



# Leprosy

## Centre for Disease Control Fact sheet

Leprosy is a disease caused by infection of a susceptible person with the bacterium, *Mycobacterium leprae*. The bacteria is very similar in appearance to *M tuberculosis*. *M leprae* has a special liking for the nerves of the arms, legs and face, the skin and the lining of the nose.

### Distribution

Approximately 410 000 new cases of leprosy were detected worldwide during 2004. Nine countries in Africa, Asia and Latin America still consider leprosy a public health problem. These countries account for about 75% of the global disease burden. In Australia leprosy is rare and found mainly in Northern Australian Aboriginal people and migrants from endemic areas.

### Infectivity

Many patients with leprosy are non-infectious and cannot pass on the disease. Infectious cases become non-infectious soon after starting regular treatment. The great majority of people who come in contact with infectious leprosy develop immunity without getting the disease. Leprosy is not highly contagious. It is transmitted by droplets from the nose and mouth when people are in close and frequent contact with an infectious patient.

### Types of Leprosy

Manifestations of leprosy are determined by the immune response. If the infected person has little resistance the germs multiply and the person develops infectious leprosy. This spectrum of disease, multibacillary, used to be referred to as lepromatous leprosy. If on the other hand the infected person has a high level of resistance, most of the germs are destroyed and the person may develop non-infectious leprosy. This spectrum of disease, paucibacillary, was referred to as tuberculoid leprosy. Most cases in the

Northern Territory are on a spectrum between these 2 types.

### Diagnosis

A skin patch, often coppery in colour, a thick nerve and loss of sensation are the early signs of leprosy. Each sign may exist alone or in combination with others. Thus if a skin patch is found to have loss of sensation or feeling the person may have leprosy. Even if there is no loss of feeling in the patch, a skin smear may reveal the presence of the leprosy germ or bacillus. It is worth remembering that a combination of skin and nerve disorders is strongly indicative of leprosy. Contact history with leprosy cases is also very useful information.

If a person suspects he/she has leprosy, advice can be sought from the Centre for Disease Control (TB/Leprosy Unit), Building 4, Royal Darwin Hospital phone 89228804 or from any Communicable Diseases Unit in Nhulunbuy, Katherine, Tennant Creek or Alice Springs. People who live remotely may consult the District Medical Officers who regularly visit many of the rural community care centres in the Northern Territory. Discussion with GPs or Infectious Disease physicians may also be appropriate.

### Treatment

Effective treatment with multi drug therapy (MDT) for 6 months or a 2 year regimen, depending on the type of leprosy, achieves a cure. Many of the infectious patients do not need to go to hospitals at all provided there are no complications. Treatment is free.

### Deformity

Much of the damage to nerves is irreversible especially with late or prolonged presentations and the person may be permanently disabled. These are



the scars of leprosy. Without care of the unfeeling hands and feet even cured patients are likely to develop increasing deformities. Leprosy patients need not develop deformities if they come early for treatment and take their treatment regularly. In cases where deformities have already occurred, they can very largely be corrected by special methods of reconstructive surgery.

## Control

The number of new cases found each year has shown a steady decline. Screening programs in the past have resulted in early detection of leprosy. Effective treatment programs have reduced transmission of the disease. Periodic examination of contacts together with the supervised treatment of infectious cases have assisted in the decline.

**REMEMBER: Leprosy today can be cured and deformities can be prevented or corrected.  
Think of leprosy when skin and nerve disorders are present.**

**For more information contact your nearest Centre for Disease Control.**

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