

Let's Talk About...

Tracheoesophageal fistula and esophageal atresia

When babies are developing before birth there are some problems that may occur. Sometimes the esophagus and trachea do not form properly. This can cause an esophageal (ee-soff-uh-GEE-ul) atresia (EA) and tracheoesophageal (TRAY-kee-oh-ee-soff-uh-GEE-ul) fistula (TEF).

It is possible for a baby to have just an EA or just a TEF, but most of the time they have both.

What does the esophagus and trachea do?

The esophagus (ee-SOFF-ah-gus) is the tube that carries food from the mouth to the stomach. The trachea (TRAY-kee-ah), or windpipe, is the tube that carries air from the nose and mouth to the lungs. Usually, the esophagus and trachea are next to each other, running side by side from the throat down to the stomach or lungs.

What is an esophageal atresia (EA)?

EA occurs when the esophagus does not connect to the stomach from the mouth before a baby is born. The part of the upper esophagus that is not formed correctly creates a pouch. Because part of the esophagus is missing, the baby's food and even spit cannot get to the stomach. This will spill into the trachea and go into the lungs.

Babies with EA may:

- Drool a lot
- Choke, cough, and sneeze.
- Swallow normally but choke, turn blue, or stop breathing

What is a tracheoesophageal fistula (TEF)?

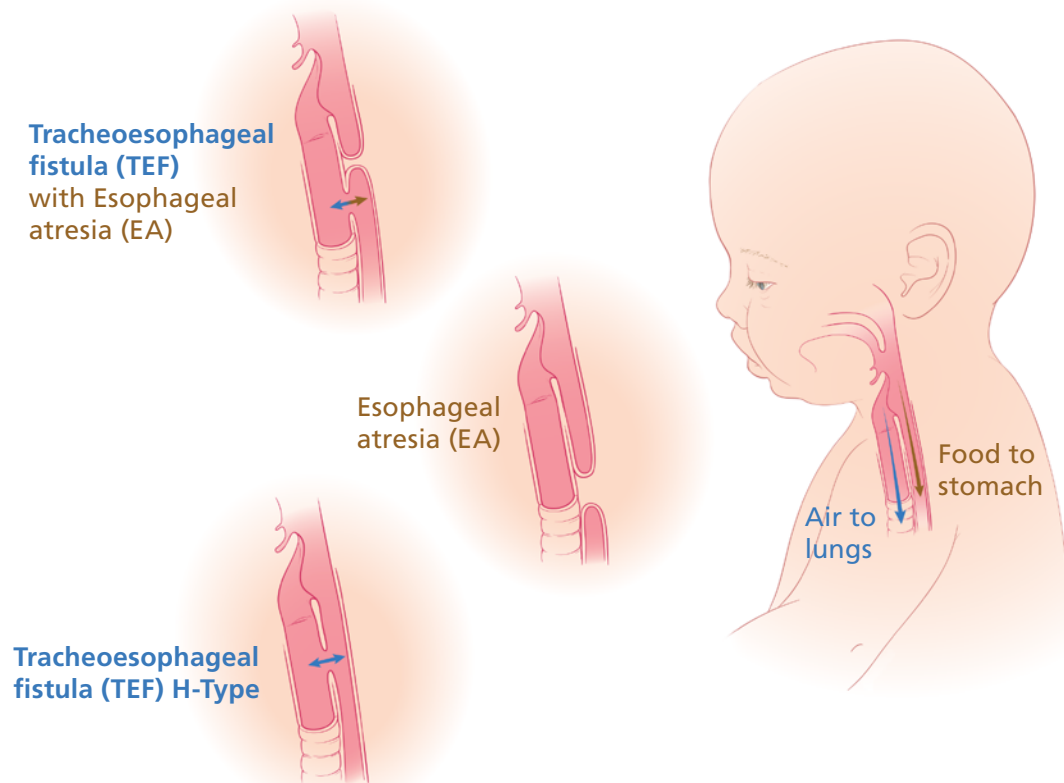
TEF occurs when there is an opening between the esophagus and trachea that shouldn't be there. Babies with a TEF have trouble breathing because liquids can pass through the opening into the baby's lungs. This can cause pneumonia.



How are TEF and EA treated?

Babies born with EA and TEF are transferred to a newborn intensive care unit (NICU), so they can receive special care. Treatment for your baby may consist of:

- The nurse placing your baby on their stomach to help drain the spit from the part of the esophagus near the mouth (the upper pouch).
- An x-ray of your baby's chest to make sure your baby has EA and TEF.
- Your baby will have a tube placed in their mouth that goes into the upper pouch. The tube sucks out any spit in the upper pouch to prevent it from going into the lungs.



- They will receive liquids through an IV (a small tube placed in a vein), because your baby will not be able to eat at this time.
- Surgery

Before surgery

Your baby will need surgery to close the TEF and connect the two ends of the esophagus. This will allow food to travel from the mouth to the stomach. Sometimes it is not possible to connect the ends of the esophagus right away because of your baby's size.

If the EA cannot be fixed immediately, the surgeon may put a tube from the outside of your baby's belly to the stomach so they can receive nutrition. This is called a gastrostomy (gas-TROSS-tuh-me) tube, or g-tube. Your child will only have the g-tube until the surgeon can fix the EA.

The surgery team will discuss the process with you before your baby has surgery.

During surgery

For babies with only TEF: A surgeon will close the opening between the trachea and esophagus.

For babies with EA: a surgeon will reconnect the esophagus to the stomach.

After surgery

Your baby will have a series of tubes that will give them the support they need after surgery. These are all temporary and will be removed as your baby gets better. Your baby will have three tubes that consist of:

- A tube in their chest (chest tube) to drain any fluid around the surgery site.
- A tube in their mouth (endotracheal tube or ET tube) connected to a ventilator, or breathing machine. Once your baby can breathe on their own, the breathing tube will be removed.
- A small tube in their nose (nasogastric tube or NG tube) that goes down to their stomach. This helps release any air or fluid that may be in their stomach.

Right after surgery, your baby cannot be held and may not be able to have a pacifier. This is to protect the surgery site. After five days, your baby will have a swallow study. This test allows a radiologist to watch how your baby moves food and liquid through the esophagus. If the surgery site is healing, the doctor will take the chest tube out. At this point, you can hold your baby and give them a pacifier. They can even start eating.

Your baby may have gastroesophageal reflux (GER) after surgery. GER occurs when stomach contents push up a little into the esophagus. Healthcare providers will give your baby medicine to prevent GER. It is also important to give your baby this medicine at home after surgery.

There may be a tight area in the esophagus, called an esophageal stricture, which makes it hard for your baby to swallow. If this happens, the surgeons will open the area using a special instrument to stretch the esophagus.

Your baby can go home when they take all their feedings by mouth, gain weight regularly, and their temperature stays normal while dressed in a crib.

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