

IS – 09

Incidence of snakebites and medically relevant snakes in different regions in Laos and Vietnam

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Objective:

The objective of the community-based surveys was to estimate the incidence of snakebites in Savannakhet province, in southern Laos, Thua Thien Hue province, in central Vietnam and Can Tho Municipality in the Mekong Delta in South Vietnam. Evaluation of hospital records of snakebite patients in the same regions provided information about medically relevant snakes.

Methods:

Cross-sectional, community-based surveys were performed in Savannakhet province in Lao PDR, and in Thua Thien Hue Province and Can Tho Municipality in Vietnam. Multi-stage random sampling was used to select interviewees in the villages.

Results:

Incidence of snakebites is high in Savannakhet province in southern Laos with up to 1105 snakebites per 100,000 persons per year. Malayan pit vipers, green pit vipers, Indochinese cobras and Malayan kraits were responsible for 40%, 30%, 25% and 5% of snakebites respectively. In Thua Thien Hue province in central Vietnam and Can Tho municipality in South Vietnam incidence was calculated at 58 and 48 snakebites per 100,000 persons per year respectively. Green pit vipers and cobras caused the majority of snakebites in both regions.

Conclusion:

Incidence of snakebites is significantly lower in central and southwest Vietnam compared to Savannakhet province in Lao PDR. Advanced mechanization in agriculture, a lower poverty rate, a different snake fauna and the exploitation of snakes for food, snake wine and traditional healing practices are main reasons for the lower incidence in the two provinces in Vietnam. Furthermore, increasing urbanization and cultivation of land for commercial purpose in this densely populated country most likely deprive snakes of their habitat.

Keywords: Incidence, snakebite, Vietnam, Lao PDR

References:

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