Leprosy – Hansen’s Disease
(Mycobacterium leprae)

What is Leprosy?
Leprosy, also known as Hansen’s Disease, is a disease caused by a bacteria called Mycobacterium leprae bacteria. This chronic infectious disease usually affects the skin and peripheral nerves but has a wide range of possible clinical manifestations.

Who is at risk for Leprosy?
In the U.S., leprosy is rare. Around the world, as many as 2 million people are permanently disabled as a result of Hansen’s disease. If you travel to area where leprosy transmission is occurring you may be at risk. You may be at risk for the disease if you are in prolonged close contact with people who have untreated Hansen’s disease. However, most adults around the world, however, might face no risk at all. That’s because evidence shows that 95% of all adults are naturally unable to get the disease, even if they’re exposed to the bacteria that causes it.

What are the symptoms of Leprosy?
Symptoms mainly affect the skin, nerves, and mucous membranes (the soft, moist areas just inside the body's openings).

- The disease can cause:
  - Skin lesions that may be faded/discolored
  - Growths on the skin
  - Thick, stiff or dry skin
  - Severe pain
  - Numbness on affected areas of the skin
- Muscle weakness or paralysis (especially in the hands and feet)
- Enlarged nerves (especially those around the elbow and knee)
- A stuffy nose
- Nosebleeds
- Ulcers on the soles of feet

Since Hansen’s disease affects the nerves, loss of feeling or sensation can occur. When loss of sensation occurs, injuries (such as burns or fractures) may go unnoticed. You should always try to avoid injuries. But, if you experience loss of sensation due to Hansen’s disease (or another cause), you may not feel pain that can warn you of harm to your body. So, take extra caution to ensure your body is not injured.

How soon do symptoms appear?
The bacteria that cause Hansen's disease grow very slowly. It usually takes three to five years for symptoms to appear but ranges from one to 20 years.

How is Leprosy spread?
Evidence suggests that the bacteria that cause Hansen’s disease can spread from person to person. This might happen when someone with the disease coughs or sneezes. This can release droplets into the air. It might also happen if you are exposed to other nasal fluids (also known as secretions). Droplets and other secretions can contain the bacteria that cause Hansen’s disease. If you breathe these in, you can become sick with the disease.

When and for how long is a person able to spread the disease?
In most cases, a person will not infect others within a day of beginning treatment with a multidrug therapy.
How is a person diagnosed?

A skin biopsy is needed to make a definitive diagnosis.

What is the treatment?

Hansen's disease is easily treatable. It’s treated for 6 months to 2 years with a combination of antibiotics. Tell your doctor if you experience numbness or a loss of feeling in certain parts of the body in order to prevent injuries that may occur.

Does past infection make a person immune?

No.

Should children or others be excluded from child care, school, work or other activities if they have tularemia?

No. A person will not infect others within a day of beginning treatment. However, infants, toddlers and school-aged children should be excluded if the staff determines the child is unwilling or unable to participate in activities. They also should be excluded if the staff determines that they cannot care for the child without compromising their ability to care for the health and safety of the other children in the group.

All others can attend work and other functions as long as they are well enough to do so. As always, good hand hygiene and respiratory etiquette are recommended.

What can be done to prevent the spread of Leprosy?

The best way to prevent the spread of Hansen’s disease is early diagnosis and treatment of people who are infected. Household and other close contacts should be seen by a doctor as soon as possible and then every year for five years after contact with a person who has the disease.

- Armadillos and Hansen's Disease: Some armadillos in the southern United States are naturally infected with Hansen's disease. While it’s possible for you to get the disease from an armadillo, the risk is low. Most people who come into contact with armadillos are unlikely to get Hansen’s disease. If you decide to see a doctor because of your contact with an armadillo, make sure you provide a complete history of armadillo contact. Your doctor can determine whether or not you have the disease.

Resources: