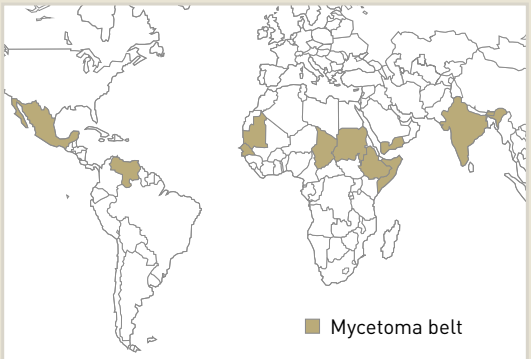
MYCETOMA

- Chronic inflammatory disease, in a fungal (eumycetoma) and a bacterial (actinomycetoma) form. Eumycetoma, mainly endemic in Africa, is much more difficult to treat
- Attacks the skin, deep muscle structures and the bone, believed to enter the body via thorn pricks or lesions on the feet
- Affects poor people in rural areas and in particular young males aged between 15 and 30
- Causes devastating deformities, often resulting in amputation and morbidity
- No global surveillance systems exist, so epidemiological data is lacking. The Mycetoma Research Centre in Khartoum, Sudan, has recorded around 6,500 patients since 1991
- Mycetoma is endemic in tropical and subtropical regions. The 'mycetoma belt' includes Chad, Ethiopia, Mauritania, Sudan, Senegal, and Somalia, as well as India, Mexico, Venezuela, and Yemen

80% of known patients develop deformities that need to be amputated

Global burden

Unknown



Eumycetoma treatments are extremely long, toxic, ineffective, and expensive. The disease is slow-growing and people often only seek treatment when it has reached later stages, by which time antifungal treatments are only 25-35% effective. Treatment is often followed by surgical removal of the remaining mass, leading to multiple amputations and, ultimately, the loss of entire limbs – with the risk of complications and death. An effective, safe, and affordable treatment for use in rural settings is urgently needed.

In 2016, mycetoma became the 18th disease to be added to the WHO list of NTDs, giving the disease political prominence and potentially paving the way for governments to monitor the disease, and for donors to fund research.

"I was in excruciating pain. I had to use a lot of pain killers just to be able to walk from one point to another. At some point, I got tired and decided to have my leg amputated."

Alsadik Mohamed Musa Omer
Infected with mycetoma 19 years ago while playing football at school in Sudan

DND*i* aims to deliver:

- **A new safe, effective, and affordable treatment** for patients with limited eumycetoma