

## Hansen's Disease (Leprosy)

Merlin reporting code = 03090  
 Case report form (CRF): [Leprosy Surveillance Report](#)  
**PAPER CRF REQUIRED**

### Clinical description

A chronic bacterial disease characterized by the involvement primarily of skin as well as peripheral nerves and the mucosa of the upper airway. Clinical forms of Hansen disease represent a spectrum reflecting the cellular immune response to *Mycobacterium leprae*. The following characteristics are typical of the major forms of the disease:

- *Tuberculoid*: One or a few well-demarcated, hypopigmented, and hypoesthetic or anesthetic skin lesions, frequently with active, spreading edges and a clearing center; peripheral nerve swelling or thickening also may occur.
- *Lepromatous*: A number of erythematous papules and nodules or an infiltration of the face, hands, and feet with lesions in a bilateral and symmetrical distribution that progress to thickening of the skin, possibly with reduced sensation.
- *Borderline (dimorphous)*: skin lesions characteristic of both the tuberculoid and lepromatous forms
- *Indeterminate*: Early lesions, usually hypopigmented macules, without developed tuberculoid or lepromatous features but with definite identification of acid-fast bacilli in Fite stained sections.

### Laboratory criteria for case classification

Confirmatory (skin biopsy needed for definitive diagnosis):

- Absence of growth of mycobacteria on conventional media (if done) AND
  - Demonstration of acid-fast bacilli in skin or dermal nerve from a biopsy of skin a lepromatous lesion using Fite stain
  - OR
  - Identification of noncaseating granulomas with peripheral nerve involvement.

Supportive:

- Polymerase chain reaction (PCR) for *M. leprae* DNA

### Case classification

Confirmed: A clinically compatible illness in a person with confirmatory laboratory evidence.

Suspect: A clinically compatible illness in a person with supportive laboratory evidence.

### Comments

A newly available PCR test from the National Hansen's Disease Program (NHDP) can provide important epidemiologic exposure information. Please be sure to create and attach any PCR results to the case.

Contact the Bureau of Epidemiology for assistance with case assessment and laboratory testing.

There are no serological tests or skin test other than a biopsy of a lepromatous lesion. Testing can be completed at the NHDP Clinical Laboratory. Contact information for the NHDP: (800)-642-2477, <http://www.hrsa.gov/hansens>.

NHDP also has support services:

- **Free antibiotics for leprosy treatment** shipped to physicians.
- **Free consultations** for physicians treating complicated patients,
- **Free pathologic review of skin biopsy** and consultation concerning **molecular techniques** for identification of *M. leprae*.
- **Free educational materials** for health care professionals and patients to improve understanding of the disease, and to prevent injury and disability.
- **Surgical care and rehabilitation** for those referred for complicated (digit or limb threatening) wounds or reconstruction of correctable deformity resulting from Hansen's disease.

[Return to Table of Contents](#)