Wild Tiger Health Centre Information Sheet

Disease threat: Ticks

Hazard description: Obligate blood-feeding ectoparasites of vertebrate species. Hard ticks, Family Ixodidae (ixodid ticks) are of greatest importance in this context, and include the genera *Ixodes*, *Dermacentor*, *Rhipicephalus* and *Haemaphysalis* (Taylor et al. 2007).

Host species: Vertebrate species. Some tick species are more host-adapted than others.

Pathogenesis: Ticks as an agent alone are considered of low morbidity (heavy infestations may cause irritation and potentially anaemia (Taylor et al. 2007). However, it is the infections they carry that are generally of greater concern. The risks associated with these infections are considered under the specific agents. Infections include: *Hepatozoon*, *Babesia*, *Cytauxzoon*, *Anaplasma*, *Ehrlichia*, *Rickettsia*, (*Mycoplasma*), *Borrelia*, *Coxiella*, *Bartonella*, and *Francisella*, with separate sections on each pathogen to which the reader is directed.

Diagnosis: Visual examination.

Free-ranging tiger occurrence: Reported from Amur tigers in RFE (Thomas et al. 2016). Almost certainly under-reported in other range states, likely in association with lack of pathogenicity per se. Ticks reported from the Lazo area of the RFE include: *Ixodes persulcatus*, *Haemaphysalis japonica*, *Haemaphysalis concinna* (Kolonin, D.G. nd).

Distribution: Species dependent – see notes on individual tick-borne pathogens.

Assumptions: Low burdens are of clinical insignificance (excluding the pathogens they may carry).

Limitations: Diagnostic sensitivity for presence/absence.