

Treating Bronchiectasis

Part 2

Bronchiectasis (bron-kee-eck-tuh-sis) is a lung condition that causes cough, sputum production, and recurrent respiratory infections. (Also see “What is Bronchiectasis” at www.thoracic.org/patients). Because bronchiectasis is a condition that develops over many years and worsens with repeated infections, the main treatment goal is to reduce stagnant secretions (mucus, sputum) in the airways and germs contained in those secretions.



Your healthcare provider will help you figure out the best treatment plan for you. There are two important parts of bronchiectasis treatment:

1. Maintenance: What you do every day. This usually includes airway clearance, changes in your lifestyle, and other actions you can take to prevent infections and lung damage.
2. Exacerbations (eg-zass-er-bay-shuns): What you do when you get sick and have a change in symptoms. This usually includes increasing airway clearance and taking antibiotics to treat infection.

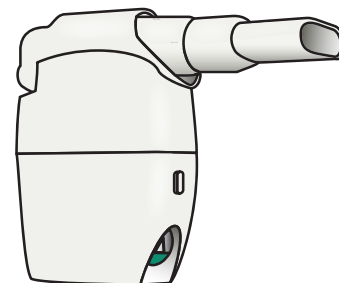
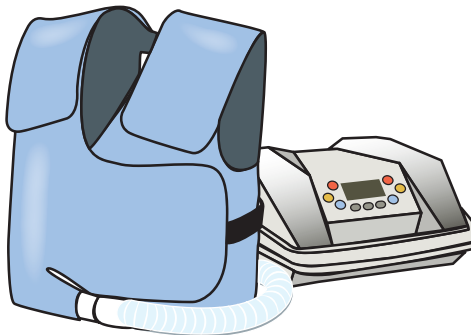
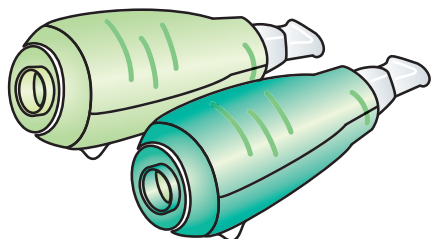
What are airway clearance techniques?

Depending on how severe your bronchiectasis is and how much mucus is produced in your airways, your healthcare provider may suggest that you learn to do one or more of the following:

Airway Clearance Methods

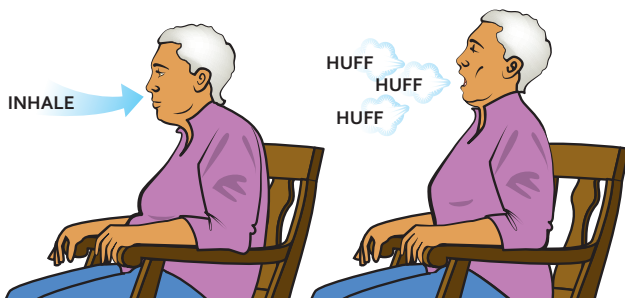
1. chest physiotherapy involves chest clapping in various positions to move mucus up to the windpipe so that you can cough it out.
2. handheld positive expiratory pressure (PEP) devices are used to loosen mucus by creating vibration while breathing through the device.
3. percussion devices which can include mechanical percussors and percussive vests (high frequency chest wall oscillation) are used to loosen mucus and move it to the windpipe to cough out.

All forms of airway clearance depend on good coughs to move loose mucus out. You can learn techniques to improve your cough strength and effort. You want to bring mucus up and out of the lungs!



Coughing Technique

During and after your airway clearance routine, you can use your cough to bring up the loosened phlegm. The most common cough technique is called the “huff cough.” It is similar to breathing fog onto your glasses to clean them: start by taking a deep breath through your nose. Exhaling in 3 equal breaths, pull your belly inward to force the air from your lungs while making a “huff” sound in the back of your throat. Repeat this 2-3 times during and after your airway clearance routine.



Inhaled (nebulized) Medications

Medicines may be inhaled to help open the airways and loosen mucus. A bronchodilator such as albuterol or levalbuterol can help relieve or prevent spasm of the airway muscles. Hypertonic saline is a concentrated salt water solution that can help loosen secretions in your airways. Often inhaled medicines are used before or during airway clearance to help bring mucus up.

Recognizing an exacerbation

While bronchiectasis is a long-term condition, you may occasionally become more ill. This is called an acute exacerbation. Often this is due to a new respiratory infection or overgrowth of bacteria that are chronic. It is important to recognize the following signs and symptoms of an exacerbation:

- Increased sputum production, and/or change in color
- Blood in sputum
- Fever
- Increased tiredness
- Worsening shortness of breath
- Unintentional weight loss, lack of appetite

If you develop any of these symptoms, contact your healthcare provider right away (promptly). You can increase your airway clearance to help get the extra mucus up. You may need antibiotics to treat the infection. Remember that repeated exacerbations can cause bronchiectasis to worsen over time.

What lifestyle changes can you make to help?

- Stay hydrated by drinking plenty of water. If you become dehydrated the mucus will also become dehydrated, making it thick and sticky.
- Exercise regularly. Jogging, biking, or brisk walking helps loosen mucus in the chest, keeping your airways clear of secretions. Regular exercise decreases exacerbations and improves quality of life in patients with bronchiectasis.
- If you smoke, stop. It is also important to avoid exposure to smoke and other air pollutants.
- Get your yearly flu shot and ask your provider if you are up to date on your Pneumococcal pneumonia vaccination. (For more information, go to www.thoracic.org/patients)
- Eat well. Maintain a healthy weight by eating a healthy diet.

Authors: Colin Swenson MD, Dean Schraufnagel MD, Ruxana Sadikot MD, MRCP(UK)

Reviewers: Mark Metersky MD, Marianna Sockrider MD, DrPH, Tim Aksamit, MD

Rx Action Steps

- ✓ Take action to help stay healthy and control bronchiectasis.
- ✓ Recognize when you have a change in symptoms and signs of an exacerbation and contact your healthcare provider promptly.
- ✓ Make sure to follow your daily treatment plan and do airway clearance as advised by your healthcare provider.

Healthcare Provider's Contact Number:

Resources

National Heart, Lung, Blood Institute (NIH)

<https://www.nhlbi.nih.gov/health/health-topics/topics/brn/>

COPD Foundation

www.copdfoundation.org

NTM Info & Research, Inc.

<https://www.ntminfo.org/>

American Lung Association

<http://www.lung.org/lung-health-and-diseases/lung-disease-lookup/bronchiectasis/>

Bronchiectasis and NTM Initiative

www.BronchiectasisandNTMInitiative.org

This information is a public service of the American Thoracic Society. The content is for educational purposes only. It should not be used as a substitute for the medical advice of one's healthcare provider.



We help the world breathe®
PULMONARY • CRITICAL CARE • SLEEP

