PURPOSE OF OUR RESEARCH
Snakebite envenoming is one of the most under-researched and neglected tropical diseases in the world. As part of our Snakebite Project, Health Action International (HAI) is developing an evidence base on snakebite in Kenya, Uganda and Zambia. Our results will enable national and regional policy-makers, including Ministries of Health, to develop and implement strong policies and programmes that improve snakebite reporting, prevention, treatment and rehabilitation.

RESEARCH METHODOLOGY
HAI is surveying all levels of the healthcare system to assess: Snakebite incidence rates; snakebite treatment methods (including antivenom), and the availability and affordability of these methods; snakebite patient profiles; health-seeking behaviours of people with snakebite; and community interventions for snakebite. HAI Snakebite Project staff developed the survey tool.

The following data is the result of the survey conducted in Kilifi County, Kenya, between November 2017 and February 2018. Eight local data collectors were trained by HAI to carry out the survey. They were then managed by HAI’s Programme Coordinator for Kenya, Royjan Taylor (James Ashe Antivenom Trust).

In total, 103 of 108 (95%) health facilities responded to the survey. One healthcare worker at each facility provided the survey responses. Data collectors provided every healthcare facility visited with a poster of the most venomous snakes in Kenya and a ‘Snakebite Incident Form’. They asked each respondent to use this form to record new snakebite cases. Data collectors will collect these forms later in 2018. This additional data will complement the initial research results.
SURVEY RESULTS

Number of Snakebite Cases
- 10% of health facilities reported 10–50 snakebite cases in the past six months, while one facility reported 100–150 snakebite cases in the same period.
- 8% of health facilities reported an average of 2–5 snakebite cases a week, which would equate to about 104–260 cases per facility in a year.

Snakebite Patients
- 70% of snakebite patients at the health facilities were 10–30 years of age.
- Farming, herding and walking were the most common activities being undertaken by snakebite patients when bitten.
- 1 out of 5 respondents reported that patients were sleeping when bitten.

First Aid and Other Prior Treatment
- 57% of respondents believed that less than a quarter of snakebite patients had received first aid before visiting their healthcare facility.
- The majority of health facilities (87%) reported that 9 in 10 patients had not visited any other health facility before reaching theirs.
- Over 25% of respondents stated that half their snakebite patients had initially visited a traditional healer before coming to their facility.

Snakebite Training for Healthcare Workers
- 63% of respondents said they did not have enough knowledge to properly treat snakebites.
- Most respondents (86%) said they received no medical training to treat snakebites.

Antivenom Availability
- Only 10% of health facilities had antivenom in stock at the time of the survey.
- 67% of respondents cited ‘financial reasons’ as the cause of low antivenom stocks.

Common Treatment Methods
- 89% of facilities used supportive treatment, such as painkillers and fluids, to treat snakebites.
- 73% of health facilities referred patients to another health facility for further assessment and treatment.
- Only 7% of health facilities treated patients with antivenom, while 88% reported that the health facility had no antivenom in stock at the time.

Affordability of Treatment Costs
- 74 of 103 respondents said snakebite patients must pay out-of-pocket for health facility registration and supportive treatment (such as painkillers and fluids).
- The majority of respondents (77%) said these costs (which exclude antivenom) are not affordable for most patients.

NEXT STEPS
A multi-stakeholder group of snakebite experts—specially convened through HAI’s Snakebite Project and led by civil society—is using these research results to develop policy recommendations that could improve snakebite reporting, prevention, treatment and rehabilitation. These recommendations will be distributed and discussed with national and regional policy-makers, including the Ministry of Health. The results will also support the expansion of our data collection activities in other counties throughout Kenya, and in Uganda and Zambia.

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

Royjan Taylor
Snakebite Programme Coordinator (Kenya)
Health Action International and Director
James Ashe Antivenom Trust
snakes@bioken.com | antivenomtrust.com