You are being discharged from UC Davis Medical Center with an artificial airway, known as a tracheostomy or “trach.” Going home with a tracheostomy is not unusual. We expect that you will be able to resume most of your normal activities, which may include going to school, working or traveling. The following information will help you learn about tracheostomy care at home. This material is additional to any handouts or instruction you receive from your care team at UC Davis Medical Center.

To breathe without problems, you must learn to take care of your new airway. Failure to keep your airway clean may result in serious illness or death. Tracheostomy care should be done routinely as outlined in this booklet. You should feel comfortable caring for your tracheostomy before you go home.

The care required can differ depending on your type of tracheostomy tube and health condition. This is something you will discuss with your care team before you leave the hospital. If you have any questions, please ask the nursing staff or your physicians before discharge.

My tracheostomy tube is manufactured by:
_________________________________________________

My tracheostomy tube is a size: ________
Learning checklist

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You have had a total laryngectomy — a surgery to remove your voice box (larynx). Your trachea, or breathing tube, is now connected to a hole in your neck called a stoma, a nickel-size opening in the front of your neck that connects directly to your lungs. You now breathe through your stoma (often called “neck breathing”).

What is a tracheostomy

A tracheostomy is an artificial opening into your trachea or windpipe that you breathe into directly. The hole in your neck is called a stoma and a tube is placed in it to keep it open. Usually your voice box, or larynx, is not changed by a tracheostomy. You may still be able to swallow, depending on your other medical conditions.

A tracheostomy is a surgical procedure usually done under anesthesia. The procedure takes about 15 to 30 minutes and may be done at the same time as your major surgery.
Tracheostomy parts and purposes

Tracheostomy tubes can be made from different materials and come in different sizes. They may have disposable (can be thrown away) or reusable (can be used again) inner cannulas or no inner cannula at all. They also may or may not have a “cuff.” Cuffed tracheostomy tubes are usually needed if you will be on a ventilator (a machine that helps you breathe) at home. You should know who made the tracheostomy, its size, and the parts of your tracheostomy tube.

Glossary

Flange — Also referred to as a faceplate or trach plate. The flange sits against your neck and has holes on the sides through which ties help hold the tube in place.

Outer cannula — The outer cannula stays in your windpipe for days at a time, and is removed only for scheduled changes.

Inner cannula — If you have an inner cannula, it fits inside the outer cannula and is changed or cleaned frequently depending on whether it is disposable or reusable.

Obturator — Inserted in place of the inner cannula when changing or reinserting your tracheostomy tube in order to smooth the passage.

Cuff — Internal balloon that helps seal the space between your tracheostomy tube and trachea when inflated.

Pilot balloon — Small balloon attached to a thin tube that attaches to the cuff inside your tracheostomy tube. A syringe is attached to the end of the balloon and used to inflate or deflate the internal cuff.

Stoma — The hole in your neck made during surgery where the tracheostomy tube sits.

See the manufacturer’s handout for pictures specific to your type of tracheostomy. Discuss these with your doctor or nurse.
Humidity

Your nose and mouth warm and humidify the air you breathe. When you breathe through a tracheostomy tube directly into your airway, you must replace this humidification. Without added moisture your secretions may become thick and hard to cough out, making it difficult to breathe. If your secretions become so thick that you cannot clear your airway, you will not be able to breathe.

To maintain moisture and help clear secretions:

1. Drink plenty of fluids to keep your secretions thin, about 10 glasses of water or juice a day.

2. Keep a humidifier in your main living area during the day. It can be a warm or cold mist humidifier and must be cleaned every week to prevent infections.

3. Use a small bedside humidifier at night.

4. Humidity monitors can help determine whether your home has enough humidification.
5. In the hospital you may receive humidification through tubing that sits over your tracheostomy tube. This may be ordered for home use depending on your condition.

6. Use a Heat Moisture Exchanger (HME) as prescribed. Refer to separate handout with education and instructions.

**Tracheostomy skin care**

Your surgical incision needs to be cleaned frequently as it heals — possibly four or five times a day until the skin is entirely healed under the tracheostomy tube. When your skin is healed, clean the incision area twice a day. Use sterile normal saline or sterile water to clean the site. If there is a lot of crusting at the incision site, hydrogen peroxide can be used but must be rinsed off as it can irritate the skin.
Suctioning

In the hospital, your nurses will perform suctioning to help clear secretions from your airway until you are able to clear them yourself by coughing. You may or may not need to suction your airway at home. You should know how to suction yourself if you are unable to cough your secretions out.

If your secretions are difficult to cough up, you may need to spray sterile normal saline (not sterile water) into your tracheostomy when suctioning yourself. You will be given normal saline “pillows” — pink plastic tubes filled with sterile normal saline that can easily be squirted into your tracheostomy.

The saline should be sprayed slowly while you are taking a deep breath. The saline should then be held in the airway until the secretions are loosened and easily coughed out. Coughing should not be tiresome. One or two good coughs should clear your airway.

Inspect your secretions. They should be clear or white with no odor. If they are yellow, green or smell foul these are signs of an infection and you should contact your doctor. Small streaks of blood in your secretions can be normal, but call your doctor if there is more than a small amount of blood.

Supplies

- Suction machine
- Suction catheters
- Small container filled with sterile normal saline or sterile water for rinsing the suction tubing
- Sterile normal saline “pillows,” if needed
- Good lighting
- Mirror
Procedure

1. Wash your hands with soap and water
2. Position a mirror and lighting so you can see your airway
3. Turn on the suction machine
4. Connect the adapter of the catheter to the tubing of your suction machine
5. Spray sterile normal saline using the "pillow" into your airway, if needed
6. Gently insert the catheter 4 to 5 inches into your tracheostomy tube
7. Cover the suction control port with your thumb and withdraw the catheter in a rotating motion
8. Breathe deeply five or six times
9. Rinse the catheter by suctioning the sterile normal saline or sterile water
10. Re-insert the suction catheter and suction again if needed to clear more secretions

Inner cannula care

Inner cannulas are an important component of managing your tracheostomy safely. They help keep your airway clear and free of secretions, and are either disposable or reusable. They can be changed or cleaned as needed without changing the entire tracheostomy tube. If your tracheostomy has an inner cannula, it should always be worn to ensure that your tracheostomy tube is kept mucus-free and that you are able to breathe easily. Make sure you have enough spare disposable inner cannulas to last you through the month until you are able to get more supplies.

Not all tracheostomy tubes have inner cannulas. If your tracheostomy tube does not have an inner cannula you will need to closely monitor your airway for buildup of secretions. The entire tube may need to be changed more frequently and you may need to suction yourself more often to keep the tube clean.

See the manufacturer’s handout for care specific to your type of inner cannula. Discuss the procedure for maintenance with your doctor or nurse.
Securing your tracheostomy tube

Your tracheostomy tube should be secured in place with Velcro tracheostomy ties or cloth string ties, called twill ties. Sometimes it is difficult to loop the new ties through the holes in the tracheostomy faceplate, also called a flange. You may need someone to help you until you are comfortable changing the ties yourself.

If the ties are not in place the tracheostomy tube can easily fall or be coughed out. The ties should be tight enough to prevent your tube from accidentally slipping out, but should not be uncomfortable. The ties should be snug but not loose, and you should be able to slip one finger underneath the tie. Change your tracheostomy ties as needed to keep your skin clean and dry.

Changing a tracheostomy tube

Tracheostomy tubes need to be replaced periodically, usually every 30 days though your provider may recommend replacing the tube more or less often. You may be instructed to change the tracheostomy tube at home, or your provider may do it during your follow-up clinic appointments.

*If you are told to change your tracheostomy tube at home see the manufacturer’s handout specific to your type of tracheostomy tube. Discuss the procedure with your doctor or nurse. You will need to be trained on the procedure and practice performing on your own.*
Home care supplies

The UC Davis Health discharge planner will arrange your supplies through your insurance company prior to you leaving the hospital. You will be given a spare tracheostomy tube of the same size, one that is one size smaller and a suction machine with corresponding parts. You will also need to have hydrogen peroxide and sterile normal saline or sterile water on hand.

Each month, you should receive the following additional supplies:

- Suction catheters
- Yankauer suction catheters
- 3cc sterile normal saline pillows
- Cotton tip applicators
- Tracheostomy tube
- Tracheostomy tube inner cannulas (if needed)
- Tracheostomy ties
- Tracheostomy kits
- Tracheostomy dressings
Resuming normal activities

Many people resume a normal lifestyle after having a tracheostomy. You should be able to continue with your usual activities, hobbies and interests, depending on your condition. Outdoor activities such as walking, gardening and golfing are encouraged.

Water-related activities — such as boating, fishing and swimming — can be hazardous and should be avoided. You have no way to hold your breath underwater with a tracheostomy. Water can freely enter your lungs and you may drown.

Foreign particles can irritate your airway and cause excessive coughing. Cotton covers or scarfs are excellent protection for your tracheostomy. Showers may be taken with special care to shield the tracheostomy tube opening from water. If you have a movable showerhead, adjust it so the stream of water hits your body well below the neck area. A protective shower guard can be purchased online or you can wrap a cotton towel loosely around your neck.

Traveling

When traveling, bring the following supplies for safety:

- Portable suction machine
- Suction catheters
- Spare tracheostomy tube, one the same size and one that’s one size smaller
- Obturator
- Spare tracheostomy tie
- Sterile normal saline pillows for instillation in your airway if you have thick secretions
- Scissors to cut tracheostomy ties if needed
Safety tips

- Have a plan for communication. If you are not able to speak with your tracheostomy then discuss options with your provider.
- Call 1-800-432-5378 for a MedicAlert bracelet that includes “Tracheostomy.”
- Review and understand the instructions included with your particular brand of tracheostomy.
- Avoid dust, mold, fumes, sprays and smoke.
- Do not swim. You will not be able to breathe if your tracheostomy is under water.
- Do not wear clothes that cover your tracheostomy or that have small fibers that could enter your airway.
- If you are unable to remove inner cannula or tracheostomy tube easily, do not force it out. Call your doctor’s office.
- Call your doctor or nurse if you notice red, inflamed skin at the stoma site or foul-smelling mucus, as these may be signs of an infection.
- Visit the nearest fire station and introduce yourself as a tracheostomy patient.
Emergency instructions

If you cannot breathe

- Remove any caps, HMEs, or speaking valves
- Spray sterile normal saline into your tracheostomy and cough
- Change your inner cannula
- Suction yourself
- Change your tracheostomy tube if you have been trained on how to do it

If your breathing does not improve, call 911. The operator will instruct you on basic life support measures. You or your caregiver can also take a class on basic life support. Sources are available online.

If your tracheostomy tube comes out

Replace your tracheostomy immediately if it falls out or if you cough it out. The stoma can shrink quickly, making it difficult to replace the tracheostomy tube. You should receive instruction on the procedure before leaving the hospital.

Always have a spare tracheostomy tube the same size and one a size smaller nearby. If you have to place the smaller size tube because you had difficulty placing the same size, call your doctor’s office immediately as you will need to be seen. Call 911 if you are unable to place the tracheostomy tube back in place. If you are unable to replace the tracheostomy tube you may not be able to breathe.
To replace your tracheostomy

Supplies
- Same size tracheostomy tube and one size smaller, with obturator
- Velcro or twill ties
- KY jelly (if available)
- Mirror (if available)
- Good lighting (if available)

Procedure
1. Wash your hands with soap and water
2. If available, position a mirror and lighting so you can see your airway well
3. Prepare your new tracheostomy tube for insertion
4. Remove the inner cannula and insert the obturator
   - Coat the end of the tube with KY jelly, if available
   - Place the Velcro or twill ties through one side of the flange holes
5. Insert the new tracheostomy tube (with the obturator in place) approaching your stoma from the side
6. Once the tube is inserted about an inch, turn the tube so it curves downward and insert the rest of the way until the flange is sitting against your neck
7. Remove the obturator and replace the inner cannula (you will not be able to breathe with the obturator in place)
8. If you are unable to breathe after placing the new tube take it out and try again
9. If you are unable to fit the new tube in your stoma, try the smaller size
10. Secure the Velcro or twill ties