

Integrated Pest Management for Iowa Schools



Avoiding and Treating Yellowjacket Stings

Insect stings, mostly honeybee stings, are the leading cause of death from venomous animals. People who die from yellowjacket or bee stings are those who either have been stung many times at once or have had an extreme allergic reaction to the venom. Half of all sting-related deaths occur in people stung for the first time.

Yellowjackets that are foraging for food will usually not sting unless physically threatened, such as being struck or caught in a tight place. But if they feel their nest is in danger, they will vigorously defend it. All wasps defend their colonies, but some yellowjackets are more sensitive to nest disturbance and more aggressive in their defense. Disturbing a yellowjacket nest can result in multiple stings. This can occur when someone accidentally steps on an underground nest opening or disturbs a nest in a shrub or building. Sometimes merely coming near a nest, especially if it has been disturbed previously, can provoke an attack.

Wasps in underground nests can be disturbed simply by vibrations. Thus mowing lawns or athletic fields can be hazardous, and operators may need to wear protective clothing when mowing during the late summer season when colonies are large. It can be very frightening to be the victim of multiple wasp stings. The first response may be to run away, however the best strategy is to back slowly away from the colony until the wasps stop attacking you. It is important to educate children about the beneficial role of these wasps (they feed on pest insects, particularly caterpillars) and to remind them repeatedly of ways to avoid stings. Since problems with yellowjackets are most common in late summer and fall, teachers use this opportunity to educate students during the fall semester.

One of the best ways to handle yellowjacket stings is to teach children how to avoid them in the first place. Explain to children that it is in their best interests to adhere to these guidelines:

- Quick, jerky movements, i.e. those typical of a frightened child, are more likely to incite the insect to sting. If yellowjackets are nearby, it is smart to remain calm and move slowly, so as not to threaten them.
- If a yellowjacket lands on you, the best method to remove it is to carefully brush it off or simply wait for it to fly away. Hitting it may cause it to sting.
- Avoid smashing yellowjackets because when they are crushed, they emit an alarm pheromone that sends a signal to other yellowjackets in the area to attack.
- Before you have a drink, look inside cups or containers of fruit drinks or sodas. Yellowjackets are attracted to the sugary liquids, and it is not uncommon to find one sampling your drink outdoors. During times when yellowjackets are in peak season, it would be a good idea to stop having drinks and snacks outside. At the very least, drinks should have a secured lid with a straw to drink through.

First aid for stings

If the sting occurs in the mouth or throat, call 911 immediately and apply ice. Swelling in those areas can cause suffocation.

Hypersensitive people require special attention. Anyone who experiences dizziness, respiratory reactions or color changes as a result of a sting should be treated by the school nurse and taken to an emergency room right away. Other symptoms include fever, chills, hives, joint and muscle pain, and swelling of the lymph glands or small air passageways. A severe case might include a sudden drop in blood pressure and loss of consciousness.

- School nurses should have an emergency kit on hand with syringes of epinephrine for hypersensitive people.
- An antihistamine, such as Benadryl, can slow symptoms if it is given to the victim immediately.
- Keep the part of the body that was stung above the heart.

General first aid principles apply to all others. Nonallergic reactions to stings include pain, itching, redness and swelling for up to a day or two afterward.

- Wash the area around the sting and apply antiseptic. Washing can reduce pain and swelling because it removes some of the venom.
- Apply ice or commercial products designed to relieve the pain of stings. You can also apply a paste of meat tenderizer and water, which breaks down the venom, easing pain and swelling.
- Antihistamines can offer some relief from pain and swelling, as well.
- After treatment, the victim should rest. Do not use sedatives.