Breathing exercises: Huff coughing

Huff coughing is a gentle way of coughing that helps clear mucus from the lungs.

What is huff coughing?
Coughing is the natural way of getting mucus out of the lungs. Huffing is a gentle way of coughing. Your child will perform huffs at two different levels.

• Low-lung volume huffs help move mucus from the smaller airways lower in the lungs to the larger airways.
• High-lung volume huffs help move mucus from the larger airways up and out of the lungs.

Why does my child need to perform huff coughing?
Children who have lung conditions, like cystic fibrosis, may benefit from huff coughing. It can help them remove mucus from their airways. Huff coughing is a gentler form of coughing because you keep an open glottis (opening between the vocal cords) while exhaling. This makes it easier to move mucus out of the lungs.

How does my child perform huff coughing?
Have your child follow these instructions to perform huff coughing:

Low-level huffs
1. Take a normal-sized breath through your nose using your diaphragm.
2. Hold your breath for 3 seconds.
3. Fully exhale with an open glottis. It may help to whisper the word “huff” while breathing out.

Perform 3 low-level huffs.

High-level huffs
1. Take a deep breath in through your nose until you can’t take in any more air. Then sniff to take in even more air.
2. Hold your breath for 3 seconds.
3. Perform short, quick, forced exhalation with an open glottis.

Perform 3 high-level huffs.
Attempt to move mucus by coughing to clear the secretions.

How can I help my child move mucus from their lungs?
If your child is having difficulty clearing the mucus from their lungs, have them try the following:

1 Adjust the speed of exhalation
   - Avoid huffing too softly. Mucus flow is greatest when your child’s breath out is faster than their breath in.
   - If your child huffs too fast or too forcefully, the airway may be compressed. Your child may not generate enough airflow to effectively move mucus.

2 Take slower breaths in

3 Take long enough breaths out

4 Keep the glottis open by:
   - Using a round cardboard or plastic mouthpiece to help keep your mouth open
   - Using visual aids like tissues to blow or mirrors to fog up
   - Touching the tip of your tongue to the roof of your mouth while huffing
   - Making an exaggerated “O” with your open mouth

What if I have questions about huff coughing?
If you have questions about huff coughing, contact your child’s healthcare provider.

Notes