Wild Tiger Health Centre Information Sheet

Disease threat: Pox viruses

Hazard description: A large family of DNA viruses. Viruses are usually names after the host/species affected, although it is now accepted that the host for cowpox is in fact predominantly rodent species (Bourne 2012).

Host species: Previously seen as a disease of cattle, cowpox is mainly seen in domestic cats, but main hosts are rodents (Bourne 2012).

Pathogenesis: Typical pox lesions occur on the face/forelimbs, with occasional systemic signs (Bennett et al. 1986). A pox agent (presumed to be from consumption of imported infected rats as a food source) was the cause of severe and lethal pulmonary infection in captive lion, cheetah and black panther, and the cause of generally less severe dermal lesions in ocelot, puma, black panther and Far Eastern cat at Moscow Zoo (Marennikova et al. 1977). Cowpox was also reported to be lethal in 2/3 infected captive cheetah at Whipsnade Zoo (Baxby et al. 1982).

Diagnosis: Clinical examination for lesions. Histopathology of lesion; confirm with electron-microscopy, PCR, immunohistochemistry, culture.

Vaccination: None.

Free-ranging tiger occurrence: No reports found.

Distribution: Assume worldwide. Assume present in all tiger range states.

Assumptions: None.

Limitations: Lack of data on potential felid pathogenicity in stable free-ranging populations.