LEPROSY (HANSEN'S DISEASE)

Patient Information Fact Sheet

>What is leprosy?

Leprosy (now also known as Hansen's disease) is a chronic infectious disease caused by an organism called *Mycobacterium leprae*. This bacteria is sometimes referred to as Hansen's bacillus and is similar to the bacteria that causes tuberculosis (TB).

Leprosy affects thousands of people throughout the world, mostly in less developed countries. In 2005, the top ten countries in new case detection were India, Brazil, Indonesia, Democratic Republic of the Congo, Bangladesh, Nepal, Mozambique, Nigeria, Ethiopia, and Tanzania. The number of people with leprosy has decreased dramatically over the past 20 years, following a World Health Organization (WHO) campaign to eradicate the disease. In 1985, there were 5.2 million people with the disease. In 2011, there were 219,075 new cases of leprosy reported around the world.

Historically, those infected with the disease were isolated in leper colonies, such as the one that existed on the Hawaiian island of Molokai. Today, leprosy can be treated effectively with modern drug therapies and isolating patients with the disease is not necessary.

>What are the symptoms of leprosy?

The bacteria that cause leprosy live in the tissues of the skin and the upper respiratory tract, in particular the lining of the nose. The bacteria multiply very slowly and it may take up to 20 years for symptoms to appear. Early symptoms may include a non-itchy rash or a bloodstained discharge from the nose. In addition, skin lesions and muscle weakness may develop.

The bacteria slowly accumulate in the main nerves of the face and limbs causing them to become inflamed. This inflammation gradually destroys the nerve fibers, resulting in paralysis of the muscles and loss of feeling in the hands and feet. This loss of feeling means that people also lose the automatic reflexes that cause them to draw away from hot or sharp objects. This can result in burns and other wounds, which may then become infected. People with leprosy often lose fingers and toes as a result of such infections. If left untreated, paralysis of the facial nerves can lead to a loss of the blinking reflex, dryness and ulceration of the eye, and blindness. In severe cases, the nose may collapse as a result of internal damage and scarring caused by the bacteria.

How is leprosy spread?

Leprosy is an airborne disease spread through droplets in the air. When a person with the disease sneezes, coughs, or even talks, droplets with the bacteria are released into the air. The disease is spread when these air droplets are then inhaled by an uninfected person. It is not easy to catch leprosy—over 95% of people are naturally immune to the bacteria, particularly those who live in areas of disease. Contrary to popular belief, the disease is not spread through contact with ulcerations on the limbs of leprosy sufferers.

>How is leprosy treated?

The bacteria that cause leprosy have gradually become resistant to single-drug treatments; therefore, the recommended treatment is a combination of drugs (referred to as multidrug therapy or MDT). The infection is treated with combinations of antibiotics such as: **dapsone** (Aczone), **rifampin**

MPR Easy-to-use, trustworthy, and accurate... eMPR.com/patientinformation (Rifadin), **clofazimine** (Lamprene), **ofloxacin** (Floxin), and **minocycline** (Dynacin, Minocin, Myrac) for 6 to 12 months. The inflammation is controlled with **prednisone**, and **thalidomide** (Thalomid). It is very important to diagnose this disease early in order to properly treat it.

>Further information

Centers for Disease Control and Prevention: http://www.cdc.gov/leprosy/ U.S. National Library of Medicine: http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0002323/ World Health Organization: http://www.who.int/lep/en/

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