Dangerous Venomous Snakes in Indonesia

The dangerously venomous snakes in Indonesia are mainly from three families:

1. Elapidae (Cobras, Kraits, sea snakes and coral snakes)  Sea snakes and  Kraits are more venomous than Cobras but much less aggressive ( Krait=Ular malas in Bahasa)

2. Vipers (ular tanah, ular pohon) cause the most fatalities of all because their habits bring them into contact with humans the most.

The third family of venomous snakes, the colubrid or back fanged snakes includes garter snakes and vine snakes. These are generally dismissed as non venomous or non dangerous, however, there are at least two common species which have caused fatalities. Also, the toxicity of Colubrid venom is poorly understood by scientists. Below are pictures of examples of these three families of dangerous Indonesian snakes. ALL the examples pictured are common in Indonesia and are ALL dangerous with the possible exception of the Vine snake

1. Cobras

There are three common species of Cobra in Indonesia. Their Colouration varies from plain black, brown or olive green to barred with yellow as seen here. They are large active and fast moving and will usually get out of your way. They only show the neck 'hood' when they are cornered.

2. Kraits
Kraits are generally shy and nocturnal and although non aggressive, they do have a habit of entering homes at night. They have VERY powerful venom. If they do bite, you only have a 50 % chance of surviving.

3. Vipers

Vipers are found in a range of habitats including the branches of trees and small bushes. They are shy, tend to hide and are difficult to see until dangerously close.

4. Colubrids

This is a large and diverse family including Garter snakes, (top two pictures) rat snakes and vine snakes. (Bottom picture) Most are believed to be not dangerous.

Other groups

Sea snakes are in the Elapid family. They are a large and diverse family. The most common species most look much like banded kraits and are even commonly referred to as sea Kraits. They are extremely common in seas and estuaries all over Asia. They are extremely reluctant to bite and have very small fangs but they are all extremely venomous. Best not to take a chance!
Sea snake

Coral snakes
These are related to Cobras and Kraits. Coral snakes are burrowing snakes, similar in appearance to banded Kraits but more brightly coloured. They are generally shy and rarely seen, they are nevertheless very venomous.

Identification
It is clear from these pictures that the dangerous snakes of Indonesia come in all shapes and colours and include some very common species. The problem is that they also vary in appearance within a species. Cobras and Colubrid species can vary a lot in colour depending on age, Habitat and moulting stage. This can cause fatal mistakes.

Effect of Bites
Bites from Cobras and Vipers are very painful and leave you in no doubt that you have a problem, but bites from Kraits, Sea snakes and Colubrid snakes have almost no immediate effect and can cause fatal mistake number two; ‘it doesn’t hurt so it must be a harmless species’ In the case of Kraits by the time you start to get symptoms there will be nothing a hospital can do. In the case of the most dangerous colubrid species, the serious symptoms often take as long as day to appear. The clinical effects range from paralysis (Kraits and sea snakes) to blood disorders such as excessive clotting or bleeding (vipers and Colubrids) or in some case, a mixture of these. (Some vipers and Cobras).

Treatment
Because of the problems with Identification and lack of symptoms ALL snakebites by wild snakes should be treated as serious. People bitten by pythons may disagree but I know many people who have misidentified pit vipers as baby pythons!

The following recommended course of action has been composed from surveys done in India and Asia including data on survival factors from tens of thousands of cases.

1. Don’t waste time with fist aid, tourniquets, sucking out the poison and the like. Get help, you will need to get to hospital quickly. You should rest as much as possible so you will need someone to transport you unless the hospital is close.
2. Go to a modern, well equipped hospital with the following facilities: Intensive care unit with equipment for assisted breathing, heart monitoring and emergency resuscitation. This is to deal with the effects of respiratory and cardiac failure resulting from cobra or krait bites. You will also need facilities to deal with transplants of blood, plasma etc and dialysis. This is in the event of bites by vipers or colubrids which can cause kidney failure.
3. Get as much information as possible about the snake, have someone find it, kill it and bring it with you if possible but failing that, get pictures and try to identify it (you may need help with this!) Hospitals in Indonesia are not usually staffed by snakebite experts and they will need all the help they can get.

4. Antivenin (antivenom) should only be used if it is made from the same species and comes from the same country as the snake. Antivenin treatment is risky since there it usually causes a severe allergic reaction and it is only worth the risk if it is done exactly right.

**Notes from the Author**

I am a Biology teacher and I have been picking up snakes for over 30 years without any mishaps until recently when I made a mistake due to misidentifying a snake as non venomous. As my subsequent research has shown, similar mistakes have claimed the lives of many famous herpetologists, the most recent being Dr Joe Slowinsky, star of discovery channel programmes with Dr Brady Barr. He died in 2001 while surveying snakes in Myanmar. His posthumously published work was one of the first really comprehensive studies done in a South East Asian country and I have included material from it in this summary. He and other famous herpetologists agreed that the main reason that people die from snakebite is through ignorance or complacency. In particular it is important to act quickly in the case of a venomous bite and it is essential to treat all venomous snakes as potentially fatal regardless of size or species, due to the inherent variation in effect of bites in different situations.

My own experience with snakebite resulted from misidentifying a dangerous Colubrid called a red-necked Keel back (the first picture in the above section on colubrids) for a non venomous species. Like many other cases before me I also made ‘fatal mistake number two’ and did not seek treatment until symptoms appeared. I ended up in I.C.U for over a week and nearly died from liver and kidney failure. At the time, Jakarta was in the grip of the worst floods for years (Feb. 07) as well as a DBD outbreak so supplies of blood and other essential materials were severely disrupted. I was lucky enough to be able to help the doctors a little with a course of treatment as I knew something about this species. They had never heard of it before.

It was a bit of a nightmare and I for one don’t want to go through anything like it again. My wife insisted I give up hunting snakes and I had to agree. Although non Biologists are unlikely to have such encounters I would advise caution in forested areas because of the habit of some vipers of sitting motionless in low branches. I once had a near miss when I went to urinate while out walking and modestly covered my actions by peeing into a bush when I noticed a green pit viper just inches away.

You have been warned!