

# ***A FAMILY GUIDE — 20 Easy Steps to Personal Environmental Health Now***



***Your Environment Is Your Health***

**It's not too much of an exaggeration to say, *Your environment is your health.***

**So to improve your health, see that your family's environment is a healthy one.**



***A health guide from the  
National Institute of Environmental Health Sciences***

*Of course, your environment isn't the only factor influencing your health. Genes play an important role, too, as your kids are sure to tell you. But, sorry, you can't choose your parents. You and your family can, on the other hand, do a lot about your personal environment—your surroundings, your exposures, your diet and your health habits—to extend your life and to improve your fitness and appearance.*

*For an example of how society has improved health by environmental action, you have to look no further than our protected reservoirs and water disinfection plants. The purification of city water supplies has been the most significant reason that the average life span has very nearly doubled over the past century or so. Millions and millions of us live longer and better because of clean water and because our country and industries have reduced our exposures to lead and other substances.*

*In addition to the environments we share, each of us has his or her own personal environment. Our personal environments can greatly influence our lifespans and how healthy we feel and are. Here are simple but important steps that you and your family can take—health-wise—about your environment....*



### ***Read the label on house and garden chemicals...***

Before you point that spray can, get your spectacles out and see if the directions or warnings have changed. They do, frequently. In fact, before you even buy a household or garden chemical, you can compare labels to be sure you're buying the safest product for your intended use. (You also may decide a bug-less, weed-less lawn isn't all that important.) Note whether a product is for inside or outside use, and what protections—rubber gloves, respirators and such—are needed. What does the product do to birds, dogs and barefoot children?

Read the labels for dry-cleaning solutions and other household chemicals, too. If a label says, "Open windows and ventilate," there's a reason. Likewise, read drug labels for warnings, and food labels for ingredients that don't agree with you, as well as to avoid

excess calories and fat. In a rhyming folder for teens, we say, "Read the label, Mabel."

Labels have recently been added to some arts and craft supplies regarding ingredients posing a cancer risk. Charcoal has a new warning label.

Prescription and non-prescription drugs often get new warning labels when a new risk shows up during use.

Food labels were reformed in 1993 to be more informative about fats and calories. A reprint, "Food Label Close-Up," tells how to make best use of the new food label format. To have it sent to you, call your nearest Food and Drug Administration office listed in the U.S. section of your telephone book.

### ***Turn down the \*!@# volume...***

While occasional loud noises may just reduce your hearing temporarily, continuous exposures

or very loud noises can cause permanent damage. Musicians know about efficient ear plugs that extend the life of their ears and perhaps their professional lives as well. You can buy them for your teens and for yourself. (You never know when your church is going to decide to do a production of “Jesus Christ, Superstar.”)

In addition to loud music, firecrackers and small arms fire, if close enough, can damage hearing, immediately or over time. That is, hearing may decline and/or there may be ringing, buzzing or roaring in the ears or head. Additional information is available at the National Institute on Deafness and Other Communication Disorders Clearinghouse, 1-800-241-1044, or e-mail [nidcd@erie.com](mailto:nidcd@erie.com).

Your teens may relate to a story about a young rock musician’s 40 percent hearing loss. “I was basically deaf for three years,” says Kathy Peck of The Contractions. Her story is available at [http://www.fda.gov/opacom/catalog/ots\\_ears.html](http://www.fda.gov/opacom/catalog/ots_ears.html).

### ***Put a carbon monoxide alarm in your home...***

Carbon monoxide from cars in garages, space heaters and other home heating sources can be deadly. You need one or more smoke alarms, frequently checked of course, but they won’t alert you to CO. For that, you need at least one carbon monoxide alarm. A few

dollars, a trip to the hardware and a few minutes’ installation are all you need to forestall a possible tragedy.

### ***Grow plants...***

Plants, including house plants, are not only nice to look at, there’s evidence they clean pollutants from the air.



### ***Put drugs, drain openers, and vitamins out of kids’ reach...***

The iron-containing vitamins that many women take, as well as prescription and nonprescription drugs like aspirin or other pain relievers can kill kids who think they’re candy. Lock them up (we don’t mean the kids but–) or put them out of reach. Same with paint thinners, detergents, drain openers and other yard and home chemicals.

Look in your telephone book for your local Poison Control Center and ask for information and for “Mr. Yuk” telephone number stickers to place on your telephone for use in a poisoning emergency. Or you can get the location of your nearest center at [http://www.poison.org/find\\_your\\_local\\_poison\\_center.htm](http://www.poison.org/find_your_local_poison_center.htm).

Getting this information now, before an emergency happens, can

be a good family lesson in prevention by planning ahead.

### ***Know the hazards of your job...***

Wherever you and your family members work there are risks. They may be physical, like falling off a ladder or lifting heavy packages, or chemical risks from petroleum products and solvents. In other occupations, computer use and other repetitive tasks pose risks of carpal tunnel syndrome. Identify the risks of your work and take the necessary precautions—whether a particular respirator, gloves, goggles or a particular posture.

You say you work at home? Work is work. You can fall, spill corrosives on your skin or breathe toxic fumes, if you’re not careful—and there may not be anyone around to help. When it comes to work accidents, you’re not home free.

### ***See if that ‘cold’ might be an allergy...***

You may think Johnny gets a lot of colds, but he may be allergic to dust mites, your cat, the pollen from trees, or cockroaches.

Plastic mattress and pillow covers, an exterminator and the elimination of dust-holders like curtains and rugs in your bedroom may help. Or, if it’s trees and pollen that get to you, air conditioning and air filters may provide relief.

The allergy may affect only one person in the family. (Being allergic

means reacting to substances that don't bother most other people.) The substance you react to can be natural substances such as molds or various manufactured chemicals.

Asthma is often provoked by reactions to such substances. For a fact sheet, "Asthma & its Environmental Triggers," call NIEHS at (919) 541-3345.

Or get "Something in the Air: Airborne Allergens," publication 98-495, from the National Institute of Allergy and Infectious Diseases by calling 301/496-5717 or e-mailing [ocpostoffice@flash.niaid.nih.gov](mailto:ocpostoffice@flash.niaid.nih.gov).

### ***Remember that lakes and streams aren't always pure...***

A crystal-clear stream or lake may be a nice place to wade or swim but may harbor bacteria that can turn your stomach inside out. When you and your family walk in the wild, take along your own drinking water or a disinfection kit.

To avoid waterborne diseases in less-developed countries, you may need to avoid tap water (even ice cubes) and to stick to bottled water, to cooked foods or to fruit that you peel yourself, such as bananas or oranges.

### ***Watch for lead, a continuing threat...***

A lot has been done to reduce our contact with the mind- and body-



destroying lead in our environment. Lead-added paints and gasolines are a bad memory. (Lead content in paint was greatly reduced in the 1950s. Later, in 1978, the addition of lead was eliminated.) But there remain many deteriorating, pre-1950 buildings with flaking lead paint that contaminates the ground and ends up on children's hands and toys as dust. Your family may track in lead dust from a demolition site down the street.

If there's a chance a child in your family is being exposed to lead, a simple blood test can alert you before lead poisoning causes significant learning and behavior problems. More than one fifth of African-American children living in housing built before 1946 have elevated blood lead levels. For more information, talk to your doctor or call 1-800-LEAD-FYI. A short booklet called "Lead and Your Health" can be obtained by calling NIEHS at 919/541-3345 or by e-mailing your request to [booklet@niehs.nih.gov](mailto:booklet@niehs.nih.gov).

Even low doses of lead can affect a child's development—causing problems with learning, remembering and concentrating. Keep the toddlers away from lead by cleaning up the flakes and dust regularly and either carefully removing the source or walling it in.

Good nutrition, including plenty of milk products and other sources of calcium, may offer some protection from lead.

Occasional high-level lead poisonings still occur from craft-style lead-glazed pottery cups and dishes. Questionable products are best used for display, rather than food or drink.

### ***Test for radon...***

Radon is a gas you can't smell in your home, but you can test for it. A naturally occurring gas that seeps out of rocks and soils, it comes from uranium buried in the earth and is itself radioactive.

There is evidence of an elevated lung cancer risk among miners exposed to radon, especially miners who smoke. Radon also seeps into homes and collects in varying amounts. To assess the possible danger, the Institute of Medicine convened a panel of experts to review the data. These experts said the lung cancer risk from radon in homes is small compared to that from tobacco products. Of about 160,000 annual lung cancer deaths, radon-related deaths were estimated to probably total 15,400 to 21,800, mostly because of a synergism between smoking and radon. Fewer than 3,000 deaths were estimated as being radon-related among nonsmokers. But, say, smokers are people too.

The Harvard Center for Risk Analysis argues that the weight of evidence is that radon in homes may pose a greater risk to more people, mostly smokers, than die of accidental falls, poisonings, home fires and burns, or accidental discharges of firearms. Though the risk can be debated, it is clear that a radon test is cheap, and that, when found, high radon levels can often be turned into low levels by simple ventilation. For more information, call 1-800-SOS-RADON.

### ***Don't get badly overheated...***

Exercise is a way to keep fit, but when you or a family member competes or runs the dog in hot weather, try to do it in the cooler hours and/or have water handy

and drink plenty of it. Keep some available for Fido and the cats, too.

Heat is a serious threat: Nearly 1,700 people lost their lives from heat-related illnesses in a big heat wave in 1980, and the forecast is for Global Warming. For more details on good health in the heat, visit <http://www.cdc.gov/nceh/programs/emergenc/prevent/heat/heat.htm>.



### ***Know about ozone...***

Ozone is a highly reactive form of oxygen—a linkage of three atoms of oxygen instead of the usual two—that occurs when there are a lot of vehicle exhaust and factory emissions. It accumulates when the air is stagnant.

Ozone can irritate and damage tissue in the lungs, nose and throat, and can make breathing hard, especially if you exercise outdoors during its peaks. Watch for ozone and other air quality alerts in your newspaper, TV and radio weathercasts. During alerts, jog in parks away from auto traffic, when possible. Especially if you have asthma, bronchitis or

emphysema, limit the time you spend outdoors when ozone levels are high. For more on ozone, e-mail us at [booklet@niehs.nih.gov](mailto:booklet@niehs.nih.gov) or visit <http://www.niehs.nih.gov> or <http://www.publicaffairs.noaa.gov/grounders/ozo1.html>.

Since evaporating gasoline adds to the ozone problem, when you service your car or mower, don't overfill the tank and spill the gasoline.

### ***Wash your hands...***

Whether you've been sneezing, handling chicken or other raw poultry or meat... have been to the toilet or changed a diaper... or are preparing to deliver a baby or perform brain surgery, washing your hands and environs (such as your cutting board in the kitchen) is a most important way to prevent the spread of germs and infection. In many of these situations, it is the most important preventive measure you can take. It's as simple as that.

You may not be doing surgery, but more than 6.5 million cases of "tummy flu" or worse occur each year, often because hands and food implements aren't washed often enough, especially after handling poultry. To start youngsters out with good hand-washing habits, your closest FDA office (listed in the U.S. government pages of the telephone book) can provide the "Food Safety Coloring Book" for

your kids. Or download it at <http://www.foodsafety.gov/~dm/cbook.html>.

### ***Watch pesticide drift...***

If you spray your roses upwind of your tomatoes, you are likely to dose your family with unapproved pesticides. Some pesticides are for non-food use only and have not been proved safe for foods.

### ***Eat a good diet...***

Not just an apple but five or more servings of fruits and vegetables a day may help keep the doctor, and cancer and other disorders away. For a booklet on the value of "five a day" or for other information on cancer and diet, call 1-800-4-CANCER.

### ***Take a vitamin...***

The federal government recommends all females of childbearing age take 400 micrograms (0.4 milligrams) of folic acid, one of the B vitamins, daily, to reduce the chances of having a child with a neural tube defect, a disorder in which the spine is open and easily damaged or even the child's brain is missing. The vitamin is needed regularly, before as well as during pregnancy, and it's hard to get the amount needed from an ordinary diet. But women and girls can get the additional folic

acid they need by taking a multi-vitamin pill. Get more information at <http://www.modimes.org>.

### ***You can't avoid all accidents, but you can minimize the results...***

Some good safety habits can save the lives and health of your family. Race car drivers know that wearing seat and shoulder belts can reduce risk by 45-50 percent. Other injury-preventing habits that athletes and regular folks alike take: wearing bike helmets and other protective athletic gear, looking ahead of time for the fire exits in a theater or hotel, checking your smoke and CO detectors at home to make sure they beep, locking hunting rifles and other firearms away from kids and others who might misuse them, and avoiding unlit and dangerous areas (and lit and dangerous people.) Carry a first aid or snake bite kit when in the wild. Find a partner or two for climbing, swimming or other exploits—someone to get you out of a tight spot or to go for help.

### ***Respect sex...***

More than 13 million Americans—two thirds of them under age 25—have sexually transmitted diseases, including HIV infections.

That's a pretty large monument to ignorance, as well as to youthful hormones and lack of restraint. For some young people, an infection may mean they'll never be able to have children. Other infections can lead to

cervical cancer (cancer of the neck, of the uterus, or womb) or, in the case of HIV infections, early death.

Young people can only be 100% safe if they avoid sex—waiting until they're prepared to have a lasting relationship with another uninfected individual. But sexually active teens and young adults can gain considerable protection by correctly and consistently using a latex condom. That's the advice of federal health agencies. You should, er, discuss this with your kids before the fact—or at least see that they get responsible information. Some parents fear that they may promote sexual activity by discussing it. However, study after study shows that preparing children with good sex education does not promote earlier sex, and several studies suggest this preparation may delay the onset of sex. For additional information, call the National STD Hotline at 1-800-227-8922, or the National AIDS Hotline at 1-800-342-AIDS, (in Spanish, 1-800-344-SIDA) or go to [http://www.cdc.gov/nchstp/hiv\\_aids/pubs/facts.htm](http://www.cdc.gov/nchstp/hiv_aids/pubs/facts.htm).

### ***Don't puff or chew...***

Just when some adults are getting a second wind, others of the same age are dying of tobacco-related lung cancer, or are crippled by other heart and lung problems.

New smokers—young people—may worry more about the smell of their breath, about their teeth getting dark and about getting wrinkles than about dying.



Yet, smoking cigarettes, cigars and pipe tobacco kills more people than AIDS, alcohol, drug abuse, car crashes, murders, suicides and fires combined. For many, there's also a

feeling of helplessness, of an addiction they can't break, at least alone. For help in quitting, call 1-800-4-CANCER, or the Office on Smoking and Health, 1-770-488-5705.

### ***Watch out for the sun and the sunlamps...***

It's not just the temporary pain of a sunburn you need to worry about. A youngster's burns may mean not only wrinkles but serious trouble, years later. Ordinary skin cancers can usually be surgically removed without difficulty, but melanomas (malignant moles) can kill, if not caught early.

Ultraviolet light from the sun or from sunlamps and sunbeds are also linked to cataracts that dim vision. Hats and other covers and

ultraviolet-blocking sunglasses all can help.

For more on what melanomas look like call 1-800-4-CANCER.

***The environmental actions listed are all about prevention. Protecting yourself from your environment (and protecting your environment from abuse)—these are preventive health measures. For your family's good health.***

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Comments? Additional environmental health tips? Write us at the National Institute of Environmental Health Sciences, Office of Communications and Public Liaison, PO Box 12233, Research Triangle Park, NC 27709. We would like to hear from you!

The National Institute of Environmental Health Sciences contributes information on health and research to two federal health information websites which you and your family may want to consult for reliable information: <http://www.healthfinder.gov> and <http://www.nih.gov/health>.

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“Easy Steps to Personal Environmental Health Now” can be found under publications at <http://www.niehs.nih.gov> with direct links to sources of further information. A children's version, using rhymes of popular names is on the NIEHS website's Kids Page. A slangy, companion publication for teens called “It's Your Scene, Teen-Your Environment is Your Health” (NIH publication #99-4654 -Teen) can be ordered via the NIEHS web page or by writing Publications EC-12, NIEHS, PO Box 12233, Research Triangle Park, NC 27709.

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***AND IT RHYMES:***

*(From It's Your Scene, Teen)*

*Read the label, Mabel:*

*Turn it down then, Townsend:*

*Leo, test for CO:*

*Grow some plants, Vance:*

*Put drugs high, Di:*

*Know the dangers of your job, Rob:*

*Your 'cold' might be your cat, Matt:*

*Don't drink from the lake, Blake:*

*Get rid of the lead, Ted:*

*Hey, Ron, what about radon?*

*Beware the heat, Pete:*

*Mind the ozone, Tyrone:*

*Don't overfill, Bill:*

*Wash your hands, Hans:*

*Watch the drift, Cliff:*

*Eat a good diet, Wyatt:*

*Take a vitamin pill, Jill:*

*Put the belt on, Shelton:*

*Use latex if you play, Tex:*

*Don't puff or chew, Stu:*

*And don't burn, Fern.*