

What does elimination of leprosy as a public health problem mean?

In 1991, the World Health Assembly passed a resolution to eliminate leprosy as a public health problem by the year 2000. Elimination was defined as a prevalence rate of less than 1 case per 10 000 population. By the end of 2000, 108 of the 122 countries originally listed as leprosy endemic by WHO, attained the elimination goal at the national level. By the end of 2005, 116 of the 122 leprosy endemic countries have attained the goal. Extra efforts are still needed to achieve the elimination goal at the national level in the remaining six countries.

The elimination strategy is based on detecting and treating all cases with MDT and thereby reducing the disease burden to a very low level. The key will be to ensure that all new cases continue to have access to MDT services.

Why is the elimination of leprosy as a public health problem feasible?

Leprosy is one of the few infectious diseases to meet the strict criteria for elimination:

- There is only one source of infection: untreated, infected human beings.
- Practical and simple diagnostic tools are available: leprosy can be diagnosed on clinical signs alone.
- The availability of an effective intervention to interrupt its transmission: multidrug therapy (MDT).
- Under natural conditions, "incident" cases (new cases in which the disease has recently developed) make up only a small fraction of the prevalence pool. Below a certain level of prevalence, any resurgence of the disease is very unlikely.
- Unlike tuberculosis, the leprosy situation does not appear to be adversely affected by HIV infection.

Why has the prevalence rate been selected as the yardstick for elimination?

Prevalence at the end of the year is a simple and easily understandable indicator, which gives the balance of the patients under active treatment, after excluding those cured and released from treatment during the year.

The main thrust of the elimination strategy is to reduce the burden of the disease to very low levels. In view of the long incubation period of leprosy, it is difficult to differentiate new or incident cases, i.e., those who developed the disease within one year from those who developed earlier (backlog cases). Hence it was decided to use prevalence rate as the yardstick for elimination.

WHO is fully aware of the limitations of using registered prevalence as an indicator of progress towards elimination. However, in the absence of practicable alternatives, prevalence was considered the best indicator available.

Now that most countries have achieved the goal of elimination of leprosy as a public health problem, using the prevalence indicator, WHO is recommending a shift to **annual new case detection and cure rate** as primary indicators in future.

Why not aim for the eradication of leprosy rather than elimination?

Eradication would mean the complete absence of the disease and the organism that causes it throughout the world. At present, we lack the tools both to protect people from developing leprosy and to diagnose and treat the disease in its sub-clinical form. Significant resources would be required to develop and deploy the necessary tools, and hence, it was decided to aim at elimination of the disease as a public health problem, as the first step.

Will new cases of leprosy continue to occur beyond the year 2005? If so, how can they be explained?

Since the goal of elimination of leprosy as a public health problem is aimed at reducing the disease burden, new cases will continue to occur in small numbers beyond the year 2005. The disease will appear in individuals who acquired their infection several years earlier as a result of the long incubation period of the disease.

Why is it crucial to integrate leprosy within the general health services?

Integration improves the coverage, equitable accessibility of leprosy services and availability of MDT to all sections of the community, and makes it an integral part of the basic health services provided to communities, thus ensuring that leprosy is considered like any other disease.

What are the most important messages about leprosy for the community?

The communication approach must be positive and attractive and the messages simple, clear, and easily understandable. Some examples of messages could be:

- Leprosy is like any other disease. It is caused by a germ and is fully curable.
- Leprosy can be easily diagnosed from clinical signs alone. A pale or reddish skin patch that lacks sensation is a tell-tale sign of the disease.
- MDT kills germs and stops the spread of leprosy after the first dose. Patients on treatment do not spread leprosy.
- MDT is available free of charge at all health facilities.
- Early and regular treatment prevents deformities
- Patients who complete treatment are totally cured, even if they have residual skin patches or disabilities.
- Patients can lead completely normal lives, before, during and after their treatment.

What was the guiding principle in the development of MDT?

MDT was developed against a background of growing primary and secondary resistance to dapsone. It is based on two or three drugs (rifampicin, clofazimine, and dapsone), used in combination to prevent the development of resistance. Leprosy should never be treated with any single antileprosy drug. Drug resistance against MDT is so far not reported.

What are the recommended standard treatment regimens for leprosy?

MDT treatment is provided in blister packs, each containing four weeks' treatment. Specific blister packs are available for multibacillary (MB) and paucibacillary (PB) leprosy as well as adult and children.

Regimen	MB (Adult)	PB (Adult)	MB (Child)	PB (Child)
Rifampicin	600 mg once a month	600 mg once a month	450 mg once a month	450 mg once a month
Clofazimine	300 mg once a month, and 50 mg daily	-	150 mg once a month, and 50 mg every other day	-
Dapsone	100 mg daily	100 mg daily	50 mg daily	50 mg daily
Duration	12 months	6 months	12 months	6 months

Children under the age of 10 years should receive appropriately reduced doses of the above drugs.

What is the role of WHO in ensuring progress towards elimination?

WHO is working on all fronts to make elimination of leprosy as a public health problem a reality in all countries. Its role includes the following elements:

- **Technical** – to further simplify and standardize the existing technology as well as to provide technical support at the country level.
- **Logistic** – to forecast annual MDT requirements, provide and distribute MDT treatment free of charge for all in need, including in those areas that are difficult to reach.
- **Operational** – to plan, guide and monitor implementation of the focused strategy.
- **Societal and cultural** – to change the negative image of leprosy.
- **Political** – to mobilize the necessary political commitment at all levels, as well as the necessary resources.

Partnership – to ensure productive collaboration between partners at the global and country levels.