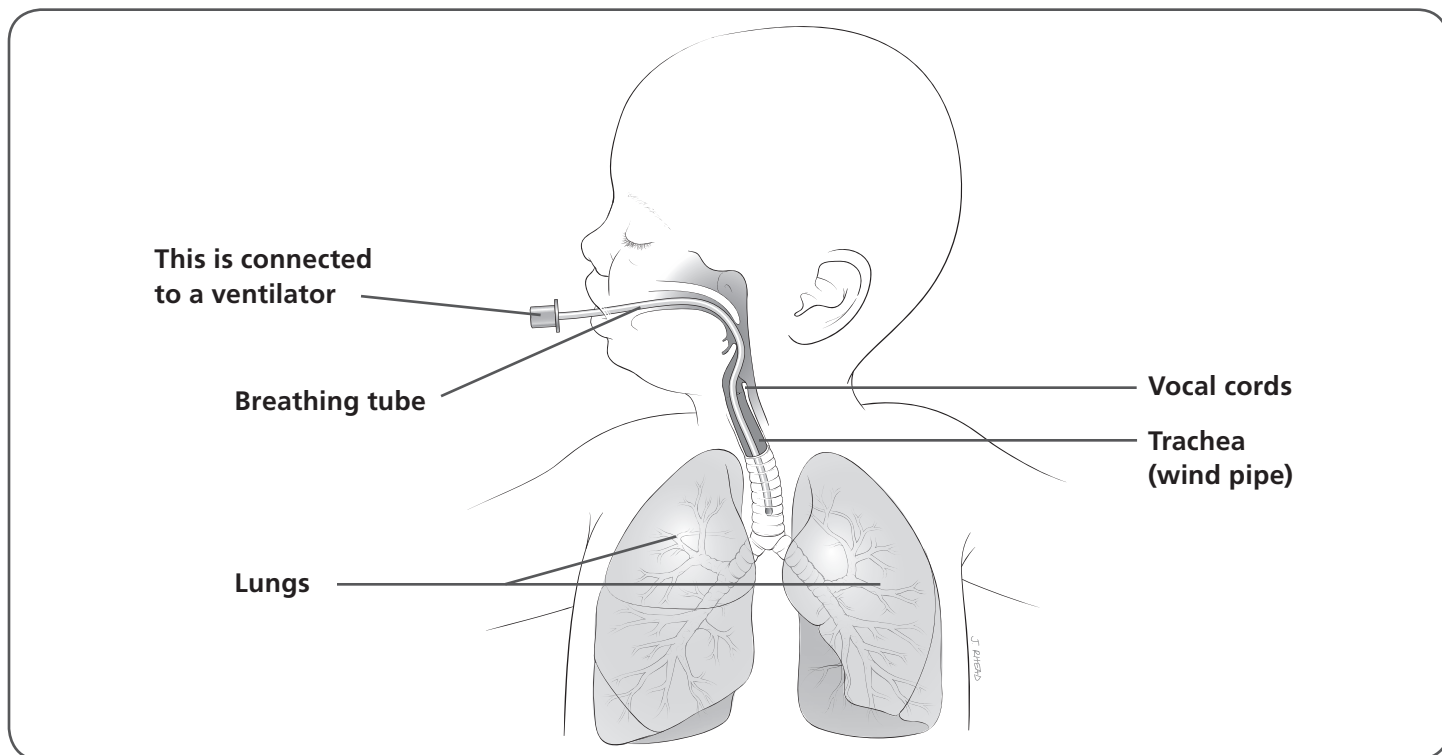


# Let's Talk About...

## Ventilators for Babies



### What is a ventilator?

A ventilator is a breathing machine. It is connected to a breathing tube. The breathing tube is in your baby's mouth and goes all the way to your baby's lungs. The ventilator can help your baby breathe or take over all of the work of breathing for your baby. This is a temporary treatment in almost all babies.

A ventilator can help a baby who has trouble breathing. In normal breathing, the person breathes air into the lungs. The air contains a gas called oxygen that the body needs. When air is breathed out, the body gets rid of another gas called carbon dioxide. Carbon dioxide is a kind of waste product in the body and must be released from the body through the lungs. Having enough breathing in and breathing out is very important. Babies can have trouble with one or both of these parts of breathing.

### Why would a baby need a ventilator?

There are several reasons why a baby might need a ventilator to help them breathe. Here are some of the common reasons:

- **The baby is born premature.** These babies have lungs that may not be developed enough. The lungs do not work well enough on their own.
- **The baby has problems with their lung or respiratory tract structure.** Babies can be born with problems such as a small jaw or a growth that presses on the airway. These babies need a breathing tube so air can get into the lungs.
- **The baby has a neuromuscular disorder.** These babies have a genetic problem that causes their muscles to be very weak. These babies cannot breathe very well on their own.

- **The baby is on pain medicine.** Pain medicine can make a baby sleepy. Some babies are so sleepy they forget to breathe. This forgetting to breathe is called apnea (APP-knee-ah). The ventilator will help the baby breathe while they need this medicine.
- **The baby has a heart defect.** Normally, the heart pumps blood to the lungs. In the lungs, the blood takes up oxygen and gives off carbon dioxide. Many heart defects can cause a change in the way the blood goes to the lungs. This change in the blood flow can affect way the lungs work and these babies may need help from a ventilator.
- **Other reasons.** Babies who have surgery can have swelling that can make it hard for them to breathe.

**My baby has a breathing tube. Where does it go inside the body?**

The breathing tube goes from the mouth through the vocal cords, then into the trachea (wind pipe). See illustration on first page.

Your child’s doctors, nurses, and respiratory therapists will tape the tube securely. They will make sure the tube is in the right place by looking at it on a chest x-ray. If the tube is too deep or not deep enough on the x-ray, the tube will be repositioned to its proper place. Even though the tube is securely taped, movement and oral secretions (spit) can loosen the tape. Your child’s healthcare providers will watch for this and tape the tube again so it remains secure.

**Why can’t I hear my baby cry?**

Your baby cannot make sounds because the breathing tube goes right through the vocal cords. After the tube comes out your baby will be able to cry again, but some babies are hoarse for a short time. The hoarseness is because the tube can cause some swelling in the airway.

**Can I touch my baby while on the ventilator?**

Most babies will relax and calm down when you touch them gently. Other babies do not like to be

touched when they are on a ventilator. Ask your baby’s nurse for the best way to interact with your baby.

**Can I hold my baby while on the ventilator?**

If your baby is medically stable (for example, their heart rate, blood pressure, and oxygen levels are good), you may be able to hold your child. Ask your baby’s nurse. If it is ok, the nurse and respiratory therapist will help you.

**Why does my baby need to have the ventilator tube suctioned?**

We all make secretions, and we clear them by giving a gentle cough (clearing of the throat). The ventilator tube makes it harder to get the secretions out. The ventilator tube is also not natural for your baby. The body sees the tube as a foreign body and makes more mucous to protect itself. The mucous that is made needs to be cleared, so the baby can breath and allow the ventilator to work correctly.

**How long will my baby be on the ventilator?**

This depends on why your baby needs the ventilator. Your baby may just need to wake up after surgery. Some babies need to grow before they can breathe for themselves. In that case they may be on the ventilator for much longer. As your baby gets better they will need less support from the ventilator. When your baby does most of the breathing on their own, the tube may be taken out.

Sometimes a baby cannot get off the ventilator. These babies may need a ventilator at home.

No matter how long your baby needs to be on the ventilator, you and your healthcare team will make a plan that is best for your baby.

**What if I have more questions?**

If you have more questions about the ventilator or your baby’s condition, please ask your baby’s nurse, doctor, or respiratory therapist.