Guide to pediatric tracheostomy care at home

Department of Pediatrics
Dear parent or guardian,

The providers at Prisma Health Children’s Hospital have created this booklet to prepare you for your transition home with a child who has a tracheostomy. Our goal is to help you know what to expect as you learn to care for your child. To make sure your child gets the safest care at all times, at least two caregivers will need to complete tracheostomy care training. You and your second caregiver both will be expected to complete all parts of the training before discharge.

Training will begin shortly after surgery. Over the coming weeks, you and your co-caregiver will learn all the skills needed to safely care for your child’s tracheostomy. At first, this information may seem overwhelming, but the two of you will have many chances to practice the things you will need to do at home. Ask questions about any information or skill that is confusing: The more you understand the care, the more comfortable you will be at home.

You will begin your training by watching the nurses and respiratory therapists provide your child’s care. You then will assist them until you and your co-caregiver can provide the care without their help. Before discharge, you and your co-caregiver will provide complete, continuous 48-hour care. Completing this 48-hour stay will ensure preparedness for discharge and make the transition home as smooth and easy as possible.

Your care team includes social workers, case managers and care coordinators who will help you plan for the equipment and supplies needed to care for your child. These items will be in place before discharge. Your child’s benefits will be evaluated to see if in-home nursing service is available. If so, every effort will be made to secure home nursing hours before your child’s discharge. It is important that you and your second caregiver, along with any other support persons who will assist you at home, be comfortable caring for your child. Our state has shortages of home nursing providers, and outside help is not always available.

The estimated length of stay after tracheostomy placement is different for each child. Length of stay is impacted by your child’s recovery, your learning needs, planning for home equipment and supplies, and the availability of home nursing. It is important to have both caregivers identified at the time of surgery so that learning can begin as soon as possible after your child’s tracheostomy is placed. We realize this is a stressful time, and our team is here to support your family during this learning process. Please take some time to review this booklet. We are here to help you and answer any of your questions along the way.

Your child’s medical team

Prisma Health Children’s Hospital
What is a tracheostomy?

A tracheostomy is a surgery where a doctor places a tube into your child’s trachea to assist with breathing. This creates an opening that is called a tracheostomy or a stoma (see Figure 1). You often will hear this opening called a “trach.” Some common reasons for placing a trach include:

- To bypass a blockage of the airway
- To assist patients who cannot cough to clear mucus from their lungs
- To help patients who need to be on a breathing machine (ventilator) for an extended period of time
- To address other special needs

You may know already why your child needs a tracheostomy. If you still aren’t sure why a trach is needed, please ask your nurse or doctor to explain your child’s medical condition to you.

A tracheostomy tube is used to keep the trach site or stoma open (see Figure 2). Trach tubes come in many sizes and lengths. The size/length needed for your child will be based on:

- Breathing problem
- Age
- Airway size
- Special needs

![Figure 1](image1.png)

![Figure 2](image2.png)
Pediatric tracheostomy tubes all include the same basic parts:

**Flanges** (or wings) are the two tabs that extend out on each side of the trach tube opening. These, with ties, are used to secure the trach.

The **adapter** is the round opening at the end of the tube used as a connection point for tubing.

The **cannula** is the long tube that is inserted into the airway.

An **obturator** is a guide that is located inside the trach tube to assist with placing the tube into the airway. Once the tube is in place, the obturator is removed.

**Figure 3** below shows the basic parts of a tracheostomy tube.
Tracheostomy tube styles

Trach tubes are available in two basic styles: cuffed and uncuffed. The tube may be made of either plastic or silicone.

The cuff is an inflatable, balloon-like part on the trach tube. By adding water to the cuff, it expands and produces a seal that will reduce or prevent the loss of air through the mouth or nose.

Examples of cuffed (see Figure 4) and uncuffed (see Figure 5) trach tubes are pictured below.

Your child’s trach also may come with a flexible extension as shown in Figure 6. An extension to the trach allows the ventilator tubing connection to be kept farther away from your child’s neck. This device enables greater mobility and decreases the risk of skin irritation around the trach site.

Figure 4
Cuffed tracheostomy tube

Figure 5
Uncuffed tracheostomy tube

Figure 6
Flexible extension
**Humidification**

The amount of moisture in the air (also known as humidity) will have an effect on the amount and thickness of your child’s secretions. Since your child has a trach in place and is not breathing through his or her nose, the air is not filtered, warmed or humidified. Without added moisture, secretions may become thicker and more difficult to cough or suction out. To keep secretions thinner, an additional source of humidity may need to be used.

**Heat and moisture exchanger**

During the day, a heat and moisture exchanger (HME) (see Figure 7) may be worn on the end of the trach tube. An HME is a humidifying filter that comes in several shapes and sizes (all styles fit over the standard trach tube).

Important: HMEs must be changed daily to prevent plugging by over-saturating the internal paper or cloth material.

**Trach collar or Airvo device**

Trach collars or Airvo devices may be worn by children who are not on a ventilator to provide humidity.

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*Figure 7*

*Heat moisture exchanger*
Important note: The following sections of this booklet discuss the skills needed to care for your child’s tracheostomy. Please ask questions if you are unsure about any of the information provided.

How will care at home be different?

While your child is in the hospital, you will notice the nurses and respiratory therapists provide care using sterile technique.

**Sterile technique (used in the hospital) includes:**

- Hand washing or the use of hand gel before providing care
- Wearing sterile gloves
- Using a new trach tube or a tube that has been sterilized each time the tube is changed
- Using a new set of trach ties each time

**Clean technique (used at home) includes:**

- Hand washing or the use of hand gel before providing care
- Optional use of gloves
- Re-using a trach tube that has been properly cleaned
- Re-using the same trach ties if they are not soiled or wet

Clean technique may be used at home because your home environment has fewer germs, and your child is less likely to be exposed to other sick people. Because you will be reusing trach tubes in the home, it is very important to carefully follow the instructions provided in this booklet for the cleaning of the trach tubes to prevent infection.
Skin care

One of the first skills the bedside providers will teach you involves caring for the skin around the trach (stoma) site.

The skin around the stoma should be kept clean and dry. You should examine and clean around the stoma site at least two to three times daily. Secretions (mucus) from the trach can cause the skin to become reddened and sore if the mucus is allowed to remain on the skin too long. It may be necessary to provide skin care more frequently if your child has a larger amount of secretions from his or her trach.

How should I identify and treat skin problems?

The use of creams, lotions or ointments around a trach site is not recommended. Check with your doctor before using any of these items.

Contact your doctor if you see any signs of infection, including redness, drainage, foul odor, swelling and cuts.

Changing trach ties

The purpose of changing your child’s trach ties is to prevent skin breakdown and infection. Changing the ties also prevents the tie material from becoming worn and allowing the trach to become dislodged.

The trach ties will need to be trimmed to fit your child’s neck. When they are secured, you should be able to fit only one finger between the tie and your child’s neck. When preparing to trim the trach ties, you will notice that a new set of trach ties will have a long end and a short end (see Figure 8). Always trim the longer side of the trach ties.

Figure 8
Supplies needed

- Mild soap
- 3 clean washcloths
- Clean Velcro trach ties
- Scissors (for trimming the trach ties if needed)

For a demo of the following steps, watch “Tracheostomy Training: Trach Care and Changing Trach Ties” at ghschildrens.org/trachdemos.

Changing steps

- Have a pre-trimmed set of trach ties ready.
- Wash your hands well.
- Prepare two cloths with warm water. Squeeze the water out and apply a small amount of soap to one of the cloths. Rub the corners of the cloth together until the soap is absorbed. The remaining wet cloth will be for rinsing.
- Remove the old trach ties and assess them for soiling or wetness. Be sure to hold the trach tube in place with one hand (see Figure 9).
- Begin cleaning as close to the stoma as possible by wiping away from the trach opening. Wipe in only one direction. Do not use a back-and-forth motion when cleaning (see Figure 10).
- Repeat using another clean corner of the washcloth until all mucus, or drainage, has been removed from around the stoma.
- Use wet cloth to rinse the soap from around the stoma by wiping in only one direction (not back and forth).

Figure 9

Figure 10
• Be sure the skin around the stoma is dry by patting the wet areas well and continue cleaning the rest of your child’s neck.

• Replace the trach ties (either with a new set or the previous set if they are not soiled or wet). Slip one of the self-fastening tabs through the opening of one of the trach flanges and fold it back onto the cloth material to fasten it securely. Repeat the process on the other flange (see Figure 11).

• With your child’s head flexed slightly forward, bring the two ends of the tie together and fasten with the third self-fastening tab at the back of your child’s neck (see Figure 12).

• Check to be sure all the tabs are secure and that you can slip only one finger between the tie and your child’s neck.

• Wash your hands.

Tips
It always is good to have an extra pre-cut set of ties ready at the bedside and in your “Go Bag” (see Page 24). Velcro ties may be reused. Wash them in warm soapy water and allow them to air dry completely before reusing them. You also should closely check the material of the ties because they may become stretched or the tabs may not hold as securely after repeated uses.

If your child has a large amount of tracheal secretions, a dry split-gauze trach dressing may be placed between the trach tube and the skin. These dressings should be assessed often for soil level. Always make sure the dressing is not covering the trach opening. If using a gauze dressing, always use a dressing made for use with a trach. Never trim a gauze dressing to fit because the frayed fibers from the gauze can be breathed into the trach tube, causing respiratory distress.

![Figure 11](image1.jpg) ![Figure 12](image2.jpg)
Suctioning a tracheostomy tube

Why does a trach tube need suctioning?

- To remove mucus from your child’s trach tube and windpipe
- To allow your child to breathe more easily

Mucus helps protect the respiratory system by filtering out dust, dirt and some inhaled germs. Your child will have more mucus in the first few weeks after surgery as a result of the tissue’s response to the placement of the new tube. The amount of mucus likely will decrease. An increase in mucus at a later time may indicate that your child has a cold or virus.

How will I know I need to suction?

You may see:

- Mucus in the opening of the trach (you also may hear it rattling in your child’s airway).
- An increase in your child’s respiratory effort and rate.
- Pulling in of the skin between your child’s ribs with each breath (retractions).
- Flaring of the nostrils when your child inhales.
- A change in your child’s skin color from normal to pale or blue.
- A change in activity level (your child seems upset, hard to calm or sleepy at an abnormal time).

Other times to suction include before eating and before and after sleeping.

Supplies needed

- A self-inflating resuscitation bag/Ambu bag (if your child is on oxygen or a ventilator)
- Normal saline (for use if the mucus is thick or blood tinged)
- A suction catheter kit
- A suction source
- Oxygen (if your child needs it)
- Water in a container to rinse the suction tubing

For a demonstration, watch “Tracheostomy Training: Suctioning” at ghschildrens.org/trachdemos.
**Suctioning steps**

- Wash your hands thoroughly with soap and water.
- Open the suction kit and the saline.
- Put on the gloves from your suction kit.
- Attach the suction catheter to a suction source.
- Place the tip of the suction catheter into water to moisten it and test the force of the suction.
- Measure the pre-determined length of the suction catheter by inserting the catheter into a spare trach tube that is the same size as the one your child currently has in place. You also may measure the length of the obturator for your child’s current trach. Add 1 to 1 1⁄2 mm (about the thickness of a dime). This is the depth that you will insert the suction catheter.
- Keeping your thumb off the valve of the suction catheter, gently insert the catheter to the predetermined length (see Figure 13).
- Place your thumb over the suction valve as you roll the catheter gently between your fingers while withdrawing it. This should last no more than 5 seconds (see Figure 14).
- Let your child catch his or her breath and monitor your child’s color and breathing effort.
- Repeat the suctioning (up to 3 times) until your child’s respirations sound clear and the catheter returns little or no mucus.
• If the mucus appears thick, you may use 2–3 drops of saline to loosen and thin the secretions. Using the saline may make your child cough, so be ready to suction immediately.
• You may give your child two to three breaths with the self-inflating bag during suctioning if needed.
• When you are finished, suction a small amount of water through the catheter to clear the mucus from the connective tubing.

Tips
If there are bloody streaks in the mucus, check the depth you are inserting the catheter and use saline with all attempts. If the blood in the mucus does not get better within 24 hours, notify your physician.

Contact your doctor if secretions change in color, increase in thickness or amount, or if there is bright red blood when suctioning.

Tracheostomy tube changes
Why does my child’s trach tube need to be changed?
• Mucus can plug the trach tube and make it hard for your child to breathe.
• To prevent infection.

When should I change my child’s trach?
You should change the trach regularly every week; however, during the time you are learning in the hospital, changes may occur more frequently.

We recommend that you schedule routine changes of the tracheostomy tube when a second person is available to assist. One person will change the tube while the other assists (and distracts your child), so the change goes smoothly. You also must know how to change the trach alone in an emergency situation. Emergency change skills will be reviewed with you before discharge.

It is best to change the tube before your child eats to avoid causing your child to vomit. Plan to change the tube when you will not be in a hurry. Include trach tube changes in your child's routine when he or she is happy and comfortable. Try to avoid times when your child will be irritable such as when he or she is sleepy or hungry.
Supplies needed

- A clean tracheostomy tube
- A tracheostomy tube that is the same length, but a size smaller
- 3 washcloths
- Scissors
- Water-based lubricant
- Saline drops
- Clean trach ties
- Mild soap
- A rolled blanket to go under your child’s shoulders

For a demonstration, watch “Tracheostomy Training: Changing the Tube” at ghschildrens.org/trachdemos.

Changing steps

- Wash and dry your hands thoroughly.
- Prepare the new set of trach ties by trimming the longer end to the appropriate length. Secure the ties into the flanges of your clean trach tube.
- Insert the obturator into the clean trach tube; lubricate the end of the tube and place it on a clean surface within reach. If your child has a cuffed trach, inflate and deflate to make sure it is working correctly.
- Put on gloves and suction your child’s tracheostomy.
- With your child on his or her back, place a small rolled blanket under the shoulders. Your child’s head should be tilted back slightly and his or her chin should be pointed toward the ceiling (see Figure 15). Be careful not to tilt the head back too far because this position could make inserting the new trach more difficult.

Figure 15
REMEMBER: Never let go of the trach tube in your child’s neck until the ties are secured.

- Have a helper hold the old trach securely in place while you remove the old trach ties.
- Have your helper remove the old trach tube. Most children will be able to breathe for a few seconds while you pick up the new tube. If this is not the case for your child, modifications to this process will be discussed during training.
- Make sure the obturator is firmly in the new trach and insert the new tube with the curve inserted downward toward the stomach (see Figure 16). DO NOT FORCE THE TUBE! Quickly remove the obturator with your free hand while holding the tube securely in place (see Figure 17).
- Secure the new ties at the back of your child’s neck. Make sure you can fit only one finger under the ties. The trach should sit midline on your child’s neck. If it pulls to one side or the other, the ties are too tight.
- Wash your hands.
- After you finish changing the trach tube, you may choose to clean the old tube immediately or at a later time. If you are not cleaning the tube right away, be sure to wash it under running water to keep the secretions from drying on the tube. Allow the tube to air dry before placing it in a container to be cleaned later.

Figure 16

Figure 17
What should I do if the trach tube won’t go in?

Remain calm and act quickly. DO NOT FORCE THE TUBE!

Reposition the head and neck. Re-lubricate the tube and try re-inserting, making sure you are inserting the tube with the curve inserted downward toward the stomach.

If the tube still will not pass, try to place the old tube back in. The old tube should go back in without problems.

If the old tube will not pass, use the smaller tube that you should have available. Remember that during these attempts you may give your child breaths with a resuscitation bag/Ambu bag by placing the mask over the nose and mouth. If air is leaking out of the tracheostomy stoma while you are bagging, then you must cover the stoma.

If you are unable to insert the smaller tube, have someone call 911 for emergency help. You should continue giving breaths with the resuscitation bag/Ambu bag and begin CPR if needed. If you are alone, perform CPR for one minute before calling 911. You will not be discharged without learning CPR. CPR instructions for an infant with a trach are located at the back of this booklet on Page 35. You may want to copy this page and post it in the area where your child receives most of his or her trach care.

If you can successfully place the smaller tube, notify your physician immediately after the tube change. The more time the smaller tube is in, the more difficult it will be to get the larger tube back in place.
Equipment maintenance

How to clean and sanitize tracheostomy tubes

There are two kinds of tracheostomy tubes used in children: Bivona silicone tubes and Shiley plastic tubes. Tracheostomy tubes can be cleaned and reused for different periods of time. This usage will be addressed by your physicians. Talk with your ENT physician and/or pulmonologist about how many times you can reuse the trach tubes before throwing them away.

Cleaning a silicone Bivona trach or a cuffed Shiley trach

Supplies needed

• Dirty trach tube and obturator
• Mild soap and water
• Container for boiling water
• Clean container or sealable plastic bag
• Paper towels
• Pen and tape

For a demonstration, watch “Tracheostomy Training: Cleaning the Tube” at ghschildrens.org/trachdemos. Instruction covers all types of pediatric trachs.

Cleaning steps

• Clean the tube and obturator with warm soapy water. The obturator may be used to clean mucus from inside the tube.

• Look at the tube carefully as you clean it. Watch for cracks or sharp edges on the tube or obturator. Do not reuse the tube if any are found.

• Heat water to boiling either on the stove or in the microwave. If you are heating the water on the stove, remove it from the heat source. Never place trach tubes in boiling water over direct heat. Place the tube and obturator into the hot water. Leave in place until the water cools enough for you to remove them with your bare hands.

• Place the clean tube and obturator on a clean towel and cover them with a paper towel. Allow the parts to dry overnight.

• Once the parts have dried, inspect them again for cracks or damage. Be careful to hold the trach tube by the flanges to prevent contamination.

• Store the trach and obturator in a clean container or a sealable plastic bag. Label the container with the trach size and date cleaned.
Cleaning uncuffed plastic Shiley trach tubes

Supplies needed

- Dirty trach tube and obturator
- Mild soap and water
- Clean container or new sealable plastic bag
- Paper towels
- Pen and tape

Cleaning steps

- Clean the tube and obturator with warm soapy water. The obturator may be used to clean mucus from inside the tube.
- Look at the tube carefully as you clean it. Watch for cracks or sharp edges on the tube or obturator. Do not reuse the tube if any are found.
- After cleansing thoroughly, rinse with sterile water to remove any cleaning solution residue.
- Place the tube and obturator on a clean towel to air dry. Cover the parts with a paper towel while they dry overnight.
- Once the parts have dried, inspect them again for cracks or damage. Be careful to hold the trach tube by the flanges to prevent contamination.
- Store the trach and obturator in a clean container or sealable plastic bag. Label the container with the trach size and date cleaned.
Emergency care for trach patients

While you are in the hospital, you will learn to care for your child’s trach. You also will learn how to prevent breathing problems resulting from things such as mucus plugging and what to do when the trach accidentally comes out. Both of these situations can lead to respiratory distress. (For quick instructions in an actual emergency, see chart on Page 33.)

What are signs of respiratory distress?

- The appearance of pulling when your child takes a breath (retractions)
- Sweatiness
- Pale skin
- Labored breathing
- Dark, dusky or blue color in lips and nail beds
- Irritability, restlessness or anxiety
- Change in the sound of your child’s breathing

Mucus plugging is the most common reason for respiratory distress (other than an illness). Mucus plugs are dried secretions that build up until they block off the trach tube. Making sure your child is receiving enough humidity to his or her trach helps prevent plugging. Suction at least twice daily, use saline to loosen mucus, and perform routine trach changes to prevent plugging of the trach.

If you suspect the trach tube may have a mucus plug, attempt to suction the tube in a normal manner (see Pages 14–15). If you have trouble, add a few drops of saline and try again. Never force the catheter into the tube as this action may push the mucus plug farther into the tube. If you can’t remove the mucus plug, or if your child begins to turn blue, change the trach tube.

What if the trach falls out?

If the tube comes out accidentally, remain calm and follow the steps used for routine tube changes (see Page 16 for detailed instructions):

- Always have a clean tube and ties ready
- Place the obturator into the tube and lubricate the tube
- Insert the tube and quickly remove the obturator
- Secure trach ties

Your child should at all times have his or her emergency kit or “Go Bag” (see page 24), which will contain these supplies. If you cannot quickly get to these supplies, replace the old tube until you have the supplies available.
**Resuscitation bag/Ambu bag use**

It is extremely important to have a manual resuscitation bag/Ambu bag (see Figure 18) available for temporary breathing support in times of emergency. You can assist your child’s breathing or completely take over breathing by using the bag. Bagging should be used in conjunction with CPR if your child does not have a pulse. CPR instructions for an infant with a trach are located near the end of this booklet on Page 35. Follow the steps on this sheet if bagging and CPR are needed.

**Supplies needed**
- Manual resuscitation bag/Ambu bag and mask device
- Oxygen tank and tubing

In the event of an emergency, your resuscitation bag/Ambu bag should be connected to the oxygen tank. The oxygen flow level should be turned on at 6–10 liters when the bag is in use.

**Always attempt to use the resuscitation bag/Ambu bag with the trach tube if possible. If this is not possible, use the mask device.**
Attach the resuscitation bag/Ambu bag to the trach tube adapter to give breaths (see Figure 19).

If using the mask, place the mask onto the resuscitation bag/Ambu bag. Breaths using the mask may be given in one of two ways:

1. Place the mask over your child’s mouth and nose. Press the mask firmly against the face and give breaths using the resuscitation bag/Ambu bag. The trach opening, or stoma, must be covered so that air does not escape via the opening (see Figure 20). You should see your child’s chest rising with each breath. You should not hear air escaping around the mask.

2. Place the mask directly over the trach opening, or stoma, and give breaths. This method may be more difficult in a smaller child because of difficulty obtaining a seal on the neck with the mask.

You may be taught one or both of these methods during your Trach CPR training class.

Figure 19

![Figure 19](image1.png)

Figure 20

![Figure 20](image2.png)
Emergency kit or “Go Bag”

You must always be prepared for emergencies! It will be very important that trach supplies always be with your child and available for use, regardless of where your child is. This bag should go with your child everywhere and easily hold all the supplies in Figure 21 (listed below and pictured on Page 25).

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<tbody>
<tr>
<td><strong>Figure 21: Emergency bag contents</strong></td>
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<tr>
<td>1</td>
<td>Important phone numbers for providers and family</td>
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<tr>
<td>2</td>
<td>Suction machine (make sure it is charged before trips)</td>
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<tr>
<td>3</td>
<td>Self-inflating resuscitation bag/ Ambu bag with face mask</td>
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<td>4</td>
<td>Suction tubing</td>
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<td>5</td>
<td>Trach tube in appropriate size and length</td>
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<td>6</td>
<td>One size smaller trach tube</td>
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<td>7</td>
<td>Pre-cut trach ties</td>
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<td>8</td>
<td>Suction catheters</td>
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<td>10</td>
<td>Normal saline</td>
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<td>Scissors</td>
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<td>Extra Omni-Flex Patient Connector</td>
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<td>Extra ballard</td>
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<td>14</td>
<td>Water-based lubricant</td>
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<td>15</td>
<td>Split gauze dressing</td>
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<td>16</td>
<td>Syringe, if the trach is cuffed</td>
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*Some children also will need:*

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<td>Travel ventilator with travel circuit</td>
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<td>18</td>
<td>HME</td>
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<td>19</td>
<td>Bacterial filter on the ventilator</td>
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<td>20</td>
<td>Pulse oximeter with extra saturation probe (make sure it is charged before trips)</td>
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<tr>
<td>21</td>
<td>Power cord</td>
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<tr>
<td>22</td>
<td>Sprint packs for back-up batteries</td>
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<td>23</td>
<td>Extra ventilator circuit</td>
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<tr>
<td>24</td>
<td>Two oxygen tanks</td>
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The bag should be sturdy and close completely. You will receive a “Go Bag” before discharge. Page 24 of this booklet also contains this list of the “Go Bag” contents. A copy should be kept with your bag at all times. Check weekly to be sure your “Go Bag” contains all the necessary items.

For more information, watch “Tracheostomy Training: Go Bag Contents” at ghschildrens.org/trachdemos.
Home care

Daily activities for patients with trachs

Bathing
Your child may bathe in a shallow amount of water. Never leave him or her alone in the bathtub. Never allow water to enter the trach tube during the bath. If water gets into the trach, suction immediately.

Do not use powders or aerosol sprays like hairspray or deodorant near the trach. Breathing these into the trach may cause irritation and breathing problems.

Child care
Never leave your child alone while he or she has a trach in place. All those who care for your child must be trained in providing all trach care and must have demonstrated to you that they are comfortable performing these tasks if the need arises. They also should be CPR certified.

Clothing
Avoid clothing such as a turtleneck that can cover the trach opening. Do not allow your child to wear necklaces, beads, clothing with strings that are near the trach or fuzzy clothing. Tiny beads, strings or fibers can get into the trach and cause breathing problems.

Home environment
Do not smoke near your child. Smoke is very irritating to your child’s airway, lungs and ears. Even fumes from smoking that remain on your clothing can cause irritation for your child. If you decide to get a pet, consider one that can live outside or that will not shed.

Play
Older children should avoid playing contact sports. Play near sand or water should be closely supervised because of the risk of getting sand or water into the trach. Children may participate in recess or physical education as long as the activities are not too strenuous.

Sleep
Pulse oximeters will be ordered for all children with a trach at the time of discharge. Your child should be on the monitor when he or she is sleeping or anytime not directly supervised.
Travel

Any time you leave home, you must bring all your emergency equipment and the portable suction with you. This is true regardless of the length of the trip, whether it is a short trip to the grocery store or an extended time like a vacation. When possible, we recommend always traveling with two people in the vehicle. It is important to have one person sitting in the back seat next to your child who is comfortable providing care in the event of an emergency. If this is not possible, you should have your child on his or her monitor. You should drive in a lane from which it is easy to pull over in the event you must stop quickly to care for your child.

Conclusion

Discharge time!

Your care team will be working with you throughout your hospital stay to help you become comfortable with the care your child will need. We recognize that discharge likely will be a stressful event for your family. We are here to help you learn and gain confidence in caring for your child.

As discharge time approaches, your supplies and equipment will be ordered. Some equipment may be delivered to the hospital for you to practice with before discharge. Other items will be delivered directly to your home. Your durable medical equipment (DME) company representative will arrange a time to come to your home to help you decide the best location for equipment there. He or she also will assess the environment to make sure all your medical equipment will fit and can be powered safely.

You should have a plan for where you will store your supplies before they are delivered to your home. Supplies should be stored in an easily accessible, clean and dry space near the area where your child will spend the most time.

Before discharge, the case manager will help you understand how to notify your telephone and power providers of your situation. In the event of an emergency, your home may be placed on a priority list to allow your services to be restored first. This notification will apply only in emergency situations. It will not prevent your utility provider from disconnecting your services if the bill is not paid.

You also should notify the fire department closest to your home and the nearest hospital, so they will be aware of your special needs in the event of an
emergency. In addition, you will complete a form giving us permission to release information to your local 911 dispatch center so they will know information about your child in an emergency.

On the day of discharge, your child will be transported home via ambulance and a representative of your DME company will meet you at your home to help get you settled.

Skills demonstration

You and the second caregiver will complete a skills check-off before discharge day. A list of these skills is included on the final page of this booklet. As a part of the check-off process, you and the second caregiver will be required to provide 48-hour continuous care of your child before discharge. As this time approaches, please speak with a care team member regarding scheduling preferences for this stay.

You will sign a skills check-off list that will be kept at your child’s bedside to acknowledge your understanding of the items on the list. This list also will document completion of the skills. If you have questions at any time regarding any of the items on the list, please notify your nurse or respiratory therapist.

This booklet was created to help you learn to care for your child. The material presented in this document is for informational purposes. It is not intended to replace medical education, training, treatment, advice or diagnosis by a healthcare professional. A qualified healthcare professional should be consulted before making any health-related decisions.
## Trach problems: Quick reference list

### Respiratory distress

**Symptoms**
- Restlessness, anxiety
- Faster breathing
- Flaring of nostrils
- Color changes in lips, nails or skin
- Retractions
- Faster heart rate
- Grunting, noisy breathing or whistling noise when breathing
- Change in blood pressure
- Sweaty or clammy skin
- Not breathing

**Actions**
- SUCTION the trach
- Provide breaths using the resuscitation bag/Ambu bag via the tracheostomy tube
- If no relief, CHANGE the trach
- If respiratory distress continues, call 911 or the doctor immediately!

### Accidental decannulation

(Trach comes out by accident)

**Actions**
- STAY CALM
- Provide breaths using resuscitation bag/Ambu bag and face mask
- Replace trach tube
- If spare trach is not handy, replace with the one that came out and change to a clean tube later, when the situation is under control

### Difficult reinsertion

(Trach will not go in)

**Actions**
- Reposition the child and try again
- If the regular size tube does not fit, place the smaller size tube
- If the smaller tube does not fit, reposition the child and try again
- Place a cut-off suction catheter in the opening
- Hold the suction catheter in the opening until help arrives
- Call 911 or the doctor immediately!
- Provide breaths using resuscitation bag
### Trach obstruction
(Trach blocked)

**Symptoms**
- In addition to symptoms of respiratory distress (see symptoms listed on Page 31), you may notice your child’s voice sounds louder or is present when not previously audible
- Poor chest movement
- Inability to pass suction catheter or difficulty using the resuscitation bag/Ambu bag

**Actions**
- SUCTION the trach
- Provide breaths using resuscitation bag/Ambu bag
- If no relief, CHANGE the trach
- If respiratory distress continues, call 911 or the doctor immediately!

### Bleeding

**Symptoms**
- Small amounts of pink-tinged or red-streaked mucus

**Actions**
- First, confirm how deep the suction is being passed and ensure it is going just slightly beyond the tip of the tracheostomy and no farther
- For small amounts of bleeding that go away in minutes, no action is needed
- For large amounts of bleeding (more than a teaspoon or if bleeding longer than 5 minutes), call 911 or the doctor immediately!

### Infection

**Symptoms**
- Lack of appetite
- Increase in the amount or thickness of secretions
- Fever
- Odor
- Red, inflamed skin at stoma
- Congested lung sounds
- Increased respiratory effort
- Decrease in activity

**Action**
- Call the doctor
Emergency procedures

If your child experiences respiratory distress, desaturations or any other concerns, please follow these instructions before attempting CPR:

1. **STAY CALM**

2. **SUCTION** the trach

   If difficulty continues, **CHANGE** the trach

   If difficulty continues, provide breaths using the **RESUSCITATION BAG/AMBU BAG** through trach; make sure chest is moving with each breath, then **CALL 911**

3. If chest is rising or breath sounds can be heard in the lungs:
   - Provide breaths using the **RESUSCITATION BAG/AMBU BAG** with mask on the child’s mouth and nose
   - **Continue to use bag** until child begins to breathe on his or her own or EMS arrives

4. If chest is not rising or breath sounds cannot be heard in the lungs:
   - **Continue to use bag** until child begins to breathe on his or her own or EMS arrives

5. If child’s heart slows or stops, **BEGIN CPR**

---

*See Page 14*

*See Page 16*

*See Page 23*

*See tear-out, Page 35*
CPR instructions for an infant with a trach

Watch for signs of breathing throughout.

Infant unresponsive

Yell for help and slap foot of infant

30 chest compressions

2 suctions

Bag 2 breaths

If resistance/No chest movement

Remove saline from trach cuff (if patient has a cuffed trach)

Change trach and add saline later

30 chest compressions

Bag 2 breaths

30 chest compressions

Bag 2 breaths

30 chest compressions

Bag 2 breaths

30 chest compressions

Bag 2 breaths

30 chest compressions

Bag 2 breaths

30 chest compressions

Call 911

If no resistance/Chest rises

30 chest compressions

Bag 2 breaths

30 chest compressions

Bag 2 breaths

30 chest compressions

Bag 2 breaths

30 chest compressions

Bag 2 breaths

30 chest compressions

Call 911
## Important information/Phone numbers

My child has a ____________________________ trach in place.

<table>
<thead>
<tr>
<th>Providers</th>
<th>Contact numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambulance/Fire departments</td>
<td>911</td>
</tr>
<tr>
<td>ENT:</td>
<td></td>
</tr>
<tr>
<td>Pulmonologist:</td>
<td></td>
</tr>
<tr>
<td>Primary care physician:</td>
<td></td>
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<tr>
<td>Equipment company:</td>
<td></td>
</tr>
<tr>
<td>Home nursing provider:</td>
<td></td>
</tr>
</tbody>
</table>
“Go Bag” contents checklist

Place a check mark verifying the item is in the “Go Bag”

___ 1. Important phone numbers for providers and family
___ 2. Suction machine (make sure it is charged before trips)
___ 3. Self-inflating resuscitation bag/Ambu bag with face mask
___ 4. Suction tubing
___ 5. Trach tube in appropriate size and length
___ 6. One size smaller trach tube
___ 7. Pre-cut trach ties
___ 8. Suction catheters
___ 9. DeLee Suction Catheter
___ 10. Normal saline
___ 11. Scissors
___ 12. Extra Omni-Flex Patient Connector
___ 13. Extra ballard
___ 14. Water-based lubricant
___ 15. Split gauze dressing
___ 16. Syringe, if the trach is cuffed

Some children also will need:

___ 17. Travel ventilator with travel circuit
___ 18. HME
___ 19. Bacterial filter on the ventilator
___ 20. Pulse oximeter with extra saturation probe (make sure it is charged before trips)
___ 21. Power cord
___ 22. Sprint packs for back-up batteries
___ 23. Extra ventilator circuit
___ 24. Two oxygen tanks

REMEMBER YOUR “GO BAG.” It goes with your child everywhere—even to the hospital!
# Trach teaching checklist

Teaching of caregivers should be initiated as early as possible. Documentation of teaching also should be completed in Epic.

<table>
<thead>
<tr>
<th>Information covered</th>
<th>1st caregiver date completed</th>
<th>2nd caregiver date completed</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review “Guide for Trach Care at Home” booklet</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suction trach</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPR class (preferably specific to trached patients)</td>
<td></td>
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</tr>
<tr>
<td>Skin care/trach tie change</td>
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<tr>
<td>Assisted trach change</td>
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</tr>
<tr>
<td>Independent trach change #1</td>
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<td></td>
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<tr>
<td>Independent trach change #2</td>
<td></td>
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<tr>
<td>Emergency care (includes practice bagging)</td>
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<tr>
<td>48-hour stay</td>
<td></td>
<td></td>
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<tr>
<td>Home equipment training</td>
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<td></td>
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<tr>
<td>Practice mini-trip (pack up supplies and equipment for practice trip around floor)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Date initiated: ___________________________ Date completed: ___________________________

Signature: ___________________________ Signature: ___________________________
Prisma Health Children’s Hospital–Midlands
7 Richland Medical Park Dr.
Columbia, SC 29203
803-296-KIDS (5437)

PalmettoHealthChildrens.org

Prisma Health Children’s Hospital–Upstate
701 Grove Rd.
Greenville, SC 29605
864-455-7000
1-800-4RBUDDY (1-800-472-8339)

ghschildrens.org

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