

# **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.



# DC/NIOSH Cooperative Agreement U50 0H07541

# <u>Glossary</u>

**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.

**Corticosteriods-** 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.

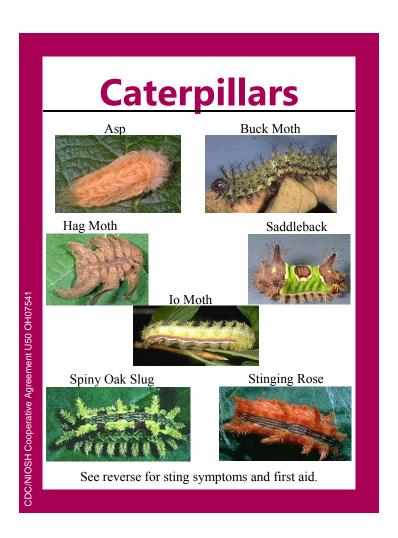
**Tourniquet-** A device, typically a tightly encircling bandage, used to check bleeding by temporarily stopping the flow of blood through a large artery in a limb.

# Bees

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

# Bees

|                                           | SYMPTOMS                                                                                                                 | FIRST AID                                                                              |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| Honeybees                                 | -Single sting -Tissue swelling                                                                                           | -Remove stinger                                                                        |
|                                           | -Burning pain                                                                                                            | -Wash wound                                                                            |
| Africanized Honeybees "Killer Bees"       |                                                                                                                          | -Apply topical cream containing antihistamines, corticosteroids, benzocaine or menthol |
| Africanized<br>Honeybees<br>"Killer Bees" | -Single sting<br>-Tissue swelling<br>-Burning pain                                                                       | -Or, apply baking<br>soda paste                                                        |
|                                           | "Killer Bee" Facts -More aggressive than honeybees -Attack in large numbers -Will attack 3 times farther from their hive |                                                                                        |



# **Caterpillars**

### **SYMPTOMS**

### **Local Reactions**

- Cold or numb feeling
- Severe body pain
- Swollen lymph nodes
- Red & swollen sting site

### **Systemic Reactions**

- Dizziness & fainting
- Difficulty breathing
- Swollen nymph nodes in groin
- \* 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 painInhaled hairs or hairs in the eye

### **Insects SYMPTOMS** FIRST AID -Wash wound -Multiple stings Fire Ant -Apply cool compress -Severe burning -Reaction far from sting sensation suggests risk for -Small blister or anaphylaxis with future whitish pustule stings -Remove stinger -Injects no venom Carpenter -Wash wound Ant -Apply topical cream containing antihistamines, corticosteroids, benzocaine or menthol -Painful bite Harvester Or, apply baking soda -Venom may travel Ant paste along lymph vessels Use pain reliever if and create serious necessary medical problems -Wash wound -Multiple stings Paper Wasp -Apply topical cream -Painful bite containing

antihistamines, corticosteroids,

paste

benzocaine or menthol

-Or, apply baking soda

-Swelling

-Central white spot

with red halo

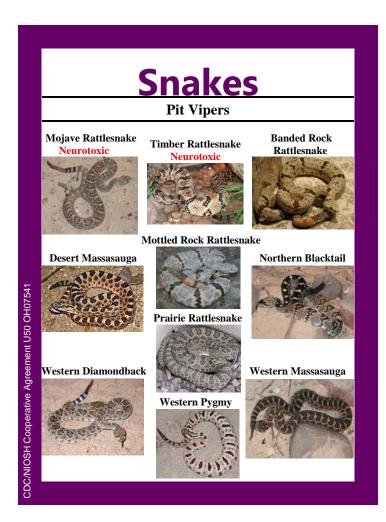
-Local swelling

Yellow Jacket

### **Insects SYMPTOMS** FIRST AID -Wash wound Bald Face -Painful sting Wasp Apply topical cream containing antihistamines, corticosteroids, benzocaine or -Typically do not sting -Have a long stinger Cicada Killer menthol Wasp Apply baking soda paste -Typically do not Tarantula Hawk Wasp sting -Wash wound Velvet Ant -Females sting upon -Apply ice pack -Take analgesic if Wasp (female) extreme provocation necessary

|                                    | SYMPTOMS                                                                                                                         | FIRST AID                                                                           |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Desert Centipede  Garden Centipede | -Multiple bites -Very painful -Swelling -Lymph node swelling -Redness -Headache -Irregular heartbeat -Nausea & vomiting -Anxiety | -Apply cool,<br>moist packs<br>-Apply topical<br>creams<br>containing<br>benzocaine |
| Millipede                          | -Not dangerous<br>to humans<br>-Secrete staining<br>chemical<br>-Chemical could<br>blister skin                                  |                                                                                     |

| Scorpions             |                                                                                                                                                                 |                                                                                                                                             |  |  |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Striped Bark Scorpion | -Multiple stings -Local burning pain -Swelling -Numbness -Nausea & vomiting -Irregular heart beat -Blood pressure change -Blurred vision -Difficulty swallowing | -Cool packs -Topical medication -Benadryl® by mouth -Seek Medical Attention Immediately for face numbness or a metallic taste in the mouth. |  |  |





### **Copperheads & Cottonmouths**

Broad-banded Copperhead



Trans-Pecos Copperhead



Southern Copperhead



Western Cottonmouth



### **Coral Snakes**

†Coral Snake Neurotoxic



Red on Black Venom Lack Red on Yellow Kill a Fellow

Milk Snake Not Poisonous



## **Snakes**

### **SYMPTOMS**

### MILD ENVENOMATION

- -Fang marks, usually paired but not always
- -Mild to severe pain
- -Mild inflammation and swelling
- -No systemic symptoms

### MODERATE ENVENOMATION

- -Fang marks with swelling
- -Immediate pain at bite site & spreading to surrounding tissue
- -Blood and/or serum may ooze from fang punctures
- -Vomiting, metallic taste in mouth
- -Muscle twitches or tremors

### SEVERE ENVENOMATION

- -Immediate, severe pain at bite site
- -Oozing of serum & blood from fang punctures
- -Rapid swelling, some bruising
- -Metallic taste, numbness of lips, nose, or tongue
- -Blurred vision, altered mental state
- -Shock, diffuse, or life-threatening internal bleeding
- -Respiratory difficulty
- -Kidney failure

† 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.

|                           | SYMPTOMS                                                                                                                               | FIRST AID                                                        |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| Black Widow<br>Neurotoxic | -Pin prick bite -Tingling sensation -Muscle & abdominal cramping -Nausea, vomiting & weakness -Difficult breathing                     | -Benadryl® by mouth<br>-Seek Medical<br>Attention<br>Immediately |
| Brown Recluse             | -Stinging sensation -Painful bite site after 6-8 hours -Pale circle with red spot -Hot bite site -Fever -Joint pain -Nausea & vomiting | -Apply cool packs -Seek Medical Attention Immediately            |
| Yellow Sac                | -Painful bite<br>-Swelling<br>-Tissue damage                                                                                           | -Apply cool packs -Benadryl® by mouth -Consult doctor            |

# **Mosquito-Borne Diseases**

|                 | SYMPTOMS                                                                                                                                                                                                                                                                                   | FIRST AID                                                                                                                                                                                                |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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<br>medication for Dengue<br>Fever<br>-Rest<br>-Drink fluids                                                                                                                      |

# **Tick-Borne Diseases**

|                                                                                                     | VECTOR                                                         | SYMPTOMS                                                                                                                                                                                | FIRST AID                                                                                                                                                                              |
|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rocky Mountain Spotted Fever (RMSF)  Shield-circular spot on a tick's back; used for identification | American Dog<br>Tick  Brown Dog Tick  Rocky Mountain Wood Tick | -Occur 5-10 days<br>following tick<br>bite<br>-Fever<br>-Nausea<br>-Vomiting<br>-Body aches<br>-Rash in 90% of<br>cases                                                                 | -Remove tick<br>(see next page)<br>-See doctor<br>within 5 days<br>for antibiotic<br>treatment<br>-RMSF can be<br>fatal in the first<br>week of<br>symptoms if not<br>treated properly |
| Lyme Disease                                                                                        | Blacklegged<br>Tick (deer tick)  Circular, dark<br>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   |
|                                                                                                     |                                                                |                                                                                                                                                                                         |                                                                                                                                                                                        |

# **Tick-Borne Diseases**

| Southern Tick Associated Reals  Lone Star Tick -Similar to -Remove tick                                                                                                                          |                 |                                     |                                                                        |                                                             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-------------------------------------|------------------------------------------------------------------------|-------------------------------------------------------------|
| Similar to Section text                                                                                                                                                                          |                 | VECTOR                              | SYMPTOMS                                                               | FIRST AID                                                   |
| Associated Rasii Illness (STARI)  Female (left) has a white 'star' on the shield  Lyme disease  -See a doctor for antibiotic treatment if symptoms appear  -Muscle/joint pain  -Target-like rash | Associated Rash | Female (left) has a white 'star' on | Lyme disease -Fever -Headache -Fatigue -Muscle/joint pain -Target-like | -See a doctor<br>for antibiotic<br>treatment if<br>symptoms |

### **Tick Engorgement Sequence**

Blacklegged Tick (Deer Tick) pictured



### **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.

### Tick Removal

- 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.

http://www.cdc.gov/ticks/removing\_a\_tick.htm

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