

# HAI SNAKEBITE PROJECT IN UGANDA



Photo: Seth Doyle (Unsplash)

## ABOUT SNAKEBITE ENVENOMING

- Conservative global estimates show that snakebite envenoming kills 81,000–138,000 people every year and permanently disables 400,000 more.<sup>1,2,3</sup>
- In Africa, there are an estimated 435,000–580,000 snakebites annually needing treatment,<sup>4</sup> resulting in about 32,000 deaths and 6,000 amputations for sub-Saharan Africa, alone.
- The economic burden of snakebite is largely under-researched and unknown. However, it is estimated that, for Western Africa, up to USD 6,205 per death could be averted with effective antivenom treatment. The costs of permanent disabilities resulting from snakebite are even higher.<sup>5</sup>
- The World Health Organization and Member States have started prioritising snakebite envenoming by committing to important policy milestones in recent years.
- Many survivors of snakebite envenoming are

left with a permanent disability, such as a limb amputation and blindness. Survivors are also often plunged further into debt—even destitution—because of high treatment costs and the inability to work.

## KEY ISSUES IN UGANDA

- **Under-reporting:** Our research found that sampled Ugandan health facilities (n=144) recorded 593 cases in 140 facilities over 12 months. These numbers are likely a vast underestimation given that up to 70% of snakebite cases go unreported in sub-Saharan Africa<sup>6</sup>.
- **Traditional healers:** 50–68% of snakebite victims in sub-Saharan Africa seek initial treatment from traditional healers<sup>7</sup>; however, these treatments are not proven to work, can worsen snakebite injuries, and waste precious time for a victim to receive timely medical care.

- **Antivenom:** Quality antivenoms are lifesaving, but there are serious shortages. Just 4-10% of HAI surveyed healthcare facilities had antivenom in stock—but most of them were ineffective, or unaffordable. Subsequently, snakebite treatment products (such as antivenom, adrenaline, antibiotics and syringes) were unavailable for up to ten days per month.
- **Healthcare workers:** Most healthcare professionals in Uganda are not properly trained to treat snakebite. Among surveyed healthcare workers, 92% said they received no snakebite training

## THE HAI SNAKEBITE PROJECT

HAI's Snakebite Project operates in Uganda in collaboration with HEPS Uganda.

### Project Activities:

- **Building a snakebite evidence base:** We are gathering much-needed data from healthcare facilities and communities on snakebite cases and antivenom treatment.
- **Conducting evidence-based advocacy:** We are recruiting and building the capacity of champions to review and use our data to call for policy changes by national stakeholders, including the Ministry of Health.
- **Increasing community education:** We are providing communities with information and tools to learn how to prevent snakebite and provide effective first-aid and treatment for it.

### Recommendations:

- **Educate communities in first-aid and prevention of snakebites** by adopting and disseminating educational tools to

communities and schools. Involve traditional healers in the approach to refer envenoming cases to medical health facilities.

- Ministry of Health to **make snakebite a notifiable disease** and to **use data for targeted snakebite control efforts**. Additionally, gather systematic data on snakebite incidences and responses from communities.
- **Include antivenoms in the supply chain of essential medicines for public health facilities.**
- **Register effective antivenom** in Uganda based on scientific evidence.
- **Include snakebite treatment in curricula of public health schools.**

## WHO WE ARE

**Health Action International (HAI)** is an independent non-profit organisation. Using research and advocacy, we advance policies that enable access to medicines and rational medicine use.

**HEPS Uganda** is a coalition of health consumers, health practitioners, civil society organisations, and community-based organisations working to ensure equitable access to health services, with special focus on access to medicines for all Ugandans.

### For more information:

Sophie von Bernus  
Senior Project Officer  
Health Action International  
sophie@haiweb.org | +31 20 412 4523  
haiweb.org

## ENDNOTES

1. Kasturiratne, A., Wickremasinghe, A.R., de Silva, N., et al., 2008. The Global Burden of Snakebite: A Literature Analysis and Modelling Based on Regional Estimates of Envenoming and Deaths. *PLoS Medicine*, 5(11): e218.
2. Gutiérrez, J.M., Burnouf, T., Harrison, R.A., et al, 2014. A multicomponent strategy to improve the availability of anti-venom for treating snakebite envenoming. *Bulletin of the World Health Organization*, 92(7):526-532.
3. Harrison, Robert A., Casewell, Nicholas R., Ainsworth, Stuart A., Laloo, David G., 2019. The time is now: a call for action to translate recent momentum on tackling tropical snakebite into sustained benefit for victims. *Transactions of The Royal Society of Tropical Medicine and Hygiene*, try134, <https://doi.org/10.1093/trstmh/try134>

4. [www.who.int/health-topics/news-room/fact-sheets/detail/snakebite-envenoming](http://www.who.int/health-topics/news-room/fact-sheets/detail/snakebite-envenoming)
5. Hamza, M., Idris, M. A., Maiyaki, M. B., Lamorde, M., Chip-paux, J.-P., Warrell, D. A., ... Habib, A. G. (2016). Cost-Effectiveness of Antivenoms for Snakebite Envenoming in 16 Countries in West Africa. *PLOS Neglected Tropical Diseases*, 10 (3), e0004568. <https://doi.org/10.1371/journal.pntd.0004568>
6. [www.who.int/snakebites/epidemiology/en](http://www.who.int/snakebites/epidemiology/en)
7. Harrison, R.A., et al., Snake envenoming: a disease of poverty. *PLoS Negl Trop Dis*, 2009. 3(12): p. e569.