

Information for patients and carers

Cough Assist Information



Division of Medicine - Neurology



What is a cough assist machine?

A cough assist machine helps to clear secretions (phlegm) from your lungs by applying a positive pressure to fill the lungs, then switching to negative pressure to produce a high expiratory (breathing out) flow rate and simulate a cough.

It can be applied via a mask, mouthpiece, or tracheostomy tube. It can also be used to maintain lung volumes (size of your breath). It is most useful in people with an ineffective cough or who struggle to take a deep breath in due to muscle weakness in neurological conditions such as muscular dystrophies, myasthenia gravis, spinal cord lesions, MND etc.

It must only be used as advised by the healthcare professional that has provided the teaching and must never be used on anyone else.

Benefits:

- Improved mucus clearance
- Help to maintain your lung volumes
- Help to maintain the suppleness of the chest wall
- Improved voice quality

You should not use the cough assist machine if you have:

- Undrained pneumothorax (air around 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 the frequency of treatments is increasing and you are still struggling with secretions, then you need to contact your GP and check for signs of a chest infection

Some of the side effects of using the cough assist machine:

- Bloated tummy
- Chest soreness
- Fatigue/tiredness
- Drop in oxygen levels

Cleaning of machine and consumables

- Everything is washable with hot soapy water except the white plastic filter
- Daily clean the mask as required; wash the tubing if it is soiled
- Weekly wash the tubing, wipe clean the machine with a clean damp cloth
- Monthly change the white plastic filter and wash the black foam filter at the back of the machine, replacing it when it is dry

How to use the cough assist machine

The following flow chart is an example of how a treatment cycle works:

Do I need any medications or a nebuliser before treatment? If yes then do this first.

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Set up the machine, tubing and mask and switch machine on.



Press therapy (right button) to begin.

Machine will be set to start automatically or to trigger as soon as the patient takes a breath.



Complete the recommended number of breaths (normally 3-6) described as a "cycle of breaths".



Remove the mask and have a rest for 30 secs and clear any debris that has been cleared.



Repeat the breath cycles for the recommended amount or until you feel the secretions have cleared, rest between each cycle.

Frequency of treatment:

Name of Patient:	
Number of Cycles and frequency of use:	

Problems

- You should have a look at the machine and electrical cable each time you use the machine. If you have any concerns with regards to the machine do not use
- If you need replacement filters, tubing or mask; contact the relevant team:

MND team: 01772 522545

(Email: MNDteam@lthtr.nhs.uk)

or

the long-term ventilation team: 01772 522340

(Email: lccventilation@lthtr.nhs.uk)

 If your symptoms or condition worsens, or if you are concerned about anything, please call your GP, 111, or 999.

Risks

- There is a very small known risk of pneumothorax (collapsed lung) normally due to an underlying lung abnormality associated with advanced lung disease
- You must be careful as the machine is an electrical piece of equipment so normal advice regarding electrical safety applies

Contact details

Should you require further advice or information please contact:

MND Team: 01772 522545 / MNDteam@lthtr.nhs.uk

Long-term Ventilation Team: 01772 522340 / ccventilation@lthtr.nhs.uk

Sources of further information

www.lancsteachinghospitals.nhs.uk www.nhs.uk www.accessable.co.uk www.patient.co.uk

Lancashire & South Cumbria MND Care Centre, 2020, Cough Assist training video:



Philips Respironics "My cough assist – patient guide to cough Assist E70", Koninklijke Philips 2016



All our patient information leaflets are available on our website for patients to access and download:

www.lancsteachinghospitals.nhs.uk/patient-information-leaflets Lancashire Teaching Hospitals NHS Foundation Trust is not responsible for the content of external internet sites.

Lancashire Teaching Hospitals is a smoke-free site. Smoking is not permitted anywhere on any of our premises, either inside or outside the buildings. Our staff will ask you about your smoking status when you

come to hospital and will offer you support and advice about stopping smoking this will include Nicotine Replacement Therapy to help manage your symptoms of withdrawal and the opportunity to speak to a nurse or advisor from the specialist Tobacco and Alcohol Care Team.

If you want to stop smoking, you can also contact the Quit Squad Freephone 0800 328 6297.

Please ask if you would like help in understanding this information. This information can be made available in large print and in other languages.

Gujarati:

આ માહિતીને સમજવામાં સહાયતા જોઇતી હોય તો કૃપ|કરીને પૂછો. આ માહિતી મોટા છપાણ માં અને અન્ય ભાષામાં ઉપલબ્ધ કરી શકાય છે.

Romanian:

Vă rugăm să întrebați dacă aveți nevoie de ajutor pentru înțelegerea acestor informații. Aceste informații pot fi puse la dispoziție în format mare și în alte limbi."

Polish:

Poinformuj nas, jeśli potrzebna jest ci pomoc w zrozumieniu tych informacji. Informacje te można również udostępnić dużym drukiem oraz w innych językach

Puniabi:

ਜੇ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਸਮਝਣ ਵੱਚਿ ਮਦਦ ਲੈਣੀ ਚਾਹੋਗੇ ਤਾਂ ਕਰਿਪਾ ਕਰਕੇ ਇਸ ਬਾਰੇ ਪੁੱਛੋ। ਇਹ ਜਾਣਕਾਰੀ ਵੱਡੇ ਪਰੀਟ ਅਤੇ ਹੋਰਨਾਂ ਭਾਸ਼ਾਵਾਂ ਵੱਚਿ ਮਹੱਈਆ ਕੀਤੀ ਜਾ ਸਕਦੀ ਹੈ।

Urdu:

دو سر ی زیانوں او ر بڑ ی اگر آپ کو دی معلومات سمجھنے کے یے لمدد یک ضرورت ہے تو ی کی چھیا کی بی بہ اب کست ہو کسکت ہے براغ میر کیان ہو ے کچہ کہ معلومات

Arabic:

مطبو عة بأحر ف كبير ة و بلغات إذا كنتَ تريد مساعدة في فهم هذه لمعلو مات يُر جي أن <u>تطلب</u> أخرى يمكن تو فير هذه المعلومات

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