



Pediatric Tracheostomy Care Guide

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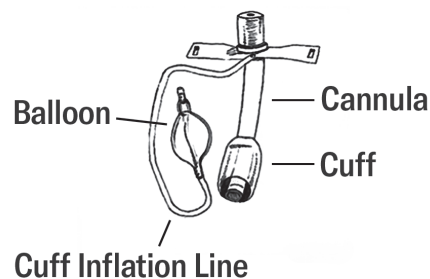
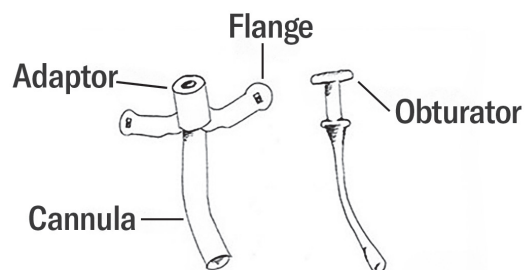
Parts of a Tracheostomy Tube

A tracheostomy is an opening (stoma) in the front of the neck that goes into the airway (trachea). A tracheostomy tube keeps this pathway open so air can go into the lungs.

Your child's doctor may recommend a tracheostomy if your child:

- Needs a breathing machine (ventilator) for a long time
- Has a blockage that keeps them from getting enough air to the lungs through the mouth and nose

Your Care Team will teach you how to keep the area around the tube clean, change the ties and tube, and suction your child's tracheostomy. They will also teach you when to call the doctor and what to do in emergencies. This guide includes directions for all of these things.



Skin Care

You need to take care of the skin around a tracheostomy at least twice a day to prevent infections.

You will need:

- Gauze or a clean washcloth
- Water and mild soap
- A clean container
- A new tracheostomy dressing



It may be helpful to put a small rolled towel behind your child's neck during tracheostomy care. Ask your doctor if this would be okay for your child.

What to do:

1. Mix warm water and mild soap in a clean container.
2. Lay your child on their back on a steady surface.
3. Dip a corner of the gauze or clean washcloth in the soapy water and squeeze out the extra liquid.
4. Gently lift one side of the tracheostomy tube and use the corner of the gauze or washcloth to wipe away any mucus or fluid around the hole. Use a clean corner for each wipe.
5. Dry the area with a dry gauze or dry washcloth.
6. If your child uses a tracheostomy dressing, put on a clean one.

Cleaning the skin on the neck:

1. Use a clean gauze with mild soap and water to wipe the skin on the neck.
2. Hold the tracheostomy tube steady, undo one side of the tie, and clean the skin under the tie.
3. Dry the skin with a clean, soft cloth.
4. Redo the tracheostomy tie.
5. Do the same on the other side.

Tips: If possible, have two caregivers present when removing the tracheostomy ties for neck care to ensure your child's safety. **Do not cut the gauze** used for cleaning or that goes around the tube. Little pieces might get into the tube.

Tracheostomy Ties

Your child's tracheostomy is held in place with a piece of material called a tracheostomy tie.

Cutting a New Tracheostomy Tie

You will need to cut a new tracheostomy tie to fit your child.

You will need:

- A new tracheostomy tie
- An old tracheostomy tie

What to do:

1. Take out a new tracheostomy tie. It has two parts—a long piece and a short piece.
2. Place the long piece of the new tie next to the long piece of an old tie that has already been cut to fit your child.
3. Cut the end of the new tie that does not have Velcro to the same length as the old tie.
4. Stick the short and long pieces of the new tie together with Velcro. They should overlap about 1 inch. Make sure the long, thin Velcro tabs are facing outward when you put them together.

Tracheostomy Tie Change

Changing the tracheostomy tie helps keep the skin healthy. Do this at least once a day, and more often if it looks dirty or wet.

You will need:

- A new tracheostomy tie

What to do:

1. Adjust the new tie to the right length using the old ties as a guide.
2. Lay your child on their back on a steady surface.
3. Put the new tie behind your child's neck, leaving the Velcro tabs open. The dull side of the tie should be against your child's skin, and the fluffy side of the tie should face out.
4. Hold the tracheostomy tube securely in place.
5. Remove the old tie on one side, then close the Velcro tab.

Tracheostomy Ties (cont'd)

6. On that same side, put on the new tie by putting the Velcro through the hole in the side of the tracheostomy tube, from the bottom up.
7. Repeat on the other side.
8. Check that the tie fits correctly. The right fit is when you can slide one finger between the tie and the neck. Adjust the tie length if needed using the Velcro on the back.
9. Take the old tie out from behind the neck.

Tips: It is best to have two caregivers present when you do this, one to hold the tracheostomy tube and one to change the tie.

You can reuse tracheostomy ties. After taking them off, wash them by hand in warm soapy water and let them air dry. Throw them away when the Velcro starts to wear out.

Suctioning Using a Straight Catheter

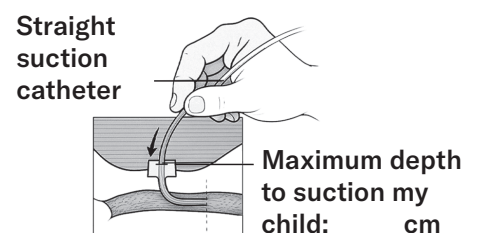
Suctioning helps clear mucus from the tracheostomy tube and stops it from getting blocked.

Do it when:

- You hear or see mucus in the airway
- Your child is coughing
- Your child has trouble breathing or a low oxygen level

You will need:

- Suction catheter
- Suction machine, tubing, and canister
- Sterile water
- Clean cup
- Clean gloves



Suction catheter should not go in past the end of the tracheostomy tube.

Suctioning Using a Straight Catheter

(cont'd)

What to do:

1. Set up the suction machine and turn it on.
2. Pour sterile water or saline into the clean cup.
3. Put on clean gloves and connect the suction catheter to the suction machine tubing.
4. Hold the catheter with your finger and thumb at the number you have been told is your child's maximum suction depth.
5. To test the catheter, put the tip of the catheter in the water. Create suction by placing your opposite thumb over the large hole at the end of the catheter. Water will get sucked into the tube. This means it is working correctly. Remove your thumb from the large hole to stop creating suction after you have tested the catheter.
6. Take off the ventilator, collar, or valve covering your child's tracheostomy. Put the catheter into the tracheostomy. Do not create suction when you are putting it in. Stop putting it in when you reach your child's maximum suction depth.
7. Start suctioning as you take out the catheter by covering the large hole with your thumb. Move the catheter in a gentle circle while removing it. The whole suctioning should take 5-10 seconds.
8. Rinse the suction catheter with sterile water in a clean cup by dipping the tip of the catheter into the water and creating suction as in step 5.
9. Repeat up to 3 times. Let your child take a breath or put the ventilator back between tries.

Tips: If your child has a cold, they might produce more mucus, and you might need to suction more. This is normal, but if the mucus smells bad, has color, or is a lot thicker than usual, call your doctor.

Suctioning Using an Inline Catheter

Your child might use an inline suction system at home.

You will need:

- Suction machine
- In-line suction catheter (connected to the tracheostomy)
- Saline nebule

What to do:

1. Attach the suction tubing to the big opening on your child's in-line suction catheter. Open a saline nebule and attach it to the little opening on the suction catheter.
2. Turn on the suction machine.
3. Gently insert the catheter into the tracheostomy until you reach the point where you were told to stop. Do not press the button on the catheter while inserting.
4. Press the button to start suction, and slowly withdraw the catheter from the tracheostomy. The entire suctioning process should take 5-10 seconds.
5. Make sure the catheter is completely removed until the black catheter tip is visible in the viewing window.
6. You can repeat this process if needed, allowing your child to rest in between.

You might also need to clean, or "flush," the suction catheter between uses.

What to do:

1. Attach a saline nebule to the suction port.
2. Press the suction port button.
3. Squeeze the saline nebule into the suction port.
4. Close the flush port when finished.



Tracheostomy Tube Change

Changing your child's tracheostomy tube as recommended helps keep away infections.

Do it when:

- Once a month or as often as your doctor tells you
- If possible, do it when you have two caregivers present who know how to do it and when you are not in a hurry

You will need:

- New, current size tracheostomy tube
- New, half-size smaller tracheostomy tube
- New tracheostomy tie, cut to the right length
- Sterile water-based lubricant
- Clean gloves
- 3 mL syringe (if your child has a cuffed tracheostomy tube)
- Rolled towel for under the shoulders

Have these nearby:

- Equipment for suctioning set up and turned on to a low setting
- Ambu Bag connected to oxygen at 10 liters/minute
- Phone in case of an emergency

Tracheostomy Tube Change (cont'd)

What to do:

1. Get everything you need ready:
 - Put the new tracheostomy tie behind the child's neck
 - Open the new tracheostomy package
 - Wash hands and put on clean gloves
 - Open and pour sterile lubricant onto a clean surface
 - If using a cuff, place a syringe on the tray
2. Check and prepare the new tube:
 - Hold the tracheostomy tube carefully without touching the part that goes inside
 - Make sure the obturator is in place
 - Test the cuff by inflating then deflating it if needed
 - Put some lubricant on the tip of the tube
3. Get ready to take out the old tube:
 - Hold the old tracheostomy tube in place
 - Undo the old tie
 - If there's a cuff, deflate it
4. Take out the old tube and put in the new tube:
 - Say "I am taking out the tube now"
 - Take out the old tracheostomy tube and put in the new one
 - Use a smooth, curved motion to guide the new tube's tip toward the back of the neck. Don't push the tube too hard
 - Hold the new tube in place
 - Take out the obturator
5. Secure the new tube:
 - Put the new ties on the tracheostomy tube
 - Put back any equipment you took off, like a ventilator or collar
 - Inflate the cuff, if your child has one

Tips: If the tracheostomy tube does not go in easily, do not force it. If you cannot put it in or move it forward, take it out. Then, change your child's position so their head tilts back and you can see the hole better. Put more lubricant on the tracheostomy tube and try again. If it still doesn't work, try a tube that is a half-size smaller. If you still cannot replace the tracheostomy tube, ask someone to call for emergency help (911).



What if My Child's Tracheostomy Tube Comes Out by Accident?

Stay calm—you can fix this.

What to do:

- 1.** Put a new tracheostomy tube back as soon as you can:
 - If you have a new tube nearby, take it out of the package and put it in as explained in the “Tracheostomy Tube Change” instructions
 - If a new tube is not close by, use your extra obturator (plastic “stiffener” that comes inside of the tracheostomy tube) to put the old tube back in
 - If you cannot put back the same size tube, try using one that is a half size smaller
- 2.** If you can't put any tube back, call 911
- 3.** Keep your child relaxed while you wait for help. If possible, put on their oxygen monitor to check their level

Cleaning and Changing Your Supplies

Tracheostomy Ties:

Change daily. Clean with warm water and dish soap after each use. Let air dry. You can reuse the ties for as long as the Velcro is strong and sticky. Throw used trach ties away when the Velcro begins to get less sticky.

Heat Moisture Exchanger (HME):

Change your child's HME at least one time a day and throw away the old one.

Speaking Valve:

Clean your child's speaking valve once a day. You can keep using it for up to two months.

What to do:

1. Separate the speaking valve and the speaking valve adaptor.
2. Swish both pieces in warm, soapy water (not hot water).
3. Rinse both pieces with warm water.
4. Let the pieces air dry before putting them away in the case.

* Do not use hot water, peroxide, bleach, vinegar, alcohol, brushes, or cotton swabs to clean the speaking valve.

Straight Suction Catheters:

It is best to use a new sterile straight suction catheter each time you suction your child. If you are running low on catheters, you can reuse your catheters for up to 12 hours if you put them back into the package they came in after each use.

Inline Suction Catheters:

Change your child's suction catheter at least once a week and throw away the old one.

Cup or Container for Rinsing Catheters:

Change daily.

Suction Machine:

Check batteries at least one time per year.

Suction Tubing:

Change your suction tubing once a week and throw away the old suction tubing.

Suction Canisters:

Clean the suction canisters daily at least one time per week. You can keep using them for as long as you need, as long as they are not broken.

Cleaning and Changing Your Supplies

(cont'd)

What to do:

1. Fill two large containers: one with warm soapy water (use mild dishwashing soap) and one with one part white vinegar and three parts water.
2. Remove the short tubing from the suction canister lid, remove the lid, and empty the contents in the toilet.
3. Put all parts of the canister and tubing in the container of soapy water and rinse with tap water.
4. Put all parts of the canister in the container of vinegar solution and soak for 30 minutes. Rinse with tap water and leave to air dry.
5. Replace in the machine, using new suction tubing.

Tracheostomy Tubes:

Change your child's tracheostomy tube at the schedule your doctor tells you. It is best to put in a new, same-size tube. Usually, you will throw away the old tracheostomy tube.

Sometimes, there might not be enough tracheostomy tubes for you to get a new one, and your doctor may tell you to clean and reuse your child's old tracheostomy tube. If this happens, do this:

If your child has a silicone Bivona tracheostomy tube:

1. Clean the tracheostomy tube in warm, soapy water. Use the obturator to get any mucus out from the inside of the tube. A soft brush, such as a clean toothbrush, may be helpful to clean the outside. When cleaning, check the tube for any cracks or sharp edges. If you see these, throw the tube away.
2. Rinse the tube and obturator in water.
3. Heat a pan of water. Take it off the heat when it starts to boil.
4. Place the tracheostomy tube and the obturator in the pan and let it cool.
5. Take the tracheostomy tube and obturator out of the water when the water is cool enough to reach in using your bare hands.
6. Put them on a clean paper towel to dry. Once the tube is dry, hold it by the wings only.
7. Put the clean tube and obturator in a clean ziplock bag and label with the date and number of times used.

Cleaning and Changing Your Supplies

(cont'd)

If your child has a plastic Shiley tracheostomy tube:

1. Clean the tracheostomy tube in warm, soapy water. Use the obturator to get any mucus out from the inside of the tube. A soft brush, such as a clean toothbrush, may be helpful to clean the outside. When cleaning, check the tube for any cracks or sharp edges. If you see these, throw the tube away.
2. Rinse the tube and obturator in water.
3. Fill a clean container with one-half water and one-half vinegar. Put the tracheostomy tube and obturator in the mixture for 2-3 hours.
4. Take the tube and obturator out and rinse with water. Place them on a clean paper towel to dry.
5. Once the tube is dry, hold it by the wings only.
6. Put the clean tube and obturator in a clean ziplock bag and label with the date and number of times used.

Daily Life and Safety

Frequently Asked Questions

Why do I need to put a filter, valve, or mask over my child's tracheostomy?

The opening to your child's tracheostomy tube should never be fully uncovered or look like an open hole. Children who do not use a ventilator need to keep a humidifying filter (HME), tracheostomy collar mask, or other special valve over the opening of their tracheostomy tube. These put moisture in the air and prevent objects from accidentally getting inside. Your child's team will recommend what is best for them.

Will my child be able to talk?

Having a tracheostomy tube changes a child's cry and voice, but there are many things available to help them, like speaking valves and other communication tools. Talk to your child's ENT doctor about this. They will tell you when your child is ready.

Daily Life and Safety (cont'd)

Frequently Asked Questions

Are there things my child needs to be careful about because of the tracheostomy?

Children who have tracheostomy tubes can enjoy many of the same activities as other children their age. But there are some things they should avoid or be extra careful about.

- Bodies of water, like baths, pools, or the ocean, are dangerous for children with tracheostomies. If you use a bathtub, only fill it enough to cover the bottom with water. During bath time, keep a close eye to make sure water does not get into the tracheostomy tube. Your child should not swim or be near open water. When washing your child's hair, carefully pour water over it with a cup while they're lying back with their head and neck supported
- Powders and sprays can get into the tracheostomy tube. Do not use these around your child unless discussed with your doctor
- Your child should not play contact sports
- Your child should not wear clothes with loose strings near the tracheostomy tube, like some sweaters, or clothes that cover the tube, like scarves or turtleneck shirts. If you're getting a pet, think about one that can live outside or does not shed. If you already have a pet, do not let it sleep with your child and keep it off the furniture
- If anyone in your household smokes, ask them to do so outdoors and to change their clothes upon coming inside

Will my child have a tracheostomy forever?

Every child is different. Some children need their tracheostomy tubes for a very long time and some children need their tubes for just a short time. Talk to your ENT doctor about this. They can advise you about what to expect for your child.

Being Prepared

Sometimes you may need to suction, change, or replace your child's tracheostomy tube when you are not planning to. To be ready for this, it is important to have a go bag packed and with you all the time.

Here's what should be in your go bag:

- A new tracheostomy tube that is the same size as the one your child uses
- Another new tracheostomy tube that is a half-size smaller
- Sterile water if needed for cuff inflation
- 5 mL syringe to inflate or deflate cuff if needed
- Scissors
- Sterile water-based lubricant
- Ambu bag
- Gloves
- Gauze
- Pre-cut tracheostomy ties
- Fully charged manual suction device
- Kit with a suction catheter
- List of emergency phone numbers
- Oxygen if your child needs it often

Getting Help

If This Happens

Do This

You're almost out of medicine.

Call your Pharmacy

- You're almost out of care supplies and need more delivered.
- You have questions about using your medical equipment or it is broken.

Call your supply company

- There are skin problems around the tracheostomy (pain, redness, drainage, swelling, bleeding, or a new smell).
- Your child's mucus is yellow, green, or smelly, or is thicker than normal.
- Your child needs more oxygen than usual.
- Your child has a fever higher than 100.4°F (38°C).

Call your ENT or pulmonary doctor

- **Your child is having trouble breathing, even after using suctioning or oxygen. Signs include retractions (pulling in at the chest), making extra noises when breathing, breathing fast, and looking pale or blue.**
- **The oxygen level is under 90% and doesn't get better with suctioning or extra oxygen.**
- **The heart rate is very low or much higher than normal.**
- **Your child is hard to wake up or acting very differently than usual.**
- **Your child's tracheostomy tube fell out and you can't put it back in.**

CALL 911

Make sure to tell them your child has a tracheostomy.

***Hook up your child to the oxygen monitor while you wait for the ambulance.**

Special Situations

If you notice that your child is having trouble breathing or has low oxygen levels and you do not know why, here are some things to check:

Things to Check

- Suction the tracheostomy
- Check that the tracheostomy tube is still in
- Check that your child's breathing machine is hooked up and on
- Check oxygen level and heart rate

How to Fix Them

- If the catheter will not go in, change the tracheostomy tube
- If it is out, put a new tube in
- If it is off, turn it back on
- Give extra oxygen if needed to get level over 90%

If you have checked all of these things and your child is still having trouble breathing, call 911.

How do I use an Ambu bag to help my child breathe in an emergency?

Sometimes, kids might have trouble breathing during an emergency. At home, you will have an Ambu bag to help them until the ambulance comes. You can check if your child is breathing by watching their chest for movement or feeling their tracheostomy for air coming out.

If your child is not breathing, use the bag to give them breaths.

1. Connect the Ambu bag to the mask.
2. If you have oxygen, connect the Ambu bag to an oxygen tank set to 10 liters per minute.
3. Attach the bag to your child's tracheostomy tube.*
4. Squeeze the bag about once every 3 seconds, allowing it to fully reopen between breaths.
5. Keep doing this until help arrives or your child starts breathing on their own.

*If your child's tracheostomy tube is out and you cannot replace it, put the face mask over your child's nose and mouth and hold tight. Cover the tracheostomy hole with a finger. Follow the steps above to give breaths.

*** Note:** Some children cannot use a face mask. Follow the instructions given by your child's doctor.

My Child's Tracheostomy Details

My Child's Name	_____
Date Tracheostomy Placed	_____
Brand of Tracheostomy	_____
Tracheostomy Size	_____
Emergency Tracheostomy Size	_____
Suction Catheter Size (Fr)	_____
Maximum Depth for Suctioning <i>If applicable:</i>	_____
How Much to Inflate Cuff (mL)	_____air/water
How Often to Change Tracheostomy	_____
Size of Inner Cannula	_____
My Child's ENT Doctor (Ears, Nose, Throat)	Phone: _____ Address: _____
My Child's Pulmonologist (Lung Doctor)	Phone: _____ Address: _____
Nursing Company	Phone: _____ Address: _____
Medical Supplies Company	Phone: _____ Address: _____
Pharmacy	Phone: _____ Address: _____

In an Emergency Call 911



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This information is brief and general. It should not be the only source of your information on this health care topic. It is not to be used or relied on for diagnosis or treatment. It does not take the place of instructions from your doctor. Talk to your health care providers before making a health care decision.

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