

Leprosy [UPSC Notes]

Leprosy is a chronic infection that affects the skin, mucous membranes and nerves and causes discolouration, lumps, disfigurement and deformities in the skin. In this article, you can learn about the disease of leprosy, its causes, cure, government policies and schemes for combating leprosy and other important information for the [IAS exam](#).

Leprosy

Leprosy is also termed Hansen's Disease (HD) after the name of the scientist who discovered this infection in 1873.

- It is one of the oldest diseases in recorded history, afflicting humanity since time immemorial.
- It is primarily a granulomatous disease of the peripheral nerves and mucosa of the upper respiratory tract; skin lesions are the primary external sign.
- The disease can be progressive, if left untreated, causing permanent damage to skin, nerves, limbs and eyes.
- Leprosy can affect people of any age or sex, including children; but it is not hereditary.

Leprosy Causes

Mycobacterium leprae and *Mycobacterium lepromatosis* are the causative agents of leprosy. The most prevalent possibility of transmission is through the respiratory route - coughing and sneezing.

Symptoms of Leprosy

Leprosy first affects the skin and then moves on to nerves present outside the brain and spinal cord which are known as peripheral nerves.

- It usually takes 3 - 5 years (incubation period) for the symptoms to appear after coming in contact with the bacteria. Leprosy-causing bacteria multiply very slowly.
- The disease has the following symptoms:
 - Skin lesions
 - Severe pain
 - Muscle weakness or paralysis (especially in the hands and feet)
 - Enlarged nerves (particularly those around elbows and knees)
 - Eye problems (that can lead to blindness)
 - Ulcers on the soles of feet

Classification of Leprosy

Leprosy is classified into two types based on the number of skin lesions, presence of nerve involvement and identification of bacilli on slit-skin smear.

1. Paucibacillary (PB) - A case of leprosy with 1 - 5 skin lesions, without the demonstrated presence of bacilli in a skin smear.
2. Multibacillary (MB) - A case of leprosy with more than 5 skin lesions or with nerve involvement or with the demonstrated presence of bacilli in a slit-skin smear, irrespective of the number of skin lesions.

World Leprosy Day

World Leprosy Day is observed every year on the last Sunday of January. In India, it is observed on 30th January every year, coinciding with the death anniversary of [Mahatma Gandhi](#), who is known for his fight against the disease.

- The aim of observing World Leprosy Day is to create awareness against the stigma attached to the disease, by making the general community aware that it is a disease spread by a type of bacteria and can be easily cured.

Management of Leprosy

Multidrug therapy (MDT), a combination of three antibiotics is an effective and powerful tool in curing leprosy. Adherence to treatment and its successful completion are equally important for the cure.

WHO Global Leprosy Strategy 2021-30 - “Towards Zero Leprosy”

Leprosy is not yet a disease of the past. Each year, around 200,000 new cases are reported and there are still endemic areas and scattered hot spots of leprosy in many countries. Some 3-4 million people are thought to be living with visible impairments or deformities due to leprosy, while stigma and discrimination towards those with the disease persist.

- In April 2021, the fight against leprosy entered a new phase with the launch by the [WHO](#) of 'Towards Zero Leprosy: Global Leprosy (Hansen's disease) Strategy for 2021-2030'. The targets include zero leprosy patients in 120 countries and a 70 percent decrease in new cases detected globally by 2030.
- The four pillars of the strategy are:
 - Implement integrated, country-owned zero leprosy road maps in all endemic countries
 - Scale up leprosy prevention alongside integrated active case detection

- Manage leprosy and its complications and prevent new disability
- Combat stigma and ensure human rights are respected. Interruption of transmission and elimination of disease are at the core of the strategy

Leprosy in India

India has 52% of the world's new leprosy patients.

- India was declared as leprosy eliminated in 2005. But it still houses more than 50% of the caseload around the world.
- To tackle this issue, a **National Strategic Plan and Roadmap for Leprosy 2023-2027** is devised.
- The National Leprosy Control Programme (NLCP) was launched by GoI in 1954-55.
- MDT (MultiDrug Therapy) came into wide use in 1982.
- NLEP (National Leprosy Eradication Programme) is a centrally sponsored scheme of the Government of India. NLEP functions under the umbrella of the [National Health Mission](#) (NHM).
- India achieved the goal set by the National Health Policy, 2002 of elimination of leprosy as a public health problem, defined as less than 1 case per 10,000 population, at the National level in December 2005.
- Under the NLEP, active case detection and regular surveillance under the Leprosy Case Detection Campaign (LCDC), ASHA-based Surveillance for Leprosy Suspects (ABSULS), Active Case Detection and Regular Surveillance (ACDRS) are being conducted to interrupt transmission of the causative organism.
- Under the National Leprosy Eradication Programme, the welfare allowance has been raised from Rs 8000 - Rs 12,000 to patients for their reconstructive surgery. The programme has been successful in reducing the leprosy rate from 0.69 per 10,000 population in 2014-15 to 0.45 in 2021-22. Also, annual new case detection rate per 10,000 population has also reduced from 9.73 in 2014-15 to 5.52 in 2021-22.
- In 2017, SPARSH Leprosy Awareness Campaign (SLAC) was launched to promote awareness and address the issues of stigma and discrimination.
- In 2019, the [Lok Sabha](#) passed a bill seeking to remove leprosy as a ground for divorce.
- NIKUSTH, a real-time leprosy reporting software across India was introduced.
- The Indian government, in 2017, announced to eradicate leprosy from India by 2030.

Situations in states:

- The number of cases and elimination target performance are different in different states.
- Uttar Pradesh, Arunachal Pradesh, Madhya Pradesh, Bihar, West Bengal, Chhattisgarh, Odisha, Jharkhand, Maharashtra, Delhi, Dadra Nagar Haveli and Daman Diu and Gujarat,

have at least one or more than one district, where they have to realize leprosy elimination target.

- The above-mentioned states combined together have 90% and more of the total caseload in India.
- Dadra & Nagar Haveli and Chhattisgarh continue to report new cases.

Strategy to combat leprosy includes:

1. Robust surveillance system to capture cases from all types of areas and backgrounds.
2. Sustaining a strong surveillance system in low-endemic districts and early and timely detection of cases in high-endemic districts can help address the number of cases and reduce their occurrence.
3. The digitalisation of case-related information.
4. Accelerated diagnosis of cases by targeted approach, implementation of modern tools and methods for early detection.
5. Implementing leprosy expertise and integrating it with multi-disease service.
6. Introduction of surveillance of [antimicrobial resistance](#).
7. Awareness and behavioural change programmes.
8. Post-treatment surveillance of treated cases.
9. Introducing a potentially safe and effective vaccine.
10. Providing the most effective chemoprophylaxis to all contacts of cases.

UPSC Questions related to Leprosy

Q. What causes leprosy?

Ans: Leprosy is caused by Bacteria - Mycobacterium leprae and Mycobacterium lepromatosis.

Q. When is World Leprosy Day observed?

Ans: World Leprosy Day is observed every year on the last Sunday of January.

Q. Name the two common types of leprosy?

Ans: The two common types of leprosy are Paucibacillary (PB) and Multibacillary (MB).