Service communication - Octobre 2022

Preventing Snakebites by Bothrops lanceolatus and Bothrops caribbaeus

When Hiking:

- Never hike alone. Always travel with a companion.
- Stay alert. Watch where you step or sit, especially in areas with tall grass or dense vegetation.
- Protect your limbs. Wear boots, socks, and long pants in snake-prone areas.
- Avoid risky behavior. Do not put your hands into holes, under rocks, or in other concealed spaces.
- Carry a cell phone. Ensure it is charged to contact emergency services (dial 15).
- Avoid ineffective measures such as tourniquets (which worsen limb ischemia) and venom suction (which has no proven efficacy).
- Immobilize a bitten limb with a loose, non-constrictive bandage to slow venom absorption and interrupt lymphatic circulation.
- Seek local advice about areas with high snake activity.

Preventing Snakebites by Bothrops lanceolatus and Bothrops caribbaeus

In and Around the Home:

- Maintain a clean property. Remove garbage, woodpiles, or brush near dwellings that may attract snakes.
- Control rodent populations to eliminate potential prey for snakes.
- Store food securely in rodent-proof containers.
- Secure sleeping areas. Raise beds and use tightly fastened mosquito nets to prevent snakes from entering sleeping areas.



Toxicology Unit:

Tel: 0596 30 64 84

email: consultation.toxicologie@chu-martinique.fr

University Hospital of Martinique
Pierre Zobda Quitman Hospital - House for Women, Mother and Child
Lamentin Hospital - Louis Domergue Hospital
Albert Clarac Hospital - Emma Ventura Center

SNAKEBITES

by *Bothrops lanceolatus*in Martinique and Bothrops
Caribbaeus in Saint Lucia





Bothrops lanceolatus (Martinique lancehead) and Bothrops caribbaeus (Saint Lucia lancehead), both members of the Viperidae family (subfamily Crotalinae), are the only snake species responsible for envenomation in Martinique and Saint Lucia. These species are endemic to these islands and are not found anywhere else in the world.

Bites from these snakes can cause severe thrombotic complications, such as cerebral, pulmonary, or myocardial infarctions, which may be life-threatening or fatal.

Fortunately, specific antivenom treatments are available :

- In Martinique, Bothrofav®2 (introduced in February 2011) has been highly effective, with no snakebite fatalities recorded on the island in over 40 years.
- In Saint Lucia, PoliVal-ICP, an antivenom produced in Costa Rica, is used to treat snakebite envenomations.

What to Do in Case of a Snakebite?

- Dial 15 in Martinique or the local emergency number in Saint Lucia. Medical professionals will provide guidance on pre-hospital care and arrange transport to a hospital.
- Place a dry, lightly compressive dressing over the bite site.

Do not attempt suction, apply a tourniquet, make incisions, or extract venom.

Immobilize the affected limb to reduce venom spread.

Administer painkillers if needed.

In Martinique, the University Hospital of Martinique is the only facility equipped with Bothrofav® (Sanofi Pasteur), the specific antivenom for Bothrops lanceolatus envenomation.

In Saint Lucia, PoliVal-ICP is available at designated hospitals.

At the hospital, the patient will receive stabilization and symptomatic treatment for pain, anxiety, vagal discomfort, or allergic reactions. Rapid intervention is crucial, and the SAMU 972 team in Martinique is highly trained in pre-hospital snakebite management.



Anivenom Botrofav of Sanofi Pasteu

Clinical Severity Score and Antivenom Protocol

Grade	Gravité	Symptoms*	Dose de Bothrofav
1	Mild	No envenomation no edema no pain, no general signs, no blee- ding, no coagulopathy	0
2	Moderate	No exceded elbow or knee. moderate pain with edema in 2-3 limd segments, no general signs	10 ml
3	Semi- Severe	Symptoms: pain with edema, Exceded elbow or knee. Blister. Local or systemic bleeding,moderste hypotension	20 ml
4	Severe	Severe pain with extensive edema beyond the root of the limb. Blister, local necrosis, systemic manifestations (vomitings, headache, thoracic and abdominal pain, shock. MOF), hypovolemic shock or multiple hemorrhagic syndrome. DIC+ ARF.	30 ml