

## **Ending the neglect of snakebite**

An estimated 2.7 million people are bitten by venomous snakes every year, killing more than 100,000 people annually and causing debilitating disabilities to many more. The vast majority of people are unable to access effective treatment.

With the creation of World Health Organization's roadmap on snakebite, there is now a unique opportunity to bring the world's attention to this issue, end the neglect and bring down the barriers that stop people getting treatment.

#### What are the barriers to treatment?

There are many reasons why people don't get effective treatment. They include:

- lack of effective and affordable polyvalent antivenom in stock.
- lack of medical staff training to administer treatment and give emergency care.
- absence of ambulance services to transport people rapidly to hospital care.
- distrust of antivenom products due to many inferior products on the market.

# A neglected disease: damaging to individuals and communities, but ignored

**Snakebite kills more people than any other neglected disease** on WHO's Neglected Tropical Diseases list, but has not received the attention required to reduce its impact on victims — both on individuals who die or may be permanently incapacitated, and on the families and communities who rely on them for support.

Many endemic countries have no reliable data on incidence on which to start to build national or regional policies to address the issues.

Multinational pharmaceutical corporations are reluctant to invest in developing treatments for people who are too poor to pay the prices they charge. In 2014, the drug manufacturer Sanofi ceased production of its African antivenom treatment because it was not profitable enough, although the product was considered excellent by experts.

### A unique opportunity: WHO's roadmap to tackle snakebite

The page is now turning...we can end the neglect. In 2018, WHO will launch an ambitious roadmap to tackle snakebite. This roadmap will include a raft of activities to overcome the range of barriers people face in accessing treatment, and call for a collaborative effort from all stakeholders involved to end the neglect.

#### What is the scope and remit of the roadmap? What will it cost?

WHO's roadmap plan will incorporate measures to assess and address snakebite burden with a focus on effective prevention, diagnosis, treatment, education and surveillance. The estimated cost is US\$16M up to the end of 2019, and the budget for the next decade is under discussion.

#### MSF and snakebite

Médecins Sans Frontières (MSF) admitted more than 3,000 patients to its clinics in 2017 for snakebite, predominantly in Sub-Saharan Africa and in the Middle East.

The highest number of cases in MSF projects are in Central African Republic, South Sudan, Ethiopia and Yemen.

Around half of the patients required and received free antivenom treatment. Other countries with significant number of cases admitted in MSF clinics were Tanzania, Kenya, Cameroon, Sudan and Sierra Leone.

"Imagine how frightening it must be to be bitten by a snake — to feel the pain and venom spread through your body – knowing it may kill you and there is no treatment available, or that you can't afford to pay for it"

- Dr Gabriel Alcoba, MSF Medical Adviser on snakebite.

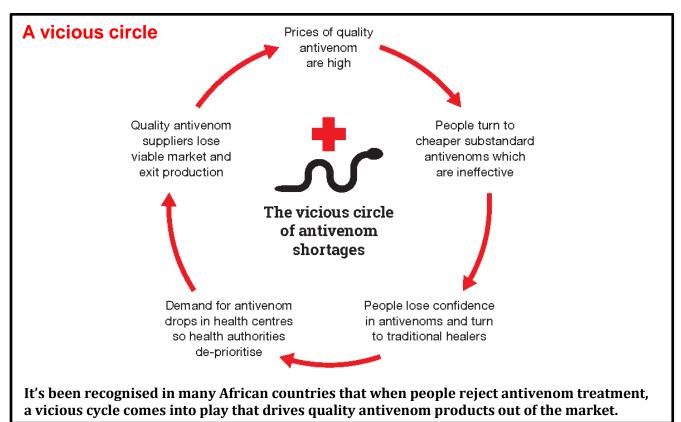
#### End the crisis in access to antivenom

Treating people with snakebite relies predominantly on an infusion of antidote to the snake venom. However only around 2% of people bitten by venomous snakes in sub-Saharan Africa have access to quality antivenom.<sup>2</sup> Here's why:

Often there is no stock of appropriate antivenoms available close to where a bitten person lives in remote rural locations.

Many antivenoms currently available are ineffective, non-specific or even harmful. The available antivenom may not be tailored to treat the most prevalent snake species in the region, and so fails to neutralise the venom. Or, the available antivenom maybe of substandard quality and may so trigger life-threatening side effects such as anaphylaxis in a high proportion of patients.

The high price of antivenoms are a major barrier for people to access treatment. Most people must pay for treatment out of their own pocket, driving patients and families into debt. The price can run to hundreds of dollars to cover the required number of doses. For this reason, people often cut short treatment; they may visit traditional healers instead or buy cheaper but ineffective substandard products.



## How to get effective and affordable antivenoms to the people who need them:

- WHO needs to establish and recommend a list of safe and effective antivenoms so country health ministries and other treatment providers procure only quality-assured antivenoms and ban ineffective products.
- Quality antivenom products must be available free of charge or for an amount that people can afford.
- Governments need to map snakebite incidence to identify hotspots and antivenom needs.
- More effective diagnostic and treatment tools must be developed not just through more investment in R&D but also by adopting innovative approaches to developing new treatments.

<sup>2</sup> Brown NI (2012) Consequences of Neglect: Analysis of the Sub-Saharan African Snake Antivenom Market and the Global Context. PLoS Negl Trop Dis 6(6): e1670. https://doi.org/10.1371/journal.pntd.0001670

<sup>&</sup>lt;sup>1</sup> http://www.who.int/snakebites/epidemiology/en/