Wild Tiger Health Centre Information Sheet

Disease threat: Feline calici virus - FCV

Hazard description: Feline calici virus is a highly contagious RNA virus, with many constantly evolving strains of variable pathogenicity (Horzinek et al. 2007).

Host species: Appears to only infect felids. Seropositivity in 14% of stoats in a New Zealand study was thought to be more likely to be associated with cross-reactivity to a mustelid calicivirus, since host-specificity appears strong for caliciviruses (Mcdonald et al. 2008).

Pathogenesis: It is predominantly a respiratory infection of cats with viral shedding by recovered domestic cats a common feature, although more severe systemic disease with gingivitis/stomatitis/arthritis may occur (Horzinek et al. 2007), and the more pathogenic strains have been associated with FCV-associated virulent systemic disease (Radford & Gaskell 2011; Meyer et al. 2011). Clinically it causes more problems in multi-cat households, and in the very young. Disease has been documented in captive wild felids including captive Amur tiger (Charoenyongyoo et al. 2008; Harrison et al. 2007; Kadoi et al. 1997; Martella et al. 2007). Serological evidence of exposure has also been detected in free-ranging European wild cats (Millán & Rodríguez 2009) and cheetah (Thalwitzer et al. 2010).

Diagnosis: Virus isolation or PCR viral detection from conjunctival/oropharyngeal swabs, serology.

Vaccination: Vaccines for domestic cats are widely available.

Free-ranging tiger occurrence: No reports of disease found, although seropositivity has been documented in 3/17 free-ranging Amur tigers (Naidenko et al, 2018) suggesting exposure.

Distribution: Widespread. Likely present in all tiger range states.

Assumptions: None.

Limitations: None.