



# What You Can Do

EVERYDAY ACTIONS TO  
PROTECT YOUR HEALTH





# what you can do

## EVERYDAY ACTIONS TO PROTECT YOUR HEALTH

### How Concerned Should You Be?

The information in this booklet is not meant to create panic. Knowing that a product contains potentially harmful chemicals is not the same as knowing that those chemicals are harming you. As scientists make new discoveries about the potential risks from contaminant exposures, it only makes sense to be proactive and switch to safer products, especially since there are so many that already exist.

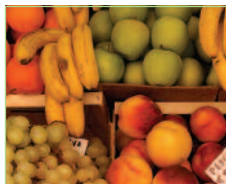
Learning about the links between our health and the environment can feel confusing and scary. Many people are left reeling with questions: Have I been exposed to anything harmful? Why isn't the government protecting us? And what can I do right now to protect myself?

We need to hold government and industry accountable for protecting our health from environmental contaminants. However, while we work toward reforms, there are many simple actions we can take to protect ourselves. For example, we can use safer household products, eat organic or less pesticide-intensive food and eliminate dust that may contain toxic residue. This booklet provides practical suggestions for how to take these and other actions.

For the other booklets in this series, *What We Know: New Science Linking Our Health and the Environment* and *What We Can Do: Community Efforts to Protect Our Health*, see: [www.womenshealthandenvironment.org/toolkit](http://www.womenshealthandenvironment.org/toolkit).



# Healthy Living Toolkit



## Fruits & Vegetables

### What you should know

Eating conventionally-grown produce (in other words, food that is not organic) can expose you to pesticides. Depending on the dose, some pesticides may increase your risk for cancer, learning disabilities or other health concerns. This is especially the case for children.<sup>1</sup>

Farms that use pesticides to grow produce expose their fieldworkers to these toxic substances at high concentrations. These pesticides can also end up in our drinking water.

### What you can do

- Eat organic food, which is the best choice if you can find and afford it. In some grocery stores, organic food is more expensive, but a local farmers market may have organic or less pesticide-intensive food that is more affordable.
- Buy organic varieties of the fruits and vegetables that are typically more contaminated, and save money by choosing conventional varieties of produce that are typically less contaminated (see sidebar for options). Avoid the most contaminated produce as much as possible.
- Become a member of community-supported agriculture—a program in which local farms will deliver a box of produce (often organic) to your door or a drop-off place in your neighborhood.
- Rinse and scrub your produce with a vegetable brush to reduce pesticide residues.
- Grow your own organic herbs or vegetables. Start with a few feet of garden space or containers on the window sill.

## SHOPPER'S GUIDE TO PESTICIDES IN PRODUCE

### CLEANEST 12 (Lowest in pesticides)

Onions  
Avocado  
Sweet corn (frozen)  
Pineapples  
Mango  
Asparagus  
Sweet peas (frozen)  
Kiwi fruit  
Bananas  
Cabbage  
Broccoli  
Papaya

### DIRTY DOZEN (Buy these organic)

Peaches  
Apples  
Sweet bell peppers  
Celery  
Nectarines  
Strawberries  
Cherries  
Pears  
Grapes (imported)  
Spinach  
Lettuce  
Potatoes

Environmental Working Group

### Resources

- **Environmental Working Group's Food News webpage:** [www.foodnews.org](http://www.foodnews.org)
- **Pesticide Action Network's *Fields of Poison 2002* report:** <http://panna.org/resources/documents/fieldsOfPoison2002.dv.html>
- **Pollution in People's Safer Food Choices webpage:** [www.pollutioninpeople.org/safer/food](http://www.pollutioninpeople.org/safer/food)
- **The Eat Well Guide** connects people to local farms, restaurants and stores that provide healthy, organic food: [www.eatwellguide.org](http://www.eatwellguide.org)
- **The Organic Manifesto** by Sandra Steingraber: [www.steingraber.com/documents/Organic\\_Manifesto\\_6-09-03.pdf](http://www.steingraber.com/documents/Organic_Manifesto_6-09-03.pdf)

## The Affordability of Healthy Products

It's often the case that people with the least disposable income are hardest hit by environmental contaminants at home and in the community. In this booklet, affordable options for healthier products have been highlighted as much as possible. While many healthier products cost more than their "mainstream" equivalents, increasing numbers of chain stores are offering affordable, healthier options. Farmers markets can be sources of affordable, organic or lower-pesticide food. Cleaners and pest-control solutions can be made at home for a fraction of the cost of buying a commercial product. Overall, businesses should be encouraged to develop more affordable healthy household goods and services. People of all income levels have the right to live healthy lives.





## Fish

### What you should know

Fish are very nutritious, but industrial activities have contaminated some fish species with mercury, polychlorinated biphenyls (PCBs) and other pollutants, which can be especially harmful to the brain and mental development of a fetus or young child.<sup>2 3 4 5</sup> However, the omega 3 fatty acids found in fish are also important to good health.

Farm-raised fish may also have high concentrations of environmental contaminants such as PCBs because they were fed contaminated fish feed. Many fish species have been over-fished, leading to the near collapse of fisheries around the world.

### What you can do

Pick the right fish to eat. The best bet is to use one of the pocket-sized fish guides (see *Resources to the right*) whenever you go food shopping or to a restaurant. They make deciding on the right fish easier. As much as possible, choose fish that are both low in mercury and other contaminants and have not been overfished. Some of these guides provide information on both issues.

### Resources

- **Environmental Defense's Pocket Seafood Selector:** [www.environmentaldefense.org/documents/1980\\_pocket\\_seafood\\_selector.pdf](http://www.environmentaldefense.org/documents/1980_pocket_seafood_selector.pdf)
- **Natural Resources Defense Council's Fish Shopping Guide:** [www.nrdc.org/health/effects/mercury/walletcard.pdf](http://www.nrdc.org/health/effects/mercury/walletcard.pdf)
- **Physicians for Social Responsibility and the Association of Reproductive Health Professionals' Healthy Fish, Healthy Families webpage:** [www.mercuryaction.org/fish](http://www.mercuryaction.org/fish)
- **Seafood Watch's Regional Fish Shopping Guides:** [www.mbayaq.org/cr/cr\\_seafoodwatch/download.asp](http://www.mbayaq.org/cr/cr_seafoodwatch/download.asp)
- **The Food and Drug Administration and the Environmental Protection Agency's Mercury Level in Commercial Fish and Shellfish webpage:** [www.cfsan.fda.gov/~frf/sea-mehg.html](http://www.cfsan.fda.gov/~frf/sea-mehg.html) (Note: Many organizations do not believe that these recommendations are strong enough.)
- **The Green Guide's Fish Shoppers' Guide:** [www.thegreenguide.com/doc.mhtml?i=115&s=nofish](http://www.thegreenguide.com/doc.mhtml?i=115&s=nofish)



## Breast Milk

### What you should know

Many studies have shown that environmental contaminants can be found in breast milk. Some women wonder whether this means they should avoid breastfeeding their babies.

### What you can do

**BREASTFEED!** Despite the presence of environmental contaminants, breastfeeding is still the best option for the baby's health and mother-baby bonding. According to the World Health Organization, "the accumulated data overwhelmingly support the positive health value of breastfeeding infants."<sup>6</sup> Breastfeeding is the best option, when possible.

### Resources

- **International Lactation Consultant Association:** [www.ilca.org](http://www.ilca.org)
- **MOMS—Making Our Milk Safe:** [www.safemilk.org](http://www.safemilk.org)
- **Physicians for Social Responsibility's Why Breastfeeding Is Best factsheet:** [www.psr.org/site/DocServer/Out\\_of\\_Harms\\_Way\\_Breast\\_Feeding\\_FS.pdf?docID=581](http://www.psr.org/site/DocServer/Out_of_Harms_Way_Breast_Feeding_FS.pdf?docID=581)
- **World Alliance of Breastfeeding Advocates:** [www.waba.org.my/environment/index.html](http://www.waba.org.my/environment/index.html)





## Plastic Products

### What you should know

Plastic products can likely be found in every room in the house: food containers, plastic wrap, drinking bottles, toys, shower curtains, shampoo bottles, water pipes and many other products. Different plastics are made with different chemicals and chemical compounds, some of which may be harmful to people's health. In particular, some chemicals in plastics may affect people's hormonal systems, which may lead to health problems.<sup>7 8 9 10</sup>

### What you can do

- Avoid certain types of plastics for food. Plastics used for food storage usually have a number code on the bottom, which will tell you what type of plastic it is. According to The Green Guide, it is best to avoid:
  - **Plastic #3: Polyvinyl chloride (also known as PVC or vinyl)**, which is found in a wide range of products, including some plastic wraps and food containers.
  - **Plastic #6: Styrene**, which is found in Styrofoam products, such as take out containers, Styrofoam cups and egg cartons.
  - **Plastic #7: Polycarbonate**, which is found in Nalgene and other sport water bottles, some baby bottles, toddler drinking cups, and 5-gallon water bottles.
- Avoid heating food in plastic containers or with plastic wrap (some plastic wraps are made with PVC). Heating increases the chances of harmful chemicals leaching out of plastic, especially with fatty foods. Use a paper towel or a glass or ceramic lid to cover food in the microwave.
- Choose plastics labeled #1 PETE, #2HDPE, #4LDPE or #5PP, which have lower potential health risks. If your community does not recycle these types of plastic, try to avoid them.
- Store food in containers made of glass, ceramic or food-safe metal.
- Avoid vinyl (PVC) shower curtains. Use curtains made of natural fibers, polyester or nylon instead.
- Buy non-PVC toys.
- Choose products for home improvement and building that are not made from PVC. (See the *Home Improvements and Building Materials* section on page seven for helpful resources.)

### Resources

- **Center for Health and Environmental Justice's PVC: The Poison Plastic webpage:** [www.pvcfree.org](http://www.pvcfree.org)
- **Environment California's Toxic Baby Bottles report:** [www.environmentcalifornia.org/reports/environmental-health/environmental-health-reports/toxic-baby-bottles](http://www.environmentcalifornia.org/reports/environmental-health/environmental-health-reports/toxic-baby-bottles)
- **Institute for Agriculture and Trade Policy's Smart Plastics Guide:** [www.iatp.org/foodandhealth](http://www.iatp.org/foodandhealth)
- **The Green Guide's Safer Plastics for Storing Food report:** [www.thegreenguide.com/doc.mhtml?i=BGG2&s=safeplastics](http://www.thegreenguide.com/doc.mhtml?i=BGG2&s=safeplastics)
- **Tiny Footprints' baby bottle recommendations:** [www.tinyfootprints.org/expecting/Plastics](http://www.tinyfootprints.org/expecting/Plastics)



Take the Children's Health Environmental Coalition's online quiz to find out where the health hazards are in your home and what you can do about them: [www.checnet.org/healthhouse/myhome/index.asp](http://www.checnet.org/healthhouse/myhome/index.asp).



## Cosmetics

### What you should know

Major loopholes in federal law allow the cosmetics industry to put unlimited amounts of chemicals into personal care products without testing for health effects or adequate labeling requirements. While the chemicals in any one personal care product may not cause harm by themselves, it makes a lot of sense to minimize the amount of chemicals linked to cancer, birth defects and other health problems in the numerous products we use every day.

Antibacterial products such as soap may cause more harm than good, killing harmless bacteria and making your body resistant to the antibiotics you may need one day. Some bacteria, for example, are developing resistance to triclosan, a common antibacterial ingredient. Triclosan may also be bad for your health.

### What you can do

Find out about the health concerns associated with the products you use. Go to the **Campaign for Safe Cosmetics** website ([www.safecosmetics.org](http://www.safecosmetics.org)) or **Environmental Working Group's Skin Deep report** ([www.ewg.org/reports/skindeep](http://www.ewg.org/reports/skindeep)), a database of over 14,000 personal care products, their ingredients and potential health concerns. You can also find safer alternatives in the Skin Deep report.

You don't always have to pay more to find safer products. Some products that score very well on the Skin Deep report are inexpensive and can be found in many well-known stores. And there is no guarantee that paying more ensures your products are safer. In fact, some of the more expensive products scored poorly in the Skin Deep review.

### Resources

- **Beyond Pesticide's Triclosan factsheet:** [www.beyondpesticides.org/pesticides/factsheets/Triclosan%20cited.pdf](http://www.beyondpesticides.org/pesticides/factsheets/Triclosan%20cited.pdf)
- **Campaign for Safe Cosmetics:** [www.safecosmetics.org](http://www.safecosmetics.org)
- **Environmental Working Group's Cosmetic Shopping Guide:** [www.ewg.org/pdf/EWG\\_cosmetics.pdf](http://www.ewg.org/pdf/EWG_cosmetics.pdf)



## Water

### What you should know

**Tap Water:** Tap water quality varies throughout the country. While many water supplies meet national standards, these standards do not cover all the potential contaminants in tap water. Some tap water is safe to drink, but other places may have environmental contaminants in the water supply that pose a hazard to your family's health.

**Bottled Water:** There are very few regulations for bottled water, so there is no way of knowing whether bottled water is any healthier than tap water. Additionally, drinking from some kinds of plastic water bottles may expose a person to low-level contaminants (see *Plastics section to the left*). Using fewer disposable plastic bottles reduces pollution from manufacturing and recycling. Another danger is the privatization of public water utilities (i.e. selling them to private companies) because water is essential to everyone's survival and should be available to and affordable for all people.

### What you can do

Tap water should be routinely tested to determine if it is contaminated. If the test results cause concern, filters can usually be installed that take out many of the contaminants of concern.

### Resources

- **Environmental Protection Agency's Ground Water and Drinking Water webpage:** [www.epa.gov/safewater](http://www.epa.gov/safewater). **Also see their Home Water Testing factsheet:** [www.epa.gov/safewater/fdq/pdfs/fs\\_homewatertest-ing.pdf](http://www.epa.gov/safewater/fdq/pdfs/fs_homewatertest-ing.pdf).
- **Environmental Working Group's Tap Water database:** [www.ewg.org/tapwater/index.php](http://www.ewg.org/tapwater/index.php).
- **The Green Guide's Bottled Water report:** [www.thegreenguide.com/reports/product.mhtml?id=49](http://www.thegreenguide.com/reports/product.mhtml?id=49)



## Thermometers

### What you should know

Many thermometers contain mercury, which can contribute to learning, behavior and memory problems if children are exposed when their brains are still developing. They are not a safe option in any home or hospital.

### What you can do

Use a digital thermometer instead of a mercury one. If you have a mercury thermometer, check with your local government or the **Environmental Protection Agency** ([www.epa.gov/epaoswer/hazwaste/mercury/collect.htm](http://www.epa.gov/epaoswer/hazwaste/mercury/collect.htm)) to see where you can dispose of it safely. Please do not throw it in the garbage can.

Similarly, if you are changing your heating and cooling system, change to a digital thermostat, which is mercury-free.

If a mercury thermometer breaks, take precautions in cleaning it up, as the mercury forms a vapor that is easily inhaled. See **Mercury Thermometers and Your Family's Health** ([www.noharm.org/details.cfm?type=document&id=309](http://www.noharm.org/details.cfm?type=document&id=309)) for instructions on how to clean a mercury thermometer spill. Importantly, ventilate the area as much as possible and **do not use a vacuum cleaner**.



### Resources

- **Health Care Without Harm's Going Green Thermometer factsheet:**  
[www.noharm.org/library/docs/Going\\_Green\\_Thermometer\\_Fact\\_Sheet.pdf](http://www.noharm.org/library/docs/Going_Green_Thermometer_Fact_Sheet.pdf)
- **Minnesota Pollution Control Agency's Frequently Asked Questions on Mercury webpage:**  
[www.pca.state.mn.us/air/mercury-faq.html](http://www.pca.state.mn.us/air/mercury-faq.html)
- **Physicians for Social Responsibility Los Angeles' mercury factsheet:**  
[www.psrla.org/documents/mercury/finalEnglish.pdf](http://www.psrla.org/documents/mercury/finalEnglish.pdf)



## Medical Radiation

### What you should know

Procedures using medical radiation, such as X-Rays and CT scans, provide important medical information. Unfortunately, there are also risks associated with these kinds of radiation exposure. There is strong evidence that radiation is linked to more than 20 serious health concerns, including breast cancer, reduced fertility, leukemia and thyroid disorders.<sup>11</sup>

### What you can do

Ask your doctor if there are detection/diagnostic or treatment methods that do not use radiation. Before you have an X-Ray, scan or other radiologic procedure, ask the technician to use the lowest dose possible. Also, keep a record of the radiologic procedures you have to prevent unnecessary duplication of tests.

### Resources

- **Institute for Energy and Environmental Research's *Science for the Vulnerable—Setting Radiation and Multiple Exposure Environmental Health Standards to Protect Those Most at Risk* report:**  
[www.ieer.org/campaign/report.pdf](http://www.ieer.org/campaign/report.pdf)
- **Breast Cancer Fund's Radiation Exposure Information Act webpage:**  
[www.breastcancerfund.org/ab929](http://www.breastcancerfund.org/ab929)





## Furniture & Electronic Equipment

### What you should know

There are over 175 different flame retardants on the market. They have played an important role in improving fire safety standards of many products, including computers, furniture, mattresses and others. Unfortunately, some of these flame retardants are both widely used and may be linked to health problems.

One class of flame retardants, called brominated flame retardants (BFRs), are especially worrisome because they are found at high levels in women's breast milk. Several states have banned some BFRs from use because they may increase risk for learning and memory problems and behavior changes.<sup>12 13</sup>

Electronic equipment is also made from a variety of other toxic materials. Pollution can occur during manufacturing and disposal of these products.

### What you can do

- **Limit your exposure to flame retardants:** Choose products made by companies that are eliminating BFRs in electronics, computers, furniture, mattresses and other products. The **Safer Products Project** website lists some companies to choose from: [www.safer-products.org](http://www.safer-products.org). Also, keep your house free of dust, which may harbor flame retardants and other contaminants (see *Dust* section on page 11).

- **Reduce contamination from manufacturing and disposal of electronic equipment:** Buy only the necessary electronic equipment. If electronic equipment is no longer needed but still functions, consider donating it to a local organization. Some towns have electronic recycling businesses or government programs which will recycle or re-sell computers and electronics. Some companies will take back electronic equipment and re-use parts of the product. Keep discarded electronics out of the regular trash because the chemicals in them make all electronic equipment hazardous waste.

### Resources

- **Computer Take Back Campaign's list of companies that take back electronic equipment:** [www.computertakeback.com](http://www.computertakeback.com)
- **Health Care Without Harm's Brominated Flame Retardants: Rising Levels of Concern report:** [www.noharm.org/details.cfm?type=document&id=1095](http://www.noharm.org/details.cfm?type=document&id=1095)
- **Health Care Without Harm's Flame Retardants: Alarming Increases in Humans and the Environment report:** [www.noharm.org/details.cfm?ID=1098&type=document](http://www.noharm.org/details.cfm?ID=1098&type=document)
- **Sightline Institute's Flame Retardants in the Bodies of Pacific Northwest Residents report:** [www.sightline.org/research/pollution/res\\_pubs/report](http://www.sightline.org/research/pollution/res_pubs/report)



## Home Improvements & Building Materials

### What you should know

The home you live in and the furnishings in it may have been built with toxic materials. Paints, adhesives and new carpets may give off toxic gases, pipes may leach contaminants and many other materials contain harmful chemicals.

### What you can do

Choose healthier building materials for home improvement projects.

### Resources

- **Healthy Building Network's Screening the Toxics out of Building Materials factsheet:** [www.healthy-building.net/pdf/Healthy\\_Building\\_Material\\_Resources.pdf](http://www.healthy-building.net/pdf/Healthy_Building_Material_Resources.pdf)
- **Toxic-Free Legacy Coalition's Less-Toxic Home Repair & Construction Materials factsheet:** [www.pollutioninpeople.org/safer/products/buildingmaterials](http://www.pollutioninpeople.org/safer/products/buildingmaterials)
- **Washington Toxics Coalition's Healthy Homes and Gardens webpage:** [www.watoxics.org/homes-and-gardens/building-materials](http://www.watoxics.org/homes-and-gardens/building-materials)



## Pest Control

### What you should know

Most people know that pesticides used in industrial agriculture can be harmful to people's health (especially farm workers), but they might not be aware that household pesticide use can also cause harm. Garden pesticides, mothballs, animal flea collars and other products to deal with pests may increase risk for health problems, such as asthma<sup>14</sup> and cancer.<sup>15</sup> Excessive exposure to some pesticides may cause acute symptoms, such as nausea, vomiting or heart irregularities. Children are particularly susceptible.

### What you can do

There are many simple, safe tricks to prevent pest problems from starting, and other tricks to deal with pests if you have them. (See *table to the right for ideas.*)

### Resources

There are extensive resources available to use less toxic pesticides, or eliminate pesticide use all together. Some excellent examples include:

- **Beyond Pesticides:** [www.beyondpesticides.org](http://www.beyondpesticides.org)
- **Northwest Coalition for Alternatives to Pesticides' resource webpage:** [www.pesticide.org/factsheets.html](http://www.pesticide.org/factsheets.html)
- **Pesticide Action Network's pesticide database:** [www.pesticideinfo.org/Index.html](http://www.pesticideinfo.org/Index.html)



## Smoking

### What you should know

It's no secret that smoking is bad for your health—and the health of people near you. The National Cancer Institute estimates that cigarette smoking causes 87 percent of lung cancer deaths and is also responsible for most cancers of the larynx, oral cavity and pharynx, esophagus and bladder. In addition, cigarette smoking is a cause of kidney, pancreatic, cervical and stomach cancers, as well as leukemia,<sup>16</sup> heart disease,<sup>17</sup> fertility challenges,<sup>18 19</sup> reduced bone density<sup>20 21</sup> and other health problems.

Evidence is also mounting that smoking can be deeply damaging to people other than the smoker. For example, research indicates that women who smoke during pregnancy or who are exposed to secondhand smoke may increase

their children's risk for asthma.<sup>22</sup> And women exposed to secondhand smoke may have a higher risk for lung cancer, asthma and breast cancer.<sup>23 24 25</sup>

### What you can do

If you are a smoker, one of the most important things you can do to protect your health is to kick the habit.

### Resources

- **The Centers for Disease Control and Prevention's resources to help quit smoking:** [www.cdc.gov/tobacco/quit\\_smoking](http://www.cdc.gov/tobacco/quit_smoking)
- **The National Cancer Institute's resources to help quit smoking:** [www.cancer.gov/cancertopics/factsheet/Tobacco/cravings](http://www.cancer.gov/cancertopics/factsheet/Tobacco/cravings)

## Community Environmental Health Resource Center: Tools for Detecting Hazards

Many people, especially those in lower income communities, live in homes or apartments that expose them to multiple environmental contaminants. The Community Health Resource Center has built tools to help you detect what hazards might exist where you live. To find out more, go to: [www.cehrc.org/tools/index.cfm](http://www.cehrc.org/tools/index.cfm).



# SIMPLE, SAFE TRICKS TO PREVENT AND TREAT PEST PROBLEMS



## GENERAL INSECTS

### PREVENTIVE METHODS

- Vacuum regularly
- See additional preventive methods for specific insects

### TREATMENT METHODS

- Set insect baits and traps
- Sprinkle diatomaceous earth (crushed fossils of living plants and freshwater organisms)
- Use beneficial nematodes (microscopic worms)
- See additional treatment methods for specific insects

## SPECIFIC INSECTS

### Cockroaches

#### PREVENTIVE METHODS

- Distribute bay leaves in affected areas
- Store food in sealed containers
- Dispose of garbage properly

#### TREATMENT METHODS

- Dust with boric acid **or**
- Dust with equal parts of boric acid powder or baking soda mixed with powdered sugar **or**
- Dust with equal parts of oatmeal, flour and plaster of Paris
- Use bait boxes

### Ants

#### PREVENTIVE METHODS

- Sprinkle black pepper, chili powder or chalk
- Store food in sealed containers
- Dispose of garbage properly

#### TREATMENT METHODS

- Brush a 1 to 10 mixture of lavender & olive oil into the tracks that ants follow
- Distribute ferns and juniper leaves, lavender flowers and goldenrod

### Moths

#### PREVENTIVE METHODS

- Use cedar balls or chips
- Sprinkle lavender

#### TREATMENT METHODS

- See preventive methods

### Hair Lice

#### PREVENTIVE METHODS

- Do not share clothing, bed linens, pillows, combs, brushes or hats

#### TREATMENT METHODS

- Use enzyme shampoos

### Fleas

#### PREVENTIVE METHODS

- Vacuum thoroughly and frequently
- Wash pet bedding weekly in hot soapy water. Spray pet daily with 50/50 mixture of white vinegar and water
- Mix brewer's yeast, Vitamin B or garlic tablets with pet food
- Rub animal's coat with fennel, rue and rosemary

- Place eucalyptus seeds and leaves where the animal sleeps

#### TREATMENT METHODS

- Use enzyme shampoos

### Termites

#### PREVENTIVE METHODS

- Dry out construction wood properly (Timber species such as oak, fir, ash and larch are best)
- Pre-treat wood with vegetable oil, paraffin or beeswax. Use an 8% solution of borax (also a fire retardant) for long term prevention
- Use a solution of soda ash or wood ash (adding plant pigments makes these solutions suitable for staining)

#### TREATMENT METHODS

- Set baits
- Use liquid nitrogen
- Use nontoxic heat method
- Use electrocution or microwaves

### Mice and Rats

#### PREVENTIVE METHODS

- Store food in sealed containers
- Dispose of garbage properly
- Sprinkle lavender, cedar oil or camphor

#### TREATMENT METHODS

- Set traps and baits
- Place cotton balls saturated with peppermint oil in areas of rodent activity



## Cleaners

### What you should know

Some household cleaners—for the kitchen, bathroom, windows and other parts of the house—contain ingredients that may increase risk for cancer and birth defects, irritate the skin or eyes or trigger asthma and other respiratory difficulties.<sup>26</sup>

### What you can do

- **Make your own cleaners:** It is easy to make safe cleaners from ingredients most people already have around the house. And they cost a fraction of any store-bought cleaners. (See sidebar for ideas.)
- **Buy less-toxic cleaners:** Stores often sell a variety of less-toxic cleaners, many of which are reasonably priced. Be aware that the words “non-toxic” or “all natural” on the label may not really mean that the product is safer. Consult **Green Seal** ([www.greenseal.org](http://www.greenseal.org)) for brands that are certified to be less toxic.
- **Use fewer products:** Basic cleaners cover a lot of bases. Unlike what the ads try to tell us, there is no need for a different type of cleaner for each room or item in the house.

### Resources

- **Washington Toxics Coalition’s Antimicrobial Products: Who Needs them? factsheet:** [www.watoxics.org/files/antimicrobials.pdf](http://www.watoxics.org/files/antimicrobials.pdf)
- *Clean House, Clean Planet*, a book by Karen Logan
- *Grist’s Good, Clean Fun: How to clean your house without hurting the planet report:* [www.grist.org/advice/possessions/2003/03/18/possessions-cleaning/index.html](http://www.grist.org/advice/possessions/2003/03/18/possessions-cleaning/index.html)
- **The Green Guide’s Cleaning Products Guide:** [www.thegreenguide.com/gg/pdf/CleaningProducts\\_1.pdf](http://www.thegreenguide.com/gg/pdf/CleaningProducts_1.pdf)

## HOW TO MAKE YOUR OWN HOUSEHOLD CLEANERS

### PURPOSE:

**Scour sinks, countertops, pots and pans**

### NON-TOXIC ALTERNATIVE:

Baking soda

### HOW TO APPLY:

Sprinkle onto moist surface

### PURPOSE:

**Clean windows and mirrors**

### NON-TOXIC ALTERNATIVE:

¼ cup vinegar mixed with 1 quart water

### HOW TO APPLY:

Wipe with newspaper

### PURPOSE:

**Clean drains to prevent clogs**

### NON-TOXIC ALTERNATIVE:

½ cup baking soda and ½ cup vinegar

### HOW TO APPLY:

Pour baking soda followed by vinegar down drains, then flush with hot water

### PURPOSE:

**Clean and remove spots from carpets**

### NON-TOXIC ALTERNATIVE:

Club soda, salt or a 3 to 1 mixture of vinegar and water

### HOW TO APPLY:

Pour onto stains and allow to bubble, then dab dry

### PURPOSE:

**Clean wooden, tile and linoleum floors as well as wooden furniture**

### NON-TOXIC ALTERNATIVE:

A few drops of vinegar and a capful of baby oil in a bucket of water

### HOW TO APPLY:

Wet mop floors

Dampen rag and apply directly to furniture



## Dust

### What you should know

New research is finding that household dust is a hotbed of environmental contaminants. Those dust bunnies we often ignore may contain residues from toys, furniture and electronic equipment, materials used in building the house and all the stuff tracked in from the outside—lawn pesticides, oil that has leaked from a car and whatever the neighbor's dog left behind.

### What you can do

In addition to using safer products to reduce contaminants in the home, eliminate dust as much as possible. Be sure to use safer cleaning products (see *previous section on cleaners*) for the task, rather than relying on toxic household cleaners.

### Tips to keep dust out of the house

1. **Best Practice:** Remove your shoes when entering your home! Wear different footwear inside that is dedicated to indoor use.
2. Place long floor runners (preferably a commercial doormat) at entrances to your home to trap outdoor dust and dirt.
3. Vacuum carpets and area rugs using a vacuum with a power brush and HEPA filter once a week (twice a week if you have a crawling child).
4. Bare floors are the best choice. Otherwise, choose floor coverings (runners and area rugs) and furniture draperies that are easy to clean. Limit the use of carpets throughout the house, especially deep plush or shag carpets.
5. Cover bare outdoor areas with trees, shrubs, flowers or gravel to reduce tracking in dust and dirt.
6. Regularly dust or wash surfaces that are often touched. Wash your hands with regular (not antibacterial) soap and warm water after cleaning, working, handling raw meat, petting animals, changing a diaper, using a bathroom or gardening and before preparing food, eating or touching a baby or ill person.
7. Clean air ducts annually and replace filters every six months.
8. Change clothes and shoes and wash exposed skin before entering your home if you come into contact with environmental contaminants. This includes exposures at work (*also see If You Are Exposed to Chemicals in the Workplace on the next page*) and at home, such as from painting or fixing your car.
9. Wash fruits and vegetables to remove dust, dirt and certain pesticide residues.
10. Clean pacifiers and wash toddler's hands with regular (not antibacterial) soap and warm water before eating and after using the bathroom.
11. Have toddlers, painted surfaces and dust tested for lead if you live in house built before 1978.
12. Have a trained person perform a home environmental assessment before renting or buying a house or having a baby.

Adapted from University of Pittsburgh Center for Environmental Oncology

### Resources

- **Safer Products Project *Sick of Dust* report:** [www.safer-products.org/page.php?p=dust](http://www.safer-products.org/page.php?p=dust)



**Removing dust is especially important if there are children around who may crawl where dust is accumulating.**

# Healthier Products: Better for You, Better for the People Who Make Them



Products that are made with safer ingredients and materials are the best bet for you and your family. They are also better for the people who manufacture them. People who work in factories making things full of harmful chemicals can be exposed to toxic substances and fumes hour after hour, day after day. Making a commitment to healthier products shows that you care not only about yourself, but about the people who make what you buy too.

## If You Are Exposed to Chemicals in the Workplace

For many people, the workplace can be more hazardous than any other place where they spend their time. Working in nail salons, dry cleaning establishments and factories or as janitors and many other blue-collar and pink-collar jobs entails serious health risks. No matter what job a person has or how few options there are in the job market, there are steps people can take to reduce the impact of exposure to environmental contaminants on the job. For example:

- If you work around chemicals, wash exposed skin and change out of your work clothes before returning to your home. Clean your work clothes separately.
- Whether at home or at work, use the recommended protective gear (gloves, masks, eyewear, etc.) to avoid inhaling, ingesting or absorbing toxic substances.
- Know what chemicals you use at work and what problems they might cause. Check the Material Safety Data Sheets (MSDS) that your employer is required to provide for each chemical in your workplace.
- You can do internet research on occupational health at [www.nlm.nih.gov/medlineplus/occupationalhealth.html](http://www.nlm.nih.gov/medlineplus/occupationalhealth.html). This website also links to local occupational health services.
- If you are pregnant or may get pregnant, take extra care to follow safety practices. Some states may allow you to take a disability leave or make accommodations at your job. Ask your doctor or a local union. Also check out **The Effects of Workplace Hazards on Female Reproductive Health:** [www.cdc.gov/niosh/99-104.html](http://www.cdc.gov/niosh/99-104.html).

Taking some or all of the actions listed above is an important step toward protecting the health of everyone—ourselves, our families and the workers who make our products. When consumers demand less-toxic products, they send a message to companies that there is a growing concern about the contaminants in the environments where we live, learn, work and play.

The recipe for a healthier environment is simple: Get active to change our everyday lives, and get active to hold our government accountable for protecting us from environmental contaminants. See the next booklet in the series *What We Can Do: Community Efforts to Protect Our Health* for ways to get involved. It's available at [www.womenshealthandenvironment.org/toolkit](http://www.womenshealthandenvironment.org/toolkit).



## Endnotes

- <sup>1</sup> National Research Council, Committee on Pesticides in the Diets of Infants and Children, Board on Agriculture and Board on Environmental Studies and Toxicology, Commission on Life Sciences. *Pesticides in the Diets of Infants and Children*. National Academy Press, Washington, D.C. 1993.
- <sup>2</sup> Mori K, Yoshida K, Hoshikawa S, Ito S, Yoshida M, Satoh M, Watanabe C. *Effects of perinatal exposure to low doses of cadmium or methylmercury on thyroid hormone metabolism in metallothionein-deficient mouse neonates*. *Toxicology* 2006 Nov 10; 228(1):77-84.
- <sup>3</sup> Debes F, Budtz-Jorgensen E, Weihe P, White RF, Grandjean P. *Impact of prenatal methylmercury exposure on neurobehavioral function at age 14 years*. *Neurotoxicology and Teratology* 2006 May-Jun; 28(3):363-75.
- <sup>4</sup> Stern AH, Jacobson JL, Ryan L, Burke TA. *Do recent data from the Seychelles Islands alter the conclusions of the NRC Report on the toxicological effects of methylmercury?* *Environmental Health* 2004 Jan 30; 3(1):2.
- <sup>5</sup> National Research Council, Committee on the Toxicological Effects of Methylmercury. *Toxicological Effects of Methylmercury*. National Academy Press, Washington, D.C. 2000.
- <sup>6</sup> World Health Organization. *Biomonitoring of Human Breastmilk Technical Note*. [www.who.int/foodsafety/chem/POPtechnicalnote.pdf](http://www.who.int/foodsafety/chem/POPtechnicalnote.pdf). Viewed April 9, 2007.
- <sup>7</sup> Rene B. J. Remillard and Nigel J. Bunce. *Linking dioxins to diabetes: epidemiology and biologic plausibility*. *Environmental Health Perspectives* 2002 Sep; 110(9):853-8.
- <sup>8</sup> Murray TJ, Maffini MV, Ucci AA, Sonnenschein C, Soto AM. *Induction of mammary gland ductal hyperplasias and carcinoma in situ following fetal bisphenol A exposure*. *Reproductive Toxicology* 2006 Oct 24.
- <sup>9</sup> Vandenberg LN, Maffini MV, Wadia PR, Sonnenschein C, Rubin BS, Soto AM. *Exposure to environmentally relevant doses of the xenoestrogen bisphenol-A alters development of the fetal mouse mammary gland*. *Endocrinology* 2007 Jan; 148(1):116-27.
- <sup>10</sup> Shanna H. Swan, Katharina M. Main, Fan Liu, Sara L. Stewart, Robin L. Kruse, Antonia M. Calafat, Catherine S. Mao, J. Bruce Redmon, Christine L. Ter-nand, Shannon Sullivan, J. Lynn Teague, and the Study for Future Families Research Team. *Decrease in anogenital distance among male infants with prenatal phthalate exposure*. *Environmental Health Perspectives* 2005 Aug; 113(8):1056-61.
- <sup>11</sup> See the Collaborative on Health and Environment Toxicant and Disease Database for more information: <http://database.healthandenvironment.org/index.cfm>. Enter "Ionizing Radiation" in the "Browse by Toxicant" section.
- <sup>12</sup> Kemmlein S, Hahn O, Jann O. *Emission of Flame Retardants from Consumer Products and Building Materials*. Berlin, Germany: Federal Institute for Materials Research and Testing; Project Number (UFO-PLAN) 299 65 321; 2003.
- <sup>13</sup> Eriksson P, Viberg H, Jakobsson E, Orn U, Fredriksson A. *A brominated flame retardant, 2,2',4,4',5-pentabromodiphenyl ether: uptake, retention, and induction of neurobehavioral alterations in mice during a critical phase of neonatal brain development*. *Toxicological Sciences* 2002 May; 67(1):98-103.
- <sup>14</sup> Salam, MT, Y-F Li, B Langholz and FD Gilliland. 2003. *Early life environmental risk factors for asthma: findings from the children's health study*. *Environmental Health Perspectives* 2004 May; 112(6):760-5.
- <sup>15</sup> University of Pittsburgh Cancer Institute, Department of Environmental Oncology. *Health effects of traditional household products*. [www.environmentaloncology.org/documents/Healtheffectsoftrad-houseprod.pdf](http://www.environmentaloncology.org/documents/Healtheffectsoftrad-houseprod.pdf). Viewed April 9, 2007.
- <sup>16</sup> National Cancer Institute. *Cigarette Smoking and Cancer: Questions and Answers*. [www.cancer.gov/cancertopics/factsheet/Tobacco/cancer#1](http://www.cancer.gov/cancertopics/factsheet/Tobacco/cancer#1). Viewed April 9, 2007.
- <sup>17</sup> American Heart Association. *Smoking and Cardiovascular Disease*. [www.americanheart.org/presenter.jhtml?identifier=3038016](http://www.americanheart.org/presenter.jhtml?identifier=3038016). Viewed April 9, 2007.
- <sup>18</sup> Sepaniak S, Forges T, Monnier-Barbarino P. *Cigarette smoking and fertility in women and men*. *Gynecologie, Obstetrique and Fertilité* 2006 Oct; 34(10):945-9.
- <sup>19</sup> Van Voorhis BJ, Dawson JD, Stovall DW, Sparks AE, Syrop CH. *The effects of smoking on ovarian function and fertility during assisted reproduction cycles*. *Obstetrics and Gynecology* 1996 Nov; 88(5):785-91.
- <sup>20</sup> Lamichhane AP. *Osteoporosis-an update*. *Journal of Nepal Medical Association* 2005 Apr-Jun; 44(158):60-6.
- <sup>21</sup> Oncken C, Prestwood K, Kleppinger A, Wang Y, Cooney J, Raisz L. *Impact of smoking cessation on bone mineral density in postmenopausal women*. *Journal of Women's Health* 2006 Dec; 15(10):1141-50.
- <sup>22</sup> Li YF, Langholz B, Salam MT, Gilliland FD. *Maternal and grandmaternal smoking patterns are associated with early childhood asthma*. *Chest* 2005 Apr; 127(4):1232-41.
- <sup>23</sup> See the Collaborative on Health and Environment Toxicant and Disease Database for more information: <http://database.healthandenvironment.org/index.cfm>. Enter "Tobacco Smoke (Secondhand)" in the "Browse by Toxicant" section.
- <sup>24</sup> Environmental Protection Agency. *Health Effects of Exposure to Secondhand Smoke*. [www.epa.gov/smokefree/healththeffects.html](http://www.epa.gov/smokefree/healththeffects.html). Viewed April 9, 2007.
- <sup>25</sup> Miller MD, Marty MA, Broadwin R, Johnson KC, Salmon AG, Winder B, Steinmaus C. *The association between exposure to environmental tobacco smoke and breast cancer: A review by the California Environmental Protection Agency*. *Preventive Medicine* 2007 Feb; 44(2):93-106.
- <sup>26</sup> University of Pittsburgh Cancer Institute, Department of Environmental Oncology. *Health effects of traditional household products*. [www.environmentaloncology.org/documents/Healtheffectsoftrad-houseprod.pdf](http://www.environmentaloncology.org/documents/Healtheffectsoftrad-houseprod.pdf). Viewed April 9, 2007.

## Organizations You Can Turn To

- Beyond Pesticides:** [www.beyondpesticides.org](http://www.beyondpesticides.org)
- Campaign for Safe Cosmetics:** [www.safecosmetics.org](http://www.safecosmetics.org)
- Center for Environmental Health and Justice:** [www.chej.org](http://www.chej.org)
- Children's Health and Environment Coalition:** [www.chechnet.org](http://www.chechnet.org)
- Computer Take Back Campaign:** [www.computertakeback.org](http://www.computertakeback.org)
- Environment California:** [www.environmentcalifornia.org](http://www.environmentcalifornia.org)
- Environmental Working Group:** [www.ewg.org](http://www.ewg.org)
- Green Guide:** [www.thegreenguide.com](http://www.thegreenguide.com)
- Green Seal:** [www.greenseal.org](http://www.greenseal.org)
- Health Care without Harm:** [www.noharm.org](http://www.noharm.org)
- Healthy Building Network:** [www.healthybuilding.net](http://www.healthybuilding.net)
- Institute for Agriculture and Trade Policy:** [www.iatp.org](http://www.iatp.org)
- Natural Resources Defense Council:** [www.nrdc.org](http://www.nrdc.org)
- Northwest Coalition for Alternatives to Pesticides:** [www.pesticide.org](http://www.pesticide.org)
- Pesticide Action Network:** [www.panna.org](http://www.panna.org)
- Physicians for Social Responsibility:** [www.psr.org](http://www.psr.org)
- Pollution in People:** [www.pollutioninpeople.org](http://www.pollutioninpeople.org)
- PVC: The Poison Plastic:** [www.pvcfree.org](http://www.pvcfree.org)
- Safer Products Project:** [www.safer-products.org](http://www.safer-products.org)
- The Collaborative on Health and the Environment:**  
[www.healthandenvironment.org](http://www.healthandenvironment.org)
- The Eat Well Guide:** [www.eatwellguide.org](http://www.eatwellguide.org)
- Tiny Footprints:** [www.tinyfootprints.org](http://www.tinyfootprints.org)
- University of Pittsburgh Center for Environmental Oncology:**  
[www.environmentaloncology.org](http://www.environmentaloncology.org)
- Washington Toxics Coalition:** [www.watoxics.org](http://www.watoxics.org)
- Women's Voices for the Earth:** [www.womenandenvironment.org](http://www.womenandenvironment.org)

This booklet was developed based on the research in the first booklet in this series, *What We Know: New Science Linking Our Health and the Environment* and other peer-reviewed, published literature. This booklet is available with full scientific documentation on our website, at [www.womenshealthandenvironment.org/toolkit](http://www.womenshealthandenvironment.org/toolkit).





**WOMEN'S  
HEALTH**  
& THE ENVIRONMENT

[www.womenshealthandenvironment.org](http://www.womenshealthandenvironment.org)