



WESTERN DIAMONDBACK – ACTUAL SIZE UP TO 6 FEET



BARK SCORPION – ACTUAL SIZE 1 ½ TO 2 INCHES



BLACK WIDOW – ACTUAL SIZE 1 ¼ INCHES



CONENOSE BUG – ACTUAL SIZE 1 INCH



AFRICANIZED HONEY BEE – ACTUAL SIZE ¼ INCH



GILA MONSTER – ACTUAL SIZE UP TO 24 INCHES



ARIZONA BROWN SPIDER – ACTUAL SIZE 1 INCH

RATTLESNAKES

Greatly feared and misunderstood, 13 species of rattlesnakes have been identified in Arizona. The most common in the lower desert regions are the western diamondback, Mohave, and sidewinder.

Bites are rarely fatal but are extremely painful and destructive. Caution and common sense should be used when enjoying Arizona's great outdoors. Many bites happen when people choose to kill, capture or tease them. It is far better to just leave the snake alone!

Rattlesnakes may be encountered any time of the year. Extra caution should be taken when walking or climbing in the desert or mountains at certain times of the year, especially when the daytime temperature stays above 80 degrees Fahrenheit. In the low desert during March and April, rattlesnakes become more active and move to areas where they can soak up the sun. During the hot summer months the temperature is too high for daytime activity. In August and September the snakes become the most active of the year.

Baby rattlesnakes are typically born the end of July, and are capable of biting and envenomating from birth. Some species of baby rattlesnakes are more toxic on a drop for drop basis than their adult counterparts. But they are typically less dangerous than adults because they are capable of injecting far less venom.

Rattlesnakes have a heat-sensing pit located between the nostril and the eye on each side of the head. This pit is used to locate and trail prey. Rattlesnakes also have a rattle on the end of its tail and long hypodermic fangs which fold against the roof of the mouth when not in use. Most have a broad, triangular shaped head. Different species of rattlesnakes can be different lengths, with the western diamondback growing up to six feet in length.

The loosely attached horny rings (rattles) at the tip of the tail are the source of the rattle sound. A baby rattlesnake is born with a pre-button on the end of the tail and only after the first molt at about two weeks do they have a button. An actual rattle does not appear until about three or four months. The shaking of the rattle can serve as a warning, but not always: rattlesnakes can strike without warning or making a sound. They can strike ¼ to ½ of their body length.

Do not handle dead snakes or their severed heads. A reflex bite can occur for hours after the snake is dead.

Color varies by species, but most blend in well with their environments. Usually mottled or banded in shades of tan and brown, rattlesnakes can also be a combination of grayish green, orange, red, bright green, yellow, black or peach.

SIGNS & SYMPTOMS OF A BITE

Immediate pain or a burning sensation occurs at the site of the bite; fang marks are usually visible. Victims may experience a metallic or rubbery taste in the mouth. Significant swelling usually occurs within minutes, and symptoms may progress to weakness, sweating and/or chills, nausea and vomiting.

A small percentage of rattlesnake bites are "dry," meaning that the snake has not injected venom. But do not count on being one of the lucky ones: seek help immediately – only a doctor can determine if you have a "dry" bite. The venom injected contains several enzymes designed to attack the tissue at the bite site that can cause blood thinning and other effects on the body. The Mohave rattlesnake venom may also contain a neurotoxin that results in severe muscle weakness.

TREATMENT

Seek medical attention from a hospital emergency room immediately! You will be evaluated and administered antivenin if necessary. It is important to get treatment as soon as possible. Even if you are a great distance from your car or other help, move slowly if necessary to get help. You have time to reach medical care.

Don't panic: Stay as calm as possible. If bitten on the hand, remove all jewelry immediately before swelling begins.

- **DON'T** apply ice to the bite site or immerse the bite in a bucket of ice.
- **DON'T** use a constricting band/cloth or tourniquets. Do not restrict blood flow in any manner.
- **DON'T** cut the bite site or try to suck out the venom. Leave the bite site alone!
- **DON'T** use electric shock or stun guns of any kind.
- **DON'T** try to capture the

snake to bring to the hospital. Time spent capturing the snake delays arrival at the emergency department, and may result in additional bites. Identification of the snake is not necessary for treatment. The physicians treat the symptoms as they occur and modify the antivenin/treatment as needed. Treatment is not snake specific.

Each year over 95 rattlesnake bites are reported to the Poison Control Center.

SCORPIONS

There are over 60 species of scorpions in Arizona. All scorpions can sting (they do not bite) and inject a venom, but only one scorpion in the United States, the bark scorpion, is classified as potentially dangerous to humans.

The bark scorpion occurs naturally throughout Maricopa County and much of the rest of the state. It is commonly found inside houses and buildings. The bark scorpion chooses a defined area in which to live. If a structure is built on that area, the number of scorpions that find their way inside can be controlled but will never disappear completely.

The bark scorpion is one of several medium scorpions and is about one and one half to two inches in length. It is the only scorpion in Maricopa County that climbs. It easily climbs any surface except clean glass and clean plastic. It can cling to the underside of a piece of wood, walk across your ceiling, climb furniture, and get into clothing and cupboards. They are most active at night and love places that are dark and damp.

The bark scorpion's color varies from clear, light tan or darker golden brown. Color and size are not a good way to identify this scorpion.

SPECIAL PRECAUTIONS

Because children under six years of age are more likely to develop severe symptoms if stung, special care should be taken if you are visiting or live in an infested house:

- Children should be protected in their cribs/beds. To prevent the bark scorpions from climbing up, place the crib/bed legs in glass jars.
- To keep the scorpions from coming into the crib/bed sideways, move the crib away from the wall and be sure that

blankets and sheets to do not touch the floor or walls.

- To prevent the scorpions from dropping in, you need to install a scorpion shield. Hang a piece of flat plastic, or other flat smooth board that is bigger than the size of the crib, several inches from the ceiling. Place double-sided sticky tape around the inside of the board. Scorpions will then fall onto the board and get stuck, rather than fall into the crib/bed.

- Check the crib/bed in advance of putting the child to bed.

- Shake out all clothing and shoes before putting them on the child.
- Have the child wear shoes at all times and be especially careful around hot tubs and pools at night.

- Teach the child not to pick up bugs in or around the house.

All of the above precautions also can apply to adults!

SIGNS & SYMPTOMS OF A STING

The bark scorpion sting is extremely painful, but does not usually cause swelling or redness at the sting site. Victims describe the feeling as similar to having a piece of metal heated in a fire and then stabbed into the skin.

The immediate local pain/burning is usually followed by a feeling of numbness and tingling (and still lots of pain) that can travel up an arm or leg. This is a totally natural reaction to the sting.

Call the poison center if you have problems with your eyes, throat, tongue, speech or breathing.

(If you are stung by one of the other 59 scorpions it will feel similar to a wasp sting with local swelling and pain.)

Young infants and children are at greater risk of serious symptoms. A major problem is identifying that a scorpion sting has occurred. With no visible mark or swelling it is hard to tell. The child will be hurting and upset, then the eyes will start moving in an uncoordinated, roving manner. The child may become hyperactive, with facial twitching and lots of drooling.

TREATMENT

Call the Poison Control Center to get first aid instructions and determine if the victim needs further medical care. Medications or antivenom may be required.

Each year over 9,000 scorpion stings are reported to the Poison Center.

BLACK WIDOW SPIDER

A mature female black widow spider has a large, black, shiny body and measures approximately ¾ inch long, with one-inch legs. An hour-glass shape in bright red or orange-red color can be found on the abdomen.

Black widow spider webs are very irregular, white in color and strong. They're most often found in areas where water and insects are readily available. Around the home, they can be found under outdoor furniture, barbecue grills, pool pumps, and in storage areas, garages, wood piles, block fences and the corners of porches and patios.

The black widow is shy. She hides near the web by day typically in some sort of sheltered spot and is most active at night, where she waits on her web for prey to enter. She produces hundreds of babies hatched from egg sacs that look like little moth balls. The young black widows are white in color and spread quickly after hatching.

The male black widow is much smaller, and is brown and white in color. Because of its size, its bite cannot pierce skin, and is therefore not dangerous to humans.

SIGNS & SYMPTOMS OF A BITE

The bite may not be painful, but will cause redness, swelling and itching. Each subsequent bite (even over months and years) can cause a more and more serious reaction, even an anaphylactic reaction.

TREATMENT

Call the Poison Control Center to determine whether the bite victim can be managed at home or will require medical treatment. If possible, capture the bug to help confirm that you were bitten by a conenose bug.

CONTROL

A "live and let live" attitude is the best approach for living in harmony with nature. But if you have a problem of close contact with the black widow or you have young children who play outside, you may have to take steps to control the black widow population around your house.

SIGNS & SYMPTOMS OF A BITE

The initial bite may feel like a pin prick, which may go unnoticed. At first, victims experience little or no visible signs of the bite such as swelling. A red circular mark may appear about six hours after the bite.

The initial symptoms may be progressive aching sensations, with muscle pain at the bite site spreading to the lower back, thighs and limbs. Symptoms often last up to 36 hours and lingering effects may last for several weeks.

TREATMENT

Call the Poison Control Center immediately to determine whether the bite victim can be managed at home or will require treatment by a physician or hospitalization. Severe cases may require antivenin treatment.

Approximately 100 calls are received each year about bites from the black widow spider.

CONENOSE BUG

Four species of the conenose bug, also known as kissing bug, assassin bug or Walapai tiger, live in Arizona. This slow-moving bug is dark brown to black with yellow/red markings on the abdomen and measures one half to one inch long. Its body is long with three pairs of legs and a cone-shaped head.

The conenose bug usually bites and feeds on the blood of a sleeping person. Seen in spring and early summer, it makes its home inside pack rat nests. They are drawn to houses by the lights at night.

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BEES, ANTS & WASPS

AFRICANIZED HONEY BEE (KILLER BEE)

Almost all the bees in Maricopa County are now classified as Africanized honey bees or killer bees. These bees look just like the European honey bees that we have known for so long. The venom injected by the stinger is no different. What is different is the aggressiveness they show in defending their hive or colony.

The Africanized honey bees swarm several times during the year changing their home (hive or colony). Having moved, they will defend it extremely aggressively. Do not try to clear out the bees yourself, but instead call the local fire department



or beekeeper. Once they start to attack, it can last for days. A single sting is no more powerful or painful than a European honey bee. They can sting only once before dying, but it is the number of stings that can be inflicted because of their numbers that can cause illness and even death. It takes over 10 stings per pound of body weight to cause a serious illness.

If attacked, cover your head and run to the nearest place that will enable you to shut out the bees. A car, truck or house will work, but do not dive into water. Some bees will come with you, but the rest will remain outside.

If you choose a car or truck, close the outside vents and if you have air conditioning, turn it on to calm the bees.

ANTS

Ants can sting or bite and use their venom to kill smaller creatures or to keep intruders away. Therefore, the best prevention is to avoid stepping or sitting on their nests.

Two types of ants cause problems in Arizona: harvester ants are large and red, dark brown or black in color. They can sting but the stingers are fairly blunt and the pain lasts four to six hours. Field ants are medium in size. After biting, they spray acid into the wound, causing short-lived pain.

VELVET ANTS (WOOLY ANTS, COW KILLERS, MULE KILLERS)

These wingless, colorful wasps are colored black with red, or orange, yellow and white. They are not common in Arizona but can congregate in enormous populations numbering in the thousands. The females sting when handled or stepped on with bare feet.

WASPS

Wasps are slender with a relatively thin waist and four wings. Smooth and somewhat shiny, they have brightly colored "skin," often with sharply contrasting black and yellow patterns. Females can sting multiple times. The males have wings but no stingers. Wasps are predators and feed on insects and spiders.

One type, the umbrella or paper wasp, is colored in dull shades of brown and yellow. It's usually only a threat when disturbed in its umbrella-shaped nest. Because its stinger is not barbed, it can be removed and reinserted repeatedly, each time metering out enough venom to cause considerable pain.

YELLOW JACKETS

Western yellow jackets have jagged bands of yellow and black and are found in the Southern parts of the state and above the Mogollon Rim. The stings are painful and occur mostly outdoors where nests are bothered.

SIGNS & SYMPTOMS OF A BEE, ANT OR WASP STING

The severity of an insect sting reaction varies from person to person. A normal reaction will result in pain, swelling and redness around the sting site. A large local reaction includes swelling and redness beyond the sting site. Although frightening in appearance, these large local reactions will go away over several days.

The most serious reaction to an insect sting is an allergic one. Any of these reactions requires immediate medical attention. Symptoms of a severe allergic reaction or "anaphylaxis" may include one or more of the following:

- Hives, itching or swelling in areas other than the sting site.
- Tightness in the chest and difficulty breathing.
- Hoarse voice or swelling of the tongue.
- Dizziness or a sharp drop in blood pressure.
- Unconsciousness or cardiac arrest.
- Massive envenomations can lead to liver or kidney damage.

This type of reaction can occur within minutes after the sting and may be life-threatening. People who have experienced an allergic reaction to an insect sting have a good chance of a similar or worse reaction if stung again by the same kind of insect. If you have severe allergies to any insect, always carry appropriate medicine prescribed by your physician with you when outdoors.

TREATMENT

Call the Poison Control Center to determine whether the bite victim can be managed at home or will require medical treatment.

GILA MONSTER

This large, heavy-bodied beaded lizard displays black markings on a background of cream, pink, yellow or orange. It measures up to 24 inches in length and weighs up to two pounds.

While it is the only venomous lizard in the United States, it is a shy creature and lives

underground for much of its life.

Bites to humans are rare and usually happen when people try to handle them. They are seen above ground from early March to mid May.

The Gila monster prefers canyon bottoms, rocky areas and outlying desert residential areas.

SIGNS & SYMPTOMS OF A BITE

A bite produces intense pain within 30 seconds, followed by swelling, weakness, dizziness, nausea and chills.

TREATMENT

Once a Gila monster bites, it does not generally let go. As they chew, the saliva carries the venom into the wound. Getting the monster off as quickly as possible is important. Various methods have been suggested, but the most effective is to just pull it off. Allow the wound to bleed freely and flood it with water, if possible.

Call the Poison Center immediately and go to the nearest emergency facility.

UNKNOWN BITES & STINGS

Each year, the Poison Control Center receives thousands of calls from people who have been bitten or stung by "something." If you are bitten or stung and did not see the insect, call the Poison Center Hotline. From the symptoms you describe, the nurses will determine if your bite or sting could be poisonous and if you need to be examined by a doctor.



UNLIKELY BITES & STINGS

CORAL SNAKE

Coral snakes are shy creatures usually found in rocky desert areas at night during the spring months of March, April, May and again during the monsoons. Because they have a small mouth, bites are highly unlikely and envenomation is difficult. The skin between your fingers or forefingers and thumb is the most vulnerable to a bite.

This slender, pencil-size, tricolor snake with red, yellow and black rings that encircle the body, has

a black head and measures up to 20 inches in length.

The following critters can cause medical problems, but the actual number of victims is very small.

ARIZONA BROWN SPIDER

This fiddleback spider is a relative of the true brown recluse spider. The true brown recluse spider does not live in Arizona. It lives in an area from Dallas, Texas, north to Des Moines, Iowa and then south throughout the Southern States.

Including the legs, this spider ranges in size from a nickel to a quarter, with a darker brown fiddle shape on the head. It is a nonaggressive spider found in undisturbed areas of houses, garages, and storage buildings, as well as in the desert.

CATERPILLARS

Two Arizona caterpillars have venom in their stiff spines, so that even brushing against them can cause burning and welting. These caterpillars should be handled with care.

The buck moth caterpillar is about one and one half inches long with little color marking on the body. The spines are dark and very sharp. One species, the palo verde buck moth, can be present in foothills areas feeding on foothill and ornamental palo verdes.

The puss moth caterpillar is about an inch long, soft and furry, and doesn't look much like a caterpillar. They feed on oak trees, as well as other trees and shrubs. The soft pale tan fur conceals the sharp spines that can inject venom.

CENTIPEDES

Centipedes actually have 20 to 100 legs and range from one to nine inches in length. Their bite can be painful and cause local swelling, but usually not long lasting.

TARANTULAS

Even though this giant spider does have fangs to inject venom, it is usually very mild-mannered. The hairs on the abdomen can also cause itching, burning, and allergic-like symptoms.

TREATMENT

Call the Poison Control Center for the signs and symptoms and first aid treatment for the bites and stings of these critters.



bites & stings

VENOMOUS BITES & STINGS OF ARIZONA



Banner
Poison and Drug
Information Center

WEST NILE VIRUS

During the summer and fall, infected mosquitoes can spread West Nile Virus. West Nile Virus can be a serious illness: not get sick.

- About 80% of people bitten by an infected mosquito will have a short mild illness. This can include fever, headache, body aches, nausea, vomiting and sometimes swollen lymph glands or skin rash.
- Up to 20% of people bitten by an infected mosquito will develop the severe illness of several weeks with possible neurological effects. This can include high fever, headache, neck stiffness, coma, tremors, convulsions, muscle weakness, vision loss, numbness and paralysis.
- People over the age of 50 are at the highest risk of getting sick with severe West Nile Virus.

PREVENT MOSQUITO BITES

- Use insect repellents when outdoors.
- Limit time outside at dusk and dawn.
- Have good screens on windows and doors.
- Empty standing water in your yard – flower pots, buckets and barrels. Change water in pet dishes and birdbaths every week. Mosquitoes lay their eggs in quiet non-moving water.

WEST NILE VIRUS



Program
1-800-222-1222
into your phone. In Arizona
with an out of state cell
phone call 602-253-3334

www.bannerhealth.com/poisoncenter

Poison Center Hotline
1-800-222-1222
Call anytime! Lines open 24/7

Administration 602-747-4884
Education Materials 602-747-4884
Presentations 602-839-2510

www.bannerhealth.com/poisoncenter

CTPER | Center for Toxicology and Pharmacology
Education and Research

A CENTER OF THE UNIVERSITY OF ARIZONA COLLEGE OF MEDICINE - PHOENIX AND BANNER HEALTH

The Poison and Drug Information Centers of Arizona

THINGS YOU CAN DO TO PREVENT A VENOMOUS BITE OR STING

WHEN AROUND YOUR HOME

- Remove litter, wood, paper, logs and debris from your yard.
- Wear your heavy work gloves when working outside around your yard.
- Keep doors and windows tight fitting with good weather stripping.
- Make sure that other openings (such as where air conditioning, swamp coolers or exhaust fans enter your house) are closed, sealed or encircled with double-sided sticky tape.
- Fill all cracks in the foundation of the house and all water faucets.
- Look before you place your hand under or into something.
- Make periodic checks for beehives or swarms; if found, have them immediately removed by pest control experts. Do not try to remove or burn them out yourself.
- Keep alert for trouble when operating equipment (lawn mowers, chain saws, weed eaters, etc.) that produces sound vibrations that may disturb a beehive or wasp nest.
- Examine all outside, line-dried clothing prior to bringing them inside the house.

WHEN ENJOYING ARIZONA'S GREAT OUTDOORS

- Do not leave shoes, boots, clothing items and towels outdoors.
- Call your local fire department for help in removing rattlesnakes and Gila monsters that do not leave on their own.
- Wear shoes when outdoors, especially around the pool at night.
- Wear long pants and lace-up leather shoes or boots that cover the ankles.
- Remain alert for snakes. Be extra cautious when temperatures stay over 82 degrees Fahrenheit in the daytime. South-facing slopes and rocky areas are places where snake encounters are more likely.
- Don't handle, touch or play with snakes or Gila monsters. Walk around them if you can.
- A long walking stick can be a good hiking companion. The vibrations can be felt by the snake, giving it more time to move out of the way.
- Step on top of rocks or logs to get a clear view of what's on the other side before stepping down.
- Don't place your hands where you can't see.
- Don't blindly reach under rocks or logs.



WHEN CAMPING

- Check and shake bedding and clothes before use.
- Don't wear scents of any kind (for example: perfume, after shave or hair spray).
- Watch for beehives, colonies or swarms when outdoors – leave alone if found.
- Check and shake bedding and clothes before use.
- Close and zip all tent closures at all times.
- Be aware that during the hot summer months in Arizona, the rattlesnakes are more active and hunt at night.
- Keep a good first aid kit with you. A snake bite kit is *not* necessary.

SERVICES

HOTLINE

The Banner Poison and Drug Information Center provides free, 24 hour a day emergency telephone service for both residents and medical professionals of Maricopa County. The Hotline is staffed by nurses and poison information providers highly trained in the recognition and assessment of poisonings, first aid treatment and drug information.

PHYSICIAN SUPPORT

Banner-University Medical Center Phoenix Department of Medical Toxicology provides physician support to the Poison Center. The Poison Center physicians are available 24 hours a day to manage the care of the poisoned patient.

COMMUNITY EDUCATION

Community Education develops and distributes a variety of educational materials for the residents of Maricopa County. In addition, educational presentations, exhibits and workshops are conducted for businesses, schools, health care professionals and community groups. To request materials call 602-747-4884 or to schedule presentation/health fair please call the education number – 602-839-2510 or email maureen.roland@bannerhealth.com.

COMMUNITY SUPPORT

The Banner Poison and Drug Information Center is a nonprofit organization that gladly accepts donations to better serve the community and continue Poison Control Center services. Gifts can be made by check or cash mailed to the Banner Health Foundation, 2901 N. Central Avenue, Suite 160 Phoenix, AZ 85012; telephone 602-747-GIVE (4483); or online at www.bannerhealth.com/poisoncenter.
*(*When donating, please designate your gift to Poison Center*).*



BANNER POISON AND DRUG INFORMATION CENTER

SERVING MARICOPA COUNTY SINCE 1979

The Banner Poison and Drug Information Center is supported by Banner-University Medical Center Phoenix, as well as funding from the State of Arizona, Federal grants, and charitable donations. It was founded at St. Luke's Medical Center in 1979 and managed 3,000 calls during its first year of operation. Since the move to the Samaritan Health System (now Banner Health), in 1987, the center's call volume has grown to over 70,000 annually.

BITTEN OR STUNG?

HELP IS A PHONE CALL AWAY!

BANNER POISON AND DRUG INFORMATION CENTER

1-800-222-1222

If you are bitten or stung by one of the venomous critters described in this brochure, call the Poison Control Center. The Poison Center has a free, 24-hour hotline. The Poison Center nurses will help decide if you can be treated at home, need to be seen by a physician or should go to a hospital emergency department.

If you can be treated at home, the Poison Center will keep in contact with you by calling back and checking on your condition. If your condition worsens, you will be directed to the nearest emergency department or the paramedics will be called.

WHAT YOU DON'T KNOW CAN HURT YOU!

WHEN IT COMES TO BITES AND STINGS, PREVENTION IS THE BEST MEDICINE

Many people are surprised to discover that the Sonoran Desert of Arizona is alive with a variety of plants and living creatures. A few of these creatures (critters) are greatly feared because they have a venomous bite or sting.

WHAT CAN YOU DO?

First, learn which creatures can bite or sting. Next, don't pick up animals that can bite or sting. Do not tease or harass venomous animals. Last, know what to do and whom to call if you get bitten or stung.



DADDY LONG LEGS ARE THE MOST POISONOUS SPIDER

They are harvestmen (Opiliones) not spiders, and they are not venomous.

THE SMALLER THE SCORPION, THE MORE POISONOUS/DEADLY IT IS

Only one, the bark scorpion, of 56 scorpions in Arizona has a neurotoxic venom and it is a medium size scorpion – full grown at about an inch and a half.

DADDY LONG LEGS ARE THE MOST POISONOUS SPIDER

Drinking several glasses of milk has not been proven to affect the sting from a scorpion.

DRINKING MILK IS A GOOD TREATMENT FOR A SCORPION STING

DO NOT use tourniquets for treating any bite or sting. This means do not use rubber bands, thread, belts or bandanas to try to stop the venom.

TOURNIQUETS WILL HELP KEEP THE VENOM FROM SPREADING

The amount of venom that a snake has is based on size. The bigger the snake, the more venom. Seek help if you are bitten by any size rattlesnake.

BABY RATTLESNAKES ARE MORE DANGEROUS THAN ADULT SNAKES

MYTHS