

## Leprosy (Hansen's Disease) Investigation Overview

Leprosy, or Hansen's disease, is caused by one of two acid-fast, rod-shaped bacilli, *Mycobacterium leprae* and *Mycobacterium lepromatosis*. Leprosy is very rare in the United States with 150-200 cases reported each year. The occasional cases seen in North Carolina have all been acquired in a country where this chronic disease is endemic. Despite the disease being hard to catch and completely curable, stigma and prejudice remains against those who have Leprosy. Leprosy is curable using antibiotics, but treatment regimens differ depending upon the form of the disease and one to two years of treatment is usually required. The National Hansen's Disease Program (NHDP) is the epicenter of care, research and information in the U.S. and the [NHDP website](#) is a good resource for information for providers and patients.

### Basic Steps of a Leprosy Investigation

1. Collect clinical information	<ul style="list-style-type: none"><li>• If patient is hospitalized for this disease, obtain medical record (admission note, progress notes, lab report(s), and discharge summary)</li><li>• Obtain healthcare provider clinical notes from date(s) of service for this disease</li><li>• Look for evidence in the medical record that supports clinical findings described in the case definition</li><li>• Look for epidemiologic linkages to similarly ill persons</li><li>• Use information collected from medical records or speak with the case</li></ul>
2. Review laboratory information	<ul style="list-style-type: none"><li>• Review laboratory report(s) specific to this disease</li><li>• Evaluate laboratory results to determine if requirements of the case definition are satisfied</li></ul>
3. Coordinate with the National Hansen's Disease Program	<ul style="list-style-type: none"><li>• The NHDP provides diagnostic services. Call 1-800-642-2477 M-F 9AM to 5:30PM ET</li><li>• Depending on the form of Leprosy suspected the following specimens may be collected:<ul style="list-style-type: none"><li>• Skin smears from the earlobes, elbows, and knees</li><li>• Skin biopsy from edges of active patches</li><li>• Nerve biopsy from thickened nerves</li></ul></li><li>• <a href="https://www.hrsa.gov/hansens-disease/diagnosis">https://www.hrsa.gov/hansens-disease/diagnosis</a></li><li>• Testing for Leprosy is not performed at the NC SLPH</li></ul>
4. Apply the case definition	<ul style="list-style-type: none"><li>• Use the case definition to determine if the clinical and laboratory findings meet the case definition criteria</li></ul>
5. Attempt to identify source of exposure	<ul style="list-style-type: none"><li>• Review clinical records for potential source(s) of exposure</li><li>• If potential source of exposure is not evident in clinical information, interview patient to obtain additional information</li></ul>
6. Implement control measures	<ul style="list-style-type: none"><li>• Refer to the APHA <i>Control of Communicable Diseases Manual</i>, 21st ed.</li><li>• Refer to <a href="#">Red Book, 2024-2027 Report of the Committee on Infectious Diseases</a>. 33rd ed.</li></ul>
7. Manage contacts	<ul style="list-style-type: none"><li>• Leprosy is not highly contagious and 95% of the human population has natural immunity. Healthcare workers rarely contract Leprosy</li><li>• Maintain active surveillance for symptoms of the disease in household contacts</li><li>• Household contacts should be examined initially and then annually for 5 years</li><li>• Refer symptomatic individuals to a healthcare provider for evaluation</li></ul>

#### Additional Resources:

CDC Clinical Overview: <https://www.cdc.gov/leprosy/hcp/clinical-overview/index.html>

National Hansen's Disease (Leprosy) Program: <https://www.hrsa.gov/hansens-disease>