

“BEE” SAFE OUTDOORS

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For the most part, bees, wasps, hornets, and yellowjackets work behind the scenes, posing little danger to humans and animals. However, they play a critical role in the ecological balance. Bees control populations of harmful insects and other pests, move pollen from flower to flower to ensure that plants and vegetables develop, and, of course, some bees produce honey. According to a Cornell University study, the value of honey bee pollination to the United States agricultural industry is more than \$14 billion annually.

We've all seen the “killer bee” attacks dramatized in movies and on television, portraying bees as predatory insects conspiring to take over. In reality, most bees pose no threat; they simply want to be left alone. Unfortunately, humans, animals, and insects share a finite space and contact with each other is inevitable. Most bees sting humans and animals only if they feel threatened, are provoked, or if their nests are disturbed.



BEE STING REACTIONS

Practically everyone will be stung by a bee or venomous insect at least once in his or her lifetime. The majority of people will only experience mild pain, redness and swelling that will go away in a couple of days. However, 40 to 100 deaths per year occur from ants and bee stings. The two major risks involved with bee stings are allergic reaction and infection. It is estimated that only one to two people out of a thousand is allergic or hypersensitive to bee or wasp stings.

Allergic Reactions

A small percentage of the human population will have extreme reactions to bee stings that can be fatal if not diagnosed and treated immediately. Allergic reactions to bee stings can develop immediately and anywhere on the body, and may include non-life-threatening reactions such as hives, swelling, nausea, vomiting, abdominal cramps, and headaches. Life-threatening reactions, such as shock, dizziness, unconsciousness, difficulty in breathing, and laryngeal blockage resulting from swelling in the throat may also occur in highly allergic people or result from multiple stings. In the most severe cases, anaphylaxis may occur.

Anaphylaxis symptoms are chest wheeze, nausea, vomiting, and confusion followed by falling blood pressure leading to death. These symptoms generally occur in older people that have pre-existing immune system or heart problems.

BEE FACTS

- Honey bees can only sting once. They leave the stinger in the victim.
- Wasps, yellowjackets, and hornets can sting multiple times. They do not leave the stinger in the victim.
- The stinger in wasps and bees is a modified egg-laying organ, thus only females can sting.
- With honey bees, the toxic dose (LD50) of the venom is estimated to be 8.6 stings per pound of body weight.
- Bees release a chemical when they sting to alert other bees to the intruder.

FIRST AID

It is normal for the sting area to hurt, have a hard swollen lump, and get red and itch. If you know there is a high possibility that you will be stung, there are kits available to reduce the pain of an insect sting. They are a valuable addition to a first aid kit. Also, watch sting victims carefully for signs of allergic reactions. Reactions can occur immediately and can last for hours.

- Remove the stinger. DO NOT try to pull it out as this may release more venom. Instead, gently scrape it out with a blunt edged object, such as a credit card or dull knife.
- Wash the sting site with soap and water.
- Apply a cold pack or ice to reduce swelling.
- Watch the victim carefully to be sure that he or she does not have an allergic reaction.
- Do not scratch the sting. This will cause the site to swell and itch more, and increase the chance of infection.
- People with known allergies to insect stings should always carry an insect sting allergy kit and wear a medical identification bracelet or necklace stating their allergy.
- Watch for signs of an allergic reaction to bee stings:
 - Swelling that moves to other parts of the body, especially the face or neck
 - Abnormal breathing
 - Tightness in throat or chest
 - Dizziness
 - Hives
 - Fainting
 - Nausea or vomiting
 - Persistent pain or swelling
- In case of an allergic reaction or if you are stung in the mouth or nose, seek immediate medical care.

HOW TO AVOID GETTING STUNG

Most stings occur when bees feel threatened, are provoked or startled, or when protecting the nest or colony. When working outdoors, be aware of frequent nest locations and avoid them. Also, never intentionally disturb or aggravate bee nests. If it becomes necessary to remove the bees, apply treatment in the evening or early morning when bees are less mobile and more likely to be in their nests.

- Don't wear brightly colored clothing, particularly floral patterns, when around garden areas. Cover the body as much as possible with clothing.
- Insects are attracted to smells. Avoid perfumed soaps, shampoos, and deodorants and don't wear cologne or perfume when working in flower or vegetable gardens. Avoid bananas and banana-scented toiletries.
- Check for new nests during the warmer hours of the day during July, August, and September. Bees are very active then.
- Keep outside areas clean. Social wasps thrive in places where humans discard food. Clean up picnic tables, grills, and other outdoor eating areas.
- If a single stinging insect is flying around, remain still. Swinging or swatting at an insect may cause it to sting.
- If several stinging insects attack you at the same time, run to get away from them. Bees release a chemical when they sting that alerts other bees to the intruder. More bees often follow. Go indoors or jump into water. Outdoors, a shaded area is better than an open area to get away from the insects.
- If a bee comes inside your vehicle, stop the car slowly, and open all the windows.

