

TIMELINE SNAKE VENOM USES



500 BC
Scythian warriors

Uses

Weapon: Arrowheads contaminated with venom.
Medicine: Antivenoms.

3100 BC
Ancient Egypt

Uses

Weapon: Snake venom was used to poison enemies.



510-479 BC

Greek

Uses

Weapon: Arrowheads contaminated with venom.
Medicine: Antivenoms.

247-181 BC

Rome

Uses

Weapon: Cathaginian Hannibal Barca threw pots full of snakes at his enemies. Medicine: Romans created the first antivenom "Theriac".



900 AD

Maya

Uses

Medicine: The venom was used for healing.

100 BC

Persian

Uses

Medicine: King Mithridates VI formulated a universal antidote "Theriac". First anticoagulating effects were reported.



1700 AD

France

Uses

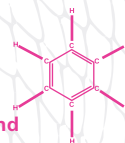
Medicine: Moysse Charas published the formula for "Theriac". Later was produced in Paris the "Orvietan" and the "Bezoard".

1800 AD

Germany

Uses

Chemistry: German chemist Kekulé dreaming of a snake that bit its tail and related it to benzene rings.



1868 AD

United States

Uses

Biochemistry: Mitchell isolated the "Crotaline" toxin from rattlesnakes and measured its toxic effects.

1843 AD

France

Uses

Medicine: Lucien Bonaparte obtained a toxic powder the "Viperine".



1886 AD

United Kingdom

Uses

Biochemistry: A substance similar to albumin was synthesized from venoms.

1894 AD

France

Uses

Medicine: Albert Calmette produced the first antivenom based on immune sera from vaccinated horses (Calmette's serum).



1970-1980 AD

Brazil

Uses

Medicine: Captopril® was the first drug derived from snake venom.

1901 AD

Brazil

Uses

Medicine: Developed the first monovalent and polyvalent antiserum for Central and South America *Crotalus*, *Bothrops* and *Micrurus* genera.



1980-Current century

Millennium Pharmaceuticals, Merck & Co

Uses

Medicine: Eptifibatide, Integrilin, Tirofiban (Agrastat®) were the first anticoagulants and fibrinolytics created from snake venom.