Report a Bee Poisoning

Pay attention to the signs and symptoms of honey bee pesticide poisonings. The main indicator that honey bees are suffering from pesticide poisoning is a large number of dead bees outside the hive entrance. Other symptoms of bee poisonings include increased defensiveness, abnormal movements, or paralysis. These signs will appear within 1-3 days of pesticide application. If mass bee deaths are occurring without the recent application of pesticides, it is most likely due to the presence of dehydration, starvation, extreme weather, or Varroa mites. If you notice any bee poisoning symptoms after a pesticide application, please contact the EPA or the WSDA pesticide compliance program.

Environmental Protection Agency (EPA)
Report.Pesticide.Incident@epa.gov

WSDA Pesticide Management Division
877-301-4555
Pcompliance@agr.wa.gov

How to Protect Bees from Pesticides: A Homeowners Guide

Additional Resources

- www.beeinformed.org – Bee Informed Partnership
- www.npic.orst.edu – National Pesticide Information Center
- www.pesticidestewardship.org – Pesticide Environmental Stewardship
- www.pollinator.org – Pollinator Partnership
- wasba.org/ - Washington Beekeepers Association
- pep.wsu.edu - WSU Urban Integrated Pest Management and Pesticide Safety Education
- xerces.org/ - Xerces Society

Questions?

Contact Pollinators@agr.wa.gov for all pollinator related questions.

To report bee pesticide poisonings contact: Pcompliance@agr.wa.gov

You can also visit agr.wa.gov for more information.

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Do you need this publication in an alternate format? Contact the WSDA Receptionist at (360) 902-1976 or TTY Relay (800) 833-6388.

Photos courtesy of Katie Buckley

Washington State Department of Agriculture
Pesticide Management Division
**We need bees!**

Honey bees, native bees, and other pollinators play an essential role in pollinating fruits, vegetables, flowers, and agricultural crops. In recent decades, news about bee poisonings, colony collapse disorder (CCD), and native bee species population decline has been on the rise. Although the definitive reason behind most of these mass bee deaths has not been determined, pesticides are one of many contributing factors.

Pesticides, such as neonicotinoids, pose a threat to bee health and have been linked to mass bee deaths. Homeowners can reduce negative health impacts on bees by using alternative pest control methods, reading pesticide labels, and avoiding applying pesticides to plants in bloom.

**Read Pesticide Labels**

Carefully follow pesticide label instructions and advisories. The Environmental Protection Agency (EPA) requires all pesticides that pose a potential risk to bees or other pollinators, to display a bee advisory icon. The pesticide label will state the level of toxicity and the residual toxicity. Residual toxicity refers to the amount of time it takes for a pesticide to break down in the environment. Pesticides with residual toxicity of eight hours or longer are responsible for the majority of bee poisoning incidents.

**Applying Pesticides:**

- The best time to apply pesticides to plants is after flower petals have fallen. This reduces the risk of bees encountering pesticides when foraging on flowers in bloom.
- Apply pesticides in the evening or when temperatures are below 55°F, when bees are not foraging.
- Apply pesticides in dry weather with low wind, to prevent off-target drift.
- Assess the target area and avoid contaminating any standing water. Bees and other insects rely on standing water for hydration.
- If you must spray ornamental plants that are in bloom, the Washington State Department of Agriculture (WSDA) recommends choosing a pesticide that is less toxic to bees or applying pesticides at a low dosage.

**Caution When Using Insecticides**

Insecticides are used to control insect pests, but can also be toxic to beneficial insects such as pollinators. WSDA recommends extreme caution and to follow the label instructions when applying insecticides. Avoid application techniques such as soil drenching or tree injections to plants that attract bees. These methods can contaminate nectar and pollen for several years after the insecticide is applied. When buying ornamental plants that attract bees, avoid plants pre-treated with insecticides.

**What are Neonicotinoids?**

Neonicotinoids are a class of insecticides that are toxic to bees for several days after an application. Neonicotinoids are widely used agriculturally to grow crops, by homeowners on ornamental gardens, and on pets for flea and tick treatments. Read the label to see if the pesticide contains neonicotinoids such as clothianidin, dinotefuran, imidacloprid, and thiamethoxam.