Canine distemper (CD) in dogs and other carnivores has been known worldwide for many years and has been the infectious disease of dogs with the highest fatality rate besides rabies. The canine distemper virus (CDV) which belongs to the morbillivirus genus has been responsible for outbreaks in many different species of the order Carnivora. Apart from domestic dogs, many different species of wild carnivores have been reported to be susceptible to CDV, including bat-eared foxes (Otocyon megalotis), and black-backed jackals (Canis mesomelas). Hyenas (Crocuta crocuta) and cheetahs (Acinonyx jubatus) are known to have been infected with CDV in the wild. More recently, there have been reports of CDV infection in non-domestic species such as African hunting dogs, and leopards (Panthera pardus). The potential for CDV to spread to non-domestic species is a concern as it can cause high mortality rates and has the potential for severe consequences for wildlife populations.

Several dramatic and unexpected outbreaks of CD have recently occurred in non-domestic animals. In eastern Africa, an outbreak of CDV occurred in the lion population of the Serengeti and Mara ecosystems in Tanzania in 1991. This outbreak was thought to have been caused by infected feral dogs and resulted in the death of 85% of the lion population in the affected area. The outbreak spread to other regions in Africa, including the Maasai-Mara ecosystem in Kenya, where 90% of the lions died in a single year.

In southern Africa, an outbreak of CDV was reported in African hunting dogs in 1994. This outbreak was thought to have been caused by infected feral dogs and resulted in the death of over 90% of the affected population. The outbreak spread to other regions in southern Africa, including Namibia and Botswana, where reports of CDV in non-domestic species were first documented.

The prevalence of CDV in non-domestic species is a concern as it can cause high mortality rates and has the potential for severe consequences for wildlife populations. The transmission of CDV to non-domestic species is of particular concern as it can lead to the introduction of CDV into new populations and potentially lead to the emergence of new variants of the virus.

**Keywords:** canine distemper virus, cheetahs, leopards, lions, southern Africa

**References:**


**Note:** The information provided is based on the extracted text and reflects the author's interpretation and understanding of the content.
CDV from domestic dog to lion in the Serengeti outbreak is not clear but it would appear to have occurred via spotted hyenas as these hyenas do range among human dwellings surrounding the park where they come into contact with unvaccinated domestic dogs. This would also further support the need for maintaining strict boundaries surrounding the National Parks and Game Reserves and for the monitoring of the general status of domestic dogs living in areas surrounding parks.

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