

## Airway Clearance Physiotherapy: Huff & Cough

Airway clearance is an essential part of the treatment routine for people with CF. Performing regular airway clearance helps loosen the thick, sticky mucus from the airways so it can be cleared more easily with huffing and coughing.

### What is a huff?

A huff is an active breath out with an open throat, like a sigh, as if trying to fog up a mirror. Huffs can be taught from a young age using a tube to keep the back of the throat open. Huffing changes the airflow in the airways to help move mucus towards the mouth so it can be cleared more easily with a cough. It should be taught by a CF specialist physiotherapist and be part of all airway clearance routines.

### Huff technique

Different types of huffs move mucus from different sized airways. Longer, more gentle huffs help to move secretions from lower, smaller airways. To do this type of huff, take a small to medium breath in and huff the air out, using your tummy muscles, being careful to avoid a wheeze or cough. Listen for the crackling noise your mucus makes – if it is early in the breath out, the mucus is higher up in your airways, closer to the mouth.

If the crackles are later in the huff you may need to keep huffing at that volume until it moves. Once you can hear that the mucus is higher, in the larger upper airways, you can use a short, fast huff to shift the mucus. Take a deeper breath in and huff the air out more quickly to clear the mucus, or use a cough.



Try not to cough until you can clear the mucus with one or two coughs. Always do quiet breathing after huffing to help relax the airways.

### Things to remember

- When learning to huff, use a tube to help keep your mouth and throat open.
- It might help to learn huffing in front of a mirror and use a tissue in the end of the tube to get the right technique.
- Use your tummy muscles to squeeze air out without causing a wheeze or cough.
- Use different sized huffs to shift mucus from different airways.
- Always use relaxed breathing after huffing and coughing.

### Useful resources

- [Forced expiration technique](#) (CF Physio)
- [Forced expiration technique](#) (Bronchiectasis toolbox)
- [Airway clearance factsheets](#) (CFWA)