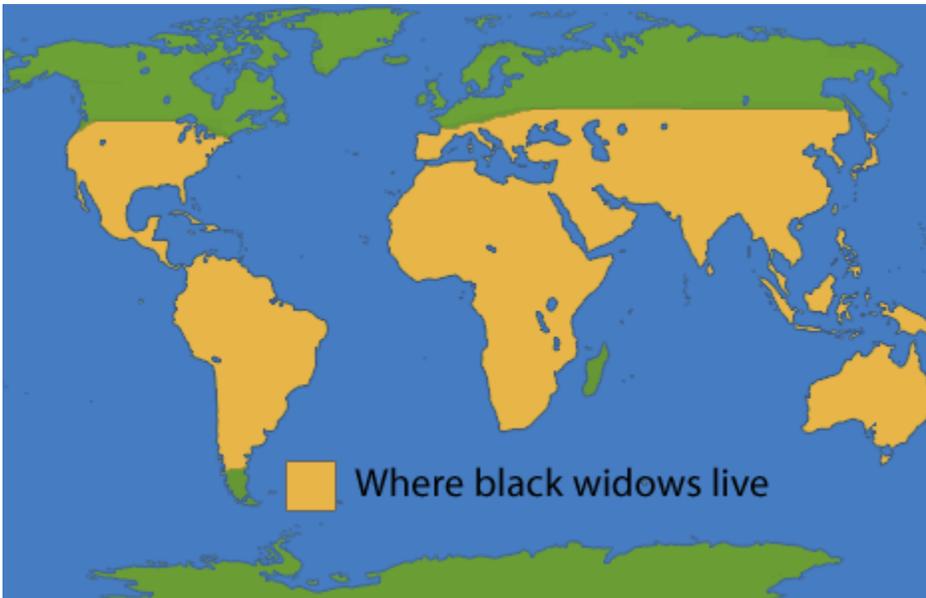


# Black Widows



**Black widows are poisonous arachnids—animals that have a skeleton outside their body, a segmented body, and eight jointed legs. They are not insects. Their deadly poison is said to be 15 times stronger than rattlesnake venom.**

The name “black widow” comes from the female’s habit of eating the male after mating.



- Facts about Black Widows:
- Female black widows are shiny black, with a red-orange hourglass pattern on their abdomen. Male black widows are not black, but brown or gray with small red spots.
- Black widows are poisonous arachnids--animals that have a skeleton outside their body, a segmented body, and eight jointed legs. They are not insects. Their deadly poison is said to be 15 times stronger than rattlesnake venom.
- Black widows use a silk-like substance to weave tangled-looking webs, typically close to the ground in covered or dark places, such as near [drain pipes](#) or under logs. The female hangs upside down in the web to await her prey, exposing her bright markings as a warning to potential predators.
- The black widow senses vibrations to the web. When an unlucky intruder gets trapped, the spider immediately begins weaving its glue-like [webbing](#) around it. Insects such as flies, [mosquitoes](#), or even larger prey like grasshoppers are typically caught. Once captured, the black widow injects its victims with poison, paralyzing them.
- The tips of the black widow’s legs are coated with an oily substance that prevents the black widow from getting caught in its own web.
- Adult male and female black widows live solitary lives, meeting only to breed. The female black widow lays approximately 200 eggs. The eggs incubate for some 20 days in a small, round papery sac that’s

attached to the mother's web. After hatching, the baby spiders stay in the cocoon for up to one month.

- **FAST FACTS** Three species of poisonous North American spiders carry the common name black widow under the genus *Latrodectus*.
- Each species occupies a distinct region of North America, as their names suggest: Eastern black widows (*L. mactans*), northern black widows (*L. variolus*), and western black widows (*L. hesperus*). These three species have very similar physical and behavioral characteristics.
- The name "black widow" comes from the female's habit of eating the male after mating.

The female black widow is approximately 1.5 inches (38 millimeters) long. The male is about half the female's size.

The black widow is prey for birds and other spiders.

- Although poisonous, the black widow is not considered aggressive unless threatened. In fact, the male black widow is reclusive and hardly ever seen by humans. While the black widow's poison is rarely fatal to humans, it can cause severe pain and nausea.

National Geographic Kids

<http://kids.nationalgeographic.com/kids/printcreature/25/>

# Kid Zone: Spider Facts

## SPIDERS ARE ARACHNIDS

Spiders belong to a group of animals called “arachnids”. Scorpions, mites, and ticks are also part of the arachnid family. Arachnids are creatures with two body segments, eight legs, no wings or [antennae](#) and are not able to chew. Many people think that spiders are insects but they are mistaken since insects have six legs and three main body parts. Most insects have wings.

Arachnids belong to an even larger group of animals called “arthropods” which also include insects and crustaceans (lobster, crabs, shrimp, and barnacles). This is the largest group in the [animal kingdom](#)! Approximately 80% of all animals are from this group...that would be over a million different species! There are more than 30 000 different species of spiders.

All spiders are predators and many will eat other spiders. Scientists have found spiders in amber (Did you watch Jurassic Park?) that dates back to about 2 million years. Because spider’s skeletons are quite small and fragile it is difficult to find whole fossilized spiders.

## THE BODY OF A SPIDER

Spiders have two body segments. The front segment is called the Cephalothorax. The spider’s eyes, mouth fangs, [stomach](#), brain and the glands that make the poison are on this part of the body. The legs are connected to this part, as well. Most spiders have eight eyes, but some have less. Spiders also have these tiny little leg-ish things called ‘pedipalps’ that are beside the fangs. They help to hold prey while the spider bites it.

The second part of the body is called the Abdomen. The back end of the abdomen is where the spinnerets, the silk producing glands, are. The spider’s body has an oil on it to keep the spider from sticking to it’s own web.

Spider’s legs are covered with many hairs. The hairs pick up vibrations and smells from the air. At the end of the legs are, at least, two small claws. Spiders have 48 knees. Yup, count them...eight legs with six joints on each.

Spiders do not have a skeleton inside their bodies. They have a hard outer shell called an ‘exoskeleton’. Because it is hard, it can’t grow with the spider. So young spiders need to molt, or shed their exoskeleton. The spider must climb out of the old shell through the cephalothorax. You can imagine how hard it must be to pull all those legs out! They are pretty helpless at this point. Once they are out they must stretch themselves out before the new exoskeleton hardens. This gives them a bit of growing room. As adults, they stop growing and do not need to molt.

Male spiders are usually smaller than [females](#).

## VENOMOUS SPIDERS?

All spiders have fangs! And, yes, they almost all have venom in them. Lucky for us, most [spider poison](#) will not harm people because it is quite weak. Most spiders use their venom to paralyze its insect victim long enough to devour it. For other spiders, their poison is strong enough to kill their prey. Of course, this also comes in handy when being attacked by a predator.

There are a few spiders with poison strong enough to cause pain or even some [nerve damage](#) in humans. These spiders include the Black Widow and the Brown Recluse spiders. If left [untreated](#), death could result.

People usually associate Tarantulas with the people-killing kind of poison. This is untrue. They have small poison glands and will be about as painful as a hornet or bee sting.

## SMOOTH AS SILK

All spiders produce silk but not all spiders spin webs. Silk is used for climbing, to create webs, to build smooth walls in burrows, build egg sacs, and wrap prey. Where does it come from? Most spiders have four or more openings, or glands, on their abdomen called spinnerets. When the spider releases the silk, it looks like one thread but it is actually many thin threads that stick together. As soon as this liquid silk hits the air it hardens.

Many spiders use their silk for something called 'draglines'. This is a rope-like web that helps the spider climb back home if they fall or let themselves drop.

Different spiders produce different types of silk. Silk can be sticky, dry or stretchy. Surprisingly, silk is so strong that some spiders use it for traveling. With one end attached to a surface such as a tree branch, the spider will hang onto the end and let the wind carry it away! Just like Spiderman! This is called 'ballooning' and can take the spider many kilometers.

Larger spiders, like the huge bird eating spiders, can actually catch and subdue animals as large as bats, mice, fish, birds and even snakes with their strong webs. Spiders like the Bolas spider will fish with their silk. When they spot their prey, they [swing](#) out a line with a sticky glob at the end and that sticks to the wings or body of their next meal! Who knew silk could be so useful...or dangerous - if you're a bug!

Did you know that spiders will recycle their silk? Yup, they eat up what isn't useful anymore and start over with fresh stuff.

## SURFING THE WEB

Many spiders will build webs to catch prey but there are lots of spiders who prefer to hunt, and they use their webs for other things. All spiders are born to spin. They don't need their parents to teach them how.

Spiders that build the circular webs that we, in Canada, usually find in our yards are called Orb-Web spiders. These webs look like [bike wheels](#) and are very sticky. These are the webs that trap insects for food. Many of these spiders will build new webs every night. Others will just keep [repairing](#) their damaged webs. The spider will sit near the center of the web and wait for insects to land on the web. Some species of Orb-web spiders will weave fancy looking webs. Scientists think that the patterns help birds to see it and avoid flying into it.

Another type of web is the sheet-web. This web is spun horizontally and has special non-sticky lines above it. These lines knock insects down onto the sheet-web where they get stuck.

Some other spiders spin funnel-webs. These webs are shaped like...you guessed it...funnels. They are wide at the top and get narrower as they go down. The spider hides at the bottom of this web waiting for its prey.

All of these webs are designed to catch food. Since spiders do not have great [eyesight](#), they usually use the vibrations of the web strands to locate their prey. When they do, they rush on over and wrap their victim in silk, turning it around and around until it is covered. Then the spider pokes its fangs into the insect and shoots poison into it, which turns its guts into liquid, the spider then sucks out the liquid. Yuck

## THE HUNTER

Spiders that don't make webs are hunters and they have other ways of getting food. Some are well camouflaged and wait for their prey to pass by unaware. Others will chase their prey. These spiders have good [eyesight](#) and can spot their victims at [long distances](#). Hunting spiders have a very strong, fast acting poison and sharp fangs that can kill insects much bigger than themselves.

The Trap-door spider has a cool way of catching prey. It digs a hole to live in and then spins a silk door to cover the hole with. It will wait in its burrow peeking through a partly open door, and when an insect wanders by, it leaps out and grabs it. Sneaky!

The Jumping Spider will [pounce](#) on it's prey and, just to be safe, it spins a safety line so that if it misses its mark, it can climb back home again.

## SOUP ANYONE?

Spiders can't chew or swallow so how do you think they eat? They can only eat [liquid](#) lunches! To do this, they inject their prey with poison using their fangs. The poison turns the insides of insect to a watery goop and the spider just sucks it up. The insect will often look normal...except that the body is empty!

Web-spinning spiders will wrap their prey in a web and then [crush](#) it's body with their teeth. They then pour [digestive](#) juice over the body and liquefy it. Perfect for sucking it up!

## SPIDERLINGS

Spiders are serious predators so mating can be a bit dangerous especially for the males. Male spiders have to be careful when meeting the female. Using his claws he will send gentle, even vibrations through the web, unlike the quick, jerky movements of scared insects. This announces his arrival, but he still has to convince the female that she shouldn't eat him. Male Jumping spiders will do a dance to show the female why he is there and the male [Wolf spider](#) will wave his hairy front legs. The male Nursery Web spider (being quite a gentleman) will wrap an insect in his silk and give it to the female as a gift! If the female chooses NOT to eat him she will mate with him. After mating she may still decide to eat him before he gets away. Tough date!! Good news: this is not too common.

Spiders will lay between 2 and 1000 eggs, depending on the species. Almost all female spiders protect their eggs by making a silk 'bed' and then covering them with a silk 'blanket'. She then wraps them in more silk to make the egg sac. She hangs [the sac](#) someplace safe and guards it until the babies hatch. When the babies hatch they often stay inside the sac to finish developing. Some mother's stay until the spiderlings leave the sac, others will either leave or die before seeing their babies.

The Wolf spider is a super-mom! She will attach the egg sac to spinnerets and carry the sac with her until the eggs hatch. Once the babies are born they climb onto her back and stay there until they are fully developed, living off their egg yolks (from their egg). This could take weeks. They go everywhere with her, including hunting. If one falls off, mom will stop what she is doing until it is back on top!

Comb-footed spiders will feed their spiderlings liquid from their mouths.

Many spiders will go off on their own after their eggs hatch, leaving the babies to fend for themselves.

## WHAT ARE SPIDERS AFRAID OF?

Because they are small, spiders have many enemies.

Larger animals, such as birds, toads, lizards and monkeys, hunt them. But they are also used as food by many smaller creatures. Ticks will attach themselves to a spider and eat away at it for a long time while the spider goes about its business.

One of the spider's worst enemies is the Spider-Wasp. The female wasp will paralyze the spider by stinging it. She then digs a hole and puts the spider and an egg into it. When the egg hatches, the baby wasp will eat away at the [paralyzed](#) spider.

We (humans) are also enemies of spiders. Besides stepping on them, the [pesticides](#) we use to control other [insects](#) can kill spiders.

## BLACK WIDOW SPIDER

The Black Widow spider is the most poisonous spider in North America, but only the adult female.

The female Black Widow is easy to recognize (if you care to get that close) by the red hourglass shape on the underneath part of her abdomen. She has a shiny black body with various types of red markings on the top, depending on the species. There are about five species of Black Widow spiders in North America.

The black widow will grow to about 8-10mm.

Black Widows will lay up to 400 eggs at a time, but they are known to be cannibals, which means that they will eat each other. The Black Widow has unfairly earned a bad reputation for wanting to eat her mate. She will only eat her mate when she mistakes him for a meal!

The silk of this spider is known to be the strongest of all silk. The Black Widow spider does not spin the pretty webs, instead she will spin the thick jumbles looking cobweb. These webs catch beetles, flies, [grasshoppers](#), moths and other spiders.

These spiders, although a little scary, have enemies, as well. A few wasps can sting and paralyze, before eating the Black Widow. She is also a favorite food of the Praying Mantis. Some birds will eat these spiders but could end up with an [upset stomach](#) from her poisons. The bright red markings on her belly will warn possible predators that she is a nasty meal.

Kid Zone

<http://www.kidzone.ws/lw/spiders/facts.htm>

## **Kids' Health: Hey! A Black Widow Spider Bit Me!**

### **What a Black Widow Spider Is**

The black widow spider is one of a few poisonous kinds of spiders in the United States. It is part of the arachnid family, which includes not just spiders, but [ticks](#), mites, and [scorpions](#), too. Its body is about one-half inch long (smaller than a dime), and it has long legs. The black widow spider is shiny and black with a red-orange or yellow mark in the shape of an hourglass on its stomach.

Black widow spiders and their relatives can be found almost anywhere in the Western hemisphere of the world in damp and dark places. Their favorite places are woodpiles, tree stumps, trash piles, [storage sheds](#), fruit and [vegetable gardens](#), in stone walls, and under rocks.

If they come inside, they will go to dark places like corners of closets, garages, or behind furniture. They are shy by nature and bite only when trapped, sat on, or accidentally touched.

### **What a Black Widow Spider Bite Looks and Feels Like**

A person who gets bitten by a black widow spider might not know it right away, since the bite can sometimes feel like a little pinprick. After 30 to 40 minutes, though, the area of the bite will swell and hurt a lot, and sometimes a person can get achy all over.

Other symptoms can include weakness, nausea, vomiting, sweating, and headache.

### **What You Should Do**

If you ever think that you've been bitten by a black widow spider, **tell an adult immediately**. Black widow spider bites rarely kill people, but it's important to get medical attention as soon as you can because they can make you very sick.

With an adult's help, wash the bite well with soap and water. Then apply an ice pack to the bite, and try to elevate the area and keep it still to help prevent the spread of venom (poison).

If it's possible, have an adult catch and bring the spider to the doctor's office with you. Even though it's usually easy to identify black widows, you'll want to make sure that's the kind of spider that bit you. The spider can be killed first before you bring it with you; just be sure not to squish it so much that no one can tell what it is.

Kids' Health

[http://kidshealth.org/kid/ill\\_injure/bugs/black\\_widow.html](http://kidshealth.org/kid/ill_injure/bugs/black_widow.html)

# The Big Zoo: Black Widow Spider

■ Tell A Friend

## *Latrodectus mactans*

### Also Called: Hourglass Spider

#### Description

Black widow spiders are considered one of the most poisonous spiders in North America. They are also the largest web-spinning spiders. Adult black widow spiders are shiny black with two reddish or yellowish triangles on the abdomen that forms an hourglass shape. Their body is approximately one half inch long and their legs about one half inch long. Adult males are about half the size of the females and have a smaller body with red or yellow bands or streaks on the abdomen and spots over the back. Spiderlings are mostly white or yellowish-white and acquire more black with varying amounts of red and white with each [molt](#) 🕸️. Young black widow spiders resemble the males. Adult males and spiderlings are harmless.

#### Food

Black widow spiders eat insects that get caught in their web.

#### Habitat

Black widow spiders live in most warm areas of the world including the Eastern and Central regions of the United States. They spin their webs of coarse silk in dark places, usually near the ground in woodpiles, rubble piles, and under decks and under and around houses and outbuildings. They will occasionally spin their web inside as a result of cold weather.

#### Predators

Mud-Dauber Wasps are natural [predators](#) 🕸️ of black widow spiders. Alternating warm and cold weather in the winter and spring are detrimental to their survival.

#### Social Structure

Female black widow spiders hang on their webs belly up and rarely leave it. The females are shy and will not voluntarily leave their webs, however, if their web is disturbed they may rush out and bite.

#### Birth & Offspring

Female black widow spiders will usually eat the male after mating. The female lays her eggs in silken cocoons or sacs that are about a ½ inch around and are white, later turning to pale brown. Usually, about 4 to 9 sacs are produced during the summer with between 20 and 900 eggs per sac. The eggs hatch in 14 to 30 days after which only 1 to 12 of them will survive due to cannibalism. The spiderlings leave the web after they have hatched. They mature in 2 to 3 months and, during that time, will [molt](#) 🕸️ from 3 to 8 times.

The Big Zoo

[http://www.thebigzoo.com/Animals/Black\\_Widow\\_Spider.asp](http://www.thebigzoo.com/Animals/Black_Widow_Spider.asp)