

Take the sting out of bee stings!

Summer is not far away! Stinging insects are more active during summer and early fall. Know their habitat and follow the guidelines given here to avoid stings. Honeybees, bumblebees, wasps, yellow jackets, hornets and fire ants belong to Hymenoptera family of stinging insects. Honeybees are found near orchards. Yellow jacket nests are found on the ground typically around garbage. Hornets and wasps are found in bushes, trees, windowsills, and roofs. Fire ants build their mounds on the ground and are very difficult to eradicate. When their habitat is disturbed, these insects sting their victims and inject venom. This is different from mosquitoes, fleas etc. which bite their victims. About 2 million Americans are allergic to stinging insects. More than 500,000 people enter hospital emergency rooms every year to receive care for insect stings. About 40 people die annually because of allergic reactions to stings.

Type of allergic reactions following bee stings

The insect sting reactions are of two kinds: Immediate and delayed. **Immediate reactions** include the following: **Local reactions** are normal and consist of brief pain, redness, and swelling at the sting site. **Large local reactions** are more extensive local reactions. **Systemic reactions** are generalized (anaphylaxis) and involve signs or symptoms at a site remote from the sting. For example, a sting on the forehead resulting in swelling of the eyelids would be classified as a local or large local reaction, whereas a sting on the foot that produced swelling of the eyelids would be considered a systemic reaction. **Toxic reactions** occur after a person receives multiple stings within a short period of time. The signs and symptoms are identical to those of systemic reactions. Fatal toxic reactions from Africanized honeybees are not uncommon. **Delayed reactions** usually present as progressive swelling and redness at the sting site but may be followed by flu-like symptoms 8 to 24 hours after the sting. Delayed reactions are rarely life threatening.

Diagnosis & treatment

A person with a prior history of systemic reaction is at 60% risk of dying if stung again. People who experience other kinds of reactions do not exhibit a similar risk. At present venom allergy testing (skin or blood tests) and venom allergy injections are indicated for those with prior history of systemic reactions only. The venom injections give 98% protection. There is a 12% risk of allergic reactions following the injections. The injections are typically given for 5 years. In some patients the injections may be required for life. Initially the injections are given weekly for 15 weeks. Then they are gradually spaced out to every 2-4 weeks.

Prevention

Knowing how to avoid stings leads to a more enjoyable summer for everyone. Implement the following precautions to avoid stings. Avoid walking barefoot in the grass. Insect repellents DO NOT work against stinging insects. Never swat or flail at a flying insect. Do not drink from open beverage cans as insects can crawl inside them attracted by the sweet beverage. When eating outdoors, try to keep food covered at all times. Stinging insects are fond of the same foods you are. Garbage cans stored outside should be

covered with tight- fitting lids. Avoid wearing sweet-smelling perfumes, hairsprays, colognes, and deodorants. Avoid wearing bright colored clothing with flowery patterns. Bees may mistake you for flowers! Following bee stings, it is important to remove the stinger within 30 seconds of a sting. Delay in removing the stinger is likely to increase the amount of venom you receive. Preferred methods of removal include: Flicking the stinger out with your finger, gently scraping it out with something like a butter knife or credit card or gently placing cellophane tape over the stinger and surrounding skin. Pull the tape off the skin to remove the stinger. Avoid pinching it out with your fingers or tweezers, which can release more venom into your skin. Only honeybees leave behind stingers after stinging. Wasps, Yellow Jackets and hornets usually do not do so! Wear a Medic Alert bracelet. Most important, you need to carry with you at all times an EpiPen or Twinject kit that you can self-administer for allergic reactions following stings. Call 911 immediately after using them.

About the author:

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