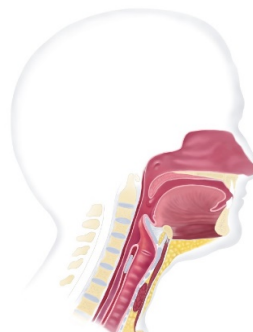


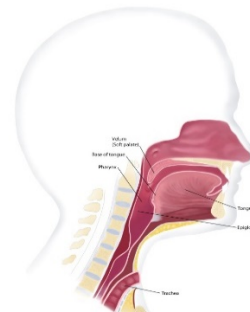
## Heat Moisture Exchange following Laryngectomy

Laryngectomy surgery involves removal of the voice box (larynx) and results in changes to breathing, smell, swallowing and voice.

After surgery, the air bypasses your nose and mouth and all breathing is done via the stoma opening in your neck. This change means that your lungs no longer benefit from the key functions that the nose and upper airway provide, namely warming, moistening, and filtering the inhaled air.



Before laryngectomy – breathing via nose/mouth



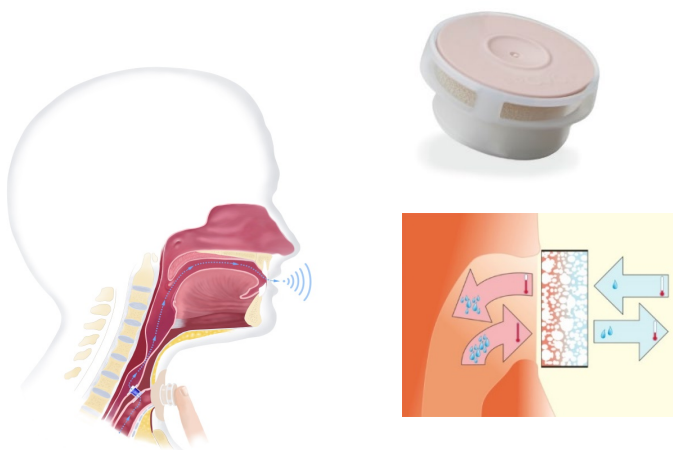
After laryngectomy – breathing via stoma

Without this conditioning system, dry, cold, and dusty air can enter your lungs directly via the stoma. As a result you may experience the following:

- frequent coughing
- increased mucus production
- chest infections
- irritation of the windpipe
- sleeping problems and fatigue

### What is a heat moisture exchanger (HME)?

**A heat moisture exchanger (HME)** has been designed to replicate the functions of the nose and upper airways to improve respiratory function following laryngectomy.



The HME cassette is a plastic device with a foam centre that is placed over the stoma opening.

It warms the air and makes it moist. It traps the warmth and humidity from the air you breathe out and passes it onto the air you breathe in.

The foam also helps to filter the small particles in the air you breathe in.

***People who consistently use a HME report that they produce less mucous, cough less, sleep better, and breathe more easily.***



## When can I use a HME?

There are a range of HME devices especially designed to be worn during everyday activities including:

- Relaxed breathing – e.g. cooking, shopping, reading.
- Physical activity – e.g. gardening, walking, cycling.
- Talking – using voice prosthesis with finger occlusion and hands-free device.
- In crowded places or dusty environments when extra protection is needed.
- Sleeping.

## How do I use a HME?

The HME cassette can be housed in the following:



Laryngectomy tube or button

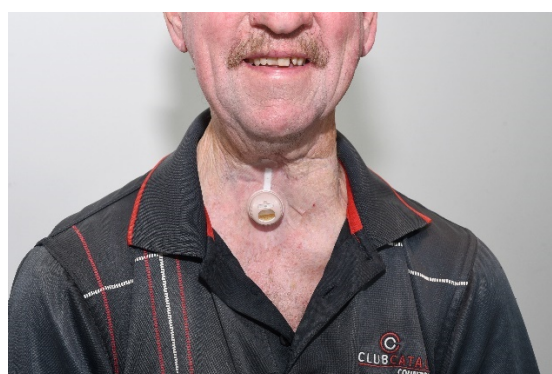


Adhesive attached on the skin

If you are using a voice prosthesis you can voice with a HME by:



Depressing the centre of HME cassette



Using a hands-free device

- HME cassettes are single use only and need to be discarded when soiled or at least every 24 hours to ensure best results.

***If you would like more information and to trial a HME device please contact your speech pathologist or ENT specialist***