

Venom: Cobras: Definition & Description; Biblical Taxonomy & Herpatology, Numbers 21:6; Deuteronomy 32:33**3. Cobras****A. Definition and Description:****1. General information****Encyclopaedia Britannica, s.v. “cobra”:**

Any number of highly venomous snakes of the family Elapidae /E-LAP-e-day/ that expand the neck ribs to form a hood.

Most species of Cobras are found in warm regions of Africa and Asia.

The world’s largest venomous snake is the king cobra, or hamadryad /ham-ah-DRY-ad/, found from southern China to the Philippines and Indonesia.

The five-foot Indian cobra (Naja naja) kills several thousand people every year, mostly because it visits houses at twilight to catch rats.

Eastern populations have the opening in the fangs facing forward for spitting—a condition perfected in the spitting cobra of Southern Africa. Venom is accurately directed at the victim’s eyes at distances of more than seven feet and may cause temporary, or even permanent, blindness unless promptly washed away.

The Egyptian cobra—the asp of antiquity—is a dark, narrow-hooded species, about seven feet long, that ranges over much of Africa and eastward to Arabia

There are two major classifications of venomous snakes: vipers technically called Viperidae /vy-per-I-day/ and cobras, called Elapidae /e-LAP-e-day/.

There are two very significant differences between the two: (1) the mobility of their fangs and (2) the effects of their venom.

Encyclopaedia Britannica, s.v. “Serpentes”:

The maxillary bone (the main bone of the upper jaw) of most snakes is elongated, with many teeth. The Viperidae /vy-per-I-day/ (Old Word vipers, New Word rattlesnakes, and other pit vipers) have only one functional fang on a rotatable maxillary. In the Elapidae (the cobras) the maxillary bears a single fang in a fixed position.

Therefore, when the viper, e.g., a rattlesnake, attacks, it moves its fangs forward on the maxillary hinge, “strikes” its victim, injects venom, and back away. On the other hand, when the cobra attacks, its fangs are fixed, therefore, it must bite and then chew its victim until the venom can be injected.

In Numbers 21:6 we see the Israelites confront thousands of Egyptian cobras. They are in the family Elapidae and are classified as *Naja haje*.

Among snakes, cobras and coral snakes may be singled out as having a particularly neurotoxic venom whereas the venom of vipers is hemotoxic. We learn the following about cobra venom from:

Klein, John A. "Cobra Venom." Pg. 3 in Cobras. <http://www.livenet.net/~cobra>; 18 Sept. 1997:

The Venom of Cobras acts powerfully on the nervous system. With effective serum more available, the high death rate from cobra bites in some areas of Asia has decreased.

The severity of a venom's effects depends on several factors, such as its chemical nature, the stinging or biting mechanism involved, the amount of venom delivered, and the size and condition of the victim. Snake venoms are complex mixtures of enzymatic proteins and different toxins. In terms of their effect, they may be broadly categorized as hemotoxic (damaging blood vessels and causing hemorrhage) or neurotoxic (paralyzing nerve centers that control respiration and heart action).

Venoms themselves have occasional medicinal uses; for example, some are used as painkillers in cases of arthritis or cancer, and some serve as coagulants for people with hemophilia.

Note the distinction between venomous and poisonous: venomous refers to a creature that has the ability to secrete or utilize its venom externally, while poisonous includes creatures that contain a poison substance. Often poisonous creatures are harmless unless eaten.

Venomous creatures can often use their poison as a weapon. Cobras are all venomous, yet most are not poisonous, so long as the venom glands are not eaten.

In order to understand the extreme jeopardy victims of cobra bites encounter, let's take a look at some comparisons between the venom strength of some vipers and cobras and the lethal human dose.