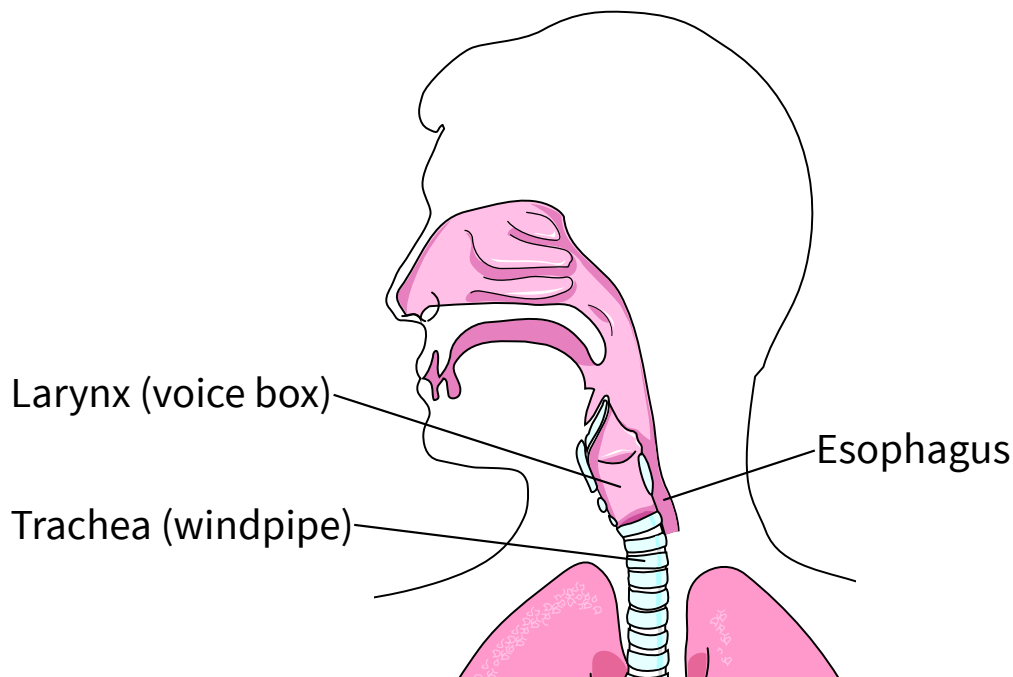


Total Laryngectomy

Total Laryngectomy

- Total laryngectomy is the removal of your larynx (voice box). Your larynx is being removed because it has a disease (like cancer).
- Your usual way of talking will change after your surgery.
- A sample of larynx tissue will be sent to the lab. A pathologist (doctor who has special training to look at changes in tissue caused by disease) will look at the sample under a microscope to find out what the disease is. Your primary health care provider will tell you the results as soon as possible. If you need further treatment, your primary health care provider will talk about this with you.



Before surgery

- You will be admitted to the hospital for this procedure.
- Remove any nail polish before coming to the hospital. Remove gel nails, if possible.
- You may have tests, like:
 - › Blood tests
 - › ECG (test that measures the electrical activity of your heartbeat)
 - › CT scan (takes special X-ray images to see inside your body)
 - › Chest X-ray
- A resident (hospital doctor) will talk with you about your surgery. They will take your medical history and do a physical exam. This is a good time to ask questions or talk about any concerns you may have.

- You will be asked to sign a consent form. Please read this form carefully. This is a good time to ask your health care team any questions you may have.
- An anesthetist (doctor who puts you to sleep for surgery) may visit you. You will have a general anesthetic (medication to put you to sleep for surgery) and will be asleep during surgery.
- A social worker will visit you to talk about any emotional concerns you may have about your surgery.
- You will see a speech language pathologist, if you have not seen one yet.
- **Your stomach must be empty during surgery. Do not** eat anything solid after midnight the night before your surgery. Ask your nurse when you should stop drinking liquids.
- Leave all jewelry and valuables at home. The hospital is not responsible for the loss of any item.
- It is very important to get a good night's sleep the night before your surgery.

The morning of surgery

- **Do not smoke.** Smoking before surgery increases your risk of complications during surgery. Smoking also slows down your body's ability to heal.
- Shower, brush your teeth, and use mouthwash.
- Be sure to go to the washroom (pee) within 1 hour before your surgery.
- Remove your dentures, if you have them. If you have capped teeth, a dental bridge, or a bite plate, tell the nurse and the anesthetist.
- Long hair must be tied back with a hair elastic. Do not wear hairclips or bobby pins.
- Remove contact lenses, if you have them.
- Remove your hearing aid(s), if you have one. Tell your nurse if you cannot hear at all without your hearing aid(s).
- An intravenous (IV) tube will be put into a vein in your arm using a needle. You will be given IV fluids. You may also be given antibiotics through the IV to prevent infection.
- You may be given medication to help you relax through an injection with a needle, or as a tablet with a sip of water. The medication may make you drowsy and your mouth dry. The nurse will put up the side rails on your bed so you will not fall out. If you need anything, ring your call bell. **Do not try to get out of bed by yourself.**

The Operating Room (OR)

- You will be taken to the OR and helped onto the operating table. You will be given medication through your IV to put you to sleep.
- The OR team will look after you during your surgery. The team includes a surgeon, residents, anesthetists, nurses, and sometimes technicians.

Right after surgery

- You will wake up in the recovery area. You will then be taken to another floor. Depending on your surgery, you may go to the Intermediate Care Unit (IMCU) or Intensive Care Unit (ICU) before going back to your regular floor. A nurse will check on you often.
- You will not be able to talk like you used to. You will be given paper and a pen to write with, and staff and your loved ones will try to read your lips. This may be frustrating. Try to be patient with yourself and others.
- You will be breathing through a hole in your neck instead of through your nose and mouth. This hole is called a stoma. The hole will have a tube in it. Mucus will come out through the tube when you cough. You will learn to cover your neck instead of your mouth when you cough.
- Take deep breaths and cough every hour to keep your lungs clear. The nurse may use a small tube to suction (suck out) the mucus from the tube in your neck.
- Your secretions (moisture in your throat, nose, and mouth) may get very dry because you are no longer breathing through your nose and mouth.
- You will be given a mask with humidified air or a heat moisture exchanger (HME). **It is very important that you breathe humidified air (air with moisture) through the hole in your neck.**
- The tube in your neck will be changed by the doctor or nurse. You will have a permanent stoma in your neck that you will breathe through. As the stoma heals, it may get smaller and you may need a different tube. Your health care team will teach you how to care for your stoma.
- You may have a drain(s) in your neck to remove old blood from under the incision (cut). This drain is usually removed 72 hours (3 days) after surgery.
- A feeding tube will be passed into your stomach through your nose. You will be fed through the tube for about 7 to 10 days.

- Your dietitian will decide what kinds of food are best for you. Your doctor(s) will decide when you are ready to have liquids by mouth. If you do not have any problems, you will be able to eat solid foods and the feeding tube will be removed.
- A nurse will check your neck incision, blood pressure, pulse, and temperature often.
- You may have some swelling of your face and neck, and bruising. This will go away over time.
- You may be given oxygen, if needed.
- A catheter (thin, hollow tube) will drain urine (pee) from your bladder. This will be removed 24 to 48 hours (1 to 2 days) after surgery.
- You may have pain medication every 3 to 6 hours. Please ask your nurse for medication if you have any pain.
- If you have nausea (upset stomach), ask your nurse for medication.
- You will be given antibiotics through your IV. Eventually, antibiotics and all medications will be given through your feeding tube. Your IV will likely stay in until you are close to going home.
- Ring your call bell for help the first few times you get out of bed. It may help to place your hand behind your head for support.
- Your stitches will be taken out in about 7 to 10 days. Your health care team will talk to you about this.

At home

Controlling pain

- You will get a prescription for pain medication before you go home, if needed.
- **Do not drink alcohol while taking pain medication.**
- **Do not drive while taking pain medication.**

Safety

- You should have someone drive you home after your surgery. It is best to have someone stay with you for the first night.
- If you will be staying alone, we recommend getting a Lifeline® device or a similar monitoring system for your home.

Important: From now on, it is not safe to swim or go out in a boat. If you fell in the water, you would not be able to stop water from going into your lungs and you would drown.

Activity

You can go back to your usual activities as told by your surgeon (except swimming and boating).

Incision

You will be taught how to care for your incision and stoma before you go home.

Emotions

- It is normal to have many emotions before your surgery, while you are in the hospital, and after returning home. It is important for you to explore your feelings and figure out what makes you feel better.
- It may help to talk about your feelings with someone you know or someone who is trained to help. It may also help to talk with someone who has had a laryngectomy. If you are interested, ask your nurse for more information.

Intimacy

- After a laryngectomy, you may worry that you are unattractive or unlovable. It helps to remember that people are loved for their whole self, not just for their appearance. Your physical appearance is only one part of you.
- It may take time to adjust to the changes in your body. Be patient with yourself and your loved ones. When going through a difficult experience like this, it often helps to talk about your feelings. Encourage your loved ones to do the same.

Protect yourself from the flu

- Get a flu shot and a pneumonia shot every fall, unless you are allergic to them. Check with your primary health care provider.
- Avoid crowded spaces and people who have the flu.
- Stay 6 feet away from other people, including your friends, during flu season.
- Caregivers should wear a mask if they have a cold or the flu.

Stoma and laryngectomy tube care

Cleaning around your stoma

Clean around your stoma and clean your laryngectomy tube at least 2 to 3 times a day, or more if needed.

1. Wash your hands.
2. Remove the laryngectomy tube. Using a cotton swab or a soft facecloth and sterile (pre-boiled - see recipe on page 10) water, gently clean away any mucus from around the stoma.
3. When clean, gently pat the area dry — do not rub.
4. Put in a clean laryngectomy tube. Secure ties around your neck and through the openings on either side of the LaryTube™. Make sure you can fit 2 fingers comfortably between your neck and the ties.

Laryngectomy tube

You will likely go home with a laryngectomy tube. **Wear it at all times until your stoma is fully healed.** If you are not using an HME, you may leave the tube out during the day and put it back in at night. You should have ties that fit comfortably on your tube to keep it from falling off when you cough and to keep it from getting lost.

Cleaning your laryngectomy tube

1. Wash your hands.
2. Use warm water to clean your tube. Use a solution of half sterile water (see recipe on page 10) and half hydrogen peroxide or mild dish detergent to loosen secretions, if needed. You can use a brush or disposable pipe cleaners. If you use a brush, make sure it is cleaned well and air dried after each use.
3. Rinse the tube very well. Do a final rinse with sterile water.
4. Dry the tube using a paper towel or a soft cloth and secure ties. If the ties are noticeably soiled or wet, put on new ties.

Stoma covers

- If you are using an HME, you do not need a stoma cover. Wearing a stoma cover stops dirt and dust from entering your airway. It will also warm the air on cold days and may help to prevent embarrassment from an unexpected cough. Covers are available at most drugstores. They can also be custom-made. Patterns to knit, crochet, or sew covers are available. Please ask your nurse or speech pathologist.
- **You must wear a stoma shield in the shower to make sure you do not get any water in your stoma.**

Supplies

- Your health care team will talk with you before discharge about the supplies you will need and where to get them. Keep your supplies in a clean, dry area. A place that is used only for storing these supplies is best.
- You can get supplies at many places (like the pharmacy in the QEII, VG site, your local pharmacy or drugstore, Medigas Atlantic, VitalAire, etc.).

Humidity

Keeping your secretions thin

- Try to keep the relative humidity in your home at 40 to 60%. This will help to keep your secretions thin. Humidity can be measured by a humidistat, which is available in most hardware stores.
- Keeping your secretions thin lets you cough them out easily and avoid having to suction. Before your surgery, your nose acted as an air conditioner by filtering and humidifying the air you breathed. After your surgery, the air entering your stoma is dry and unfiltered.
- Dry air can cause plugs of mucus to form that can clog your airway. These plugs also give a place for bacteria to grow and may cause infection. This can make your secretions thick and hard to cough out, and may make it harder to breathe.
- There are several things you can do to prevent your secretions from getting thick:
 - › Drink 6 to 8 glasses of fluids (water is best) a day. Check with your doctor to make sure this is OK for you.
 - › You may wish to try an HME. Your speech language pathologist will talk about this with you.

- › You may wish to try an ultrasonic humidifier. Keep it running beside you or use the mask with the attached hose. It is important to follow the instructions for using and cleaning the humidifier. Only use **distilled water**. This is available at most drugstores. Clean the mask and hose with dish detergent and water. Rinse well with boiled, cooled water and let air dry.
- If your secretions are thick, dry, crusty, hard to clear, or have small blood streaks, you need more humidity. Use your humidifier as much as needed to keep your secretions thin so you can cough them out.
- If you are still having problems, ask a nurse or respiratory therapist (breathing specialist) to teach you how to **instill** your airway with saline (salt water).
- You can also use a small mist bottle with sterile water to keep your airway moist when you are away from your humidifier for short times.
- Sleeping in a cool room at night may help to keep your airway moist.
- Mouth care is very important. It can help to rinse your mouth with saline or plain water, or brush your teeth.
- If you have trouble clearing the mucus from your stoma, you may need to have a suction machine at home. Talk to your nurse about this, if needed.
- If you are having problems clearing mucus from your airway and humidity is not helping, talk to your primary health care provider.
- **If you have bleeding, inflammation (swelling), or a lot of redness around your stoma, see your doctor.**

Speech rehabilitation

- After your larynx is removed, you will not be able to talk the same way as before your surgery. The speech language pathologist will teach you a new way of talking.
- Right after surgery, we will give you information about stoma care (stoma covers, shower shield, etc.) and safety (applying for a MedicAlert® bracelet and wallet card).
- Once you have started eating, you will start learning to use your “new voice” in 1 of 3 ways:

1. Tracheo-esophageal speech

- › During your surgery (or sometimes months later), your surgeon will create an opening that connects your windpipe (passage from throat to lungs) to your esophagus (food passage).
- › A small silicone prosthesis will be placed in the opening.

- › When you cover the stoma, air from your lungs is sent through the prosthesis into the esophagus. The tissues vibrate to make sound. This sound travels to your mouth, where you use your tongue, lips, and teeth to talk.

2. Esophageal voice

- › You will learn to push air from your mouth into your esophagus. This makes the tissues vibrate to make sound. The sound is then released into your mouth to talk.

3. Artificial larynx

- › A battery-operated device makes a new “voice”. You hold the device against your neck or cheek. Sound moves into your mouth and you use your tongue, lips, and teeth to talk.

Each way has advantages and disadvantages. The speech language pathologist will help you choose the way that works best for you.

Before you go home, you will get information about support groups. After leaving the hospital, you will see a speech language pathologist in your area for therapy.

Nutrition

You can eat and drink as usual after surgery. It may help to make some changes in how you eat and what types of foods you eat. We recommend that you:

- Eat slowly and chew all foods well.
- Avoid hard, scratchy foods (like nuts, tough cuts of meat, and raw carrots) for the first 2 weeks.
- Eat well to help your body heal. Try to eat small meals often and eat a wide variety of foods. If you have lost weight recently or are concerned about your eating habits, ask to talk with a dietitian.
- Drink lots of fluids (like water, juice, and milk). This will help with swallowing, keeping your bowels regular, and keeping your lung secretions thin enough to cough out. If you are on fluid restriction because of another health problem, talk about this with your doctor.
 - › It is best to limit drinks with caffeine and alcohol, as these can be very drying.
- If gas, burping, or bloating is a problem:
 - › **Do not** use straws.
 - › Avoid hard candies, lozenges, and chewing gum.
 - › Chew with your mouth closed. Avoid talking when chewing.

- › Try eating smaller amounts of foods that cause gas (like carbonated (fizzy) drinks, broccoli, cabbage, onions, turnips, raw vegetables, dried beans and peas, melons, and unpeeled apples).
- › If you are having any other problems with gas or heartburn, please talk to your primary health care provider.
- Talk to a dietitian about how to keep your bowels regular, as you will not be able to bear down/strain if you get constipated (not able to poop).

Recipe for sterile water

Boil water for 15 minutes in a covered pot to get rid of bacteria. Let it cool.

To store sterile water:

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

Follow-up

- You will be given an appointment to see your surgeon at the ENT Clinic located at:
Dickson Building, 3rd floor
5820 University Avenue
Halifax, Nova Scotia B3H 1V7
- At this appointment, your surgeon will make any other follow-up appointments, if needed.

Call your doctor if you have:

- › Fever (temperature above 38.0^o C/100.4^o F)
- › More swelling, pain, and/or redness to your neck
- › Shortness of breath
- › Wheezing
- › Trouble breathing

If you cannot reach your doctor, go to the nearest Emergency Department right away.

