You Can Do It!

A tracheostomy is not a common occurrence like putting braces on your child’s teeth. So, it’s normal to feel a little frightened at first. But this will pass as you become more familiar with the situation.

You will receive training for tracheostomy care while your child is still in the hospital. Participate actively, ask lots of questions and take notes. Practice makes perfect. The more time you spend; the more comfortable you’ll be as you care for your child.

It is a good idea for several family members to take the training so that they also will know how to care for your child’s tracheostomy.

Your doctor, nurse or therapist are your best sources for advice. But this guide will provide helpful tips and reminders so that things go smoothly once you and your child are home again.

With the instruction at the hospital, practice and this guide, you’ll do fine.

Things You’ll Need

Basin (to check cuff on tube)
Blanket (to swaddle child)
Blunt-Nose Bandage Scissors
(to cut the twill tape)
Box of Facial Tissues
Bulb Syringe
Cotton Swabs (used to clean around the opening)
Gloves (like your doctor uses)
Humidifier (to moisten the air during naps and at night)
Hydrogen Peroxide and Water
(mixed half and half, used to clean around the opening)
Nebulizer (to moisten the lungs)

Replacement Tracheostomy Tube (same size and one smaller)
Resuscitation Bag (optional)
Saline (to soften mucus so that it may be suctioned)
Sterile Water (for rinsing suction catheters)
Suction Catheter
Suction Machine (plug in and portable)
Towel or Small Blanket (to roll up and place under your child’s shoulders during tracheostomy care)
Tracheostomy Tube Mask
Twill Tape or Other Tracheostomy Tube Holder (to hold the tube in place)
Water-Based Lubricant

NOTE: Some items come from your home care supplier; some you must buy at the store.
WHAT THE DOCTOR DOES

The doctor makes an opening (stoma) in the front of the neck into the wind pipe (trachea). He then places a curved plastic tube (tracheostomy tube) into this opening through which your child will breathe.

WHAT’S HAPPENING INSIDE

Normally, we breathe through the nose and mouth so that air is filtered, warmed and moistened before it goes down the windpipe to the lungs.

With a tracheostomy, air goes directly into the windpipe to the lungs. There’s no filtering, warming or moistening. You will learn how to make up for this by using the proper equipment and by learning the proper tracheostomy care.
Humidity.

Normally air goes through the nose and mouth where it is filtered, warmed and moistened. This protects the lining of the lungs and keeps the mucus from drying.

A tracheostomy bypasses the nose and mouth. So, we need to add moisture, even in damp climates, or mucus will dry and block the tracheostomy tube. This is why a humidification system with flex tube and tracheostomy mask is often used. Another way to humidify is to use an “artificial nose”. This device traps warmth and moisture when the child breathes out and then puts that moisture back in the air when he breathes in.

Be sure to use a humidifier during naps and at night to reduce the chance of mucus plugging the tracheostomy tube, even if your child wears an artificial nose while awake.

Weaning From The Humidifier

During the day (and only during the day) you can let your child go without humidity for longer periods of time. Do this gradually. Start with one hour. Watch for thick mucus, or mucus with traces of blood in it. If you find either, then give him plenty of liquids to keep the mucus thin. Notify your doctor.

If the tracheostomy tube plugs up, suction it to remove the mucus plug. (See page 9.) If you can’t remove the mucus plug; change the tube.

Tips For Daily Living.

Mealtime

Your child will eat just like other children. You just need to be careful so foods and fluids “don’t go down the wrong way.”

When bottle feeding an infant, don’t prop the bottle or otherwise feed the child while he is lying down. Liquid can get into lungs this way. Hold the infant in a nearly upright position during feeding. Lay the infant on its side after eating. This way if vomiting occurs, there is less risk of the child getting it in his lungs and choking.

Watch toddlers during meals so they don’t get food in the tracheostomy tube. You may wish to loosely cover the tracheostomy tube opening with the mask of the humidification system or with an artificial nose for extra safety.

Bath Time

Children love to take baths. Your child will too, with you watching over him.

Always prepare a shallow bath. Use care to prevent bath water from getting in the tracheostomy tube because it goes directly to the lungs. For extra safety, attach a trach mask or an artificial nose.

When it’s time to shampoo, do it with the child lying on its back, with the head over the sink.
GETTING DRESSED

You can dress up your child almost any way you wish. You need only be careful the clothing does not block the tracheostomy tube.

Avoid: Crew necks, turtlenecks, buttons in back, necklaces, shoulder straps and clothes that shed fibers or lint.

Prefer: V-neck tops and clothing that buttons in the front. Cotton bibs are preferred over plastic ones.

PLAYTIME

Toddlers can enjoy most normal kinds of play, but they must be supervised. Also, you will want to select toys carefully.

Avoid: Small toys or toy parts that could fit into the tracheostomy tube, sandboxes and contact sports.

In cold or dusty weather, use a loose scarf, mask or artificial nose to warm the air and keep dust out of the tracheostomy tube.
ILLNESS

Illness is no fun for anyone. It is best avoided with tracheostomy patients. So, see that your child eats healthy foods. Be sure he’s up to date for all shots and vaccines and keep him away from others who are sick.

If illness occurs, you need to be very watchful. If your child is vomiting, or has diarrhea or fever, you may have to suction more frequently and give the child more fluids. Also, if vomiting occurs, loosely cover the tracheostomy tube with an artificial nose, bib or scarf to keep vomit out. If you think vomit may have entered the tracheostomy tube, suction immediately. If you see bits of food, call your doctor immediately.

GETTING AWAY

Taking care of a child with a tracheostomy can require much of your time. Be sure to plan extra time for yourself, your spouse and your other children.

If you are going out, you must use a baby-sitter who is trained in tracheostomy care. It is a good idea to train a grandparent or other family member or a neighbor. Some parents swap baby-sitting with other parents of patients with tracheostomy tubes.
Follow your doctor’s or hospital’s directions for care. If instructions in this guide are different from your training, follow your training.

Only people who have been trained by a health care professional should perform tracheostomy care.

Always have extra tracheostomy tubes on hand for an emergency. (same size and one smaller)

Do not resterilize tracheostomy tubes.

Don’t place the tracheostomy tube anywhere the temperature is over 120°F.

Avoid over inflating the tracheostomy tube cuff. This can injure your child’s wind pipe.

Watch for these signs of infection and notify your physician:
- Red, inflamed skin at stoma
- Foul-smelling mucus
- Bright red blood in mucus

Take only a few seconds to suction. Take a short break before you suction again.

Use care when bathing your child.
- Use shallow water
- Use the trach mask

Keep the tracheostomy tube loosely covered during feeding.

Supervise meals to keep food out of the tracheostomy tube.

Position infants on their side after eating in case they vomit.

Don’t use perfumes, powders or aerosol sprays around your child.

Keep your child away from dust and mold.

Don’t smoke around your child.

Keep clothing away from the tracheostomy tube except for a protective scarf.

Encourage play but:
- Avoid sand boxes
- Avoid tiny toys

Supervise play at all times, especially with other children.

Learn CPR.
- You will be taught CPR at the hospital
- All care givers must know CPR

Post CPR instructions near bedside.
Post emergency numbers near phone.

IF YOUR CHILD USES A VENTILATOR:

Routinely check the ventilator safety and auditory alarms to be sure they are working properly.

Be sure the ventilator tubes are properly placed so that they don’t pull on the tracheostomy tube.

Don’t twist or pull on the tracheostomy connector any more than you must. This may cause discomfort to your child or disconnect the ventilator tubes.

Hold the tracheostomy tube in place when connecting/disconnecting the ventilator or humidification tubing.
The lungs and wind pipe are meant to produce mucus. The mucus cleans the air as we breathe by trapping small particles. It then moves up the windpipe until it can be swallowed.

Mucus can collect in and around the tracheostomy tube. It must be removed so it doesn’t dry and block the tube.

Suctioning should be done only as needed, usually upon waking, before meals (if needed), at nap time and before bed. Do not suction too frequently. The more you suction; the more secretions can be produced.

As your child grows older, you may need to suction less often. But, you will still want to assess the need for suctioning at least twice a day.

Watch for these signs that tell when your child may need suctioning. If you see any of them, suction immediately.

- Increased gurgling, bubbling or coughing
- Anxious or restless, crying
- Flaring nostrils
- Mouth, lips and fingernails may be pale, blue or dusky color
- Difficulty eating
- Hollow in the neck
- Skin under breast bone and between ribs pulls in
- Can’t cough out secretions

Discuss with your physician anytime your child experiences signs that require immediate suctioning.

**Note:** Always follow your doctor’s or hospital’s directions if they differ from the directions in this guide. 

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**WHAT YOU WILL NEED**

- Suction machine
- Collection jar for secretions
- Suction catheter
- Sterile water
- Resuscitation bag (optional)
- Gloves
- Saline

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8
HOW TO SUCTION.

1. Wash hands.
2. Put on glove. Use the gloved hand when touching suction end of catheter.
3. Attach catheter to machine.

4. Rinse catheter by suctioning sterile water.
5. Put 2-3 drops of saline down the tracheostomy tube to loosen mucus.
6. Gently insert catheter into tracheostomy tube until it reaches the end of tube. (You will be taught in the hospital about tracheostomy tube length.)

7. Cover the thumb hole on catheter to suction.

8. Gently remove the catheter as you roll it between your thumb and forefinger. (Start to finish should take no longer than 5 to 10 seconds.)
9. If you need to suction again; rinse the catheter first.
10. Look at the mucus:
    
    **Normal**: Clear with no odor.
    
    **Infection**: Yellow or green color with a foul-smelling odor.
    
    **Blood**: A few streaks of blood is OK. But if it has more bright red or old dark blood, there could be a problem.

11. If you see signs of infection, or bright red blood, call your doctor.

Follow the hospital’s or home health provider’s instructions for storage or disposal of catheters.

Keep the suction machine, tubing and collection jar clean according to the home health supplier’s instructions.
It is important to keep the area around the opening in the neck clean to help prevent infection. So, change ties whenever they become wet or soiled, but change ties at least daily. You will be using scissors close to the face. So, you’ll need to hold your child still. This job is easier with two people. But it can be done by one, if need be.

WHAT YOU WILL NEED

Tracheostomy twill tape or other tracheostomy tube holder
Blunt-nose bandage scissors
Towel or small blanket, rolled and placed under the child’s shoulders
Clean gloves (optional) depending on institution or physician preference

HOW TO CHANGE TWILL TAPE TIES

1. Wash hands. (Both people, if two are involved.)

2. Cut two lengths of twill tape, each long enough to fold in half and still reach around the child’s neck. Set these nearby.

3. One person holds the child, the other changes the ties. If you are doing this alone, swaddle the child securely in a blanket to restrain the hands.

4. Place a rolled towel or blanket under the child’s shoulders.
5. Leave the old ties in place. Thread the folded end of one of the new ties through one of the holes on the tracheostomy tube, going from the skin side, out toward you.

6. Pull the tie through, until it forms a loop. Draw the other ends through the loop until the tie is secured to the tracheostomy tube.

7. Repeat steps 5 and 6 for the other tie.

8. Bring the loose ends of both ties around to the back of the neck and tie them together using a square knot. (Don’t use a bow.)
   
   Note: Change the location of the knot from side to side and in the back of the neck to prevent skin irritation.

9. Cut the ends of the ties leaving only 1" to 2".

10. Carefully cut and remove soiled ties.

   Note: You know the ties are pulled tight enough when you can fit the tip of your little finger snugly between the neck and the tie.

   This job may be scary at first. But with practice, you’ll do just fine.
This job may be scary at first, but with practice, it becomes easier. Frequent and routine changes of the tracheostomy tube and accessories are recommended. This helps to prevent gradual mucus build-up, which can clog or block the tube. Your doctor will advise you how often to change the tube. (If your doctor instructs you to clean and reuse the tracheostomy tube, Mallinckrodt recommends that Shiley® Tracheostomy Tubes be discarded after 29 days of use.)

Changing the tube may upset the child, and cause coughing which can lead to vomiting following insertion. That’s why it is best to do this before a meal or at least 1-1/2 hours after eating.

CLEANING THE TRACHEOSTOMY TUBE

If you are instructed by your health care professional to clean the tracheostomy tube, follow these instructions and warnings:

Both the tube and obturator may be cleaned using either hydrogen peroxide (half strength), household vinegar (half strength), sterile normal saline, or water and mild detergent. After cleaning, rinse thoroughly with sterile saline to remove all the cleaning solution residues. Allow to air dry.

If using a cuffed tracheostomy tube, the cuff should be rinsed gently in sterile saline and not come in contact with any cleaning detergents or chemicals.

WARNINGS:

DO NOT USE SOLUTIONS OTHER THAN THOSE MENTIONED ABOVE TO CLEAN ANY PART OF THE TUBE OR OBTURATOR.

DO NOT EXPOSE THE TUBE OR OBTURATOR TO ANY CHEMICAL AGENTS OTHER THAN THOSE RECOMMENDED, AS THIS MAY RESULT IN DAMAGE.

DO NOT SOAK THE TUBE OR OBTURATOR IN PEROXIDE.

IT IS ESSENTIAL TO VERIFY THAT LUBRICANT DOES NOT ENTER AND OCCLUDE THE TUBE LUMEN, THEREBY PREVENTING VENTILATION.

CAUTION:

Shiley® Tracheostomy Tubes are designed for single patient use only.

Note: Always follow your doctor’s or hospital’s directions if they differ from the directions in this guide.

WHAT YOU WILL NEED

Replacement tube (with ties already attached)

Blunt-nose bandage scissors

Towel or blanket to roll under the child’s shoulders

Water-based lubricant

A helper or a blanket to swaddle the child in
1. Wash hands. (Both people, if two are involved.) Put on clean gloves.

2. Insert obturator into new tracheostomy tube.

3. Attach ties as shown in “How To Change Twill Tape Ties” on page 10. (Do this before putting the tube in your child’s neck.) Place tube with ties attached in the opened package nearby.

4. Lubricate the end of the new tube with a thin layer of water-based lubricant.

5. Place rolled towel or blanket under the child’s shoulders.

6. Have your partner restrain the child’s arms while you cut the ties and remove the tube. (If no partner, swaddle the child securely.)

7. Remove the old tube.

8. Gently insert the new tube, pushing back, then down, in an arcing motion.

9. Immediately remove the obturator as you hold the tube in place with your finger.

10. Fasten the ties using a square knot.

11. Throw away the old tube and ties.

Note: You probably won’t have trouble inserting the new tube. But if you do, be sure the child’s head is tilted back. If you are still having difficulty, spread the skin around the stoma and insert the tube while the child is breathing in. Try a smaller size. Call your doctor immediately if you have any problems.
HOW TO CHANGE A CUFFED TUBE.

1. Wash hands. (Both people, if two are involved.)
2. Remove the new tube from the package. Take care to avoid damaging the cuff, inflation line or pilot balloon in any way.

3. Use a syringe to inflate the cuff to the proper leak test volume. The markings on the syringe show air volume.

4. Place entire tube, including inflation line, in a basin with enough sterile water to cover it and watch for bubbles indicating an air leak.
   Note: If you see any leaks, DO NOT use the tube.

5. Deflate the cuff completely using a syringe. As you are doing this, gently push the cuff away from the end of the tube. Be sure to remove all air. This makes it easier to insert the tube.

6. Attach ties as shown in “How To Change Twill Tape Ties,” on page 10, and insert the obturator. Do this before inserting the tube.

7. Lubricate the tube using a thin film of water lubricant.

8. Then place the tube with ties attached in the opened package nearby.

### SHILEY® TEST TUBE SIZE VOLUME

<table>
<thead>
<tr>
<th>Tube Size</th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0 PDC</td>
<td>8.0 cc</td>
</tr>
<tr>
<td>4.5 PDC</td>
<td>8.0 cc</td>
</tr>
<tr>
<td>5.0 PDC or PLC</td>
<td>9.0 cc</td>
</tr>
<tr>
<td>5.5 PDC or PLC</td>
<td>9.0 cc</td>
</tr>
<tr>
<td>6.0 PLC</td>
<td>11.0 cc</td>
</tr>
<tr>
<td>6.5 PLC</td>
<td>11.0 cc</td>
</tr>
</tbody>
</table>
9. Place a rolled towel or blanket under the child’s shoulders.

10. Have your partner restrain the child’s arms while you cut the ties and remove the old tube. If no partner, swaddle the child securely. If necessary, suction accumulated secretions above the cuff prior to deflating.

11. Gently insert the new tube, pushing back, then down in an arcing motion.

12. Immediately remove the obturator, as you hold the tube in place with your fingers.

13. Continue to hold the new tube in place while your partner fastens the ties using a square knot.

14. Inflate the cuff to the proper volume using a syringe. (Your doctor will tell you what volume to use.)

Note: Care must be taken to place the air line and pilot balloon so that they do not become damaged during the child’s normal activities.

15. Throw away the old tube and ties.

Note: You probably won’t have trouble inserting the new tube. But if you do, be sure the child’s head is tilted back. If you are still having difficulty, spread the skin on the stoma and insert the tube while child is breathing in. Call your doctor immediately if you have any problems.

Note: Always follow your doctor’s or hospital’s directions if they differ from the directions in this guide.
Skin care is easy, but important. It should be done at least twice a day: once in the morning and once at night. If you smell an odor around the neck or opening, clean the area every 8 hours until the odor is gone.

In between skin care time, keep the neck and area around the opening clean and dry. Do not use powders or lotions. The child could breathe them into the lungs. Watch for red, irritated areas. If excessive redness or pimples occur around the opening, call your doctor, reduce humidity and use only sterile water for cleaning. If your doctor orders an ointment, spread it on according to his instructions.

**WHAT YOU WILL NEED**

- Water and hydrogen peroxide, mixed half and half
- Cotton swabs
- Towel or small blanket, rolled up

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Water + Hydrogen Peroxide
1. Wash your hands.

2. Mix four (4) tablespoons of hydrogen peroxide solution with four (4) tablespoons of water as shown on facing page. Empty the solutions into a clean basin or container.

3. Place roll under your child’s shoulders to expose the stoma area.

4. Dip a cotton swab into the hydrogen peroxide and water mixture.

5. Roll the cotton swab between the tracheostomy tube and the skin around the opening. Clean from the stoma outward. This removes wet or dried mucus.

6. Repeat steps 4 and 5, using a fresh cotton swab each time, until entire area around opening is clean.

7. Rinse the area using clean cotton swabs, dipped in clean water only. Then let it air dry.
Your child doesn’t have to be stuck in the house. You may take him with you shopping, to the park, or on visits to friends and family. Whenever you go out, prepare a travel kit.

**What You Will Need**
- Spare tracheostomy tubes (with obturators and ties, same size and one smaller)
- Scissors
- Portable suctioning device with suction catheter
- Saline
- Tissues
- Bulb syringe
- Breathing Medications (if child uses)
- Manual resuscitation bag (if ordered)

**If It’s Cold Out**
If it’s below-freezing outside, don’t let your child breathe cold air directly through the tracheostomy tube. This can be bad for his wind pipe and cause problems.

Use a scarf, kerchief or single layer of gauze tied loosely around the neck. If you have an artificial nose, use that. These things warm the air as the child breathes in. They also are good ways to keep dust and dirt out on dusty or windy days.

**Going To School**
If your child is school age, he may attend. But it’s important to contact the school nurse to make special arrangements ahead of time, so that the school can provide the proper care.

**Going Out To Play**
Your child can play with other children. But you should supervise the play. Contact sports or rough games are not a good idea for children with tracheostomies. Do not let your child play in pools, sandboxes or areas where small particles could get inside the tracheostomy tube.
Learning To Speak.

At first your child may not be able to make a sound. Don’t worry. As swelling decreases, he may begin to make sounds. In the meantime, watch his face. He can tell you a lot with his looks.

How much sound your child is able to make depends on his age, the tracheostomy tube, his breathing patterns, etc. Some children can produce sound around the tube. Others may use things called speaking valves that help control the airflow so they can speak.

Your child will need special care so that he will be able to speak properly as he grows. Be sure to show him things. Say their names. Read to him. Point to pictures and say what they are. Talk to him. Tell him what you are doing. A little extra effort really pays off.

At nine months, children can learn sign language. If you sign to your child, always say the words out loud while you sign.

A speech pathologist can be a big help because they will give you tips to help your child learn to talk properly.

Not all children have speech and language delays. Many problems can be avoided. You are the key to preventing problems.

How Do I Know If My Infant Needs Me?

Any non-speaking child, especially if they are less than a year old, should be closely monitored. If you are worried that you won’t know when your infant needs you, let your baby sleep in the same room with you. Better yet, put an intercom in the child’s room. Always check on your child frequently during the day.

Some people attach bells to their infant’s legs, so they will hear them when they wake and move. (Be sure your child can not remove and swallow the bells.)
Glossary (In Plain English).

Artificial Airway (ar•teh•fish•all air•way) Another word for tracheostomy tube.

Artificial Nose (ar•teh•fish•all noz) Also called HME (heat and moisture exchanger). A device that warms and moistens the air your child breathes in.

Bacteria (back•teh•ree•ah) Germs.

CPR A method for getting someone to breath again once they have stopped.

Cannula (can•you•la) The tube part of the tracheostomy tube.

Cartilage (car•till•age) The tough tissue rings the wind pipe is made of.

Cuff The inflatable balloon on some tracheostomy tubes.

Diaphragm (die•ah•fram) The big muscle below the lungs that controls breathing.

Encrustation (in•cruss•ta•shun) Hard, crusty, dried mucus.

Exhale (x•hale) Breathe out.

Expiration (x•pire•a•shun) Breathe out.

Health Care Provider Nurses, nurse practitioners, doctors, respiratory therapists, speech pathologists or others that visit your home.

Health Care Supplier The company where you get special medical equipment.

Inhale (in•hale) Breathe in.

Inspiration (in•pire•a•shun) Breathe in.

Lumen (loo•men) Inside part of the tube, where the air goes in and out.

Mucus (mu•kuss) Slippery fluid that’s produced in the lungs and windpipe. This dries and sticks to any surface and forms a crust.

Nebulizer (neb•you’ll•eyes•er) A machine that puts moisture and/or medicine directly into the lungs.

Obturator (ob•tur•a•tor) The semi-rigid stick you put into the tracheostomy tube to help guide it into the opening in the neck.

Phonation (fo•nay•shun) Talking or making sounds with the vocal cords.

Pliable (ply•ah•bull) Soft, flexible.

Saline (say•leen) Solution similar to water found in the body.
Secretions (see•kree•shuns) Another word for mucus.

Speaking Valve (spee•king valv) A one-way valve that lets air come in through the tracheostomy tube, but then sends it out past the vocal cords and mouth to make talking possible.

Speech Pathologist (speech path•ol•o•gist) A person trained to help people with speaking and swallowing problems.

Stoma (sto•ma) Hole in the neck where you insert the tracheostomy tube.

Sterile (steer•ill) Free from germs.

Suctioning (suck•shun•ing) Vacuuming up mucus in the tracheostomy tube.

Swaddle (swah•del) To wrap a baby like a mummy with only his head sticking out.

Syringe (see•r enj) The thing the doctor uses to give shots, only there is no needle on it.

Trachea (tray•key•ah) Your wind pipe.

Tracheostomy (tray•key•oss•tuh•mee) An operation where they cut a hole in the neck to make breathing easier.

Tracheotomy (tray•key•oto•mee) Same as above.

Trach Mask (trake mask) A device that fits on the end of the trach tube to provide moisture.

Trach Tube (trake toob) Short for tracheostomy tube. This is the tube the doctor puts in the opening in your child's neck.

Ventilator (vin•till•a•tor) A machine that helps a person breathe.

Vocal Cords (vo•cal cords) Two strips of tissue in the voice box in the neck that vibrate to make sounds when we talk.
Shiley® Uncuffed Tubes.

1. Connector: The part of the tube that sticks out of the neck.
2. Cannula: Another name for the tube part of the tracheostomy tube.
3. Neck Plate: This is where the ties are attached to hold the tracheostomy tube in place.
4. Size and style of the tracheostomy tube.
5. Size of the opening on the tracheostomy tube.
6. Size of the outside of the tracheostomy tube.
7. Obturator: This is used to help guide the tube during insertion.
1. Connector: The part of the tube that sticks out of the neck.
2. Cannula: Another name for the tube part of the tracheostomy tube.
3. Neck Plate: This is where the ties are attached to hold the tracheostomy tube in place.
4. Size and style tracheostomy tube.
5. Size of the opening on the tracheostomy tube.
6. Size of the outside of the tracheostomy tube.
7. Cuff: Once the tracheostomy tube is in the neck, this is filled with air. It helps keep food, water or vomit from getting into the lungs.
8. Inflation Line: Carries air to and from the cuff.
9. Pilot Balloon: If there is air in the cuff, this will be puffed up. If you have sucked all the air out of the cuff this will be flat.
10. Luer Valve: This is where you insert the tip of the syringe to put air in, or take air out, of the cuff.
## SOLVING PROBLEMS.

<table>
<thead>
<tr>
<th>SYMPTOM</th>
<th>WHAT MAY HAVE HAPPENED</th>
<th>WHAT TO DO</th>
</tr>
</thead>
</table>
| Your Child is:  
• Restless  
• Crying  
• Scared look on face  
• Making a bubbling or wheezing sound  
• Can’t cough out mucus  
• Pale color or blue, dusky color around mouth and nose  
• Flaring nostrils  
• Trouble eating  
• Looks hollow in the neck  
• Skin on the chest is sucked in | Build up of mucus. | Suction. If symptoms remain after suctioning, call your doctor. |
<p>| Yellow or green mucus, bad smelling mucus or bright red blood comes out when you suction. | Infection. | Call your doctor. |
| Tube comes out of the opening in the neck. | Pulling or weight at connector. | Hold the neck plate with one hand while removing ventilator tubing to reduce pulling. Move ventilator (if used) and tubing so it doesn’t pull on the tracheostomy tube. Put the tube back into the opening and retie the tracheostomy ties (refer to pages 10 and 11). |</p>
<table>
<thead>
<tr>
<th><strong>Symptom</strong></th>
<th><strong>What May Have Happened</strong></th>
<th><strong>What To Do</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Unable or difficult to pass suction catheter through tracheostomy tube.</td>
<td>Mucus plugging tracheostomy tube.</td>
<td>Put 2 or 3 drops of saline into the tracheostomy tube and suction. If this doesn’t open it, change the tracheostomy tube.</td>
</tr>
<tr>
<td></td>
<td>Catheter too large for tube size.</td>
<td>Contact your Home Health Care Supplier.</td>
</tr>
<tr>
<td>When you change diapers: You notice your child has stopped wetting or is wetting a lot less. Dark urine with a strong ammonia smell.</td>
<td>Dehydration.</td>
<td>Call your doctor.</td>
</tr>
<tr>
<td>Tube, or any part of the tube is broken or doesn’t work.</td>
<td>Faulty tracheostomy tube.</td>
<td>Replace the tube.</td>
</tr>
<tr>
<td></td>
<td>Tracheostomy tube was cleaned using improper cleaning agents.</td>
<td>Replace the tube. Always use only those cleaning agents recommended by the tube manufacturer.</td>
</tr>
<tr>
<td></td>
<td>Pulling or weight at connector.</td>
<td>Hold the neck plate with one hand while removing ventilator tubing to reduce pulling. Move ventilator and tubing so it doesn't pull on the tracheostomy tube.</td>
</tr>
</tbody>
</table>
### What May Have Happened

<table>
<thead>
<tr>
<th>Symptom</th>
<th>What May Have Happened</th>
<th>What To Do</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ventilator’s “High Pressure” alarm goes off.</td>
<td>Ventilator tubing is blocked or kinked.</td>
<td>Clear tubing of kink or blockage.</td>
</tr>
<tr>
<td></td>
<td>Mucus is plugging the tracheostomy tube.</td>
<td>Suction to clear mucus.</td>
</tr>
<tr>
<td></td>
<td>If the first two suggestions don’t work, there may be a ventilator problem.</td>
<td>Contact Home Health Care Supplier.</td>
</tr>
<tr>
<td>Ventilator “Low Pressure” alarm goes off.</td>
<td>Ventilator tubing is not connected at machine.</td>
<td>Make sure all tubing to machine and patient is connected.</td>
</tr>
<tr>
<td></td>
<td><strong>If you have a cuffed tracheostomy tube:</strong> Leak in cuff, inflation line or pilot balloon.</td>
<td>Remove ventilator tubing from tracheostomy tube. Deflate and re-inflate cuff with proper volume. Attach ventilator tubing. Turn on machine. Replace the tube if it will not remain inflated.</td>
</tr>
<tr>
<td></td>
<td>If the first two suggestions don’t work, there may be a ventilator problem.</td>
<td>Contact Home Health Care Supplier.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Deliver breaths with a manual resuscitation bag, if available.</td>
</tr>
</tbody>
</table>

*The following applies only to patients on ventilators.*
The best way to deal with this is to have a plan.

Before the power goes out, notify the power and phone companies, in writing, that your child uses a tracheostomy tube. Ask for priority for restoring service.

You may purchase a special light that goes on if the power goes off. Use this to alert you.

You may go to a friend’s or family’s home. Also, you might go to a hospital or fire house where there will be an emergency generator.

**WHAT IF THE POWER GOES OUT?**

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**SAMPLE LETTER**

[Letter content]

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**IMPORTANT PHONE NUMBERS**

- Doctor
- Home Care Provider
- Home Care Supplier
- Emergency
### Home Care Manual Listings.

This section contains a listing of additional tracheostomy/laryngectomy care manuals that are available through the authors or institutions listed below. Since patient home care needs vary, please contact your physician or home health care provider for guidance in obtaining any of the following manuals.

<table>
<thead>
<tr>
<th>Manual Title</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Your Child Has A Tracheostomy</strong></td>
<td></td>
</tr>
<tr>
<td>A Guide for Home Care</td>
<td>Order through:</td>
</tr>
<tr>
<td></td>
<td>Beatrice Ames, RN, MS, CNAA</td>
</tr>
<tr>
<td></td>
<td>Boston City Hospital</td>
</tr>
<tr>
<td></td>
<td>818 Harrison Avenue</td>
</tr>
<tr>
<td></td>
<td>Nursing Education Bldg., 4th Floor</td>
</tr>
<tr>
<td></td>
<td>Boston, MA 02118</td>
</tr>
<tr>
<td><strong>Pediatric Tracheostomy Care</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Loma Linda Medical Center</td>
</tr>
<tr>
<td></td>
<td>11234 Anderson</td>
</tr>
<tr>
<td></td>
<td>Loma Linda, CA 92354</td>
</tr>
<tr>
<td></td>
<td>Contact:</td>
</tr>
<tr>
<td></td>
<td>Sherry Blansfield</td>
</tr>
<tr>
<td></td>
<td>Respiratory Discharge Therapist</td>
</tr>
<tr>
<td></td>
<td>714-909-4488 Ext.: 6204</td>
</tr>
<tr>
<td><strong>Tracheostomy Home Care For Children</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contact:</td>
</tr>
<tr>
<td></td>
<td>Sheila Kun, RN, MS</td>
</tr>
<tr>
<td></td>
<td>Box 50</td>
</tr>
<tr>
<td></td>
<td>Children’s Hospital of Los Angeles</td>
</tr>
<tr>
<td></td>
<td>4650 Sunset Blvd.</td>
</tr>
<tr>
<td></td>
<td>Los Angeles, CA 90027</td>
</tr>
<tr>
<td></td>
<td>213-669-2554</td>
</tr>
<tr>
<td><strong>Tracheostomy Home Care For Children</strong></td>
<td></td>
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<tr>
<td></td>
<td>Contact:</td>
</tr>
<tr>
<td></td>
<td>Patient &amp; Family Education Coordinator</td>
</tr>
<tr>
<td></td>
<td>Children’s National Medical Center</td>
</tr>
<tr>
<td></td>
<td>Trinity Square</td>
</tr>
<tr>
<td></td>
<td>216 Michigan Avenue NE</td>
</tr>
<tr>
<td></td>
<td>Washington, DC 20010</td>
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</tbody>
</table>

**NOTE:**

The information and procedures contained in the above listed Home Care Manuals are those of the authors and institutions and do not necessarily reflect the opinions of Mallinckrodt Inc.

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