

Tracheostomy Care at Home

This booklet tells you about your tracheostomy and how to care for it at home. You don't have to read it all at once. Your nurses, therapists, and doctors will help you understand the information and do the tasks.

Take your time. Write down any questions you have. There is a space for notes near the back of this booklet.

Feel free to talk about your concerns and questions with us.

We are here to help you and your family.

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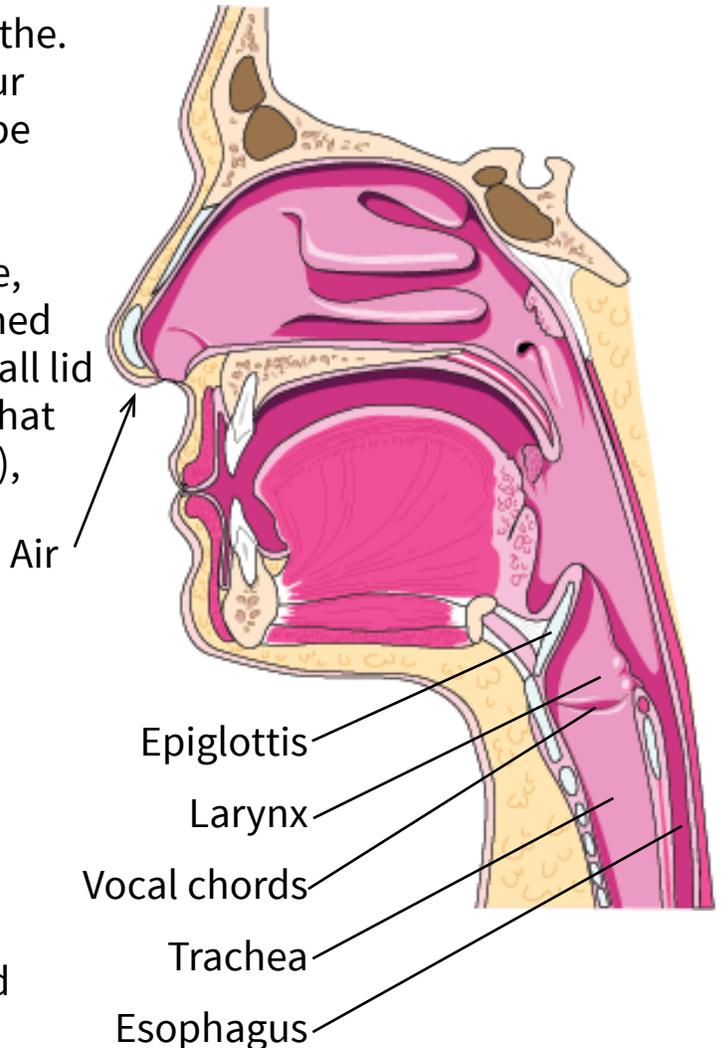
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Tracheostomy Care At Home

You'll understand your tracheostomy better if you know more about your breathing.

Breathing

Air comes into your lungs when you breathe. Usually air enters your lungs through your nose and mouth, then travels down a tube called the trachea (windpipe) to get to the lungs. Your lungs are your organs for breathing. As air travels through the nose, throat, and windpipe, it is warmed, cleaned and moistened. When you swallow, a small lid (epiglottis) closes over the windpipe so that food goes into the food tube (esophagus), rather than the windpipe.



What is a tracheostomy?

An opening is made into the trachea, or windpipe, to help you breathe. This opening is called a “stoma”. A tube called a tracheostomy or trach tube, is put into the opening. The trach tube lets you breathe air directly into your windpipe instead of through your mouth and nose.

There are many reasons why a tracheostomy is needed. Your doctor has explained why one is necessary for you. If you do not understand, ask one of us.

Because the air goes straight into the windpipe, your nose can no longer clean, warm, and put moisture in the air you breathe. Also, because the stoma is below your vocal cords, you may only be able to talk by covering the opening of your trach tube. You may find that you need to be very careful when you swallow, to keep food from going into your windpipe. We will talk more about these things later in the book.

Your tracheostomy tube

To care for your trach tube you will need to learn more about it. There are different types of trach tubes and yours may not be exactly as pictured here but it should be similar. The staff will explain any differences.

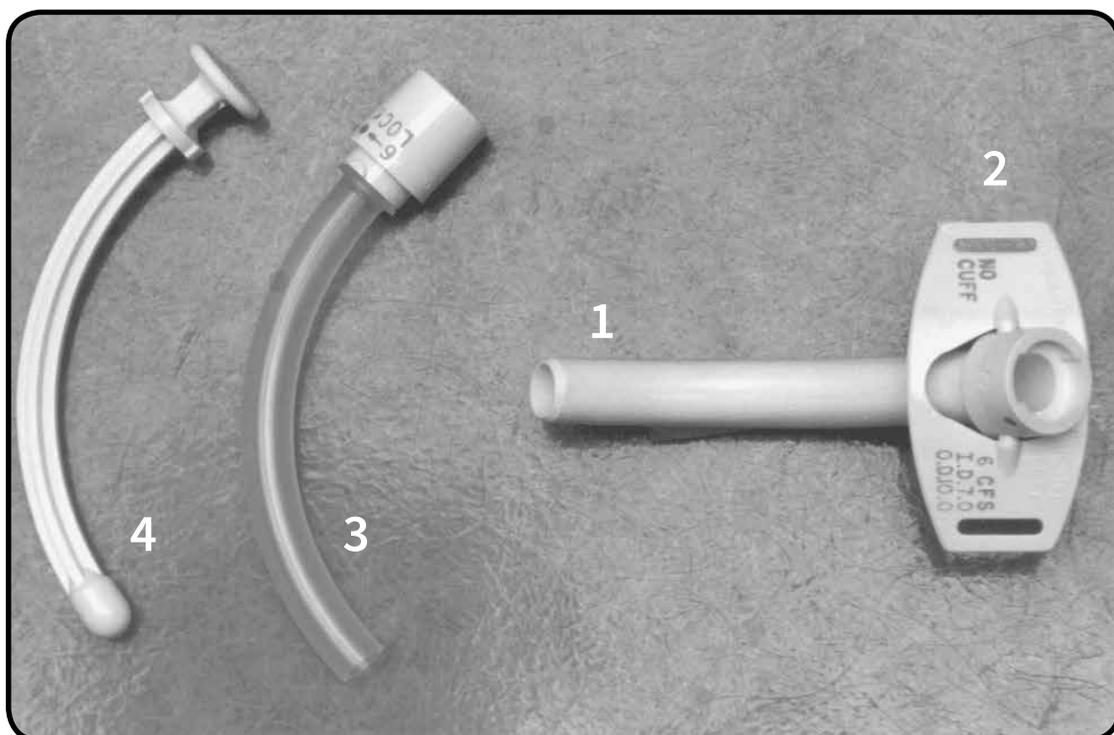
The different parts of a trach tube are:

1. An outer cannula
2. Trach plate
3. An inner cannula
4. An obturator or guide

The outer cannula (1) fits into the trachea and maintains the opening during healing. The trach plate (2) is a flat plastic hinge attached to the outer cannula. It has holes on either side so that ties can be put in and tied around the neck. This keeps the tube from falling out.

The inner cannula (3) locks into the outer cannula and can be taken out and cleaned often. Cleaning the inner cannula keeps the airway clear of mucus. You may have more than one inner cannula. Check to see which one you should be using.

The obturator (4) is used only when the entire trach tube is changed. It acts as a guide when the outer cannula is put into the trachea. This lessens irritation to the trachea wall.



How do I care for my trach?

You or someone you live with will need to learn how to:

- › Clean the trach tube
- › Care for your stoma
- › Clear secretions (mucus) from your lungs
- › Change the trach ties

We will help you every step of the way.

Cleaning your trach tube

Cleaning the **inner cannula** of your trach tube is an important task. It should be done at least once a day, or more often if needed, to keep it clean and free of secretions.

To clean the inner cannula you will need:

- › 2 bowls (clean, empty margarine containers work well) or disposable cups; 1 for cleaning, 1 for rinsing.
- › Hydrogen peroxide solution.
- › Long pipe cleaner, cotton-tipped applicator sticks (Q-tip®), or a trach brush.
- › Sterile water (see recipe for sterile water, page 15).

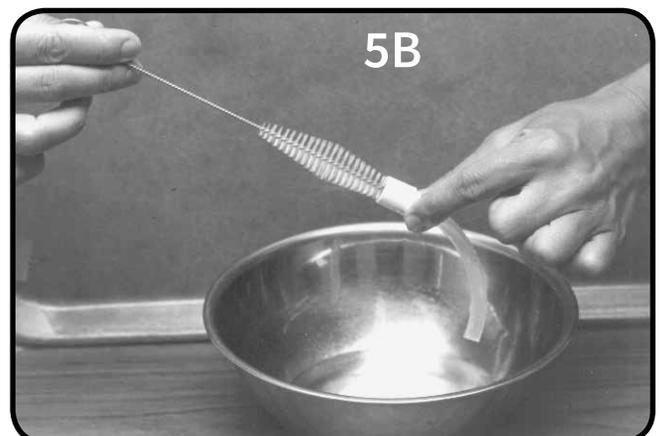
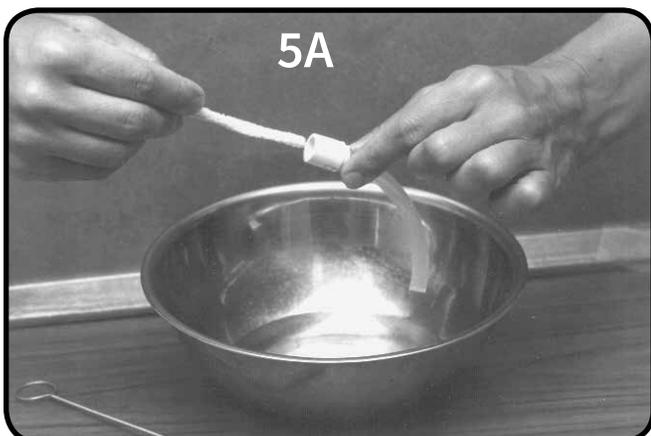
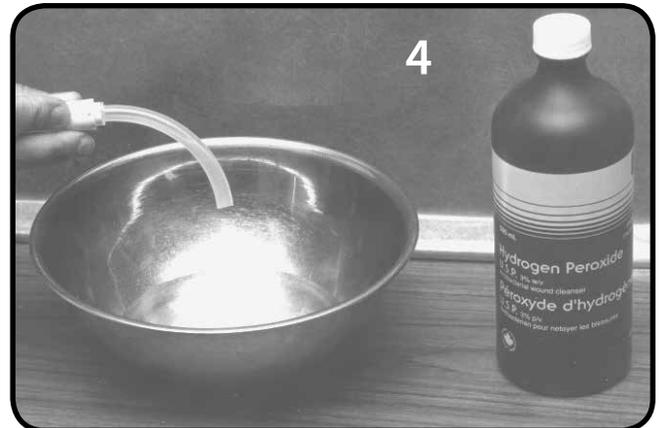
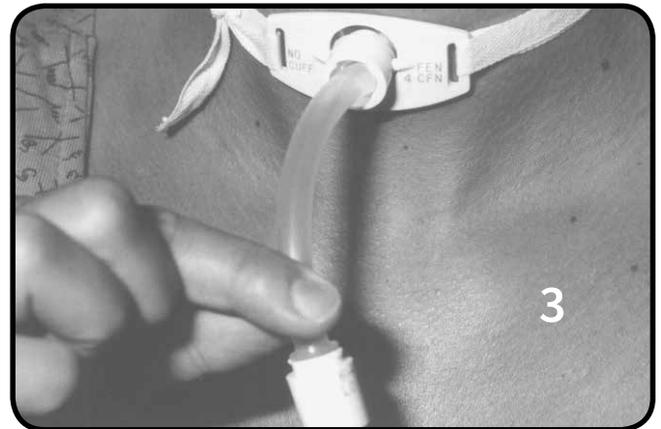
First, you need to get things ready:

1. Wash your hands well.
2. In the first bowl, make hydrogen peroxide solution: pour 1/2 cup of sterile water and 1/2 cup of hydrogen peroxide into 1 bowl.
3. In the other bowl, pour only sterile water.
4. Cough or suction if needed. This clears the airway of secretions.

Take a few deep breaths.

Now you are ready to clean the inner cannula:

1. Loosen the inner cannula.
2. Hold the outer cannula with one hand. With the other hand, turn the inner cannula to your right to unlock.
3. Remove the inner cannula by steadily pulling it down and toward your chest until it is out.
4. Place the inner cannula in the peroxide solution.
5. Use a pipe cleaner folded in half, an applicator stick, or trach brush to gently clean the inner cannula and to remove mucus and dried secretions.

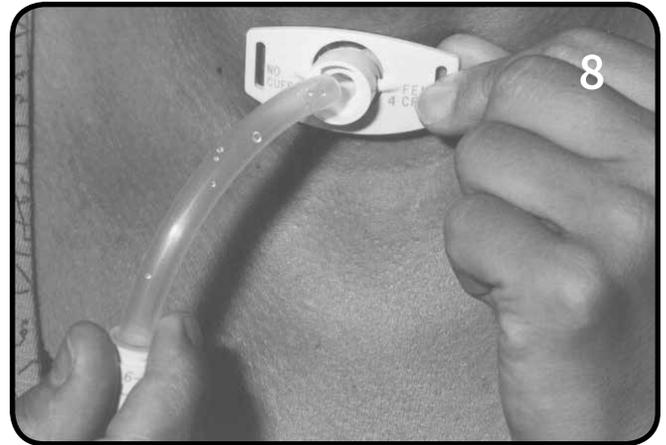


6. Now put it in the bowl of plain sterile water and rinse well.



7. Shake off extra water. Do not dry it. Moisture will make the inner cannula slide back in easily.

8. Put the inner cannula back in. Keep the curved part facing downward.



9. Lock the inner cannula into position.

10. Wash bowls thoroughly and leave to dry in a clean place. If using a trach brush, soak it in hydrogen peroxide, rinse with sterile water, and leave to dry. Throw away pipe cleaners or applicator sticks and paper cups.



11. Wash your hands.

My routine

Caring for your stoma

Clean the stoma, or area of skin around the outer cannula, at least once a day, and as often as needed to keep it clean and dry. If you wear a trach dressing, change it whenever it gets soiled and when you clean your stoma. Trach dressings are not needed but may prevent skin irritation and keep your clothing dry.

You will need:

- › A clean facecloth. Sterile water (normal saline if the skin is red or sore).
- › Q-tips® or cotton-tipped applicators.
- › Trach dressings if you are using them.

Cleaning around your stoma

1. Choose a comfortable position, such as sitting in front of a mirror.
2. Take off the old dressing, if present.
3. Wash your hands well.
4. Wet your facecloth with sterile water. Gently clean the outer cannula and skin around it. Q-tips® may be used for “hard-to-get” areas under the trach plate. Dry with clean cloth.
5. Look closely at your stoma site. **Call your doctor if you notice any redness, swelling, irritation, bleeding, green discharge or food.**
6. Put on a new dressing with the open ends up, if you like to wear one.

My routine

Changing your trach tie

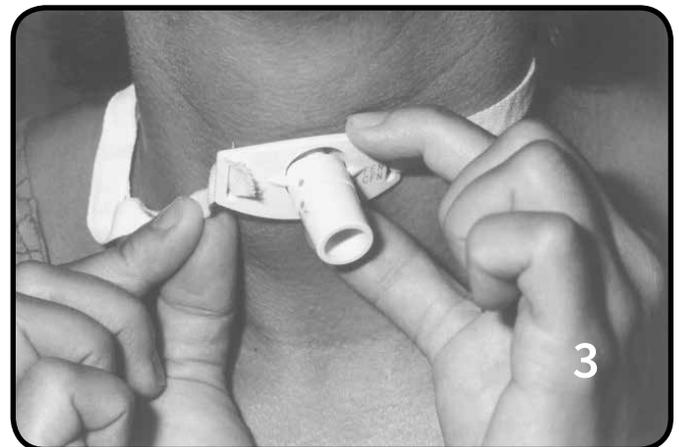
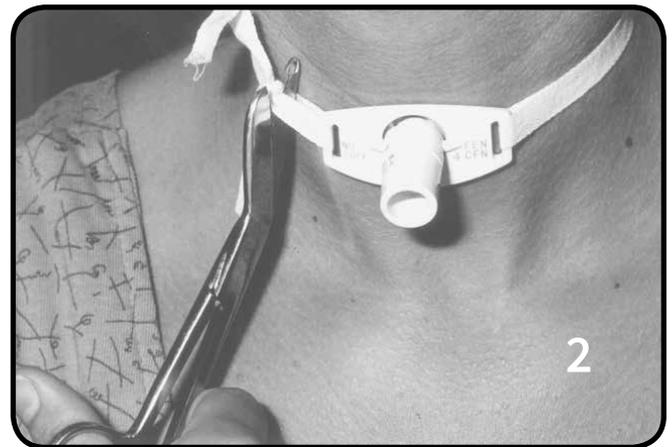
You will need to remove and replace your trach ties when they get soiled (dirty). **It is a good idea to do this with the home care nurse until she/he says it is safe for you and your helper to do it yourselves.**

You will need:

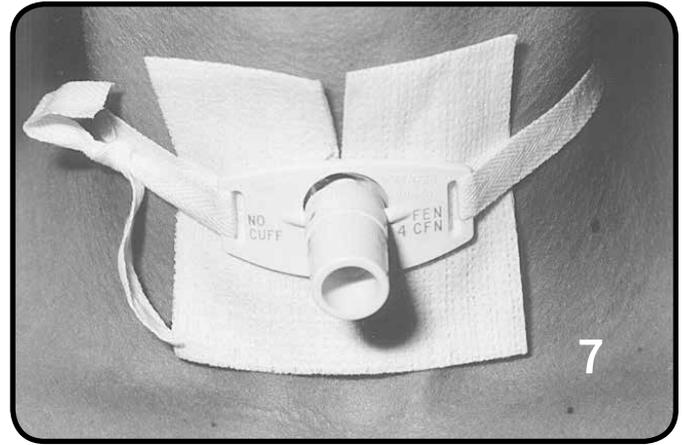
- › Twill tape or Velcro® trach holder
- › Scissors
- › A helper

To change your trach tie:

1. Cut a piece of twill tape long enough to go around your neck twice. Leave some extra for tying. Cut the ends on an angle. Remove trach dressing.
2. Cut and remove the old trach ties. **We suggest that you have someone hold your trach when you change the ties because it is possible to cough out the trach tube.**
3. Insert 1 end of the trach tie through the opening on 1 side of the trach plate.
4. Pull the 2 ends of the trach tie together so they are even.
5. Wrap the ties around your neck and put the end of the tie that is closest to your neck through the opening on the other side of the trach plate.
6. Tie both ends together in a firm knot on the side of your neck. Do not tie a bow because it may come undone. **One finger should fit between the ties and your neck.** Put your new trach dressing on with the open ends up, if you wear one.



7. We suggest that you combine cleaning your inner cannula, caring for your stoma, and changing your trach ties all at the same time.
8. You may choose to buy Velcro® trach ties at the pharmacy. These can be washed, dried, and reused. Follow the instructions on the package for putting them on.



Clearing secretions

Most people do not need home suctioning. If you are prone to mucus plugs, have a lot of secretions, and have needed lots of suctioning while in hospital, you may need a suction machine at home. Suctioning of the trachea takes secretions from your airway when you cannot cough them up. Suctioning should be done **only** when needed, to make breathing easier. Check with your nurse or doctor. Make sure you or your caregiver are comfortable with suctioning before going home if it is decided that you need this.

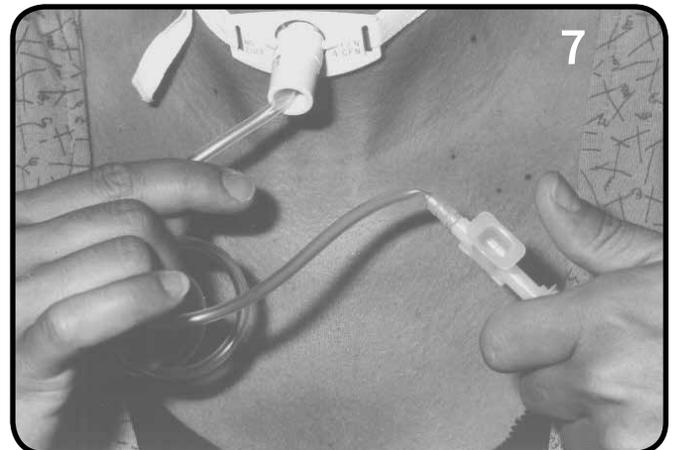
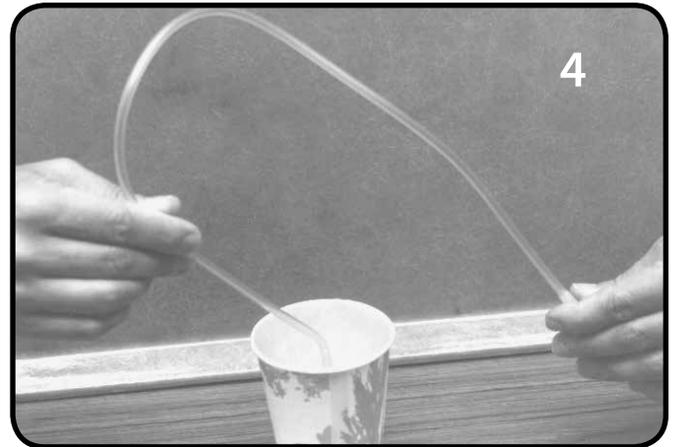
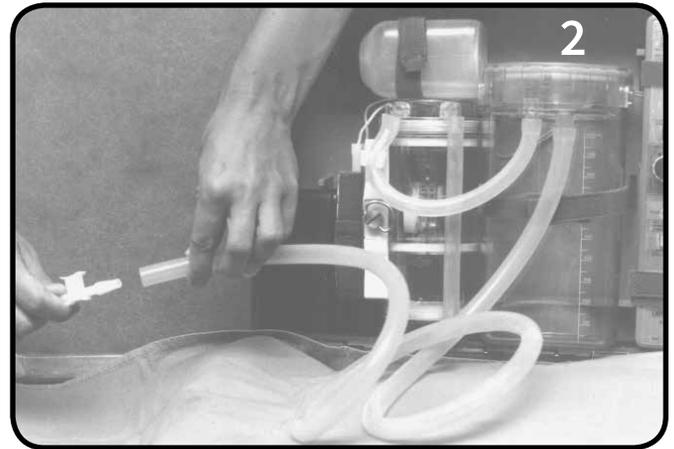
You will need:

- › Suction machine
- › Suction catheter (tube) – the right size for your trach
- › Sterile water (see recipe for sterile water, page 15)
- › A bowl or disposable cup
- › Mirror
- › Clean gloves

Now you are ready to suction!

How to suction

1. Wash your hands well.
2. Open the catheter package and connect the catheter to the suction machine tubing. Turn on the suction machine.
3. Put on gloves.
4. Moisten the catheter by dipping it into a clean container of sterile water.
5. Sit comfortably in front of a mirror. Take at least 5 deep breaths.
6. Insert the catheter. Make sure your thumb is off the opening on the adaptor. Guide the catheter into the tracheostomy tube about 4 to 6 inches.
7. Place your thumb on and off the opening on the adaptor to apply suction as you pull out the catheter in a rotating (turning) motion.
8. Rinse the catheter of secretions by suctioning through a small amount of sterile water.
9. If needed, repeat these steps until you sound clear. Give yourself time to catch your breath between suction passes.
10. Throw away the suction catheter when you're finished.



The suction machine

- Clean equipment and replace tubing according to the instructions that come with the suction machine.

What to do if

You have a hard time breathing

- You may have secretions in your trach tube. Take out the inner cannula to check for mucus and clean if necessary. Then replace it. If your breathing does not get better, keep using your humidity, and cough hard. (Most people go home with an ultrasonic humidifier. Keep it running beside you or use the hose with trach mask attached.)
- You may have secretions in your windpipe beyond the trach tube. Again, try coughing. If that does not work, suction yourself if you have a machine.
- If you **often** have a hard time breathing, you may need aerosol medication. Ask your doctor.
- If your secretions/mucus are thick, sticky, and/or hard to cough out, consider taking steps to make them thinner (see 'Keep your secretions thin', next page).
- You may have an infection. If you start to notice more secretions than normal, or they change colour, contact your doctor.

You simply can't breathe through your tube

It is unlikely that this will happen, but if it does it is either because the tube has slipped out of position (see 'Your trach tube comes out', next page) or, more likely, you have coughed up secretions that are plugging your tube.

Once again, stay **calm!**

- Try removing the inner cannula and check it for a plug. If it is clear, put it back in and continue to cough hard. Turn up the humidity and breathe deeply. Try suctioning if you have a suction machine.
- If that does not work to clear your airway, **cut the ties and take out your tube.** Cough hard or suction yourself through your stoma.
- If that does not work, go to your nearest Emergency Department or call 911. Take your extra trach tube with you.

Your trach tube comes out

Don't panic! **Stay calm.** Your stoma will stay open. It may help to tilt your head back to keep the stoma opening larger. Think about your own personal plan of action that you created for times when you need help.

1. Cut the ties and, if you know how, put the tube back in. Use the same motion you use to put your inner cannula in. Tie the trach tube in place.
2. If you do not know how to put the tube back in or you can't get it in, have someone take you to the nearest Emergency Department, or go to your family doctor's office. Take your extra trach tube with you.
3. It's not likely, but if you have trouble breathing you can hold (or have someone hold for you) a suction catheter placed about 2 inches inside your stoma. Breathe through it until you can get the tube back in.

Keep your secretions thin and manageable

We recommend 40 - 60% relative humidity in your home. Measure humidity with a humidstat, which you can get in most hardware stores. You want to keep your secretions thin so that you can cough them out easily and avoid the need for suctioning.

Before your tracheostomy, your nose acted as an air conditioner by filtering and humidifying the air you breathe. After surgery, the air that enters your stoma is dry and unfiltered. Dry air can cause plugs of mucus to form and clog your airways. These plugs create a place for bacteria to grow and may cause infection. These conditions make your secretions thick and hard to cough out, and may make breathing more difficult for you. There are several things you can do to prevent your secretions from getting thick.

- Drink 6 to 8 glasses of fluids a day (water is best). Check with your doctor.
- Most people go home with an ultrasonic humidifier. Keep it running beside you or use the hose with trach mask attached.
- It is important to follow the instructions for operating and cleaning that come with the ultrasonic humidifier machine. Use **distilled water** for operating, not water straight from the tap. Clean the mask and hose with mild soap and water and rinse well with boiled, cooled water and let air dry.
- If your secretions are thick, hard to cough out or have small blood streaks, you need more humidity. Use your humidifier as much as needed to keep your secretions thin and able to be coughed out.

- If you are still having problems, ask a nurse or a respiratory therapist to teach you how to **instill** (put drops into) your airway with normal saline.
- If you can afford them or you have insurance, you may want to buy “heat moisture exchangers”. They are for daytime use only. Respiratory therapists or your nurse will know about them, so feel free to ask.
- You can also carry a small mist bottle with sterile water to keep your airway moist if you are away from your humidifier for short trips.
- Sleeping in a cool room at night may help to keep your airways moist.
- Mouth care is also very important. Rinsing your mouth with normal saline or plain water is helpful.

Safety

It is important to know that you can no longer swim and you should avoid going out on boats. You would not be able to prevent water from entering your airway.

Speaking

Being able to speak is very important to all of us. Speech takes place by air moving through the vocal cords in our windpipe as we breathe out. Your tracheostomy is below your vocal cords, so most of the air that you breathe out goes through your trach tube. Some air may pass by your tube and through your vocal cords. The amount of speech that you are able to make depends on how much air reaches your vocal cords.

There are a number of ways for people who have tracheostomies to get back their ability to speak.

Some examples are:

- Take a deep breath and plug your trach tube as you attempt to speak while breathing outward. **If your trach tube has a cuff, it should be deflated when you want to speak.**
- A cuffless or fenestrated trach tube (a tube that has a hole) lets more air pass through the vocal cords.
- Sometimes a speaking valve can be placed on the end of your trach tube to make speaking easier.

There may be other things to help you. Let your nurse know if you wish to see a speech pathologist before you leave the hospital.

Swallowing

Swallowing food and liquid may be hard for a few people with tracheostomies.

Some tips to prevent problems with swallowing are:

1. Sit upright to eat.
2. Eat slowly.
3. Chew your food well.
4. Focus on your swallowing.
5. If you are having problems, ask to be referred to the swallowing team.
6. If you notice food or liquids in your cough secretions, let your doctor know right away.

Emotions

Many people have a variety of emotions before surgery, while in the hospital, or when returning home. These are normal reactions. Sometimes it is helpful to speak with another person who has a tracheostomy – ask your nurse. It is important for you to explore your feelings and figure out what makes you feel better.

It is often helpful to talk about your feelings with someone you know or someone who is trained to help.

Diet and exercise

Eat a well-balanced diet with plenty of fluids to keep your bowels regular. Go back to your usual activity unless told otherwise by your doctor.

Intimacy

With a tracheostomy, sometimes people are afraid they will become unattractive or unlovable. It helps to remember that people are loved for their entire self, not for the way the lower neck looks. Try not to place too much importance on such a small part of you.

It sometimes takes a while to adjust to physical change. Be patient with yourself and your loved ones. Often when people go through a difficult experience like this, it helps to talk about your feelings and encourage your partner or family to do the same.

Protect yourself from the flu

- Get a flu and pneumonia shot every fall (if you are not allergic). Check with your doctor.
- Avoid crowded spaces and people with the flu.
- Stay 3 feet away from any sick friends or family.
- Caregivers should wear a mask if they have a flu or a cold.

Stoma/trach covers

You should wear some type of stoma/trach cover to prevent dirt and dust from getting into your airway. These will also warm the air on cold days and might help to prevent embarrassment from an unexpected cough. Trach covers are available at most drug stores or you can make your own. There are patterns to knit, crochet (using cotton yarn), or sew trach covers. Ask your nurse or speech pathologist for patterns to make trach covers.

Stoma shower shields

A shower shield can help to protect your airway from water while showering. Ask your nurse if you need more information, and for advice on where to find them.

How to make sterile water

To make sterile water:

Boil water for 15 minutes in a clean covered pot. Let it cool. Boiling kills any bacteria.

To store sterile water:

1. Place clean jars and lids in a large pan of water.
2. Heat water to boiling. Boil jars and lids for 15 minutes.
3. Remove jars and lids from water. Place on a clean towel to cool.
4. Pour sterile water into jars and seal with the lids.
5. Store in the fridge for up to 2 days.

Supplies

Your health care team will talk with you about the list of supplies you will need before discharge, and where to get them.

As a general rule, supplies need to be stored in a clean, dry area, preferably a place that is used only for storing supplies.

Some possible sources for your supplies are the pharmacy in the hospital, your local pharmacy, Medigas, or VitalAire.

If you have any questions, please ask.

We are here to help you.

Looking for more health information?

This pamphlet and all our active patient pamphlets are searchable here: <http://bit.ly/NSHApamphlets>

Contact your local public library for books, videos, magazines, and other resources.

For more information go to <http://library.novascotia.ca>

Nova Scotia Health Authority promotes a smoke-free, vape-free, and scent-free environment.

Please do not use perfumed products. Thank you!

Nova Scotia Health Authority

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The information in this brochure is for informational and educational purposes only.

The information is not intended to be and does not constitute healthcare or medical advice.

If you have any questions, please ask your healthcare provider.

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The information in this pamphlet is to be updated every 3 years or as needed.