*