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## TICK PARALYSIS FACT SHEET

### What is tick paralysis?

Tick paralysis is a condition caused by the bite of a tick. When a tick feeds on a person or animal, a chemical in its saliva is released that stops the normal function of nerves and muscles.

### How does a person get tick paralysis?

A tick must be attached to the skin and feeding for tick paralysis to occur. Many tick species are capable of causing tick paralysis. The condition occurs most often in children less than sixteen years old and adult men, however anyone bitten by ticks can be at risk.

### Where does tick paralysis occur?

In the United States, tick paralysis occurs most often in the Pacific Northwest and Rocky Mountain states following the bite of the Rocky Mountain wood tick (*Dermacentor andersoni*). In the eastern and southern states, other tick species, including the American dog tick (*Dermacentor variabilis*), the Lone Star tick (*Amblyomma americanum*), the Gulf Coast tick (*Amblyomma maculatum*), and occasionally the deer tick (*Ixodes pacificus*) have been associated with human cases.

### What are the symptoms of tick paralysis?

The first symptom is weakness in the arms and legs, two to seven days following a tick bite. Hours to days later, the person becomes unable to move their arms and legs. If not treated, the person may become unable to speak or even breathe. How badly a person is affected depends on the number of ticks and how long they remain attached. Tick paralysis is fatal in about ten percent of people who are not treated. Tick paralysis can resemble other disorders of the nervous system such as botulism and Guillain-Barré syndrome.

### How is tick paralysis treated?

Tick paralysis is treated by locating and removing the attached tick(s). Ticks are often found attached on the scalp, particularly at the hairline. In most cases, normal muscle function returns within hours of removing the tick.

### How can I prevent tick paralysis?

The risk of tick paralysis, as well as other diseases transmitted by ticks, can be reduced by taking appropriate precautions to avoid tick bites.

- Avoid areas where ticks are known to occur.
- Stay in the middle of trails; avoid grassy areas, contact with logs, tree trunks and fallen branches or tree limbs in forests.
- Use an EPA registered repellent for use against ticks. Repellents with at least 20% DEET are effective and can be applied to the skin and clothing. Always follow directions on the container.
- Apply permethrin to clothing (only) to kill ticks.
- Thoroughly check yourself and others for ticks during and up to three days after activities in tick-infested areas.
- Shower soon after returning from tick habitat.

- Before washing, place clothing worn while in tick habitat in a hot dryer for 10 minutes to kill ticks crawling on clothing.
- Keep grass along trails, buildings, and camping areas mown.

**Where can I find more information on tick paralysis?**

You can find more information on the California Department of Public Health webpage:

<https://www.cdph.ca.gov/HealthInfo/discond/Pages/TickParalysis.aspx>

U.S. Centers for Disease Control and Prevention webpage:

<http://www.cdc.gov/ticks/symptoms.html>

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