Anyone can become allergic to bee and wasp stings, but those most likely to become bee allergic are bee keepers. Those who work in gardens are also more likely to become either wasp or bee allergic. It is unusual to be allergic to both insects.

Insect stings are more common in children, but children appear to be less likely to experience severe reactions. While severe reactions can occur as a result of a sting, deaths from stings are extremely rare, and mainly affect older people. Most people survive sting allergy reactions, even if they receive no effective treatment, so DON’T PANIC.

**Mild systemic reactions**
These reactions are characterised by skin swelling and hives (red, raised, itchy rash) in an area of skin remote from the sting. Children experiencing these reactions are not thought to be significantly at risk of future life-threatening reactions compared to others. However, in older children and adults, such reactions are considered to be a risk factor for a future severe reaction.

**Moderate / severe systemic reactions (Anaphylaxis)**
Any or all of the following symptoms may be present:

- Swelling of throat and mouth
- Difficulty in swallowing or speaking
- Difficulty in breathing – due to severe asthma or throat swelling
- Hives anywhere on the body, especially large hives
- Generalised flushing of the skin (not just around the sting site)
- Abdominal cramps, nausea and vomiting
- Sudden feeling of weakness (drop in blood pressure)
- Collapse and unconsciousness

The symptoms of anaphylaxis occur because the sting causes the release of allergy-producing chemicals (mediators) into the blood which can affect the whole body, and in particular, the breathing and blood circulation.

**Localised reactions**
Swelling at the site of the sting, which can be more than 10 cm in diameter and last for more than 24 hours. The rest of the limb may be involved but no generalised symptoms are present. These reactions are more common in children than in adults. If you are concerned, visit your GP / family doctor for further advice.

**Diagnosis**
Insect allergy should be confirmed by...
measurement of the allergen specific IgE antibody in blood (this involves no risk to the patient), although these blood tests are not 100% reliable. Note that skin prick testing alone may be not reliable for diagnosing allergy to bees and wasps, so skin tests may be performed which involve a small injection under the skin, known as an intradermal injection. This can be a little painful, but is not known to cause anaphylaxis when performed according to agreed guidelines. These tests are available at NHS allergy clinics.

It is important to be referred to an Allergy Specialist as people at risk of future severe reactions should be given an adrenaline auto-injector device and taught how to use it.

It is essential that those at risk and families/associates of anaphylactic individuals are experienced in the administration of adrenaline using one of the prescribed devices called Adrenaline Auto Injectors (AAI’s). All these companies can provide practice devices. The necessary techniques should be practiced under the supervision of somebody trained such as an allergy nurse or specialist. It is essential to ensure that the prescribed adrenaline is not out of date. Venom allergic people should keep two dose units of adrenaline with them at all times. A repeat dose may be needed while awaiting the arrival of emergency services.

Management
If the bee sting has been left behind, it can be helpful to remove it gently in order to prevent further venom release. Do not pull it out with your fingers, and this may squeeze the venom sac causing the opposite effect. It is best to flick the stinger out with your nail. Generally speaking, wasps do not leave their sting behind, this means that they may sting you more than once. If possible place an icepack or similar on the area of the sting and ideally sit down or lie down, especially if feeling faint (if this happens call an ambulance, see point 2 below)

1. Localised reactions (involving swelling of affected area, urticaria and flushing): Use a non-sedating, rapid acting antihistamine as advised by your GP or pharmacist. Large local reactions can also be treated with oral steroid tablets. Soon after the sting and repeated daily for up to 3 days. These tablets will need to be prescribed by your GP.

2. Anaphylactic reactions: (A severe allergic reaction) If an adrenaline (epinephrine) auto-injector device is available, use it immediately.
   • An ambulance should be called immediately (999). The controller must be told that the patient has anaphylaxis (pronounced ana-fer-laxis)
   • Keep the patient lying down and stay with them. Don’t let them stand up or walk, where possible, raise their feet up.
   • If they have not recovered in 5 minutes, give a second adrenaline injection, if available
   • Even if the patient recovers quickly, they must still go to hospital for observation in case of delayed or repeated reactions.
   • If the patient has an asthma blue inhaler, they should use it AFTER the injection. But do not delay administering the adrenaline injection

Desensitisation
Many NHS allergy clinics offer desensitisation. This involves injections of diluted wasp or bee venom at regular intervals, usually monthly after an initial build-up course, for up to 3 years. Desensitisation is a very effective way of reducing the risk of a severe reaction to an insect sting in the future, but must be performed in a hospital as there is a slight risk of a reaction to the injection. For more information, see our factsheet on immunotherapy.
Useful tips

- Wear a Medic Alert bracelet or medallion. This will have details of the allergy and treatment required.
- Inform teachers/work colleagues and occupational health advisors of your insect allergy, and treatment required.
- Bees normally only sting in self-defence so avoid provoking bees and wasps.
- If you are allergic to bees or wasps, drive with the windows up and the air conditioner on.
- Wasps tend to nest in logs, walls or underground. They are generally more aggressive than bees and are attracted to food and drink, so don’t drink blindly from drink cans when outdoors.
- Do not drink out of cans (beer or soft drinks), as wasps can crawl inside cans where they are not seen until the drinker puts the can to their lips.
- Avoid walking barefoot on grass, especially if clover is present.
- Don’t pick up fallen fruit. The side you cannot see may have a wasp in it.
- Get professional help if there is a wasps’ nest in or near your home.
- Avoidance measures are the most sensible course of action, but this can be difficult due to the difficulty in spotting the insects.
- It is important to keep away from stinging insects that can cause an allergic reaction, but it is equally important not to panic when a bee or wasp comes near.
- It should be encouraged to stay calm and gently brush the insect away if it lands on them.
- As your child gets older discourage them from wearing highly scented sprays as these can attract wasps.
- If eating or drinking when wasps are prevalent then make sure your child stays inside at this time.
- In the UK insect stings from bees, wasps and hornets can cause allergies, but when travelling abroad, be aware of the other stinging insects that can pose a hazard, i.e. fire ants and yellow jackets.
- Be aware that insect repellents may not work against stinging insects.
- Wasps and bees are most common during the summer and early autumn and, if going out, cover skin with clothing as much as possible, especially when gardening. If not covered always take an item of clothing that can be used to cover skin if the insects become a nuisance.
- Discourage your child from wearing open toe sandals or walking barefoot outside.
- Bright colours attract insects as if to flowers, so you could consider encouraging your child to wear dark or pastel colours.

Did you find this helpful?
Please donate so that we can continue to help others

Donate

www.allergyuk.org/donate