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Please consider distributing this newsletter to others.

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## Pesticide Safety in Community Environments

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### What are pesticides?

According to the law, a pesticide is any substance "intended for preventing, destroying, repelling, or mitigating any pest." The term "pests" may refer to unwanted or harmful insects and other arthropods, microorganisms, plants, birds or animals.

It is important to realize that despite several misconceptions about pesticides, they can be important tools in a pest management plan. However, applying pesticides is not the only means to control pests. In many situations, pests can be effectively managed using non-chemical methods.

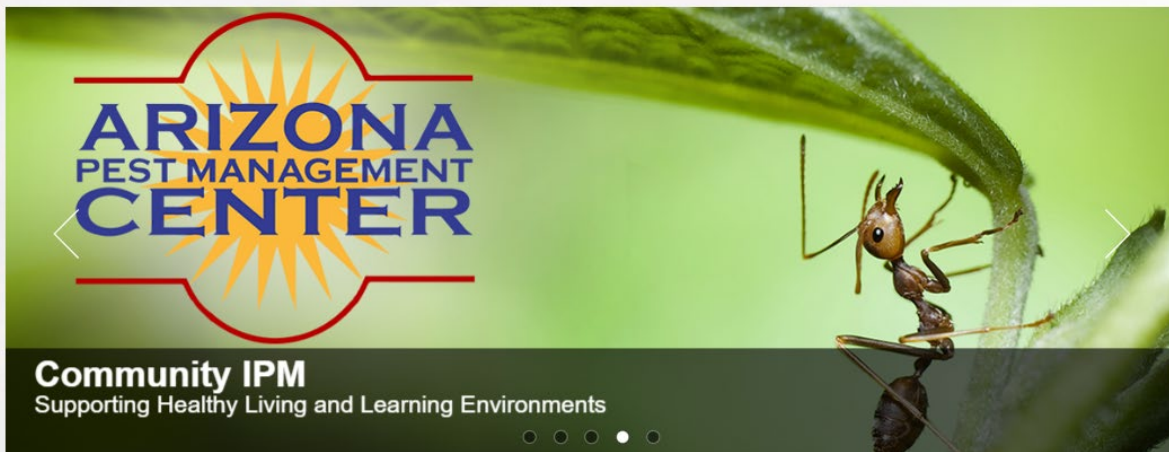
The most sensible, economical and sustainable method of pest management in any situation is **integrated pest management** or **IPM**.

- "IPM is an ecologically-based pest management strategy that provides long-term management of pest problems with minimum impact on human health, the environment and non-target organisms." – **Arizona Pest Management Center**.  
<https://acis.cals.arizona.edu/about-us/arizona-pest-management-center>.

## Arizona Pest Management Center

Providing independent, science-based information for Arizona communities and farms

SHOW MORE ABOUT ARIZONA PEST MANAGEMENT CENTER



**The Arizona Pest Management Center (APMC)** is a multidisciplinary organization within the University of Arizona that represents, organizes and streamlines faculty pest management research and outreach. The APMC facilitates and supports efforts to develop and deliver outstanding Integrated Pest Management (IPM) programs that address the needs of Arizona's citizens. This includes IPM programs serving agriculture, urban communities and natural areas. The APMC engages with faculty, partner organizations, clientele and other interested stakeholders to:

- Identify pest management needs and priorities in Arizona.
- Promote partnerships focused on addressing pest management priorities in Arizona and the West.
- Identify and secure funding to support research and outreach programs aimed at addressing pest management needs.
- Evaluate and improve IPM programs and assess their impact on end-users and the environment.
- Enhance communication among all IPM stakeholders, including UA faculty, state partners, clientele groups, the Western IPM Center and federal IPM programs.

The **Environmental Protection Agency (EPA)** is an independent executive agency of the United States federal government tasked with environmental protection matters and is charged with ensuring that pesticides do not pose unreasonable risks to the public and to the environment. The EPA regulates the use of pesticides under the authority of two laws—the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Federal Food, Drug and Cosmetic Act (FFDCA). Most pesticides may legally be sold in the United States if they have been “registered” by EPA and if they bear an EPA registration number. Federal pesticide registration, however, is only the first step in preventing pesticide risks. Just as important are the steps that consumers take to control pests and use pesticides safely.

There is an increasing awareness of the benefits of IPM practices, as people realize the importance of environmental stewardship. However, this is also accompanied by changes in pest situations and management options due to new pest introductions and changes in availability of treatment measures such as pesticides.

There are many different types of pesticides; each is meant to be effective against specific pests. Some examples include:

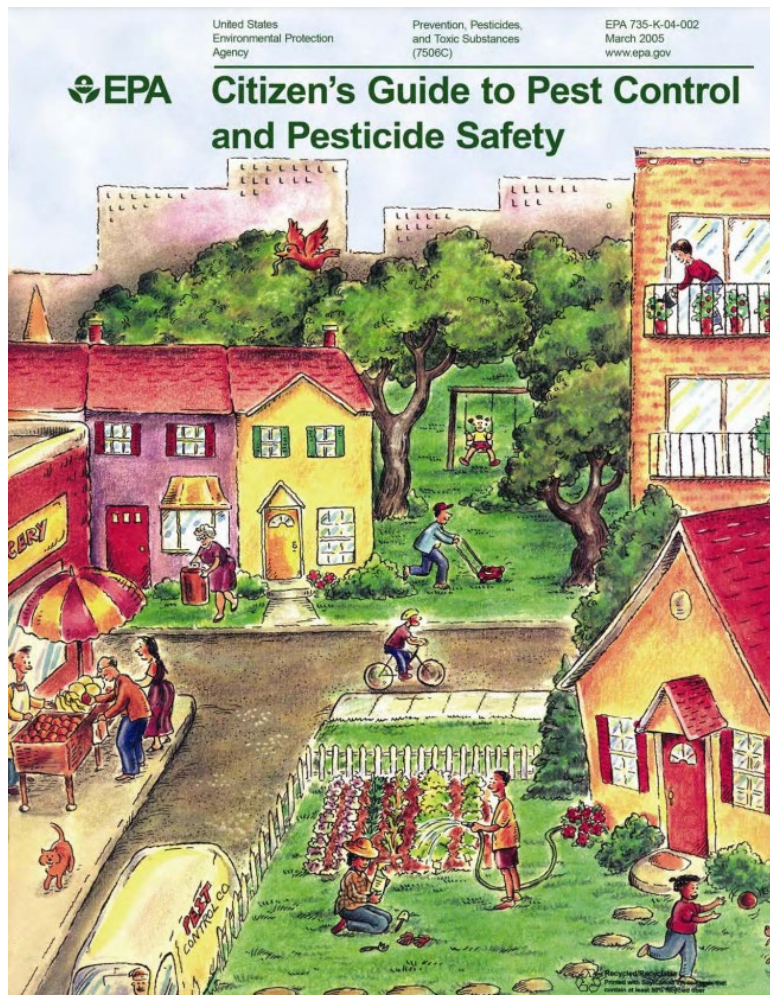
- **Algaecides** to kill and/or slowing the growth of algae.
- **Antimicrobials** to control germs and microbes such as bacteria and viruses.
- **Disinfectants** to control germs and microbes such as bacteria and viruses.
- **Fungicides** to control fungal problems like molds, mildew, and rust.
- **Herbicides** to kill or inhibit the growth of unwanted plants, also known as weeds.
- **Insecticides** to control insects.
- **Insect Growth Regulators** to disrupt the growth and reproduction of insects.
- **Rodenticides** to kills rodents like mice, rats, and gophers.
- **Wood Preservatives** to make wood resistant to insects, fungus and other pests.

Read more about different types of pesticides here: <https://www.epa.gov/safepestcontrol/why-we-use-pesticides>

One of the greatest causes of pesticide exposure to humans is the use of pesticides in and around the home. Consumers can buy a wide variety of “off the shelf” or “over-the-counter” pesticide products to control weeds, unwanted insects, and other pests. No special training is required before homeowners can use these pesticides in their homes or gardens. Yet, many of the products can be hazardous to people if they are stored, handled, applied, or disposed of improperly. Therefore, it is extremely important to practice safety when using pesticides so you can reduce risks of exposure to yourself, other people and the environment.

**The basic steps in reducing pesticide risks are:**

- Choosing the right pesticide product for the area and the pest you want to treat.
- Reading and following the product label.
- Determining the right amount to purchase and use.
- Using the product safely and correctly.
- Storing and disposing of pesticides properly.



The EPA publication “Citizen’s Guide to Pest Control and Pesticide Safety” available here ([https://www.epa.gov/sites/default/files/2017-08/documents/citizens\\_guide\\_to\\_pest\\_control\\_and\\_pesticide\\_safety.pdf](https://www.epa.gov/sites/default/files/2017-08/documents/citizens_guide_to_pest_control_and_pesticide_safety.pdf)) is designed to help answer citizen’s questions about pest control and pesticide safety and more.

The booklet provides information on how to control pests without risking your family's health and without harming the environment. The major goals of this booklet are to help you understand

- What steps to take to control pests in and around your home.
- Alternatives pest control measures such as pest prevention and non-chemical pest control methods.
- How to choose pesticides and how to use, store, and dispose of them safely.
- How to reduce your exposure when other people use pesticides.
- How to choose a pest control company.
- What to do if someone is exposed to a pesticide.

## **Pesticide Poisoning**

Tens of thousands of pesticide poisonings are reported each year. Following a few simple steps can prevent many of these accidents. An EPA survey showed that almost half (47%) of households with young children and 75% of homes without young children had pesticides stored in unlocked cabinets within reach of children. Following a few simple steps, such as those outline below, can help prevent many of these accidents.

### **Pesticide Poisoning Prevention Tips from NPIC**

**The National Pesticide Information Center (NPIC)** provides objective, science-based information about pesticides and pesticide-related topics to enable people to make informed decisions about pesticides and their use.

The Center operates through a cooperative agreement between Oregon State University and the U.S. Environmental Protection Agency. The NPIC website <http://npic.orst.edu/about.html> provides a variety of useful pesticide safety-related information, such as the pesticide poisoning prevention tips listed below.



Figure 1: Store pesticides in locked cabinets. Photo: Consumer Product Safety Commission.

- Store pesticides in locked cabinets, out of the reach of children and pets.
- Read the entire label before using any pesticide in or around the home and follow all label directions.
- Read the label's precautionary statements and safety measures so that you are prepared in the event an accident occurs.
- Keep children and pets away from pesticides, pesticide containers, and areas being treated with pesticides. Make sure the product containers are safely out of reach while they are being applied.
- Close pesticide containers immediately after their use to avoid accidental spills.
- Never mix or store pesticides in food or drink containers.
- Be prepared by having a pesticide emergency plan or card on hand, or programming the number for the Poison Control Center (800-222-1222) in your phone.
- If you have questions about this, or any pesticide-related topic, please call NPIC at 800-858-7378 (8:00am - 12:00pm PST), or email the center at [npic@ace.orst.edu](mailto:npic@ace.orst.edu).



### **Pesticide Safety Tips from the EPA**

The **Environmental Protection Agency (EPA)** is an independent executive agency of the United States federal government tasked with environmental protection matters and is charged with ensuring that pesticides do not pose unreasonable risks to the public and to the environment. The EPA regulates the use of pesticides under the authority of two laws—the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Federal Food, Drug and Cosmetic Act (FFDCA). Most pesticides may legally be sold in the United States if they have been “registered” by EPA and if they bear an EPA registration number. Federal pesticide registration, however, is only the first step in preventing pesticide risks. Just as important are the steps that consumers take to control pests and use pesticides safely, such as:

- The most effective way to reduce risks posed by pesticides is to use non-chemical control methods to reduce or eliminate pest problems. Around homes and schools, such measures include removing sources of food and water (for example, by repairing leaky pipes) and destroying pest shelters and breeding sites (such as removing indoor clutter, outdoor litter and plant debris).
- If you decide you need to use pesticides, always read the label first and follow the directions to the letter, including all precautions and restrictions.

- Don't use products for pests that are not listed on the label and don't use more pesticide than the amount prescribed by the label. Don't think that twice the amount will do twice the job.
- Use protective measures when handling pesticides as directed by the label, such as wearing impermeable gloves, long pants, and long-sleeved shirts. Change clothes and wash your hands immediately after applying pesticides.
- Before applying a pesticide (indoors or outdoors), move children, their toys, and pets from the area and keep them away until the pesticide has dried or as recommended by the label.
- Don't spray outdoors on windy or rainy days. Take precautions to keep the pesticide from drifting or running off into the vegetable garden, pool, or neighbor's yard.
- Remove food, including pet food from the area, during indoor applications.
- If using a commercial applicator or lawn care service, ask for information about potential risks and safety precautions to take.
- Don't buy more pesticides than you will need. If you have leftover pesticides, check with your local government or waste management agency to determine whether your community has a household hazardous waste collection program or other program for disposing of pesticides. If no community program exists, follow label directions and any state or local regulations regarding disposal.
- Keep the telephone number of your area Poison Control Center near your telephone: 1-800-222-1222.

The EPA provides a pesticide poison prevention checklist "Poison-proof Your Home: One Room at a Time". Access the checklist here: <https://www.epa.gov/sites/default/files/2015-10/documents/roombyroom-checklist.pdf>



## Pesticide Poison Prevention Checklist

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The EPA recommends and promotes integrated pest management (IPM) in schools, to reduce pesticide risk and exposure to children.

For more information on school IPM read: <https://www.epa.gov/schools>

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## We Want Your Ticks



**The Border Tick and *Rickettsia* Surveillance (BiTeRS) program of the Pacific Southwest Center of Excellence in Vector-Borne Diseases** offers services to enhance surveillance for ticks and tick-borne pathogens of human health concern in California and Arizona. This is made possible through our project leaders at the University of California, Davis, the University of Arizona, and collaborating local and state agencies, including the California Department of Public Health and the Arizona Department of Health Services.

### **We work with partner organizations to:**

- Perform surveillance for ticks and tick-borne diseases in their area.
- Learn about risks of tick-borne diseases in their area by testing ticks for pathogens/diseases.
- Collect and submit ticks for identification and testing.
- Report results of tick identification and pathogen testing to submitting partners.
- Provide training on ticks and tick-borne diseases.

### **Partner organizations may be:**

- Government entities (local, tribal, county, or other).
- Workplaces with potential for tick exposures e.g., animal control, rescue, or veterinary clinics.
- Pest control services, or groups with potential tick exposure.

**Download the BiTeRS Flyer for distribution: <https://pacvec.us/biters/>**

## What the Heck Was This?



**Answer: An adult giant mesquite bug.**  
**Congratulations to Master Pest Detectives**

Bill Simonson, City of Glendale Water Services  
Dave Lee, Gilbert Public Schools  
Al Brown, Arizona State University  
Karen Austermler, Yavapai County Master Gardener

## What the Heck is This?



**What does this image mean on a pesticide label?**

If you know the answer, email Dawn at [dhgouge@arizona.edu](mailto:dhgouge@arizona.edu). You will not win anything if you are correct, but you will be listed as a “Master Pest Detective” in the next newsletter issue.



## Upcoming Events

**Horticultural Plant Pest and Disease Seminar** at Maricopa County Cooperative Extension. **Thursday, September 7<sup>th</sup> 8:00 am to 4:00 pm.**

The seminar will feature a variety of talks and hands-on activities on pests and diseases of horticultural plants in Arizona landscapes; for landscapers, property managers, nursery growers and others engaged with the horticulture industry. 6 AZ Dept. of Ag. Agricultural (Ag.) and Structural PMD (OPM) **CEUs are APPROVED!**

**Registration and schedule :** <https://tinyurl.com/2ujkwkcd>.

For more information, contact Michael Chamberland, [mchamb@arizona.edu](mailto:mchamb@arizona.edu) or Shaku Nair, [nairs@arizona.edu](mailto:nairs@arizona.edu).

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**Save the Dates! Pest Management and Pesticide Safety Seminars for Turf and Landscapes. November 29<sup>th</sup> and 30<sup>th</sup> organized by the UA Turfgrass Science Program.**

The seminars will be offered on two dates and locations, in person: **November 29<sup>th</sup> at Sun City West** and **November 30<sup>th</sup> in East Valley (Location TBD)**. Both days will feature presentations by experts on various aspects of turf and landscape pest management and pesticide safety. Six AZ Dept. of Ag. Agricultural (Ag.) and Structural PMD (OPM) and GCSAA CEUs will be requested. **Registration and more information coming soon!** For more information, contact Shaku Nair [nairs@arizona.edu](mailto:nairs@arizona.edu).

**\*\*Please note change in dates from earlier announcements – Nov 29<sup>th</sup> in Sun City West, Nov 30<sup>th</sup> in East Valley.**

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**What's Bugging You? First Friday Events (New York State IPM Program)**

**Fridays | 12:00 pm. – 12:30 p.m. EDT | Zoom | Free; registration required**

In this monthly virtual series, we explore timely topics to help you use integrated pest management (IPM) to avoid pest problems and promote a healthy environment where you live, work, learn and play. What is IPM? It's a wholistic approach that uses different tools and practices to not only reduce pest problems, but to also address the reasons why pests are there in the first place. Each month, our speakers will share practical information about how you can use IPM. **Register for upcoming events.**

- September 1: Right plant, right place | Transplanting trees/shrubs
- October 6: Jumping worms | Roof gutter pests
- November 3: Winter Garden prep | Tick check reminder
- December 1: Houseplant IPM | Firewood pests

What's Bugging You First Friday events are in **Spanish** this year. Individuals interested in these events can find more information on this website: <https://cals.cornell.edu/new-york-state-integrated-pest-management/outreach-education/events/whats-bugging-you-webinars/conozca-su-plaga>

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**Urban and Community IPM Webinars** (Host: University of California)

UC Statewide IPM Program Urban and Community webinar series is held the third Thursday of every month to teach about pest identification, prevention and management around the home and garden. This series is free but advanced registration is required.

Dates and topics below, all begin at noon Pacific. <https://ucanr.edu/sites/ucipm-community-webinars/>

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### **EPA Webinars about Integrated Pest Management**

View recordings of archived EPA Integrated Pest Management Webinars at <https://www.epa.gov/managing-pests-schools/upcoming-integrated-pest-management-webinars>.

For more information about the EPA Schools program: <http://www.epa.gov/schools/>.

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To view previous University of Arizona newsletters, visit: <https://acis.cals.arizona.edu/community-ipm/home-and-school-ipm-newsletters>.

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We respectfully acknowledge the University of Arizona is on the land and territories of Indigenous peoples. Today, Arizona is home to 22 federally recognized tribes, with Tucson being home to the O'odham and the Yaqui. Committed to diversity and inclusion, the University strives to build sustainable relationships with sovereign Native Nations and Indigenous communities through education offerings, partnerships, and community service.