

Name of Child: _____ Date: _____

Home Care of Your Child's T-Tube

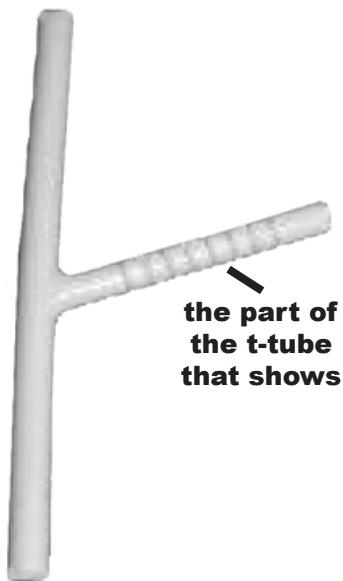
What is a t-tube?

When a child has surgery to rebuild the upper airway, the doctor puts in a t-tube.

A t-tube is a tracheostomy tube that a child breathes through. It is shaped like a T. The air can go through all 3 ends of the tube.

Sometimes the child will breathe through the nose and mouth, and sometimes the child will breathe through the trach tube (outside limb).

**the part of the t-tube
inside the airway**



When do I cap the t-tube?

The doctor will tell you when to cap the outside limb of the t-tube. This makes your child breathe through the nose or mouth.

What is suctioning?

Suctioning pulls mucus out of a child's airway.

When should a t-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
- 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 has trouble eating
- your child is restless
- your child's breathing is noisy
- you hear a whistle from the trach

How do I suction my child's t-tube?

There are two ways to suction: **shallow** and **pre-measured**. Suctioning takes out mucus from your child's airway. Choose the way that goes down only as deep as you need to clear the airway. The t-tube trach has 2 arms.

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.

What pressure should I use to suction?

Usually, suction a baby's t-tube with a pressure between 60 to 80 mm/Hg and a child's trach tube between 80 to 100 mm/Hg.

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 t-tube before suctioning?

You may use saline (sterile salt water) if your child's t-tube is plugged with mucus, or in the first few days after surgery. For babies, use 3 to 5 ml of saline. For older children or adults, use up to 10 ml of saline.

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).

- Ask your doctor when you should use saline in the t-tube. (Check when done.)

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 t-tube.

Suction with a Yankauer Tip or Neo-Sucker

1. Wash your hands with soap and water.
2. Place 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 t-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 t-tube.

Premeasured Suctioning

Use premeasured suctioning to suction your child's t-tube every morning and every evening.

Sometimes your child's t-tube collects mucus inside. The surgeon will tell you how long the limbs of the t-tube are. The upper and lower limb may be different lengths. Suctioning too deeply may hurt the trachea.

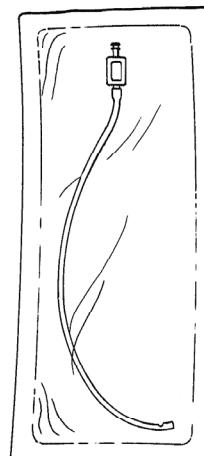
My child's t-tube is _____ inches long, or _____ centimeters long.
The upper limb is _____ inches long, or _____ centimeters long.
The lower limb is _____ inches long, or _____ centimeters long.

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.



**Use a new or
clean catheter.**

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. You may suction both going in and out of the t-tube.

6. As you suction, twirl the catheter between your thumb and finger so the catheter moves easily along the side of the t-tube.
Do not stir the catheter with your whole hand. Only the catheter should move, not the t-tube.
Suction for 5 seconds or less.

To suction the lower limb of the t-tube

Gently press up on the limb of the t-tube that shows, and turn down the suction tube as you put it in.

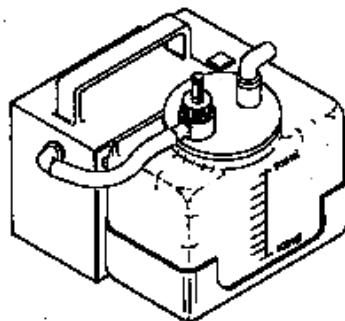
To suction the upper limb of the t-tube

Gently press down on the limb of the t-tube that shows, and turn up the suction tube as you put it in.

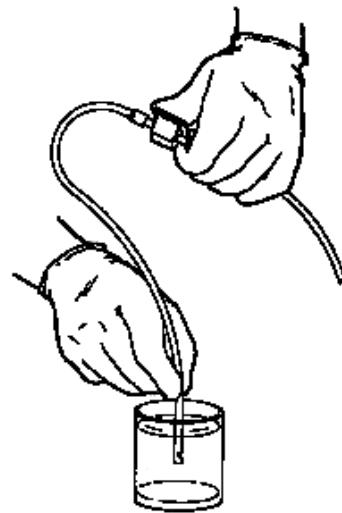
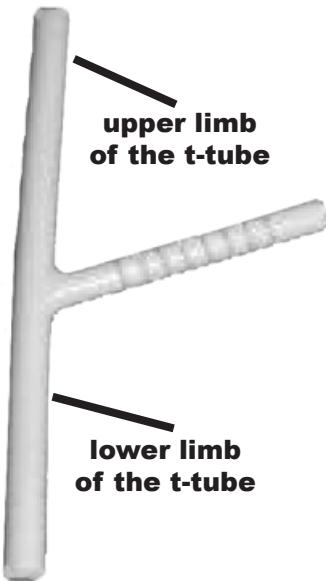
7. Let your child rest for at least 30 seconds between suctioning. You may need to use a resuscitation bag to help your child catch his or her breath.

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

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



Turn on the suction machine.



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

You may suction your child's nose or mouth after you suction the t-tube, but the next time you suction the t-tube use a clean catheter.

After you suction

After you suction look at the mucus. Check for:

- 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 collar may not be working well, or the child may not be using the trach nose (also called HME) when away from the humidity collar. Bleeding from the t-tube may also be a sign of infection.

A color change, like yellow or green mucus, or mucus with a strong odor may mean there is an infection in the airway (trachea) or lungs. If you find these, call your child's doctor right away.

Skin Care

Keep the skin around the t-tube clean and dry.

To clean the skin around the t-tube (**stoma**), use soap and water or saline water. Do not use cream, powder, or perfume on the neck.

Emergencies

You will not change the t-tube at home. A t-tube usually stays in place for 3 to 6 months.

If the t-tube becomes blocked and your child cannot breathe:

What you need

- suction machine
- catheter
- saline drops
- sterile water in a paper cup, to rinse the catheter
- resuscitation bag
- hemostat
- trach tube
- yes no adapter for resuscitation bag if T-tube is size 10 or larger

1. If your child's t-tube is plugged with mucus, you may use saline to loosen it for pre-measured suctioning. For babies, use 3 to 5 ml of saline. For older children or adults, use up to 10 ml of saline.
2. If the tube is still blocked and your child cannot breathe, use a resuscitation bag with an adaptor to give breaths through the t-tube.
3. If the tube is still blocked and air still does not go in, take out the t-tube.
 - a. Put your index finger on the skin just above the t-tube. Put your thumb on the skin just below the t-tube. Press with steady and firm pressure.
 - b. Pick up a hemostat with your other hand, use it to hold the outside limb of the t-tube, and pull the t-tube out.
 - c. Put a trach tube into the stoma, and begin CPR.
 - d. Call 911.

Now that you've read this:

- Tell your nurse or doctor why your child needs a T-tube. (Check when done.)
- Show your nurse or doctor how you would shallow suction your child's t-tube. (Check when done.)
- Show your nurse or doctor how you would suction your child's t-tube at the pre-measured depth. (Check when done.)
- Tell your nurse or doctor when you would call the doctor. (Check when done.)
- Tell your nurse or doctor what you would do if the t-tube becomes blocked and your child could not breathe. (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.

Tuesday, June 12, 2007 • DRAFT to family review
#839 • Written by Penny Morgan Overgaard, RN • Illustrated by Dennis Swain



The Emily Center

Home Care of Your Child's T-Tube

Procedure/Treatment/Home Care

Si usted desea esta información en español,
por favor pídasela a su enfermero o doctor.

Name of Health Care Provider: _____

Number: 839

For office use: Date returned: _____ db nb

Family Review of Handout

Health care providers: Please teach families with this handout.

Families: Please let us know what you think of this handout.

Would you say this handout is hard to read? Yes No

easy to read? Yes No

Please circle the parts of the handout that were hard to understand.

Would you say this handout is interesting to read? Yes No

Why or why not?

Would you do anything differently after reading
this handout? Yes No

If yes, what?

After reading this handout, do you have any
questions about the subject? Yes No

If yes, what?

Is there anything you don't like about the drawings?

Yes No

If yes, what?

What changes would you make in this handout to make it better or easier to understand?

Please return your review of this handout to your nurse or doctor or send it to the address below.

Fran London, MS, RN
Health Education Specialist
The Emily Center
Phoenix Children's Hospital
1919 East Thomas Road
Phoenix, AZ 85016-7710

602-546-1395
flondon@phoenixchildrens.com

Thank you for helping us!