

Congenital Diaphragmatic Hernia

What is Congenital Diaphragmatic Hernia (CDH)?

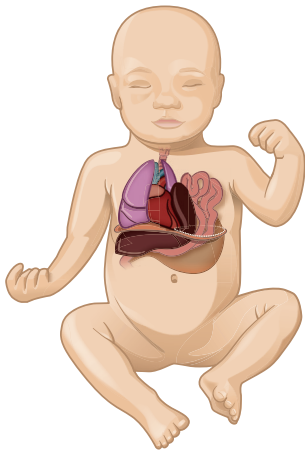
CDH is a fetal abnormality that occurs very early in pregnancy (10-12 weeks), when the baby's diaphragm does not form properly. An opening in the diaphragm leads to contents of the abdomen—such as the stomach, small intestine, spleen, liver, or kidney—developing in the chest cavity instead of the abdomen. The hernia usually occurs on the left side, but can also occur on the right side. The displaced organs prevent the lungs from developing properly.

CDH is rare, occurring in 1 out of 2,500 to 3,000 births. It varies in severity from very severe, causing immediate distress, to mild, causing no neonatal effect at all. CDH is not related to anything the mother did or did not do during pregnancy.

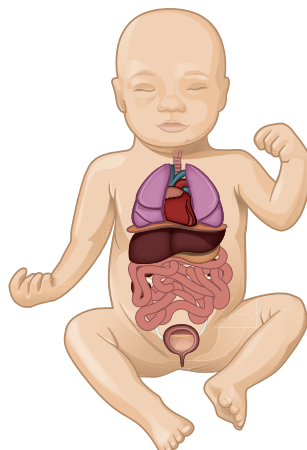
Once diagnosed, how is the severity of CDH assessed?

At 22 to 28 weeks of gestation, the SSM Health Cardinal Glennon St. Louis Fetal Care Institute team performs a focused ultrasound, a fetal MRI, and a fetal echocardiogram (echo) to assess the severity of the CDH. We also offer genetic testing to determine if it was caused by a chromosomal abnormality.

The team uses several measurements to understand how the CDH will affect the baby. We measure the lung-to-head ratio, the liver position, the total lung volume, the response of the fetal lungs to oxygen, and we look for any abnormalities suggestive of a genetic cause. This is a critical assessment.



*Baby With
Congenital Diaphragmatic Hernia*



Healthy Baby

A Cardinal Glennon St. Louis Fetal Care Institute nurse is available 24 hours a day, seven days a week to discuss referrals with physicians and potential families by calling 314-268-4037, option 2.

Phone 314-268-4037, option 2
Toll-free 1-877-SSM-FETL (776-3385)
Web stlouisfetalcare.com
Email fetalcare@ssmhealth.com
Facebook facebook.com/fetaldocs

Congenital Diaphragmatic Hernia

What happens at delivery and beyond?

Most babies with less severe CDH can be delivered by whatever route the mother desires, usually vaginally. The baby is quickly evaluated by the neonatologists (pediatricians specialized in newborn care) and a breathing tube is inserted so that a breathing machine can help the baby breathe.

The care after birth is quite complex, but generally the baby is stabilized from a breathing and heart function standpoint. Once these issues are stable and working well, the surgery to repair the hole in the diaphragm can be performed. After this, the baby must learn to breathe and eat without assistance. This can take several weeks. The neonatologists and pediatric surgeons work very closely with the baby's family to navigate through the hospitalization.

In severe cases of CDH, we may recommend a special delivery procedure. The delivery is by an EXIT (Ex Utero Intrapartum Treatment) procedure. During an EXIT procedure, the mother has a Cesarean birth while asleep under general anesthesia. The placenta and umbilical cord

remain attached to the mother and support the baby while we evaluate the baby's airway and lung function. A breathing tube is inserted and breathing is assisted using a ventilator machine. Once we are confident that the lungs are working well, the baby is fully delivered by cutting the umbilical cord. The care after this is essentially the same as with any other baby with CDH.

What is ECMO?

In some cases, the CDH is so severe that the lungs and heart cannot provide the necessary functions to survive. More development time is needed for the lungs to function optimally. If this is the case, ECMO is used.

ECMO is short for extracorporeal membrane oxygenation. It is a machine which functions just like the lungs, exchanging gasses like oxygen. The neonatologists and pediatric surgeons watch your baby very carefully to determine if ECMO is needed. If so, then surgery is needed to place tubes in the baby's blood vessels, so that blood can be removed, run through the ECMO machine, and returned to the baby.

We understand that Congenital Diaphragmatic Hernia (CDH) can be a scary diagnosis. That's why we're available to help 24 hours a day, 7 days a week.

For more information or to schedule an appointment, call us at 314-268-4037, opt. 2 or toll free at 877-SSM-FETL (877-776-3385).

While we can't change the diagnosis, we can provide you expert care and support, helping your baby get the most out of treatment - and life.
