

Helping Hand[™]

Health Education for Patients and Families

Tracheostomy Tube: What It Is

A tracheostomy (trach) tube provides another way to access the airway other than through the mouth or nose. It helps your child breathe and lets you clear mucus out of their airway. It is a small tube that is inserted in the front of your child's neck.

There are many reasons a child may need a trach tube. The most common are for long-term breathing support, a blockage in the upper airway, or management of secretions. Your child's doctor or health care provider will talk with you about why your child needs a trach tube. How long your child has the tube will depend on their conditions and needs.

The Respiratory System

The respiratory system is a group of organs that help you breathe (Picture 1). It includes many parts:

- Nose Filters, moistens, and warps up air that goes to the lungs.
- Mouth and throat
- Pharynx The parts of the throat behind the nose.
- Larynx The voice box that creates sounds and lets you talk.
- Windpipe (trachea) Carries air from the throat to the lungs.
- Bronchi Carry air to the alveoli, where carbon dioxide is turned into oxygen.
- Lungs Lets the body take in oxygen and remove carbon dioxide through breathing in (inhaling) and breathing out (exhaling).





Why a Tracheostomy

A trach tube may be needed for a short time or a long time, depending on your child's needs. The most common reasons for a tracheostomy are:

- A blockage in the upper airway. Things that may block the airway include:
 - Parts in the nose or throat that did not grow the right way
 - Vocal cords that do not work (paralyzed)
 - Narrowing of the voice box or trachea
 - A weak or floppy trachea
- Mucus, food, or saliva that can't be cleared from the lungs and airway.

If mucus stays in the lungs or if food or saliva is going into the lungs consistently, the child is more likely to get infections.

• Long-term help with breathing.

A trach tube is put in when a child has to be on a breathing machine (ventilator) for a long time. They may have to go home with a trach and a ventilator.

Placing the Trach Tube

- The surgery to insert a tube in the trachea is called a tracheostomy. The surgeon makes an opening, called a stoma, in the front of the neck (Picture 2).
- Then, they put a curved tube called a tracheostomy (trach) tube into the stoma. It's kept in place while the stoma heals. After it heals, the tube is held in place with Velcro trach ties.
- The first trach tube is changed about one week after surgery, when the stoma has healed.

How a Trach Tube Works

• Air can be breathed in or given through a ventilator or CPAP machine. It goes through the tracheostomy tube and into the lungs.



Picture 2 The tracheostomy tube is placed into the trachea below the vocal cords.

• Mucus (secretions) are suctioned from the trach tube to help keep the airway open.

- If your provider decides that a trach tube is no longer needed, it can be removed. The hole (stoma) will heal shut.
- Your child may not be able to cry or talk while the trach tube is in place. This is because it is more difficult for air to pass over the vocal cords in the voice box to make them vibrate. There are ways to improve the voice with a trach tube in place. Your child's providers will discuss these with you at the right time.
- A doctor or health care provider will talk to you about devices that will let your child talk.

Types of Trach Tubes

There are many types of trach tubes. Often, the first trach tube has a cuff to keep air from leaking out around the tube.

The type of trach tube your child has depends on:

- The reason your child needs the trach.
- The size of your child's trachea.
- Whether your child needs a ventilator.

Caring for the Trach Tube

If you agree to a tracheostomy for your child, you will learn how to care for it. This includes:

- Suctioning
- Changing the trach ties

- Cleaning the stoma
- Changing the trach tube

• Doing CPR with a trach

• Problem-solving

You will help with your child's trach care after they have the first trach tube change. You will also go to classes at the Family Resource Center. This lets you practice at the hospital and learn what to do at home.

Preparing for Discharge

Before your child goes home, you will do your child's care for 24 hours at the hospital. This helps you get ready to care for your child at home.

Before your child leaves the hospital, do these things at home:

• Find out how many amps are needed for the equipment your child will use at home. Amps are a measure of electricity. The equipment supply company can tell you about this information for each machine. Have an electrician check your power. You will need a certain amount to use the equipment. Show the electrician where you plan to plug in the equipment. Also, ask them if you can use the suction machine, ventilator, and/or other machines at the same time.

- Label the fuse box or circuit breakers for the outlets used for your child's equipment. If a fuse or circuit breaker blows, you will need to know which one to reset right away.
- If your electrical system uses fuses, place extra fuses near your fuse box.
- **Keep flashlights close.** Keep them beside your child's bed and next to your fuse box or circuit breaker panel.
- Make sure all **equipment is grounded**.
- Ask the electric company to tell you when they are planning a power outage in your area. Ask them to call you if the power goes out in the middle of the night. Contact the electric company and tell them you have a child who uses special equipment. You will need to fill out a form.