UNIVERSITY OF
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MICHIGAN MEDICINE

Heat and Moisture Exchanger (HME) Discharge Instructions

What does a heat and moisture exchanger (HME) do?

The heat and moisture exchanger (HME) serves as your “new nose” after your laryngectomy surgery, conditioning the air you breathe. Your voice box, or **larynx**, is removed during total laryngectomy surgery. This is often due to cancer or chronic side effects from previous radiation therapy. The voice box is the connection from your mouth and nose to your lungs.

Before your surgery, the air you breathed in was warmed and humidified (or moisturized) by your nose and upper airway to provide your lungs with the best environment for good oxygen exchange. Since surgery, the passages of your nose are no longer connected to your lungs, and you are breathing through the **stoma** at the base of your neck. The stoma is the small hole at the base of your neck where your airway was newly connected during surgery. Without the humidification source of your sinus passages, you may experience more mucus, coughing, and discomfort. The HME can help with these issues. Continue to wear the HME after discharge from the hospital to experience the greatest long-term benefits.

How do I use and care for my HME?

- You can wear an HME 24 hours per day, 7 days per week, or as recommended by your Speech-Language Pathologist.
- You must change your HME at least once per day, or more frequently if you are still experiencing increased mucus and coughing. The HME is treated with a special salt solution, which enables the foam core to keep

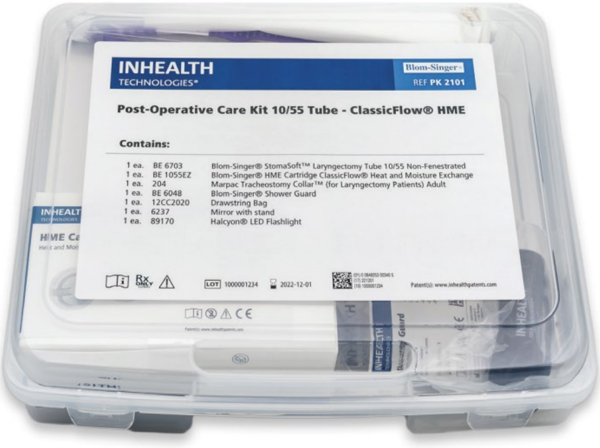
in moisture and condition the air when you breathe in. After 24 hours of use, this special salt solution is used up.

- Remove the HME prior to removing the laryngectomy tube for cleaning purposes, suctioning your stoma, or if you anticipate that you're going to cough. If your HME has mucus on the back, you may try to wipe it off with a clean towel or tissue and then replace the laryngectomy tube. Otherwise, just throw the HME away and put on a fresh one.
- Do not wash or rinse HMEs, or reuse HMEs after 24 hours.
- Do **not** wear the HME at the same time as your moist air machine (also referred to as a humidified tracheostomy mask or collar). You should wear only one at a time.
- The type of HME you received while in the hospital is not proven to protect against or filter out viruses and bacteria, but it will protect against larger particles and debris (such as dust, pollen, pet hair, food crumbs, bugs, etc.).

- The Day&Night HME should be twisted into the locked position before placing into your laryngectomy tube. You should **not** able to push the button in.

What should I know about my Post-Operative Care Kit?

After surgery, you received the Post-Operative Care Kit with supplies to help you take care of your stoma. Please note the following:



- The tracheostomy necktie (a white fabric strap) should **only** be worn with your laryngectomy tube if your surgeon allowed you to wear one in the hospital. Some people need more time for healing around their neck.
- Within the kit, there is a box of 30 HMEs for you to begin using once you are home. Remember that the HME must be changed at least once per day and, it is normal to use more than one per day for the first few weeks after surgery.
- A spare laryngectomy tube is provided in case the one placed during surgery becomes lost or damaged.

How do I get more HMEs?

You will return for a follow-up appointment with your surgeon, typically 1-2 weeks after leaving the hospital. At this time, you will also meet with a Speech-Language Pathologist. During this visit you may receive more samples of HME types to try. When indicated, we will write a prescription for the type you like. You may run out of HMEs after discharge and before your follow-up visit. This happens and is normal. If this happens to you, continue wearing your laryngectomy tube without an HME and use your moist air machine for continued pulmonary benefit until you see the Speech-Language Pathologist.

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