

## Neglected tropical diseases



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### What are the neglected tropical diseases?

Seventeen neglected tropical diseases (NTDs) have been identified by the World Health Organization (WHO). It is estimated that over 1 billion people are infected with NTDs, with a further 1 billion at risk. The majority of NTDs occur in the tropics and sub-tropics and have particular characteristics in common:

- They afflict the poorest people – those without access to the safe water, sanitation, and basic health services required in order to protect themselves against infection by bacteria, viruses and other pathogens. High-income groups are rarely affected.
- Many are chronic, slowly developing conditions that become progressively worse if undetected and untreated. The damage they cause can be irreversible.
- They can cause severe pain and life-long disabilities, with long-term consequences for the person and also for family members who have to care for the person.
- People with NTDs are often stigmatised and excluded from society, and this can affect their mental health.

The individual diseases are very different, and one person can be affected by more than one disease at the same time.



Kate Holt/Sightsavers

Community distribution of ivermectin for onchocerciasis. NIGERIA

The infectious agents responsible include:

- viruses (rabies and dengue)
- bacteria (leprosy, yaws, trachoma and Buruli ulcer)
- protozoa (leishmaniasis and trypanosomiasis)
- helminth parasites (schistosomiasis, lymphatic filariasis, onchocerciasis, intestinal worms and Guinea worm).

Transmission is equally diverse and can take place via:

- flies, fomites (e.g. skin cells, hair, clothing or bedding) and fingers (trachoma)

- mosquitoes (dengue fever and filariasis)
- tsetse flies (sleeping sickness)
- sandflies (leishmaniasis)
- blackflies (onchocerciasis)
- snails, which release infective larvae into water to penetrate human skin (e.g. schistosomiasis)
- the faeco-oral route (e.g. soil-transmitted helminths – see page 29) or via food products.

NTDs can cause blindness (onchocerciasis and trachoma), deformity and disablement, disfigurement, cancers, and neurological problems.

*Continues overleaf* ➤

### ABOUT THIS ISSUE



**Allen Foster**

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In 1988, Merck in the USA made Mectizan available at no cost to communities with onchocerciasis infection. The commitment was 'as much as is needed for as long as it is needed.'

This game-changing donation heralded the development of a new global partnership in health between the pharmaceutical industry, UN agencies,

national ministries of health, non-governmental organisations and communities at risk – sectors of society which normally do not work together. Although they have different structures, driving forces, and skills, they agreed to break down the barriers that usually make them work in separate silos and to come together with a common vision to control and eliminate the specific diseases affecting neglected people. Two of these diseases – onchocerciasis and trachoma – cause blindness. Thanks to these ongoing

donations, the challenge with neglected tropical diseases today is not so much to discover a treatment but rather to reach the very remote communities with an integrated, effective and sustainable programme of disease control.

This edition of the *Journal* aims to inform our readers about the neglected tropical diseases, the communities affected, and the available control measures. Emphasis is placed on integration and learning from each other to make the programmes more effective.