

## Report a bee poisoning

Pay attention to the signs and symptoms of honey bee pesticide poisonings. The main clue 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 a pesticide application. If mass bee deaths are occurring when no pesticides have been recently applied, it is most likely due to dehydration, starvation, extreme weather, or Varroa mites.

If you notice any bee poisoning symptoms after a pesticide application, please contact EPA at [Report.Pesticide.Incident@epa.gov](mailto:Report.Pesticide.Incident@epa.gov) or WSDA pesticide compliance at 877-301-4555 or email [Pcompliance@agr.wa.gov](mailto:Pcompliance@agr.wa.gov).



## Additional Resources

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



Contact [Pollinators@agr.wa.gov](mailto:Pollinators@agr.wa.gov) for all pollinator-related questions.

You can also visit [agr.wa.gov](http://agr.wa.gov) for more information.



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## How to Protect Bees from Pesticides:

### A Homeowners Guide



Washington  
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## We need bees!



Honeybees, native bees, and other pollinators play an essential role in pollinating fruits, vegetables, flowers, and agricultural crops. News about bee poisonings, colony collapse disorder, 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 U.S. 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 is 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 most 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 when bees are not foraging. Bees do not actively forage in the evenings or when temperatures are below 55°F.
- Apply pesticides in dry weather with low wind, to prevent off-target drift.
- Assess the target area and avoid contaminating standing water, which bees and other insects rely on for hydration.
- If you must spray ornamental plants in bloom, 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 using extreme caution and following 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 to grow agricultural 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.

