

# Navigating Nontuberculous Mycobacteria Lung Disease

## What is NTM-LD?



- Infection caused by nontuberculous mycobacteria (NTM) that are found in water and soil
- *Mycobacterium avium* complex (MAC) is the most common NTM that causes lung disease (NTM-LD)
- Can cause permanent lung damage, but is treatable

## Risk Factors for NTM-LD



### Lung Diseases

- Bronchiectasis
- COPD
- Cystic fibrosis
- Prior infections like TB



### Immune Disorders

- Autoimmune diseases
- Immunodeficiencies
- Hematologic malignancies



### Others

- Certain medications, such as immunosuppressants
- Environmental exposure
- Female sex and older age

## Symptoms of NTM-LD



Cough



Chest Pain



Shortness of breath



Fever



Fatigue



Cough up thick mucus or blood

See a pulmonologist if you have symptoms that are unexplained or will not go away, or if you have a treated lung condition with worsening symptoms

## How is NTM-LD Diagnosed?



Symptoms described above that cannot be explained by another diagnosis

**and**



Chest X-ray or CT scan findings consistent with NTM-LD

**and**



Presence of NTM in sputum (mucus) samples; bronchoscopy or lung biopsy may be necessary to obtain samples

# What Should I Know About NTM-LD Treatment?

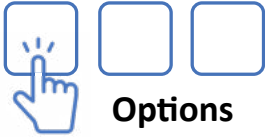


## Goals

1. Negative sputum (mucus) cultures – culture conversion

2. Reduce symptoms

3. Improve or stabilize chest X-ray and/or CT scan




## Options


Scan here for a list of selected clinical trials in NTM-LD



## Depending on the Type of MAC-LD

 **Combination of 3 Oral Antibiotics**  
3X per week or 1X per day

With or Without

 **IV Antibiotics**  
3X per week

*If sputum cultures remain positive despite at least 6 months of treatment*

 **Inhaled Antibiotic**  
1X per day  
May be added\*

## Potential Medication Side Effects Include:



Vision Changes



Rash



Hearing Changes



Leg Numbness



Elevated Liver Enzymes



Hoarseness



GI Upset, Nausea, Vomiting



Decreases in Blood Counts



- ✓ Your doctor should have your sputum tested to determine which antibiotics will be effective
- ✓ Talk to your doctor if you experience any side effects, they are often manageable, and treatment can be continued
- ✓ Treatment should continue for 12 months after your first negative sputum culture

## Other Treatments & Management Approaches



### Airway Clearance

Clears away mucus and improves lung function



### Quit Smoking

(and Vaping)



Treat Other Coexisting Lung Disease(s)



**Pulmonary Rehabilitation**



**Exercise Regularly**



**Maintain a Healthy Diet and Body Weight**

## Additional Resources

[Nontuberculous Mycobacteria \(NTM\) \(chestnet.org\)](https://www.chestnet.org)

[Evolution to Bronchiectasis and NTM 360 | Bronchiectasis and NTM 360 \(bronchiectasisandntminitiative.org\)](https://www.bronchiectasisandntminitiative.org)

[Learn about NTM Lung Disease | American Lung Association](https://www.lung.org)

\*Alternatively, IV antibiotics may be added