

# WEEKLY EPIDEMIOLOGICAL REPORT A publication of the Epidemiology Unit Ministry of Health, Nutrition & Indigenous Medicine 231, de Saram Place, Colombo 01000, Sri Lanka Tele: + 94 11 2695112, Fax: +94 11 2696583, E mail: epidunit@sltnet.lk Epidemiologist: +94 11 2681548, E mail: chepid@sltnet.lk Web: http://www.epid.gov.lk

**Snake Bite** 

of Sri Lanka

# Vol. 45 No. 44

## 27<sup>th</sup>– 02<sup>nd</sup> November 2018

## According to the Merriam Webster dictionary the bite of a <u>snake</u> especially a venomous snake is defined as a snake bite. It can be either venomous or non venomous mainly.

A venomous (poisonous) snake bite is when a bite or a puncture <u>wound</u> made by a snake that is adept of injecting, secreting, or spitting a toxin into the penetrated skin wound or, mucus membranes or the eyes where the toxin can be absorbed. A bite from one of these snakes should be considered a medical emergency. In Sri Lanka the following venomous snakes can be identified

Sci- entifi c name	Eng- lish name	Sin- hala name s	Tamil name s
Tri-	Green	Pala	Pa-
meres	pit vi-	po-	chai
urus	per	longa	viri-
trigon			yan
oceph			Kopi
alus			viri-
			yan

Table2.0 – Moderately venomous land snake

#### Table1.0 – Highly venomous snakes of Sri Lanka

Scientific name	English name	Sinhala names	Tamil names	A non venomous (nonpoisonous)					
Naja naja	Cobra	Naya Nagaya	Naga pambu Nalla pambu	snake bite is a bite or puncture wound made by a snake that is					
Bungarus caeruleus	Common krait	Thel karawala Magamaruwa Habaralaya Mavilla	Yennai pambu Yennai viriyan Yettadi viriyan	They are back fanged and cannot efficiently deliver venom into hu-					
Bungarus ceylonicus	Ceylon krait	Dunu karawala Polon karawala Mudu karawala	Yennai viriyan Yettadi viriyan	mans. They do not caused signifi- cant medical problems. These					
Daboia russelii (Vipera russelli)	Russell's viper	Dhara polonga Tith polonga	Kannardi viriyan	fied reputation in Sri Lanka as being highly venomous. There					
Echis cari- natus	Saw scaled viper	Weli polonga	Surattai pambu Pal surattai	from the bites of these snakes. It					
Hypnale spp.	Hump nosed viper	Polonthelissa Kunakatuwa	Konal mookupuda- yan Kopi viriyan	ing.					
Enhydrina schistosa	Hooked- nose Sea Snake	Valakkadiya		Table3.0 – Mildly venomous					
	Unane	1		I land snake of Sri Lanka					

There is another group as mildly/moderately poisonous snakes which cannot kill but the effect could persists for a longer time. It may effect the kidneys and cause severe pain and swelling.

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Scientific	English	Sinhala	Tamil	long
name	name	names	names	
Boiga spp.	Cat snakes	Mapila		Trea
				Majo
Calliophis melanurus	Sri Lankan coral snake	Depath- kaluwa		ous s surai
Ahaetulla spp.	Whip snakes Vine snakes	Ahaetulla Asgulla Henaka- daya	Kankuthi pambu	tion of pain quets
Cerberus rhynchops rhynchops	Dog faced water snake	Kunudiya kaluwa Di- yabariya	Tanni pambu	that and to th
Chrys- opelea spp.	Flying snake Gold and black tree snake	Polmal karawala	Parrakum pambu	tive such cine <b>Prev</b>
Hypnale spp.	Hump nosed viper	Polonthelis sa Kuna- katuwa	Konal mookupud ayan Kopi viriyan	This and Pro
Bal- anophis ceylonen- sis	Blossom krait	Nihaluwa Mal kara- wala		Av Us

The snake bites mannerism a major public health problem in children and adults worldwide. The health impacts of snake bites are dependent on the type of species, the size and health of the bitten person, and accessibility to appropriate health care.

## Scope of the problem

Annually up to five million people are bitten by snakes worldwide. Poisonous (envenoming) snakes cause extensive morbidity and mortality. Annually there are between 94000 to 125 000 deaths and around 2.4 million envenomations (poisonings from snake bites) estimated. This also causes around 400 000 amputations as well as other severe health complications such as infection, tetanus, scarring, contractures, and psychological disorders. Deficiency of antivenom and poor health access increases the severity of the injuries and their outcomes.

## Risk

Snake bites mainly occur in Africa and South-East Asia. It is most common among people living in rural, resource-poor settings. Also mainly seen among low-cost, non-mechanical farming and other field occupations. Agricultural workers, women and children are most frequently bitten by snakes. Therefore it causes an additional burden to the community and the families as adult victims are often the wage earners or care providers of the family unit while child victims can suffer lifelong disability.

## reatment

Majority of snakes are not venomous while even the venomous snakes may not inject the venom always therefore reassurance should be done in positive and efficient manner as fear will be the commonest reaction. Complete immobilization of the effected body part is essential as it will reduce the pain and the absorption of the venom is reduced. As tourniquets and cutting wounds can worsen the effects of the venom and should not be used as first aid. To remove venom that lies on the surface of the skin gentle washing with soap and water is advisable. Transporting the victim immediately to the hospital is essential as in case of envenoming, affective treatment is available in hospitals. Supportive therapy such as airway support, and administration of tetanus vaccine when required must be carried out.

## Prevention of snake bites

This involves informing communities about snake bite risks and prevention techniques, as:

- Protect the legs and feet by wearing shoes or boots, and ankle length garments
- Avoid tall grass or dense under growth and jungle paths
- Use torchlight or a source of elimination to prevent treading on snakes
- Carry a stick when walking in snake infested sites to beat the grass and undergrowth.
- Warn snakes of your approach by treading heavily
- Avoid putting hand into anthills, cavities in trees and thick undergrowth and under logs
- Dispose of garbage and junk regularly
- Keep dwelling and surroundings free of rats, mice, frogs, lizards, etc., which attract snakes.
- Avoid storing paddy inside your house as it attracts mice. Hang rolled-up mats from the roof
- Knowledgeable persons should handle or rear snakes.
- Dead snake should be handled with great care

In order to prevent serious health implications of snake bites, health-care providers should be educated on snake-bite management which includes the proper use and administration of antivenom. Health authorities and policy-makers should ensure appropriate supplies of safe and effective antivenoms to communities and countries. Research initiatives to determine the burden of these injuries caused by snake bites and regarding development and administration of region or country specific antivenom.

## Source

WHO animal bites- <u>https://www.who.int/en/news-room/fact-sheets/detail/animal-bites</u>

Medicine net- https://www.medicinenet.com/snake\_bite/ article.htm#what\_is\_a\_venomous\_poisonous\_snake\_bite SLMA Expert Committee on Snakebite

Table 1: Selected notifiable disease	s reported by Medical Officers	of Health 20th - 26th October 2018(43rd Week
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RDHS Division		Colombo	oaha	Kalutara	Kandy	Matale	NuwaraEliya	Galle	Hambantota	Watara	Jaffna	Kilinochchi	Wannar	Vavuniya	Mullaitivu	Batticaloa	Ampara	Trincomalee	Kurunegala	Puttalam	Anuradhapura	Polonnaruwa	Badulla	Monaragala	Ratnapura	Kegalle	Kalmune	SRILANKA	Source: Weekly I

27<sup>th</sup>– 02<sup>nd</sup> November 2018

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## Table 2: Vaccine-Preventable Diseases & AFP

# 27th– 02<sup>nd</sup> November 2018 20th-26th October 2018(43rd Week)

Disease	No. of	Cases by	y Province	)				Number of cases during current	Number of cases during same	Total num- ber of cases to	Total num- ber of cases to date in	Difference between the number of		
	W	С	S	N	E	NW	NC	U Sab Sab 2018 Salite week in 2018 date in 2017		cases to date in 2018 & 2017				
AFP*	00	00	00	00	00	00	00	00	00	00	02	54	61	- 11.4 %
Diphtheria	00	00	00	00	00	00	00	00	00	00	00	00	00	0%
Mumps	02	00	00	00	00	00	01	00	00	03	07	289	263	9.8 %
Measles	00	00	00	00	00	00	00	00	00	00	03	105	180	- 41.6 %
Rubella	00	00	00	00	00	00	00	00	00	00	00	05	10	- 50 %
CRS**	00	00	00	00	00	00	00	00	00	00	00	00	01	0%
Tetanus	00	00	00	00	00	00	00	00	00	00	00	18	16	12.5 %
Neonatal Tetanus	00	00	00	00	00	00	00	00	00	00	00	00	00	0 %
Japanese En- cephalitis	00	00	00	00	00	00	00	00	00	00	00	25	21	19.0 %
Whooping Cough	00	00	01	00	00	00	01	00	00	02	00	44	19	131.5%
Tuberculosis	127	72	19	00	01	10	09	17	23	238	179	7225	7056	2.3 %

#### Key to Table 1 & 2

W: Western, C: Central, S: Southern, N: North, E: East, NC: North Central, NW: North Western, U: Uva, Sab: Sabaragamuwa. Provinces:

RDHS Divisions: CB: Colombo, GM: Gampaha, KL: Kalutara, KD: Kandy, ML: Matale, NE: Nuwara Eliya, GL: Galle, HB: Hambantota, MT: Matara, JF: Jaffna, KN: Killinochchi, MN: Mannar, VA: Vavuniya, MU: Mullaitivu, BT: Batticaloa, AM: Ampara, TR: Trincomalee, KM: Kalmunai, KR: Kurunegala, PU: Puttalam,

AP: Anuradhapura, PO: Polonnaruwa, BD: Badulla, MO: Moneragala, RP: Ratnapura, KG: Kegalle.

Data Sources:

Weekly Return of Communicable Diseases: Diphtheria, Measles, Tetanus, Neonatal Tetanus, Whooping Cough, Chickenpox, Meningitis, Mumps., Rubella, CRS, Special Surveillance: AFP\* (Acute Flaccid Paralysis ), Japanese Encephalitis

CRS\*\* =Congenital Rubella Syndrome

NA = Not Available



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Comments and contributions for publication in the WER Sri Lanka are welcome. However, the editor reserves the right to accept or reject items for publication. All correspondence should be mailed to The Editor, WER Sri Lanka, Epidemiological Unit, P.O. Box 1567, Colombo or sent by E-mail to chepid@sltnet.lk. Prior approval should be obtained from the Epidemiology Unit before publishing data in this publication

# **ON STATE SERVICE**

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