Poisonous Bug Bites and Stings

Wasp

Mud Dauber

Visit our web site: www.sbcounty.gov/dehs
## Ants

### REACTIONS

**IMMEDIATE**
Fierce burning pain lasting minutes

**LOCAL**
(fire ants)
Minutes - Wheal formation
- 2-4 hours - Clear fluid-filled vesicles
- 8-10 hours - Cloudy fluid-filled vesicles
- 12-24 hours - Umbilicated pustules on a red base, with pain and tenderness
- 3-8 days - Lesions resolve; may leave scars

**SYSTEMIC**
Due to allergic sensitization; severity and speed of onset related to degree of sensitivity. May see wheezing, urticaria, abdominal cramps, generalized edema, nausea, vomiting, dizziness, confusion, shock

**ANAPHYLAXIS AND DEATHS**
Rare, but reported

### TREATMENT

**LOCAL**
- Wash sites with soap and water
- Apply ice packs or cold compresses
- Apply baking soda and water paste

**SYSTEMIC**
See physician for proper treatment

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## Black Widow Spider

### REACTIONS

**IMMEDIATE**
Pinprick sensation from bite

**LOCAL**
Dull, numbing pain; two red puncture marks at bite site. Pain peaks at 1-3 hours and persists 12-48 hours

**REGIONAL**
- Severe muscle pain and spasm
- Rigid board-like abdomen
- Tightness in chest and pain on inspiration

**GENERAL**
- Rigidity and spasm of all large muscle groups; excruciating abdominal pain
- Convulsions, paralysis
- Shock

**DEATHS**
4-5% of untreated cases due to neurotoxic effect of venom

### TREATMENT

**LOCAL FIRST AID**
Ineffective and unnecessary

**SYSTEMIC**
See physician for proper treatment
**Scorpions**

**REACTIONS**

<table>
<thead>
<tr>
<th>IMMEDIATE</th>
<th>Severe sharp pain</th>
</tr>
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<tbody>
<tr>
<td>LOCAL</td>
<td>Pain, often intense</td>
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<tr>
<td>REGIONAL</td>
<td>1-4 hours - A two-puncture wound at the site with redness, swelling and a burning, aching pain that subsides in 4-5 hours</td>
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**SYSTEMIC**

- Hypoesthesia and numbness or drowsiness
- Itching of nose and throat
- Impaired speech and tightness of jaw muscles
- Restlessness and muscle twitching
- Muscle spasm with pain, nausea, vomiting, incontinence, convulsions
- Respiratory and/or circulatory distress

**ANAPHYLAXIS AND DEATH**

- Rare, but reported with nonneurotoxic species
- Deaths: Occasional; due to neurotoxic species

**LOCAL FIRST AID**

- Apply ice packs
- Apply tourniquet if possible and as near sting site as possible. Loosen briefly every 10-15 minutes

**WARNING:** Do not use morphine or opiates since they increase toxic effects

**TREATMENT**

See physician for proper treatment

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**Centipedes**

**REACTIONS**

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<td>1-4 hours - A two-puncture wound at the site with redness, swelling and a burning, aching pain that subsides in 4-5 hours</td>
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<tr>
<td>REGIONAL</td>
<td>Rare - Purpura of an entire limb</td>
</tr>
</tbody>
</table>

**ANAPHYLAXIS AND DEATH**

- None reported in the United States

**TREATMENT**

- Wash with soap and water
- Apply ammonia in 10% solution
- Apply cool, wet dressings of a saturated magnesium sulfate solution

**LOCAL FIRST AID**

- Analgesics for pain

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**Scorpion**

**REACTIONS**

- Pins-and-needles sensation with no local swelling or discoloration (found in Arizona only)
- Comparatively harmless species (not neurotoxic) - Local swelling and discoloration at sting site

**ANAPHYLAXIS**

- Rare, but reported with nonneurotoxic species

**DEATHS**

- Occasional; due to neurotoxic species

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**Centipede**

**REACTIONS**

- Pain, often intense

**LOCAL FIRST AID**

- Apply ice packs
- Apply tourniquet if possible and as near sting site as possible. Loosen briefly every 10-15 minutes

**WARNING:** Do not use morphine or opiates since they increase toxic effects

**SYSTEMIC**

- Analgesics for pain

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**Centipede**

**REACTIONS**

- Pain, often intense

**LOCAL FIRST AID**

- Apply ice packs
- Apply tourniquet if possible and as near sting site as possible. Loosen briefly every 10-15 minutes

**WARNING:** Do not use morphine or opiates since they increase toxic effects

**SYSTEMIC**

- Analgesics for pain
### Brown Recluse Spider

**REACTIONS**

**IMMEDIATE**
Very little pain, if any

**LOCAL**
- 2-8 hours - Mild to severe pain with redness and vesiculation at bite site, followed by ischemia
- 3-4 days - Star-shaped firm area of deep-purple color with necrosis
- 7-14 days - Central area of depression and ulceration
- 21 days - Healing and scar formation. May not heal sufficiently and may require skin grafting

**SYSTEMIC**
* Fever, chills, nausea, vomiting, weakness, joint pain
* Morbilliform or petechial generalized eruption
* Occasionally serious hematological disturbances - hemolytic anemia, thrombocytopenia

**DEATHS**
Reported; usually in children, due to renal failure and hematological abnormalities

**TREATMENT**

**LOCAL FIRST AID**
Ineffective and unnecessary

**SYSTEMIC**
See physician for proper treatment

### Urticating Caterpillars

**REACTIONS**

**IMMEDIATE**
Severe burning pain

**LOCAL**
- Numbness and swelling of area inflicted with severe radiating pain
- Possible double row of parallel red puncture marks forming a grid-like tract along the path of the caterpillar

**SYSTEMIC**
- Swelling of regional lymph glands
- Late foreign-body reaction to unremoved spines

**DEATHS**
None reported

**TREATMENT**

**LOCAL FIRST AID**
- Repeated stripping using adhesive or cellophane tape to remove spines
- Apply ice packs
- Apply baking soda-and-water paste

**SYSTEMIC**
See physician for proper treatment

* Fever, chills, nausea, vomiting, weakness, joint pain
* Morbilliform or petechial generalized eruption
* Occasionally serious hematological disturbances - hemolytic anemia, thrombocytopenia

* Tent Caterpillar
**Ticks**

**REACIONS**

**IMMEDIATE**
Mild itch to severe allergic reaction

**LOCAL**
- Red swelling at point of bite
- Potentially fatal from tick paralysis
- Numbness of lower limbs, continuing to upper body regions within hours

**SYSTEMIC**
- Tick granuloma (tumor) may occur days or months after bite

**DEATHS**
Rare

**TREATMENT**

**LOCAL FIRST AID**
- Remove tick by grasping the mouthparts close to the attachment point with forceps or tweezers and slowly removing the tick.
- Apply ice pack

**SYSTEMIC**
See physician for treatment of these symptoms of diseases transmitted by ticks

**True Bugs**

**REACIONS**

**IMMEDIATE**
Usually no sensation, occasionally mild pain

**LOCAL**
Four distinct reactions depending on degree of sensitivity
- Papule with a central punctum
- Small vesicles grouped around bite site with swelling and little redness
- Giant urticarial lesion with central punctum and surrounding brawny edema on hands and feet — the characteristic “kissing bug bites”

**ANAPHYLACTIC SHOCK**
Rare, but reported

**DEATHS**
None reported

**TREATMENT**

**LOCAL**
Wash with soap and water

**SYSTEMIC**
Oral antihistamines

*Seven (7) species occur within our local area*
## Bees and Wasps

### REACTIONS

<table>
<thead>
<tr>
<th>IMMEDIATE</th>
</tr>
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<tbody>
<tr>
<td>Pain</td>
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<thead>
<tr>
<th>LOCAL</th>
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<tbody>
<tr>
<td>Within 1-4 hours – Appearance and subsidence of wheal and red flare; may see intense local swelling in region of sting</td>
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<tr>
<th>SYSTEMIC</th>
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<tr>
<td>Mild reaction – Generalized urticaria, itching, malaise, anxiety</td>
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<tr>
<td>Moderate reaction – Any of the above plus generalized edema, tightness in the chest, wheezing, abdominal pain, nausea, vomiting, dizziness</td>
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<tr>
<td>Severe reaction – Any of the above plus labored breathing, difficulty in swallowing, hoarseness or thickened speech, marked weakness, confusion, feeling of impending disaster</td>
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<tr>
<td>Shock – Cyanosis, fall in blood pressure, collapse, incontinence, unconsciousness</td>
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<tr>
<td>Delayed serum-sickness-like reaction (10-14 days after sting) – Fever, lymphadenopathy, malaise, headache, urticaria, polyarthritis, renal dysfunction</td>
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### TREATMENT

<table>
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<tr>
<th>LOCAL FIRST AID</th>
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<tr>
<td>• Remove bee stinger from sting site by gently scraping with a fingernail, blade, or credit card to prevent further venom injection from attached venom sac (wasp does not lose its stinger and can sting more than once)</td>
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<tr>
<td>• Wash site with mild soap and water</td>
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<tr>
<td>• Apply ice packs or 10% ammonia solution</td>
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<tr>
<td>• Apply water and baking soda paste</td>
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<tr>
<td>• Elevate and rest involved limb</td>
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<th>SYSTEMIC</th>
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<td>See physician for proper treatment</td>
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<tr>
<th>LONG-TERM MANAGEMENT</th>
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<tr>
<td>• Medic-alert tag or badge</td>
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<td>• Emergency treatment kit and instructions for use</td>
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<td>• Program for desensitization</td>
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</table>

### ANAPHYLAXIS AND SUDDEN DEATH

Many cases reported, usually in adults

**Honey Bee**

**Yellow jacket**