

Do you, or someone you know, have a lung condition such as COPD, bronchiectasis, and/or a history of tuberculosis? If so, they may be at risk for **NTM lung disease**.¹

Because symptoms of NTM lung disease are similar to other lung conditions, some people may go years without a proper diagnosis.

What is NTM?

NTM is short for nontuberculous mycobacteria. These bacteria are found in soil and both natural and treated water. NTM is typically not passed from person to person.²

Common symptoms are

- cough
- fatigue
- weight loss
- shortness of breath.³

How is NTM lung disease diagnosed?

- Complete health history
 - Chest CT (computerized tomography) scan
 - Two or more sputum samples (cultures)^{3,4}
- Because the bacteria grow slowly, the culture may take up to 6 weeks to get the final result.



Those with COPD are about **16 times** more likely to get NTM lung disease.¹

How does NTM lung disease occur?³

NTM is breathed in and enters the airways

NTM finds a home in the lungs and slowly grows

Over time, symptoms can start to develop



It is hard to avoid NTM but wearing a mask while gardening and staying away from saunas and hot tubs can help.



Bronchiectasis & NTM
ASSOCIATION

Tell Me More About NTM Lung Disease

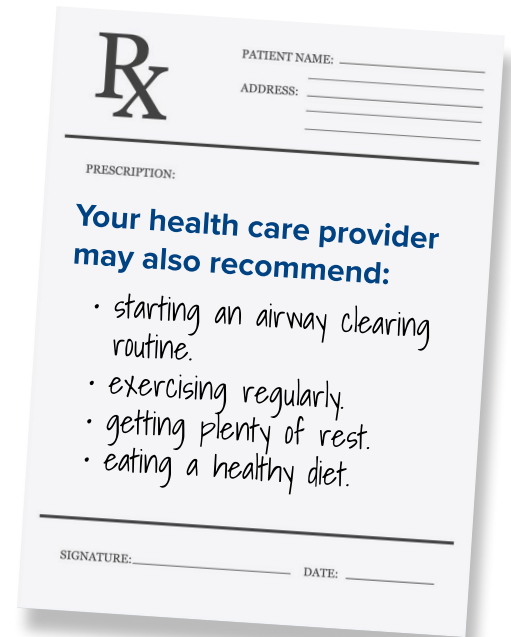
How is NTM lung disease treated?

If treatment is recommended, your HCP will prescribe multiple antibiotics over a long period of time to treat the NTM.⁴ Guidelines say that those on multiple medicines should use them for at least one year after test results are clear of NTM.^{3,4}

Sputum cultures should be collected periodically while on treatment. If NTM is still present after 6 months, alternative treatment options may be evaluated.⁴

Is the NTM damaging my lungs?

NTM can cause damage to the lungs even if you are not feeling symptoms.⁴ As your immune system fights the infection, permanent nodules or cavities are created, further injuring the lungs.¹



There are over 200 different types of NTM, most of which do not cause disease. The most common is called MAC (or *Mycobacterium avium* complex).⁴

When will my health care provider decide to start treatment?

Starting treatment is often recommended rather than waiting and following over time. This may help to reduce damage to the lung and improve symptoms.⁴

Factors to consider before treatment:

- NTM could cause damage to the lungs.
- Advantages and possible risks of therapy.
- A person's desire to start medicines after discussing with their doctor.
- Goals of therapy^{3,4}.

Although starting treatment is preferred, sometimes, your health care team may choose “watchful waiting.” This means reassessing the NTM lung disease after a period of observation.⁴



Bronchiectasis & NTM
ASSOCIATION

You can learn more about NTM lung disease by talking to your health care provider or by visiting www.bronchandNTM.org

These educational materials have been supported by Insmid Incorporated.

References:

1. Szturmowicz M, Onisz K, Wyrostkiewicz D, Radwan-Rohrenscheff P, Filipczak D, Zabost A. Non-Tuberculous Mycobacteria in Respiratory Specimens of Patients with Obstructive Lung Diseases-Colonization or Disease?. *Antibiotics (Basel)*. 2020;9(7):424. Published 2020 Jul 20. doi:10.3390/antibiotics9070424
2. Bryant JM, Grogono DM, Rodriguez-Rincon D, et al. Emergence and spread of human-transmissible multidrug-resistant nontuberculous mycobacterium. *Science*. 2016;354(6313):751-757. Doi:10.1126/science.aaf8156
3. Griffith DE, Aksamit T, Brown-Elliott BA, et al. An official ATS/IDSA statement: diagnosis, treatment, and prevention of nontuberculous mycobacterial diseases [published correction appears in *Am J Respir Crit Care Med*. 2007 Apr 1;175(7):744-5. Dosage error in article text]. *Am J Respir Crit Care Med*. 2007;175(4):367-416. doi:10.1164/rccm.200604-571ST
4. Daley CL, Iaccarino JM, Lange C, et al. Treatment of nontuberculous mycobacterial pulmonary disease: an official ATS/ERS/ESCMID/IDSA clinical practice guideline. *Eur Respir J*. 2020;56(1):2000535. Published 2020 Jul 7. doi:10.1183/13993003.00535-2020