A Healthy Home for Everyone: The Guide for Families and Individuals

How do you define “home”?

a. The structure that shelters my family from the outdoors and bad weather
b. A private place of our own
c. The space where I raise my family
d. _________________(fill in the blank)

Our homes fulfill many of our daily needs.

What is a healthy home?

It is all of the above, and it is designed, built, and maintained to support our health.

Most people spend at least half of every day inside their homes. A healthy, safe, affordable, and accessible home supports their basic needs and protects them from illness and injury.

Historically, a home’s main purpose has been to provide people with such basics as walls to keep out animals and a roof to keep out rain. As health knowledge increased, people added openings to let in fresh air and to let out smoke and fumes. By the 1800s, health officials had learned that to help prevent disease, a home had to have safe water and ways to treat waste.

The purpose of this booklet is to provide information about the connection between housing and health. You will find action steps for making your home healthy, definitions for words used in the booklet, and a resource section to find more information about a making your home a healthy home.
# The Bad News: An unhealthy home is connected to poor health

Our homes can sometimes make us sick. Science tells us the following about unhealthy housing:

<table>
<thead>
<tr>
<th>This Cause:</th>
<th>Can Become this Illness or Condition:</th>
<th>How to Prevent this Illness or Condition:</th>
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</thead>
<tbody>
<tr>
<td>In homes built before 1978: • Peeling paint • Sloppy repair/paint work</td>
<td>Lead poisoning – causes lower IQ and other learning and behavior problems in children</td>
<td>• Fix lead hazards • Work safely and check for dust • Clean up the site after any work is finished</td>
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<tr>
<td>Smoking, secondhand smoke</td>
<td>Asthma, respiratory problems, sudden infant death syndrome (SIDS), lung cancer, and deaths from fires</td>
<td>• Don’t smoke in the home • Don’t let anyone else smoke in the home</td>
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<tr>
<td>Radon</td>
<td>Lung cancer</td>
<td>• Install fan systems that can remove radon or vapor barriers that can block radon</td>
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<tr>
<td>Lack of a working smoke alarm</td>
<td>Fire injuries and deaths</td>
<td>• Install smoke alarms on every floor of the home • Use long-life smoke alarms with lithium-powered batteries • Test all smoke alarms every month</td>
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<tr>
<td>Moisture and mold</td>
<td>Asthma and respiratory problems</td>
<td>• Fix water leaks • Keep house well ventilated</td>
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<tr>
<td>Pesticide use</td>
<td>Acute poisonings and possible chronic conditions such as cancer, low birth weight and prematurity</td>
<td>• Keep pests out by cutting off their water, food, and access • Use pesticides wisely • Store pesticides properly</td>
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**Many homes have unhealthy conditions:**
- 1 in 16 have high radon levels
- 1 in 10 have water leaks
- 1 in 6 have structural problems
- 1 in 4 have lead-based paint
- 1 in 4 do not have a working smoke alarm

**The housing problems that can make us sick are interconnected:**
- Lack of ventilation (airflow) keeps poisons in and builds up moisture.
- Moisture causes deteriorated paint, attracts and sustains pests, and leads to mold.
- Pests make holes that become leaks and make people use poisonous pesticides.
Unhealthy housing conditions may seem like cosmetic problems. But hazards can lurk where you least expect them: peeling paint can contain lead, too much moisture can result in mold, and clutter can shelter insects and rodents. And some deadly hazards are invisible, such as carbon monoxide and radon.
The Good News: A healthy home prevents injury and disease

A healthy home has
Good indoor air—it is smoke-free and CO free, and has good ventilation.

Safe water—a clean supply and water temperature set at 120°F.

A healthy home is
Free from lead, high levels of radon, and excess chemicals.

A solid structure that keeps out pests, moisture, noise, and pollution.

Safe from injuries—it has smooth floor surfaces, stair handrails, adequate lighting, and safety devices.

A home is a system
To have a healthy home and keep it healthy, pay attention to the whole home.

Solutions to housing problems are interconnected
One fix can help with more than one problem:
Preventing moisture can keep out pests and keep paint intact.
- Ventilating well can get rid of poisons, keep moisture down, and bring in fresh air.
- Installing a vapor barrier can keep out radon and prevent moisture.
- Replacing old windows can reduce lead-based paint, save energy, and improve ventilation.

Everyone can have a healthy home
The following pages show action steps to take in each room and in each area of the home.
Healthy Homes Action Steps for Bedrooms, Living Rooms, and Family Rooms

Install smoke and carbon monoxide alarms:
• Install smoke alarms on every floor and near all rooms family members sleep in.
• Test smoke alarms monthly; Change alkaline batteries annually.
• Install carbon monoxide alarms near bedrooms.

Do not smoke or allow anyone else to smoke in the home.

If your home was built before 1978:
• Test your home for lead paint.
• Fix peeling or chipping paint using lead-safe work practices.
• Use safe work practices when painting, remodeling, and renovating to prevent spreading lead dust.

Clean up clutter—it provides places for rodents and insects to nest and can be a trip hazard.
• Keep floors clear of electrical cords and clutter such as shoes, clothing, and children’s toys.

Special steps to prevent your child from being injured:

• Make sure cribs, playpens, and play equipment are safe.
• Keep the crib free of soft objects or loose bedding such as pillows, quilts, bumper pads, or stuffed toys.
• Place an infant on his or her back to sleep.
• Use cordless blinds and shades or tie the cords out of reach of children.
• Place covers on electrical outlets.
• If a firearm is kept in the home, it should be stored unloaded and locked in a secure container—inaccessible to children.
Healthy Homes Action Steps for Kitchens

Never use the stove or oven to heat the house.

Use a range hood fan or other kitchen exhaust fan. The best fans vent outside; a fan that is not vented outside keeps the poisons and moisture in the house.

Install a carbon monoxide alarm:
• Test it regularly.
• Change the batteries at least once a year; a good time is when clocks are reset forward or back.
• Never leave food unattended on the stove.
• Avoid wearing clothes with long, loose fitting sleeves when cooking.

Use safe cleaning and pest control products. If you cannot avoid using harmful products:
• Keep them locked up away from children.
• Read the labels and follow directions for use.
• Dispose of products safely.

Stop cockroaches, ants, and mice without pesticides:
• Keep them out—seal openings to the outside and between rooms.
• Starve them—put away food, clean up, and cover the trash and garbage.
• Deny them water—fix leaks and wipe up spilled water.
• Use closed baits, traps, and gels only when necessary.
• Never use bug bombs or foggers.

Cleaning products can be safe when used as directed, but some cleaners are dangerous for a child to eat or drink even a small amount: bleach, detergent, oven cleaner, wood polish, shoe polish, and toilet and drain cleaners.
Healthy Homes Action Steps for Bathrooms

Install grab bars on the wall of the bathtub and shower and next to the toilet.

Use mats with nonslip rubber backs on bathroom floors.

Keep prescription and over-the-counter medications away from children:
• Lock it in a medicine cabinet, and
• Use childproof caps.

Clean up moisture and mold safely.
• Wash away the mold with a bleach and water mixture. Never mix bleach with ammonia or other cleaners.
• Open windows and doors to get fresh air.

Use a bathroom exhaust fan that is vented outside; a fan that is not vented outside might move air, but it keeps moisture in the house.
Healthy Homes Action Steps for Attics

Check for water leaks from the roof.

Ensure proper ventilation in the attic to prevent moisture that promotes mold growth.

Seal gaps around roofing and attic openings to keep rodents and insects out of the house.

Clean up clutter to deny rodents and insects any places to nest.

Older insulation may contain asbestos. If insulation must be removed or disturbed, hire an expert.

Healthy Homes Action Steps for Basement, Crawl Space, Utility and Laundry Areas

Maintain appliances:
• Set the water heater at 120°F to prevent burns.
• Change the furnace/AC filter regularly.
• Have gas appliances and furnaces checked yearly by a professional to make sure they do not release CO.

Vent the clothes dryer to the outside.

Test for radon:
• If a high level is detected, hire a specialist to eliminate the hazard.

Lock up products used for cleaning, car maintenance, gardening, and pest control.
Healthy Homes Action Steps for Stairways and Halls

Use stair gates at the top and bottom of stairs if children live in or visit the home.

Keep a working light bulb in overhead lights in the hall and above the stairs.

Prevent trips and falls on the stairs:
- Fix loose or uneven steps and rails.
- Attach stairway carpet firmly to every step—or remove carpet and attach nonslip rubber stair treads.
- Keep stairs free of clutter.
- Install handrails on both sides of the stairs.

Healthy Homes Action Steps for Outer Parts of House and Yard

To keep pests away:
- Fix holes, cracks, and leaks on exterior of the house.
- Eliminate standing water and food sources.
- Keep trash can covered with a lid.

Maintain gutters, downspouts, and roof to prevent moisture from entering the home.

Use safe work practices when painting, remodeling, or renovating a home built before 1978.

If you have a septic tank or private well, properly maintain it to prevent illness.

If you have a swimming pool, use self-closing and self-latching gates and four-sided fencing to prevent small children from unintended access.

Complete a playground safety checklist if you have playground equipment in your yard.

Be ready in case of disaster: have a kit for shelter in place and plan fire escape routes.
With knowledge, having a healthy home is in everyone’s reach. Get started today.
Glossary

**Acute:**
Quick and short term.

**Asbestos:**
The name of a group of similar minerals with long and thin fibers that separate. These fibers are so small they cannot be seen. These tiny fibers are only dangerous if they are disturbed, because the fibers float in the air and people can breathe them in.

**Carbon Monoxide (CO):**
An odorless, colorless gas that is found when fuel sources are not burned completely. It can build up in the home or garage and cause sudden illness or death in people and animals.

**Chronic:**
Lasting a long time.

**Clutter:**
Piles or stacks of household items such as clothing, magazines, and children’s toys.

**Lead Safe Work Practices:**
Type of work done on the home that lessens the amount of lead people in the home may be exposed to by removing old paint in ways that make only small amounts of dust and by careful clean up of any dust after the work is done.

**Radon:**
Radon comes from the natural breakdown of uranium in soil, rock and water and gets into the air you breathe.

**Toxic:**
Poisonous.

**Ventilation:**
Airflow. Exhaust fans and windows ventilate the house.
If you want to learn more about a healthy home topic, please see our resource list below.

**Federal Organizations**

**U.S. Consumer Product Safety Commission** 1-800-638-2772
- Playground Safety Checklist:  

**U.S. Department of Agriculture**  
Cooperative State Research, Education, and Extension Service:  
[http://www.csrees.usda.gov/sustainablehomes.cfm](http://www.csrees.usda.gov/sustainablehomes.cfm) or 202-720-4423

**U.S. Environmental Protection Agency**
- Asbestos:  
  [http://www.epa.gov/asbestos/pubs/ashome.html#4](http://www.epa.gov/asbestos/pubs/ashome.html#4)
- Child Health Protection:  
  [http://yosemite.epa.gov/OCHP/OCHPWEB.nsf/content/homepage.htm](http://yosemite.epa.gov/OCHP/OCHPWEB.nsf/content/homepage.htm)
- Indoor Air:  
  [http://www.epa.gov/iaq/](http://www.epa.gov/iaq/) or 1-800-438-4318
- Lead:  
  [http://www.epa.gov/lead/](http://www.epa.gov/lead/) or 1-800-424-LEAD (1-800-424-5323)
- Pesticide:  
  [http://www.epa.gov/pesticides/health/public.htm](http://www.epa.gov/pesticides/health/public.htm) or 1-800-858-7378
- Safe Cleaning Products:  
- Septic Tanks:  
  [http://www.epa.gov/owm](http://www.epa.gov/owm)

**U.S. Fire Administration**
- Home Fire Safety:  
- Carbon Monoxide:  

**U.S. Department of Health and Human Services**
- Quit Smoking:  
  [http://www.smokefree.gov](http://www.smokefree.gov) or 1-800-QUIT-NOW (1-800-784-8669)

**Office of the Surgeon General:**  
[http://www.surgeongeneral.gov](http://www.surgeongeneral.gov)
Centers for Disease Control and Prevention  1-800-CDC-INFO (1-800-232-4636)

- Asthma:  
  http://www.cdc.gov/asthma/default.htm
- Childhood Injury:  
  http://www.cdc.gov/safechild/
- Drinking Water:  
  http://www.cdc.gov/healthywater
- Drowning:  
  http://www.cdc.gov/HomeandRecreationalSafety/Water-Safety/waterinjuries-factsheet.htm
- Falls Among Older Adults:  
  http://www.cdc.gov/HomeandRecreationalSafety/Falls/CheckListForSafety.html
- Healthy Homes:  
  http://www.cdc.gov/healthyhomes
- Lead:  
  http://www.cdc.gov/nceh/lead/
- Mold:  
  http://www.cdc.gov/mold/
- Poisoning:  
  http://www.cdc.gov/HomeandRecreationalSafety/Poisoning/

U.S. Department of Housing and Urban Development

- Office of Healthy Homes and Lead Hazard Control  
  http://www.hud.gov/offices/lead

Nonfederal Organizations

- Alliance for Healthy Homes:  
  http://www.afhh.org
- Coalition to End Childhood Lead Poisoning:  
  http://www.ceclp.org
- National Center for Healthy Housing:  
  http://www.nchh.org
- Home Safety Council:  
  http://www.homesafetycouncil.org
For more information

To download copies of this booklet or The Surgeon General’s Call To Action On Healthy Homes, go to www.cdc.gov/healthyhomes

To order single copies of these documents, call toll free 1-800-CDC-INFO or e-mail CDCINFO@cdc.gov

Centers for Disease Control and Prevention:
National Center for Environmental Health
Lead Poisoning Prevention Program
4770 Buford Highway, NE
Atlanta, Georgia 30341-3724
Telephone: 1-800-CDC-Info (1-800-232-4636)
E-mail: CDCINFO@cdc.gov
Web site: www.cdc.gov/nceh/lead