

Information for patients and carers

Cough Assist Devices

Clearway 1 and 2



What is a cough assist?

A mechanical cough assist is a machine which can help you clear secretions or phlegm from your lungs. The aim of the treatment is to help you breathe in and out deeply and quickly. This can help when your own cough is not strong enough.

The cough assist is usually delivered through a mask over your mouth and nose. It helps you take a big breath in then helps you breathe out quickly; you would feel a gentle sucking sensation.

What is it used for and why?

There are many different reasons why a cough assistor may be needed including:

- Muscle problems that make breathing and coughing difficult
- Bone problems that make the chest small and coughing difficult
- It may help you clear mucus from your chest and may help prevent chest infections
- It can be used alongside other treatments to prevent breathlessness when you are lying down and shallow breathing that leads to a strain on your heart and daytime sleepiness

If you are unsure about the reason why you have been given the machine, please ask your physiotherapist or doctor.

Are there any risks of using a cough assistor?

Do not use the cough assist if you have any of the following:

- Undrained pneumothorax (hole in the lung without a chest drain)
- Enlarged air sacs in the lungs (bullae)
- Broncho pleural fistula (hole in lining of your lung)
- Bleeding in the lungs/coughing up blood
- Recent airway surgery/damage to your lungs

- DO NOT use the machine within one hour of eating
- If you feel that you are having to use the machine too often and you are still struggling with secretions, then you need to contact your GP and check for signs of a chest infection

It is important to check the pressures before starting treatment to ensure the settings match the prescription you have. Use of high pressures could potentially cause a pneumothorax (hole in the lungs). You will have been carefully assessed and settings decided on your clinical need.

We will carefully choose settings to minimise any risk of harm to you. If you experience any sudden sharp pain which does not go away, stop using the device and contact your GP or visit accident and emergency if you feel you are seriously unwell.

You may experience bloating in your tummy from air being pushed into it, or you may feel a stretching feeling of your ribs and muscles due to you getting a large breath. These feelings are nothing to worry about but talk to your healthcare professional if you are concerned.

When is a cough assist used?

You will be advised by your healthcare professional about how to use the machine. You may be advised to use the device only when you are struggling to clear mucus, or more regularly throughout the day.

Before using the machine

Important: You must CHECK the machine settings each time before starting treatment:

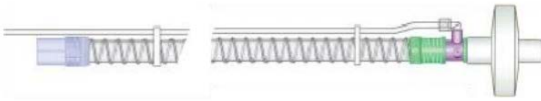
- The cough assist machine you have been given operates from the mains i.e., it must be plugged in when in use. If necessary, a battery can be provided to allow use when away from mains electricity.
- To turn the machine on, press the switch on the front of the machine.



The settings are displayed on the screen when switched on.

Circuit set up

The circuit for each machine is slightly different. If you are using the Clearway 1 please set up the circuit as below. The mask will attach to the far end after the filter.



If using the clearway 2 the circuit is below. The mask will attach to the far end after the filter.



CHECK that the filter, tubing and mask are attached to the cough assist and that there are no holes/splits in the tubing.



Clearway 1



Clearway 2

What if I am concerned about the safety checks?

If there are any concerns about the checks you have performed: **DO NOT USE THE MACHINE** contact the team that provided the machine for further advice.

How do I use a cough assistor?

Your healthcare professional will write in this leaflet the recommended settings and use of this device. Please refer to the instruction manual provided with your machine for detailed operating instructions.

If you need a nebuliser or medication before treatment have these first.

↓
Check the circuit and mask are intact and attached.

↓
Switch on the machine.

↓
Hold the facemask tightly over your mouth/nose or attach tracheostomy connector to your tracheostomy.

↓
Press the start button to begin treatment, if using a triggered mode take a breath after pressing the start button to begin treatment.

Clearway 1:



Clearway 2:



↓
Complete the cycle of breaths in and coughs.

↓
Remove the mask or tracheostomy connector and have a short rest or clear mucous.

↓
Repeat the recommended number of cycles or continue until your chest feels clear, rest between cycles.

My machine and settings

Model:

Settings:

Date	
Mode	
Insufflation pressure and repeat	
Exsufflation pressure and repeat	
Ti	
Te	
Pause	
Cycle repeat	
Vibration/ oscillations	
Recommended usage – Number of cycles/treatment and amount of treatments/day. (e.g., each cycle consists of 4-6 inhalation/ exhalations)	

Cleaning the machine and consumables

It is important that your machine is placed on a firm, flat surface. It should be kept clean and dust-free. Switch device off after use.

Masks: wash daily in warm soapy water. If using a tracheostomy connector this should be replaced every 24 hours and kept covered when not in use.

Filters: Inspect all filters weekly, there is one in the circuit and another at the back of the machine. Replace the white plastic filter within the circuit if visibly soiled or contains trapped moisture. At the back of the machine; Clearway 1- white filter can be replaced if visibly soiled. Clearway 2 - black foam can be washed or vacuumed and put back when dry, the white filters need to be disposed and replaced if visibly soiled.

Tubing: The tubing should be washed in warm soapy water every week. If mucus is coughed into the tube, please wash after use. Please ensure that the tubing is dry prior to reconnecting to the cough assistor.

Machine maintenance and repair

If your machine breaks down or has a fault, please contact our team **in office hours on 01772 523838**.

If it breaks down or has a fault **outside office hours**, you can call the respiratory high care ward on **01772 522589**.

If you cannot manage without the machine, they will arrange to send a spare device out or for you to collect. If the issue isn't urgent, we will deal with this in office hours.

Routine servicing will be arranged at your home automatically, but please get in touch if you notice the machine service is out of date.

Replacement consumables

If you require any replacement consumables e.g., tubing, masks, filters etc. please telephone the team on **01772 523838**. We will post replacement equipment out to you, or you can arrange a convenient time to collect any equipment required.

Are there any alternatives?

Your healthcare professional may be able to teach you exercises, positions or supported cough techniques which may help you to clear mucus. There is also a simple device called a breath stacker which may help people with weak coughs to clear mucus. Please ask your healthcare professional if you require any more information about these alternatives.

Travel abroad

Most machines can be used abroad with a plug adaptor. You must ensure that your machine is taken as hand luggage. The team can provide you with a letter to allow this. If you are unsure about travelling, please contact the team for advice.

Electricity supply

Please inform your electricity provider that you are dependent on medical technology. They can add you to a medical priority list to prioritise power being restored to your property in case of a disruption to your supply. This does not mean you will not get power cuts, but they will aim to restore power to your property as a priority to allow you to use your electronic equipment. If this is a common problem for you, please discuss with us so we can make sure you have a backup battery.

Contact details

Should you require further advice or information please contact the team looking after you.

Lancashire and South Cumbria Ventilation Service **01772 523838**

OR

MND team: **01772 522545** Email: MNDteam@lthtr.nhs.uk

We will occasionally be required to share some of your personal information with a secure and approved 3rd party, for example to service your machines. This is only ever done in situations where it will improve the care provided by the ventilation service, if you have any concerns with this or would like to discuss further, please speak to a member of the ventilation service.

Sources of further information

www.lancsteachinghospitals.nhs.uk

www.nhs.uk

www.accessable.co.uk

www.patient.co.uk

Training videos are available from:

<https://vimeo.com/showcase/9971801>

QR Code-Training Videos:



www.educationbybreas.com

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www.lancsteachinghospitals.nhs.uk/patient-information-leaflets

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If you want to stop smoking, you can also contact Smokefree Lancashire on Freephone **08081962638**

**Please ask a member of staff if you would like help in understanding this information.
This information can be made available in large print, audio, Braille and in other languages.**

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