

WEEKLY EPIDEMIOLOGICAL REPORT A publication of the Epidemiology Unit Ministry of Health, Nutrition \& Indigenous Medicine 231, de Saram Place, Colombo 01000, Sri Lanka
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## 

According to the Merriam Webster dictionary the bite of a snake 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 wound 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

Table1.0 - Highly venomous snakes of Sri Lanka

Table2.0 - Moderately venomous land snake of Sri Lanka

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


| Scientific name | English name | Sinhala names | Tamil names |
| :---: | :---: | :---: | :---: |
| Naja naja | Cobra | Naya Nagaya | Naga pambu Nalla pambu |
| Bungarus caeruleus | Common krait | Thel karawala Magamaruwa Habaralaya Mavilla | Yennai pambu Yennai viriyan Yettadi viriyan |
| Bungarus ceylonicus | Ceylon krait | Dunu karawala Polon karawala Mudu karawala | Yennai viriyan Yettadi viriyan |
| Daboia russelii (Vipera russelli) | Russell's viper | Dhara polonga Tith polonga | Kannardi viriyan |
| Echis carinatus | Saw scaled viper | Weli polonga | Surattai pambu Pal surattai |
| Hypnale spp. | Hump nosed viper | Polonthelissa Kunakatuwa | Konal mookupudayan Kopi viriyan |
| Enhydrina schistosa | Hookednose Sea Snake | Valakkadiya |  |

A non venomous (nonpoisonous) snake bite is a bite or puncture wound made by a snake that is incapable of secreting a toxin. They are back fanged and cannot efficiently deliver venom into humans. They do not caused significant medical problems. These snakes have earned an unjustified reputation in Sri Lanka as being highly venomous. There have been no documented deaths from the bites of these snakes. It only causes local pain and swelling.

Table3.0 - Mildly venomous 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 <br> name | English <br> name | Sinhala <br> names | Tamil <br> names |
| :--- | :--- | :--- | :--- |
| Boiga spp. | Cat snakes | Mapila |  |
| Calliophis <br> melanurus <br> sinhaleus | Sri Lankan <br> coral snake | Depath- <br> kaluwa |  |
| Ahaetulla <br> spp. | Whip <br> snakes <br> Vine <br> snakes | Ahaetulla <br> Asgulla <br> Henaka- <br> daya | Kankuthi <br> pambu |
| Cerberus <br> rhynchops <br> rhynchops | Dog faced <br> water snake | Kunudiya <br> kaluwa Di- <br> yabariya | Tanni <br> pambu |
| Chrys- <br> opelea <br> spp. | Flying <br> snake <br> Gold and <br> black tree <br> snake | Polmal <br> karawala | Parrakum <br> pambu |
| Hypnale <br> spp. | Hump <br> nosed viper | Polonthelis <br> sa Kuna- <br> katuwa | Konal <br> mookupud <br> ayan Kopi <br> viriyan |
| Bal- <br> anophis <br> ceylonen- <br> sis | Blossom <br> krait | Nihaluwa <br> Mal kara- <br> wala |  |

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 400000 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 life-
long disability.

## Treatment

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- $\underline{h t t p s: / / w w w . w h o . i n t / e n / n e w s-r o o m / f a c t-~}$ sheets/detail/animal-bites
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 diseases reported by Medical Officers of Health 20th 26 $^{\text {th }}$ October 2018(43rd Week)


Table 2: Vaccine-Preventable Diseases \& AFP

| Disease | No. of Cases by Province |  |  |  |  |  |  |  |  | Number of cases during current week in 2018 | Number of <br> cases <br> during <br> same <br> week in <br> 2017 | Total number of cases to date in 2018 | Total number of cases to date in 2017 | Difference between the number of cases to date in 2018 \& 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | W | C | S | N | E | NW | NC | U | Sab |  |  |  |  |  |
| 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 Encephalitis | 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

Provinces: W: Western, C: Central, S: Southern, N: North, E: East, NC: North Central, NW: North Western, U: Uva, Sab: Sabaragamuwa.
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
Number of Malaria Cases Up to End of October 2018,

## 03 <br> All are Imported!!!

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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@sItnet.lk. Prior approval should be obtained from the Epidemiology Unit before publishing data in this publication

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