

REDUCE PESTICIDES FOR HUMAN AND ENVIRONMENTAL HEALTH



A healthy environment composed of native plants and wildlife is in balance and provides the components needed for healthy human life: clean air, water, and a variety of healthy food. Pesticides are sometimes necessary to prevent diseases and ensure human health, but improper use of pesticides can have health and environmental risks. Use an Integrated Pest Management approach to help determine whether pesticides are necessary and reduce the risks associated with improper use or overuse of pesticides.



Reduce pesticide exposure

Before using a pesticide, try preventative and less toxic pest management first. If a pesticide is necessary, read the product label for precautions and safety instructions. Environmental exposure may pose a greater risk to children and pregnant women. To reduce risks, hire a licensed professional to apply the pesticide.

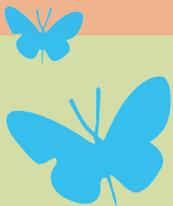
[Protecting Kids from Environmental Exposure](#), CDC Agency for Toxic Substances and Disease Registry

Reduce water pollution

Many pesticides are water soluble for application. This means pesticides can leach into streams and rivers when it rains. Stormwater runoff carries pesticides and other pollutants to streams via storm drains. Much of the drinking water in Northern Virginia comes from the Potomac River.



[Water's Journey](#), Fairfax County Department of Public Works and Environmental Services



Avoid harming beneficial insects

Broad spectrum insecticides not only kill targeted pests, they also kill beneficial insects including bees, butterflies and ladybugs.

Bees and butterflies are important pollinators that aid food production. Birds and other animals that eat insects suffer when insect populations decline.

[Smarter Pest Management: Protecting Pollinators at Home](#), Xerces Society

Reduce the costs of unnecessary spraying

Just as antibiotics are not the cure for every illness, pesticides are not always the appropriate solution and can lead to pesticide resistance. Use Integrated Pest Management to identify problems and determine whether pesticides are necessary. Choose an appropriate solution with minimal risks to human and environmental health.



[Introduction to Integrated Pest Management](#), Environmental Protection Agency



Reduce harm to fish and other aquatic wildlife

Insecticidal sprays that end up in bodies of water can directly harm fish and other aquatic wildlife. To reduce the harm to non-target animals, try alternatives first and choose less toxic pesticides such as larvicides. Avoid applications on wet or windy days to prevent drift to streams or other habitats.

[Pesticides and Aquatic Animals: A Guide to Reducing Impacts on Aquatic Systems](#), Virginia Cooperative Extension

Find more information on eco-friendly landscape maintenance at Watch the Green Grow www.fairfaxcounty.gov/parks/nature-history/watch-green-grow. Share your progress reducing pesticide usage by recording it on the map.



CONTROL MOSQUITOES AND TICKS WITH INTEGRATED PEST MANAGEMENT



Identification

- Identify the pest and whether it is a problem or an annoyance. Contact a local [VCE extension agent](#) for assistance identifying the pest.
- Not all mosquitoes and ticks carry disease. [Fairfax County Health Department](#) sprays for mosquitoes when there is evidence of disease transmission.

Prevention

- Dump stagnant water to reduce mosquito habitat. Organize a community clean-up day to remove standing water sources.
- Grow deer-resistant native plants and remove invasives such as English Ivy and Japanese Barberry, that harbor mosquitoes and ticks.
- Consider adding a deer fence or using deer repellent.
- Position playgrounds and other high-use areas away from woodland.
- [Tick Management Handbook](#), CDC and Connecticut Agricultural Experiment Station

Targeted use of larvicide

- If standing water cannot be dumped and pesticides are necessary, use a targeted pesticide that has fewer risks to other species. Insecticide options include larvicides such as Bti that kill mosquito larvae in water and adulticides that are sprayed to kill adult insects. Larvicidal mosquito dunks are more targeted than adulticidal sprays and pose less risk to fish and bees.
- Use larvicides to treat water that will not be used for drinking.
- Mosquito Control: [What you need to know about Using Larvicides](#), CDC

Use insecticide carefully



- If an adulticidal spray is necessary, look for a qualified, licensed pest management professional to apply it safely. Find tips for selecting a pest management professional from the [National Pest Management Association](#).
- Insecticides should be applied between March and May and targeted to areas of mosquito and tick habitat such as ivy, bamboo, and brush. Avoid spraying around fruit and vegetable gardens or flowers in bloom. Do not apply products in wet or windy weather.
- People and pets should stay away from treated areas for an hour or until the product has dried. Adulticides are less targeted to the pest than larvicides and may be toxic to non-target animals. Adulticides should be used as a last resort, not as a preventative measure.
- [Mosquito Control: What you need to know about Using Adulticides](#), CDC

Monitor results

- Monitor treatment results and update the pest control plan based on the results.

Do more: Visit www.audubonva.org/audubon-at-home for information on the Healthy Yard Pledge and Wildlife Sanctuary Certification. Audubon at Home Ambassadors provide complimentary, personalized advice to homeowners and communities on choosing native plants, removing invasive plants, and other actions to create wildlife habitat.

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