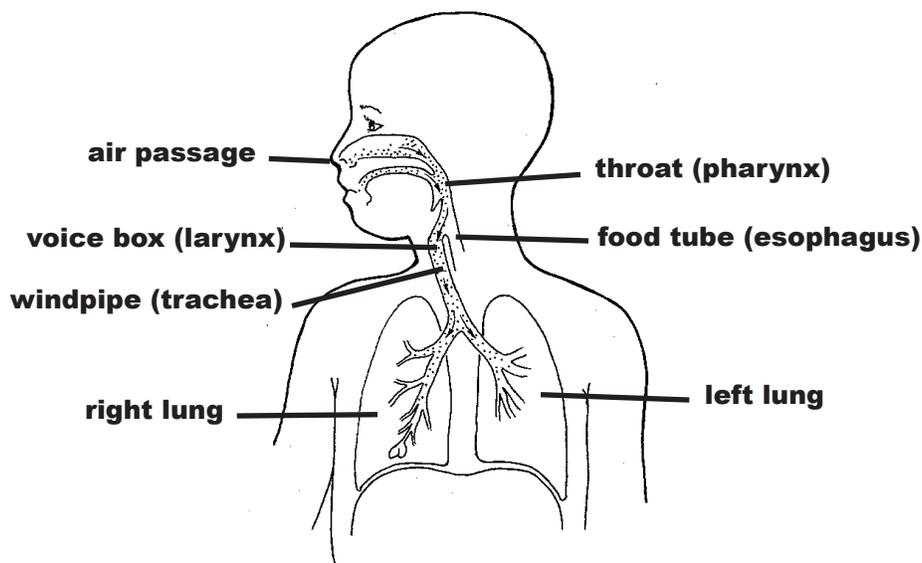


Name of Child: \_\_\_\_\_ Date: \_\_\_\_\_

# Breathing and Speech with a Tracheostomy

## Normal Breathing

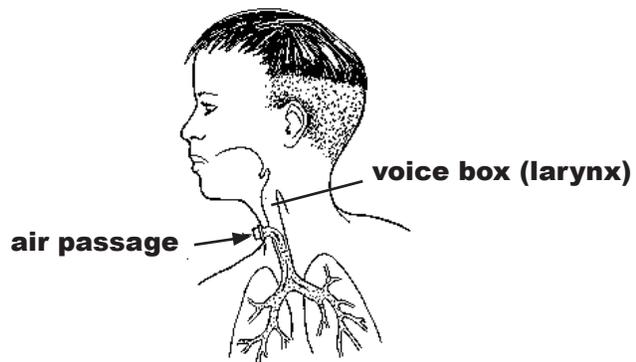
In normal breathing, air comes in through your nose and mouth. Tiny hairs in your nose filter out dust and small particles. The moist membranes lining your nose and throat warm and humidify the air. This keeps very dry and very cold air out of the lungs.



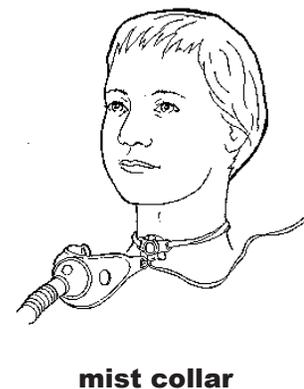
Air from your nose and mouth passes down through your throat to the voice box (also called **larynx** or **vocal cords**) and into the windpipe (**trachea**). Your windpipe is the big air tube leading to the lungs. When you breathe out (**exhale**), air leaves your lungs through this tube. The voice box is between the throat and trachea. When air passes through the voice box, it makes a sound (as in talking).

## The Tracheostomy

A **tracheotomy** is a surgery that makes an opening (**stoma**) from the neck into the windpipe below the voice box. The result of this surgery is a tracheostomy.



A **tracheostomy tube** (also called **trach** or **trach tube**) keeps the hole open. Air flows directly into the lungs through this hole. Since the air does not pass through the nose and mouth, it does not get filtered, warmed and humidified. At home, you will use a special **humidifier** to help moisten the air. The humidifier breaks water up into a mist.

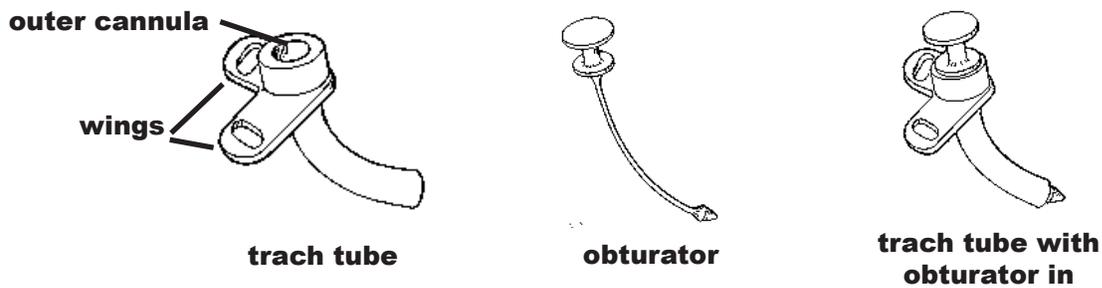


The mist is carried to the trach by a lightweight plastic hose (**mist collar**). Your child may not need this humidifier 24 hours a day. Most children use humidifiers during naps and at night while sleeping. For short periods, your child can use an **artificial nose** which helps filter and moisten air. The artificial nose fits on the end of the trach tube.

There are several types of trach tubes. One is a plastic tube with two parts: the tube and an obturator. The **obturator** is a guide for putting in the trach tube. Both are curved so they go in easily and fit comfortably. The obturator is taken out as soon as the tube is in place.



The trach tube is kept in place with ties made from cloth or Velcro which go around the neck, like a necklace. The wings of the trach have slits to hold these ties.



## Speech with a Tracheostomy

When a trach is in place, air goes in and out of the lungs below the voice box. In many cases air can flow out through the vocal cords and out the trach tube. This lets your child speak. If air cannot flow around the trach, your child will not be able to make sounds, speak or cry out. However, if enough air flows around the trach tube through the voice box your child can make sounds.

## The next steps

Most children with trach tubes can be cared for by their parents at home, but it does take special training. Your doctors, nurses, and therapists will teach you what you need to know, and give you time to practice these new skills in the hospital. You will know how to care for the trach safely before you take your child home.

## Now that you've read this:

- Describe a tracheostomy to your nurse or doctor. (Check when done.)
- Tell your nurse or doctor why mist is used with a tracheostomy. (Check when done.)



If you have any questions or concerns,  
 call your child's doctor or  call \_\_\_\_\_

If you want to know more about child health and illness,  
visit our library at The Emily Center at Phoenix Children's Hospital  
1919 East Thomas Road  
Phoenix, AZ 85016  
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866-933-6459  
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#842 • Written by Penny Overgaard, RN • Illustrated by Dennis Swain