PEDIATRIC HOME CARE GUIDE

Shiley™
tracheostomy tubes

Medtronic
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Read before using this homecare guide
This manual is intended as a guide only and should not replace institutional policies or physicians’ orders.
This guide and the product usage directions are intended for use with Shiley™ tracheostomy products from Medtronic only. Use of these guidelines with other tracheostomy products is not recommended. Always follow your doctor’s or hospital’s directions if they differ from those found here.
Warning: Shiley™ tracheostomy tubes are sterile if not opened, damaged or broken.
Do not resterilize Shiley™ tracheostomy tubes.
Note: Federal law restricts the sale of Shiley™ tracheostomy tubes to, or on the order of, a physician.

What’s inside
This booklet provides information on how to care for your tracheostomy tube. You will find tips on how to suction, change ties, change tubes and care for the skin around the opening in your neck. Also included are basic safety tips, a problem-solving guide and an easy-to-understand glossary of the technical terms you may hear.

Review safety tips and notes
On page 7, and throughout this guide, are a number of safety tips and notes designed to warn about conditions that could adversely affect you. There are others that caution about situations that could damage your Shiley™ tracheostomy tube. Take a moment to review these tips and notes before you begin your tracheostomy tube homecare.

Important phone numbers
Doctor
Homecare provider
Homecare supplier
Emergency
What the Doctor Does

The doctor makes an opening (stoma) in the front of the neck into the windpipe (trachea). He or she 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.

A tracheostomy is not a common occurrence, so it’s normal to feel a little frightened at first. That’s why we created this guide: to answer parents’ common questions as they learn how to care for their child’s tracheostomy.

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

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

Your doctor, nurse and 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 return home.
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 a 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 she 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, give her 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.

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 she is lying down. Liquid can get into the lungs this way. Hold the infant in a nearly upright position during feeding. Lay the infant on her 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 his back, with his head over the sink.

Getting Dressed

You can dress up your child almost any way you wish. Just 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.

Use: 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. Also stay away from 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
While no one likes to be ill, it can be especially challenging for tracheostomy patients. Preventing illness is best, so make sure your child eats healthy foods. Also keep your child up to date on all shots and vaccines and keep her away from others who are sick.
If illness occurs, keep a close eye on your child. If your child is vomiting, has diarrhea or a 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 babysitter trained in tracheostomy care. It is a good idea to train a grandparent or other family member or a neighbor. Some parents swap babysitting with other parents whose children have tracheostomy tubes.

If you 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.
Grasp the tracheostomy tube to hold it in place when connecting or disconnecting the ventilator or humidification tubing.
• 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 healthcare 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.
• Do not put the tracheostomy tube any place where the temperature is over 120°F.
• Avoid over-inflating the tracheostomy tube cuff. This can injure your child’s windpipe.
• Watch for signs of infection. Notify your physician if you discover:
  – 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:
  – Sandboxes
  – Tiny toys
• Supervise play at all times, especially with other children.
• Learn CPR.
  – You will be taught CPR in the hospital
  – All caregivers must know CPR
• Post CPR instructions near bedside.
• Post emergency numbers near phone.
How to Suction

What you will need
- Suction machine
- Collection jar for secretions
- Suction catheter
- Sterile water
- Resuscitation bag (optional)
- Gloves

The lungs and windpipe 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 naptime 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.

The following signs are indications that your child may need immediate suctioning:
- Increased gurgling, bubbling or coughing
- Anxious or restless, crying
- Flaring nostrils
- Mouth, lips and fingertips 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 any time your child experiences signs that require immediate suctioning.

1. Wash hands.
2. Put on a glove. Use the gloved hand when touching suction end of catheter.
3. Attach catheter to machine.
4. Rinse catheter by suctioning sterile water.
5. Gently insert catheter into tracheostomy tube until it reaches the end of tube. (You will be taught in the hospital about tracheostomy tube length.)
6. Cover the thumb hole on the catheter to suction.
7. 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.)
8. If you need to suction again, rinse the catheter first.
9. 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.
10. If you see signs of infection, or bright red blood, call your doctor.

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

Keep the suction machine, tubing and collection jar clean according to the home health supplier’s instructions.

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

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.

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.
Changing the Tracheostomy Tube

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

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, we recommend that Shiley™ tracheostomy tubes be discarded after 29 days of use.)

Note: Changing the tube may upset the child and cause coughing, which can lead to vomiting following insertion. That’s why it is best to change a tube before a meal or at least 1½ hours after eating.

Cleaning the Tracheostomy Tube

If you have been instructed by your healthcare 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.

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.

1. Be sure all involved wash their hands. 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. Place rolled towel or blanket under the child’s shoulders.
5. Have your partner restrain the child’s arms while you cut the ties and remove the tube. (If no partner, swaddle the child securely.)
6. Remove the old tube.
7. Gently insert the new tube, pushing back, then down, in an arcing motion.
8. Immediately remove the obturator as you hold the tube in place with your finger.
9. Fasten the ties using a square knot.
10. Throw away the old tube and ties.
1. Be sure all involved wash their hands.
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. Then place the tube with ties attached in the opened package nearby.
8. Place a rolled towel or blanket under the child’s shoulders.
9. 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.
10. Gently insert the new tube, pushing back, then down in an arcing motion.
11. Immediately remove the obturator, as you hold the tube in place with your fingers.
12. Continue to hold the new tube in place while your partner fastens the ties using a square knot.
13. 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.
14. Throw away the old tube and ties.

<table>
<thead>
<tr>
<th>Shiley™ Tube Size</th>
<th>Test 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>

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 the child is breathing in. Call your doctor immediately if you have any problems.

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

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 solution into a clean basin or container.
3. Place rolled up towel or blanket 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 the 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.

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 windpipe 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.
Glossary

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

Artificial Nose (ar-teh-fish-all noze) 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 Cardiopulmonary Resuscitation A method for getting someone to breath again once they have stopped breathing or to get the heart to pump again if it has become ineffective.

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

Cartilage (car-till-age) The tough tissue rings the windpipe 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 (en-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 semirigid 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) The actual opening in your 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 (seer-enj) The plastic device with a plunger that you use to inflate the cuff.

Trachea (tray-key-ah) The windpipe.

Tracheostomy (tray-key-oss-tuh-mee) The opening in your neck where your tracheostomy tube goes, to make breathing easier.

Tracheotomy (tray-key-ot-o-mee) The operation where a doctor makes an opening in your neck for a tracheostomy tube to make breathing easier.

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 (ven-till-a-tor) A machine that helps a person breathe through a trach tube by mechanically inflating the lungs.

Vocal Cords (vo-cal cords) Two strips of tissue in the voice box in the neck that vibrate to make sounds when we talk.
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 of the 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 the air has been sucked out of the cuff, this will be flat.
10. Luer Valve: This is where the tip of the syringe is inserted to put air in, or take air out, of the cuff.
<table>
<thead>
<tr>
<th>Symptom</th>
<th>What May Have Happened</th>
<th>What To Do</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your Child: • Is restless • Is crying • Has a scared look on his face • Is making a bubbling or wheezing sound • Can’t cough out mucus • Has a pale color or blue, dusky color around mouth and nose • Is flaring his nostrils • Is having trouble eating • Looks hollow in the neck • Has the skin on his chest sucked in</td>
<td>Build-up of mucus.</td>
<td>Suction. If symptoms remain after suctioning, call your doctor.</td>
</tr>
<tr>
<td>Yellow or green mucus, bad smelling mucus or bright red blood comes out when you suction.</td>
<td>Infection.</td>
<td>Call your doctor.</td>
</tr>
<tr>
<td>Tube comes out of the opening in the neck.</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 (if used) and tubing so it doesn’t pull on the tracheostomy tube.</td>
</tr>
<tr>
<td>Tracheostomy ties too loose or tied the wrong way.</td>
<td></td>
<td>Put the tube back into the opening and retie the tracheostomy ties (refer to pages 10 and 11).</td>
</tr>
</tbody>
</table>

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<th>What May Have Happened</th>
<th>What To Do</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unable or difficult to pass suction catheter through tracheostomy tube.</td>
<td>Mucus plugging tracheostomy tube.</td>
<td>Change the tracheostomy tube.</td>
</tr>
<tr>
<td>Catheter too large for tube size.</td>
<td></td>
<td>Contact your home healthcare 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.</td>
<td>Replace the tube.</td>
</tr>
<tr>
<td>Tracheostomy tube was cleaned using improper cleaning agents.</td>
<td></td>
<td>Replace the tube. Always use only those cleaning agents recommended by the tube manufacturer.</td>
</tr>
<tr>
<td>Pulling or weight at connector.</td>
<td></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>
<tr>
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</tr>
<tr>
<td>---------</td>
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</tr>
<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 healthcare 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>If you have a cuffed tracheostomy tube: Leak in cuff, inflation line or pilot balloon.</td>
<td>Remove ventilator tubing from tracheostomy tube. Deflate and reinflate 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 healthcare supplier. Deliver breaths with a manual resuscitation bag, if available.</td>
</tr>
</tbody>
</table>

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 in 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 member’s home. Also, you might go to a hospital or firehouse where there will be an emergency generator.

**SAMPLE LETTER**

Date
ABC Power Company
123 Elm Stree
Anytown, USA Zip

To Whom It May Concern:

Please provide priority service for my home in case of a power outage.

Our child, (Name and age) requires (type of equipment) in order to breathe. Our doctor’s name is

(Doctor’s name, address and phone)

If I am not available, please contact

(Name of relative, friend or neighbor who can always reach you.)

Sincerely,