

Healthy Homes



Healthy People

Introduction

Your home is a very important environment where you and your family may spend much of your time. This booklet has been developed by the Iowa Department of Public Health and the Environmental Protection Agency as a tool to help you make your home healthy. As you flip through the pages you will find a little information about a lot of different topics. You will also find phone numbers and Web sites for many different resources so you can learn more about a particular topic that interests you.

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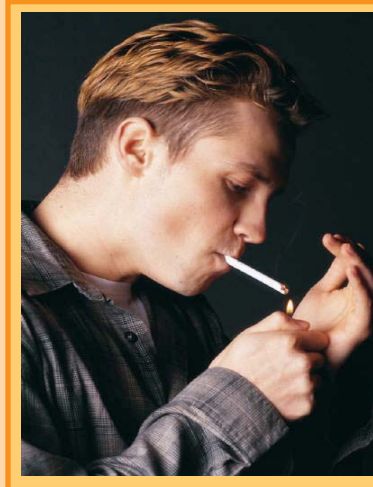
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First and Secondhand Smoke

Air Quality

First and secondhand smoke comes from a burning cigarette, cigar, pipe, or an exhaling smoker. Not only



is secondhand smoke an asthma trigger, but people exposed to it tend to have more ear and respiratory infections such as bronchitis and pneumonia. The Environmental Protection Agency (EPA) estimates that secondhand smoke is responsible for about

3,000 lung cancer deaths each year among nonsmokers in the U.S. About 800 of these are estimated to be from exposure to secondhand smoke at home, and 2,200 deaths are from exposure in work or social situations. Smoking greatly increases the risk of lung and heart disease. In addition, current smokers and former smokers are at greater respiratory risk from other exposures such as asbestos and radon. Smoking is also associated with an increased risk for Sudden Infant Death Syndrome (SIDS).

Actions you can take:

- Take the smoke-free pledge.
- Choose to smoke outside.
- Don't smoke around your children.
- Call Quitline Iowa (1-800-QUIT-NOW) for help.

Carbon Monoxide

Carbon Monoxide (CO) is a colorless, odorless gas that can cause sudden illness and death. Carbon monoxide is harmful when breathed because it robs the heart, brain, and other vital organs of oxygen. Depending on the level and length of exposure, carbon monoxide can cause shortness of breath, nausea, headaches, dizziness, vision problems, loss of coordination, mental confusion, fainting, or even death. In early 2007, 41 Iowans were poisoned by carbon monoxide. Most of the cases involved the use of generators, furnaces, gas stoves, or wood burners as a source of heat during power outages. All carbon monoxide poisonings could have been prevented by proper use of generators and gas powered appliances, annual gas appliance inspections, and maintenance of exhaust vents during storms. To help prevent carbon monoxide poisoning, buy a carbon monoxide detector with a battery backup and make sure to install it correctly. Look for detectors with the UL (Underwriters Laboratories) seal with an easy to hear alarm.



Air Quality

Actions you can take:

- Use carbon monoxide detectors.
- Properly vent heating systems, gas or propane stoves, ovens, and dryers.
- Never use barbecue grills indoors and never leave gasoline-powered motors running in the garage.
- Never use stove tops or ovens to heat a room.





Asthma

Air Quality



Asthma is a chronic, inflammatory airway disease of the lungs that causes breathing problems. Asthma affects

infants, children, adults, and the elderly. In 1999, approximately 47,000 children and 145,000 adults in Iowa were affected by asthma. Each year in Iowa, uncontrolled asthma results in approximately 12,000 hospitalizations, 45,000 emergency room visits, 37,000 unscheduled doctor's office visits, and

140,000 lost school days. The common symptoms of asthma are wheezing, shortness of breath, chest tightness, and coughing that produces mucus. For infants and young children, symptoms may include wheezing, persistent coughing, and recurring or lingering chest colds. Many causes of asthma attacks are commonly found in the home and include: dust, cigarette smoke, pet fur, mold, cockroaches, dust mites, and fumes from household items.

Actions you can take:

- Visit your doctor regularly and have an asthma action plan.
- Know your asthma triggers and do your best to avoid or reduce them.
- Call the The Lung HelpLine at (1-800-LUNG-USA) if you have additional questions.

Radon

Exposure to radon gas is the the leading cause of lung cancer in nonsmokers and the second leading cause in smokers. Radon is a naturally occurring radioactive gas that enters homes through cracks, holes, or spaces in the basement walls and floor. It is colorless, odorless, and tasteless. Studies show that at least two out of three homes in Iowa have elevated levels of radon and at least half of the homes have readings above EPA's action level of 4 pCi/L (picocuries per liter). Iowa's indoor radon level is almost eight times the national indoor average of 1.3 pCi/L. Radon exposure accounts for approximately 55 percent of a person's radiation dose in their lifetime, however, in Iowa it accounts for approximately 75 percent. The overall risk of exposure depends on how much and how long you have been exposed to radon gas.



Air Quality

Actions you can take:

- Test your home for radon.
- Call 1-800-206-7818 for inexpensive do-it-yourself radon test kits.
- Call the Radon Hotline at 1-800-383-5992 if you have questions.

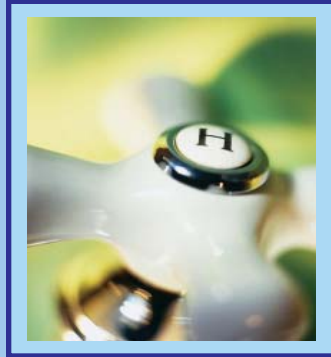




Drinking Water

Water Quality

Clean drinking water is necessary for good health.



High concentrations of bacteria, synthetic chemicals, and natural contaminants in drinking water have the potential to cause health problems. Public water supplies are monitored by the Iowa Department of Natural Resources (IDNR). Every

year, public water supplies are required to send a water quality report (Consumer Confidence Report) to the households they serve. In the rare case when there is a problem with the public water supply, the supplier must alert everyone who might be affected. Private wells should be tested annually to ensure the quality of the drinking water. In most cases, testing of private wells is the owner's responsibility. If you are interested in having your well tested, contact your local county health department to see if they participate in the Grants-to-Counties program. This program provides free water testing to Iowa residents whose primary source of drinking water comes from private wells.

Actions you can take:

- Read the Consumer Confidence Report from your local public water supply.
- Have the water in your private well test.
- Contact your local county health department or IDNR with questions.

Septic and Sewer

Wastewater treatment systems, such as an on-site septic or a community sewer, are necessary to properly treat and dispose of wastewater contaminants. Septic tanks should be properly constructed and maintained to ensure that they are getting rid of the treated water safely. The solid waste in the tank should be pumped out once every three to five years depending on the size of the tank and water usage. If your wastewater is treated at a public sewer, there are still ways you can help reduce the impact your wastewater has on the environment. Conserving water and being careful about what you put down the drain are easy ways to help. You should not flush non-biodegradable products down the toilet such as: coffee grounds, cigarette butts, diapers, or feminine products. In Iowa, local boards of health are responsible for sewer systems serving fewer than 15 people, while IDNR is responsible for the larger public systems. There may be financial assistance programs available in your county to aid in the replacement of inadequate, outdated, or failing septic systems.



Water Quality

Actions you can take:

- Conserve water and consider composting your food waste.
- Contact your local solid waste management agency or landfill to find details on how to properly dispose of hazardous wastes.
- Contact IDNR, your county's sanitarian, or your nearest Iowa State Extension Office for more information about wastewater management.

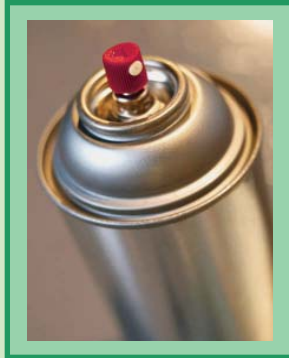




Pesticides

Toxics

Many pesticides pose some risk to humans, animals, and



the environment because they are designed to kill or otherwise adversely affect living organisms.

At the same time, pesticides are often useful because of their ability to control disease-causing organisms, insects, weeds, or other pests. In 2006, there were 1,984 cases of pesticide poisoning in Iowa. Most of these cases were related to improper handling of chemicals. The pesticide label contains information you should read and understand before you use the product. Poisoning from pesticides may cause nausea, dizziness or more serious harm such as: injury to the lungs or damage to the nervous, reproductive, endocrine or immune systems. The extent of these problems depends on the toxicity of the product and the amount and length of exposure. All pesticide product labels contain the word “danger,” “warning” or “caution” to indicate how hazardous the product is to people. Make sure to keep all pesticides and other household chemicals in secure places, safely out of the reach of children and pets.

Actions you can take:

- READ THE LABEL before you buy, use, or dispose of a pesticide.
- Always wash your hands after working with pesticides.
- Call POISON CONTROL at 1-800-222-1222, if you suspect poisoning.

Asbestos

Asbestos is a mineral found in some older building materials such as shingles, siding, pipe insulation, floor tiles, and ceiling panels (including acoustical tiles). Asbestos was also used in coatings, gaskets, vermiculite insulation, and in brake linings and disc-brake pads of some automobiles. Most materials that contain asbestos do not pose a health risk, as long as they are maintained



in good condition. In these cases, the safest, easiest, and least expensive option may be to just leave it alone. When building materials break down, are damaged or disturbed, tiny fibers of the mineral can be released into the air. If these

fibers are inhaled, they can cause serious lung damage, and even cancer. However, symptoms may not appear for up to 20 or more years after the exposure.

Toxics

Actions you can take:

- Do not disturb materials that you think may contain asbestos.
- Hire a state-certified asbestos contractor if you decide to have asbestos removed.
- Contact the IDNR Air Quality Bureau for more information on asbestos regulations.

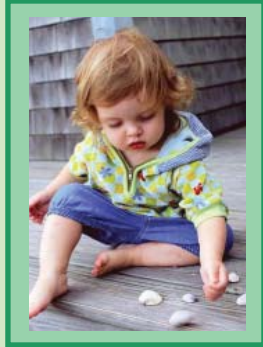




Lead

Toxics

Lead is found in many older Iowa homes. Before being



banned in 1978, lead was added to household paint. Lead poisoning is usually caused by lead-based paint found in homes built before 1960. About 60 percent of the homes in Iowa were built before 1960. Lead paint that is chipping, peeling or in high use areas (like window sills,

doors, or stairways) is considered a hazard. These hazards must be repaired to prevent lead poisoning and to help lead-poisoned children get better. One out of every seven Iowa children is lead-poisoned. This is three times the national average. Exposure to lead can result in lower intelligence in children and has been associated with behavioral problems and nerve damage. At very high levels, it can cause seizures, coma and even death. Even though children are much more sensitive, adults can also become lead-poisoned. The only way to tell if you or your child is lead-poisoned is to have a blood test. It is important to have your child's blood tested for lead at least once a year until they are six years old.

Actions you can take:

- Have your children tested for lead poisoning.
- Keep painted surfaces in good condition.
- Contact the IDPH Lead Poisoning Prevention Program Bureau (1-800-972-2026) if you have questions about lead.

Household Cleaners

Many household products contain ingredients that have the potential to harm your health and your environment if not used properly. Organic vapors or volatile organic compounds (VOCs), found in paints and solvents, can be very hazardous to your health. Possible health effects of exposure to VOCs include: irritation to the eyes, nose, and throat; damage to the liver, kidneys and central nervous system; and cancer. You should make sure to use these products in well ventilated areas. Products like motor oil and pesticides have the potential to pollute drinking water or nearby streams if poured onto the ground. Take care to dispose of any unused products in a safe and responsible manner (for example, take your unused products to a household hazardous waste collection facility.)



Toxics

Actions you can take:

- Read and follow product labels and use products in well-ventilated areas.
- Buy only the amount of product you will need.
- Contact your local landfill or hazardous waste collection facility.





Mold

Toxics

Mold grows in moist and damp environments. Mold spores, which are found almost everywhere in our environment, need moisture to grow. If mold spores from the air land on a wet surface in your home, they may just need a day or two to grow. Potential symptoms



associated with exposure to mold include allergic reactions, asthma, and other respiratory complaints. The only way to check for mold is through visual inspection. Once you have identified a mold issue, you will need

to remove it. Use a mild household detergent to clean mold off of solid surfaces such as concrete, tile, vinyl flooring, tub surrounds, and plastic toys. For items with a porous surface such as drywall, carpeting, furniture, bedding, clothing, books, and stuffed animals, the best thing to do is to throw the moldy item away. The key to controlling mold problems is to control the amount of moisture in your home. It does no good to clean up the mold if you haven't solved the moisture problem.

Actions you can take:

- Make sure to control the moisture in your home.
- Fix leaks, reduce indoor humidity, and increase ventilation in your home.
- Visit <http://www.cdc.gov/mold> for more information.

Housekeeping

A clean home is a healthy home. Weekly dusting and vacuuming can help to eliminate many health hazards in the home. When cleaning, pay particular attention to areas where moisture and condensation collect, such as under sinks, near toilets, and around bathtubs. Reducing clutter is also an important part of maintaining a clean house. Too much clutter allows dust to accumulate and creates hiding spaces for cockroaches and other pests. Mites, molds, and other allergens can be controlled through managing the indoor environment, especially keeping humidity under 50 percent. Some ways to limit the growth of mold and mildew in your home include: monthly cleaning or replacing of your heating and air conditioning filters, using dehumidifiers, keeping windows open when outside conditions allow, and using fans to increase ventilation. Cleaning products themselves can contribute to an unhealthy and unsafe home. Many household cleaners may be poisonous to young children, even in small quantities. Make sure to follow label directions and store all products safely.



Home Maintenance

Actions you can take:

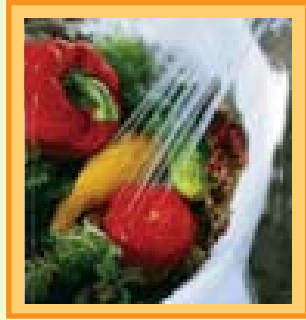
- Reduce clutter in your home.
- Vacuum and dust regularly.
- Clean or change furnace filters monthly.
- Follow directions on cleaning products and store them safely.





Food Safety

Food safety is an important part of maintaining a healthy home. Keeping your kitchen clean and handling food



properly will help lower the amount of bacteria found in your home. Make sure to always wash fruits and vegetables before you eat them. You should defrost meat, poultry, and fish products either in the refrigerator, the microwave, or in cold water that

is changed every 30 minutes. When cooking meat, use a meat thermometer to test for a safe internal temperature before eating. Do not eat raw or slightly cooked eggs, like you would find in cake or cookie batter. Any leftovers should be refrigerated as soon as possible, but no more than two hours after cooking. Keep your refrigerator's temperature at 40°F or less. After each meal, you should wipe down your kitchen counters and clean your dishes within two hours of use. If you are hand-washing your dishes, let them air dry before putting them away. Dish towels and sponges should be sanitized regularly, and you should wash your cutting board with soap and hot water after each use.

Actions you can take:

- Cook and store your food properly.
- Keep your kitchen and your dishes clean.
- Contact your nearest Iowa State Extension Office for more information on food safety.

Pest Management

An important part of maintaining a healthy home is pest control. Insects and rodents can create a very unhealthy home. It's been reported that cockroaches spread at least 33 kinds of bacteria, six kinds of parasitic worms, and at least seven other kinds of human pathogens. They can pick up germs on the spines of their legs and bodies wherever they crawl and then carry these germs into food or onto food surfaces. There are many ways you can reduce the number of pests that get into your home. These include: getting rid of outdoor clutter and debris from around the home (especially firewood and building materials), sealing up cracks and holes, getting rid of standing water, and keeping weeds and tree branches cut back from the house. If pests still manage to get into your home, make it unfriendly to them by keeping the house clean, eliminating clutter, storing food in proper containers, and throwing away waste. If you have a pest control problem that is not solved by regular cleaning, consider using traps or chemical pesticides. But try to use the least-toxic product available, and choose one that is designed specifically for the type of pests you have.



Home Maintenance

Actions you can take:

- Seal cracks and holes in and around the home.
- Properly store food and throw away trash.
- Contact your nearest Iowa State Extension Office for more information on pest management.





Immunizations

Health & Safety

Immunizations have saved millions of lives by preventing hundreds of millions of cases of disease. Vaccines teach the immune system how to recognize and fight bacteria and viruses before an infection happens. Some vaccines require only one dose, while others require several doses to provide complete protection.



Vaccines are available to protect against the following diseases:

Anthrax	Pertussis (Whooping Cough)
Cervical Cancer	Pneumococcal
Diphtheria	Polio
Hepatitis A	Rabies
Hepatitis B	Rotavirus
<i>Haemophilus Influenzae</i> Type b (Hib)	Rubella (German Measles)
Human Papillomavirus (HPV)	Shingles (Herpes Zoster)
Influenza (Flu)	Smallpox
Japanese Encephalitis (JE)	Tetanus (Lockjaw)
Lyme Disease	Tuberculosis
Measles	Typhoid Fever
Meningococcal	Varicella (Chickenpox)
Monkeypox	Yellow Fever
Mumps	

Actions you can take:

- Talk to your doctor or local public health agency to see if your child's immunizations are current.
- Contact the Healthy Families Line (1-800-369-2229) to find out where you can go for free or low-cost vaccinations.
- Contact the IDPH Immunization Program (1-800-831-6293) with questions about immunizations.

Water Safety

Drowning is the second leading cause of unintentional injury-related death among children ages 1 to 14. Drowning can happen in a matter of seconds. In 2006, there were 29 deaths due to drowning in Iowa. A small child can drown in a very small amount of water. Toddlers have drowned in garden ponds, bathtubs, buckets, and toilets. Keep children out of the bathroom, except when they are directly supervised, and never leave a child unattended in the bathtub. Keep the drain plugs out of the reach of children, so the tub or sink can not fill with water. Toilet seat locks, safety gates, and door latches can also be used to keep children away from potential drowning hazards. If you have a pool or live near a body of water, make sure to set strict rules about playing near those areas and never let your child swim unsupervised. Never leave a container with even a small amount of liquid unattended. You should empty these containers as soon as you are done with them. Parents and caregivers should take a CPR course; it can be a lifesaver.



Health & Safety

Actions you can take:

- Never leave your child unsupervised in a pool or bathtub.
- Always empty liquid out of containers, especially buckets, after use.
- Contact the American Red Cross (www.redcross.org) to enroll in a CPR course.





Fire Safety

Health & Safety

Fire is the second leading cause of accidental death in the home. In 2006, 21 Iowans died from fire-related injuries. Being prepared is the best way to protect your family from fire. Here are a few tips you should keep in mind: Supervise your children when they use kitchen appliances or any electrical devices. Use caution when operating space heaters. Place the heaters at least three feet from anything flammable. If you smoke, be especially careful around furniture, never smoke in bed, and be sure cigarettes are completely out before you toss them into the trash. Always keep matches and lighters out of children's reach. If you light candles, keep them out of the reach of children and pets. Never place a lit candle near curtains or furniture, and extinguish them before you go to bed or leave the house. Install smoke detectors on the ceiling or high on a wall, and make sure they are in working order. In case of a fire, plan an escape route and practice it often with your children.



Actions you can take:

- Always be aware of potential fire hazards in your home.
- Make sure all smoke detectors are placed properly and are in good working order.
- Plan an escape route and practice it with your children.

Reduce, Reuse, and Recycle

One of the ways to keep a healthy home is to produce less waste and to properly dispose of the waste you do produce. Do this by following the three Rs: Reduce, Reuse, and Recycle. Reduce the amount of trash you throw away and only buy as much of something as you need. The old adage “One man’s trash is another man’s treasure” defines reuse. Reusing items by repairing them, donating them to charity or selling them reduces waste. Recycling includes collecting recyclable materials that would otherwise be considered garbage, sorting and processing recyclables into raw materials, and manufacturing raw materials into new products. Recyclable materials typically include: paper, cardboard, glass, metal, plastic, yard waste, electronic equipment, and food waste. Collecting recyclables varies from community to community; however, there are four primary methods of recycling: curbside pick-up, drop-off centers, buy-back centers, and deposit/refund centers.



Go Green

Actions you can take:

- Produce less waste.
- Reuse or recycle the waste you do produce.
- Call 1-800-CLEANUP for more information on recycling in your community.





e-Waste

Go Green



Electronic equipment, sometimes referred to as “e-waste,” is an emerging and growing source of waste. These products include items like TVs, computer monitors, CPUs, keyboards, cell phones, printers, and copiers. Many natural resources, including metals and plastics, are found in e-waste and can be reclaimed. Computer monitors and older TV picture tubes contain an average of two to four pounds of lead (depending on their age) and require special handling when disposed. Electronics can also contain other hazardous substances including mercury, cadmium, and brominated flame retardants. When electronics are disposed of improperly, these toxic materials can present problems. Extending the life of your electronics or donating your most up-to-date and working electronics can save you money and saves valuable resources. Check to see what kind of electronics can be collected in your community. Many retailers and manufacturers will take their products back for free or for a fee.

Actions you can take:

- Dispose of electronic waste safely and correctly.
- Donate used electronics for recycling.
- Contact IDNR for more information about e-waste.

Energy Star®

Energy Star® is a program that helps businesses and individuals protect the environment through superior energy efficiency. Energy-efficient choices can save families about 30 percent on their energy bill and reduce greenhouse gas emissions. Most Energy Star® appliances offer the same features, style, and comfort as other appliances. Energy Star® qualified light bulbs are 75 percent more efficient than incandescent bulbs. Refrigerators use more energy than any other appliance in your home, but an Energy Star® qualified refrigerator uses about half the energy of a 10-year-old conventional model. Energy Star® qualified clothes washers use 50 percent less water and 70 percent less energy per load. An Energy Star® qualified programmable thermostat can automatically adjust the temperature of your home when you are away. Check with your local utility company to see what rebates and incentives are available for the purchase of Energy Star® qualified heating systems, air conditioners, light bulbs, and other appliances.



Go
Green

Actions you can take:

- Replace your old appliances with Energy Star® appliances.
- Replace your light bulbs with Energy Star® lighting.
- Contact your local utility company to ask about incentives for purchasing Energy Star® products or to schedule an energy audit.



National

Environmental Protection Agency

Web site: <http://www.epa.gov/region7>

Centers for Disease Control and Prevention

Web site: <http://www.cdc.gov>

National Pesticide Information Center

Phone: 1-800-858-7378

Web site: <http://www.npic.orst.edu>

American Red Cross

Web site: <http://www.redcross.org>

American Lung Association

Web site: <http://lungusa.org>

Consumer Product Safety Commission

Web site: <http://www.cpsc.gov>

Local

Iowa Department of Public Health

Web site: <http://www.idph.state.ia.us>

Iowa Department of Natural Resources

Web site: <http://www.iowadnr.com>

Iowa Poison Control Center

Phone: 1-800-222-1222

Web site: <http://www.iowapoinson.org>

Iowa State Extension

Web site: <http://www.extension.iastate.edu>

County Government Sites

Web site: <http://www.iowa.gov/state/main/govcounties.html>

Healthy Families Line

Phone: 1-800-369-2229

COLOR YOUR HEALTHY HOME.



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