



Name of Child: _____ Date: _____

How to Suction Your Child's Tracheostomy

What is trach suctioning?

Suctioning pulls mucus out of a child's airway.

When should a trach tube be suctioned?

Suction your child's tracheostomy once every morning and once every evening, to keep the trach tube from slowly becoming blocked.

A trach tube also needs to be suctioned when your child cannot clear the mucus.

Suction your child's trach when:

- your child has trouble breathing
- you can see or hear mucus
- your child has trouble eating
- your child's breathing is noisy
- a plug of mucus is blocking the airway
- your child's breathing sounds wet or not normal
- your child's skin is blue, pale, red, or a color that isn't normal
- your child's heart is beating very fast
- your child's skin is sweaty when it's cool
- your child is less active than usual
- your child breathes faster than normal
- coughing does not clear the mucus
- your child is restless
- you hear a whistle from the trach

How do I suction my child's trach?

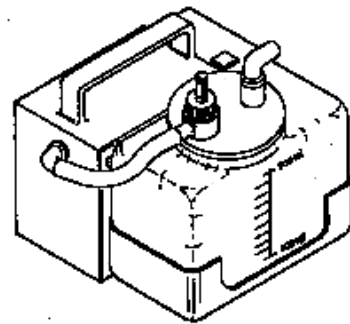
There are three ways to suction:

1. shallow,
2. pre-measured, and
3. deep.

Use shallow or pre-measured suctioning for regular mucus removal. Use deep suctioning for emergencies. Choose the way that goes down only as deep as you need to clear the airway.

In the hospital we are very careful to keep germs away from your child, using a sterile technique to suction. We wear gloves to suction and use each catheter only once.

The germs in your home have already touched your child, so you can use a clean technique to suction safely at home. This means you should wash your hands well before suctioning, and you don't need to wear gloves. Clean the catheter after you use it, and you can use it again.



The suction machine.

Number of times to use the catheter: (circle one) 4 5 6 7 8

If your child is sick, use a new catheter after 3 hours _____ hours.

If your child is well, use a new catheter after 10 hours _____ hours.

What pressure should I use to suction?

Usually, suction a baby's trach tube with a pressure between 60 to 80 mm/Hg and a child's trach tube between 80 to 100 mm/Hg. Babies are under 1 year old. Children are 1 year old and older.

The pressure may be slightly different, depending on the machine and the thickness of the mucus.

Should I drip a little saline in my child's trach before suctioning?

You should not use saline for regular suctioning. Saline may loosen germs in the lower airway. Studies show that when you put saline in before suctioning, your child may get less oxygen for up to 5 minutes. Studies also show saline can bother the airway (trachea).

You should only use 1 to 2 ml of saline if your child's trach is plugged with mucus or you see dried mucus, and you need to loosen it up to get it out.

Shallow suctioning

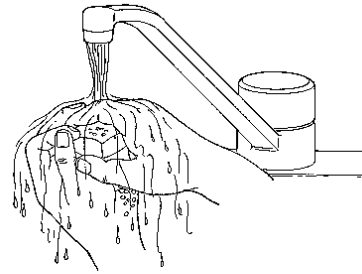
Shallow suctioning takes away the mucus at the end of the tube. You may see mucus after your child coughs. With shallow suctioning you do not put the catheter into the trach tube.

You may use a bulb syringe or a suction machine using a Yankauer tip to remove mucus from the opening of the trach.

Suction with a Bulb Syringe

Use one bulb syringe for a baby's nose and mouth, and another bulb syringe for baby's trach.

1. Wash your hands with soap and water.
2. Point the bulb syringe away from your child and squeeze out the air.
3. Put the tip of the bulb syringe into the opening of the trach tube.
4. Stop squeezing the bulb syringe. It will pull mucus out of the trach into the bulb syringe.
5. Squeeze the mucus from the bulb syringe into a tissue.
6. Repeat, if you did not get enough mucus out.
7. Rinse the bulb syringe out with warm water.
8. Wash your hands with soap and water.



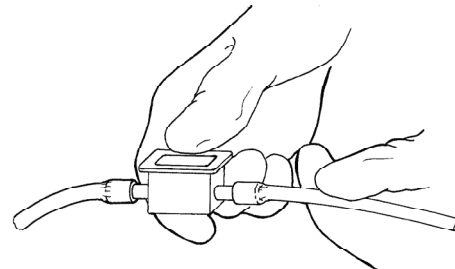
**Wash your hands
with soap and water.**



**Point the bulb syringe
away from your child
and squeeze out the air.**

Suction with a Yankauer Tip

1. Wash your hands with soap and water.
2. Put the Yankauer tip on the end of the suction tubing.
3. Turn on the suction machine.
4. Put the tip at the opening of your child's trach tube.
5. Put your thumb over the air vent to start the suction. Take your thumb off the air vent to stop the suction.
6. Use the suction to take away mucus that has been coughed up to the opening of the trach.



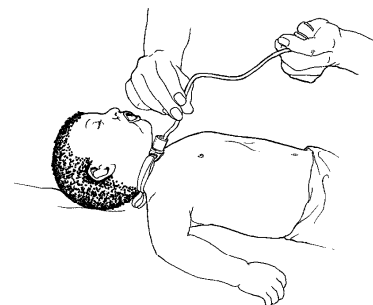
**Put your thumb
over the air vent
to start the suction.**

Premeasured Suctioning

Use premeasured suctioning to suction your child's trach every morning and every evening.

Sometimes your child's trach tube collects mucus inside. Measure how long the trach tube is, and put the catheter in just a little more than the length of the trach tube. This is called pre-measured suctioning.

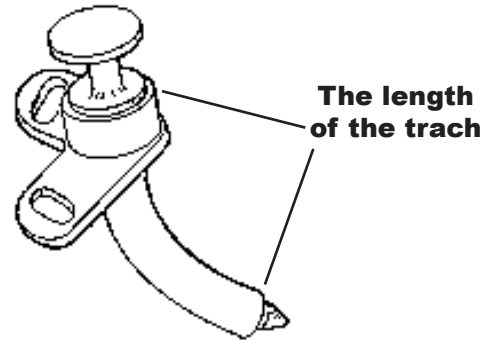
My child's trach tube is _____ inches long (or _____ centimeters long)



**Use premeasured suctioning
to suction your child's trach
every morning
and every evening.**

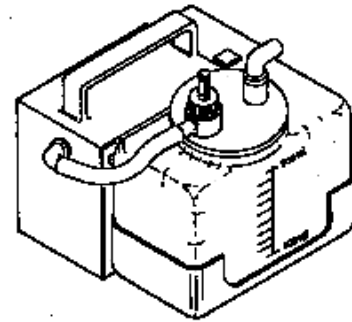
What you need

- suction machine
- catheter
- saline drops
- sterile water in a paper cup, to rinse the catheter
- resuscitation bag



What to do

1. Wash your hands with soap and water.
2. Turn on the suction machine.
3. Use a new or clean catheter. Do not touch the end of the catheter with your bare hands.
4. Connect the catheter to the suction tubing.
5. Put your thumb over the air vent, to close it and start the suction. With premeasured suctioning, you can suction going in and out of the trach tube.

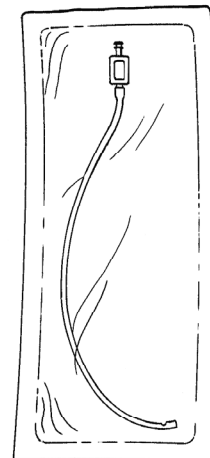


Turn on the suction machine.

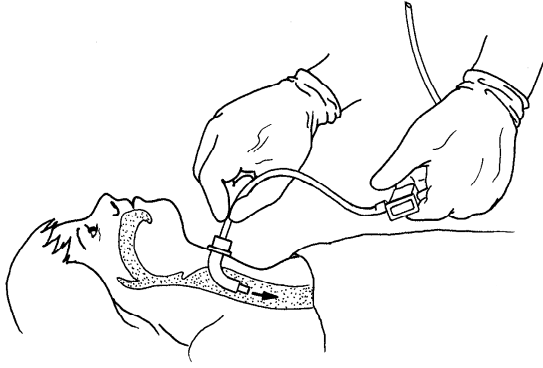
6. Put the catheter in the trach only about 1/4 inch past the tip of the trach tube.
7. As you suction, twirl the catheter between your thumb and finger so the catheter moves easily along the side of the trach tube.


1/4inch

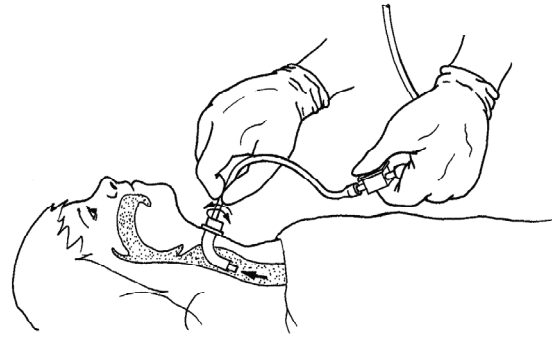
Do not stir the catheter with your whole hand. Only the catheter should move, not the trach tube. If the trach tube rubs on the inside of the child's airway, it could get sore and bleed.



Use a new or clean catheter.



**Put your thumb over the air vent,
to close the opening.
Suction going in and out
for 5 seconds or less**



**As you suction, twirl the catheter
between your thumb and finger
so the catheter moves easily
along the side of the trach tube.**

Suction for 5 seconds or less. Count one-one-thousand, two-one-thousand, three-one-thousand, four-one-thousand, five-one-thousand.

8. Let your child rest for at least 30 seconds between suctioning. You may need to use a resuscitation bag to help your child catch his or her breath.

9. After each suction, rinse the tubing with sterile water.

10. If you need to, repeat steps 5 to 7. You may need to do this one or two times.

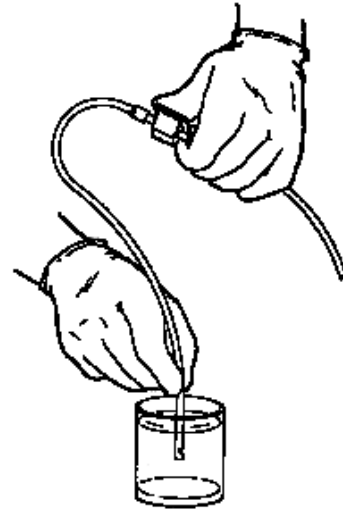
You may suction your child's nose or mouth after you suction the trach tube, but the next time you suction the trach tube use a clean catheter. If you use the same catheter, germs from the nose or mouth could be placed in the trachea. This could give your child an infection.

After you suction

After you suction look at the mucus. Check:

- is it thin, watery, or thick?
- what color is it? white, yellow, green, bloody, tan?
- how does it smell? no odor, foul, faint
- how much mucus is there? a small, medium, or large amount?

Know what your child's mucus usually looks like. Mucus tinged with blood means the inside of the airway has been irritated. This can happen when you suction too much, too hard, or too deeply. It may mean the pressure on the suction machine was too high.



After each suction, rinse the tubing with sterile water.

There are other reasons for a little blood in the mucus. The air may be too dry (not enough humidity). The trach ties may be too loose or too tight. The trach tube may be moving during suctioning, and rub against the airway, making it bleed. The trach collar may not be working well, or the child may not be using the trach nose or HME when away from the humidity collar. Bleeding from the trach tube may also be a sign of infection.



Call your child's doctor right away if you see:

- A color change, like yellow or green mucus
- mucus with a strong odor
- bleeding from the trach

This may mean there is an infection in the airway (trachea) or lungs.

Deep suctioning

Deep suctioning goes in further than the end of the trach tube. Use deep suctioning only for emergencies when premeasured suctioning does not work or you have to do CPR. Since the suction tube goes in much deeper, deep suctioning can hurt the airway (tissue of the trachea).

Now that you've read this:

- Show your nurse or doctor how you would shallow suction your child's trach. (Check when done.)
- Show your nurse or doctor how you would measure your child's trach. (Check when done.)
- Show your nurse or doctor how you would suction your child's trach at the pre-measured depth. (Check when done.)
- Tell your nurse or doctor when you would call the doctor. (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
602-546-1400
www.phoenixchildrenshospital.com

Disclaimer

The information provided at this site is intended to be general information, and is provided for educational purposes only. It is not intended to take the place of examination, treatment, or consultation with a physician. Phoenix Children's Hospital urges you to contact your physician with any questions you may have about a medical condition.

#807 • Written by Penny Morgan Overgaard, RN • Illustrated by Dennis Swain