

Patient information from BMJ

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Laryngeal mask airway

What is a laryngeal mask airway?

A laryngeal mask airway (LMA) is a tube that passes over the tongue and along the larynx, to deliver oxygen to your lungs.

The **larynx** is what's known as the "voicebox". It helps you to breathe and make sounds.

An LMA is placed through the **mouth**. On the end of the tube that goes into your mouth is an inflatable silicone cuff. When this is inflated inside your larynx, it blocks your esophagus (food pipe), so that the oxygen only goes into your lungs, where it's needed.

Some newer LMAs may be slightly different and have a gel cuff instead of an inflatable one. This gel cuff works by molding itself around your airway and creating that tight seal so that oxygen doesn't enter your esophagus.

After an LMA is placed, oxygen is then fed through the other end of the tube and goes directly to your lungs.

Why might I need a laryngeal mask airway?

The main reason why you may need an LMA is to help you breathe steadily during surgery while under general anesthetic.

You might also need this procedure if you're struggling to breathe on your own and you're unconscious. When you're unconscious, you don't have a gag reflex so it's easier to put an LMA in place. It's one of several methods that can be used to help someone whose breathing has stopped or is weak.

What will happen during the procedure?

This procedure will almost always happen when you are is unconscious, either because you're having surgery with a general anesthetic, or because you are having a medical emergency.

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If you are having surgery and need an LMA, you'll be given a general anesthetic first which means you won't be awake when an LMA is placed.

The medic performing the LMA procedure will position your head and chin so that your airway is open. They will then:

- **pass** the tube with the cuff down into your larynx until it is in position
- **inflate** the cuff to make sure that oxygen goes into your lungs and not your stomach (newer LMAs may have gel cuffs so they won't need inflating)
- **attach** the LMA to the tube that is supplying oxygen
- **check** the LMA is in position by making sure that your chest is rising and falling steadily, and by listening to your chest with a stethoscope.

What are the risks with a laryngeal mask airway?

If you have this procedure, the medic treating you will keep a close eye on how it is working. LMAs are generally **safe** and easier to insert than other airway tubes, but problems do still sometimes happen.

For example, if the oxygen flows into your stomach, instead of your lungs, this can cause vomiting. If this happens, there is a chance that you could breathe vomit into your lungs, and that this could then block your airway. It could also lead to an infection in your lungs known as aspiration pneumonia. But this is usually very uncommon.

Other problems that could happen include injury to your teeth, mouth, or throat when the tube is first being placed. Sometimes, LMAs can also cause tongue swelling if left inside your mouth for a long period of time or the cuff is overinflated.

If the medics think you may have a spine injury, they will take special care when performing this procedure. They will try and open your airway without moving your head, so that they don't disturb your spine.

What can I expect afterwards?

An LMA is a **temporary** airway to help you breathe. This means that you can only have it for several hours at the most. After then, it must be removed or replaced with a different tube that can stay in your airway for longer if you need it.

Once you can safely start breathing again on your own, the LMA will be removed. But the medics treating you will keep a close eye on you to check you can still breathe properly on your own.

Your doctor might also want to do a blood test to make sure that enough oxygen is getting into your blood.

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