



Procedure/Treatment/Home Care Si usted desea esta información en español, por favor pídasela a su enfermero o doctor.

#807

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 your child breathes faster than normal
- you can see or hear mucus coughing does not clear the mucus
- your child has trouble eating your child is restless
- your child's breathing is noisy you hear a whistle from the trach
- 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

## 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 suction machine.

At home, you will use what is called a clean technique. This means you should clean your hands well before suctioning, and you don't need to wear gloves.

### **Information about Suction Catheters**

Suction catheters are made to be used only once. If your insurance company or homecare company do not provide you with enough suction catheters to use a new one each time you suction your child's trach, ask your nurse, doctor, or homecare company what to do. If your child is sick, it is best use a fresh suction catheter from a new package every time, instead of cleaning and reusing them.

If you are directed to clean and re-use suction catheters:

- Ask your nurse or doctor for the handout: **Trach Tubes and Suction Catheters**, #860.
- Clean your suction catheters after every session of suctioning.

## 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 1/2 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. Use the smallest amount possible to loosen the mucus.

## **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 that you can see from the opening of the trach.

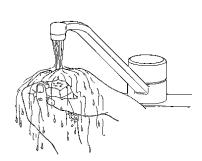
#### Suction with a Bulb Syringe

Use one bulb syringe for a baby's nose and mouth, and another bulb syringe for baby's trach. Label them so that you do not mix them up.

1. Clean your hands with soap and water for 15 to 30 seconds. Rinse, then dry your hands with clean paper towels.

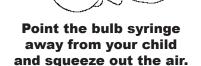
If your hands are not visibly dirty, you can use alcohol-based hand rub to clean them using the following steps:

- 1. Put enough alcohol-based hand rub to fill the palm of your hand.
- 2. Spread the hand rub over all parts of your hands.
- 3. Rub hands until dry.



Clean your hands with soap and water for 15 to 30 seconds.

- 2. Point the bulb syringe away from your child and squeeze out the air.
- 3. Put the tip of the bulb syringe very near 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. Ask your nurse or doctor for the handout: Using a Bulb Syringe, #48 to learn how to clean a bulb syringe.
- 8. Clean your hands when you are done.

#### Suction with a Yankauer Tip

1. Clean your hands with soap and water for 15 to 30 seconds. Rinse, then dry your hands with clean paper towels.

If your hands are not visibly dirty, you can use alcoholbased hand rub to clean them using the following steps:

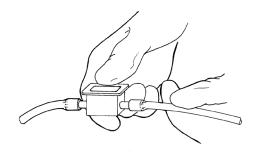
- 1. Put enough alcohol-based hand rub to fill the palm of your hand.
- 2. Spread the hand rub over all parts of your hands.
- 3. Rub hands until dry.



Clean your hands with soap and water for 15 to 30 seconds.

- 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.** 

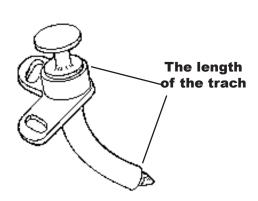
My child's trach tube is \_\_\_\_\_ centimeters long



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 clean paper cup, to rinse the catheter
- ☐ Ambu bag
- ☐ Soap or alcohol-based hand rub
- ☐ Paper towels

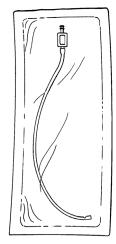


#### What to do

1. Clean your hands with soap and water for 15 to 30 seconds. Rinse, then dry your hands with clean paper towels.

If your hands are not visibly dirty, you can use alcohol- based hand rub to clean them using the following steps:

- 1. Put enough alcohol-based hand rub to fill the palm of your hand.
- 2. Spread the hand rub over all parts of your hands.
- 3. Rub hands until dry.
- 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.



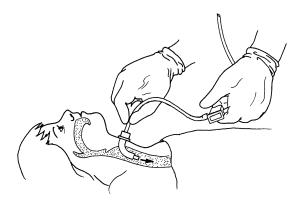
Use a new or clean catheter.

- 1/2 centimeter
- 6. Put the catheter in the trach only about 1/2 centimeter 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.

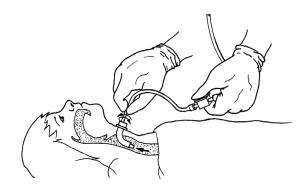
Do not stir the catheter with your whole hand. Only the catheter should move, not the trach tube. If the trach tube rubs on the inside of the child's airway, it could get sore and bleed.

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 Ambu bag to help your child catch his or her breath.



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

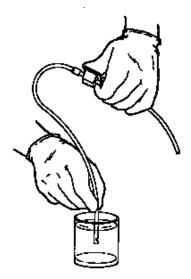


As you suction, twirl the catheter between your thumb and finger so the catheter moves easily along the side of the trach tube.

- 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.

11. Clean your hands when you are done.



After each suction, rinse the tubing with sterile water.

## 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.

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 (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.)
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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 602-933-1400 866-933-6459

www.phoenixchildrens.org

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#807 • April 18, 2016 • Written by Penny Morgan Overgaard, RN • Updated by Monica Hauss, MSN, RN • Illustrated by Dennis Swain and Christine Remmel