

## POISONOUS PLANTS, STINGS, AND BITES

The warmer months are upon us and that brings the added hazards of poisonous plants, insects, and snakes. They are all around us and most of the time we do not even realize it. In this article, we will help you identify the culprits and steps to remediation and treatment ideas to relieve the pain or allergic reaction.

### Poisonous Plants

The three that occur most often in the wild are poison ivy, poison oak, and poison sumac. The name of the oil that causes the skin irritation and allergic reactions is urushiol. Urushiol can be found on all three types of plants. Do not under any circumstances remove these plants through weed eating, mowing, or burning. Remove with sheers or pruners and place in plastic bags. Do not tear or rip from the vine as this will also release the toxic resin. Remember the number “3” with these plants. Poison Ivy and Poison Oak have three leaf clusters. The number of leaves on Poison Sumac is divisible by three (9,12,15, etc.).

### Poison Ivy Identifier

Poison Ivy has a triple leaf pattern with prominent veins and shiny surfaces. The center leaf has a stalk forming a vine or a low shrub. Later in the season, clusters of whitish, waxy, and poisonous berries form.



Spring



Summer



Fall



Winter

### Poison Oak Identifier

Poison Oak has a triple leaf pattern with prominent veins and shiny surfaces. The center leaf has a stalk and is mostly found growing as a shrub.



Poison Oak Spring



Poison Oak – Fall



Poison Oak – vine

## Poison Sumac Identifier

Poison sumac can be identified by its row of paired leaflets that contains an additional leaflet at the end.



Poison Sumac



Poison Sumac – Fall

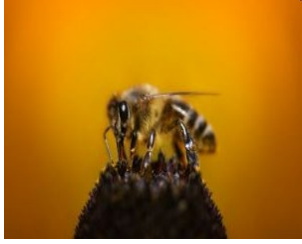
Treatment for all three plant types:

- Wash all clothes and shoes with hot water and a strong soap.
- Bathe pets in cold water who have come in contact with poison plants.
  - The oil can stay on pets for many days.
- Keep your hands away from your eyes, mouth, and face.
- Do not scratch or rub the rash.
- Apply any of these to the skin rash:
  - Calamine (not Caladryl) lotion
  - Zinc oxide ointment
  - Paste made with baking soda
    - Mix 3 teaspoons of baking soda with 1 teaspoon of water
- If irritation increases in severity, contact the poison hotline or your doctor.

Control Measures:

- Barrier cream
- Long sleeve shirt, pants, and gloves
- Prompt hand washing
- Washing clothes separately in hot water
- Avoiding areas known to have poison ivy, oak, or sumac

## Poisonous Insects/Arachnids



Honeybee



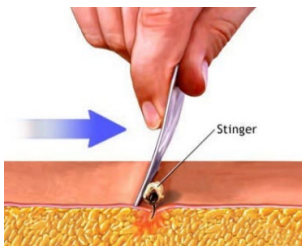
Wasp

Precautions to prevent stings:

- Wear long sleeves and pants when working around potential hive areas
- Wear a beekeeper's hat if knowingly working near or around a hive
- Stay aware around old, hollowed out trees and along canals

If being swarmed or stung:

- Run away quickly in a straight line covering your head with a towel or shirt
- Do not dive into water
  - They will wait until you surface to take a breath
- To remove a stinger
  - Do not use tweezers or your fingers
    - It may release more toxin from the stinger
  - Use a sweeping motion with a credit card or similar piece of plastic



Symptoms of Local reactions (only the part of the body near the sting is affected):

- Immediate pain, redness, swelling, and itching at the sting site may occur.
- A large (greater than four inches across) local reaction may develop over the next 12-36 hours.
- A bacterial skin infection, although uncommon, may also begin during the first 12-36 hours (or even after the first few days).
- These may cause an enlarging area of redness at the sting site. It may be difficult to tell a local skin reaction and a local bacterial skin infection apart.

Symptoms of a systemic or allergic reaction (parts of the body away from the sting are affected):

- Many people underestimate the potential severity of bee and wasp stings
- Hives (raised itchy bumps on the skin) and itching all over the body
- Swelling of the mouth, throat, or both
- Shortness of breath or other difficulty breathing
- Nausea
- Vomiting
- Chest pain
- Low blood pressure (weakness or fainting)
- In severe cases, marked difficulty breathing, unconsciousness, and even death may occur

When to Seek Medical Care:

- If a large, localized reaction (greater than about 10 inches in diameter) occurs, evidence of infection (increasing pain, swelling, redness, drainage of pus, or fever) is present at the sting site, or any symptoms last for more than a day or two.
- **If you recognize any symptoms of an allergic reaction as discussed, seek immediate medical attention.**
- If it has been more than 10 years since your last tetanus booster immunization, contact your doctor about getting a tetanus immunization.



Black Widow



Brown Recluse

Both types of spiders can be found hiding between boards, boxes, old towels, clothes, unused furniture, meter boxes, under eaves, and other undisturbed areas. Neither the black widow nor the brown recluse spiders are aggressive, but they will both bite when accidentally trapped, disturbed, or threatened.

All spider bites possess the potential for a secondary infection and should be washed thoroughly with soap and water or an antiseptic, if available. If possible, the spider should be captured for positive identification. An ice pack may be applied to alleviate pain and swelling in the bite area. First Aid is of limited help so you will need to contact the Texas Poison Center Network at 1-800-POISON-1 (1-800-764-7661) or your family physician. **If you recognize any symptoms of pain or an allergic reaction, seek immediate medical attention.**

## Poisonous Snakes

Texas is home to four types of poisonous snakes, the western diamondback rattlesnake, copperhead, cottonmouth (water moccasin), and coral snake. Diamondback rattlesnakes, copperheads, and cottonmouths are pit vipers whose venom is hemotoxic; meaning the venom destroys red blood cells, disrupts blood clotting, and/or causes organ degeneration and generalized tissue loss.

The venom of the coral snake is a neurotoxin; meaning the venom attacks the recipient's nervous system. Neurotoxins typically act faster than hemotoxins. The coral snake has the second strongest venom in the world; however, it has a less effective poison-delivery system and do not strike at their prey like rattlesnakes, copperheads, and cottonmouths do. Baby snakes are also venomous.



Western Diamondback



Copperhead



Cottonmouth



Coral Snake

Most bites occur between the months of April and October when snakes are the most active. Rattlesnakes can be especially dangerous for outdoor workers who may wander into the snake's path or accidentally disturb them while performing normal job duties. All four snakes may roam at any time of the day or night depending on temperatures and threatening weather.

- Always wear appropriate clothing (closed toe shoes, long pants, boots, and snake guards) when working in areas where you won't have a clear view of your path.
- When working in tall grass, weeds, or brush, use a long stick to disturb the area prior to entering it.
- Never pick up a dead or live poisonous snake with your hand. The biting reflex remains intact even after death.
- If you hear a rattlesnake, STOP immediately and locate the snake. If you are close to the snake, remain still and allow the snake to calm down and back away. When you are a full snake body length away, step away from the snake.
- Never place your hands or arms into areas blindly.
- Check around stumps or logs for concealed snakes before sitting down.
- Walk around logs instead of stepping over them.
- Check the cabs of parked equipment before entering.
- Never nudge a snake to encourage it to move along. The snake may consider this a threatening act and respond accordingly.
- Copperheads and cottonmouths are aggressive in nature and may attack even if unprovoked.

- Coral snakes and king snakes look very similar. The difference is in their band configuration.
- Coral snakes have red and yellow touching, whereas king snakes have black and yellow touching.

## **IF BITTEN, THE DO'S AND DON'TS**

### **DO:**

- Move beyond striking distance from the snake.
- Seek medical attention immediately.
- Try to stay calm and limit movement. Anxiety and panic can increase your heart rate and speed up the spread of venom to your heart.
- Remove jewelry and tight clothing before you start to swell.
- If possible, position yourself so the bite is level with, or below, your heart.
- Clean the wound and let it bleed.
- Bleeding may release some of the venom.
- Cover the wound with a clean, dry dressing.

### **DON'T:**

- Try to capture the snake.
  - These snakes are common in Texas.
  - There is no need to kill, handle, or identify the snake.
- Use a tourniquet or apply ice, which can block circulation and possibly result in gangrene.
- Cut the wound or attempt to suck out the venom.
  - Cutting the wound can cause excessive bleeding and human mouths are full of bacteria, which can cause infection.
- Don't drink caffeine or alcohol, which could speed your body's absorption of venom.

## **SYMPTOMS**

- A rattlesnake, cottonmouth, copperhead, or coral snake may attempt to bite without injecting venom. This is known as a "dry bite". While you may not be poisoned, the bite can still be painful and become infected.
- If venom is injected into the wound, symptoms can include:
  - Swelling
  - Bleeding at the wound
  - Nausea/vomiting
  - Dizziness
  - Numbing or tingling of the mouth and tongue
  - Pain
  - Sweating
  - Chills
  - Weakness
  - Changes in heart rate and blood pressure

While performing various tasks in the field, we encounter numerous challenges and safety hazards. To ensure personal safety, it is crucial to take necessary precautions to minimize risks. These include reducing exposure to poisonous plants and protecting oneself from bites or stings caused by snakes, insects, or spiders. Proactive measures can make a significant difference in mitigating these dangers.