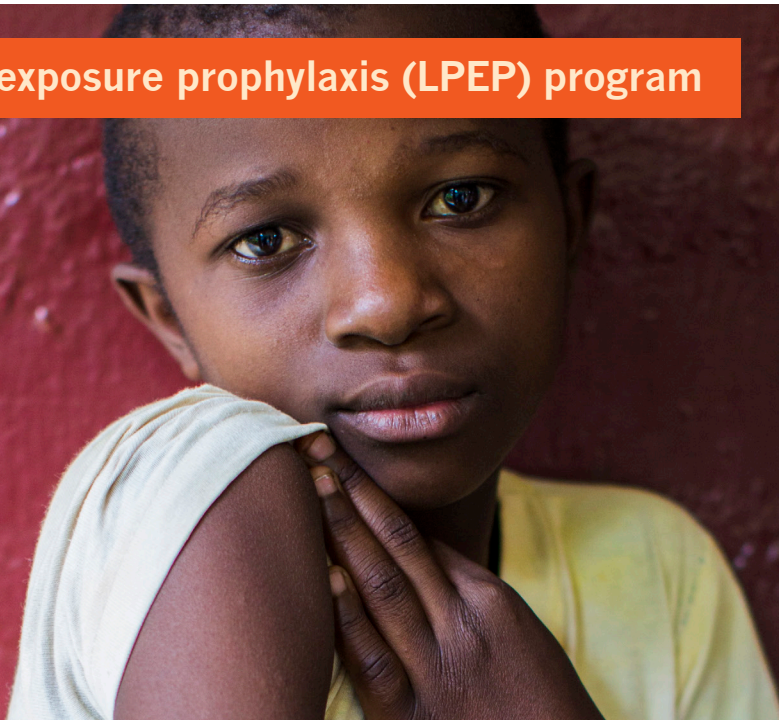


Leprosy post-exposure prophylaxis (LPEP) program



Program objectives

The overall aim of the LPEP program is to evaluate the feasibility and efficiency of contact tracing and the provision of preventative treatment for leprosy under routine conditions in several countries, and to determine the impact this has on leprosy incidence. LPEP also aims to strengthen nationally scalable disease surveillance systems to make them more action oriented and able to closely follow the national evolution of leprosy.

The ultimate goal of the LPEP program is to document and integrate the evidence generated and lessons learned into national leprosy policy to ensure widespread implementation. Together with local authorities, the LPEP partnership develops guidelines for these activities based on the LPEP experience, and sets out realistic cost implications to ensure long-term success.

How it works

Once a new patient has been diagnosed, health services actively screen household members and neighbors of the patient and examine them. Symptomatic persons are promptly referred for multidrug therapy (MDT) and asymptomatic contact persons are offered a post-exposure prophylaxis (single dose rifampicin), to reduce their risk of developing leprosy by 50-60%. This active contact tracing of newly diagnosed patients is a targeted strategy to prevent leprosy and to accelerate diagnosis and prompt treatment among those most at risk.

In 2015, the LPEP program was further implemented in Indonesia and launched in India, Nepal, Myanmar, Tanzania and Sri Lanka. LPEP also includes the Cambodian Retrospective Active Case Finding program, which develops an alternative methodology to ensure early detection of household members and neighbors of leprosy patients diagnosed up to ten years earlier. By focusing on areas where clusters of index patients are located, the program works to increase the efficacy of a small team of leprosy diagnostic experts, by tracing, screening and managing all contacts in a single “drive”. This approach is repeated until all high-priority operational districts, identified through high case detection rates or a high proportion of child patients e.g., have been covered. Working with the Cambodian National Leprosy Elimination Program and the Comité

Facts & Figures

- LPEP was launched by the Novartis Foundation in 2014.
- LPEP is now operational in **Indonesia, India, Nepal, Myanmar, Tanzania and Sri Lanka**
- Brazil and Cambodia are complementing LPEP with alternative but similar approaches to **contact tracing and post-exposure-prophylaxis**.



International de l'Ordre de Malte (CIOMAL), the program trains healthcare workers, strengthening capabilities in the detection and treatment of leprosy. In 2016, Cambodia will expand its contract tracing approach to include the provision of preventative treatment.

In Brazil a similar approach, complementing the evidence from the LPEP program, is used in the "PEP-Hans" project that explores the administration of chemo- and immunoprophylaxis simultaneously (with 30 days interval) to about 20 contacts per index patient. This initiative is implemented in 16 municipalities of Mato Grosso, Pernambuco and Tocantins states and covers index patients diagnosed between 2015 and 2017.

LPEP will run until 2018, with ongoing data collection to generate evidence on the most efficient way to operationalize contact tracing with post-exposure prophylaxis and its potential to interrupt leprosy transmission.

LPEP partners include several International Federation of Anti-Leprosy Associations (ILEP) members: Netherlands Leprosy Relief, FAIRMED, American Leprosy Missions and the German Leprosy and TB Relief Association, and two academic institutions: the Erasmus University Medical Center and the Swiss Tropical and Public Health Institute.

The Novartis Foundation's strategy to interrupt the transmission of leprosy

Despite the availability of free multidrug therapy (MDT) drastically reducing the number of leprosy patients over the past 30 years, the number of new patients diagnosed with leprosy has plateaued over the last decade at about 200,000-250,000 per year. In several countries across Asia and Africa, leprosy remains endemic in high-burden pockets. Now, the challenge of covering the last mile to make leprosy history is to interrupt its transmission.

Although there are still uncertainties as to how leprosy is transmitted, one of the high risk factors is close and frequent contact with an infectious patient. Once infected, the average incubation period is about 5 years and it can take as long as 20 years for symptoms to appear.

Disabilities are secondary complications which result from late diagnosis, when the nerve damage caused by leprosy is already present, or from acute inflammatory reactions that can occur at any stage. MDT has made it possible to treat patients, reduce transmission and prevent disability. Early detection and prompt treatment is currently the best approach to control the disease.

Toward a world without leprosy

The Novartis Foundation has been active in the fight against leprosy for 30 years. The LPEP program is part of the Novartis Foundation's focus on exploring innovative interventions to bring the world closer to the eventual goal of leprosy elimination. The strategy is based on consensus reached by a group of leading leprosy and disease elimination experts, who agree that a successful program requires:

- early diagnosis and prompt treatment for all patients
- tracing (also known as active screening) and post-exposure prophylaxis for contact persons of newly diagnosed patients
- development of new diagnostic tools
- action-oriented surveillance systems