

# HAI SNAKEBITE PROJECT IN KENYA



Photo: Tucker Tangeman (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</sup>.
- In sub-Saharan Africa, snakebite is estimated to cause about 32,000 deaths and 6,000 amputations a year.
- The economic burden resulting from snakebite envenoming in sub-Saharan Africa is largely under-researched and unknown, but likely high. A study showed that snakebite treatment costing 3 British Pounds is unaffordable in developing countries. Yet, treatment and transport costs often amount to several years of income<sup>3,4</sup>.
- The World Health Organization (WHO) and Member States have started prioritising snakebite envenoming. The WHO released its global strategy on snakebite in 2019, following the adoption of a Resolution at the 71st World Health Assembly and the addition of snakebite to the WHO's list of neglected tropical diseases.

## SNAKEBITE CHALLENGES IN KENYA

- **Under-reporting:** Our research shows that health facilities in Kilifi County (one of 47 counties in Kenya) receive up to 260 snakebite patients a year. This figure could be vastly underestimated given that up to 70% of snakebite cases go unreported in sub-Saharan Africa<sup>5</sup>.
- **Traditional healers:** At least 68% of snakebite victims in Kenya still seek initial treatment from traditional healers<sup>6</sup>. 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. Our research in Kilifi County found that only 10% of healthcare facilities had antivenom in stock. In addition, some antivenoms are not safe, effective, or affordable. And poor access to healthcare services, limited transportation infrastructure, poverty, and cultural barriers also reduce treatment access in rural areas.

- **Survivors:** Many snakebite envenoming victims who survive are left with a permanent disability, such as limb amputation and blindness. Survivors are also often plunged further into debt—even destitution—because of high treatment costs and the inability to work any longer.
- **Healthcare workers:** Most healthcare professionals in Kenya are not properly trained to treat snakebite. For example, our research in Kilifi County found that 86% of surveyed health professionals said they received no snakebite training.

## THE HAI SNAKEBITE PROJECT

Health Action International's (HAI) Snakebite Project operates in Kenya in collaboration with the Global Snakebite Initiative and the James Ashe Antivenom Trust at Bio-Ken Snake Farm.

### 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:** The HAI multi-stakeholder group Kenya is a group of snakebite experts, led by civil society, which regularly meets 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.

HAI is also contextualising and implementing this Project in Uganda and Zambia.

### Project Goals:

- **Empowered communities:** Communities across Kenya independently reduce the number of snakebite cases through awareness and education tools.

### ENDNOTES

<sup>1</sup> 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.

<sup>2</sup> Gutiérrez, J.M., Burnouf, T., Harrison, R.A., et al, 2014. A multicomponent strategy to improve the availability of antivenom for treating snakebite envenoming. *Bulletin of the World Health Organization*, 92(7):526-532.

- **Mandatory snakebite reporting:** Government authorities make snakebite a notifiable or reportable disease by law.
- **Treatment available for all:** Kenyan health authorities take steps to ensure antivenom is provided to everyone and is safe, effective, and affordable.
- **Effective healthcare interventions:** Evidence from our project encourages proper training of healthcare workers, including tools for rehabilitation and disability services.

## WHO WE ARE

- **Health Action International** is an independent non-profit organisation. Using research and advocacy, we advance policies that enable access to medicines and rational medicine use.
- **Global Snakebite Initiative** is a non-profit organisation of experts created to give voice to the forgotten victims of snakebite.
- **James Ashe Antivenom Trust** is a member of the Global Snakebite Initiative. It provides antivenom and aims to reduce the number of deaths and disabilities caused by snakebite.

### For more information:

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<sup>3</sup> Habib, A. G., & Brown, N. I. (2018). The snakebite problem and antivenom crisis from a health-economic perspective. *Toxicon*, 150(February), 115–123. <https://doi.org/10.1016/j.toxicon.2018.05.009>

<sup>4</sup> Theakston, R. D. G. a Warrell, D. A. Crisis in snake antivenom supply for Africa [14]. *The Lancet*, 356, 2104 (2000).

<sup>5</sup> <http://www.who.int/snakebites/epidemiology/en/>

<sup>6</sup> WHO. (2019). Prevalence of snakebite envenoming. Retrieved July 18, 2019, from <http://www.who.int/snakebites/epidemiology/en/>