

## **KNOW ABOUT RABIES INFECTION**

There has been another outbreak of rabies in Lenasia, Johannesburg. Here's what everyone needs to know about this infection.

This fatal viral infection affects the brain and spinal cord, causing both irritation and inflammation. Pets can infect humans with this virus. What usually happens is that they themselves have been infected by an animal, usually a wild one, carrying the virus in their saliva.

This virus is mostly spread by means of bites. The disease, though found more often in dogs than cats, can also be spread when any rabid animals bite humans. Once symptoms appear, rabies is always fatal to both animals and humans.

### **Who is at risk?**

If a rabid animal bites a person, rabies usually results. People are at risk if they come into contact with wild animals, in South Africa particularly suricates (meerkatte), the black-backed jackal or the bat-eared fox, which may be infected with rabies. People who have pets who may have been bitten by a rabid wild animal or by another pet, which may have contracted rabies, are at risk. It stands to reason therefore that people living in rural areas or on the outskirts of cities are at greater risk than people living in urban areas. As bites are the source of rabies infection, which can be fatal, all bites should be treated as medical emergencies, particularly if the animal involved is wild, or is a pet that is showing abnormal behaviour.

### **Signs and symptoms**

Symptoms of rabies can take anything from 20 to 60 days to manifest. Symptoms vary from person to person, but one in every five people who have rabies, develops rising paralysis. Symptoms often appear flu-like – sore throat, a headache, fever and nausea and vomiting. Depression, restlessness and insomnia often also mark the onset of rabies symptoms. Overproduction of saliva and uncontrollable excitement and aggression often marks the next phase, followed by spasms of the throat and voice box, which can be extremely painful. This happens because rabies affects the area in the brain responsible for breathing and swallowing. Attempts to drink water can also bring on these spasms.

### **Diagnosis**

Diagnosing rabies in its early stages, especially if a doctor is not told about an animal bite, is not easy, as the symptoms are varied and can appear to be the symptoms of many other diseases. In order to make a confirmed diagnosis of rabies, brain tissue of the animal that bit the person, must be examined. In the case of a pet, which shows no symptoms, the animal may be observed by a veterinarian for ten days to determine whether the animal was infected with rabies at the time of the bite. Viral testing of a person is ineffective in the case of rabies, but both a skin biopsy and a blood test can reveal the virus. In the case of the blood test, it will only help in diagnosing the condition once serious symptoms have set in.

### **Treatment and prevention**

It is possible to vaccinate people against rabies. This is usually done in the case of people who, through their work, may come into contact with animals that may be infected. Game rangers, veterinarians and laboratory workers all fall into this group. The vaccine should be administered every two years.

Immediate preventative steps must be taken when someone may have been bitten by a rabid animal. This can prevent someone from developing rabies. Cleaning the contaminated area with hot water and disinfectant immediately after a bite also reduces the infection risk. Vaccination against rabies and a tetanus injection must also be given immediately after a bite. Before vaccination was available, death usually occurred within three to 10 days, and was usually caused by paralysis, asphyxia, convulsions or exhaustion. People can still die from rabies, especially if treatment is delayed after the initial bite occurred.

Rabies is best prevented when all animal bites are considered medical emergencies, especially if the animal that bit the person concerned is not known, is wild, or was acting strangely at the time the bite occurred.

People who regularly come into contact with a range of animals, especially through their work or hobbies, should be vaccinated regularly.

Human rabies can be prevented, even after someone has been bitten by a rabid animal. The important thing is to get the appropriate treatment before the person starts showing signs of rabies.

### **Further Reading**

See "Rabies. Guide for the Medical, Veterinary and Allied Professions" available at: <http://www.nda.agric.za/docs/GenPub/rabiesB5.pdf>