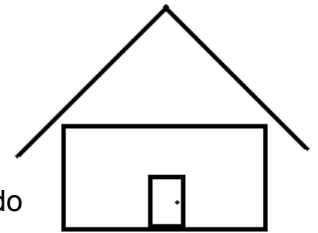


DRAFT INDOOR AIR QUALITY FACT SHEET

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Indoor Air Hazards You Should Know About:

- **Moisture and biologicals (like molds, mildew and dust mites).**
Sources include excessive humidity levels, poorly maintained humidifiers and air-conditioners, inadequate ventilation and animal dander.
- **Combustion products including carbon monoxide.**
Sources include unvented fossil-fuel space heaters, unvented gas stoves and ovens, and "backdrafting" from furnaces and water heaters.
- **Formaldehyde.**
Sources include durable press drapes and other textiles, particleboard products such as cabinets and furniture framing, and adhesives.
- **Radon.** This is a radioactive gas from soil and rock beneath and around the foundation, groundwater wells and some building materials.
- **Household products and furnishings.** These include volatile organic compounds from paints, solvents, air fresheners, hobby supplies, dry cleaned clothing, aerosol sprays, adhesives and fabric additives used in carpeting and furniture.
- **Asbestos.** Many homes more than 20 years old are likely to have asbestos. Sources include deteriorating, damaged or disturbed pipe insulation, fireproofing or acoustical material and floor tiles.
- **Lead.** Sources include lead-based paint dust from removing paint by sanding, scraping and burning.
- **Particulates.** Sources include particles from fireplaces, woodstoves, kerosene heaters, unvented gas space heaters, tobacco smoke, dust and pollen.
- **Environmental tobacco smoke.** A mixture of smoke given off by the burning end of a cigarette, pipe or cigar, and the smoke exhaled from the lungs of smokers.
- **Remodeling byproducts.** Remodeling can provide the disturbance that releases such materials as asbestos, lead, formaldehyde and other hazardous materials.

Remodeling And Indoor Air Quality

Q: What remodeling hazards should I be concerned about?

A: Asbestos, formaldehyde and other organic solvents, and leaded paint dust are the main ones. These hazardous materials can be released into the air when you remove paint, hang cabinets or disturb other existing products that contain these materials. Paints, stripping and finishing products, and adhesives can also create indoor air pollution.

Q: By remodeling with products that don't include these hazardous materials, won't that minimize my exposure?

A: Not necessarily. Lead and asbestos were commonly used in home building until the late 1970s. Remodeling or attempting to remove these material from a building can actually increase your risk of exposure. Often it's better to leave the lead- or- asbestos-containing materials in place, but cover or seal them to reduce exposure. If you suspect these materials are in your home, seek professional help before remodeling. If you remodel, remember that careful cleanup is important to control exposure.

Q: What is asbestos and why should I be concerned about it?

A: Major sources of asbestos are deteriorating, damaged or disturbed insulation, fireproofing or acoustical materials, and floor tiles. You won't feel any immediate symptoms from excessive asbestos exposure, but there is the long-term risk of chest and abdominal cancers and lung disease. Smokers are at higher risk of developing asbestos-induced lung cancer.

Q: Why should I be concerned about lead?

A: Young children (up to about six years old) are especially at risk of unknowingly ingesting lead contaminated dust or paint chips. Small amounts of lead dust, ingested regularly, can cause delayed development, reading and learning problems, lowered IQ, hyperactivity and discipline problems. Larger doses can cause high blood pressure, anemia, and kidney and reproductive disorders in kids and adults. Lead accumulates in the body and its effects are irreversible.

Q: What is formaldehyde and why should I be concerned?

A: Formaldehyde is often used as a preservative or as an adhesive in pressed wood products, such as paneling and particleboard, and furniture. Formaldehyde fumes may cause eye, nose and throat irritations; wheezing and coughing; fatigue; skin rashes; headaches; loss of coordination; nausea; damage to liver, kidneys and the central nervous system; and severe allergic reactions. It has also been linked to cancer. (Excessive formaldehyde exposure is rare)

Q: What about other chemicals used in remodeling, such as paints, wood strippers and finishes, adhesives, waxes and cleaners?

A: The products to watch for are those containing volatile organic compounds, which are organic solvents that easily evaporate into the air. Some may be flammable. Following are some of the compounds listed on product labels: petroleum distillates, mineral spirits, chlorinated solvents, carbon tetrachloride, methylene chloride, trichloroethane, toluene and formaldehyde. Other remodeling products can be a hazard if they are used improperly.

All the above information was furnished by the Consumer Information Center's (CIC) *Healthy Indoor Air for America's Homes*. You can contact the CIC at (202) 501-1794, or write to Consumer Information Center, Room G-142 (XC), 1800 F Street, NW, Washington, D.C. 20405, Or go to www.pueblo.gsa.gov on the Internet.