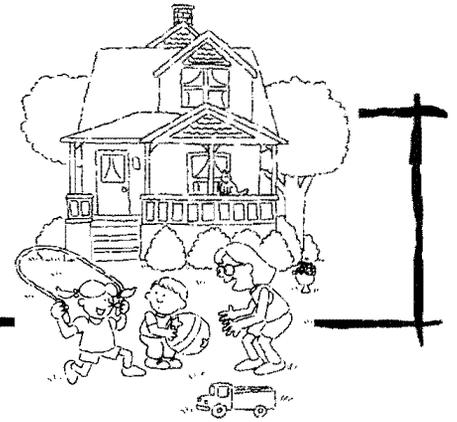


# Your Child and the Environment



Environmental dangers are everywhere. Most of these dangers are more harmful to children than adults. However, there are things you can do to reduce your child's contact with them. Read more to learn about how to protect your family from environmental dangers.

## Where children live

Air pollution is not just a problem outside. There can be things in the air inside your home that can harm your child. There can also be hazards found in the dust and dirt in or around your home and yard. The following are examples of hazards found where children live:

### Asbestos

Asbestos is a natural fiber that was often used for fireproofing, insulating, and soundproofing between the 1940s and 1970s. Asbestos is only dangerous when it becomes crumbly. If that happens, asbestos fibers get into the air and are breathed into the lungs. Breathing in these fibers can cause chronic health problems, including a rare form of lung cancer. Asbestos can still be found in some older homes, often as insulation around pipes. Schools are required by law to remove asbestos or make sure that children are not exposed to it.

#### What you can do

- ✓ Don't allow children to play near exposed or crumbling materials that may contain asbestos.
- ✓ If you think there is asbestos in your home, have an expert look at it.
- ✓ If your home has asbestos, use a certified contractor to help solve the problem. You could have more problems if the asbestos isn't contained or removed safely.

### Carbon monoxide

Carbon monoxide (CO) is a toxic gas that has no taste, no color, and no odor. It comes from appliances or heaters that burn gas, oil, wood, propane, or kerosene. Carbon monoxide poisoning is very dangerous. If left unchecked, exposure to CO can lead to memory loss, personality changes, brain damage, and death.

#### What you can do

- ✓ Call the Poison Help number at 1-800-222-1222 if you suspect CO poisoning.
- ✓ See your doctor right away if everyone in your house has flu-like symptoms (headache, fatigue, nausea) at the same time, especially if the symptoms go away when you leave the house.
- ✓ Put CO detectors on each floor in your home.
- ✓ Never leave a car running in an attached garage, even if the garage door is open.
- ✓ Never use a charcoal grill inside the home or in a closed space.
- ✓ Have furnaces; woodstoves; fireplaces; and gas-fired water heaters, ovens, ranges, and clothes dryers checked and serviced each year.
- ✓ Never use a gas oven to heat your home.

### Household products

Many cleaning products give off dangerous fumes or leave residues. These products can be harmful if they are not thrown out properly (for example, if they are left in the garage).

#### What you can do

- ✓ Only use these products when needed.
- ✓ Always have enough ventilation when using these products.
- ✓ Store them in a safe place.
- ✓ Bring empty containers to your local hazardous waste disposal center.

### Lead

Lead is one of the most serious environmental problems to children. Your child can get lead in her body if she swallows lead dust, breathes lead vapors, or eats soil or paint chips that have lead in them. Lead poisoning can cause learning disabilities, behavioral problems, anemia, or damage to the brain and kidneys.

Lead is most often found in

- Paint that is on the inside and outside of homes built before 1978
- Dust and paint chips from old paint
- Soil that has lead in it (particularly around older homes or by businesses that used lead)
- Hobby materials such as paints, solders, fishing weights, and buckshot
- Food stored in certain ceramic dishes (especially if dishes were made in another country)
- Older painted toys and furniture such as cribs
- Tap water, especially in homes that have lead solder on pipes
- Mini-blinds manufactured outside the United States before July 1997

A child who has high lead levels may not look or act sick. The only way to know if your child has lead in her body is with a blood test.

#### What you can do

If your home was built before 1978, test the paint for lead. If lead paint is found, get expert advice on how to repair it safely. Unsafe repairs can increase your child's risk for exposure to lead.

- ✓ Don't scrape or sand paint that may have lead in it.
- ✓ Clean painted areas with soap and water and cover peeling, flaking, or chipping paint with new paint, duct tape, or contact paper.
- ✓ Make sure painted areas are repaired before putting cribs, playpens, beds, or high chairs next to them.
- ✓ Check with your health department to see if the water in your area contains lead.
- ✓ Always use cold water for mixing formula, cooking, and drinking. Run the water for 1 to 2 minutes before each use.
- ✓ Ask your pediatrician if your child needs a lead test. A blood test is the only accurate way to test for lead poisoning.
- ✓ Encourage your child to wash his hands often, especially before eating.
- ✓ Give your child a healthy diet with the right amounts of iron and calcium.
- ✓ Before moving into a home or apartment, check for possible lead problems.
- ✓ Never live in an old house while it's being renovated.

### Molds

Molds grow almost anywhere and can be found in any part of a home. Common places where molds grow include the following:

- Damp basements
- Closets
- Showers and tubs
- Refrigerators
- Air conditioners and humidifiers
- Garbage pails
- Mattresses
- Carpets (especially if wet)

Children who live in moldy places are more likely to develop allergies, asthma, and other health problems.

#### What you can do

- ✓ Keep the surfaces in your home dry.
- ✓ Throw away wet carpets that can't be dried.
- ✓ Keep air conditioners and humidifiers clean and in good working order.
- ✓ Use exhaust fans in the kitchen and the bathroom to help keep the air dry.
- ✓ Avoid using items that are likely to get moldy, like foam rubber pillows and mattresses.

### From-the-job hazards

From-the-job hazards brought into the home can be dangerous to children. This can happen when parents who work with harmful chemicals bring them into the home on their skin, hair, clothes, or shoes. People who work in the following places are most at risk:

- Painting and construction sites
- Car body or repair shops
- Car battery and radiator factories
- Shipyards

#### What you can do

- ✓ Find out if you or any adult in your home is exposed to lead, asbestos, mercury, or chemicals at work.
- ✓ If so, shower and change before coming home.
- ✓ Wash work clothes separately from other laundry.

### Radon

Radon is a gas that can be found in water, building materials, and natural gas. It has no taste, no color, and no odor. Radon can seep into a home through cracks in the foundation, floors, and walls. High levels of radon have been found in homes in many parts of the United States. Breathing in radon doesn't cause health problems at first. However, over time it can increase your risk of lung cancer. Radon is believed to be the second most common cause of lung cancer (after smoking) in the United States.

#### WHAT YOU CAN DO

- ✓ Check with your health department to see if radon levels are high in your area.
- ✓ Test your home for radon. Home radon tests don't cost much and are easy to use. The results can be analyzed by a certified laboratory. You can't test yourself or your child for radon exposure.

### Secondhand smoke

Secondhand smoke is also called environmental tobacco smoke (ETS). This is the smoke breathed out by a smoker or from the tip of a burning cigarette, pipe, or cigar. Children are exposed to secondhand smoke any time they are around

someone smoking a cigarette, pipe, or cigar. The chemicals in secondhand smoke can cause cancer. In fact, secondhand smoke has been linked to 3,000 lung cancer deaths each year in people who don't even smoke!

#### What you can do

- ✓ If you are a smoker, get help so you can quit! (Children whose parents smoke are more likely to try smoking than those whose parents give clear messages that smoking is not healthy.)
- ✓ Remove your children from places where smoking is allowed, even if no one is smoking while you are there.
- ✓ Make your home and car smoke-free.

### What children eat and drink

#### Drinking water

Children drink 5 to 10 times more water for their size than adults. Most of this water is tap water. Tap water in most areas is protected by law. However, small water supplies, such as from private wells, are not.

Many people use bottled water because they think it's better than tap water. Some brands are better. However, other brands may only be tap water that's bottled and sold separately. Bottled water costs a lot more than tap water, but may be needed in some areas. Children need fluoride for good dental health. Only some brands of bottled water have fluoride, so read the labels.

Some of the things in drinking water that can make children sick include the following:

- Germs
- Nitrates
- Heavy metals
- Chlorine
- Radioactive particles
- By-products from cleaning products

The quality of water in the United States is among the best in the world, but problems do happen. County health departments and state environmental agencies are the best sources of information about the water where you live.

#### What you can do

- ✓ Find out where your water comes from. If you are on a municipal water supply, the water company must tell you what is in the water. If your water is not regulated or you have a well, have it tested each year.
- ✓ Always drink and cook with cold water. Contaminants can build up in water heaters.
- ✓ If you are not sure of your plumbing, run the water for 1 to 2 minutes each morning before you drink or cook with water. This flushes the pipes and reduces the chances of a contaminant getting into your water. In some areas more time is needed to flush water through the pipes. Ask your pediatrician or health department about recommendations specific to your area.
- ✓ If you have well water and a baby younger than 1 year, have your water tested for nitrates *before* giving it to your baby. Breastfeeding, using ready-to-feed formula, or using bottled water with powdered formula is wise until you know if your water is safe. If you have questions, call your local health department.
- ✓ If you think your water may have germs, you can kill most of them by boiling the water and cooling it before use. Do not boil water for longer than 1 minute. This can cause a buildup of toxins and metals in the water. Water filters installed on faucets or pitchers that have built-in filters may also help remove harmful contaminants from tap water.

**Mercury**

Mercury that gets into oceans, lakes, rivers, and ponds can get into the fish we eat. Mercury can also be found in many other places. Because mercury can be toxic, especially in large doses, every effort should be made to reduce exposure to children and pregnant women.

**What you can do**

- ✓ Don't eat shark, swordfish, king mackerel, or tilefish because they contain high levels of mercury. Also, limit your child's intake of canned light tuna, shrimp, pollock, salmon, cod, catfish, clams, flatfish, crabs, and scallops to 2 meals per week. Albacore (white) tuna should be limited to 1 meal per week. Pregnant or nursing women should also limit the amount of these fish they eat.
- ✓ Check with local advisories about the safety of fish caught in your area. If no advice is available, only give your child up to 1 meal per week of fish from your local waters.
- ✓ Remove mercury thermometers from your home. See if your community has a thermometer exchange program for the proper disposal of these thermometers.
- ✓ The material traditionally used to fill dental cavities contains small amounts of mercury. There is no scientific proof that this is dangerous to children. However, if this worries you, talk to your dentist about other treatment options.
- ✓ Talk with your pediatrician if your family uses mercury in folk remedies or in cultural traditions (such as Santería [religion originating in Cuba]). To do their part, drug companies have stopped using mercury as a preservative in vaccines (even though it was used only in very small amounts). All vaccines for children, except some influenza (flu) vaccine and Td (tetanus-diphtheria—containing) vaccines, are now free of mercury.

**Pesticides**

Pesticides are chemicals used to kill insects, weeds, and fungi. Many are toxic to the environment and to people. Too much exposure to pesticides can cause a wide range of health problems.

**What you can do**

- ✓ Wash all fruits and vegetables with water.
- ✓ Buy fruits and vegetables that are in season because they are less likely to be heavily sprayed.
- ✓ If possible, eat foods that are grown without the use of chemical pesticides.
- ✓ Use nonchemical pest control methods in your home and garden.
- ✓ Keep all pesticides out of children's reach to avoid accidental poisoning.
- ✓ Tell neighbors before you spray outdoors.

**Are electric and magnetic fields safe?**

All electric appliances like microwaves, computers, and TVs produce electric and magnetic fields (EMFs) when they are used. There is some concern that exposure to these fields may cause health problems, including cancer. However, more research is needed and a definite link between cancer and EMFs has not been made.

Until more is known about EMFs, reduce your child's exposure by

- Keeping your child away from microwaves while they are in use
- Having your child sit at least 3 feet from the TV screen
- Moving electric clocks, radios, and baby monitors away from your child's bed
- Not using electric bedding (blankets, mattress pads, heating pads, and waterbed heaters)

**Where children play**

**Art supplies**

Art supplies can cause health problems in children who use them. While older children can usually use these products safely, most younger children and some children with disabilities cannot. Harmful art supplies can include the following:

- Rubber cement
- Permanent felt-tip markers
- Pottery glazes
- Enamels
- Spray fixatives
- Prepackaged papier-mâché

**What you can do**

- ✓ Use only nontoxic art supplies.
- ✓ Read and follow all instructions carefully.
- ✓ Always use products in a well-ventilated room.
- ✓ Look for the ACMI (Art & Creative Materials Institute Inc.) nontoxic seal or other information on the label that says the product is safe for children.
- ✓ Talk with your school to make sure only safe art supplies are being used.

**Insect repellent**

Most insect repellents include a chemical called DEET (diethyltoluamide). This chemical is absorbed into the skin and can harm children.

**What you can do**

- ✓ Choose an insect repellent that is made for children. Make sure the brand you choose has no more than 30% DEET for infants older than 2 months and older children. Do not use DEET products on infants younger than 2 months.
- ✓ Apply insect repellent to clothing when possible, rather than directly on the skin.

**Lawn and garden fertilizers**

Lawn and garden fertilizers can be harmful if children come in contact with them while playing in the yard. Many of these products are made with chemicals (pesticides) that are known to cause health problems, especially in children.

**What you can do**

- ✓ Use these chemicals only when needed.
- ✓ Read and follow the instructions carefully.
- ✓ Keep your child off a treated lawn until it has been watered twice and the odor of the chemicals is gone.

**Ozone**

Ozone is colorless gas found in the air and is harmful the closer it gets to the ground. Ozone levels are highest in summer, in the late afternoon. Ozone pollution can cause breathing problems in children with asthma.

**What you can do**

- ✓ Keep your child indoors as much as you can when there's a health advisory or smog alert.
- ✓ Take public transportation, carpool, walk, or ride a bike instead of driving when you can, or buy a fuel-economic car. This will help reduce the amount of air pollution caused by cars.

**Sun**

The sun is the main cause of skin cancer in the United States. Children's skin can burn easily. Sunburns can be very painful and can cause a child to become sick. The sun's rays can also damage the eyes.

## Safety and Prevention

### What you can do

- ✓ Keep babies younger than 6 months out of direct sunlight.
- ✓ Choose a sunscreen made for children with a sun protection factor (SPF) of at least 15.
- ✓ Use hats and sunglasses to protect your child's head and eyes from the sun.
- ✓ Try to keep your child in the shade between 10:00 am and 4:00 pm. This is when the sun's rays are strongest.
- ✓ Dress your child in lightweight clothing that covers as much of the body as possible.

### To learn more

#### Agency for Toxic Substances and Disease Registry

800/232-4636

[www.atsdr.cdc.gov](http://www.atsdr.cdc.gov)

#### American Lung Association

800/LUNGUSA (800/586-4872)

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

#### Environmental Protection Agency

202/272-0167

[www.epa.gov](http://www.epa.gov)

#### Food and Drug Administration

888/INFO-FDA (888/463-6332)

[www.fda.gov](http://www.fda.gov)

#### Health Resources and Services Administration Poison Control Program

[www.poisonhelp.hrsa.gov](http://www.poisonhelp.hrsa.gov)

#### National Coalition Against the Misuse of Pesticides

202/543-5450

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

#### National Pesticide Information Center

800/858-7378

[www.npic.orst.edu](http://www.npic.orst.edu)

### Hotlines

#### EMF InfoLine

800/363-2383

#### National Lead Information Center

800/424-LEAD (800/424-5323)

#### National Radon Hotline

800/SOS-RADON (800/767-7236)

#### Poison Help

1-800-222-1222

#### Safe Drinking Water Hotline

800/426-4791

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The information contained in this publication should not be used as a substitute for the medical care and advice of your pediatrician. There may be variations in treatment that your pediatrician may recommend based on individual facts and circumstances.

From your doctor

### Remember

Whether it is inside or outside, children love to explore their environment. This natural curiosity is an important way for children to learn. Be aware of the possible dangers that your child may face. Keep in mind that not all environmental dangers can be avoided completely, and do what you can to reduce your child's exposure.

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