# World Leprosy Day (WLD)

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#### Introduction

World leprosy day is celebrated on 30<sup>th</sup> of January every year all over the world. Leprosy is a NTD (Neglected Tropical Disease). Leprosy also known as Hansen's disease (HD).

#### Aim

The purpose of observing the World Leprosy Day is to generate awareness among public.

## History

The day was chosen by French humanitarian Raoul Follereau in 1953. He wanted to coincide with the anniversary of Mahatma Gandhi's death on 30<sup>th</sup> January 1948.

## Causative Organism

Leprosy is a chronic infectious disease which is mainly caused by *Mycobacterium leprae*. This disease mainly affects on skin, peripheral nerves, upper respiratory track and eyes. This disease can be treated in early stages which can help in reduce the risk of disability. This diseases cannot be transmitted to others only in a single meeting. For example: sitting in a bus next to a leprosy patient or shaking hand with them cannot transmit the disease but if one person stays close to the leprosy patient for years such as 5-6 years, the disease will be slowly transmitted to them. According to the research *Mycobacterium leprae* mostly affects the age between five to fifteen years and above thirty years people. As it is a chronic disease it can last to years or it can also be for life long. Usually it can be treated in 6-12 months by usage to drugs. It can be transmitted to others by airborne respiratory droplets such as coughing or sneezing.

Etiology: Mycobacterium leprae: gram-postive.

Theme	
Year	Theme of WLD
2024	Ending Stigma, Embracing Dignity
2023	Act Now. End Leprosy
2022	United for Dignity
2021	Beat Leprosy, End Stigma and Advocate for Mental Well-Being
2020	Ending discrimination, stigma and prejudice, is fundamental to ending leprosy

## **Symptoms**

- 1. Muscle weakness: The muscle weakness is one of the symptom of leprosy. It is mainly seen in muscles of hands and feet. Due to this symptom the muscles gets weakness and cannot be functioned properly.
- 2. Enlarged nerves: The enlargement of nerves is found as a symptom. The nerves around the knee, elbow and around the neck are enlarged. This is one of the symptoms of leprosy.
- 3. Eye problems: Small eye problems are also considered as one the symptom of leprosy. If the disease is not cured it can lead to eye infections and permanent eye blindness.
- 4. Skin allergies: usually small skin allergy is found on mycobacterium leprae patient. Such as light colored skin and red skin patches.

## Advanced stage

- Vision loss
- Paralysis
- Loss of eyebrows
- Shorter toes and fingers

Leprosy disease can be treated with 12 months of period. It is an all age disease as it can last for life time. Antibiotics used during the treatment helps to kill the bacteria that causes leprosy.

## Some precautions to avoid leprosy disease are as follows:

1. Early diagnosis: When a person gets affected to leprosy many symptoms can be seen in his body such as redness of skin, pale color of skin, etc... As soon as one notices such symptoms he should consult a doctor as it can help them to know the particular details of the disease and can be cured in earlier stage.

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- 2. Treatment of infected people: The person who are infected should get the treatment as soon as possible. They should consult the doctor and get the best treatment. It can be treated using drugs and many other antibiotics. The basic intervention strategy to control leprosy is 'Multidrug Therapy'.
- 3. Social Distance maintenance: The leprosy patient should avoid distance and close contact with other people. Leprosy cannot be transmitted to others in a single meet rather if there as a close relation with the other person for months or year. For example: if a person shakes hand with them, it will not be transmitted but if the leprosy patient sneezes or coughs in front of other person it can be transmitted.
- 4. Awareness of the disease: The people of the country whether rich or poor should know about the disease. They should know the precautions about it as it can help them to stay safe from it. Knowing symptoms is also a high requirement as if one person gets infected to it they can know the symptoms in early stage and consult a doctor.
- 5. Vaccination: Leprosy is endemic in several regions of the world. There's no particular vaccine to cure it but presently the only protection has come from the BCG (*Bacillus Calmette-Guerin*). A single dose of this vaccination gives up to 50% or higher protection against the disease.

#### Classification of Leprosy:

- 1. Tuberculoid Leprosy (TT): It is also called as paucibacillary leprosy. Under this type the people have widespread sores and lesions that affects nerves, skin and other organs of the body. Some symptoms of this are: discoloured patches on skin, loss of eyebrows or eyelashes, growth of nodules on the skin, etc...
- 2. Lepromatous Leprosy (LL): This leprosy is caused due to absence of epithelioid cells in lesions. This is known as the most unfavourable variant of leprosy. This usually has a very high chance of affecting the children.
- 3. Borderline Leprosy (BL): It has an appearance of thick granular margins and small satellite. Patients with this are treated for 6 months. It can also be more than that for 1 or 2 years. Sometimes it lasts for 5 to 6 years.

## **Risk Factors**

- Close contact
- Immunosuppression
- > Age

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## Diagnosis

- Physical exam
- Skin biopsy
- Polymerase Chain Reaction
- Serologic test

## **Complications**

Drug Resistance

#### Association

- International Leprosy Association
- American Leprosy Missions
- German Leprosy and TB Relief Association
- The Malaysian Leprosy Relief Association
- The Leprosy Mission Australia

#### Conclusion

Leprosy is a world wide spread disease. It affects all ages. Everyone should be aware of this disease. Some poor people are not aware of this disease and are vetting infected to it. Rather they should know the symptoms and should be given a good treatment. Hence people should help the poor people by providing them hospitality facilities. This will help to develop the country.

### **FAQ**

- What color is the ribbon for Leprosy day?
  - Purple
- What is the causative organisms of Leprosy?

Mycobacterium tuberculosis, M. leprae, M. lepromatosis, Bacillus

In India, the Leprosy awareness event is called ......

Anti-Leprosy Day

#### Reference

https://www.who.int/campaigns/world-leprosy-day

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