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NORTHERN BLACK WIDOW SPIDER (*Latrodectus variolus*)

The most medically significant spider in the northeast is the northern black widow spider *Latrodectus variolus*. The closely related brown widow spider (*L. geometricus*) and the false widows (*Steatoda*) have bites that are medically significant, but are less severe.



Fig. 1: Northern black widow spider (with brown marmorated stink bug prey)

Appearance/Life Cycle:

Black widow spiders are easy to identify. Female spiders have a ½ inch long body, 1 ½ inches if including the legs. Their bodies are glossy black. They possess a distinctive bright red hourglass marking on the underside of their dime-sized abdomen; however the hourglass is ‘broken’ in the center (Fig. 1). Additionally, depending on the spider’s maturity there may be a line of reddish-orange markings along the top of the abdomen. Males and juvenile spiders are

similarly marked and are smaller than the females. They are ¼ inch long, with brown legs and an additional set of diagonal whitish bands along each side of their abdomen.

Black widow spiders can be found in natural shelters such as hollow stumps, or rock piles. They build three-dimensional webs and prefer dark, closed in areas with lots of attachment points for their webs. Man-made structures such as colonial stone walls, culverts and wood piles can also serve as black widow spider habitats. Spiders may be found in underused sheds, greenhouses, garages, or attic spaces. Black widows are very timid. If their habitat is disturbed, they will quickly flee and will not actively defend webs.

Control and Prevention:

The control of black widows in structures does not require pesticides, instead it involves protecting vulnerable spaces by reducing the amount of desirable habitat for spiders indoors. Spiders prefer darkness, higher humidity, and undisturbed corners. Reducing moisture in these areas will make it less desirable to both spiders and the small arthropods the spiders hunt. Reducing clutter in long-term outdoor storage and regularly cleaning out spider webs from work areas using a vacuum or broom will reduce

populations and discourage additional activity. If gloves or boots have been stored in these areas for a prolonged period, turn them inside out or shake them out thoroughly before wearing. Always wear protective gloves when working outside, with stone or woodpiles, or when working in enclosed spaces such as under low decks.

Bite First Aid:

Although black widow spiders possess extremely potent neurotoxic venom, they rarely bite humans. Bite incidents usually involve an instinctive panic response when a spider is crushed directly against bare skin before it could escape. This might happen if it is accidentally trapped inside a boot or glove.

Symptoms of a black widow bite reaction usually include initial pain at the bite site and abdominal cramping, leading to intense systemic pain. Sweating, nausea, vomiting, tremors, and breathing difficulties may also occur. If you have been bitten or suspect someone may have been bitten by a black widow spider, apply a cold compress to the wound site and immediately seek medical attention. If safe and possible, the spider should be collected for professional identification. Fatal bites from black widows are very rare (less than 1% of all cases), especially if there has been medical treatment. Symptoms generally subside within 48 hours as the venom breaks down.