Wild Tiger Health Centre Information Sheet

Disease threat: Mycoplasma haemofelis

Hazard description: (Previously *Haemobartonella felis*). An obligate intracellular erythrocytic bacterium, likely transmitted by fleas/lice/?ticks?, although natural transmission routes are unknown (Taylor et al. 2007; Barker & Tasker 2013). The taxonomic history of this organism is complex with three feline haemoplasmas: *Mycoplasma haemofelis*, *Candidatus mycoplasma haemominutum* and *Candidatus mycoplasma turicensis* (Willi et al. 2011; Barker & Tasker 2013).

Host species: Felids.

Pathogenesis: Causes anaemia. Disease is common in domestic cats (Barker & Tasker 2013). The agent has been detected by PCR in captive tigers (Haefner et al. 2003) and captive lion (Guimaraes et al. 2007). It has been reported as unconfirmed as a cause of lethal anaemic disease in a captive lion (Choy et al. 2005).
Haemoplasmas have also been detected by PCR in several free-ranging species including Iberian lynx, Eurasian lynx, European wild cats and Serengeti lions from Europe and Africa (Willi et al. 2007). Interactions between other infections such as CDV, FIV or FeLV could be a factor in determining outcomes (Meli et al. 2009; Willi et al. 2007). The full picture of pathogenesis in free-ranging wild felids has yet to be fully elucidated.

Diagnosis: PCR on blood – more sensitive than blood smear microscopy.

Vaccination: None.

Free-ranging tiger occurrence: No reports found. Captive only (see above).

Distribution: Assume present worldwide. One wild Amur leopard in RFE PCR positive from 5 screenings of 4 leopards.

Assumptions: None

Limitations: Incomplete understanding of its role as a primary pathogen in wild felids.