

It's a wild world out there, and you may encounter some dangerous critters in the field. But proper protection can help fend off these threatening insects and arachnids.



## MOSQUITOES

### Threat

Carriers and transmitters of West Nile Virus

Bites can result in a range of symptoms, from flu-like conditions (West Nile fever) to potentially life threatening disease (West Nile encephalitis or meningitis)

### Prevention



Keep skin covered as much as possible



Avoid use of scented lotions, perfumes/cologne



Use repellants with DEET or Picaridin; spray on skin and outside of clothing



## BEEES & WASPS

### Threat

Allergic reaction

### Precaution/Treatment



Verify any bee allergies via skin testing, and consider immunization

Carry sting kit (EpiPen®) if necessary

Carry identification notifying hypersensitivity

Keep sweet items covered, such as soft drinks, ripened fruit

Avoid use of scented lotions, perfumes/cologne

Keep an eye out for insect entry/activity, being particularly cautious near likely nesting habitats (such as white firs in the Sierras)



**DON'T MOVE RAPIDLY**  
This often provokes attack



**DON'T SWAT**  
Wasp venom contains pheromones, signaling nearby wasps to swarm

Remove any bee stingers as quickly as possible—the longer the stinger remains in the skin, the stronger the reaction can be



## TICKS

### Threat

Blacklegged ticks are carriers and transmitters of Lyme Disease (Borrelia Burgdoferi)

Without treatment, bacteria from an infected tick bite can spread to joints, heart and nervous system

Ticks latch onto skin, requiring careful removal

### Prevention



Use repellents with DEET or Picaridin on skin

Use Permethrin as extra protection  
**FOR CLOTHING/GEAR USE ONLY!**



Wear light colors to make ticks more visible; check for ticks every 2-3 hours



Wear long sleeves and pants, tucking pants into socks or shoes

### Removal

Using tweezers, grasp mouthparts as close to skin as possible. Gently pull straight out.

After removal, disinfect the bite and wash hands. Contact doctor with any concerns. If possible, capture insect for proper identification.



**DON'T SQUEEZE!**  
Body of tick can contain infectious fluids



## CHIGGERS

### Threat

Chiggers are NOT known to carry disease

However, bites can cause irritation comparable to cases of poison ivy

Scratching or breaking bites may cause secondary infection



### Prevention

Chiggers are found in low, damp areas with rank vegetation

Most numerous in early summer when grass, weeds and vegetation are at their heaviest

Laundry clothes immediately after leaving a chigger-infested area

To relieve itching, apply ointment of benzocaine, hydrocortisone, calamine lotion or others as recommended by a pharmacist or doctor

## SPIDERS & STINGING INSECTS

### Threat

Insect stings or bites require quick action

Brown recluse spiders, fire ants, scorpions

- Tissue-destroying bites; watch for marked swelling or discoloration

Black widow spiders

- Neurotoxic bites may not cause swelling or discoloration



### Prevention/Treatment



Apply ice to site or immerse affected body part in ice water until a physician can be reached

If possible, capture insect for proper identification