

PMI 214 Notes - Janet Foley

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Tick Talk

- tick borne pathogens
- ticks are arthropods - jointed legs
- ticks are “obligated” parasites - must eat blood
- no ticks can fly
- ticks have 8 legs like spiders
- mouth parts tucked underneath
- soft ticks feed once for 20 minutes every week
- hard ticks feed once per stage. It must transform in to a new stage before it transmits the disease. But the tick only needs to feed once in a year!
- some diseases in some ticks are trans-ovarial - adult tick gets infection and passes it on to child
- Wolbachia are ubiquitous parasites
- Wolbachia can either
 - really really damage their host, or
 - actually help their host. Wolbachia is a parasite in heartworm, which is a parasite in dogs..
 - * When you kill the heartworm in the dog, you may release wolbachia. So first vets treat the worm, then they kill the worm.
- Potomac horse fever - caused by neorickettsia
- Salmon poisoning - same as above, but affects dogs..
 - bacteria → fluke → salmon → dog
- Tick prevalence is dependent on anthropogenic change (climate change)
- rocky mountain spotted fever (rickettsia rickettsii)