

A COUGH IS ONE THING

COUGHING
OVER & OVER
& OVER
— IS ANOTHER —

Coughing, fatigue, shortness of breath—if you have these symptoms over and over and already suffer from a lung condition, like bronchiectasis, COPD, or asthma, it could be a sign of a **lung disease called NTM.**

WHAT IS NTM LUNG DISEASE?

Nontuberculous mycobacterial (NTM) lung disease is an infection caused by bacteria that are breathed in through the nose and mouth.

NTM bacteria are **common in the environment.** They can be found in places such as tap water, showerheads, steam from hot tubs, and soil from parks and gardens. The most common species of NTM in the US is *Mycobacterium avium* complex (MAC).

NTM lung disease typically develops in people with preexisting lung conditions. Some of those lung conditions are **bronchiectasis, COPD, and asthma.**

HOW NTM AFFECTS YOU AND YOUR LUNGS

NTM can make you sick and cause you to experience symptoms like coughing, fatigue, and shortness of breath. Over time, **your symptoms can worsen**, because NTM lung disease is progressive. That means the infection gets worse over time and can result in severe, permanent lung damage.

Since symptoms of NTM lung disease are similar to other lung conditions, people can have NTM for years without knowing it.

YOUR LUNG CONDITION PUTS YOU AT RISK

Everyone comes into contact with NTM bacteria during their daily lives. However, not everyone is at risk of getting NTM lung disease. Most people do not become infected because their lungs are healthy enough to clear NTM bacteria.

People with a history of lung conditions, like bronchiectasis, COPD, or asthma, are more likely to develop an infection. You can also get infected if you have had severe or chronic pneumonia.

That's because the damage from these conditions can make it easier for NTM to infect your lungs, and more difficult to get rid of NTM. This puts people with lung conditions at a higher risk for NTM lung disease.

DID YOU KNOW?



50%

50% of people with bronchiectasis may have active NTM lung disease

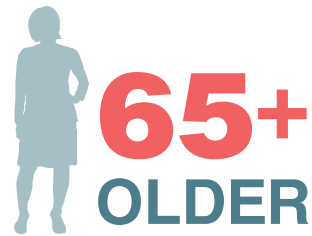


16x

People with COPD are almost 16 times more likely to get NTM

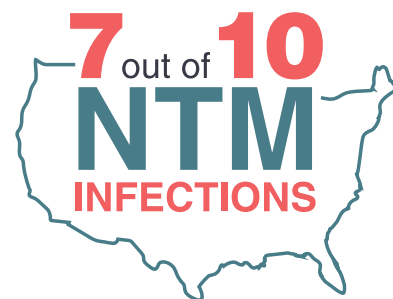
NTM is **NOT** considered contagious

WHO ELSE IS AT RISK?



NTM lung disease is more common in women than in men. People aged 65 and older, a population that is expected to **nearly double by 2030**, are at an increased risk. However, people as young as 45 years could also get infected.

People who have weakened immune systems can also develop NTM infections, including those taking medications which affect immune response.



Some areas of the US have higher rates of NTM lung disease. In fact, 7 out of 10 cases occur along a coastal area.

RECOGNIZING THE SYMPTOMS

The symptoms of NTM lung disease are so similar to other lung conditions that NTM is sometimes misdiagnosed or not diagnosed at all.

Many people who have symptoms think they're due to the lung condition they already have. For example, if you have bronchiectasis, you may be coughing a lot. But that cough may not just be from bronchiectasis. It could also be from NTM.

So how can you tell if it's NTM and not just your current lung condition acting up?

Well, the truth is, it's very difficult. But, there are tests your doctor can use to see if it's NTM.

WHAT ARE THE KEY SYMPTOMS?

If you have NTM lung disease, you may experience one or several of these signs and symptoms:



Coughing

It may be a chronic cough that you can't get rid of like a "coughing fit," or a cough that comes and goes. You may have a cough that is dry, brings up mucus, keeps you up at night, or brings up blood. **If you are coughing up blood, call or visit your doctor right away**



Feeling Tired Often

Being exhausted, making it hard to do daily activities



Trouble Breathing/ Shortness of Breath

When everyday activities, like walking your dog or climbing stairs, leave you short of breath, with a wheeze, or with tightness in your chest



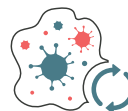
Weight Loss and/or Lack of Appetite

Sudden, unexplained weight loss and/or when you don't feel like eating



Fever

A slight fever that may also include night sweats and chills



Recurring Infection

If you keep getting a lung infection or pneumonia



Symptoms Don't Get Better with Medicine

You may have taken medications for other lung conditions over a long period of time. But despite taking medicine, you keep getting sick

GETTING TESTED

It's important to get tested for NTM as soon as possible because NTM lung disease is progressive. This means that it gets worse over time, causing more damage to your lungs. Your symptoms can get worse too.

Since the symptoms of NTM lung disease are similar to other lung conditions, diagnosis can be delayed. Many people who have it may not know it for months or sometimes years. In fact, 2 out of 3 people with NTM have **moderate to severe lung disease** by the time they're finally diagnosed.



To help determine if you have NTM lung disease, your doctor may:

- Perform a **physical exam**
- Review your **medical history**
- Collect a **sputum culture**, which involves you coughing up mucus for your doctor to analyze
- Do a **chest CT scan or X-ray**, where a specialized machine takes a picture of your body that shows any damage in your lungs

WHAT IF YOU'RE DIAGNOSED?

You and your doctor will decide which treatment option is right for you. You may be prescribed a treatment regimen or you may be referred to a specialist who has more experience treating people with NTM.



If you do start treatment, sticking to your treatment regimen is extremely important. That's because when you stay on treatment, there is a greater chance you could get rid of NTM.



TALK TO YOUR DOCTOR

If you think you may have NTM lung disease, there is something you can do. **Talk to your doctor or a specialist**, like a Pulmonologist or Infectious Disease Specialist – someone who has experience treating people with NTM. Ask if getting tested for NTM may be right for you. The **Doctor Discussion Guide** on [AboutNTM.com](https://www.aboutntm.com) can help you figure out the right questions to ask.

For more info, visit

[AboutNTM.com](https://www.aboutntm.com)

SUPPORT AND RESOURCES

Valuable tools that can help you throughout your journey

Join *AboutNTM Support*

If you think you could have NTM lung disease or have already been diagnosed, sign up for the *AboutNTM Support* program. There, you will receive helpful information, support, and resources to help you along the way.

Watch real NTM stories

You are not alone. People with NTM have shared their stories in hopes of spreading more awareness of this rare disease. Get to know Betsy, Donna, and Jim and learn from their experiences.

Connect with people living with NTM

You might have a lot of questions, but there are NTM communities for people to support one another.

- NTM Info & Research support groups
ntminfo.org
- Bronch and NTM 360 Social online community
bronchiectasisandntminitiative.org