# Wild Tiger Health Centre Information Sheet

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## Disease threat: Neorickettsia helminthoeca

***Hazard description***: Obligate intracellular bacterium causing salmon poisoning disease (SPD) (Taylor et al. 2007).

***Host species:*** Dogs, foxes and other animals from infected fish consumption. Disease has been reported from captive sunbears in USA (Gai & Marks 2008). The bacteria are maintained through the complex life cycle of *Nanophyetus salmincola which* involves snails as the first intermediate host, salmonid fishes as the second intermediate host and fish-eating mammals as definitive hosts (Greiman et al. 2016).

***Pathogenesis:*** Dogs are infected through consumption of infected salmonid fish (Headley et al. 2011). The bacterium causes an acute, severe and sometimes fatal febrile disease (Taylor et al. 2007).

***Diagnosis***: Histology, PCR on tissues.

***Vaccination***: None.

***Free-ranging tiger occurrence:*** No reports found.

***Distribution:*** As for *Nanophyetus salmincola*: Western and Eastern Northern Pacific rim (Voronova et al. 2017) i.e. North America and RFE, and *N. salmincola* has been reported from Amur tiger in RFE (Zheleznova et al. 2012).Thus likely restricted to RFE and NE China tiger range states.

***Assumptions***: Low pathogenicity in felids.

***Limitations***: Data poor.