

Bee Stings and Other Insect Stings

Insect stings are common in children and usually are not serious. However, if your child is allergic to bees and related insects, serious reactions can occur. If your child is allergic to bees, you should keep an emergency kit (EpiPen) handy. Allergy shots can reduce or eliminate bee allergy.

Should I be concerned about bee stings?

Nearly all children get stung by bees or other insects at one time or another. Most often, the sting causes only a minor skin reaction. A cold washcloth and pain reliever are the only treatment needed.

The situation is different if your child is allergic to bees or other stinging insects. If your child has a large skin reaction or a more general bodily reaction to a bee sting, he or she is probably allergic. Your child may need treatment to prevent more serious reactions in the future.

What kind of reactions can occur?

Allergic reactions to bee stings range from minor skin reactions to life-threatening reactions.

- **Minor reactions.** Your child will have a raised, red area around the sting. You may see the insect's stinger in the skin. Minor reactions to bee stings usually go away in a day or less. Sometimes they don't appear for a few hours.
- **Larger skin reactions.** Your child may develop a larger skin reaction over several hours or a few days. The area of swelling around the sting becomes larger. The reaction goes away after a few days.
- **Non-life-threatening reactions.** Your child may develop a more severe skin reaction. This usually starts within minutes after the sting. You may see red splotches spreading around the sting and sometimes on other parts of the body. Swelling and itching may be intense.
- **Life-threatening reactions.** In addition to an intense skin reaction, your child may develop signs of a more serious allergic reaction, such as wheezing (high-pitched sounds coming from the lungs) and/or coughing. This is called anaphylaxis. *This is an emergency.* Call 911 or another emergency number.

What causes reactions to bee stings?

Bees and related insects—including wasps, yellow jackets, hornets, and ants—inject a weak venom (poison) when they sting. For most people, this small amount of venom does no harm.

However, 1% to 4% of people are allergic to bees and related insects (called *Hymenoptera*). If your child has ever had more than a small, local reaction to a sting, he or she is at risk of more severe reactions to future stings.

Mosquitoes, ticks, and other insects can also give painful bites. However, allergic reactions to these insects are not common.

Can reactions to bee stings be prevented?

Some simple steps can reduce the risk of bee stings *for all children*:

- Don't bother bees or other insects. Most will only sting if disturbed. (Yellow jackets are more aggressive, however.)
- Wear protective clothing, including shoes and long pants, when walking in grass or through fields.
- Using insect repellents containing a chemical called "DEET" is effective against ticks and mosquitoes, but not bees.
- Avoid things that may attract bees, such as perfumes or bright-colored clothing.

If your child is allergic to bees, other preventive steps are needed:

- If your child has had anaphylaxis or other serious reactions to bee stings, you should keep an emergency kit containing self-injectable epinephrine (EpiPen) handy at all times. You will be taught how to inject this medication to interrupt severe reactions. Older children can learn how to do this themselves.
- Make sure to tell those who care for your child, such as day-care providers and camp counselors, about your child's bee allergy. They must also know how and when to use the EpiPen.
- Typical insect repellents don't work against bees and other stinging insects.

What are some possible complications of bee allergy?

- Even if your child has a minor reaction, the area around a bee sting or bite can become infected. Simple treatments may reduce this risk. Try to stop your child from scratching the area.
- Although death caused by allergy to bees and related insects is rare, it is a risk. Keeping an EpiPen and knowing how to use it in an emergency may save your child's life.

How are bee stings treated?

If your child is not allergic to bees:

- Place a cold washcloth on the area. Pain relievers may be helpful.
- If the stinger is present, scrape it out. Don't pull on it or use tweezers—this may cause more venom to be injected.
- Apply a paste of meat tenderizer and water to help reduce swelling.

If your child is allergic to bees:

- ! ● If your child develops a large area of swelling, redness, or a rash, or develops wheezing or difficulty breathing, go to the emergency room immediately.
- ! ● If your child has previously had serious allergic reactions to bee stings, you should keep an EpiPen handy at all

times. If he or she seems to be having another allergic reaction, use the EpiPen immediately. Then call 911 or another emergency number.

- If your child has serious reactions to bee stings, allergy shots (venom immunotherapy) are helpful.
 - In this treatment, your child receives a series of shots of venom from *Hymenoptera* (bees and related insects—wasps, yellow jackets, hornets, and ants). Over a long time, the dose is gradually increased until your child is no longer allergic.

Treatment is highly effective in reducing the risk of future serious allergic reactions. A specialist in allergic diseases (an allergist/immunologist) can tell if venom immunotherapy is a good option for your child.

! When should I call your office?

Call our office if:

- Your child has any symptoms of a serious allergic reaction to a bee or insect sting (red splotches, intense itching and swelling, noisy breathing). *This is an emergency!*
- If the sting does not feel better after home care or doesn't clear up within 2 or 3 days.
- If the sting becomes red, swollen, warm, and tender a few days after the sting. These may be signs of infection.
- If your child develops a fever.