

Tracheostomy and Intensive Care

Patients in an Intensive Care Unit often need help with their breathing and they may have a tracheostomy.

This information sheet will explain more about tracheostomies.

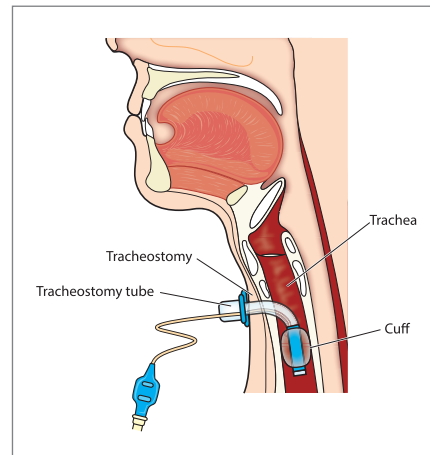


Contents

What is a tracheostomy?	3
Why did I need a tracheostomy?	3
What is it like to have a tracheostomy?	4
How is a tracheostomy put in?	5
Can I speak when I have a tracheostomy?	5
How will doctors know when I am ready to come off breathing support?	6
When can my tracheostomy be taken out?	7
How will my tracheostomy be taken out?	8
Will I have a scar?	9
For more information	9

What is a tracheostomy?

A tracheostomy is a small hole which is made through the front of your neck into the windpipe (known as a trachea). This hole is called a 'stoma'. A small plastic tube is then put into this hole to keep it open and the tube is connected to a ventilator (breathing machine), so that air can be blown into your lungs. This means that you are breathing through the tube in the tracheostomy hole rather than using your nose or mouth and so you will not need a mask or tubes in your mouth to provide extra air.



Most tracheostomy tubes have a plastic cuff (sometimes called a balloon) around the lower part of the tube. This can be inflated (have air put into it) to keep the tube in the right position in your windpipe and to stop it from moving around. The cuff also helps to stop your saliva going from your mouth and into your lungs, because this can cause a chest infection (as saliva is usually swallowed into your stomach).



You may hear a tracheostomy also referred to as a tracheotomy, which is the American word for it.

Why did I need a tracheostomy?

When you were critically ill, a ventilator was needed to help you to breathe because your body was not able to take in enough oxygen or remove carbon dioxide. Carbon dioxide is the waste product of breathing and we are usually able to breathe it out.

When you first needed help with your breathing, you will have had a tube going into your windpipe from your mouth (this is called an endotracheal tube). This tube is usually only used for a short time because it can be uncomfortable,

“A tracheostomy has many benefits”

especially for patients who are awake and no longer sedated. Sedated means when you are given strong drugs to keep you asleep. This tube can also cause damage to your voice box and mouth if it is kept in for a long time.

If you still needed breathing help for a longer time, a tracheostomy would have been put in. The medical staff will have talked to you about this with you if you were well enough to understand it, or if you were not able to, it may have been discussed with your family or partner.

A tracheostomy has many benefits compared to having a tube in your mouth to give you air:

- It is more comfortable than having a tube in your mouth, because it doesn't make you feel like you want to gag when you are awake. This means it is easier to wake you (to be given less of the drugs that were keeping you asleep).
- It is easier for staff to keep your mouth clean and to stop sore patches developing on your lips and mouth
- You will be able to move your mouth normally which may help you communicate because staff and family might be able lip read what you want to say (as you won't be able to speak with a tracheostomy in at first).
- You may be able to come off breathing support more quickly because you can be awake when you have a tracheostomy. This means you can start to do exercises to help you get stronger.

What is it like to have a tracheostomy?

Sometimes it can feel a bit harder to swallow with a tracheostomy tube in place, so it may feel a little strange. This is because your food pipe (oesophagus) is

behind your windpipe and the cuff on the tracheostomy tube can press on your food pipe when you swallow.

You may produce more mucus from your lungs. It is quite normal for this to happen because having a tube in your airway will irritate your lungs which makes them produce more mucus. Also, if you have had a chest infection you will have more mucus. However, you may not be strong enough to cough out this mucus. The nurses or physiotherapists will then need to 'suction' down the tracheostomy tube to take out the mucus.

Suction is when a smaller tube is put in the tracheostomy tube. This causes the same physical reaction as if you were coughing and it helps to bring up mucus from your lungs. The staff can then suction (hoover) out any mucus out to make it easier for you to breathe. This can feel unpleasant because it can make you gag. It can feel upsetting if you have it done when you are sedated and you don't understand why you are gagging. Your visitors may be asked to wait outside while this is being done.

While you are in the Intensive Care Unit (ICU), physiotherapists will help you to strengthen your breathing muscles and cough, so you can begin to clear the mucus by yourself. Getting your muscles stronger in this way will also help you come off any breathing support.

How is a tracheostomy put in?

A tracheostomy is normally put in whilst you are sedated, so you will not have been aware of it being done. This is normally done in the ICU but it is sometimes done in the operating theatre.

Can I speak when I have a tracheostomy?

When you first have a tracheostomy, you will not be able to speak. This is because the cuff on the bottom of tracheostomy tube must be inflated when you are first on a ventilator to allow all the air from the breathing machine to enter your lungs from the tracheostomy tube. The inflated cuff stops air from passing over your vocal

cords and this means that you are not able to speak.

Your nurses will find ways to help you communicate, even though you can't speak. They may encourage you to mouth words, use picture or letter boards or ask you to write things down. In some ICUs a Speech and Language Therapist will come to work with you.

As your breathing gets better and you require less support from the breathing machine, the cuff can be deflated (air let out of it). At first, this will just be for a short amount of time, and then for a longer time as you get used to it.

“nurses will find ways to help you communicate”

At this point, you might be able to start using a speaking tube, which has a speaking valve put on it. This is put into the main tracheostomy tube and helps you to speak by closing the valve slightly. This means you can speak because as the valve closes, it pushes air up past your vocal cords. Some patients find that it can feel harder to breathe when they start using a speaking valve (because when the valve closes slightly it can feel more difficult to breathe out). It is worth practising with it to see if you can get used to it. You may find that your voice is very weak to start with but with practice you will be able to make sounds that are clearer.

How will doctors know when I am ready to come off breathing support?

Coming off breathing support and reducing your need for the tracheostomy is called 'weaning'. The muscles you normally use to breathe will be weak and they will get tired quickly so it is important to find a balance between exercising the muscles (to make them stronger) and resting the muscles to avoid getting too tired. To help you come off the ventilator, you will start by having short breaks from it, or have less air from it and work up to until you are breathing on your own without help from the machine. This can take some time, as your breathing muscles need to be trained to get strong again, so you may move between times when the ventilator machine is doing most of the work and time where you are

doing most of the work.

Your nurses will keep a very close watch on you while this is happening. They will look at how quickly you are breathing, the levels of oxygen and carbon dioxide levels in your blood and how hard you are finding it to breathe. This will tell them how well your body is managing with less support from the machine and if you can manage without it.

Sometimes, doctors may also change the tracheostomy tube you have in for a thinner tube first to see if you can manage with less air from the ventilator, before taking out your tracheostomy.

When can my tracheostomy tube be taken out?

Your tracheostomy can be taken out when:

- Your lungs are working well so you don't need extra air from a ventilator. Staff will be looking at the levels of oxygen and carbon dioxide in your blood to check this.
- Your cough is strong enough to remove the mucus in your lungs on your own. This means that your muscles that you use for breathing (respiratory muscles) are getting stronger.
- You are swallowing as normal, so any saliva will go into your stomach and not into your lungs.
- You find it comfortable to have the cuff on the tracheostomy tube deflated (let down) for 24 hours.
- You need less extra oxygen to be given through your tracheostomy tube.
- You feel comfortable breathing through your nose and mouth again. To check this, the end of the tracheostomy tube is covered with a finger or speaking valve to allow air to come up from your lungs and go past your vocal cords.
- You are able to move around more, such as sitting up in bed or out in a chair.

Sometimes patients need help with their breathing even when they are ready to

leave hospital, and then they will go home with a tracheostomy. They will see the Ear, Nose and Throat medical team before they leave hospital and be shown how to look after their tracheostomy. They would then be looked after by healthcare professionals in the community, such as district nurses, who will check their tracheostomy regularly.

How will my tracheostomy be taken out?

When you are ready to have the tracheostomy tube taken out, it will be done at your bedside on the ICU or ward. It is quick to do and it won't hurt. The cuff will be fully deflated and the tube is simply removed by a nurse or physiotherapist. A small dressing will be placed over the hole and this will close over a period of about 5-10 days.

For the first few days, you should put two fingers over the dressing and press firmly where the hole is when you want to cough and speak. This will force the air up over your vocal cords to strengthen your cough (any mucus should come in to your mouth) and make your voice stronger. At first some mucus may come out of the hole so the dressing will need to be changed regularly, but this will stop as the hole heals. Sometimes this opening takes a little longer to heal, and the nurses will make sure it stays clean.

If you are out of hospital, and the hole starts to bleed or becomes very red and sore, you can contact your GP to ask for advice.

Your swallowing muscles may have become weaker, so it may take a little time for them to return to normal once the tracheostomy tube is removed. To begin with, it may help to eat foods that are easy to swallow such as yoghurt and soup. You may want to take smaller mouthfuls and eat a little slower than you used to do, just while you are getting used to eating again and until your swallowing muscles get stronger.

Will I have a scar?

You will be left with a scar on your neck, but it will fade over time and become less obvious. Once the scar has healed, you might want to gently massage the scar (using small circular movements) with a non-perfumed cream or oil which might help the scar to be less obvious.

More information

If you have any concerns or questions about your tracheostomy, you can speak to the ICU or ward staff if you are in hospital, or a community healthcare professional (such as a physiotherapist, district nurse or GP) if you are out of hospital.

The NHS website has some information about tracheostomies:

www.nhs.uk/conditions/tracheostomy

This factsheet was written by Catherine White, Information Manager ICUsteps, Eleanor Douglas Lecturer/Practitioner Physiotherapist, University of Nottingham and Nottingham University Hospitals NHS Trust and Ashley Quinn, Inpatient Superintendent and ITU lead, Darent Valley Hospital.

Our information and general advice is based on experiences of former ICU patients and it should not replace the advice you receive from healthcare professionals. ICUsteps cannot accept responsibility or liability from the use of this resource. ICUsteps is a patient-led support charity. For more information, resources or to make a donation, visit our website: icusteps.org