



Patient Information

Chest Clearance – Autogenic Drainage

It is normal to have mucus in the airways. It is produced by cells that are in the lining of the airway walls and moves continuously up through the airways towards the throat and mouth.

What is Autogenic Drainage?

Autogenic Drainage, or 'AD', is a breathing technique that uses controlled breathing and minimal coughing to clear secretions from your chest. It involves hearing and feeling your secretions as you **breathe** out and controlling the desire to cough until secretions are high up and easily reached with minimal effort.

AD uses air flow to move secretions from the smaller (lower) airways into the larger (upper) airways. The aim is to move secretions to these large airways with breathing and then using a huff or cough to clear the secretions.

Before You Start

- If you normally use a “blue” inhaler, known as a bronchodilator (such as salbutamol or bricanyl), make sure you take this 15 minutes before physiotherapy.
- Choose a comfortable position which allows you to take a full breath, such as upright sitting, forward leaning or side lying. Relax, with your shoulders resting down away from your ears and your neck long.
- Avoid slumping/slouching as this will make it harder to take a full breath.
- Clear any secretions from your nose and your throat.

AD Breaths

The breath in should be quiet and slow, to allow time for the air to get behind secretions and prevent them from moving back down.

At the end of your breath in, pause for a few seconds keeping your upper airways and throat open and your chest and stomach as still as possible. This allows time for air to get behind the secretions and to fill your lungs completely.

The breath out should be a steady flow of air through your mouth, like a gentle sigh. If you hear a wheeze when you breathe out, you are trying too hard. If you hear secretions crackling, you are breathing out correctly.



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Locating secretions

Complete an 'assessment breath' before starting AD.

Begin with some gentle relaxed breaths known as **breathing control**.

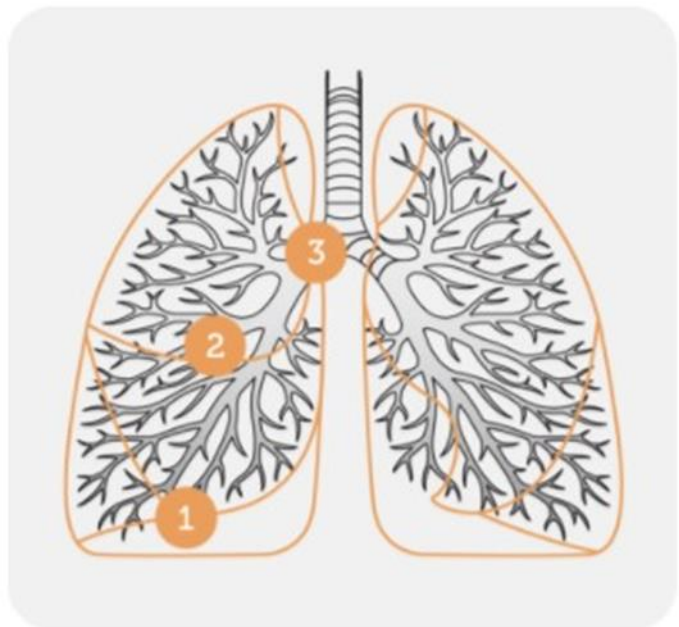
- Take a **very slow deep breath in** through your nose, to your absolute maximum possible.
- **Pause at the end of the full breath** with your mouth slightly open and count for 3-4 seconds.
- **Breathe out through your mouth**. This should be active (you can feel your tummy muscles tighten) but should not be forced.
- You should **listen and feel** for secretions crackling as you breath out

Are the crackles at the beginning, middle or end of your breath out?

Beginning = in large tubes of your chest (3)

Middle = in the middle sized tubes (2)

End = in the small tubes (1)



Moving Secretions

Now that you know where the secretions are, you can use the autogenic drainage technique to remove them. To do this you will breathe using the 'AD Breaths' at different levels in your lungs.

“Unstick”

Breathing at a low level helps move secretions from the small tubes. To do this, breathe out as far as you can, tensing your stomach muscles. Squeeze all the air out until you can breathe out no more. Take a small breath in and pause. Hold your breath for about 3 seconds, keeping your upper airways open. Breathe out through your mouth as a gentle sigh. Repeat the cycle. Inhale slowly to avoid sending the mucus back down. Keep breathing at the low level until you either feel the secretions moving, or hear them getting louder.



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“Collect”

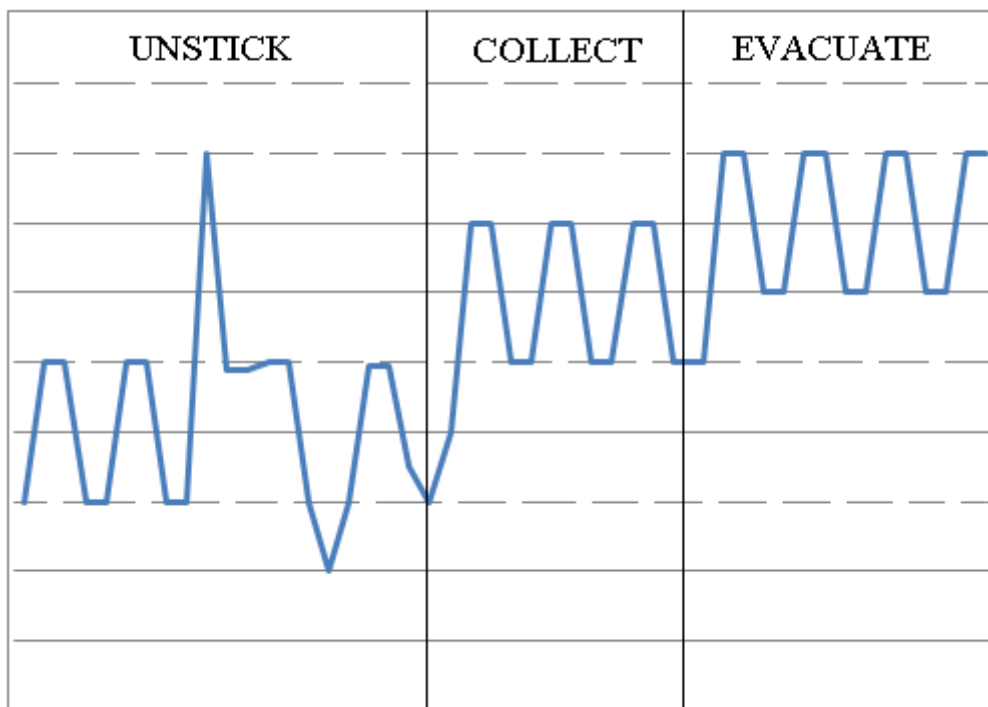
To move mucus from the middle sized tubes you can then breathe in a little deeper and not breathe out quite so far, still using AD breaths. You can then progressively use AD breaths at higher levels as the secretions move through your lungs.

“Evacuate”

When the secretions feel high up in the lungs you should be using AD breaths at a high level i.e. with deep breaths in and small breaths out.

Once you can feel the secretions at the back of your throat you should be able to clear them with one or two effective huffs or coughs.

Once you have cleared these secretions, repeat this ‘cycle’ again, until your chest feels as clear as possible.



Your physiotherapist will show you how to do AD. This guide is a reminder for you. If you have any queries or concerns regarding the information in this leaflet please contact the Acute Physiotherapy Team on 01793 605126 (8:30 – 16:30 Monday – Friday).



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From 1st January 2019 smoking will not be permitted on any NHS site in England. Smoking will not be permitted within any of our buildings or anywhere outside on our sites. Smoking facilities will not be provided. Please be considerate of others when vaping in hospital grounds.

This information sheet is available to order in other languages and formats. If you would like a copy, please contact us on 01793 604031 or email gwh.pals@nhs.net

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