Leprosy explained

Leprosy (also known as Hansen’s disease, Hanseniasis or HD) is a chronic bacterial infection of the skin and superficial nerves. It may also involve the nose, eyes, throat and testicles. The organism that causes leprosy is called *Mycobacterium leprae*.

The disease is common in parts of tropical and subtropical Asia, Africa, Central and South America, some Pacific countries, and in parts of the USA. In Australia, leprosy is now rarely seen. With the introduction of multi-drug therapy in the early 1980s, the disease is now curable.

The main characteristics of Leprosy

Leprosy is characterised by skin lesions, as well as a number of other effects that are due to its impact on the nervous systems of the body. Leprosy does not affect the central nervous system. However, it can affect the sensory, peripheral, motor and autonomic nerves in the following ways:

- **Sensory nerve damage** – when the sensory nerves are damaged, they cannot register pain. This leaves the extremities of hands and feet vulnerable to burns and injuries that can result in loss of fingers, toes, hands and feet.
- **Eye nerve damage** – when the eye is affected, it can lead to blindness, particularly if the person does not know how to prevent injury due to dust or other irritants.
- **Motor nerve damage** – when the motor nerves are involved, various forms of paralysis can occur such as ‘dropped foot’, ‘dropped wrist’, ‘clawed hand’, or Lagophthalmos (where the eye cannot close).
- **Autonomic nerve damage** – this can cause hair loss and can affect the ability to sweat, leaving the skin dry and cracked and exposed to secondary infection.

Lost limbs are a myth

Leprosy does not cause flesh to rot and fingers and toes to drop off. In the past, limbs that have been damaged because the person cannot feel pain have sometimes had to be amputated. Now that the disease can be detected early, the need to amputate is rare.

How leprosy is transmitted

It is considered likely that leprosy is spread from person to person in respiratory droplets or, in cases of children under one year of age, via the placenta. People at risk are generally in close contact with leprosy patients or living in countries where the disease is more common. The incubation period is thought to range from nine months to 20 years.

Treatment

Until the introduction of multi-drug therapy in the early 1980s, the disease could only be arrested, as the bacteria could not be killed. With the introduction of new bactericidal drugs, used in conjunction with other drugs, the disease is curable. Once a person with leprosy begins appropriate treatment, they quickly become non-infectious to others.

Vaccination against leprosy

There is no vaccine generally available to specifically prevent leprosy. Because the organism that causes leprosy is closely related to the one that causes tuberculosis (TB), the vaccine against TB (called the BCG vaccine) may also provide some protection against leprosy.

Where to get help

- Your doctor.

Things to remember

- Leprosy is a chronic bacterial infection.
- Leprosy affects the various nervous systems of the body, particularly the skin and peripheral nerves.
- The disease is more common in tropical and subtropical areas.
- The disease is curable through multi-drug therapy.

This page has been produced in consultation with, and approved by, the Public Health Division of the Department of Human Services Victoria. The Better Health Channel is part of the Department of Human Services, Victoria.