



Malaria Pathophysiology

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Learning Objectives



- Review microbiology of *Plasmodium* spp. parasites
- Survey pathology of severe malaria
- Review factors that govern malaria pathogenesis
 - Parasite – mainly *P. falciparum*
 - Human hosts



Plasmodium spp.



- Parasitic protozoa
 - More than 100 species
 - Infect humans, primates, birds, reptiles, rodents
- Host: **vertebrate**; Vector: **mosquito**
- Human *Plasmodium* spp.
 - *P. falciparum* – widespread, intense, deadly
 - *P. vivax* – debilitating, recurrent, S. Asia
 - *P. knowlesi* – newest human malaria, Malaysia
 - *P. malariae* & *P. ovale* – limited transmission



