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The Black Widow and Other Spiders



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THE BLACK WIDOW SPIDER is found in practically all parts of the United States. Although found in all parts of Oregon, it occurs in greatest abundance east of the Cascade Range. This spider does not enter houses often, but it is frequently found in garages, sheds, outdoor toilets, manholes, culverts, and similar places. It is also found under rocks, in hollow logs, stacked lumber, boxes, woodpiles, and in animal burrows. It feeds on insects and other small creatures.

The black widow spider is the most poisonous spider in the United States. It is the only spider native to Oregon whose bite causes severe poisoning in humans. There are many other kinds of spiders in Oregon. These seldom bite, and if they did would cause only minor irritation. The brown recluse spider, feared in some parts of the United States, is not found in Oregon. There are authentic records of a few deaths resulting from the bite of the black widow spider. Fortunately this spider is very shy and retiring. Bites usually occur as a result of accidentally squeezing a spider when picking up an object to which it is clinging. Bites may occur when putting on clothing or shoes in which a spider is hidden. The mature male does not attack prey and will not bite.

The bite is inflicted by two stout jaws which work sideways. The tip of each jaw is provided with an incurved, needle-like tooth, through which the poison is injected. Poison glands are in the head near the base of the jaw. The spider often has difficulty piercing tough skin. The bite usually causes a stinging sensation at the point of puncture which is marked by a tiny red spot, sometimes surrounded by a whitish wheal. Within a few minutes to an hour or more, sharp pains develop in the region of the bite and there may be swelling. If the bite is on a finger, the aching pain progresses up the arm to the shoulder and finally reaches the chest. In cases of acute poisoning, the pain may even extend to the hips and the abdomen may become rigid. Breathing may be forced and irregular, accompanied by muscular contractions. The venom has a retarding effect on the heart, sometimes

markedly slowing its action. If bitten by a black widow spider, see a doctor. If possible, the spider involved should be collected and referred to an entomologist or other qualified biologist for identification.

The female black widow spider is shiny jet black on the upper surface of the body. On the underside there is a characteristic red mark shaped like an hour glass. The body of a full grown female is about $\frac{1}{2}$ inch in length, with an overall spread, including the legs, of approximately $1\frac{1}{2}$ inches. The male usually has light streaks on his abdomen. It is recognized readily by the knob-like appendages which it carries in front of its head. The male is always considerably smaller than the mature female, and has an overall spread of about 1 inch. After mating, the female spider frequently ensnares and eats her mate; hence the "widow."

The web of the black widow spider is loosely woven, irregular, and made up of rather coarse strands. The webs are frequently at or near the ground level. Three to four hundred eggs at a time usually are laid and placed inside a dense, whitish, silken ball the size of a large pea. The eggs hatch in three to four weeks, and the tiny spiders scatter over the web. The species is very cannibalistic, and most of the young are devoured before they reach maturity. The life cycle from egg to maturity requires at least four months. Overwintering in the immature stage prolongs the time for completion of the life cycle. Mature spiders may be present throughout most of the year, but they are most abundant in the late summer and fall months.

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Indoor Control Measures

Pressurized spray cans containing Baygon, diazinon, dichlorvos (Vapona), or chlordane are available ready to use and may be applied in home, garage, basement, and attic situations. The effectiveness of aerosols containing pyrethrins is dependent upon direct contact of spiders with the insecticide mist.

The brand name of these pressurized sprays does not identify the active ingredient nor insure that all pests may be controlled. Look elsewhere on the label for the name of the chemical insecticide and the pests controlled.

Space treatment with Vapona resin strips are effective in rooms and storage areas having minimal air circulation.

Residual dusts of 5 percent chlordane or silica aerogels may be applied in attics, crawl spaces, wall voids, or other unused areas. Dusts should not be applied where children or pets may come in contact with them.

Outdoor Control Measures

1. When working where black widow spiders may be present, wear gloves.
2. Remove loose brick, tile, wood, boards, and trash where spiders may live or hide.
3. Use a spray containing chlordane at the rate of $\frac{1}{2}$ cup chlordane (44% emulsifiable concentrate) per gallon of water.

Thoroughly spray areas outside the house where black widow spiders or other spiders are troublesome or abundant. Avoid wetting vegetation with sprays prepared from the emulsion concentrates. Emulsion concentrate sprays of this concentration may injure tender foliage. The sprays kill spiders by contact at the time of application, and if thoroughly applied they leave a residue that continues to kill for several weeks. The sprays also help control other undesirable insects,

including boxelder bugs, grass bugs, root weevils, and sowbugs which sometimes enter homes during the fall.

Use Pesticides Safely

Follow the manufacturer's directions, restrictions, and precautions on the pesticide labels. Safe use is intelligent use.

- ✓ Never apply more pesticide than recommended. Too much pesticide may be dangerous and is certain to be wasteful.
- ✓ Avoid inhalation, eye or skin contact with pesticides. Should accidental exposure occur, wash affected skin or eyes with liberal quantities of clean running water.
- ✓ Do not eat, drink, or smoke while using a pesticide.
- ✓ Avoid pesticide contact with food, cooking utensils, and dishes.
- ✓ Store pesticides and application equipment out of reach of pets and children. Separate from food storage areas.
- ✓ Always keep pesticides in the original labeled containers. Food and beverage containers used for pesticide increase the danger of serious accidents.
- ✓ Rinse "empty" pesticide container thoroughly with water and use the rinse water in the spray operation. Wrap the empty pressurized container in newspaper and dispose of in the garbage can. Never puncture or incinerate pressurized cans.
- ✓ If a pesticide is accidentally swallowed, contact a physician at once. Be prepared to tell him the active ingredients of the pesticide swallowed or take the container itself to the physician.