

Infection Prevention for Bronchiectasis Patients



It is natural for bronchiectasis patients to feel overwhelmed and worried after being diagnosed. However, patients who focus on managing their condition by preventing infections can slow the progression of the disease and gain more control over their future.

What is bronchiectasis?

Bronchiectasis is a lung condition where the airways, or the tubes going into the lungs, permanently widen. The widened airways can't get rid of mucus (sputum) easily. Bacteria can reproduce in the sputum, causing respiratory infections. Additional respiratory infections may widen the airways more, creating a cycle of increasing damage and vulnerability to additional infections.

- The two main symptoms are chronic cough and daily mucus production. Other common symptoms are shortness of breath, fatigue, and frequent respiratory infections.
- A pulmonologist will typically diagnose bronchiectasis by using a chest computed tomography (CT) scan to see detailed lung images.
- Bronchiectasis is often caused by prior infections that were severe enough to damage the lungs, although there can be other causes.

Your doctor may recommend one or more of the following techniques to help reduce sputum production, increase lung function, and reduce the frequency of infections.

Airway Clearance Techniques (ACTs)

ACTs are breathing exercises that improve sputum clearance, preventing bacteria from breeding and becoming infectious. Many doctors consider ACTs to be the most important way to manage bronchiectasis.¹ ACTs also improve the patient's quality of life and decrease mortality.² Two websites that include video instructions for performing ACTs are the Individual Management of Patient Airway Clearance Therapy (IMPACT) website (impact-be.com) and the Bronchiectasis Toolbox (bronchiectasis.com.au).



Pulmonary Rehabilitation

Pulmonary rehabilitation is a program that includes exercise training and education to help patients increase their lung function and exercise with less shortness of breath. Bronchiectasis patients who follow a pulmonary rehabilitation program can reduce the number of infections they have a year.³



Vaccinations

Keeping up to date on vaccinations against respiratory diseases, including influenza, COVID-19, pneumonia, and RSV, can reduce the severity of illness. The American Lung Association website includes a Vaccine Finder tool and answers to commonly asked questions about vaccines. lung.org/lung-health-diseases/wellness/vaccines



Medications

Medications that reduce inflammation can be effective in managing bronchiectasis. Inhaled corticosteroids reduce sputum production and may be appropriate for some patients.²



¹ Beatriz Herrero-Cortina, Annemarie L. Lee, et al. 2023. European Respiratory Society statement on airway clearance techniques in adults with bronchiectasis. *Respiratory Journal* 2023; DOI: 10.1183/13993003.02053-2022.

² Young Choi, Joon. 2023. Exacerbation prevention and management of bronchiectasis. *Tuberculosis and Respiratory Diseases (Seoul)*. 86(3):183-195.

³ Yang Feng, Lianjun Gao, Qimin Wang, Weiping Deng, and Wei Gao. 2020. Effect of exercise-based pulmonary rehabilitation in patients with bronchiectasis: a meta-analysis. *Respiratory Medicine and Research* 81:100910.

