CALIFORNIA TICKS

**TICK-BORNE PATHOGENS**

- Lyme Disease
  - carrier: Western Blacklegged tick
  - 1-2% adults, 2-15% nymphs infected
- Anaplasmosis
  - carrier: Western Blacklegged tick
- Spotted Fever
  - carrier: Brown Dog tick, American Dog tick
- Tularemia
  - carrier: American Dog tick

**TICK HABITATS**

*Ticks can be encountered by people in their yard, on their pets, or throughout nature trails.*

- Nymphs
  - dense woodlands, forest harboring oak, leaf litter
  - questing nymphs sit on top of litter or branches up to 4 feet
- Adults
  - low lying vegetation in grassland, woodland grass, brush, along margins of trails
LIFE STAGES OF TICKS

Full life stage will take 3 years to complete and will undergo at least two blood meals from vertebrate hosts.

1) Egg
2) Larvae
   o peak season: Fall
   o found mostly on birds, small mammals, lizards
3) Nymph
   o peak season: spring/early summer
   o found mostly on birds, small mammals, lizards
4) Adult
   o found mostly on humans, dogs, deer

TICK BITE PREVENTION

Tick bites can be increasingly preventable with the amount of precaution an individual takes.

- Dress appropriately
  o Full-length pants, long sleeved shirt, tuck pant legs into socks, prevent ticks crawling into clothes

- Acaricides or repellents
  o Commercially available acaricides or repellents, such as Permethrin, can be sprayed directly onto skin or clothing
  o Other products containing 20-30% DEET as active ingredient are effective against wide range of ticks and insects

- Tick checks
  o Frequently inspect clothing or exposed skin to detect and remove ticks while outdoors
  o Ticks often attach to scalp, behind ear, arm or leg
  o Place clothes worn outdoors to one hour dyer cycle at high heat to kill ticks that crawled into them

- Reduce tick abundance
  o Good land scape management
  o Clear leaf litter or woodchip barriers
TICK REMOVAL

• Remove tick immediately once found (do NOT squish tick)
• Grasp tick as close to skin with a pair of sanitized tweezers (use protected fingers if tweezers are unavailable)
• Slowly and steadily pull tick straight out, and remove mouthparts that break off
• Clean wound with soap and water
• Apply mild antiseptic (rubbing alcohol or povidone-iodine)

WHO TO CONTACT

• Physician
• Government agency specialist
• California Department of Public Health
• Your city’s local health department
• Local mosquito and vector control districts or universities may assist with tick identification

LYME DISEASE: SIGNS AND SYMPTOMS

• 60-80% patients show reddish rash known as “erythema migrans” within 3-32 days after bite of infectious tick
• Fatigue, headaches, fever, chills and flu-like symptoms during initial stage of illness
• Without treatment, other signs or symptoms may occur days to months later, such as:
  o Skin rashes, musculoskeletal system (migratory pain in joints, tendons, muscles or bones), neurologic system (sever headache, facial palsy, memory loss), enlarged lymph nodes
• In extreme cases, inflammation of heart, eyes, and liver damage can occur

PETS & LYME DISEASE

• Dogs, cats, horses, and livestock may become infected but only dogs show clinical signs
• Signs/symptoms may include:
  o Arthritis, lameness, lethargy, loss of appetite, enlarged lymph nodes

ADDITIONAL INFORMATION

• www.cdph.ca.gov
• https://www.cdc.gov/ticks/diseases/
• http://www.tickencounter.org/faq/seasonal_information