Home Indoor Air Quality Checklist

The average American is indoors nearly 90 percent of the time, and more than half of this time is spent in the home. This checklist is a guide to help determine the general status of indoor air quality in your home.

Sources of Indoor Contaminants

- ❑ Do any household members smoke?
- ❑ Do you have any unvented gas appliances?
- ❑ Do any furry pets live indoors?
- ❑ Are insecticides or pesticides used indoors?
- ❑ Are cars parked in an attached enclosed garage?
- ❑ Are any of the following hobbies conducted indoors: woodworking, jewelry making, pottery or model building?
- ❑ Is part of your living area below ground?
- ❑ Is your home insulated with urea formaldehyde or asbestos?
- ❑ Do burner flames on gas heating or cooking appliances appear yellow instead of blue?
- ❑ Do you regularly use a fireplace or woodstove?

Strength of Indoor Contaminants

- ❑ Are there unusual and noticeable odors?
- ❑ Is the humidity level unusually high or is moisture noticeable on windows or other surfaces?
- ❑ Are there lingering cooking odors?
- ❑ Does the air seem stuffy?
- ❑ Is the house temperature unusually warm or cold?
- ❑ Are there dirty heating and air conditioning units?
- ❑ Is there a noticeable lack of air movement?
- ❑ Is dust on the furniture noticeable?
- ❑ Is dust or dirt staining walls, ceilings, furniture or draperies?
- ❑ Have you recently installed new furniture or carpeting or are you using new household products?

High-Risk Household Members

- ❑ Are any household members less than four years old or more than 60 years old?
- ❑ Is anyone normally confined to the house more than 12 hours per day?
- ❑ Does anyone suffer from COPD, asthma, bronchitis, allergies or heart problems?

Health Effects of Common Indoor Pollutants

- **Asbestos**: No immediate symptoms, but long-term risk of chest and abdominal cancers and lung diseases. Smokers are at higher risk of developing asbestos-induced lung cancer.
- **Biologicals:** Includes allergens (mold, mildew, pollen) and infectious disease agents (viruses, bacteria). Eye, nose and throat irritation; shortness of breath; dizziness; downiness; fever; digestive problems; asthma; humidifier fever (a respiratory illness); influenza and other infectious diseases.
- **Carbon monoxide**: At low concentrations, fatigue in healthy people and chest pain in people with heart disease. At higher concentrations, impaired vision and coordination; headaches; dizziness; confusion; nausea; flu-like symptoms that clear up after leaving home; and death. Hundreds of people die each year in their homes from CO poisonings.
- **Combustion byproducts:** Eye, nose, and throat irritation. Nitrogen dioxide may cause decreased lung function and increased respiratory infections in young children. Respirable particles may cause respiratory infections, bronchitis, and lung cancer (See *Environmental Tobacco Smoke*).
- **Environmental Tobacco Smoke:** Eye, nose and throat irritation; headaches; lung cancer; may contribute to heart disease. Specifically for children, increased risk of respiratory tract infections (bronchitis, pneumonia) and ear infections; increased severity and frequency of asthma episodes; decreased lung function.
- **Formaldehyde:** A widely used chemical in household products. Eye, nose, and throat irritation; wheezing and coughing; fatigue; skin rash; sever allergic reactions. May cause cancer. May also cause other effects listed under *Organic Gases*.
- **Lead:** Lead affects practically all systems within the body. Lower levels of lead can adversely affect the central nervous system, kidney, and blood cells and can impair mental and physical development. Lead at high levels can cause convulsions, coma, and even death.
- **Organic gases:** Gases released from chemicals used in household products. Eye, nose and throat irritation; headaches; loss of coordination; nausea; damage to liver, kidney, and central nervous system. Some organic chemicals may cause cancer in humans.
- **Pesticides:** Eye, nose, and throat irritation; damage to central nervous system and kidney; increased risk of cancer.
- **Radon:** An invisible, radioactive gas. It is the second leading cause of lung cancer. No immediate symptoms. Smokers are at higher risk.

Source: "How Healthy is the Air in Your Home"
Consumer Federation of America

Room-by-room checklist

Although indoor air quality problems may be present throughout an entire home, certain rooms are more susceptible to problems. The following chart lists several areas of the home and their potential problems, as well as remedies for improving the air quality in each room.

Room	Potential problems	Remedies
Kitchen	1. Unvented gas ranges and ovens. (carbon monoxide and combustion byproducts)	▪ Install and use an exhaust fan while cooking. ▪ Do not use a gas range or oven for home heating. ▪ Keep burners properly adjusted (blue flame tip, not yellow)
	2. Household cleaners (organic gases)	▪ Open windows and/or run the exhaust fan. ▪ Follow the directions for use and safety procedures.
	3. Moisture from cooking and dishwashing (biologicals)	▪ Install and use a properly vented exhaust fan.
	4. Pressed wood cabinets, furniture, and paneling (formaldehyde)	▪ When purchasing new, ask about formaldehyde content and emissions. Some pressed wood products, such as those with phenol resin or those painted with polyurethane or laminates, emit less formaldehyde. ▪ After installation of cabinets, open windows and ventilate well. ▪ Maintain 30% to 50 % humidity levels. ▪ Maintain room temperature over 50° F.
	5. Refrigerator drip pans (moisture encourages mold growth)	▪ Follow manufacturer's instructions for cleaning the drip pan and hoses.
	6. Undersink moisture (mold growth, biologicals)	▪ Check undersink area monthly for signs of moisture from leaking faucets or drains or cleaning products that are stored under the sink.
Bathroom	1. Cleaning supplies, including air fresheners (organic gases)	▪ Choose less-toxic products when possible. ▪ Follow the directions for use and safety. ▪ Open window or run exhaust fan during use.
	2. Moisture encourages the growth of mold and mildew (biologicals)	▪ Clean sinks, showers and tubs frequently. ▪ Use exhaust fans. ▪ Fix plumbing leaks promptly. ▪ Keep shower doors and curtains open. ▪ Wipe down shower walls after use. ▪ Use tile or vinyl flooring (when possible).
	3. Personal care products (organic gases)	▪ Open window or run exhaust fan during use.

Bedrooms	1. Humidifiers (biologicals)	▪ Use only when room humidity drops below 30% to 50% relative humidity. ▪ Refill with clean water daily. ▪ Clean frequently to prevent buildup of microbes.
	2. Moth repellents (pesticides) / Dry cleaned goods (organic gases)	▪ Avoid breathing vapors. Keep moth repellents in trunks or other containers and store away from living areas. ▪ Do not accept dry cleaned goods with chemical odor until they have been properly dried.
	3. Dust mites (biologicals)	▪ Use allergen-impermeable covers on pillows and mattresses. ▪ Wash bedding in hot water at least once a week. ▪ Use smooth, easy-to-clean furniture.
All Rooms	1. Animal dander, hair, skin or feathers (botanicals)	▪ Keep pets clean. ▪ Clean house regularly.
	2. Floor tiles containing asbestos (asbestos)	▪ Periodically inspect for damage or deterioration. Do not cut, rip, sand or remove any asbestos-containing materials. ▪ If planning to make changes that would disturb the asbestos, or if materials are more than slightly damaged, repair or removal by a professional is needed. Check EPA recommendations.
	3. Carpets (biologicals if water damaged, organic gases if new)	▪ Clean and dry water-damaged carpets immediately. Replace when necessary. ▪ Ask retailer to air out new carpeting before installing. Ask for low-emitting adhesives, if adhesives are needed. ▪ Keep rooms well ventilated during carpet installation. Leave premises during and after installation. Open windows and doors, use window fans or room air conditioners. ▪ Vacuum regularly.
	3. Draperies (formaldehyde)	▪ Keep rooms ventilated when new draperies are installed. ▪ Maintain 30-60% humidity levels and moderate temperatures.
	4. Secondhand smoke (environmental tobacco smoke, carbon monoxide, and combustion products)	▪ Do not smoke in the house, and insist that others smoke outside. ▪ If smoking cannot be avoided, open windows or use exhaust fans.
	5. Dust mites (biologicals)	▪ Clean house and vacuum often. ▪ Wash fabric throws and pillow covers in hot water.
	6. Lead-based paint (lead)	▪ Lead paint that is in good condition should be left alone, use a damp cloth to dust. ▪ Hire a professional to replace, enclose or encapsulate deteriorating lead paint.

	7. Moisture encourages mold to grow (biologicals)	▪ Cooking, baths and showers increase the humidity or moisture in the home. ▪ Use a dehumidifier to maintain 30-60% relative humidity. ▪ Use properly vented exhaust fans. ▪ Frequently wipe off moisture that collects on windows and window areas. ▪ Remove mold and mildew deposits promptly. ▪ Increase ventilation or air circulation where moisture (mold) appears. ▪ Open closet doors ▪ Increase heat in closed off rooms ▪ Check for vapor barrier or insulation problems along outside walls. ▪ Keep furniture away from wall to allow for air circulation.
Basement/ground floor	1. Asbestos pipe wrap insulation (asbestos)	▪ Inspect for damage or deterioration. ▪ Consult a professional to repair or remove any asbestos products.
	2. Moisture (biologicals)	▪ Clean and disinfect floor drain. ▪ Use dehumidifiers to keep humidity levels below 60%. Empty and clean often. ▪ Remove mold and mildew deposits promptly. ▪ Keep basement air dry by using fans, a heat source, an absorbent marine product or a dehumidifier.
	3. Radon (radon)	▪ Test for radon levels with an inexpensive do-it-yourself kit. ▪ Consult professionals if radon levels are high (4 picocuries per liter).
	4. Unvented clothes dryer (biologicals, combustion byproducts)	▪ Vent to the outdoors.
Garage	1. Car exhaust (carbon monoxide and combustion byproducts)	▪ Do not idle car in garage. To keep exhaust out of house, use weather stripping on door from garage to house.
	2. Paint/hobby products (organic gases)	▪ Use only in well-ventilated areas or outdoors. ▪ Follow manufacturer's directions for use and safety. ▪ Buy limited quantities. ▪ Reseal containers well. ▪ Clean brushes and other materials outside.
	3. Pesticides	▪ Use non-chemical methods of pest control. ▪ Follow manufacturer's directions for use and safety. ▪ Avoid using or mixing indoors. ▪ Take plants or pets outside when applying pesticides. ▪ Clean shoes and hands to avoid tracking pesticides indoors.

	4. Stored fuels (e.g. gasoline or kerosene) (organic gases)	▪ Buy limited quantities. ▪ Use well-sealed containers. ▪ Do not store inside the home.
Heating/cooling systems	1. Air conditioner (biologicals)	▪ Change filter when needed. ▪ Empty and clean water tray often. ▪ Follow proper service and maintenance procedures.
	2. Furnace (carbon monoxide, combustion byproducts)	▪ Inspect and service each year. ▪ Follow proper service and maintenance procedures, including changing filters.
	3. Fireplace (carbon monoxide, combustion byproducts)	▪ Open flue when fireplace is in use. ▪ Inspect flue and chimney annually for blockage or other damage. ▪ Always extinguish fires before going to bed for the night.
	4. Kerosene heater /gas space heater (carbon monoxide, combustion byproducts)	▪ Vent to the outside. ▪ Only use fuel recommended by the manufacturer. Refill outside. ▪ If unvented, open a door to the rest of the house and open a window slightly.
	5. Wood stove (carbon monoxide, combustion byproducts)	▪ Vent to the outside. ▪ Choose a properly sized wood stove that meets EPA emission standards. ▪ Make sure all woodstove doors fit tightly. ▪ Use aged or cured (dried wood only) never use pressure-treated wood. ▪ Follow manufacturer's directions.
Crawl space	Moisture in the crawl space will increase indoor humidity levels and may lead to wood decay.	▪ Cover crawl space soil with a 6 mil polyethylene moisture barrier. ▪ Keep crawl space vents open in spring, summer and fall. ▪ Rainwater and watering systems need to drain away from the home.
Attic	Water vapor may condense in the attic, damaging ceilings, walls and contributing to humidity problems.	▪ Properly seal around plumbing, spaces around chimneys and light fixtures. ▪ Maintain vents in the attic to promote good air circulation. ▪ Inspect for moisture annually; promptly remove damp insulation.

Edited and Adapted for Oregon by Pat Aune and Janice Gregg, Extension Faculty, Oregon State University Extension Service from "Healthy Homes: Improving Indoor Air Quality", University of Missouri-Columbia and "How Healthy is the Air in Your Home?" Consumer Federation of America

Indoor Air Quality Resources, 2003

This is a brief list of organizations providing additional information about indoor air quality issues. Web addresses as well as mailing addresses and phone numbers are provided.

Healthy Indoor Air for America's Homes web site: www.healthyindoorair.org
Access new research and information in this easy to use web site. The site reviews Indoor Air Quality effects on health, building science, indoor air hazards, educator's resources, printed publications, frequently asked questions and links. This nationally recognized site is maintained by Montana State University Extension Service, 111 Taylor Hall, Bozeman, MT 59717.

IAQ-INFO (Indoor Air Quality Information Clearinghouse)
PO Box 37133, Washington, DC 20013-7133
Call: 800-438-4318, ask for publications by title or number or have an order form faxed.

Fax: 703-356-5386 **E-mail: iaqinfo@aol.com**

IAQ INFO is an easy to access, central source of information on indoor air quality, created and supported by the U.S. Environmental Protection Agency (EPA). As concern about air pollution indoors has grown, so has the amount of information on this subject; but getting current, useful information can be a challenging task. The purpose of the **IAQ INFO** is to help you locate information to answer your questions about indoor air pollution.
The following publications are closely related to the subjects discussed in this lesson. You can order the printed publications from IAQ INFO, most are free of charge or you can go to the EPA web site, read the information and/or print off copies. If you request more than one copy from IAQ INFO please identify how the copies will be used.

- A Brief Guide to Mold, Moisture, and Your Home 402-K-02-003
- Indoor Air Quality Basics for Schools (fact sheet) 402-F-96-004
- Mold Remediation in Schools and Commercial Buildings 402-K-01-001
- Should You Have the Air Ducts In Your Home Cleaned? 402-K-97-002
- Residential Air Cleaners (Indoor Air Fact Sheet No. 7) 20A-4001
- Healthy Indoor Air For America's Homes 402-K-98-002
- Healthy Indoor Painting Practices 744-F-00-011
- Clear Your Home Of Asthma Triggers: Your Children Will Breathe Easier, 402-F-99-005

U.S. Environmental Protection Agency web site: http://www.epa.gov
The EPA provides information on a variety of environmental issues, including indoor air quality and mold in buildings. Most publications are available in HTML or PDF files. A variety of organizations and agencies with related information are linked to this web site.
US EPA, Region 10 Call: 800-424-4EPA
1200 Sixth Ave, Seattle, WA 98101

American Lung Association: http://www.lungusa.org
Asthma and indoor air quality are included on this web site.

American Lung Association of Oregon Call: 503-924-4094
7420 SW Bridgeport Road #200 Web site: www.lungoregon.org
Tigard, OR 97224-7711
Resources include indoor air quality, asthma and allergy information and brochures.

Federal Emergency Management Agency (FEMA): http://www.fema.gov
Water damaged homes (floods and fires) are affected by molds, so FEMA provides consumer fact sheets that address clean-up issues following an emergency.

Center for Disease Control (CDC) http://www.cdc.gov/nceh/airpollution/mold
This CDC site includes more detail on specifics molds, questions and answers on stachybotrys chartarum and other molds. Asthma and other indoor air pollution issues are discussed.

American Academy of Allergy, Asthma & Immunology (AAAAI) http://www.aaaai.org
611 East Wells Street, Milwaukee, WI 53202 Call: (414) 272-6071
Patient information and physician referral line: 1-800-822-2762
For all general questions, feel free to e-mail info@aaaai.org Please note: The AAAAI can not answer individual questions relating to diagnosis or treatment.

Oregon State University Extension Service http://eesc.oregonstate.edu
Choose Publications and Videos to view and print many publications. You can search by subject, keyword, title, series, or series number.

- "Wood and Moisture Relationships" EM8600 is available as pdf file or can be purchased from your local Extension Office, $1.00 publication charge.
- "Home Moisture Problems" EC1437 written by David M. Brook, Extension agent, Multnomah County, 1995 is available as pdf file or can be purchased from your local Extension Office, $1.25 publication charge.
- "How to Prevent and Remove Mildew in the Home" EC1174 is a publication that can be purchased from your local Extension Office, $1.00.

Institute of Inspection, Cleaning and Restoration Certification (IICRC)
Call: (360) 693-5675 www.iicrc.org
Information on certification and standards for the inspection, cleaning, and restoration industry.

Carpet and Rug Institute (CRI) www.carpet-rug.com
Call: (800) 882-8846
Carpet maintenance, restoration guidelines for water-damaged carpet, and other carpet-related issues.

The Soap and Detergent Association www.sdahq.org
475 Park Avenue South, New York, NY 10016
Information on cleaning and laundry and products used. Teaching information and resource materials on allergies and asthma.

Environmental Health Watch http://www.ehw.org/index.html.
Information for people with asthma.

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Indoor Molds 2002 Issues and Recommendations

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January 2003

> "*The term "mold" means any furry growth of minute fungi occurring in moist conditions; the term "toxic mold" means any indoor mold growth capable of creating toxins that can cause pulmonary, respiratory, neurological or other major illnesses after minimal exposure*."This is a direct quote from the proposed United States Toxic Mold Safety and Protection Act of 2002, H.R. 5040 that is currently being reviewed by Congressional Committees.

The US Toxic Mold Safety and Protection Act provides funding for research that will establish guidelines for mold exposure, mold in buildings and the remediation process. The Centers for Disease and Control (CDC), the Environmental Protection Agency (EPA), the National Institutes of Health (NIH), and the Department of Housing and Urban Development (HUD) are directed to conduct the research and establish the guidelines.

Scientific research is critical to the mold and remediation issues that have received media attention in recent years. Increased public awareness of mold in building issues is beneficial because there is mounting evidence that indoor molds can have severe health impacts.

Molds in Buildings

Molds are common in buildings and homes where there is moisture. The most common indoor molds are Cladosporium, Penicillium, Aspergillus, and Alternaria. Stachybotrys chartarum is the mold that has received the most media attention. The CDC does not have accurate information about how often Stachybotrys chartarum is found in buildings and homes. While it is less common than other mold species, it is not rare.

All indoor molds need to be eliminated or managed so they have little impact on the building or the people in the building. The treatment methods are the same regardless of the mold species. Testing is currently not encouraged. Reliable sampling for mold is expensive and standards for judging what is and what is not an acceptable or tolerable quantity of mold have not been established. If you see mold or smell musty odors remove the moisture and remove the mold!

Molds naturally grow in the indoor environment. Mold spores enter your house through open doorways, windows, heating, ventilation, and air conditioning systems. Spores in the air outside attach to people and animals. Clothing, shoes, and bags are convenient vehicles for carrying mold indoors.

Moisture Encourages Mold Growth

Mold grows when mold spores drop on places where there is excessive moisture, such as where leakage may have occurred in roofs, pipes, walls, plant pots, or where there has been flooding. Many building materials provide nutrients that encourage mold to grow. Wet cellulose materials, including paper and paper products are conducive for the growth of some molds. Other materials such as dust, paints, wallpaper, insulation materials, drywall, carpet, fabric, and upholstery commonly support mold growth.

Sometimes a "musty or moldy" odor is the only indicator of mold growth in an area. Look for signs of moisture to find the source of the growing mold. Remove the moisture and dry the air to stop the mold growth.

Health Concerns

The common health concerns from molds include hay-fever like allergic symptoms. Some individuals with chronic respiratory disease (chronic obstructive pulmonary disorder, asthma) may experience difficulty breathing. Individuals with immune suppression may be at increased risk for infection from molds. If you or your family members have these conditions, a medical doctor should be consulted for diagnosis and treatment.

Some people are sensitive to molds. Their symptoms include nasal stuffiness, eye irritation, or wheezing. Severe reactions may occur among workers exposed to large amounts of molds in occupational settings, such as farmers working around moldy hay. Severe reactions may include fever and shortness of breath.

Avoiding or Managing Mold

Mold growing in homes and buildings indicates there is a problem with water or moisture. Eliminate or solve the water and moisture problem first.

- Clean off moldy surfaces with soap and water and dry the area. The CDC suggests wiping the area with a weak bleach solution. The EPA does not encourage the use of bleach or other strong cleaning products or sanitizers. Clean and dry the area to prevent growth of molds.

- Keep indoor humidity below 60% (ideally between 30 and 50 %) relative humidity. Moisture or humidity meters cost $20 -$50 at many hardware stores. If your home typically has higher humidity levels consider purchasing and using a dehumidifier.

- Use an air conditioner or a dehumidifier during warm humid months.

- Be sure your home has adequate ventilation; use exhaust fans in kitchen and bathrooms. Quiet exhaust fans with timers or humidity sensors are a good investment.

- Mold under carpets typically requires that the carpets be removed. Flooded carpets must be removed and replaced. Do not carpet bathrooms or other places in the home where moisture might occur. Concrete basements might be too damp for carpeting.

- Do not paint or caulk over moldy surfaces. Clean the mold and dry the surface before painting. Paint applied over moldy surfaces is likely to peel. Consider adding a mold inhibitor to the paint.

- In areas where flooding has occurred the CDC recommends, prompt cleaning of walls and other flood-damaged items with water mixed with chlorine bleach, diluted 10 parts water to 1 part bleach to prevent mold growth.

Removing Mold 2002 EPA Recommendations

- If the moldy area is less than about 10 square feet (roughly a 3 foot by 3-foot patch) home cleaning methods are effective.

- If the moldy area is greater than 10 square feet, consult the EPA guide, Mold Remediation in Schools and Commercial Buildings. Professional methods must be used for the removal of mold from large areas.

- If you suspect the heating/ventilation/air conditioning (HVAC) system is contaminated with mold do not use it—it could spread mold throughout the building.

- If water and/or mold damage is caused by sewage or other contaminated water call in a professional who has experience cleaning and fixing buildings damaged by contaminated water.

- If you have health concerns, consult a health professional before starting cleanup.

- Fix plumbing leaks and other water problems as soon as possible. Dry all items completely within 24-48 hours.

- Scrub mold off hard surfaces with detergent and water, and dry completely.

- Discard absorbent or porous materials, such as moldy ceiling tiles, insulation, wallboard, rugs and carpets.

- Wear long rubber gloves, avoid touching mold or moldy items with your bare hands.

- Avoid breathing in mold or mold spores. Wear an N-95 respirator, available at many hardware stores. They cost $25 to $35.

- Wear goggles that do not have ventilation holes to avoid mold spores in your eyes.

- Keeping the area dry is more important than treating the area with a biocide (chlorine bleach and water). Mold spores are always present but do not grow unless there is moisture.

Resources:

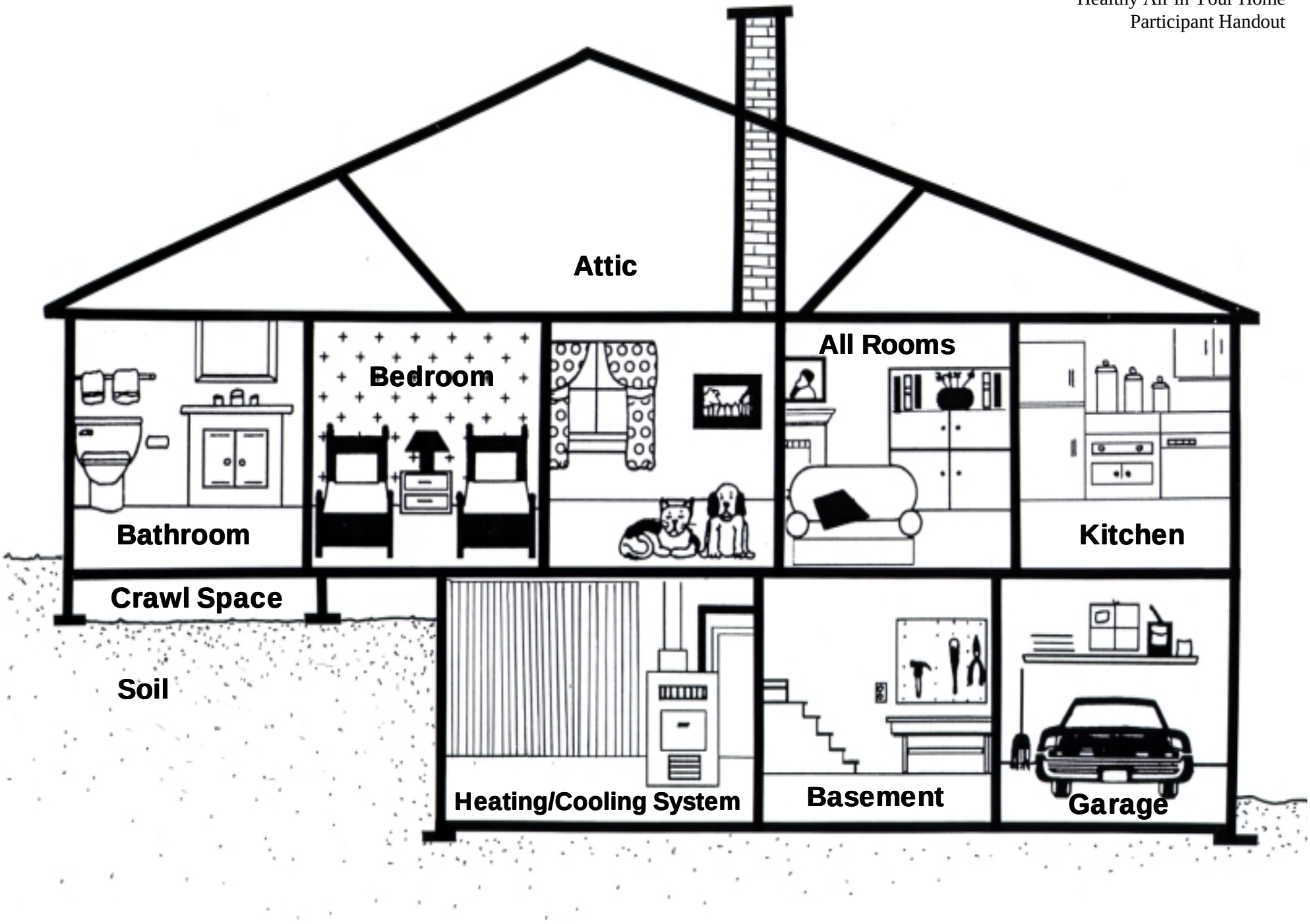
The United States Toxic Mold Safety and Protection Act of 2002 or the "Melina Bill" H.R. 5040 is available from the U.S. House of Representatives.

Questions and Answers on Stachybotrys chartarum and other molds. Air and Respiratory Health Branch, National Center for Environmental Health, Centers for Disease Control and Prevention. Reviewed August 03, 2002. http://www.cdc.gov/nceh/airpollution/mold/stachy.htm

A Brief Guide to Mold, Moisture, and Your Home, U.S. Environmental Protection Agency, Office of Air and Radiation, Indoor Environments Division. EPA 402-K-02-003, published in 2002. Call (800) 438-4318 or visit www.epa.gov/iaq/molds

Air Quality Home Check

FCD 2-002F
Healthy Air in Your Home
Participant Handout



Health Effects of Common Indoor Pollutants

Activity: If your group enjoys word games or if you want an introductory activity use these terms and descriptions to create a matching quiz or a game of chance where participants draw a piece of paper with word or phrase and search to find its description. These can be cut apart for this activity.

Asbestos:

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Biologicals:

Includes allergens (mold, mildew, pollen) and infectious disease agents (viruses, bacteria). Eye, nose and throat irritation; shortness of breath; dizziness; drowsiness; fever; digestive problems; asthma; humidifier fever (a respiratory illness); influenza and other infectious diseases.

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At low concentrations, fatigue in healthy people and chest pain in people with heart disease. At higher concentrations, impaired vision and coordination; headaches; dizziness; confusion; nausea; flu-like symptoms that clear up after leaving home; and death. Hundreds of people die each year in their homes from poisonings.

Combustion byproducts:

Eye, nose, and throat irritation. Nitrogen dioxide may cause decreased lung function and increased respiratory infections in young children. Respirable particles may cause respiratory infections, bronchitis, and lung cancer (See *Environmental Tobacco Smoke*).

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A widely used chemical in household products. Eye, nose, and throat irritation; wheezing and coughing; fatigue; skin rash; severe allergic reactions. May cause cancer. May also cause other effects listed under *Organic Gases*.

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Affects practically all systems within the body. Lower levels can adversely affect the central nervous system, kidney, and blood cells and can impair mental and physical development. High levels can cause convulsions, coma, and even death.

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Gases released from chemicals used in household products. Eye, nose and throat irritation; headaches; loss of coordination; nausea; damage to liver, kidney, and central nervous system. Some organic chemicals may cause cancer in humans.

Pesticides:

Eye, nose, and throat irritation; damage to central nervous system and kidney; increased risk of cancer.

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An invisible, radioactive gas. It is the second leading cause of lung cancer. No immediate symptoms. Smokers are at higher risk.

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