Caring for your Tracheostomy

A Guide for Patients and Families

MADE WITH
PATIENT & FAMILY INPUT

Sunnybrook
HEALTH SCIENCES CENTRE

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We have prepared this booklet to help you understand how to care for your tracheostomy at home.

During your hospital stay, the nursing staff will help you to understand how to care for your tracheostomy.

If you have any questions please ask a member of your healthcare team.

Created by the Respiratory Therapy Department
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Before you go home the staff will make sure that:

- You and/or a family member can do tracheostomy care.
- You get a prescription for pain medication.
- A follow-up appointment with your doctor has been scheduled.
- The Home and Community Care Support Services (HCCSS) coordinator will:
  1. Visit you in the hospital and make sure a nurse comes to your home.
  2. Arrange the equipment and supplies you need are delivered to your house before you leave the hospital.
- The nurse will check on you in your home at a time booked by you and your case manager. These visits will stop when you both agree the time is right.

If you have any questions, please feel free to call:

Inpatient Unit/Clinic: _____

Phone #:_____

Homecare Provider:_____

Phone #:_____

Medical Supply Provider: _____

Phone #:_____

Home Oxygen Supplier: _____

Phone #:_____

What is a tracheostomy?

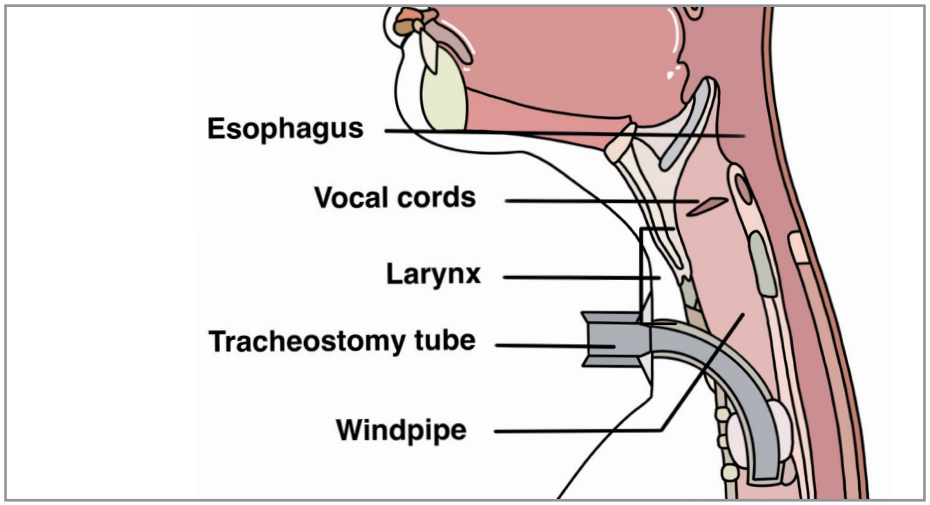
You need to breathe air in and out of your lungs so that:
1. Oxygen gets in to the body and
2. Carbon dioxide is removed from the body

The nose and the mouth allow us to breathe air in to the lungs.

A surgery called a **tracheostomy** allows you to breathe air in and out from your neck. During the surgery a hole is made in the front of the neck called a **stoma**. This hole lets air to go straight into the lungs. A medical device called a **tracheostomy tube** keeps the hole open.

Why do I need a tracheostomy?

You may have a:
- Blockage in the mouth, voice box (**larynx**) or wind pipe (**upper trachea**) which makes it hard to breathe.
- A life support machine (ventilator) is needed to breathe.
- To clean mucus (**secretions**) from the lungs.



What changes will I feel with a tracheostomy?

Talking

You may feel a change in your voice strength or a loss of your voice. This is because air is not moving through your voice box as easily. Your voice box is called the **larynx** and is where your **vocal cords** are that help make sounds and speech.

A **Speech Language Pathologist** and a **Registered Respiratory Therapist** will see you in hospital and teach you how to talk or suggest a device that will help you talk with others.

Eating and Drinking

It may be hard to swallow your food. If you have trouble swallowing, food and drink could go into your lungs and cause breathing problems. This is called **aspiration**.

A **Speech Language Pathologist** will do a test to see if your swallowing is safe. You may have to follow a special diet and a **Dietitian** will help you.

If your swallowing is not safe, you may need a **feeding tube** until your swallow is better. A feeding tube puts food right into your stomach. A **Dietitian** and a **Nurse** will teach you how to use and care for your feeding tube.

Secretions

Coughing is the best way to clear dirt, germs, dust and mucus from the lungs. Your cough may not be strong and it may be hard to cough through the tracheostomy tube. This may lead to a buildup of mucus in your lungs, also called secretions. You may need help to remove these secretions, which will require a technique called **suctioning**. See page 11.

Why is humidity and hydration important?

Breathing through your nose and mouth makes the air you breathe in warm and moist. Warm and moist air is called humidified air. **Humidified air** keeps your lungs healthy. When you are breathing with a tracheostomy the air does not pass your nose and mouth, it goes through the hole in your neck. This means the air stays dry and cold. Breathing dry and cold air for long periods of time could cause breathing problems.

HME

Here are a few ways to moisten the air and keep the lungs healthy at home:

1. If you can drink, have at least 6 - 8 glasses of liquids a day. Some good choices are water, juice, tea and coffee.
2. Use a humidifier or nebulizer in your bedroom at night and when you sit for long periods. The mist can be cool or warm.
3. Use a **heat moister exchanger (HME)** when you are outside. An HME is a little device that fits onto your tracheostomy tube. You can buy them from a medical supply store.
4. Use a spray bottle to mist your tracheostomy opening. You can do up to 3 sprays from the bottle. The water should be distilled or sterile water (e.g. boiled water that has been cooled to room temperature).

Tips for daily living

Rest and Sleep

When you rest or sleep, remove any items that are directly connected to the tracheostomy tube and use a humidifier or nebulizer to moisten the air around you.

Bathing and Shaving

When you wash your face or take a bath, be careful not to splash water into your tracheostomy tube. Things you can do to help:

- Point the shower head at your lower chest
- Use a hand-held shower head for better control
- Buy a “shower shield” from any medical supply store

If you shave avoid getting sprays, soaps or foams close to the stoma site.

Clothing

Keep clothing away from the tracheostomy tube. You can wear a scarf made with breathable material tied loosely around your neck. Choose materials that are lint-free and do not have loose fibers that you could accidentally breathe in.

Pets

Try not to have close contact with animals that have fine hair that sheds. You could accidentally breathe it in.

Getting Outside

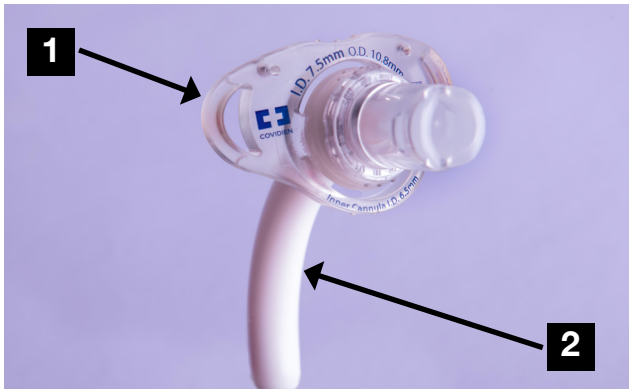
If you plan to leave home bring a travel kit with basic supplies in case of an emergency. Wear an HME or a breathable scarf over your neck if it is cold or windy.

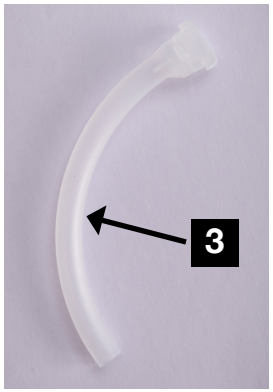
What equipment to bring:

- Spare inner cannula
- Box of tissues
- Portable suction machine
- Suction catheter
- Velcro ties
- Sterile normal saline bottle
- Resuscitation bag

Resuscitation bag

Parts of a tracheostomy tube





1. Flange

A plastic plate that you can see at the neck. It has information about the size and model of the tracheostomy tube.

The flange has holes on both sides that you put Velcro ties through so the tracheostomy tube doesn't fall out.

2. Outer tracheostomy tube

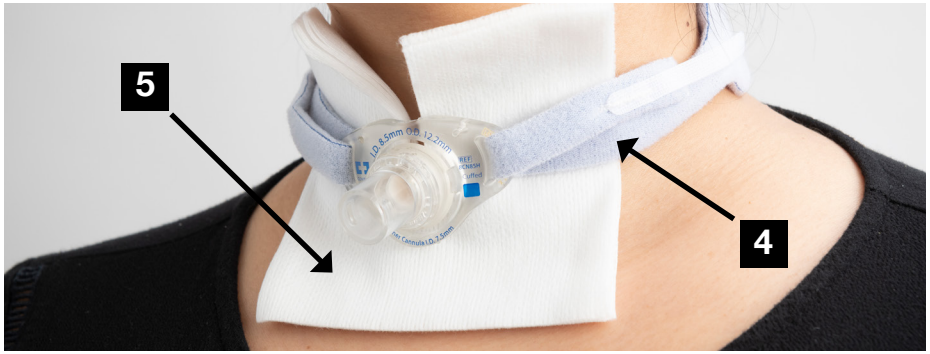
This is attached to the flange and holds the inner cannula. The outer tracheostomy tube keeps the hole in your neck open.

3. Inner cannula

A slim tube that fits inside the outer tracheostomy tube. You need the inner cannula for safety. It is very important to keep it clean. It can be easily removed for cleaning.

It should be checked at least 2 times a day to make sure it is clean. Clean when dirty. See page 15.

When in hospital, ask the nurse if you can do your own trach care so that you can practice and get help if needed.



4. Velcro ties

A cloth-like material that goes around the neck and stops the tracheostomy tube from falling out. It is important that these look tidy. If they are dirty, damaged or frayed they need to be changed.

Velcro ties should be snug, not tight. You should be able to fit two fingers underneath the Velcro ties. See page 17.

5. Gauze

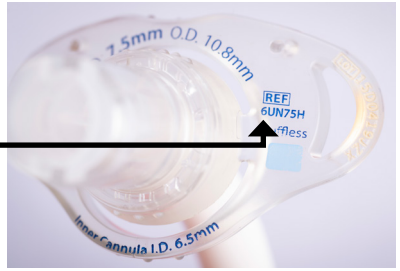
A square piece of gauze cut down the middle that sits between the neck and the tracheostomy tube. It has two jobs:

1. Keeps the skin dry
2. Protects the skin from sores

Change once a day or if it looks dirty or very wet. See page 14.

What is the size of my trach?

The first number under the REF is the size of your trach. In this example, it is 6.

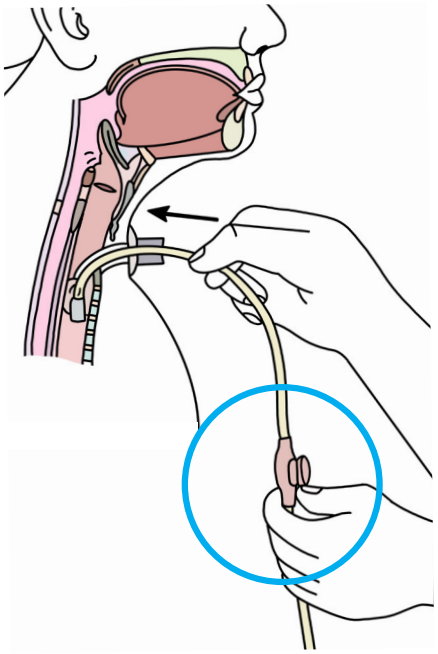


Suctioning through your tracheostomy tube

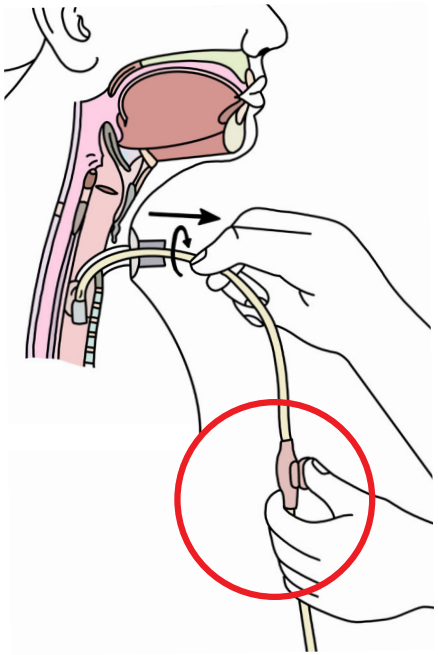
If you are having trouble breathing you should suction. **Only suction when you really need it.** Too much suctioning can bother the walls of your lungs.

Equipment needed:

- 1 clean cup
- Sterile water or normal saline
- Suction machine
- Suction catheters
- Suction tubing
- Mirror



Suction should be OFF when going in. See **BLUE** circle.



Suction should be ON when coming out.

Place thumb on top of port to turn ON suction. See **RED** circle.

Steps:

1. Put all the equipment on a clean surface in front of a mirror.
2. Fill the clean cup at least half way with sterile water.
3. Attach the suction catheter to the suction tubing and turn on the suction machine. Suction pressure should be no higher than 100 mmHg. Keep the suction catheter in the packaging so it stays clean.
4. Clean your hands with hand sanitizer or wash with soap and water.
5. Grab the suction catheter and remove it from the packaging. Test that the suction is working by suctioning some sterile water from the clean cup.
6. When you are ready, slowly put the tip of the suction catheter into your tracheostomy tube and advance 5 – 6 inches or until it cannot go any further. You may cough and this is normal.
7. Put your thumb over the hole of the suction catheter and slowly remove the catheter. Roll the catheter between your fingers as you do this. This should take no longer than 20 seconds.
8. Take a moment to catch your breath.
9. Rinse the catheter before using again by suctioning sterile water from the clean cup.
10. Suction yourself again if you need to. Repeat steps 6 – 9 as needed.
11. Wash the cup and leave it to air dry in a clean place.

Do you have thick secretions?

It is common for secretions to get thick and you may need extra help to get them out. You can add extra moisture to help loosen secretions.

Equipment needed:

- 10 mL syringe
- 1 clean cup
- Normal saline

Steps:

1. Place the tip of the 10 mL syringe into the normal saline.
2. Pull back the plunger to the 3 - 5 mL to suck up the normal saline into the syringe.
3. Place the tip of the syringe in the opening of your tracheostomy tube.
4. Slowly press the plunger to instill the normal saline down into your windpipe. This might cause you to cough and that is normal.
5. Suction following instructions on page 6.
6. Repeat these steps until you can breathe easily.

Call your doctor if you notice any of these signs of infection:

- Needing to suction more often than before
- Secretions are changing colour, especially to yellow, green or brown
- Secretions have a bad smell
- Chills and a fever over 38.5°C (101.3°F)
- Wheezing or shortness of breath
- Bright red blood in the secretions

Changing the dressing and cleaning the stoma

Change your dressing once a day or when you can see that it is dirty or very wet. The stoma should be cleaned at least once a day.

Equipment needed:

- Mirror
- Clean tracheostomy gauze
- Sterile water or distilled water or normal saline
- Clean towel
- Clean cup or basin
- Cotton tip swab
- Clean washcloth

Steps:

1. Pour sterile water into cup or basin.
2. Clean your hands with hand sanitizer or with soap and water.
3. Take off the gauze dressing at your neck and throw it in to the garbage.
4. Look closely at your stoma for signs of infection.
5. Soak the cotton-tipped swab in sterile water. Use the swab to clean the skin around the stoma, especially under the tracheostomy tube flange. Use a gentle sweeping motion.
6. Wet a clean washcloth with tap water or distilled water. Use the washcloth to wipe the skin on your neck near the tracheostomy tube.
7. Dry the skin with a clean towel.
8. Apply a new, clean 4" x 4" tracheostomy gauze underneath the tracheostomy flange.

Call your doctor if you notice any of these signs of infection:

- Red, inflamed, itchy skin
- Bleeding or streaks of blood
- Swelling, pus or other drainage

Cleaning the inner cannula

Check your inner cannula at least two times a day to see if it is dirty or blocked. Check inner cannula more often if secretions are thick.

Equipment needed:

- Spare inner cannula the same size
- 2 x basins, clean bowls or clean cups
- Sterile water or distilled water
- Pipe cleaners or a small brush
- Mirror
- 4" x 4" gauze pad
- Clean towel or paper towel
- Hydrogen peroxide (if needed)

Note:
If your secretions are very thick or difficult to clean, use a 50/50 mixture of sterile water and hydrogen peroxide in the soaking/cleaning basin. Make sure you rinse well with the second rinsing basin to get rid any left over hydrogen peroxide.

Gently hold the flange when removing inner cannula for cleaning.

Gently hold the flange when cleaning underneath the flange and around the stoma site.

Steps:

1. Clean your hands with hand sanitizer or with soap and water.
2. Lay out equipment on a clean surface. Fill two basins with sterile water. One is for soaking/cleaning and the other is for rinsing.
3. Place one finger on the flange of the tracheostomy and use the opposite hand to pinch and remove the inner cannula. It should slide out easily.

4. Place the dirty inner cannula in a basin filled with sterile water. Allow the inner cannula to soak if heavily coated with secretions. Add hydrogen peroxide if needed.
5. Place the spare clean inner cannula of the same size back in to your tracheostomy tube. Pinch and push. The inner cannula should click into place.
6. Clean the soaking inner cannula using a pipe cleaner or a small brush.
7. Soak the inner cannula in the second basin to rinse clean.
8. The inner cannula can be pat dry with a clean 4" x 4" gauze pad or left on a clean surface to air dry.
9. Clean your hands with hand sanitizer or with soap and water. Wash the basin and small brush with soap and warm water. Leave them on a clean surface to air dry.

Call your doctor if you have:

- A temperature greater than 101°F (38.5°C)
- Redness, swelling, odor, discharge or increased pain at or around your tracheostomy
- Any other concerns about your tracheostomy
- Ongoing stomach problems lasting 3 days, such as nausea, vomiting and/or diarrhea
- Difficulty breathing or unable to manage secretions

Changing the Velcro ties

Change your Velcro ties when they look dirty or frayed. Two people are needed to change Velcro ties safely.

Equipment needed:

- Velcro ties
- Someone to help you

Steps:

1. Clean your hands with hand sanitizer or with soap and water.
2. One person will keep their hands on the tracheostomy tube at all times, gently holding the flange to the skin. This avoids accidentally coughing out the tracheostomy tube.
3. The second person will undo one side of the dirty Velcro ties and attach the new clean Velcro tie through the same hole. The “hook” fastener attaches to the fuzzy side of the Velcro ties.
4. Gently remove the dirty Velcro ties from around the neck and undo from the opposite side.
5. Feed the clean Velcro tie around the back of the neck and feed the free “hook” into the other hole on the flange.
6. Adjust the ties so that it sits snug on the neck. There should be enough space to fit two fingers between the Velcro tie and your neck.
7. Throw out the dirty Velcro ties.

Emergency situations

Difficulty Breathing

Your tracheostomy tube can easily get plugged with mucus which may make it hard to breathe. If you have trouble breathing, take a deep breath and cough. If you still have trouble breathing:

1. Take off anything that may be on top or covering your tracheostomy tube.
2. Take out and check your inner cannula to see if it is blocked or dirty. Clean it if you need to.
3. Suction down your trach. Instill normal saline if needed.
4. If steps 1 - 3 do not fix your breathing **call 911.**

Trach Falls Out

To stop your tracheostomy tube from falling out, make sure that your Velcro ties are tight enough.

Do not panic. If you have oxygen, put it on. **Call 911**.

Keep a pre-recorded message for calling 911. Have a friend or family member record a message that says:

“My name is (your name).
I have a breathing tube that has fallen out
and I am in need of emergency medical help.
My address is (your address).
Please send an ambulance.”

Breathing Stops

If the tracheostomy tube becomes blocked or falls out and breathing stops **start CPR immediately and call 911**.

Notes

References
1. Standards for the care of adult patients with a temporary tracheostomy, Intensive Care Society (2008)
2. Best practice statement: Caring for the patient with a tracheostomy, NHS Quality Improvement Scotland (2007)
3. Best practice statement: Caring for the child/young person with a tracheostomy, NHS Quality Improvement Scotland (September 2008)
4. Tracheostomy Care, Cleveland Clinic, Sunnybrook Health Sciences Centre
5. Adult Homecare Guide: Shiley Tracheostomy Tube, Medtronic (2018)
6. Home Tracheostomy Care: Information for Patients and Families, Fraser Health (2020)

2075 Bayview Avenue
Toronto, ON M4N 3M5
sunnybrook.ca

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Sunnybrook
HEALTH SCIENCES CENTRE