



Photo credit : Nasir Ghafoor/MSF

**Six-year-old Faiza Bibi waits to receive treatment for lesions on her face at the Médecins Sans Frontières (MSF) cutaneous leishmaniasis treatment centre in Peshawar, Pakistan.**



# CUTANEOUS LEISHMANIASIS

## THE MARK OF NEGLECT

Cutaneous leishmaniasis (CL), the most common form of leishmaniasis, is a vector-borne disease transmitted through the bite of sandflies that carry the *Leishmania* parasite. People affected by poverty, malnutrition, displacement, and poor housing conditions are most at risk. Although it is not fatal, CL is a disfiguring and stigmatizing disease that receives little attention from research and development (R&D) and public health efforts.

People with CL develop skin lesions on the parts of their body where they are bitten – often on the face or other exposed areas – leaving disfiguring, life-long scars that bring severe social stigma, particularly for women and children.<sup>1</sup> The ostracism, halted or interrupted education, and economic loss that often result have a devastating impact on people’s lives. Very few people receive treatment.



**600,000 TO 1 MILLION**  
new cases of CL occur worldwide each year.



CL is endemic in  
**87 COUNTRIES WORLDWIDE**

## THE TREATMENT CHALLENGE

Current treatment for CL relies on drugs known as antimonials. Developed over 70 years ago, they are toxic, costly, require repeated painful injections, and are less effective in children under five years of age.<sup>2</sup> Treatment with antimonials is also long – between 20 and 30 days – and not indicated for patients who are pregnant, have diabetes, or have heart, liver, or kidney problems.

Adherence to treatment is a major challenge, particularly for children, because treatment is painful and requires someone to take them to the health centre every day. As a result, many patients discontinue treatment.

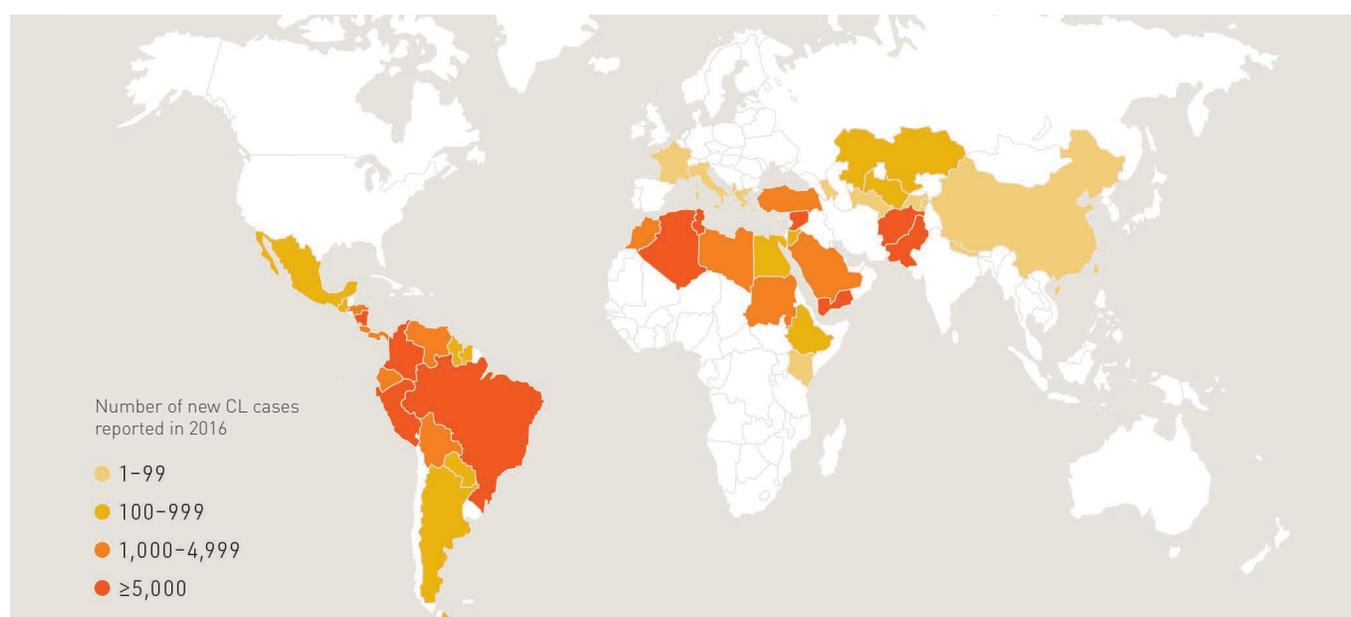
## Our search for shorter, safer treatments

To improve people's hope of healing from this disfiguring and stigmatizing disease, DNDi seeks to develop short-duration, safe, effective, non-invasive, affordable, and field-friendly treatments for CL.

DNDi has tested the efficacy of combining thermotherapy with a short course of miltefosine for CL. Compared to current recommended treatments, this combination could improve treatment effectiveness, shorten treatment duration, and reduce the rate of side effects. DNDi is planning a Phase III study of the combination in four countries in Latin America and MSF is testing the combination in Pakistan. The results from both trials could therefore help improve treatment both in the Americas and the Middle East and South Asia, where treatment responses to current regimens are not satisfactory.

## Geographical distribution of new cutaneous leishmaniasis cases<sup>3</sup>

CL affects people in many parts of the world and is considered endemic in 87 countries or territories. About 95% of CL cases occur in the Americas, the Mediterranean basin, the Middle East and Central Asia. Afghanistan, Algeria, Brazil, Columbia, Pakistan, and Syria each reported more than 10,000 cases of CL in 2016, representing more than 70% of cases globally.



1 Reithinger R, Aakil K, Kolaczinski J, Mohsen M, Hami S (2005). Social impact of leishmaniasis, Afghanistan. *Emerg Infect Dis* 11: 634-636. 2015 Apr 11. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3320322>

2 WHO (2010). Technical Report Series 949: Control of the Leishmaniases – Report of a meeting of the WHO Expert Committee on the Control of Leishmaniases, Geneva, 22-26 March 2010. Available at: [https://apps.who.int/iris/bitstream/handle/10665/44412/WHO\\_TRS\\_949\\_eng.pdf?sequence=1](https://apps.who.int/iris/bitstream/handle/10665/44412/WHO_TRS_949_eng.pdf?sequence=1)

3 WHO (2018). Weekly Epidemiological Record, No. 40, 5 Oct. 2018. Available at: <http://apps.who.int/iris/bitstream/handle/10665/275333/WER9340.pdf?ua=1>