Bee, Wasp, Hornet, and Yellow Jacket Stings

Objective: Identify general tips to prevent and treat bee, wasp, hornet, and yellow jacket stings.

How to Use This Module

Bees, wasps, hornets, and yellow jackets can be a minor nuisance — or a serious danger. For this module:

- Review the information on stings, reactions to stings, and how to prevent them.
- Ask other workers to describe their own reactions to stings.
- Review the important points.
- Take the True/False test to check your learning.

Background

Between one and two million people in the United State are very allergic to stinging insect venom. Every year 90 to 100 people die from sting reactions. Many more deaths may happen, mistakenly diagnosed as heart attacks or sunstrokes or attributed to other causes. More people die yearly from the effects of insect venom than from spider bites.

Stinging insects can present an occupational health problem, mainly for sensitive workers. Usually, danger occurs when workers disturb nests of stinging insects such as bees, wasps, hornets, or yellow jackets.

Mild Reactions

Most people have a mild reaction to bee, wasp, hornet, or yellow jacket stings:

- Itch
- Irritation
- Redness
- Swelling

For a mild reaction, you can relieve symptoms with ice, baking soda, meat tenderizer, 1% to 2.5% ammonia solution, topical steroids, or oral steroids.
Anaphylaxis

The most severe allergic reactions to stings can be fatal. These reactions, called anaphylaxis, can include life-threatening symptoms:

- Breathing problems
- Swelling of the lips or throat
- Faintness
- Confusion
- Rapid heartbeat
- Hives

For any severe allergic reaction, seek emergency medical help immediately. Reaction may occur in a few minutes; death often occurs within 30 minutes.

Preventing Stings

Workers can take some simple steps to prevent stings, both in the open outdoors and in greenhouses.

- Use a commercially available stinging insect control aerosol to destroy nests. It can shoot a high-volume spray stream 15 to 20 feet.
- Do not stand directly under an overhead nest you are trying to destroy. If possible, hire a professional exterminator to remove a nest.
- Never try to burn or flood a nest with water since this will only make stinging insects angry.
- Be careful not to mow over a nest in the ground or disturb a nest in a tree or the eaves of the home.
- Never strike or swing at a wasp or a bee.
- Never trap a wasp or a bee against your body. That can cause the insect to sting.
- Wear a hat and closed shoes (not sandals).
- Light-colored cotton clothing is best. Avoid white or bright-colored, loose-fitting clothing.
- Never wear wool around stinging insects because wool retains some degree of animal odor even after extensive processing.
- Avoid heavy, flowery perfumes, colognes, or scents. They may attract bees.
- Run away from bees, wasps, hornets, or yellow jackets. They are not very fast, and you can usually outrun them.
- Avoid sweet beverages, which can attract stinging insects.
- Do not drink out of a can. Bees might be inside the can where you cannot see them.

Review These Important Points

- Be careful not to mow over a nest in the ground nor disturb a nest in a tree or the eaves of the home.
- The most severe allergic reactions to stings can be life threatening.
- Avoid disturbing nests of bees, wasps, hornets, or yellow jackets.
About These Modules

The author team for the training modules in the landscape and horticultural tailgate training series includes Dee Jepsen, Program Director, Agricultural Safety and Health, Ohio State University Extension; Michael Wonacott, Research Specialist, Vocational Education; Peter Ling, Greenhouse Specialist; and Thomas Bean, Agricultural Safety Specialist. Modules were developed with funding from the Occupational Safety and Health Administration, U.S. Department of Labor, Grant Number 46E3-HT09.

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Answer Key: 1 = F, 2 = F, 3 = F, 4 = T, 5 = T.

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Name________________________________________

True or False?

1. Stinging insects calm down when their nest is burned or flooded with water. T F

2. It is best to drink sweet beverages out of a can because bees cannot get inside the can. T F

3. Rapid heartbeat and breathing problems are a normal, mild reaction to a sting. T F

4. Run away from stinging insects. They are not very fast. T F

5. Ice or baking soda may be useful for stings causing itch, irritation, redness, and swelling. T F