Safety Bulletin
Wasp, Hornet and Bee Stings: First Aid and Safety Tips

Wasps, hornets and bees are common construction hazards. Stinging insects have been known to fly into truck and equipment cabs, and under shirts and pants legs. They have also crawled into open beverage containers and stung people as they drink. Nests can be found in the ground, in trees and under eaves. If we disturb or destroy these nests as we work, a bunch of bugs are usually swarming around us and we get stung. Unlike a honey bee, wasps and hornets can bite and sting at the same time; they can also sting multiple times.

In the summer of 2003, the Nebraska Poison Center in Omaha received a call about a person who was stung on the tongue by a bee while sipping from a soda can. She was treated in the emergency room for swelling to her tongue, lips and face up to her eyes. “It’s a concern any time there is swelling in the face or an area other than where the sting occurred,” advises an emergency physician.

Other symptoms of an allergic reaction are hives, itching, rash, difficulty breathing and shock. Most reactions to bees are mild, but severe allergic reactions lead to between 40 and 50 deaths each year. An allergic reaction can occur even if a person has been stung before with no complications.

What can you do to keep wasps, hornets and bees away?
- Wear light-colored clothing and avoid using scented soaps, perfumes or aftershaves.
- Keep your shirt and pants legs tucked in, so they can’t fly under your clothing.
- Be careful when eating food or sweet drinks outside.

If you are stung:
- Don’t panic; only 2 out of 1,000 people are allergic to wasp, hornet or bee stings. The average person can safely tolerate 10 stings per pound of body weight, meaning the average adult could withstand more than 1,500 stings (although we don’t recommend testing this theory).
- Remove the stinger by scraping it away in a side-to-side motion with a credit card or fingernail, a dull knife blade or other straight-edged object, and then wash the area with soap and water. Muscles remaining on the stinger will continue to pump venom for up to a minute or until the stinger is removed.
- Do not pull the stinger out with your fingers or tweezers because you may squeeze the attached venom sac and squeeze more venom into the wound.
- Treat any bug bite or sting with ice or a cold compress, apply a topical antibacterial cream and take pain-relieving medication like Tylenol, Advil or aspirin.
- Because bees puncture the skin with their stingers, there is a slight risk of tetanus infection. Adults should have a tetanus booster shot every 10 years.

If an allergic reaction occurs, consider seeking medical attention immediately, but try not to panic. Panic increases your heart rate and speeds the venom through your body. Allergic reactions can develop anywhere on the body and may include:
- Rash or hives
- Stomach cramps, nausea, vomiting or diarrhea
- Dizziness or severe headache
- Swelling that is not in the general area of the sting site, especially in the throat, neck or tongue
- Shortness of breath or difficulty in swallowing
- Shock
• Unconsciousness
• Drop in blood pressure

If you experience any of these symptoms, tell your supervisor or a co-worker immediately. Allergic symptoms can begin immediately following the sting or up to 30 minutes later, and might last for hours. Anaphylaxis, or the inability to breathe, could occur within seconds or minutes of a sting. If you are allergic to a sting, experts recommend carrying an EpiPen® or epinephrine, a prescription hormone that can be self-injected and will relax your airways, improve your blood pressure and increase your heart rate. Tell your supervisor and co-workers of your allergy and where you store your EpiPen®.

Keep these tips in mind the next time you or a co-worker have to deal with stinging insects.