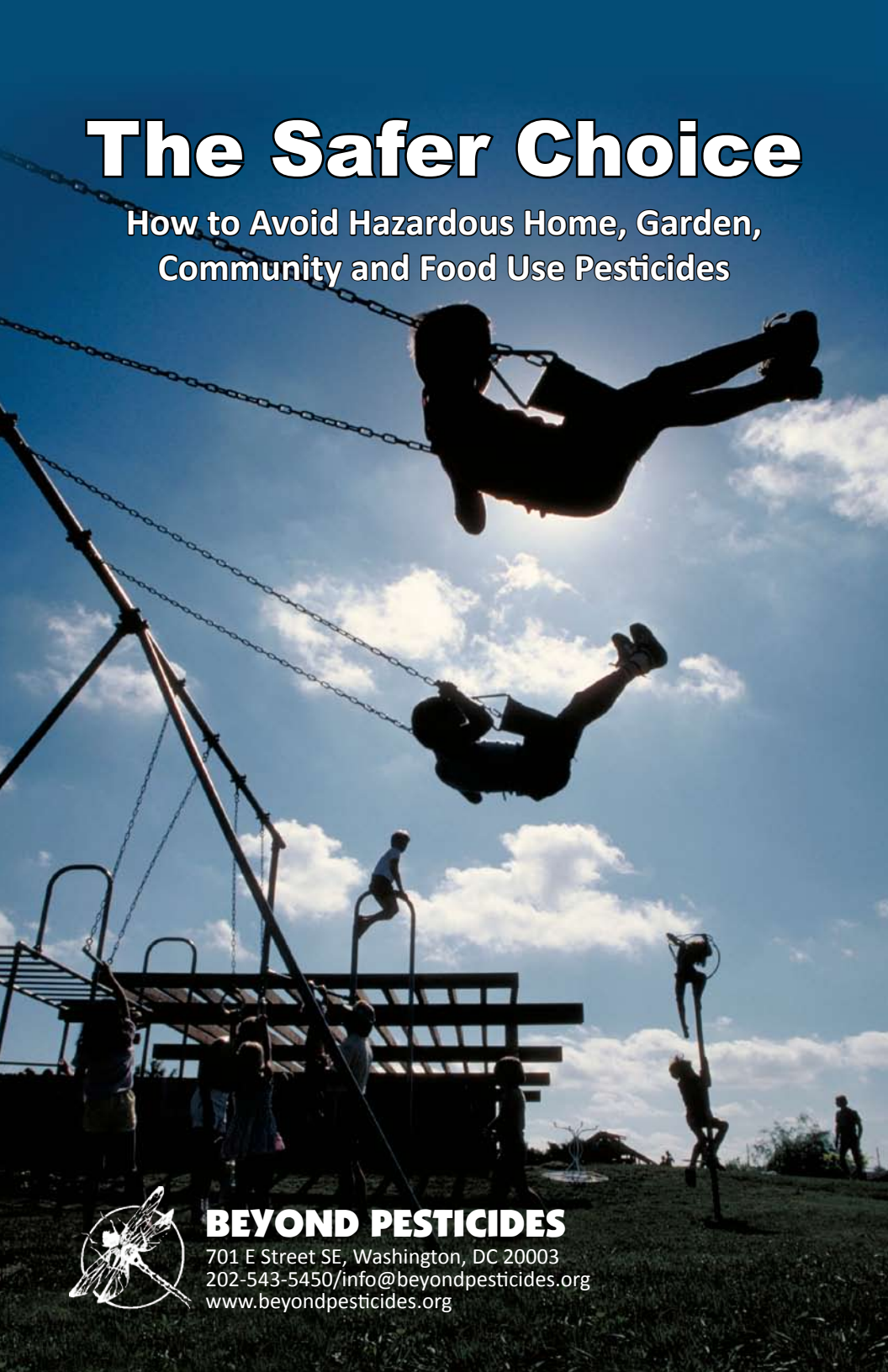


The Safer Choice

How to Avoid Hazardous Home, Garden,
Community and Food Use Pesticides



BEYOND PESTICIDES

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How To Avoid Hazardous Home, Garden, Community and Food Use Pesticides

Pesticides are widely used in homes and communities without complete public knowledge about the harm that they cause to children, pets and the environment. These hazardous chemicals include insect sprays and baits, rodent poison, pet flea collars, weed killers

and even antibacterial personal care products, among others. They are used to control a variety of common household pests like cockroaches, ants, and mice, despite the availability of safer management



and control tactics and products. Scientific studies find that breathing the fumes from sprays and dusts, touching surfaces where pesticides have been applied, or ingesting pesticide residues in food or on hands can cause nerve and immune system damage, respiratory illness, reproductive problems, cancer and affect behavior and the ability to concentrate.



Children, pregnant women, the elderly and people with compromised immune systems are especially at risk to pesticide-induced illness. Children can come into contact with pesticides at home, where they play, eat and sleep, and at their schools, parks

and other public areas. Children take into their bodies more pesticides relative to their weight than adults --from the food they eat, the liquids they drink, and the air they breathe. Their developing organ systems make them more sensitive to toxic chemical exposures. Pesticide fumes contribute to the high rate of asthma, affecting one in eight children, and the even higher rate of developmental and behavioral problems, affecting one in six. Babies are exposed to pesticides in the womb, causing or contributing to developmental, behavioral and birth defects.



Alternatives for a Healthy Home, Community and Environment

There are alternatives to pesticides for managing insects, rodents and weeds effectively without exposing your family to harmful toxic chemicals. This brochure focuses on what you can do to manage your home, school and community without poisoning your children, families, pets, and the environment. Tips are also provided for healthy eating, safer playing areas and for getting friends and neighbors involved to help make your schools and community safe from toxic pesticides.



Managing to Keep Unwanted Critters Out

The most common household pests include cockroaches, ants and rodents, and they can enter your home through tiny cracks and openings as they look for food, shelter and nesting grounds. While these unwelcome visitors can bring in allergens, bacteria and disease, and can inflict damage on homes and personal items, insect sprays and other pesticides that are used in response only serve to endanger your health --and the pests keep coming back!

Preventing these pests can be achieved with clearly defined management practices that seal out insects and rodents, eliminate their source of food and water --and does this without the use of hazardous pesticides, only using least-toxic pesticides as a last resort. The following are examples of some simple practices that can help you avoid toxic pesticide use.

Common Sense Instead of Cockroaches

Cockroaches can travel up drains, through heating and air vents, in tiny cracks and crevices in walls and above false ceilings, and take up residence near areas that provide a steady food source, such as kitchens, pantries and garbage disposal areas. In apartment buildings, they can enter living areas through elevator shafts.

Preventing and eliminating cockroaches can be as easy as these few simple steps, while costing you less:

- **Deny Access** - Caulk or repair any holes or openings around baseboards, water pipes, outlets, doors, windows and in walls.
- **Keep Clean** - Rinse food and drink containers before disposal. Make sure that the stove is free of food and grease and drains are clean. Keep areas free of clutter from papers and cardboard boxes, since cockroaches like to live in small places covered on their top and bottom.
- **Keep Sealed** - Store food in tightly sealed containers or in the refrigerator.
- **Monitor** - Inspect and monitor cockroach hiding areas like cupboards, moist areas and wall cracks.

Use Least-Toxic Alternatives. If the problem persists after trying non-chemical interventions, apply least-toxic alternatives such as non-volatile boric acid, diatomaceous earth or silica gels to cracks and crevices where cockroaches hide: inside and behind cabinets and appliances, wall cavities and under sinks. [Boric acid/borates are widely available in various formulations like bait stations, powders, gels or pastes. To avoid exposure to boric acid dust, follow label directions and use caution when applying. Boric acid products should not be used anywhere children or pets can access.]



Keep food in sealed containers



Repair leaky pipes and other water sources



Install weather-stripping to eliminate spaces



Caulk gaps and holes to keep pests out

Ants

Most indoor ants originate outside. However, finding the source of their entry is easy, once you follow the ant trail.

- **Deny Access** - Caulk all gaps and openings (entry points for pests), preferentially with caulking.
- **Keep Clean** - Clean up and remove food sources. Remove left over pet food between meals.
- **Empty Garbage** - Use a kitchen trash can with a secure fitting lid and empty often. Store outdoor garbage can away from house.
- **Keep Sealed** - Store food in glass jars with seals or gaskets and plastic containers with tight-fitting lids.
- **Use Soap and Water** - Cleaning away ants with soap and water will disrupt the ants' chemical trails.
- **Use Least-Toxic Alternatives** - Boric acid can also be used to target larger populations that cannot be sealed out. Cayenne and black pepper can be used as repellents near entry points as well. Sticky paper/barrier is another least toxic alternative that can be used around the legs of tables, plants stands or wherever problem persists.



The Safety Source for Pest Management

Beyond Pesticides maintains a directory of pest control companies that use one or more practices and/or materials that are categorized as preventive or least-toxic. As a customer, you must talk with the service professional about the practices and -products that they use, inform yourself on their potential to cause adverse effects, and decide what makes sense for you. If you live in a building or complex where pest control is handled by management, ask that they choose only those companies that practice predominantly non-chemical methods and only use least-toxic pesticides as a last resort. To find a professional near you visit www.beyondpesticides.org/safetysource.

Rodents

Mice and rats are the most common and troublesome pests to get rid of in houses and other buildings. These rodents thrive where they can find sources of food, water and shelter. Removing these sources generally puts an end of your rodent problem.

■ **Deny Access** - Mice can squeeze through holes the size of a dime, and rats can squeeze through holes the size of a quarter. Therefore, seal any holes or gaps that can possibly be an entryway for these critters. Look for holes/gaps:

- ◆ Inside, under, around, and behind kitchen cabinets, refrigerators and stoves, closets, doors, fireplaces, pipes, attics, basements and laundry rooms.
- ◆ Fill gaps with steel wool, caulking or hardware cloth. Use weather-stripping.
- ◆ Eliminate potential habitat by moving woodpiles far away from the sides of the home (100 feet or more is best). Remove old tires and other debris that mice and rats could use as harborage.

■ **Keep Clean** - Clean spills and dishes. Keep the stovetop, oven, broiler, and kitchen floor clean (especially under stove and refrigerator). Take trash out frequently.

■ **Keep Sealed** - Remove food sources by storing food in thick plastic or glass containers with tight lids. Use a thick plastic or metal garbage can with a tight lid.

■ **Use Least-Toxic Alternatives** - Set traps next to walls since rodents tend to run along walls for safety. If you use snap traps, obtain traps that have expanded triggers that snap when a mouse runs over them, even when not baited. Rat and mice traps are available at local retailers and can be used safely within your home. Remember to use gloves when cleaning up after rodents and wash hands thoroughly!

For more information on least toxic alternatives for removing pests from your home, visit www.beyondpesticides.org/alternatives/factsheets.

Are There Pesticides in Your Food?

Most foods offered at your local supermarket have been treated with hazardous pesticides. Residues of the pesticides are often found in and on the foods you buy and can accumulate in your body. These residues have been linked to serious adverse effects. Pesticides also poison farmworkers and farm families, contaminate water and are hazardous to wildlife. It is recommended that you buy foods labeled “organic” whenever possible. Organic foods are grown without toxic synthetic pesticides and have been shown to have higher nutritional quality. Learn more about the benefits of organic food at www.EatingWithAConscience.org.



Children and Organic Food

Pound for pound, children eat, drink, and breathe more than adults, and thus they take in more pesticides relative to their body weight. Scientists have found that children on an organic diet drastically reduce their exposure to pesticides. If organic foods are not easily accessible to you due to cost, consider buying organic for the

foods that you and your family, especially the children, eat the most. Organic foods to look for are:

- Milk and juices- these are consumed almost daily by children
- Fruits and vegetables- Fruits, whose skins are also eaten, like apples, peaches, grapes.
- Poultry, eggs, and meat.



Organic foods are now available at most leading supermarkets. For more information about organic food and why it is good for you and the environment, visit www.beyondpesticides.org/organicfood



Is Your School Protecting Your Children from Pests and Pesticides?

Pesticides are commonly used in school buildings and on school grounds. Schools in poor condition or inadequately maintained tend to suffer from pest problems and pesticide use the most. However, children face unique hazards from pesticide exposure. School age children have the highest asthma rate and learning and developmental disabilities are widespread, all of which are made worse by pesticide exposure.

Schools should have adopted management programs that eliminate the use of toxic pesticides.. These programs should involve inspection, monitoring, non-chemical pest prevention techniques, and defined least-toxic pesticides only as a last resort. In the long-term, these practices can save money.

Talk with your school administrators to:

- Identify local and state laws concerning school pesticide use and find out who administers the pest control program.
- Develop interest and encourage parents and teachers to help petition and develop a safe school pest management program. Parent-Teacher Association (PTA) meetings are excellent forums for discussion.



- Gather information about common pests, the hazards of pesticide use and the increased susceptibility of children to the health effects of pesticides.

- Share collected information with the appropriate school officials and let them know that their support and action is necessary and important.

- Be persistent.

Eat Healthier School Lunches

Many schools around the country are introducing more organic foods to their lunch menus. Having organic foods at schools mean that children can have a diet free of pesticides, and high in nutritional content. Many school districts across the country have already switched to an organic lunch program.



Going Organic in the School Cafeteria

If your school has not already gone organic, here are a few tips:



- Familiarize yourself with your child's school district policy regarding meals and snack items. Contact school and public officials to share your concerns.
- Know the benefits of organics at school.
- Involve the media. Write letters to the editor, or call your local radio station to report the problems you see and their solutions.
- Recruit members from the community who will be helpful, such as pediatricians, nurses or nutrition experts.
- Share your story with others to inspire and get other communities involved.

Visit Beyond Pesticides' Children and Schools webpage at www.beyondpesticides.org/schools and Organic webpage at www.beyondpesticides.org/organicfood/index.htm, for more information and resources.



Take Action To Make Your Community Safer

Protecting yourself and your family from pesticides does not end in your home or school, but continues in the larger community. Schools, apartment complexes, parks and other recreational areas are just some places where pesticides are used. With the goal of creating a pesticide-free community, find out the following:

- Who is responsible for pest control, what local ordinances, if any, govern pesticide use and how well are they implemented.
- Collect details, including the insects, rodents and weeds that are identified as problems, chemicals being used and their toxic effects, and the pest control the costs.
- Educate yourself on alternatives through research on the internet or at the local library.

Once you have all this information, involve your neighbors and the community groups in your area to advocate alternatives. It is your community's right to be protected from pesticides!

For more information on how to organize in your community, visit www.beyondpesticides.org/how-to.



Mosquitoes and Your Community Health

Community-wide eradication of pests affects everyone. Mosquitoes and the diseases they carry, like West Nile virus, are becoming more prevalent nationwide. Community-wide spraying of chemical pesticides to control mosquitoes is ineffective --less than 1% of sprayed chemicals actually hit their mosquito target. Thousands of people become sick from pesticide spraying each year especially those with asthma, compromised immune systems and children.

Prevent mosquito breeding. An ideal mosquito management strategy emphasizes public awareness, prevention and



monitoring methods. Take the following steps in your community to prevent a mosquito outbreak.

- **Eliminate breeding sites:** Hundred of mosquitoes can breed in a bottle cap of water. Get rid of old tires and maintain clean gutters and ditches to prevent standing water. Empty water from toys, buckets, birdbaths and clean up unnecessary debris on your property.

- **Educate your neighbors:** While community officials are generally given this task, you can also help your friends and neighbors understand how to reduce the chance of mosquito bites through the elimination of breeding sites and the proper use of repellents. Try to organize a community forum at your local community center, school or place of worship to discuss the issue.



Protect yourself in the event of pesticide spraying. If your community officials decide to spray, there are certain steps you can take to protect yourself and your family:

- Close the windows.
- Turn off air intake on window unit air conditioners.
- Take toys and patio furniture inside.
- Remove shoes before entering homes to avoid tracking in residues.
- Do not let children play near or behind truck-mounted applicators or enter an area that has just been sprayed.

For more tips, visit www.beyondpesticides.org/mosquito.

Personal steps to avoid biting mosquitoes

- Wear protective clothing, like long sleeves and pants in light colors, if going outside when mosquitoes are most active; usually in the early morning and evening.
- Ensure that window and door screenings are properly maintained.
- Avoid using mosquito repellents containing DEET, which can cause headaches, seizures, muscle and joint pain, blisters and skin irritation.
- Use botanical skin repellent alternatives containing citronella, lemon and oil of eucalyptus, geraniol and other essential oils are good alternatives.



Pesticides, Lawns and Playing Fields

A typical lawn, which may be your neighbor's yard, your school's football field or your community's playing field, is maintained with a mixture of poisons designed to kill fungus, weeds, and insects. When children come into contact with the grass, they are exposed to these poisons.



Children are being exposed to chemicals that can impair their health even though safer alternatives exist. Attempts to make our lawns and playing fields

free from toxic chemicals are often met with arguments that it is not possible, would produce more weeds, or just costs too much. However, safer alternatives exist that over time are not only cheaper but more effective.

Organic Land Care

This method of turf management involves developing and maintaining healthy soils without the use of toxic synthetic pesticides. An organically maintained field becomes naturally resistant to weeds, insects and diseases and is cheaper to maintain in the long term.



What can you do to get an organic playing field or lawn?

- Find out whether your state, school or community has a law or policy governing pesticide use in and around schools, or on public lands. Find out if, and how well, it is being implemented.
- If you do not have

A Healthy Lawn Eliminates The Need For Pesticides

Here are a few tips for maintaining a healthy lawn:

- Mowing height – Mow grass high (at least two inches high) to allow the grass to develop deeper, drought-resistant root systems and to prevent weeds from sprouting.
- Watering – Deep infrequent soaking is more beneficial than frequent, light watering. Overwatered lawns attract insects and new weeds.
- Aeration – Soils need air and water to be healthy. If your soil is hard and compacted, air and water cannot enter. Use a garden fork or other tools to loosen the soil.
- Fertilize – Lawn clippings and compost (including compost teas) are great and easy ways to add nutrients to your lawn. Beware of commercial fertilizers that can weaken grass, promote disease and insects.



For more healthy lawn tips, visit www.beyondpesticides.org/lawn.

one, advocate for an organic land care policy in your community.

- Petition the school and the town parks department to convert the playing fields to organic care
- Require that the grounds maintenance director, or contracted professional, be trained in organic land care.

Many communities around the country have petitioned for, and achieved safe organic land management. For more information about these communities or for fact-sheets and information on organic land management, contact Beyond Pesticides at info@beyondpesticides.org.



Fight Germs Without Dangerous Antibacterial Products

You may have heard about the rise of “superbugs” and deadly viruses that can be picked up from just about anywhere. In response, store shelves have filled with antibacterial products like antibacterial hand soaps, dishwashing liquid, many personal care items and even



toys. Many believe that in order to protect themselves and their families from contracting these dangerous germs, they must first eliminate them. However, scientists have found that it is the use and overuse of these antibacterial products that have led to an increase in these “superbugs.” That is because the more these antibacterial products are used, the more germs adapt and become resistant to them, eventually making them totally ineffective.

The Ubiquitous Triclosan

Here are some facts you should know about triclosan, a common and widely used antibacterial ingredient that:

- Is found in more than 140 types of products from mattresses and socks, to soaps and toys.



- Is found in almost every major waterway in the U.S., and in your tap water because it is removed by waste water treatment processes.

- Has been detected in breast milk, urine and umbilical cord blood.

- Has breakdown products known to be hormone disruptors and carcinogens.

- Can cause contact dermatitis and other skin allergies.

- Can impact the immune and hormone system.
 - Accumulates in fish and shellfish and therefore can be ingested by humans.
 - Is proven to be no more effective than soap and water
- So, why are you using antibacterial products that do more harm than good?

Take Action!

- If washing with soap and water is not possible, use alcohol-based sanitizers.
- Wash hands frequently and thoroughly. Regular soaps lower the surface tension of water, and thus wash away unwanted bacteria. Lather hands for at least 10 to 15 seconds and then rinse off in warm water. It is important to wash hands often, especially when handling food, before eating, after using the bathroom, and when someone in your house is sick.
- Dry hands with a clean towel to help brush off any germs that did not get washed down the drain.
- Wash toys and other surfaces regularly, especially those that come in contact with food, with a detergent and water.

Check out Beyond Pesticides' antibacterial webpage at www.beyondpesticides.org/antibacterial for a list of antibacterial products to avoid.

The Hazards of Pesticides

Pesticides are poisons designed to kill and should never be considered safe. Exposures to pesticides cause a wide range of human health problems, some of which are only now being studied. Children, the most vulnerable, are exposed even in the womb and because their developing bodies take in a higher proportion of pesticides than adults. Asthma, developmental and behavioral problems, cancer, immune and nervous system illness, and reproductive problems are only a few conditions that have been linked to pesticide exposures. However, there are many alternative practices and products to toxic pesticides available. Many of them are simple, common-sense methods for pest prevention. Beyond Pesticides believes that with this information, you will be able to make better informed decisions about your health and that of your family's.



Beyond Pesticides

Beyond Pesticides, working with allies to protect public health and the environment, is leading the transition to a world free of toxic pesticides. The organization is a national, community-based coalition of grassroots groups and individuals, bridging environmental and health concerns to: (i) stimulate widespread education on the hazards of toxic pesticides, and the availability of effective alternative pest management approaches; (ii) influence decision makers responsible for pest management to use safe methods; and, (iii) encourage the adoption of local, state and national policies that stringently restrict pesticide use and promote alternative approaches that respect health and the environment. Look to Beyond Pesticides to help you make the case that toxic pesticides are unnecessary to manage homes, schools and communities.



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