

HAI SNAKEBITE PROJECT IN ZAMBIA



Photo: Kamryn Hinojos (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.^{1,2,3}
- In Africa, there are an estimated 435,000–580,000 snakebites annually needing treatment,⁴ 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.⁵
- 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 devastating debt because of high treatment costs and the inability to work.

KEY ISSUES IN ZAMBIA & OTHER AREAS OF SUB-SAHARAN AFRICA

- **Under-reporting:** 875 cases were reported in Zambia by 97 facilities over one year. These rates are likely to be low, as approximately 70% of snakebite cases in sub-Saharan Africa go unreported.⁶
- **Traditional healers:** Many snakebite victims continue to seek treatment from traditional healers in sub-Saharan Africa. For example, at least 68% of snakebite victims in Kenya still seek initial treatment from traditional healers⁷; 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 can make the difference between life and death, but there are serious shortages. Some antivenoms are not effective or affordable. And poor access to healthcare services, limited transportation infrastructure, poverty, and cultural barriers also reduce treatment access in rural areas. Only 15% of the Zambian facilities reported treating snakebite patients with antivenom. Meanwhile, only 10% of the facilities reported to have antivenom in stock. And only 29% of the overall commodities for snakebite were available in Zambian healthcare facilities. Another 15% offer traditional treatment.
- **Healthcare workers:** Our research found that 82% of the Zambian healthcare workers are not trained in snakebite treatment.

THE HAI SNAKEBITE PROJECT

HAI's Snakebite Project operates in Zambia in collaboration with the Global Snakebite Initiative and Mr. Liyoka Liyoka.

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 schools and communities. 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 Zambia 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 advocacy and research, we advance policies that enable access to medicines and rational medicine use.

Global Snakebite Initiative (GSI) is a non-profit organisation of experts created to give voice to the forgotten victims of snakebite. HAI is the secretariat for GSI.

Mr Liyoka Liyoka is the National Coordinator of the HAI Snakebite Project in Zambia.

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
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
7. Harrison, R.A., et al., Snake envenoming: a disease of poverty. *PLoS Negl Trop Dis*, 2009. 3(12): p. e569.