



Understanding Tracheostomy Care for your Child



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Children's

Inside this guide:

This guide will help you learn how to take care of your child’s tracheostomy (trach). It is important to ask questions. You will be given time to learn. Working with the healthcare team, you will be able to show you are skilled and able!

This booklet will answer some of the questions you may have:

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Use the white space on each page to add your own notes.

What do I need to know for breathing emergencies?

A trach must not be plugged or displaced.

This can block the airway and your child will not be able to breathe.

Call 911 if you need help.

Problem:	Actions (Move to next step if not successful):
Child becomes pale or blue	Use breathing bag to give breaths to trach Check oxygen or ventilator and suction
Air will not enter trach from breathing bag	Attempt to suction Try change trach (same size first, then one size smaller) Cover stoma; use mask to mouth and nose to give breaths with breathing bag
Tube falls out	If tube falls out, place obturator in tube and re-insert
Rapid breathing, looks anxious or restless, nasal flaring, chest or neck is sucking in	Check oxygen reading on oximeter Provide breathing with bag and suction Check for fever

An oxygen source and breathing bag should be near at all times.

It is best to have it connected and ready to use. If you find your child:

- Does not respond or look right or has a gray, blue, or pale color
- Is working hard to breathe (such as seeing pulling in between ribs or neck)

You need to get help and call 911. Start these steps right away.

1. First, you must determine if your child has a clear airway. Lay your child down and listen by your child's trach tube for airflow. Watch for the chest to rise. You may need to tilt the head slightly.
2. Do you hear air flowing in and out?
 - a. If no, make sure the tubing, bag, and flowmeter are connected. Turn on the oxygen tank to 10-15 LPM and attach the resuscitation bag to the trach. The reservoir must be inflating or extended. Attempt to give rescue breaths. Give 1 breath every 3 seconds, or 20 breaths per minute.
3. Try to give a breath by squeezing the bag, if you cannot get air in or see chest rise, try suction. If unable to suction, you may give saline drops to loosen secretions.
4. Try again to give a breath. If you still cannot get air in, you must change the trach tube. Lay your child flat with a neck roll if possible. Try the same size trach, if unable to place the same size then place the size smaller trach from the bedside. Hold the trach tube in place or secure a trach tie.
5. Try to give a breath. If still unable to give a breath, you should remove the trach tube, cover stoma with a cloth with one hand and place a mask on the bag, apply to face, covering the nose & mouth. Make sure you have a good seal. Begin giving breaths with the mask and bag. By this time help should have arrived to help with CPR.

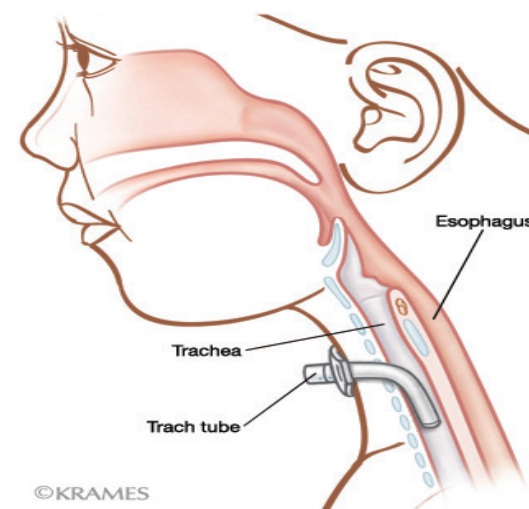
How does a tracheostomy (trach) work?

What is a tracheostomy?

A tracheostomy is an opening created for air to flow into the lungs.

Reasons to have a trach can include:

- Use of a long-term ventilator (machine to help with breathing)
- Blocked airway because of an accident, paralysis, surgery, or other problem
- Frequent need to suction (clear the airway)
- Blockage of airway during sleep, known as sleep apnea



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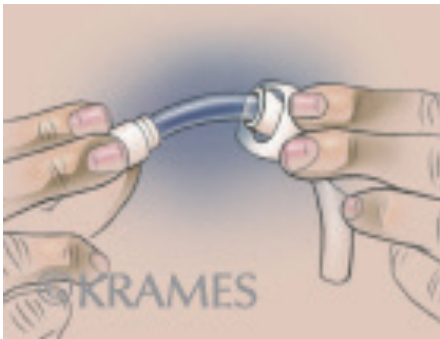
A tracheostomy creates a shorter path to the lungs by an opening in the neck into the windpipe (trachea).

Use the notes section to write down the type and size of trach and any other helpful care facts you want to remember.

What are parts of a trach tube?

Trachs may be made up of 3 parts:

- Inner cannula (tube)
 - This part may be removed for cleaning
 - Most children's trachs do not have an inner cannula, only an outer cannula.



- Outer cannula
 - This should not be removed
 - A cuff on the outside is inflated to block air around the tube. Air or sterile water may be added to the small tube called a pilot balloon. You will be told how much air or sterile water to use to fill the pilot tube.

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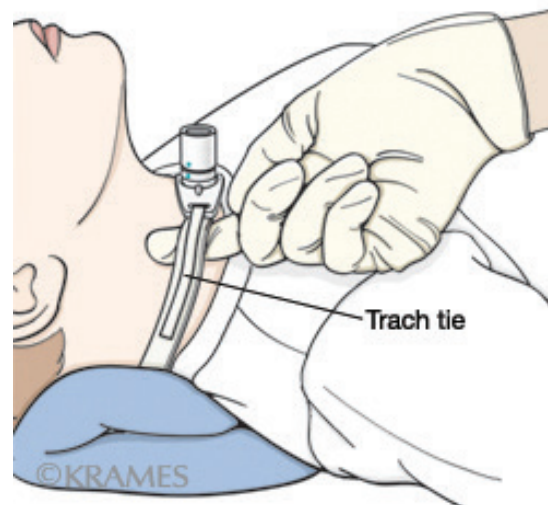
- Obturator
 - Helps with placing the trach. Keep this nearby in case the trach tube comes out.

How do I take care of the area around the stoma (trach opening)?

Keep skin clean and dry. Do skin cares every 12 hours and as needed. Trach ties hold the tube in place. Ties should not be too tight or too loose. In many children, 1 finger-width is advised.

Trach care supplies needed:

- Sterile cotton-tipped applicators
- Sterile water, sterile gloves
- Normal saline vials (pink jets or bullets)
- Suction equipment
- Trach ties
- Medicine cup or small container
- Trach dressing, if applicable
- Skin barrier, if applicable
- Neck roll



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You will be told how often you should clean around the trach.
Supplies may not need to be sterile.

Cleaning around the trach:

1. Wash hands and apply gloves.
2. Suction trach if needed.
3. Fill medicine cup or container with sterile water.
4. Place 8 sterile, cotton-tipped applicators in sterile water.
5. Put bed flat, secure child as needed.
6. Place neck roll under shoulders to open up neck area around trach.
7. Clean trach plate with moistened cotton-tipped applicators.
8. Clean skin under the trach plate with moistened cotton-tipped applicators. Be careful when cleaning under trach by using 2 cotton-tipped applicators at a time by rolling between your fingers. Always move away from the trach opening. The child may get poked if only 1 cotton-tipped applicator at a time is used.
9. Dry the area with sterile cotton-tipped applicators or 4X4 sponge.
10. Use a skin barrier if there is redness or open areas.

Changing Trach Ties:

Trach ties should be changed at least 1 time each day and as needed if wet or soiled. It is advised to have 2 people to change trach ties safely.

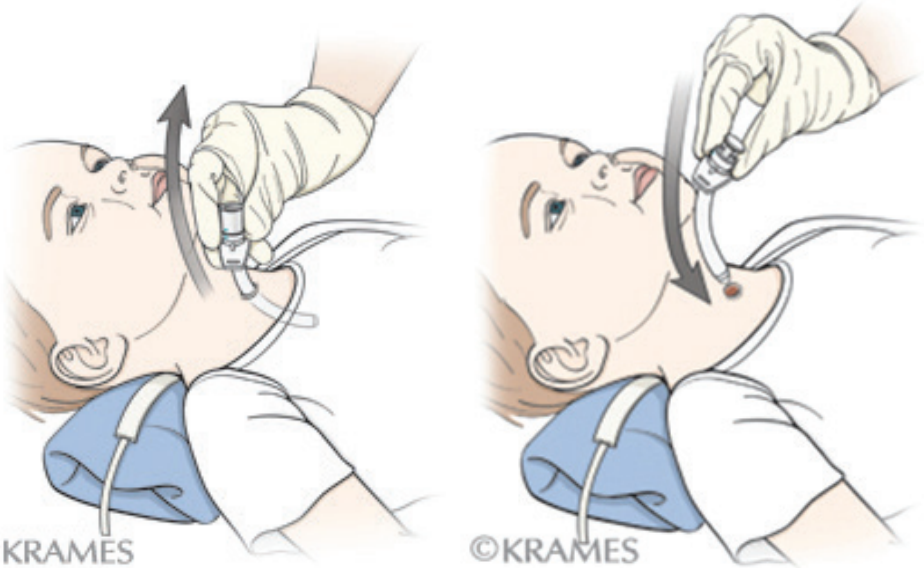
- Take off trach tie only 1 side at a time.
- Secure trach tube by holding lightly with your finger. Be careful not to plug the trach.
- Re-attach clean trach tie.
- Move to the other side and repeat.

What do I need to know to change a trach?

Trach change

The trach tube is changed for cleaning or if there are problems breathing. Change the trach at least _____.

Have all emergency supplies, obturator, syringe, new trach and a smaller trach ready. It is a good idea to have a second person available whenever you change the trach.



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Plan to change the trach before a feeding or 2 to 3 hours after a feeding to help avoid any chance of your child vomiting. Try to change the trach tube in a quiet place where you will not be disturbed. Do the trach change with one of your support persons. If the child is active, you will need someone to help hold your child.

1. Wash your hands. Apply gloves if used.
2. Have supplies, emergency equipment, and helper ready.
3. Check new trach by making sure cuff inflates properly if a cuffed trach is used.
4. Suction if needed. Allow to recover.
5. Remove trach dressing.
6. Check the skin around the stoma for any redness, swelling, cuts, or bruises.
7. Prepare new trach by putting trach ties on 1 side.
8. Remove tie on 1 side and hold in place.
9. Deflate cuff (if there is a cuff) by removing air or sterile water with syringe.
10. Remove old trach tube.
11. Put in new trach tube. Remove obturator if present.

What is an oximeter?

A device that measures the oxygen level is called an oximeter. This may be connected to a finger or foot. You may notice a red light on the tip. Your doctor will tell you what this number should be.

What is a resuscitation (breathing) bag?

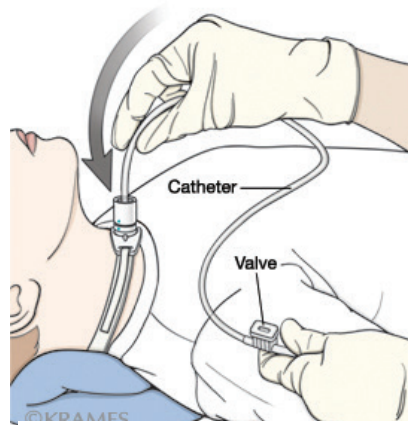
A resuscitation bag helps supply oxygen into the lungs. A resuscitation bag is used to assist breathing. This is very important when a child is not able to breathe without help. A mask is attached when someone does not have a trach or if attempts to clear a trach do not work.

How do I suction the trach?

It is not always possible to cough out secretions from a trach. In the hospital, suctioning is done by staff using a sterile technique. When you learn, and while you are at home, you will use a clean technique.

Supplies you will need include:

- Suction machine
- Suction catheter and packaged gloves
- Suction connecting tubing
- Saline drops, if needed



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Steps you will use for suctioning:

1. Wash your hands and apply gloves.
2. Connect suction catheter to suction tubing and tuck under arm (be careful to not let the catheter slip out).
3. Advance suction catheter (without applying suction) into trach _____ cm.
4. Apply suction and rotate catheter slowly while withdrawing catheter (approx. 15-20 seconds) completely.
5. Apply oxygen to allow breathing to recover.
6. Repeat above until clear.
 - a. If secretions are thick, use saline drops.
7. Apply oxygen source and ensure comfort.
8. Rinse suction catheter with sterile water.
9. Place suction catheter in clean package at bedside.
10. Rinse connecting tubing.
11. Wash your hands.

How do I work with oxygen?

Oxygen is dangerous around sources of fire. **Do not allow** smoking in your home. Do not have any open flames such as burning candles. Children who are old enough to cook should not do so while wearing oxygen. Oxygen tanks and mixers should be handled with caution. Use the prescribed dose of oxygen.

The airway must be kept moist at all times. Humidity may be applied to the trach and can be used with or without oxygen. A heat moisture exchanger, called an HME or nose, helps to keep the airway from becoming too dry and protects food or water from entering from the outside into the trach during play or bath time. Change as needed or advised by your equipment provider.

How do I use a speaking valve?

If your child is verbal, talking is not possible at first. With a trach, air does not flow near the vocal cords. Some trachs can be adapted later with a valve to allow for speech. The special valve is sometimes called Passy-Muir or PMV.

Important things to know

- **Do not** use the speaking valve with the cuff inflated. The patient will not be able to breathe.
- Always remove the speaking valve when doing a nebulizer treatment. The medication will cause the valve to stick.
- When you are finished with the speaking valve, reinflate cuff if it was inflated before. Place back on routine respiratory support.

Here are steps to use the valve:

1. Suction trach if needed.
2. Deflate the cuff on the trach tube if there is one.
3. Apply speaking valve to trach.
4. Apply humidity or oxygen, if needed.

Clean the valve when finished. Swish the valve in fragrance-free soap and warm (not hot) water. Rinse thoroughly with warm water. Allow the speaking valve to air dry thoroughly before placing it in the storage container.

- **Do not** apply heat to dry the valve.
- **Do not** use hot water, peroxide, bleach, vinegar, alcohol, brushes or cotton tipped applicators to clean the valve.

How do I troubleshoot breathing problems?

Problem:	Actions:
Wheezing, coughing	Trach may need to be suctioned; Give reliever (nebulizer or inhaler) if you have been advised.
Trach ties become loose	Check tightness of tie. Keep one finger width. Replace ties as needed.
Mucous build-up, mucous that is thick, smelly, yellow, or green	Suction, check temperature, use saline if needed, and inner cannula or trach tube may need to be changed.

What is a ventilator (breathing machine)?

Some children will need a machine to help with breathing. Your healthcare team will help you and your loved ones adjust to it and use it safely. Home ventilators are usually small and portable. Most types can be attached to wheelchairs. They can also be set up by the bed for use when sleeping. A ventilator works by pushing air (and extra oxygen, if needed) into the lungs.

Ventilators can deliver various types of breaths, such as volume control and volume assist, pressure control and pressure assist, and pressure support. Some people need to use the ventilator all of the time. Others may only need it at certain times, such as when sleeping.

What should be in a Go bag?

You will want to be comfortable leaving your home. Bringing your “Go bag” will help you be prepared. This will include what you need for emergencies as well.

These supplies include:

- An extra same size tube with the ties already in place
- A tracheostomy tube that is a size smaller than the one that your child uses with the ties already in place in case the stoma shrinks during an emergency
- Suction machine (handheld or battery powered)
- Suction kits
- Resuscitation bag (with face mask and trach adapter)
- Medical scissors, adhesive bandages
- Gauze pads, antiseptic wipes
- Water-soluble lubricant such as K-Y[®] Jelly (**never** use an oil-based lubricant such as Vaseline[®] petroleum jelly)
- Cotton-tipped applicators
- Vials of saline
- Sterile gloves (even though you may be using a clean technique)
- Plastic clean-up bag
- Flashlight
- Cell phone - charged

When do I call the doctor?

Call your healthcare provider right away for any of the following:

- Shortness of breath, wheezing, or coughing
- Red, painful, or bleeding stoma
- Swelling around the trach tube
- Fever of 100.4°F (38°C) or higher, or as directed by your healthcare provider
- Yellow, smelly, bloody, or thick mucus
- Coughing up blood
- Vomiting that doesn't go away

If there are problems with breathing, start the trouble-shooting you have learned and **have someone call 911 right away.**



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