

Equine ToxoFluor™ ***Toxoplasma gondii* IFA** **Results Interpretation**

Toxoplasma gondii, an obligate intracellular parasite, is an important pathogen of warm-blooded animals, including horses. Clinical signs includes fever, ataxia, retinal degeneration and encephalomyelitis, and abortion or stillbirth in pregnant equids.

Studies performed at UC Davis have shown that at a titer cutoff of 320, horses with clinical signs compatible with EPM had 3.55 times the odds of seropositive *T. gondii* tests compared to those without clinical signs. In other species, increased infection rates are noted later in the calendar year (late summer and autumn), potentially due to peak periods of *T. gondii* oocyst shedding in domestic kittens and cats. When restricted to the autumn season, at a titer cutoff of 320, an EPM suspect horse had 6.4 times the odds of testing seropositive to *T. gondii* when compared to non-neurologic horses. The association between high *T. gondii* titres and clinical signs of EPM is potentially reflective of toxoplasmosis in horses. (1)

While future studies investigating the relationship between *T. gondii* and neurological signs compatible with EPM are necessary, the UC Davis VMTH Clinical Diagnostic Laboratories are proud to offer *Toxoplasma gondii* IFA testing to our veterinary clients to assist in clinical diagnostics.

- (1) “*Toxoplasma gondii* seroprevalence and association with equine protozoal myeloencephalitis: A case controlled study of California horses.” James KE, Smith WA, Packham AE, Conrad PA, Pusterla N. Vet J. 2017 Jun;224:38-43. doi: 10.1016/j.tvjl.2017.05.008.