

How Healthy Is The Air In Your Home?



A Room-by-Room Checklist for Your Home's Indoor Air

CONSUMER RESEARCH COUNCIL

To live more safely and stay healthy, we often take simple steps to protect ourselves and our families. Smoke detectors alert us about the potential for fire. Parents childproof their homes to protect their inquisitive toddlers. Yet, few of us recognize that the air we breathe inside our homes can make us feel tired or dizzy, make our eyes itch or our throats feel scratchy, bring on an asthma attack, spread an infectious disease, or even, over a long period of time, contribute to our risk of cancer.

You may be surprised to learn that the air inside your home may be more seriously polluted than the outdoor air, even if you live in a large industrial city. This, coupled with the fact that you spend a large amount of time inside your home, makes indoor air quality a health concern. Some people, such as the young, the elderly, and the chronically ill, are even more seriously affected. Fortunately, there are simple steps you can take to reduce your exposure to indoor pollutants.

How To Use This Checklist

Use the following room-by-room guide to check for indoor pollutants. In each room, we have listed different household products, the indoor air problems associated with them, and remedies intended to help decrease your family's exposure to indoor pollutants. A summary of adverse health effects or symptoms associated with different pollutants is also included. This information is not intended to replace the services, advice, or consultation of a physician.



KITCHEN

Household Cleaners. *Remedy:* Open window. Use according to manufacturer's directions. See **O**

Moisture from Cooking & Dishwasher Use. *Remedy:* Install and use exhaust fan. See **B**

Pressed-Wood Cabinets. *Remedy:* See *Living Room: Paneling, Pressed-Wood, Cabinetry.* See **F**

Unvented Gas Stove & Range. *Remedy:* Keep burners properly adjusted (blue flame tip, not yellow). Install and use exhaust fan. Never use a gas stove to heat your home. See **CO** **CB**



BATHROOM

Air Freshener. *Remedy:* Open window or use exhaust fan instead. If using air fresheners, follow directions. See **O**

Moisture, Mold & Mildew. *Remedy:* Install and use exhaust fan. Fix plumbing leaks promptly. See **B**

Personal Care Products (e.g. hair spray, nail polish). *Remedy:* Open window or use exhaust fan. Follow directions for use. See **O**



BEDROOM

Dry Cleaned Goods. *Remedy:* Do not accept dry cleaned goods with chemical odor until they have been properly dried. Try a different dry cleaner. See **O**

Humidifier. *Remedy:* Clean according to manufacturer's directions. Refill with clean water daily. See **B**

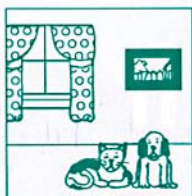
Moth Repellents (with paradichlorobenzene). *Remedy:* Avoid breathing vapors. Place moth repellents in trunks or other containers and store separately (attic, storage closet), away from living areas. See **P**



LIVING ROOM

Paneling, Pressed-Wood Furniture & Cabinetry. *Remedy:* When purchasing new paneling,

pressed-wood furniture or cabinetry, ask about formaldehyde content and release. Some types of pressed-wood products, such as those with phenol resin, emit less formaldehyde. Also, pressed-wood products coated with polyurethane or laminates may reduce formaldehyde emissions. After installation, open windows. Maintain moderate temperature and humidity. See **F**



ALL ROOMS

Animals (dander; hair, feather, or skin).

Remedy: Clean house regularly.

See **B**

Carpets. *Remedy:* Clean and dry or remove water-damaged carpets promptly. If installing new carpet, ask your retailer to air out the carpet before installation. Ask for low-emitting adhesives, if adhesives are needed. Leave the premises during and after installation. Open doors and windows; use window fans or room air conditioners. Vacuum regularly. See **B** resulting from water damage; **O** from new carpet.

Draperies. *Remedy:* New draperies may be treated with a formaldehyde-based finish and may emit formaldehyde for a short time. Open doors and windows. Maintain moderate temperature and humidity. See **F**

Health Effects of Common Indoor Pollutants

A 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.

B 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.

CO 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.

CB 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*).

E ENVIRONMENTAL TOBACCO SMOKE: Eye, nose, and throat irritation; headaches; lung cancer; may contribute to heart disease. Specifically for children, increased risk of lower

respiratory tract infections (bronchitis, pneumonia) and ear infections; increased severity and frequency of asthma episodes; decreased lung function.

F FORMALDEHYDE: 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*.

L 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.

O 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.

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

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

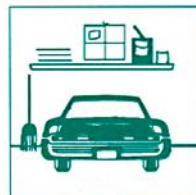
Environmental Tobacco Smoke (from cigarette, pipe, and cigar smoking). *Remedy:* Do not smoke in your home or permit others to do so (especially near children). If smoking cannot be avoided, open windows or use exhaust fans. See **E** **CO** **CB**

Floor Tiles Containing Asbestos. *Remedy:* Periodically inspect for damage or deterioration. Do not cut, rip, sand, or remove any asbestos-containing materials. If you plan to make changes that might disturb the asbestos, or if materials are more than slightly damaged, repair or removal by a professional is needed. Call EPA at 202-554-1404 for more information. See **A**

House Dust Mites. *Remedy:* Clean house and vacuum regularly. Wash bedding in hot water. See **B**

Lead-Based Paint (if manufactured before 1978). *Remedy:* Leave lead-based paint undisturbed if it is in good condition. Do not sand, burn off, or remove lead paint yourself; to remove, hire a person with special training for correcting lead paint problems. For more information call 1-800-LEAD-FYI. See **L**

Moisture. *Remedy:* Use exhaust fans. Use dehumidifier if necessary (See *Basement: Dehumidifier*). See **B**



GARAGE

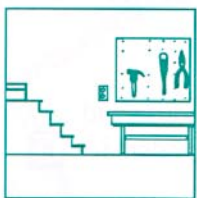
Car Exhaust. *Remedy:* Do not idle car in garage. To keep exhaust out of house, use weather stripping on door from garage to house. See **CO** **CB**

Paint Supplies. *Remedy:* Open windows when using. Follow manufacturer's directions. Buy limited quantities. If products contain methylene chloride (e.g. paint strippers), use outdoors. Reseal containers well. Clean brushes and other materials outside. See **O**

Pesticides (products that kill household pests).

Remedy: Use nonchemical methods of pest control where possible. Follow manufacturer's directions. Mix or dilute outdoors. Open windows when using indoors. Take plants or pets outside when applying pesticides. Do not store pesticides inside home. Clean shoes and hands to avoid tracking pesticides indoors. Call EPA at 1-800-858-PEST for more information. See **P**

Stored Fuels (e.g. gasoline, kerosene). *Remedy:* Buy limited quantities. Use well-sealed containers. Do not store inside home. See **O**



BASEMENT OR GROUND FLOOR

Asbestos Pipe Wrap & Furnace Insulation. *Remedy:* See

All Rooms: Floor Tiles Containing Asbestos. See **A**

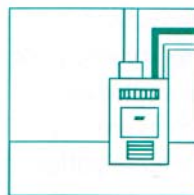
Dehumidifier. *Remedy:* Empty and clean water tray often. See **B**

Ground Moisture. *Remedy:* Clean and disinfect basement floor drain regularly. Keep basement dry and free of moisture and mildew. See **B**

Radon. *Remedy:* Test your home for radon—do it yourself kits are easy and inexpensive. Fix your home if your radon level is 4 picocuries per liter (pCi/L) or higher. For more information, contact your state radon office or call 1-800-SOS-RADON. See **R**

Stored Hobby Products (e.g. paint, glue, epoxy). *Remedy:* Follow manufacturer's directions. Use outdoors, if possible. Indoors, open window or use exhaust fan. Reseal containers well. Clean brushes and other materials outside. See **O**

Unvented Clothes Dryer. *Remedy:* Vent to outdoors. See **B**; **CB**, if gas-fired dryer.



HEATING & COOLING SYSTEMS

Air Conditioner. *Remedy:* Empty and clean water tray often. Follow all service and maintenance procedures, including changing filter. See **B**

Furnace. *Remedy:* Have your heating system inspected and serviced every year. Repair fuel or gas leaks promptly. Follow service and maintenance guidance, including changing filter. See **CO** **CB**

Fireplace. *Remedy:* Open flue when fireplace is in use. Have flue and chimney inspected annually for blocks, leaks, or other damage. See **CO** **CB**

Gas Space Heater. *Remedy:* In room where heater is located: open a door to the rest of the house; turn on exhaust fan; and open a window slightly. See **CO** **CB**

Kerosene Heater. *Remedy:* Vent to outside. Only use fuel recommended by manufacturer. Refill outside. If using unvented, open a door to the rest of the house and open a window slightly. See **CO** **CB**

Woodstove. *Remedy:* Vent to outside. Choose a properly sized woodstove that is certified to meet EPA emission standards. Make certain all woodstove doors fit tightly. Use aged or cured (dried) wood only; never use pressure-treated wood. Follow manufacturer's directions. See **CO** **CB**

For more information on reducing indoor air problems in the home, contact: Indoor Air Quality Information Clearinghouse at 1-800-438-4318. Ask for a free copy of *The Inside Story: A Guide to Indoor Air Quality*. Operators are also able to answer questions and supply more information about specific indoor pollutants found in your home.

Funding for this document was provided through a cooperative agreement with the U.S. Environmental Protection Agency.

