Bites, Stings & Venomous Things

Venomous critter identification, sting symptoms and wound first aid for Arkansas, Louisiana, New Mexico, Oklahoma & Texas

The Southwest Center for Agricultural Health, Injury Prevention and Education
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Tips for venomous critter identification, sting symptoms and wound first aid

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First Aid Kit

The following are recommended items for a first aid kit; modify to suit your particular needs. When in doubt, always seek advice from a licensed healthcare professional.

- Adhesive Tape (non-allergenic)
- Antiseptic Ointment
- Band-Aids (assorted sizes)
- Benadryl®
- Blanket
- Cold Pack
- Disposable Gloves
- Epi-Pen® www.epipen.com
- Gauze Pads & Roller Gauze (assorted sizes)
- Hand Cleaner
- Plastic Bags
- Safety Pins
- Scissors & Tweezers
- Small Flashlight & Extra Batteries
- Topical Cream containing: antihistamines, menthol, corticosteroids, or benzocaine (e.g. Sting Kill®)
- Triangular Bandage

All agents should be used according to the manufacturer’s use and dosing recommendations.
Glossary

**Anaphylactic Shock**- Severe and sometimes fatal systemic reaction upon a second exposure to a specific antigen (as wasp venom or penicillin) after previous episode characterized by respiratory symptoms, fainting, itching and hives.

**Antihistamine**- Medicines that oppose the actions of histamine and are used especially for treating allergic reactions, cold symptoms and motion sickness.

**Analgesic**- A drug or medication given to reduce pain without resulting in loss of consciousness.

**Benzocaine**- Local anesthetic.

**Corticosteroids**- Any of the steroid hormones made by the outer layer of the adrenal gland; e.g. Cortisol.

**Envenomation**- The injection of a poisonous material by sting, spine, bite or other similar means.

**Neurotoxic**- Toxic to the nerves or nervous tissue.

**Systemic Reaction**- Affecting the body generally; dizziness, fainting, difficulty breathing, swollen lymph nodes.

**Tourniquet**- A device, typically a tightly encircling bandage, used to check bleeding by temporarily stopping the flow of blood through a large artery in a limb.
### Bees

<table>
<thead>
<tr>
<th></th>
<th>SYMPTOMS</th>
<th>FIRST AID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bumble Bees</td>
<td>- Multiple stings</td>
<td>- Apply topical cream containing antihistamines, corticosteroids, benzocaine or menthol</td>
</tr>
<tr>
<td></td>
<td>- Painful sting</td>
<td>- Or, apply baking soda paste</td>
</tr>
<tr>
<td>Carpenter Bees</td>
<td>- Multiple stings</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Painful sting</td>
<td></td>
</tr>
<tr>
<td>Leafcutter Bees</td>
<td>- Not aggressive</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Sting only when handled</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Minor sting</td>
<td></td>
</tr>
<tr>
<td>Sweat Bees</td>
<td>- Attracted to sweat</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Sting only when touched/disturbed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Minor sting</td>
<td></td>
</tr>
</tbody>
</table>
### Bees

**Honeybees**
- Single sting
- Tissue swelling
- Burning pain

**Africanized Honeybees “Killer Bees”**
- Single sting
- Tissue swelling
- Burning pain

**“Killer Bee” Facts**
- More aggressive than honeybees
- Attack in large numbers
- Will attack 3 times farther from their hive

**SYMPTOMS** | **FIRST AID**
---|---
Honeybees | - Remove stinger  
| | - Wash wound  
| | - Apply topical cream containing antihistamines, corticosteroids, benzocaine or menthol  
| | - Or, apply baking soda paste

**CDC/NIOSH Cooperative Agreement U50 OH007941**
Caterpillars

Asp
Hag Moth

Buck Moth
Saddleback

Io Moth

Spiny Oak Slug
Stinging Rose

See reverse for sting symptoms and first aid.
### Caterpillars

**SYMPTOMS**

<table>
<thead>
<tr>
<th>Local Reactions</th>
<th>Systemic Reactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Cold or numb feeling</td>
<td>- Dizziness &amp; fainting</td>
</tr>
<tr>
<td>- Severe body pain</td>
<td>- Difficulty breathing</td>
</tr>
<tr>
<td>- Swollen lymph nodes</td>
<td>- Swollen lymph nodes in groin</td>
</tr>
<tr>
<td>- Red &amp; swollen sting site</td>
<td></td>
</tr>
</tbody>
</table>

* Caterpillar hairs can cause respiratory problems & blindness.

**FIRST AID**

- Apply sticky tape (medical adhesive or duct tape) to sting. Assure firm adhesion and then pull it off.
- Apply topical cream or hydrocortisone.
- Oral Benadryl® may be taken.

**Seek Immediate Medical Attention For:**

- Systemic reactions
- Extreme pain
- Inhaled hairs or hairs in the eye
### Insects

<table>
<thead>
<tr>
<th></th>
<th>SYMPTOMS</th>
<th>FIRST AID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Ant</td>
<td>- Multiple stings</td>
<td>- Wash wound</td>
</tr>
<tr>
<td></td>
<td>- Severe burning sensation</td>
<td>- Apply cool compress</td>
</tr>
<tr>
<td></td>
<td>- Small blister or whitish pustule</td>
<td>- Reaction far from sting suggests risk for anaphylaxis with future stings</td>
</tr>
<tr>
<td>Carpenter Ant</td>
<td>- Injects no venom</td>
<td>- Remove stinger</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Wash wound</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Apply topical cream containing antihistamines, corticosteroids, benzocaine or menthol</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Or, apply baking soda paste</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Use pain reliever if necessary</td>
</tr>
<tr>
<td>Harvester Ant</td>
<td>- Painful bite</td>
<td>- Wash wound</td>
</tr>
<tr>
<td></td>
<td>- Venom may travel along lymph vessels and create serious medical problems</td>
<td>- Apply topical cream containing antihistamines, corticosteroids, benzocaine or menthol</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Or, apply baking soda paste</td>
</tr>
<tr>
<td>Paper Wasp</td>
<td>- Multiple stings</td>
<td>- Wash wound</td>
</tr>
<tr>
<td></td>
<td>- Painful bite</td>
<td>- Apply topical cream containing antihistamines, corticosteroids, benzocaine or menthol</td>
</tr>
<tr>
<td></td>
<td>- Swelling</td>
<td>- Or, apply baking soda paste</td>
</tr>
<tr>
<td>Yellow Jacket</td>
<td>- Central white spot with red halo</td>
<td>- Wash wound</td>
</tr>
<tr>
<td></td>
<td>- Local swelling</td>
<td>- Apply topical cream containing antihistamines, corticosteroids, benzocaine or menthol</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Or, apply baking soda paste</td>
</tr>
<tr>
<td>Insects</td>
<td>SYMPTOMS</td>
<td>FIRST AID</td>
</tr>
<tr>
<td>--------------------------</td>
<td>----------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Bald Face Wasp</td>
<td>-Painful sting</td>
<td>-Wash wound</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Apply topical cream containing antihistamines, corticosteroids, benzocaine or menthol</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Apply baking soda paste</td>
</tr>
<tr>
<td>Cicada Killer Wasp</td>
<td>-Typically do not sting</td>
<td>-Wash wound</td>
</tr>
<tr>
<td></td>
<td>-Have a long stinger</td>
<td>-Apply topical cream containing antihistamines, corticosteroids, benzocaine or menthol</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Apply baking soda paste</td>
</tr>
<tr>
<td>Tarantula Hawk Wasp</td>
<td>-Typically do not sting</td>
<td>-Wash wound</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Apply ice pack</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Take analgesic if necessary</td>
</tr>
<tr>
<td>Velvet Ant Wasp (female)</td>
<td>-Females sting upon extreme provocation</td>
<td>-Wash wound</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Apply ice pack</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Take analgesic if necessary</td>
</tr>
<tr>
<td></td>
<td>SYMPTOMS</td>
<td>FIRST AID</td>
</tr>
<tr>
<td>--------------------</td>
<td>-------------------------------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td>Desert Centipede</td>
<td>- Multiple bites</td>
<td>- Apply cool, moist packs</td>
</tr>
<tr>
<td></td>
<td>- Very painful</td>
<td>- Apply topical creams containing</td>
</tr>
<tr>
<td></td>
<td>- Swelling</td>
<td>benzocaine</td>
</tr>
<tr>
<td></td>
<td>- Lymph node swelling</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Redness</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Headache</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Irregular heartbeat</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Nausea &amp; vomiting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Anxiety</td>
<td></td>
</tr>
<tr>
<td>Garden Centipede</td>
<td>- Not dangerous to humans</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Secrete staining chemical</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Chemical could blister skin</td>
<td></td>
</tr>
<tr>
<td>Millipede</td>
<td>- Not dangerous to humans</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Secrete staining chemical</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Chemical could blister skin</td>
<td></td>
</tr>
</tbody>
</table>
# Scorpions

## SYMPTOMS

| Striped Bark Scorpion | - Multiple stings  
|                       | - Local burning pain  
|                       | - Swelling  
|                       | - Numbness  
|                       | - Nausea & vomiting  
|                       | - Irregular heart beat  
|                       | - Blood pressure change  
|                       | - Blurred vision  
|                       | - Difficulty swallowing |

## FIRST AID

- Cool packs  
- Topical medication  
- Benadryl® by mouth  

- Seek Medical Attention Immediately for face numbness or a metallic taste in the mouth.
Snakes

Pit Vipers

- Mojave Rattlesnake
  Neurotoxic
- Timber Rattlesnake
  Neurotoxic
- Banded Rock Rattlesnake
- Mottled Rock Rattlesnake
- Desert Massasauga
- Northern Blacktail
- Prairie Rattlesnake
- Western Diamondback
- Western Massasauga
- Western Pygmy
# Snakes

## Copperheads & Cottonmouths

<table>
<thead>
<tr>
<th>Broad-banded Copperhead</th>
<th>Southern Copperhead</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trans-Pecos Copperhead</td>
<td>Western Cottonmouth</td>
</tr>
</tbody>
</table>

## Coral Snakes

<table>
<thead>
<tr>
<th>†Coral Snake</th>
<th>Milk Snake</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neurotoxic</td>
<td>Not Poisonous</td>
</tr>
</tbody>
</table>

- Red on Black
- Venom Lack
- Red on Yellow
- Kill a Fellow
### Snakes

#### SYMPTOMS

<table>
<thead>
<tr>
<th></th>
<th>MILD ENVENOMATION</th>
<th>MODERATE ENVENOMATION</th>
<th>SEVERE ENVENOMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fang marks</td>
<td>- Fang marks, usually paired but not always</td>
<td>- Fang marks with swelling</td>
<td>- Immediate, severe pain at bite site</td>
</tr>
<tr>
<td></td>
<td>- Mild to severe pain</td>
<td>- Immediate pain at bite site &amp; spreading</td>
<td>- Oozing of serum &amp; blood from fang punctures</td>
</tr>
<tr>
<td></td>
<td>- Mild inflammation and swelling</td>
<td>to surrounding tissue</td>
<td>- Rapid swelling, some bruising</td>
</tr>
<tr>
<td></td>
<td>- No systemic symptoms</td>
<td>- Blood and/or serum may ooze from fang punctures</td>
<td>- Metallic taste, numbness of lips, nose, or tongue</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Vomiting, metallic taste in mouth</td>
<td>- Blurred vision, altered mental state</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Muscle twitches or tremors</td>
<td>- Shock, diffuse, or life-threatening internal bleeding</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Respiratory difficulty</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Kidney failure</td>
</tr>
</tbody>
</table>

† Symptoms of *Coral Snake* bites may be delayed for 10-12 hours. If it is likely that the bite is from a coral snake, the victim should be taken to a hospital for observation and treatment.
Snakes

FIRST AID

-Seek medical attention immediately for treatment.
-Remain calm.
-Remove any rings or constricting items because the affected area may swell.
-If possible, wash the bite with soap and water and cover with a clean cloth or dressing.
-Immobilize the bitten area.
-Keep the bitten limb level with the heart.

-NEVER cut the skin.
-NEVER attempt to suck the venom out.
-NEVER use ice.
-NEVER use a tourniquet.
-NEVER use aspirin, anti-inflammatory drugs or alcohol.
-NEVER use electric shock
-NEVER try to capture the snake.

Call the Poison Center at 1-800-222-1222 for more instructions.
# Spiders

<table>
<thead>
<tr>
<th>SYMPTOMS</th>
<th>FIRST AID</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Black Widow</strong>&lt;br&gt;Neurotoxic</td>
<td>- Pin prick bite&lt;br&gt;- Tingling sensation&lt;br&gt;- Muscle &amp; abdominal cramping&lt;br&gt;- Nausea, vomiting &amp; weakness&lt;br&gt;- Difficult breathing</td>
</tr>
<tr>
<td><strong>Brown Recluse</strong>&lt;br&gt;</td>
<td>- Stinging sensation&lt;br&gt;- Painful bite site after 6-8 hours&lt;br&gt;- Pale circle with red spot&lt;br&gt;- Hot bite site&lt;br&gt;- Fever&lt;br&gt;- Joint pain&lt;br&gt;- Nausea &amp; vomiting</td>
</tr>
<tr>
<td><strong>Yellow Sac</strong>&lt;br&gt;</td>
<td>- Painful bite&lt;br&gt;- Swelling&lt;br&gt;- Tissue damage</td>
</tr>
</tbody>
</table>
## Mosquito-Borne Diseases

<table>
<thead>
<tr>
<th>Disease</th>
<th>Symptoms</th>
<th>First Aid</th>
</tr>
</thead>
</table>
| **West Nile Virus**   | *Occur 5-10 days following bite*  
  -Fever  
  -Headache  
  -Nausea & vomiting  
  -Body aches  
  -Fatigue  
  -Rash (2-5 days after fever)  
  **Severe symptoms:**  
  -High fever  
  -Severe headache  
  -Stiff neck  
  -Disorientation or confusion  
  -Stupor or coma  
  -Tremors or muscle jerking  
  -Lack of coordination  
  -Convulsions | *No vaccine or specific antiviral treatment*  
  *Over the counter pain relievers can be used as directed*  
  *Mild symptoms usually resolve on their own*  
  **Seek Medical Attention Immediately for severe symptoms** |
| **Dengue Fever**      | *Occur 3-14 days following bite*  
  -Mild to high fever  
  -Severe headache  
  -Pain behind the eyes  
  -Muscle and joint pain  
  -Rash  
  **Severe symptoms:**  
  -Abdominal pain  
  -Persistent vomiting  
  -Bleeding  
  -Breathing difficulty | *No vaccine or specific medication for Dengue Fever*  
  *Rest*  
  *Drink fluids* |
## Tick-Borne Diseases

<table>
<thead>
<tr>
<th>VECTOR</th>
<th>SYMPTOMS</th>
<th>FIRST AID</th>
</tr>
</thead>
</table>
| **Rocky Mountain Spotted Fever (RMSF)** | - Occur 5-10 days following tick bite  
- Fever  
- Nausea  
- Vomiting  
- Body aches  
- Rash in 90% of cases | - Remove tick (see next page)  
- See doctor within 5 days for antibiotic treatment  
- RMSF can be fatal in the first week of symptoms if not treated properly |
| American Dog Tick  
Brown Dog Tick  
Rocky Mountain Wood Tick | | |

**Lyme Disease**

<table>
<thead>
<tr>
<th>VECTOR</th>
<th>SYMPTOMS</th>
<th>FIRST AID</th>
</tr>
</thead>
</table>
| Blacklegged Tick (deer tick)  
Circular, dark shield | - Expanding rash in 80-90% of cases, solid red or bull’s eye 1-2 weeks after disease transmission  
- Flu-like illness  
Later symptoms:  
- Headache  
- Stiff neck  
- Fatigue  
- Cognitive impairment | - Remove tick (see next page)  
See a doctor for antibiotic treatment if symptoms appear  
- 10-20% of patients may have recurrent or persistent symptoms even after antibiotic treatment |

**VECTOR**

- American Dog Tick  
- Brown Dog Tick  
- Rocky Mountain Wood Tick  
- Blacklegged Tick (deer tick)
# Tick-Borne Diseases

<table>
<thead>
<tr>
<th>VECTOR</th>
<th>SYMPTOMS</th>
<th>FIRST AID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southern Tick Associated Rash Illness (STARI)</td>
<td>- Similar to Lyme disease</td>
<td>- Remove tick</td>
</tr>
<tr>
<td></td>
<td>- Fever</td>
<td>- See a doctor for antibiotic treatment if</td>
</tr>
<tr>
<td></td>
<td>- Headache</td>
<td>symptoms appear</td>
</tr>
<tr>
<td></td>
<td>- Fatigue</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Muscle/joint pain</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Target-like rash</td>
<td></td>
</tr>
<tr>
<td>Female (left) has a white ‘star’ on the shield</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[Image of tick]</td>
<td>[Image of tick]</td>
<td>[Image of tick]</td>
</tr>
</tbody>
</table>

## Tick Engorgement Sequence

*Blacklegged Tick (Deer Tick) pictured*

1. Use fine-tipped tweezers or a tick removal tool to grasp the tick as close to the skin’s surface as possible.
2. Pull upward with even pressure. Don’t twist the tick; this can cause mouth-parts to break off in the skin. If this happens, clean the bite site and apply antiseptic cream.
3. After removing the tick, thoroughly clean the bite area and your hands with soap and water or hand cleaner.
4. Keep the tick in a zip-locked bag or jar and store in a freezer for identification or testing purposes.

**DO NOT burn the tick, smother it with oil, alcohol, or Vaseline or crush the tick with your fingers.**

[See website](http://www.cdc.gov/ticks/removing_a_tick.html)

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**Preventing Tick Bites**

Wear light colored clothes to see ticks better; use insect repellents with DEET or Permethrin; and check clothing and skin daily for ticks.
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www.tickinfo.com

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(903) 877-5998 
agcenter@uthct.edu ● www.swagcenter.org
Call the Poison Control Center toll-free for more information about venomous critters.