

Going Home with a Tracheostomy

Information for Patients and Families

Contents

Introduction	4	Care for Your Stoma	26
Words to Know	5	Steps for cleaning around your stoma.....	27
Your Breathing	8	Clearing Mucus from Your Lungs	28
Breathing with a Tracheostomy Tube	9	Keeping air moist	28
Your Tracheostomy Tube	10	Keeping your mucus thin.....	29
Preparing to Go Home	12	Coughing to clear mucus.....	30
Supplies.....	13	Suctioning - when coughing is not enough ...	31
Living with a Tracheostomy	15	Changing the tracheostomy ties.....	36
Rest and sleep.....	15	Inflate and deflate the cuff.....	38
Bathing.....	16	Swallowing and speaking.....	40
Clothing.....	16	Emergency Situations	42
Physical activity and exercise	17	What if your tracheostomy tube gets	
Getting out.....	18	plugged with mucus?.....	42
Emergency supplies travel kit	18	What if your tracheostomy tube	
Staying healthy.....	19	comes part way out of the stoma?	43
Avoiding infection	19	What if your tracheostomy tube	
What if you get a chest infection?	20	falls out completely.....	44
Emotions	21	Tracheostomy Care Checklist	45
Caring for Your Tracheostomy Tube	21	Skills competency checklist	46
Comparing care in the hospital to		Discharge readiness checklist.....	48
care at home.....	22	Recipe: Saline (salt water) for Cleaning	50
Keys to a good clean technique.....	22	Vendor List	51
Cleaning your tracheostomy tube		Important Phone Numbers	53
and inner cannula	23	Notes	54
Steps for cleaning your tracheostomy		Other Resources	55
tube and inner cannula	24		

Introduction

This booklet tells you about your tracheostomy and how to care for it at home. It also gives you helpful tips and reminders so your move from hospital to home is as easy as possible.

Your nurse and respiratory therapist will help you to understand the information and how to care for yourself.

Take your time. Write down any questions you might have. Talk to us about your concerns and ask questions. We are here to help you and your family.

Words to Know

Artificial Nose [artificial sounds like *art-eh-fish-all*]

A heat and moisture exchanger that attaches to the tracheostomy tube and used to warm and moisten the air you breathe in.

Aspiration [sounds like *ass-per-ray-shun*]

When foods or liquids accidentally go down the wrong way into the trachea and into the lungs, rather than down the esophagus into the stomach.

Chest Percussion [percussion sounds like *per-ka-shun*]

Using cupped hands to pat the chest wall with a regular rhythm.

Chest Vibration [vibration sounds like *vi-bray-shun*]

Using an electronic vibrator to vibrate or shake the chest wall, or when another person uses both hands to vibrate or shake the chest wall when you breathe out.

Cuff

The balloon at the end of some tracheostomy tubes. When blown up or inflated, the cuff seals the trachea.

Epiglottis [sounds like *ep-ee-glot-tis*]

A flap in your windpipe that closes when you swallow to prevent food from entering your lungs.

Fenestrated Tracheostomy Tube

[fenestrated sounds like *fen-uh-tray-ted*]

‘Fenestrated’ means having an opening or window.

A tracheostomy tube with a window in the tube. When you cover the outside opening, air moves through this window to your vocal cords so you can talk.

Flutter Valve

A flap inside the tracheostomy tube that allows mucus to come out and not go back in the tube when you are coughing.

Heat Moisture Exchanger

A device that attaches to your tracheostomy tube to help warm and moisten the air you breathe
Also called an ‘artificial nose’.

Inner Cannula [cannula sounds *can-you-la*]

The removable inner tube of your tracheostomy.

Mucus (Sputum)

Produced by your windpipe. Normally thin in consistency and white or clear in colour.

Nebulizer

A machine that takes a liquid and turns it into a mist so you can breathe it in.
Sometimes medication is added to the liquid.

Obturator [sounds like *ob-tour-ate-or*]

A hard, rigid tool used to guide the tracheostomy tube into the stoma.

Outer Cannula

The outer part of the tracheostomy tube that stays in the trachea.

Pilot Balloon

A small balloon connected to the cuff of a cuffed tracheostomy.

Stoma [sounds like *stow-ma*]

The hole made in the neck that the tracheostomy tube goes through.

Trachea [sounds like *tray-key-yah*]

Commonly called the windpipe. How air gets in and out the lungs.

Tracheostomy [sounds like *tray-key-oss-toe-me*]

When an opening is made through the skin of the neck and into the windpipe.

Tracheostomy Tube

A hollow, plastic tube placed in the opening of the windpipe to keep it open.
Also called a ‘Trach Tube’ [sounds like *trayke*].

Yankuer

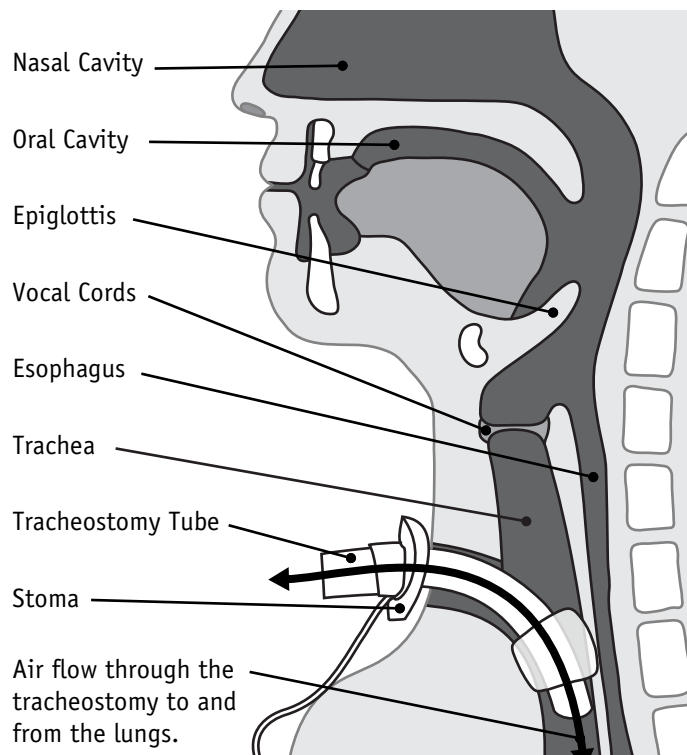
Mouth suctioning tool.

Your Breathing

Knowing how you breathe will help you understand your tracheostomy.

Air comes into your lungs when you breathe. Usually air enters your lungs through your nose and mouth, travels down the windpipe (trachea) to your lungs. Air is warmed, cleaned, and moistened as it travels from your nose to your lungs. Your lungs are the organs for breathing.

When you swallow, a small flap (called the epiglottis) closes over the trachea to prevent food going down the wrong way. Food then passes into the food tube (called the esophagus) safely.



Breathing with a Tracheostomy Tube

An opening is made through the skin of your neck into your trachea to help you breathe. This opening is called a stoma.

A tube, called a tracheostomy tube is placed into this opening. You will hear us refer to this as your ‘trach’ tube which sounds like trayke. The tracheostomy tube allows you to breathe in air directly into your lungs instead of through your mouth and nose.

There are many reasons why a person needs a tracheostomy tube. Your doctor would have explained why one is necessary for you. If you are not sure as to why you have one, ask us.

Because the air goes straight into your lungs, your nose can no longer clean, warm, and moisten the air you breathe. Your stoma is located below your vocal cords, so you may only be able to talk by covering the opening of your tracheostomy tube.

You may find you need to be very careful swallowing, to keep food from going into your lungs.

We will talk more about all of these things later in this book.



Tracheostomy Tubes

Your Tracheostomy Tube

Before caring for your tracheostomy tube, you need to learn more about the tube, how it goes together, and how it works.

The different parts of a tracheostomy tube are:

The **outer cannula** fits into the trachea and keeps the trachea and stoma open while it heals.

The **trach flange** or tracheostomy flange is a plate attached to the outer cannula. It has holes on either side. You attach ties to the tracheostomy flange. The ties are tied around your neck. This keeps the tube from falling out.

The **inner cannula** locks into the outer cannula and can be removed and cleaned frequently. Some people have to clean the inner cannula often to clear it of mucus. (There is more than one type of inner cannula. Make sure you know which one you are using.)

The **obturator** is used only when the entire tracheostomy tube is changed. It acts as a guide when the outer cannula is inserted through the stoma into the trachea.

The **cuff** wraps around the end of the outer cannula. When inflated, it forms a seal between the tracheostomy tube and the trachea. If you have a cuffed trach you will learn more about this on page 38.

The **pilot balloon** is used to inflate the cuff.

Tracheostomy Tube

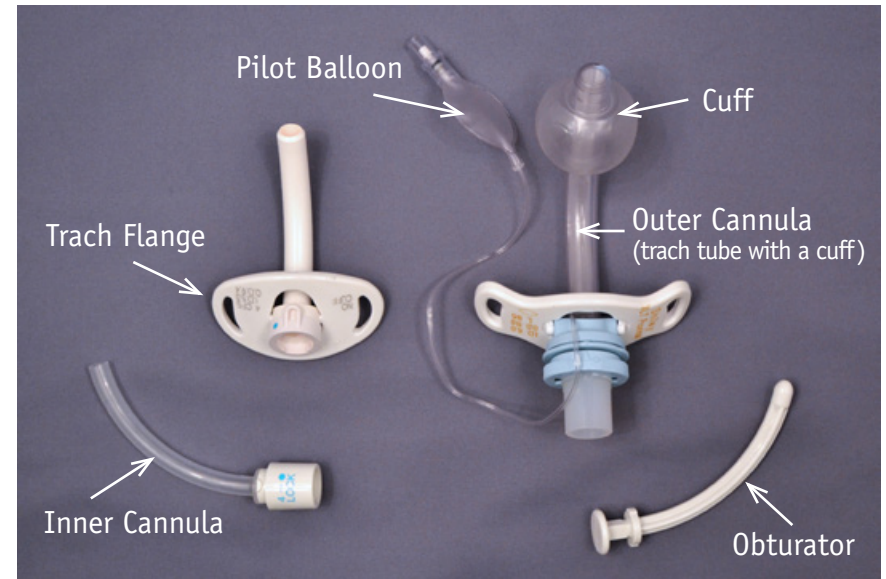


Figure 1 Disposable Tracheostomies



Figure 2 Re-usable tracheostomies (Silver Jackson)

Preparing to Go Home

Even though you may not be going home right away, we want you to start thinking and planning for going home now. You need to learn how to care for your tracheostomy tube while you are in the hospital so that you are comfortable caring for yourself at home.

We will provide you with a number of education sessions while in the hospital. Have a family member or friend join you for these sessions. It is handy to have someone else who knows what to do, especially if you need help or are sick

Bring this booklet to every education session. Feel free to write notes in this booklet.

Ask lots of questions. Your respiratory therapist, nurses and doctors are your resources. We want make sure you understand how to take care of your tracheostomy tube properly.

Get as much practice as you can so that you are comfortable doing your tracheostomy care. The more practice you have, the more confident you are. The more confident you are, the easier it should be for you at home.

Before you go home, we will give you a list of supplies needed to do your tracheostomy care.

Supplies



Equipment available from specialist vendors

(Check box if item is needed for home)

- Portable suction machine
(can be rented or purchased)
- Yankauer (mouth suctioning tool)
Suction tubing:
 - #14-16 Fr. vented red rubber (washable)
 - OR**
 - #10,#12 or #14 Fr. vented clear suction catheters (disposable)
- Large Volume Nebulizer for humidification if required
- Corrugated tubing
- Water Trap
- Small volume nebulizer for medication
- Tracheostomy Mask

Equipment From Pharmacy/Medical Supplies Shop

- Two plastic bowls
- Stand-up bedside mirror
- Blunt-nose scissors
- Cotton tipped swabs (Q-tips)
- Disposable Gloves
- Tracheostomy ties -Velcro or twill tape ties – (circle preference)
- 4x4 Tracheostomy sponges
- Hydrogen Peroxide
- Saline (salt water) for cleaning stoma site (may make own see recipe see page 50)
- Trach cleaning brush
- 2x2 gauze
- Water soluble lubricant
- Distilled water for large volume nebulizer
- Hand rub - disinfectant
- Alcohol to clean trach mask
- Blunt ended Tweezers easier for cleaning stoma
- Sterile Normal Saline for instillation 3cc or 5cc vials
- Medic Alert Bracelet
- Tracheostomy bibs
- Spare tracheostomy tubes
- Size _____ and _____ (One size smaller)
- Cuffed/un-cuffed (circle required)
- Type _____
(if XLT needs to be special ordered takes longer to obtain)
- Spare inner cannula (2 if corrugated required for XLT)
- Heat -Moisture Exchanger (HME)

**Everyone in your home needs to know
where your supplies are kept.**

Living with a Tracheostomy

Living with a tracheostomy can affect how you go about doing simple daily living activities. The following gives you tips on how to approach daily living so that you can continue to live your life safely with your tracheostomy.



Rest and sleep

Recovery from this surgery usually takes 3 to 6 weeks. However, everyone recovers at their own rate. When you get home, you may be surprised how tired you are. This is normal. Rest is important to your recovery. Plan to rest twice a day for the first week at home. Then rest at least once a day until you feel fully recovered. Your rest time should be between 30 and 60 minutes. Sleep or just rest quietly. Try to get at least 8 hours of sleep each night. It may take you a couple of nights to adjust to sleeping with the tracheostomy.

Bathing

When washing your face or taking a bath, be careful not to splash water into your tracheostomy tube.

When taking a shower, you must keep the water from getting into the tracheostomy tube and stoma.

- Point shower head to lower chest and stand with your back to the water.
- Take extra care to cover your tracheostomy tube when you use powders or any kind of sprays around your face and neck.
- For men, take care to cover your tracheostomy tube when shaving.
- Never use plastic covers for shielding your tracheostomy. To cover your tracheostomy loosely tie a scarf, thin cloth, or tracheostomy bib around your neck. You can also buy a 'shower shield' from any medical supply store.

Clothing

Protect your tracheostomy from getting such things as hair, dust, or food in it. Cover your tracheostomy with a loose scarf.

Be sure not to block your tracheostomy tube with clothing. Choose v-neck tops and leave shirt collars open at the neck and avoid turtle neck, crew neck or any other top that tightly covers your tracheostomy.

Another thing to think about is the type of fabric you wear. Choose materials that are lint-free and do not have loose fibres that you could accidentally breathe in.

Physical activity and exercise

For the first few days at home, do the same amount of activity you were doing in the hospital. Gradually increase your daily activities. Remember to do your deep breathing and coughing exercises each day.



Take short walks each day. Gradually increase how far you walk.

Cold air, dust, or dirt can irritate your windpipe and lungs. The air you breathe in will not be warmed or filtered by your nose or mouth. If it is cold or windy outside, wear a scarf or handkerchief loosely over your tracheostomy tube. You can also use an 'artificial nose' (called a Heat Moisture Exchanger).

During the first 3 to 4 weeks at home, do not lift anything heavy, or pull or push heavy objects. 'Heavy' means anything that weighs more than 4.5 kilograms (10 pounds).

If you feel very tired, have pain, or feel short of breath during an activity, stop and rest. You may be trying to do too much. Contact your family doctor if you do not feel you are recovering or you are having trouble increasing your activity.

You may be able to return to work within 4 weeks but it depends on how you feel and the type of work you do. Talk to your doctor about a return-to-work plan.

Within 4 to 6 weeks, you should feel well enough to return to your regular exercise routine or sports. However, you should not do any contact sports. You do not want your tube moving or falling out. You cannot go swimming – you will drown.

Getting out

Once you start to feel better and have more energy, try taking short trips to a friend's home or to the store.

Pollution and smoke can irritate your airways and increase your mucus. Avoid places where it is smoky. Stay indoors on days when the air pollution index is high.

Try not to have close contact with animals that have fine hair. You don't want to inhale the hair.

If you are going to be away from your home, make yourself a travel kit. Include emergency supplies in case you need to change your tube and travel supplies you would need for simple care.

Emergency Supplies Travel Kit

- 2 spare tracheostomy tubes (1 same size and 1 smaller)
- Obturator
- Suction catheter
- Disposable gloves
- Tracheostomy ties
- Scissors (if using cotton ties)
- Syringe (if tube is cuffed)
- Portable suction machine
- Water-soluble lubricant
- Sterile Normal Saline in 3cc or 5 cc vials
- Tissues
- Spare inner cannula
- Emergency contact details
- Cell phone (fully charged)

If ordered by your doctor, also include:

- Manual Resuscitation bag
- Breathing medications

Staying healthy

In addition to rest and sleep, good nutrition speeds healing. Eat regular meals. You may find it easier to eat 5 to 6 smaller meals a day to start with. Aim for 7 to 10 servings of fruit and vegetables each day (a serving is $\frac{1}{2}$ cup). Include protein such as meat, cheese, beans, tofu, and eggs in at least two meals each day. You may find it hard to swallow or chew at first. Try not to eat tough foods initially (such as tough meat, corn, nuts, popcorn, and fruit skins). See the 'Swallowing and Speaking' section on page 40.

Avoiding Infection

Because your nose and mouth are not being used to filter the air you breathe, you are more likely to catch a cold, a virus, or the flu.

- Try not to be around people who are sick or have an illness that you could catch.
- Ask people who are sick to not visit you until they are feeling better.
- Ask anyone who has a cold, including care workers, to wear a mask when near you.
- Get the influenza shot (the 'flu' shot) every autumn.
- Get the pneumovax ('pneumonia shot) as recommended by your General Practitioner (GP).
- If you are throwing up, make sure you cover the tracheostomy tube with towel, shower shield, or your Heat Moisture Exchanger. This will prevent vomit from being inhaled into your tracheostomy.
- Suction yourself right away if you think any vomit could have entered your airway.
- Monitor your mucus if you notice a change in color (yellow, green or brown), it's getting thicker or you are producing more. Contact your doctor for advice.

During flu season:

- Avoid crowded places such as restaurants or shopping malls. (Flu season is from late October to February or March.)
- If you need to see your doctor, call ahead and ask for an appointment time so that you are not waiting in the waiting room.

What if you get a chest infection?

When you have a tracheostomy, you have a greater chance of getting a chest infection which could lead to pneumonia.

The following symptoms may mean you have a chest infection contact your doctor right away if you have the following symptoms:

- You are coughing more than usual.
- You feel short of breath and it is either new for you or it is more than usual.
- You have more mucus than normal and have to clear your tube more often.
- Your mucus is yellow, green, brown, or has an odour.
- You have chills and a fever over 38.5°C (101.3°F), using an ear or mouth thermometer.
- You are breathing faster than you normally do when you are resting.
- Your heart is beating faster than it normally does when you are resting.

Call 911 and go to your nearest emergency if you are:

- Feeling that your symptoms are getting worse.
- Finding it more difficult to breath at rest.
- The skin below your finger nails, the end of your nose, and/or around your mouth looks slightly blue.
- Your heart is beating faster than normally at rest.

Emotions

It is common for a person to go through a number of different emotions when dealing with something like a tracheostomy. At times you may feel worried, nervous, sad, stressed, or angry. Take time to talk to your doctor, nurse, respiratory therapist, or other health professional about any worries or concerns you may have about living with your tracheostomy.

Many people find it helpful to talk with another person who has a tracheostomy. Some resources are listed at the end of this brochure. It is important for you to explore your feelings and identify what makes you feel better. If you feel you would like help working through your feelings and challenges of coping with a tracheostomy, arrange to see a counsellor or a social worker for support.

Caring for Your Tracheostomy Tube

While in the hospital, we teach you and/or someone you live with how to:

1. Clean your tracheostomy tube and inner cannula.
2. Care for your stoma.
3. Clear mucus from your lungs.
4. Change the tracheostomy ties.
5. Inflate and deflate the cuff (if you have a cuffed tracheostomy).

We will help you practice each of these so that you can do them on your own.

Comparing care in the hospital to care at home

In the hospital, there is a risk of exposing patients to 'superbugs' or harmful bacteria. Because of this we use what is called 'sterile technique' to care for your tracheostomy tube.

Sterile technique is when all supplies have been sterilized to remove all germs. The supplies are sealed in packages to keep them from getting germs on them. We follow a specific process to help prevent harmful germs from getting into your tracheostomy when we clean it.

At home, you are surrounded by your own 'normal' or community germs. Because of this, you do not need to use sterile technique. Instead, it is quite safe for you to just keep everything clean. We call this way of cleaning – 'clean technique'.

Keys to a good clean technique

- Always wash your hands for 45 seconds before and after caring for your tracheostomy and stoma, suctioning, and changing your ties.
- Use soap and water to scrub the equipment.
- Keep work surfaces clean. Remember, you will remove many but not all germs.
- Use gloves if you expect to contact blood or body fluids. Even if you choose to wear disposable gloves, always wash your hands before putting them on and after taking them off.



Cleaning your tracheostomy tube and inner cannula

Every morning and evening, clean the inner cannula of your tracheostomy tube. If needed, clean it more often to keep it clean and free of mucus.

Supplies for cleaning

- 2 plastic containers - one for cleaning and one for rinsing
- Hydrogen peroxide (Warning: not for use with Jackson tracheostomies as hydrogen peroxide damages the metal).
- Saline (salt water). This can be made at home using the recipes on page 50 or bought at a pharmacy)
- Trach brush
- Disposable gloves

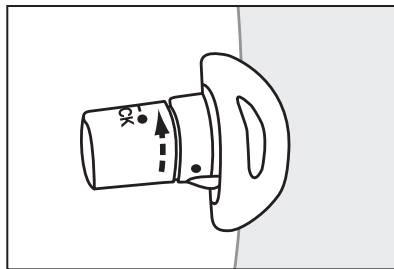


Steps for cleaning your tracheostomy tube and inner cannula

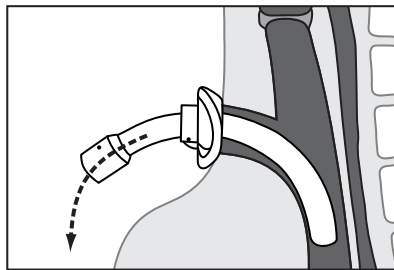
1. Clean your work area and set up your supplies.
2. Wash your hands for at least 45 seconds.
(Optional: put gloves on.)
3. Pour 1 cup of full strength hydrogen peroxide* into one plastic container. (*No peroxide for Jackson tubes – use 1 cup of saline)
4. Pour saline (salt water) into the other plastic container.

5. Cough or suction if needed. This clears the airway of mucus.

6. Loosen the inner cannula by unlocking. Hold the trach tube with one hand and with the other hand remove the inner cannula.

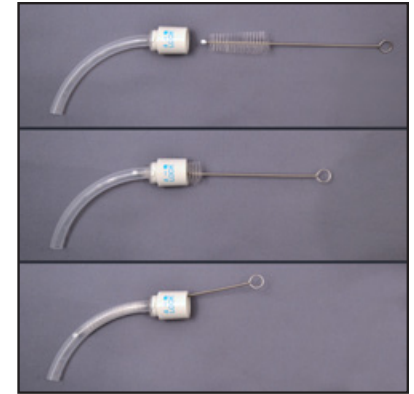


7. Remove the inner cannula by steadily pulling it down and towards your chest until it is out.



8. Place the dirty inner cannula in the peroxide solution for 10 to 15 minutes.

9. Use the trach brush to gently clean inside the inner cannula. Ensure all mucus is removed including anything that is dried on.



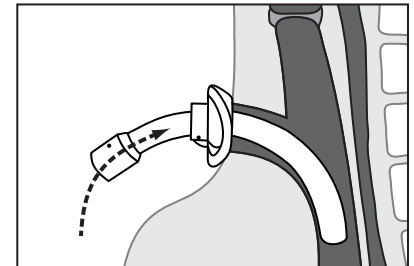
10. Once clean, place the inner cannula in the bowl of saline (salt water). Remember to hold inner cannula by connector, keeping it as clean as possible.



11. Rinse well.

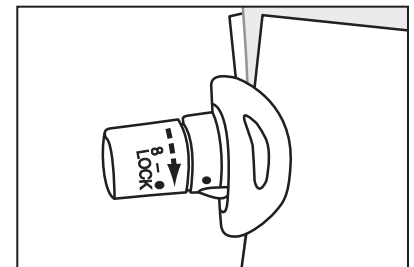
12. Shake off any excess water. **Do not dry it with a cloth.** Moisture makes the inner cannula easier to slide back in.

13. Put the inner cannula back in the tracheostomy tube. Keep the curved portion facing downward.



14. Lock the inner cannula in place.

15. Wash the plastic containers and trach brush well with hot water and soap then rinse thoroughly. Leave them to air dry in a clean place.



16. Remove and discard gloves if using.

17. Wash your hands for at least 45 seconds.

Care for Your Stoma

Once a day, clean the stoma and skin around the outer cannula. If needed, clean it more often to keep it clean and dry.

Supplies for cleaning around your stoma

- A mirror
- Clean face cloth
- 2x2 gauze
- Saline (salt water - can use home made) in bowl.
- Cotton tipped applicators
- Pre-cut tracheostomy dressings
- Disposable gloves (if you want to use them)

Steps for cleaning around your stoma

1. Choose a comfortable position sitting in front of a mirror.
2. Remove the old dressing.
3. Wash your hands for at least 45 seconds.

4. Wet the facecloth with saline (salt water). Gently clean the outer cannula and skin around it.
5. Use moistened cotton-tipped applicators for the 'hard to get' areas, such as under the flange.



6. Look closely at your stoma site for signs of infection.
7. Use a cotton-tipped applicator to put on ointment (if you are using ointment).



8. Put on a new pre-cut dressing. Insert the dressing below the flange so that the open end is up towards your head.



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

- Red, inflamed skin around your stoma.
- Bleeding of the skin or yellow/green discharge around the stoma.
- More mucus than normal.
- Changes in mucus colour, especially from clear to yellow, green, or brown.
- Mucus has a bad smell.
- You have chills and a fever over 38.5°C (101.3°F), using an ear or mouth thermometer.

Clearing Mucus from Your Lungs

- You must keep your airway clear of mucus.
You do this by:
 - Keeping the air you breathe moist
 - Keeping your mucus thin
 - Coughing to clear mucus
 - Suctioning when coughing is not enough to clear the mucus

Keeping air moist

Normally, the air we breathe is moistened by going through the nose and mouth. Since breathing through your tracheostomy bypasses your nose and mouth, air now has to be moistened another way.

- Keep the relative humidity of your home around 40 to 60%. To measure the humidity of your home, use a humidistat.
- Use a cool mist humidifier by your bedside at night.
- Use a Heat Moisture Exchanger or 'artificial nose'.
- Grow houseplants. They increase the humidity in the air.

Keeping your mucus thin

When your mucus is thin, it is easier for you to cough it out and you won't need to suction yourself. Dry, unfiltered air going into your lungs can cause mucus to become thick and form plugs. Mucus plugs can block the smaller airways in your lungs, making it hard to breathe. Also, mucus plugs attract germs which can cause an infection. An infection produces more mucus.

- Drink 6 to 8 glasses of water each day, unless you have been told to limit the amount of fluid you drink.
- Keep your mouth moist. Rinse your mouth with water or salt water.
- Sleep in a cool room. Cool temperatures may keep airways open and moist.
- Ask your respiratory therapist about other ways to keep your mucus thin.

If you are still having mucus plugs after doing the above steps, ask your respiratory therapist or home care nurse about putting a small amount of sterile normal saline into your tracheostomy tube before suctioning (called 'instilling'). This needs to be purchased. The 'home made' salt water (saline) is good for cleaning but will cause irritation if used to instill.

Coughing to clear mucus

If you can give a good strong cough to clear your mucus, it is much better for you than suctioning.

- Lean slightly forward.
- Support yourself if you need to by leaning on a table or counter.
- Hold facial tissue 2 to 3 cm from opening of trach.
- Take in the biggest breath you can.
- Cough into a tissue.

You may have to cough several times before you can cough all the mucus out of your airways.

If you find it hard to cough strong enough to clear your mucus, it may be helpful to see a physiotherapist or a respiratory therapist. A physiotherapist or respiratory therapist will assess your needs and teach you the best way to manage your mucus. Therapy can include:

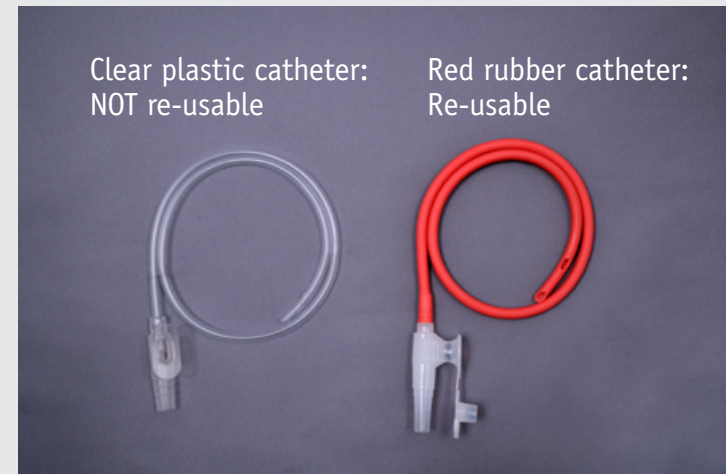
- Treatment on your chest to help move the mucus (chest percussion or chest vibration).
- Learning different positions to lay or sit in that use gravity to help the mucus clear out of your lungs.
- Learning how to do 'pursed-lip breathing' (where you take a deep breathe, hold your breath for 5 to 10 seconds, and then breathe out through partially closed or pursed-lips).
- Learning how to cough or 'huff' to help clear the mucus.
- Learning breathing techniques to remove mucus (called 'Active Cycle of Breathing').

Suctioning - when coughing is not enough

If you are having trouble breathing and cannot cough out the mucus, you can suction yourself. Only suction yourself when you really need it. If you suction yourself too often, it can irritate the walls of your airways and cause bleeding. The irritation will also mean your lungs will make more mucus.

Supplies for suctioning

- Suction machine
- Suction catheters (See the supplies list on page 13 for the size and type you need).
- 2 plastic containers - one for cleaning and one for rinsing
- Saline (salt water)
- Sterile normal saline vials (as needed)
- Mirror
- Disposable gloves
- A clean facecloth (Keep one set aside to use only for your tracheostomy care)



Steps for suctioning

1. Wash your hands for at least 45 seconds.
2. Ensure suction machine is assembled and functioning. Lay all materials needed out on a clean work surface.
3. Wash hands
4. Put on a pair of clean disposable gloves.
5. Sit comfortably in front of a mirror.
6. Pour 1 cup of saline (salt water) into 1 plastic container.
7. Turn on the suction machine.
8. Connect the suction catheter to the suction tubing.
9. If you are instilling sterile normal saline, do it at this point. (See the steps for instilling on page 34).
10. To moisten the catheter, dip it into the container with saline (salt water).

11. Keeping your thumb off the side opening in the catheter, slowly insert the catheter into your tracheostomy tube about 4 to 5 inches.



12. Cough. This helps loosen the mucus.
13. To suck out the mucus, place your thumb over the side opening in the catheter.

14. Slowly pull out the catheter, rotating the catheter as you pull it out.

15. Take a moment to catch your breath.

16. Rinse catheter and suction tubing of mucus by sucking up some saline (salt water).

17. Suction again if you need to.

18. Once finished discard disposable suction catheter in the garbage or if using re-usable the red rubber catheter clean following instructions on page 30.

19. Wash the plastic containers well.

20. Leave them to air dry in a clean place.

21. Wash your hands for at least 45 seconds.

If your secretions are too thick to suction, try putting a small amount of sterile normal saline into your tracheostomy tube before suctioning (this is called 'instilling'). This is not the same as the home made saline and must be bought at the pharmacy.



Steps for instilling:

1. Using 3cc or 5cc vials of sterile normal saline remove cap and squirt into opening of tracheostomy while breathing in. This may make you cough.
2. Suction.
3. Repeat these steps until you can breathe easily, can cough out the mucus, or can suction out the mucus.



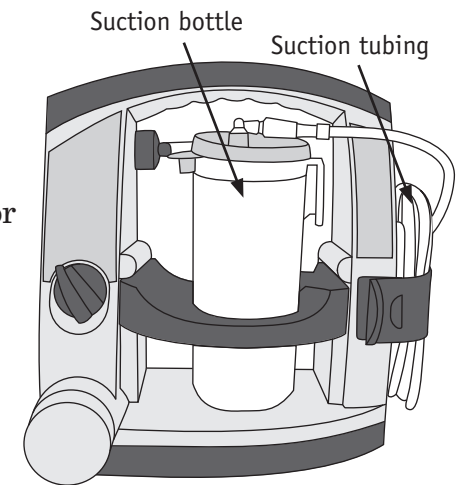
To clean the red rubber catheters

1. Suction saline (salt water) to clean the inside of the catheter after suctioning completed.
2. Wash suction catheters in hot soapy water.
3. Rinse with tap water to remove soap. Suction up tap water to rinse inside of catheter.
4. Soak the catheter in 3% hydrogen peroxide for 15 to 30 minutes.
5. Rinse the catheter with tap water.
6. Shake off any excess water. Do not dry it with a cloth.
7. Place catheter in clean container and cover with clean towel.

To clean the Suction Tubing and Machine

Always rinse the tubing after each time you use it by sucking sterile water through it until it is free of mucus. You must clean the suction machine regularly.

1. Empty the suction bottle.
2. Clean the bottle with soap and water.
3. Soak the suction tubing and suction bottle in 3% hydrogen peroxide in a clean container large enough to hold both the tubing and bottle for 30 minutes.
4. Rinse well with tap water.
5. Let everything air dry.
6. Once a week, wipe down suction machine.
7. Once a month replace the suction tubing with new tubing. Throw out the used suction tubing in the regular garbage.
8. Every 2 months, change suction machine filter.



Changing the tracheostomy ties

Change tracheostomy ties when they are soiled and at least every 2 to 4 weeks.

Supplies for changing ties

- Tracheostomy ties
- Mirror
- Scissors
- Pre-cut tracheostomy dressing
- Someone to help you

Steps for changing the cotton twill tracheostomy ties

1. Wash your hands for at least 45 seconds.
2. Measure a length of twill tie. Make it long enough to go around your neck 2½ times.
3. Cut both ends on an angle.
4. Remove your tracheostomy dressing, if you have one.
5. Have someone hold your tracheostomy by gently holding the bottom of the flange against your neck (It is possible to cough out the tracheostomy tube.)
6. Cut and remove the old tracheostomy ties.
7. Thread one end of the tie through the opening on the one side of the flange.
8. Pull the two ends of the tracheostomy tie together so the ends are even.
9. Wrap both tie ends around your neck.
10. Thread the end of the tie closest to your neck through the opening on the flange.



Tying on the side of the neck with space to fit 2 fingers between the ties and your neck

11. Adjust the fit of the ties by making sure you can fit 2 fingers in between the ties and your neck.
12. Tie both ends together on the side of your neck using a firm knot. Do not tie a bow. It could come undone.



Threading a pre-made tie through opening in flange

Steps for changing pre-made tracheostomy holders

1. Wash your hands for at least 45 seconds.
2. Remove your tracheostomy dressing, if you have one.
3. Have someone hold your tracheostomy by gently holding the bottom of the flange against your neck. (It is possible to cough out the tracheostomy tube.)
4. Remove the pre-made holder.
5. Thread the 'hook' end of the tie through the opening on one side of the flange.
6. Attach the 'hook' fastener to the fuzzy side of the holder.
7. Wrap the holder around the back of your neck.
8. Thread the other 'hook' end through the other opening in the flange and attach.
9. Adjust the fit of the holder so you can fit 2 fingers in between the holder and your neck.

Inflate and deflate the cuff

If you have a tracheostomy tube with a cuff, there are times when your cuff should be inflated and deflated.

You will be instructed to have the cuff inflated in different situations. Those checked off below apply to you:

- When eating or drinking
- For 1 hour after eating or drinking
- When lying down
- While you are sleeping
- When using a manual breathing bag or breathing machine
- All of the time

Supplies for deflating and inflating the cuff

- 10 mL syringe
- Supplies for suctioning (See page 31)

How to deflate the cuff

1. Wash your hands for at least 45 seconds.
2. Suction down your tracheostomy.
3. Suction your mouth and down the back of your throat.
4. Attach an empty 10 mL syringe to the valve on the pilot balloon.
5. Slowly pull back the plunger on the syringe until the pilot balloon is completely flat.
6. Remove the syringe from the pilot balloon.
7. Cough and suction your mouth.

How to inflate the cuff

1. Wash your hands for at least 45 seconds.
2. Pull back on the plunger of the syringe to the 10 mL mark. This fills the syringe with air.
3. Attach the syringe to the valve on the pilot balloon.
4. Slowly inject the air into the pilot balloon. You have the right amount of air in the cuff when there is just enough so you cannot speak or make a sound with your voice. Too much air puts pressure on your trachea and can cause damage. You may be shown how to check the cuff pressure with a small device that measures the pressure more accurately your respiratory therapist will decide with you if this is necessary.
5. Remove the syringe from the pilot balloon valve
6. Check that your pilot balloon has stayed inflated. If it won't hold air, there is probably a leak and your tube must be changed as soon as possible.

Swallowing and speaking

Swallowing

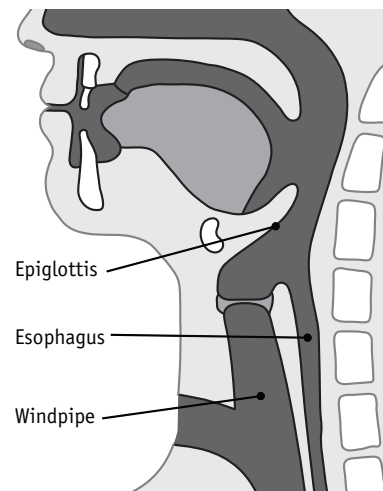
You may find it hard or painful to swallow food and liquids, especially at first. If your doctor says you can, you may want to take pain medication about 30 minutes before you eat. Do this only until the pain on swallowing goes away. Talk to your doctor about what pain medication will work best for you.

Swallow carefully. It is possible for you to accidentally breathe in food or liquid, instead of them going into your stomach. When this happens, it is called ‘aspiration’ (sounds like ass-pier-aye-shun).

Tips for swallowing

- Try not to eat tough fibre foods until you find swallowing easier. Tough fibre foods include tough meat, corn, nuts, popcorn, and fruit skins.
- Sit upright to eat.
- Eat slowly.
- Chew your food well.
- When you swallow, focus on your swallowing.

If you notice foods or liquids cause you to cough or there is food or liquid in the mucus you cough up or when suctioning, contact your doctor as soon as possible. It means you may have aspirated and could get an infection in your lungs.



Speaking

Normally, we speak by moving air over our vocal cords in our windpipe as we breathe out. Your tracheostomy is located below your vocal cords. Most of the air you breathe out goes through your tracheostomy. If your tube does not have a cuff, your cuff is deflated, or you have a fenestrated tube, some air can pass around your tube through your vocal cords. How loud you can speak depends on how much air goes through your vocal cords.

We know speaking is important. There are a few ways to be able to speak again. Examples include:

- Speaking around the tube (you must be taught how to do this safely). When the tube does not have a cuff, when the cuff is deflated, or when the tube is fenestrated, you can take a deep breath, plug the tube, and try to speak while breathing out.
- Using a one-way speaking valve (Passy-Muir Valve). The valve is placed on the end of your tracheostomy tube, allowing air in but not out. This forces air to go out around the tube and up through the vocal cords. This can't be used with a cuffed tracheostomy.
- Using a hand-held electronic speech device. The device is placed on the neck, vibrating when activated, allowing words to be mouthed.

A speech language pathologist works with you to determine which option is best for you. A speech language pathologist should come to see you before you leave the hospital. If you haven't had a visit yet, ask your doctor, nurse, or respiratory therapist to arrange for you to see one

Emergency Situations

In this section, we identify the steps to take in different situations. Make sure everyone knows where you keep your supplies and equipment.

What if your tracheostomy tube gets plugged with mucus?

A plugged tracheostomy tube will make it difficult to breath. Try to stay calm while following the steps below to unplug and clear out the mucus.

Follow these steps in order. If one action does not work, go to the next step.

1. Try to cough really hard.
2. Suction.
3. If you cannot get the catheter to go in remove the inner cannula and replace with a clean one.
4. If you don't have a suction machine skip steps 2 and 3.

If you are still having trouble breathing:

1. Call 911
2. Cut the ties.
3. Take out your tracheostomy tube.
4. Cough hard.
5. Suction through the stoma.
6. Replace tracheostomy if you are able to. Follow steps on the next page.

Call 911 right away if all of these actions fail to clear your airway.

What if your tracheostomy tube comes part way out of the stoma?

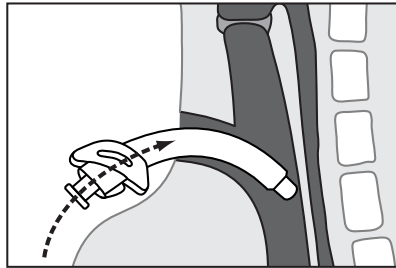
Once your tube has been in place for about 5 days, the hole is well formed and will not suddenly close. If your tube has slipped part way out:

1. Stay calm. Your stoma will stay open.
2. Tilt your head back to make the stoma hole larger.
3. Cut the ties or undo one side of the pre-made holder if necessary.
4. Guide the tracheostomy tube back into the stoma. Use the same motion you use to insert your inner cannula. Or have someone else who knows how to care for your tracheostomy tube try to gently push the tube back in place.
5. Hold the tube in place.
6. Get help to make and attach new ties.

Call 911 right away if you cannot get the tube back into the right place and are having difficulty breathing. If you are alone, dial 911 using a landline. Leave the phone off the hook.

What if your tracheostomy tube falls out completely:

1. Stay calm. Your stoma will stay open.
2. Open your Emergency Supply Bag and get:
 - a. A new tracheostomy tube (one the same size and one a size smaller)
 - b. The obturator
 - c. Water-soluble lubricant
 - d. Tracheostomy ties
3. Insert the obturator into the new tracheostomy tube. Note: Inner cannula needs to be removed from the new trach.
4. Lubricate the end with the water-soluble lubricant.
5. Insert the new tracheostomy tube into the stoma using the same arching motion as you would your inner cannula.
6. Pull the obturator out.
7. Insert the inner cannula and lock it in place.
8. Secure your tracheostomy tube into place.



If you cannot get the tube back in:

Have someone call 911 right away. If you are alone, dial 911 using a landline. Leave the phone off the hook.

Until help arrives, insert a suction catheter into your stoma. Hold it in place. You can breathe through the catheter until emergency personnel arrive.

Tracheostomy Care Checklist

Tracheostomy size: _____

Suction catheter size: _____
(red rubber catheter)

Every morning or evening

- Clean the inner cannula.
- Clean the stoma and skin around outer cannula.
- Change your cotton tracheostomy ties (eg. when soiled).

At least once a day

- Empty the suction bottle (if used).

At least once a month

- Replace the suction tubing with new tubing. Can replace less often if not requiring regular suctioning.

Every four to six weeks

- Make an appointment to get tube changed .

Tracheostomy Skills Competency Checklist

Trach Size: _____

Trach type: _____

S = Successful
P = Partially Successful
N = Needs work

KNOWLEDGE	Teaching Demo	Practiced Demo	Practiced Demo
Describes the parts of the tracheostomy tube	Date: Initial:	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>
TRACHEOSTOMY CARE			
Demonstrates equipment set-up for tracheostomy care	Date: Initial:	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>
Demonstrates correct cleaning procedure for the inner cannula	Date: Initial:	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>
Demonstrates the difference between plugged and unplugged (if applicable)	Date: Initial:	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>
Demonstrates how to remove and insert inner cannula/plug (if applicable)	Date: Initial:	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>
Demonstrates stoma care	Date: Initial:	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>
Demonstrates correct technique for changing tracheostomy ties	Date: Initial:	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>
Demonstrates correct instillation of sterile normal saline into the tracheostomy (if required)	Date: Initial:	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>
Demonstrates correct application of the humidification device to the tracheostomy (if applicable)	Date: Initial:	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>

SUCTIONING			
Recognizes signs that indicate need for suctioning	Date: Initial:	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>
Demonstrates equipment set-up for tracheostomy suctioning and use of portable suction	Date: Initial:	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>
Demonstrates proper application of suction pressure and duration of suctioning	Date: Initial:	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>
Demonstrates proper suctioning technique	Date: Initial:	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>
Recognizes potential problems and carries out required actions (ie: mucus plug, bleeding, change in secretions)	Date: Initial:	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>
EMERGENCY PRECAUTIONS AND PROCEDURES			
Blocked tracheostomy tube	Date: Initial:	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>
Dislodged tracheostomy tube	Date: Initial:	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>
Accidental decannulation	Date: Initial:	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>
Aspiration	Date: Initial:	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>
Respiratory distress	Date: Initial:	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>	Date: S <input type="checkbox"/> P <input type="checkbox"/> N <input type="checkbox"/>

Tracheostomy Discharge Readiness Checklist

to be completed within 24 to 48 hours of expected discharge date.

Please send a copy to:

- Community Team
- GP
- MRP/Specialist Physician office

	Date Completed	Not Applicable
Medication Prescriptions		
<ul style="list-style-type: none"> • Prescriptions for equipment • Support Letter for Equipment and supplies Ministry/Private Insurers 		
Supplies obtained (see supplies list)		
Integrated Care conference – as needed		
Family Meeting		
Client/key learner Tracheostomy and Competency Checklist Completed		
Back up Care giver Tracheostomy Competency Checklist Completed		
Contact Numbers for Home Care		
Follow up Appointments <ul style="list-style-type: none"> • GP • MRP/Specialist Physician 		
Next Planned Tracheostomy Changed booked and transport confirmed		
Discharge Date confirmed with TST Community Teams Notified		
Transport Home confirmed including carer competent to manage tracheostomy		
My Discharge Plan reviewed with Client/care-giver		
Back up plan for clients without carers eg. Lifeline		
Discharge Handouts: <ul style="list-style-type: none"> • Going Home with Tracheostomy Pamphlet 		

Recipe: Saline (salt water) for Cleaning

- Select a container with a secure lid to store saline (salt water).
- Wash container well and rinse. Give it one more rinse with boiling water.
- Set container aside.
- Pour 4 cups of water into a clean cooking pot and bring to a boil.
- Turn off stove and let water cool.
- Pour water into the clean storage container.
- Add 1 teaspoon of salt to the water. Put the lid on the container and shake gently until salt dissolves.
- Label container with “Salt Water” and the date it was made.

Salt water can be kept in the fridge for 3 days. After this discard and make a new batch of salt water.

Note: This is not sterile and should never be instilled into tracheostomy tube. Use only for suctioning, tracheostomy stoma care, and cleaning suction catheters.

Vendor List

Praxair/Medigas: 1-866-446-6302

Vancouver, BC www.medigas.com

- Provide suction units for both purchase or monthly rentals.
- Provide air compressors for both purchase or monthly rental.
- Provide an RT representative for teaching patient/caregiver on use/cleaning/maintenance of equipment and will do so in the patients home.

West Care Medical: 604-540-8288

Coquitlam, BC www.westcaremedical.com

- Provide suction units for purchase only.
- Provide air compressors for purchase only.
- Provide tracheostomy tubes by special order.
- Do not provide RT rep. for teaching- equipment will be couriered to unit time permitting, or sent directly to patients home. Manuals on use/cleaning/maintenance attached to all equipment.

VitalAire: 1-800-637-0202

Vancouver, BC www.VitalAire.com

- Provide suction units for both purchase or monthly rentals.
- Provide air compressors for both purchase or monthly rental.
- Provide tracheostomy tubes for purchase.
- Provide tracheostomy supplies for purchase.
- Provide an RT representative for teaching patient/caregiver on use/cleaning/maintenance of equipment and will do so in the patients home.

MedPro Respiratory Care: 1-888-310-1444

Langley, BC www.MedProrespiratory.com

- Provide suction units for purchase.
- Provide air compressors for purchase.
- Provide tracheostomy tubes for purchase.
- Provide Tracheostomy supplies for purchase.

IRS Canada: 1-877-965-6204

Vancouver, BC www.irscanada.ca

- Provide suction units for purchase.

Pharmacies and Retail stores

MacDonald's Pharmacy: 604-872-5496

Vancouver, BC www.macdonaldsrx.com

Located close to VGH – 746 W Broadway between Heather St and Willow St

- Provide tracheostomy supplies for purchase.
- Provide tracheostomy tubes for purchase take 1-3 days to order in.

Lancaster Medical Supplies: 604-873-8585

Vancouver, Burnaby, Surrey, BC

www.lancastermed.com

Located close to VGH – 1-601 W Broadway .

- Provide suction units for both purchase and rental.
- Provide tracheostomy supplies for purchase.

Regency Medical Supplies: 604-434-1383

Burnaby, BC www.regencymed.com

- Provide tracheostomy supplies for purchase.
- Provide tracheostomy tubes for purchase.

Stevens Medical: 604-634-3088

Delta, BC www.stevenshomemedical.com

- Provide tracheostomy supplies for purchase including tracheostomy brushes.
- Provide tracheostomy tubes for purchase.

Important Phone Numbers

Blank area for listing important phone numbers, consisting of 12 horizontal grey bars.

Adapted for Vancouver Coastal Health with permissions from Fraser Health

For more copies, go online at <http://vch.eduhealth.ca> or
email pem@vch.ca and quote Catalogue No. **FN.231.T6731**
© Vancouver Coastal Health, October 2013

The information in this document is intended solely for the
person to whom it was given by the health care team.
www.vch.ca