

Leprosy (Hansen's Disease)

This is a bacterial infection of the skin and nerves caused by *Mycobacterium leprae*. Leprosy is a rare infection in Australia, found mainly in Indigenous people from northern Australia and migrants from areas where the disease is more common.

A person with leprosy may have symptoms across a spectrum ranging from:

- > Multibacillary (or lepromatous) leprosy where there are many symmetrical lumps (nodules, papules and macules) on both sides of the body; involvement of the lining of the nose causing crusting and difficulty in breathing; and bleeding and inflammation of the eye (keratitis and iritis).
- > Paucibacillary (or tuberculoid) leprosy with a few skin lesions with loss of feeling that are clearly marked (loss of pigment or reddish colour); and symmetrical thickening of the nerves of the arms, legs and face on both sides of the body with loss of feeling

Complications of leprosy include permanent deformity and disability, especially of the hands, feet and face; most of which can be prevented by early treatment. Special reconstructive surgery can correct many deformities that do develop.

The diagnosis can be made without laboratory tests in some cases, especially for paucibacillary leprosy. In multibacillary leprosy, the bacteria can be seen with a microscope in a skin smear using a special stain.

Leprosy only causes infections in humans. The disease is probably transmitted from the lining of the nose of a person with the infection to the skin and respiratory tract of another person. Close and frequent contact is required for transmission but only a small proportion of close contacts actually develop leprosy.

Incubation period

(time between becoming infected and developing symptoms)

Ranges from 9 months to 20 years, with an average of about 4 years for paucibacillary leprosy and 8 years for multibacillary leprosy.

Infectious period

(time during which an infected person can infect others)

People with paucibacillary leprosy are probably not infectious. People with multibacillary leprosy are probably infectious for as long as the person has the disease, however they are no longer infectious soon after starting treatment with a combination of two or three medicines (multi-drug therapy).

Treatment

Multi-drug therapy has significantly improved treatment for people with leprosy. Most people with leprosy can be cured and do not need to be treated in hospital. The duration of therapy is usually for 6 to 24 months, depending on the type of leprosy. Treatment is free.

Control of spread

- > Control is best achieved by the rapid elimination of infectivity in persons with leprosy using multi-drug therapy.
- > Persons with paucibacillary leprosy do not need to be excluded from work or school. Persons with multibacillary leprosy are no longer infectious within one day of starting multi-drug therapy.
- > Because close and prolonged contact is required for transmission, travellers to areas where leprosy is present have a very low risk of contracting the disease.



Leprosy is a notifiable disease