

A Guide to the Management of Exercise Induced Laryngeal Obstruction (EILO)

What Is EILO?

This is the term used when the larynx (voice box) tightens or partially closes during intense exercise. When this happens it becomes hard to breathe, especially when breathing IN. Signs include hearing a noise or wheeze as you are breathing IN and a feeling of tightness in the upper chest or throat. These feelings may stop you from exercising and may also make you feel panicked, scared or frustrated. Symptoms usually **stop quickly** when you stop exercising and rest.

How Is It Different from Asthma?

EILO affects the throat (upper airway). Asthma affects the lungs (lower airway). EILO starts during moderate to high-effort exercise and rarely responds to inhalers. Asthma tends to start more slowly after exercise and your symptoms or breathlessness may worsen even after you have stopped exercising and often respond to 'Reliever' inhalers.

What Can Trigger EILO?

- High intensity exercise
- Short, fast breathing
- Stress
- Dry, cold, or humid air
- Neck and shoulder tension
- Nasal congestion

Tips to Prevent EILO:

- **Manage Nasal Congestion:** Keep the nose and nasal passages clear and open to enable you to breathe through your nose. Ensure that any Post Nasal Drip is treated. Nasal rinsing can help, as can reminding yourself to keep your mouth closed. (see Your Guide to the Nose Leaflet).
- **Stay Hydrated:** Keeping the throat moist at all times, especially when exercising.
- **Treat Acid Reflux:** Speak to your doctor if you have heartburn as this can make symptoms worse.
- **Maintain Good Posture:** Stand, walk, run tall, keep your chin tucked, and shoulders relaxed. Look straight ahead-not up or down.

Management of EILO

The first step to managing EILO is to become aware of how you breathe.

Try to establish an efficient breathing pattern when at rest and during movement. See our resources 'Guide to Good Breathing' 'Guide to the Nose' leaflet too.

Using your nose: Breathe through your nose for as long as you feel comfortable. If this becomes too difficult or uncomfortable try breathing IN through the nose and OUT through the mouth. As the exercise becomes more intense you may need to breathe in and out through the mouth. Continue to try to breathe through the nose for 1-2 breaths every so often if you are able (see Reset Breaths below).

Pursed-lip breathing: This may be beneficial as the intensity of exercise increases

The in-breath should be **relaxed, and calm** (avoid forcing the air in)

For the out breath **Blow out gently through your mouth** (as if blowing out a candle).

Reset breaths: Every so often take 2–3 slow, deeper breaths in through the nose and out through pursed lips to make sure you are fully emptying your lungs. This helps to relax the shoulders and bring the air lower into your chest.

Sniffing in quickly through the nose and **blowing** out through pursed lips. Repeat 3–4 times

Slowing your breathing a little in anyway you feel comfortable-without trying too hard!

EILO-BI (EILO Biphasic Inspiratory) breathing techniques

- **Hoover Technique:** Breathe out with a soft “hoo” sound (lips pursed). Breathe in through your teeth, then open your mouth halfway through and make a “fvaah” sound
- **Tooth Technique:** Breathe in with a 'ffff' sound through teeth behind lips, then open mouth quickly
- **Lip Technique:** Purse lips, breathe in through them, then open mouth to finish the breath
- **Nose Technique:** Tongue on roof of mouth, breathe in through nose, then drop tongue to finish the breath
- **Shlurp Technique:** Tongue behind front teeth, breathe in making a 'shlurp' noise, then open mouth

The essential components for management of EILO:

- **Efficient Breathing:** Open your chest and use your ribs. This reduces effort and keeps your throat open.
- **Control the Throat:** Use special breathing techniques (such as pursed-lip breathing) to prevent throat closure.
- **Confidence:** Knowing what's happening helps your brain feel safe. Practice builds trust in your breathing.

Practice Makes Perfect:

These techniques can be tricky to learn. Practice in front of a mirror at rest and regularly during light exercise and in low stress situations before progressing to harder exercise. Use the techniques as soon as symptoms start. Start every 4th breath, then every 3rd, then alternate breaths. Check in with your breathing while exercising. Notice if your breathing is getting faster or your shoulders are moving more.

ACT EARLY!

Quick Summary:

At rest: Breathe in and out through your **NOSE** slowly.

During gentle exercise: Breath in & out through your nose, if this is not comfortable try intermittently breathing out through your mouth.

Intense exercise: Relaxed mouth breath **IN** and longer mouth breath **OUT** as needed.