



## Hansen's Disease (Leprosy)

Hansen's disease (also known as leprosy) is an infection caused by slow-growing bacteria called *Mycobacterium leprae*.

### Signs and symptoms:

*Mycobacterium leprae* grow very slowly, and it may take up to 20 years to develop signs of the infection.

The disease can affect the nerves, skin, eyes, and lining of the nose (nasal mucosa). The bacteria attack the nerves, which can become swollen under the skin. This can cause the affected areas to lose the ability to sense touch and pain, which can lead to injuries, like cuts and burns. Usually, the affected skin changes color and either becomes:

- lighter or darker, often dry or flaky, with loss of feeling, or
- reddish due to inflammation of the skin.

If left untreated, the nerve damage can result in paralysis of hands and feet. In very advanced cases, the person may have multiple injuries due to lack of sensation, and eventually the body may reabsorb the affected digits over time, resulting in the apparent loss of toes and fingers. Corneal ulcers and blindness can also occur if facial nerves are affected. Other signs of advanced Hansen's disease may include loss of eyebrows and saddle-nose deformity resulting from damage to the nasal septum.

### Transmission:

It is not known exactly how Hansen's disease spreads between people. Scientists currently think it may happen when a person with Hansen's disease coughs or sneezes, and a healthy person breathes in the droplets containing the bacteria. **Prolonged, close contact with someone with untreated leprosy over many months is needed to catch the disease.**

Due to the slow-growing nature of the bacteria and the long time it takes to develop signs of the disease, it is often very difficult to find the source of infection. Overall, the risk of getting Hansen's disease for any adult around the world is very low. That's because more than 95% of all people have natural immunity to the disease.

You **cannot** get leprosy from a casual contact with a person who has Hansen's disease like:

- Shaking hands or hugging
- Sitting next to each other on the bus
- Sitting together at a meal

Once treatment is started, the person is no longer contagious after 72 hours. However, it is very important to finish the entire course of treatment as directed by the doctor.

### Diagnosis:

To confirm the diagnosis, a sample of skin or nerve (through a skin or nerve biopsy) is taken to look for the bacteria under the microscope. Additional tests may be conducted to rule out other skin diseases.

**Role of the School Nurse:****Prevention**

- The best way to prevent the spread of leprosy is the early diagnosis and treatment of people who are infected.
- For household contacts, immediate and annual examinations are recommended for at least five years after last contact with a person who is infectious.
- Currently there is no vaccine approved in the US for the prevention Hansen's disease.

**Treatment Recommendations**

- If acute infection is suspected, the student should be referred to their primary care provider for further evaluation.

**Exclusions:**

None

**Reporting Requirements:**

Hansen's Disease is a reportable condition under the unusual illness criteria and should be reported immediately upon recognition or strong suspicion to Maine CDC at 1-800-821-5821.

**Resources:**

- Federal CDC Hansen's Disease website: <https://www.cdc.gov/leprosy/index.html>
- National Hansen's Disease (Leprosy) Program: <https://www.hrsa.gov/hansens-disease>