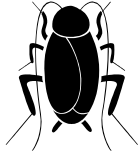


## PESTICIDE WORKSHOP OBJECTIVES

- Understand how pesticides affect humans
- Discuss what to do in case of a pesticide exposure at home
- Learn how you can protect children from pesticide exposure
- Learn about alternatives to the use of chemical pesticides at home
- Learn how farmworkers can protect themselves from pesticide exposure in the fields
- Know what to do in case of pesticide exposure on a farm
- Understand your rights to a safe workplace



## COCKROACHES

You can control cockroaches by taking some simple steps.

1. Find them
2. Deny them shelter, food and water
3. Kill them



### 1. Find them.



Look for evidence of cockroaches, such as living or dead roaches, their egg cases, or their feces (small dark brown pellets). Place sticky traps in areas where you suspect the cockroaches are living, like under a sink, behind the refrigerator or stove, or in the back of a kitchen cabinet. You can buy sticky traps wherever insecticides are sold. Place the traps against the wall because roaches like to stay along the edges of floors. Check on the traps during the next week or two and dispose of them when they have collected a large amount of roaches. Remember which areas have the greatest concentration of roaches.

### 2. Deny them shelter, food and water.



**Shelter:** Cockroaches live in small tight places and prefer to live on porous surfaces like wood, paper, cardboard, insulation and cloth. Focus your efforts on areas where you caught the largest number of roaches in the sticky traps. Deny them shelter by organizing storage areas and cleaning all surfaces (removing clutter). Also,

- seal all cracks and crevices with silicone caulk
- put screens over vents and pipes that open to the outside
- seal spaces around corners and pipes

### Food

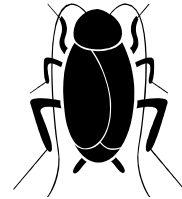
- seal up boxes and bags of food
- don't leave bowls of pet food or water out over night
- pick up dirty dishes and clean and dry them right away
- wipe up spills and crumbs
- keep a tight lid on trash and remove frequently

## Water

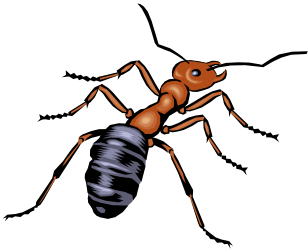
- drain dishwater from the sink
- fix leaky faucets and plumbing
- empty excess water in flower pots and plant stands
- insulate cold water pipes to prevent condensation

### 3. Kill them.

If you still see roaches after taking the steps above, try using less toxic products like boric acid powder and bait stations to kill the remaining pests. Sprinkle the boric acid powder into cracks and crevices where roaches live. Set bait stations or sprinkle boric acid around baseboards, under and behind refrigerator, stove, sink, dishwasher, washing machine and dryer. Roaches will eat the boric acid and the poison in the stations and will also carry the poison back to their nests on their legs. Boric acid is toxic to small children and animals, so do not apply it in areas where children or pets can reach it.



## ANTS



To get rid of ants in your home, you can do several things:

1. Find their point of entry and seal it.
2. Destroy the nest.

### **Find their point of entry.**

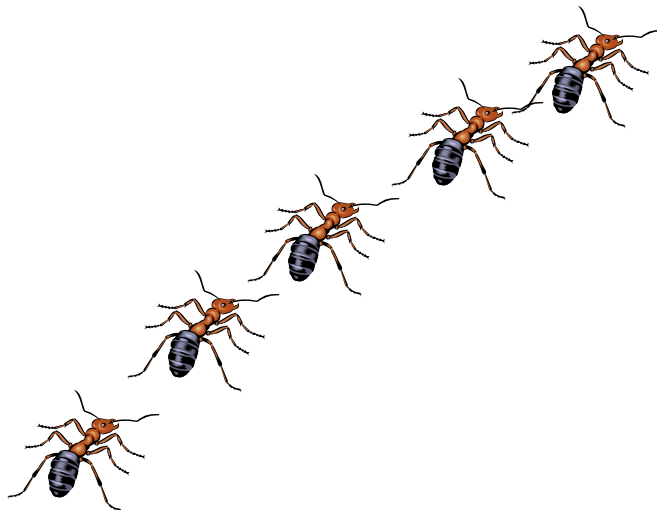
Follow the trail of ants until you find where they are entering your home. Try to prevent their entry with fresh lemon juice and lemon peel, chalk, damp coffee grounds, bone meal, charcoal dust or cayenne pepper. You can also temporarily seal the area with Vaseline, until you can permanently seal it with silicone caulk.

In the areas where there are a lot of ants spray or wipe the area with soap and water or with a fifty-fifty solution of vinegar and water.

### **Destroy the nest.**

If you cannot find the nest, you can set boric acid baits near their point of entry. You can buy boric acid baits at a hardware store or you can make your own trap by mixing 2 teaspoons of boric acid powder, 4 ounces of water and a teaspoon of sugar and placing the mixture into a lid or shallow container. The ants will ingest the mixture and carry it back to their nest to poison the others. Place the baits out of the reach of children and pets since boric acid is toxic if ingested.

If you know where the ant nest is, pour 1-2 gallons of boiling water onto individual ant hills. Be careful not to spill water on any neighboring vegetation that you want to keep.





## FLEAS

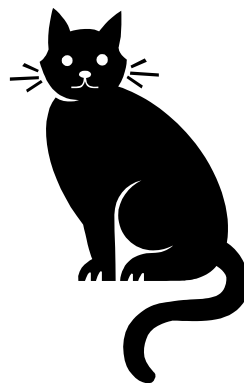
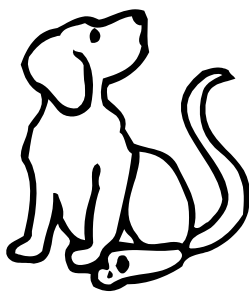
If you have a pet with fleas, try the following measures to control the fleas:

- Groom your pet using a flea comb to inspect for and remove fleas
- Vacuum often and immediately dispose of the vacuum cleaner bag
- Wash pet bedding in hot water once a week
- Use soap and water to clean your pet's sleeping areas
- Shampoo your pet regularly with plain soap & water or grooming shampoo (without pesticides)



If these steps are not enough, you may need to buy a less-toxic product:

- pheromone pills (from veterinarian) to reduce the flea population
- products labeled "insect growth regulators" or "IGRs" to kill the offspring of any fleas currently on your pet. Three common IGRs available at most pet stores are named "Program", "Nylar," and "Biolar"
- Avoid using any product listing the following chemicals as the active ingredient: chlorpyrifos, dichlorvos, phosmet, naled, tetrachlorvinphos, diazinon, malathion, carbaryl and propoxur. These chemicals are dangerous to adults and children.



## Mosquito Control



### Reduce the Risk

The most effective way to reduce a local mosquito population is to remove their breeding areas in sources of standing water, such as old discarded tires, clogged gutters, planters, bird baths, or tree stump holes. Empty children's swimming pools when not in use. Other easy steps to consider include:

- Keep grass cut short and trim shrubs to minimize hiding places for adult mosquitoes
- Wear a hat and light-colored, loose-fitting clothing (avoid wearing bright colors or flowery prints)
- Avoid using scented soaps and shampoos, lotions, oils or perfumes, including tanning products
- Consider appropriate lighting, incandescent lights attract mosquitoes, while florescent lights neither attract nor repel them

### Repellents

Most insect repellents include the chemical DEET (N,N-diethyl-meta-toluamide). DEET is absorbed through the skin and can cause harm, especially to children. Other repellents include natural ingredients such as citronella, eucalyptus oil, or soybean, which are non-toxic and safer for use on children.

If you use a repellent with DEET, it should contain no more than 10 percent of the chemical. The concentration of DEET varies significantly from product to product, so read the label of any product you purchase. Repellents with DEET should be used sparingly on children 2 through 6 years of age and not at all on infants under the age of 2.

The US EPA recommends the following precautions when using insect repellents containing DEET:

- Apply only to exposed skin and/or clothing. Do not use under clothing.
- Never use repellents over cuts, wounds, or irritated skin.

- Do not apply to eyes and mouth, and apply sparingly around ears. When using sprays do not spray directly onto face; spray on hands first and then apply to face.
- Do not allow children to handle the products, and do not apply to children's hands. When using on children, apply to your own hands and then put it on the child.
- Do not spray in enclosed areas. Avoid breathing a repellent spray, and do not use it near food.
- Use just enough repellent to cover exposed skin and/or clothing. Heavy application and saturation is generally unnecessary for effectiveness; if biting insects do not respond to a thin film of repellent, then apply a bit more.
- After returning indoors, wash treated skin with soap and water or bathe. This is particularly important when repellents are used repeatedly in a day or on consecutive days. Also, wash treated clothing before wearing it again.
- If you suspect that you or your child are reacting to an insect repellent, discontinue use, wash treated skin, and then call your local poison control center. If/when you go to a doctor, take the repellent with you.



Sources: American Academy of Pediatrics, US EPA, Centers for Disease Control and Prevention

American Academy of Pediatrics, *Caring for Your Baby and Young Child: Birth to Age 5*, 2002; (see <http://www.aap.org/pubserv/prev0-5.htm>)

Centers for Disease Control and Prevention. *Health Information for the International Traveler 2001-2002*. Atlanta: US Department of Health and Human Services, Public Health Service, 2001.

## **WARNINGS ABOUT THE HOME USE OF PESTICIDES**

Conventional pesticides may get rid of insects and other pests, but the cure can be worse than the problem. Pesticides used in and around the home can accidentally poison children, adults or pets. They also pollute the air and water. You can minimize pesticide exposure by taking some simple measures.

- Try to prevent bugs from entering your home in the first place,
- Use non-chemical methods of killing insects who do enter the home.

If you must use a chemical pesticide, many of the injuries that can occur during its application are preventable. Before any use, you should always:

- Read the label and follow directions.
- Try to minimize your exposure to the pesticide.
- Wear protective clothing such as long-sleeved shirts and rubber gloves when necessary.
- Wash application equipment, hands and clothing after using pesticides.
- Store all pesticides in their original containers in areas where children and pets cannot get at them.
- Dispose of used containers properly.
- Never use farm pesticides in the home.

## **NEVER USE AGRICULTURAL PESTICIDES AT HOME**

Using farm pesticides in the home is dangerous and illegal. These chemicals are not designed to be used where people will be directly exposed. Farm pesticides properly used outdoors are broken down by sunlight, rain, and bacteria. Indoors, farm pesticides may last for years. You, your family, and pets may be harmed by pesticides misused indoors by swallowing them, breathing them in, or touching them with your skin.

When used indoors, farm pesticides can cause serious health problems including:

- Dizziness
- Blurred vision

- Headaches
- Difficulty breathing
- Confusion and memory loss
- Weakness and poor coordination
- Vomiting and diarrhea
- Death

It is also against the law to misuse pesticides. You must follow the label directions and never use a pesticide that does not have label directions.

Source: Texas Structural Pest Control Board

## **The Worker Protection Standard**

The Worker Protection Standard (WPS) is a federal law designed to protect the health of farmworkers and pesticide handlers. Its requirements include:

### **Protection during applications**

Applicators are prohibited from applying a pesticide in a way that will expose workers or other persons. Workers are excluded from areas while pesticides are being applied.

### **Restricted-entry intervals**

Restricted-entry intervals must be specified on all agricultural plant pesticide product labels. Workers are excluded from entering a pesticide treated area during the restricted entry interval, with only narrow exceptions.

### **Personal protective equipment**

Personal protective equipment must be provided and maintained for handlers and early-entry workers.

### **Notification of workers**

Workers must be notified about treated areas so they may avoid inadvertent exposures.

### **Decontamination supplies**

Handlers and workers must have an ample supply of water, soap, and towels for routine washing and emergency decontamination.

### **Emergency assistance**

Transportation must be made available to a medical care facility if a worker or handler may have been poisoned or injured. Information must be provided about the pesticide to which the person may have been exposed.

### **Pesticide safety training and safety posters**

Training is required for all workers and handlers, and a pesticide safety poster must be displayed.

### **Access to labeling and site specific information**

Handlers and workers must be informed of pesticide label requirements. Central posting of recent pesticide applications is required.

## REDUCING PESTICIDE EXPOSURE ON THE JOB







Farmworkers can take a number of steps to reduce their risk of pesticide exposure on the job. They include:

- ➔ Wear a long-sleeved shirt, long pants, socks, shoes, hat, and gloves (if possible) to work each day.
- ➔ Change clothes and bathe as soon as possible after returning home from work.
- ➔ While at work, wash hands **before** you eat, drink, smoke or go to the bathroom. Wash hands **after** going to the bathroom.
- ➔ Try to eat lunch outside of the treated field or areas where pesticides are stored.
- ➔ Do not enter a field that was recently treated with pesticides or that displays a poster warning that pesticides have been sprayed. When you see a posted field, ask when the Restricted Entry Interval ended.
- ➔ If you are sprayed with pesticides directly or through drift or otherwise believe that pesticides are on your body, wash as soon as possible with the water available in the field. If possible, find out the name of the pesticide and seek medical attention.



## HOW FARMWORKERS CAN PROTECT THEIR FAMILIES FROM PESTICIDE EXPOSURE

Farmworkers can take a number of steps to protect their families from pesticide exposure. They include:

-  Never take home pesticides from work. Never transfer pesticides from their original container to another that children could mistake for drink or food containers (e.g., coke bottle).
-  Wash work clothes with detergent and hot water before wearing them again. Wash work clothes separately from the family's clothes.
-  Put a tarp or other covering over car seat when returning home from work in pesticide-contaminated clothes.
-  Try to wash hands or bathe and change out of work clothes before touching children.
-  Take off work shoes before entering the home.
-  Shower (or bathe) with water, soap and shampoo and change clothes as soon as possible after returning home from work.

# FIELD SANITATION

## Federal Requirements

Employers with 11 or more workers in the field are required to provide:

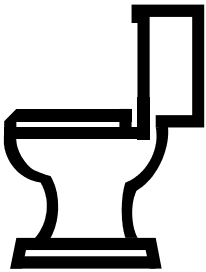
### Drinking Water

- adequate amounts of cool, potable water
- kept in clean, covered containers, refilled as necessary
- single use cups accessible to workers and within a  $\frac{1}{4}$  mile from their work area



### Toilets

- accessible to workers and within a  $\frac{1}{4}$  mile from their work area
- one toilet for each 20 workers
- clean and in good condition
- safe and sanitary disposal of wastes
- private and ventilated
- doors that can be closed and latched from inside



### Hand Washing Facilities

- accessible and close to the toilets
- adequate supply of potable water, soap and single use towels



Some states have more protective laws.