What HAS often led to disastrous consequences is to confuse a venomous snake with a non-venomous one. Only a fifth of India's 255 species are venomous.

The Common Krait is confused with a Wolf snake. The viper with a baby Python or a "dry bite" and happens when a snake just wants to warn or is caught unawares. The Cobra is especially intelligent and uses venom when very necessary," says Dr Ranjan Maheshwari, deputy director (academics), at RTU.

The best safeguard is spreading awareness about snakes. "Do not try to identify a snake and get close to it. In case of a bite, avoid torniquets and cutting open the wound or sucking it with the mouth. Rush the patient to medical care and keep the affected limb in splints. Keep the patient reassured so that the heartbeat remains normal and blood circulation from the bitten area is slower," says Capt Sharma, who has rescued more than a 1,000 snakes, and whose wife, Rajbir Kaur, is the snake rescue NGO, Snake Cell, along with his wife, Rajbir Kaur.

India's most dangerous land snake, Common Krait, is found across Chandigarh region. Most fatalities are due to its bite and that of the Cobra's. "The Krait is a nocturnal snake. Most of the help calls at night from the city are for this snake. It likes inhabited areas. The tricky thing about the Krait is that symptoms of the bite manifest after a couple of hours. Its venom is 15 times more toxic than the Cobra's," says Capt (retd) Suresh Sharma, who runs the snake rescue NGO, Snake Cell, along with his wife, Rajbir Kaur.

Studies conducted under the aegis of the IIT, Roorkee, and Rajasthan Technical University (RTU), Kota, show that as little as .6 mg of Krait venom is enough to kill a human. "Our field studies show that bites vary in individual snakes. Sometimes snakes do not want to kill. For example, a girl was bitten by a Cobra but showed no neurological signs of poisoning. This is called a 'dry bite' and happens when a snake just wants to warn or is caught unawares. The Cobra is especially intelligent and uses venom when very necessary," says Dr Ranjan Maheshwari, deputy director (academics), at RTU.

The lethal Russell's viper is an enigma with its rich tapestry of skin colour and circular patterns. Found in hedges and bushes, the viper is a very cunning snake. While snakes do not form packs and get after humans, these creatures can be quite aggressive when threatened. "One village lad whom we treated was known for being a brave fellow as he used to kill snakes. However, one viper he was trying to kill got so enraged that it coiled up and threw itself five to six feet in the air and bit the lad's hand," recalls Dr Maheshwari.

Aggressive vipers are known to bite through their lower jaw and pierce its long fangs through the human hand's thumb when being milked for venom at extraction centres. Kraits are cannibalistic. "I had rescued three Common Kraits and a Cobra and kept them in a cage for releasing them in a jungle. However, the Kraits pounced upon the Cobra and gobbled it up," says Nikhil Sanger of the Nawanshahr-based NGO, Wildlife Conservation Society.

What is worrying snake experts is the polyvalent antisnake vaccine made of a cocktail of the venoms of the Big Four and used for all snakebites. "Since the venom used for polyvalent is from south and western Indian snakes, the efficacy declines when used in North and NE India. The best solution would be to develop a vaccine for each particular snake," advises Dr Das. The problem is compounded because each vial costs between Rs 450 and 700 and five to 45 vials may be used for a snakebite. "I have come across cases where the relatives take away a dying patient once they come to know the cost," says Dr Maheshwari.

The best safeguard is spreading awareness about snakes. "Do not try to identify a snake and get close to it. In case of a bite, avoid torniquets and cutting open the wound or sucking it with the mouth. Rush the patient to medical care and keep the affected limb in splints. Keep the patient reassured so that the heartbeat remains normal and blood circulation from the bitten area is slower," says Capt Sharma, who uses the analogy of insulating naked electricity wires. Understanding snakes insulates humans from their harmful ways, he says.

Timely action

DO NOT try to identify a snake and get close to it. In case of a bite, avoid torniquets and cutting open the wound or sucking it with the mouth. Rush the patient to medical care and keep the affected limb in splints. Keep the patient reassured so that the heartbeat remains normal and blood circulation from the bitten area is slower.

The misunderstanding

What HAS often led to disastrous consequences is to confuse a venomous snake with a non-venomous one. Only a fifth of India's 255 species are venomous.