

Least-toxic Control of Spiders

The most common poisonous spiders in the U.S. are tarantulas, black widows, and brown recluse or violin spiders.

Tarantulas are light to dark brown and typically about 2.5 inches long, though they can grow to 5 inches including the legs. Their abdomen and legs are covered in hair. They are basically harmless and will only bite upon extreme provocation. Their first line of defense is to rear up their hind legs and look fierce. They also have specialized urticating hairs on their abdomen that are tipped with venom and are brushed loose with their hind legs.

They are found in certain parts of the Southwest, from Texas through California, and north through Oklahoma, Colorado, Utah and Nevada. Young tarantulas either burrow in the ground or find a suitable hole to occupy in a protected location. They line their tunnels with silk and camouflage the opening with plant debris or soil. Once establishing a good nest, they do not stray for the many years it takes to reach maturity, when the male will wander to find a female. This is usually the only time they would enter a house and cause concern.

The adults of the three most common species of black widows in the U.S. are shiny black with a red design resembling an hourglass on the underside of the abdomen. The young spiders are whitish when they leave the egg and darken gradually, passing through stages where the black is mixed with white, yellow and red spots and bands. Adults grow to be about 9/16 inch long. They are not aggressive and rarely bite.

Black widows spin a small web of coarse silk with a tunnel in the center, where they will retreat when disturbed. Webs are generally spun close to the ground.

There are at least six species of brown recluse or violin spiders in the U.S., with a typical body length of 1/3 inch. They are tan to brown with a distinctive violin shaped darker marking on the top of the body near the head. Their legs are long and thin, and their bodies are smaller in relation to the legs than a black widow's.

They prefer dark, undisturbed places near the ground for their webs. They will travel some distance from their webs to hunt, and will take temporary refuge in clothing or bedding, which is usually when humans are bitten.

Most spiders pose no threat to humans. Even the most dangerous spiders in the U.S. are not aggressive and can only be provoked to bite under certain circumstances. Spiders are actually beneficial biological control agents, preying upon a vast number of insect pests.

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Webs usually only become visible when they are no longer in use and begin collecting dust. The only potentially dangerous web-building spiders occasionally found in the house, the black widow and the brown recluse or violin spider, are found in dark, hidden corners, usually near the floor, and not in light, open areas along the ceiling or around windows where spider webs are often noticed.

Spiders will often build webs in corners, under eaves and on shrubbery. Inside, they are most numerous in storerooms, crawl spaces and basements. They are attracted to places where there are large numbers of insects for food, and are therefore attracted to structures with security lighting, which attracts flying insects. Usually, there is little food available indoors, limiting spider populations unless there is easy access or food sources. Populations will fluctuate from year to year and will be the highest in late summer.

Prevention

- Install door sweeps.
- Seal electrical openings.
- Screen vents and seal around them.
- Seal up access points on the outside of your house.
- Repair or tighten screens in doors and windows.
- Power wash the outside of the house to remove debris.
- Vacuum the floor, baseboards and corners regularly.
- Remove vegetation from around the home, leaving a 24-inch band.
- Move firewood, stacked lumber, stone, and other clutter from around the house's foundations.
- Remove, reduce or shield outside lighting. Use shielded lights, lower wattage bulbs, or sodium vapor or yellow lights.
- Indoors, use shades or curtains at night so that insects and spiders are not drawn to windows.
- Dry out and vent any moist areas, which may attract spiders.
- Remove clutter in storage rooms; keep boxes away from walls.

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- Remove clothing from the floor and hang shoes or place them in sealed plastic bags. (Most spider bites are received when putting on shoes or clothing that has lain on the floor.)
- Shake out any clothing thoroughly that has been at ground level overnight.
- Thoroughly check and shake clean blankets or other bedding that have been undisturbed for long periods.
- Eliminate insect populations attracting spiders.

Monitoring

Look for spiders crawling about or webs in corners, eaves, or outdoors in shrubs. An increase in insect pests may lead to an increase in spider populations and indicate a need for closer surveillance. Use glue board monitoring traps to follow spider activity and find problem spots.

- Monitor for black widows at night with a head lamp or flashlight, checking in cracks and crevices around the foundations of buildings, on the undersides of outdoor wooden furniture, between stones and flowerpots, and around the edges of woodpiles or other materials stored outdoors.
- Brown recluse spiders are most often found in boxes, around piles of paper and debris, in bedroom closets, under furniture, around woodpiles, sheds, and similar areas outdoors where debris may pile up.

Control

- **Vacuum** to remove webs and egg cases.
- **Invert a wide-mouthed jar over the spider** and slide a piece of stiff paper or thin cardboard under the jar while keeping the jar pressed against the surface on which the spider is standing. Keeping the paper pressed against the mouth of the jar, turn the jar over and tap the paper so the spider falls in the jar. Carry the jar outside and shake the spider out.
- **Freeze boxes of papers** suspected of harboring brown recluse spiders for 48 hours to kill the spiders before unpacking the boxes.
- **Gently sweep up the spider** (especially tarantulas), place them in a grocery bag and release outside.
- You should not have to use poisons to rid your structure of spiders.

References

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Beyond Pesticides/NCAMP. "Least Toxic Control of Pests In the Home & Garden: A series of pest control & chemical factsheets." Washington, DC.

Olkowski, Helga, Daar, Shiela, and Olkowski, William, *Common-Sense Pest Control*, Newtown: The Taunton Press, Inc., 1991.

Pinto & Associates. 1998. "Spider Pest Management." *Techletter*. 14(9):1-2. Pinto & Associates, Mechanicsville, MD.

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