

Airway Clearance Techniques (ACTs)

Before watching the video about Airway Clearance Techniques at https://www.youtube.com/watch?v=1Ufj3oU_M2w study the tasks below:

ACTs are performed to loosen and move the thick sticky mucus out of the airways to facilitate breathing. All ACTs include huffing or coughing. When done consistently as part of your daily care plan ACTs can help control infection and slow the progression of damage to your lungs.

Huffing

1. How long do you hold your breath for in huffing before you exhale with an open mouth?
 - a. 2 seconds b. 3 seconds c. 5 seconds
2. In this video huffing is compared to fogging a ...
 - a. window b. glass pane c. mirror
3. Some words have been removed from the description - complete it:

larger – clean – spit – out – clear – short – deep – swallow – up – long – small

In huffing a small breath in, followed by a a/_____ exhale, moves mucus from the b/_____ airways c/_____ into the larger airways, a d/_____ breath in, followed by a e/_____ forceful exhale, moves mucus from the f/_____ airways and g/_____ of your lungs. Then you cough to h/_____ the mucus out of your airway. After coughing it's important to always i/_____ out the mucus and not j/_____ it, and remember to k/_____ the hands when you are finished.

4. The names for **other ACTs** have been mixed up in points 1 to 6 below – correct them:

- | | |
|--|--------------------------------|
| 1. Airway cycle of physical therapy | 1. Active |
| 2. Autogenic oscillating drainage device | 2. |
| 3. Chest wall physical | 3. |
| 4. High-frequency chest vest | 4. |
| 5. Positive expiratory breathing | 5. |
| 6. Active oscillating device | 6. |

5. **Active Cycle of Breathing** consists of 3 phases – which description in a, b, and c goes with 1, 2, and 3?

1. breathing control	1.	a. here you huff cough to move the mucus from the larger airways, and finally out of your body
2. chest expansion exercise	2.	b. gently breathe in through the nose to relax your airways
3. forced expiratory technique	3.	c. inhale deeply and hold your breath for three seconds

	which will get air behind the mucus and loosen it, making it move up into the larger airways more easily
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6. Autogenic drainage has three phases – put them in order:

1. you collect mucus by holding your breath for three seconds
2. take in shallow breaths to unstick mucus from the sides of the small airways
3. you move the mucus out of your airway with a hard huff cough

7. The following ACTs are almost complete – what are the key missing words?

Chest physical therapy also known as postural drainage & percussion

when another person uses cupped hands and percussion to loosen mucus from your airways when you lie in positions that use g..... to drain the mucus from your smaller airways

High-frequency **chest wall oscillating vest** is a technique that works by c..... the chest in and out to create airflow, which loosens mucus from the airway walls.

Positive Expiratory Pressure (PEP) uses r..... to open the airways and get air behind the mucus, loosening it and moving it from smaller airways to larger ones, where it is huffed or coughed out.

Much like PEP, in an **airway oscillating device (AOD)**, resistance forces airways to open. V..... from the device, also called oscillations, also shake mucus loosening it from the airway walls. Once the mucus has moved up into the larger airways you huff or cough it out of your airway.

Opracowanie mgr Joanna Mazur na podstawie:

Cystic Fibrosis Foundation, *Airway Clearance Techniques (ACTs)*, 19.05.2017 [dostęp 2.04.2020].
Dostępne w https://www.youtube.com/watch?v=1Ufj3oU_M2w .

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