

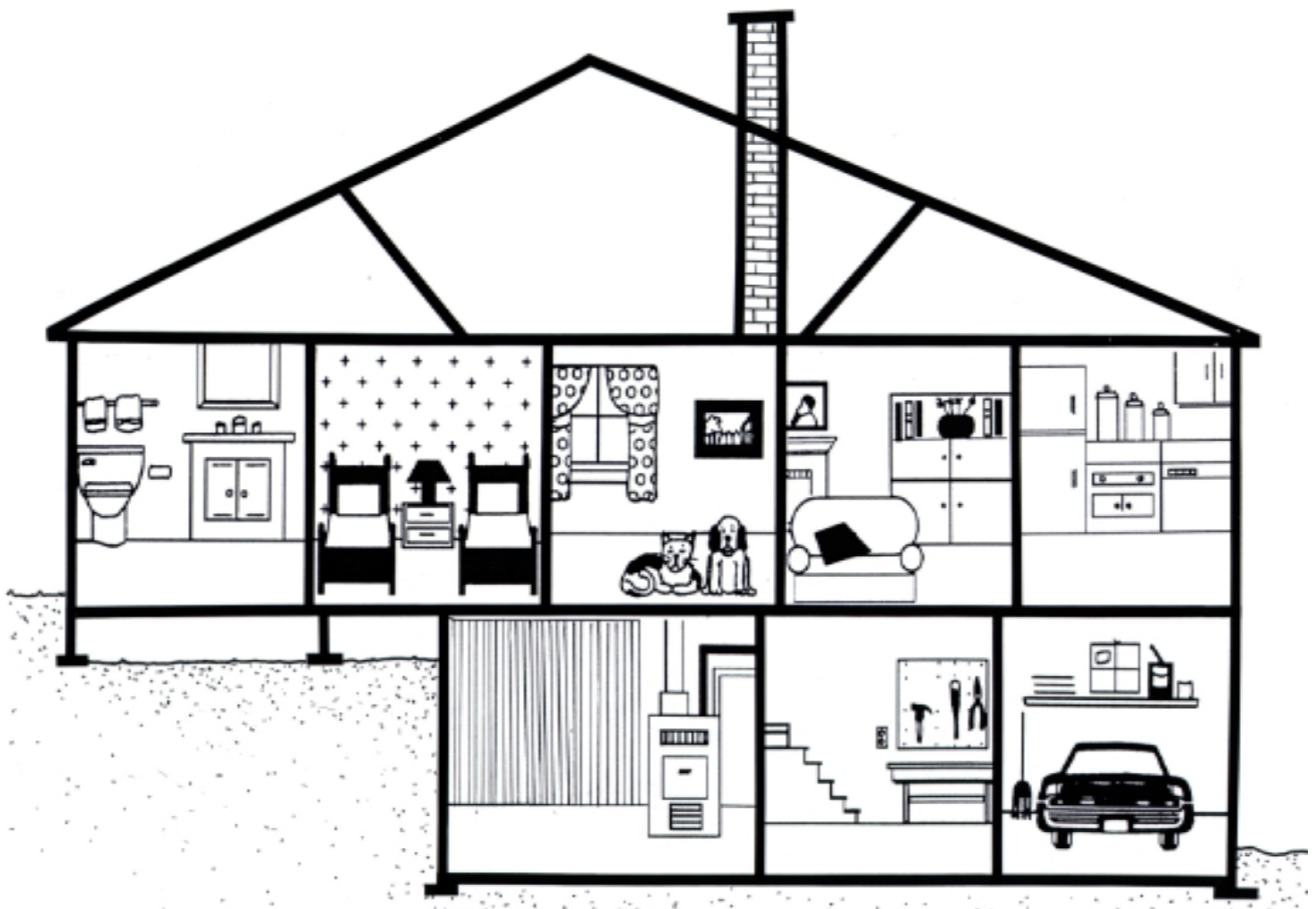


2017

# Air Quality Home Check



Sweetwate Home Services



# 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; severe 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.

## 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
<b>Kitchen</b>	1. Unvented gas ranges and ovens. (carbon monoxide and combustion byproducts)	<ul style="list-style-type: none"> <li><input type="checkbox"/> Install and use an exhaust fan while cooking.</li> <li><input type="checkbox"/> Do not use a gas range or oven for home heating.</li> <li><input type="checkbox"/> Keep burners properly adjusted (blue flame tip, not yellow)</li> </ul>
	2. Household cleaners (organic gases)	<ul style="list-style-type: none"> <li>• Open windows and/or run the exhaust fan.</li> <li>• Follow the directions for use and safety procedures.</li> </ul>
	3. Moisture from cooking and dishwashing (biologicals)	<ul style="list-style-type: none"> <li>• Install and use a properly vented exhaust fan.</li> </ul>
	4. Pressed wood cabinets, furniture, and paneling (formaldehyde)	<ul style="list-style-type: none"> <li>• 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.</li> <li>• After installation of cabinets, open windows and ventilate well.</li> <li>• Maintain 30% to 50 % humidity levels.</li> <li>• Maintain room temperature over 50° F.</li> </ul>
	5. Refrigerator drip pans (moisture encourages mold growth)	<ul style="list-style-type: none"> <li>• Follow manufacturer's instructions for cleaning the drip pan and hoses.</li> </ul>
	6. Undersink moisture (mold growth, biologicals)	<ul style="list-style-type: none"> <li>• Check undersink area monthly for signs of moisture from leaking faucets or drains or cleaning products that are stored under the sink.</li> </ul>
<b>Bathroom</b>	1. Cleaning supplies, including air fresheners (organic gases)	<ul style="list-style-type: none"> <li>• Choose less-toxic products when possible.</li> <li>• Follow the directions for use and safety.</li> <li>• Open window or run exhaust fan during use.</li> </ul>
	2. Moisture encourages the growth of mold and mildew (biologicals)	<ul style="list-style-type: none"> <li>• Clean sinks, showers and tubs frequently.</li> <li>• Use exhaust fans.</li> <li>• Fix plumbing leaks promptly.</li> <li>• Keep shower doors and curtains open.</li> <li>• Wipe down shower walls after use.</li> <li>• Use tile or vinyl flooring (when possible).</li> </ul>
	3. Personal care products (organic gases)	<ul style="list-style-type: none"> <li>• Open window or run exhaust fan during use.</li> </ul>

<b>Bedrooms</b>	1. Humidifiers (biologicals)	<ul style="list-style-type: none"> <li>• Use only when room humidity drops below 30% to 50% relative humidity.</li> <li>• Refill with clean water daily.</li> <li>• Clean frequently to prevent buildup of microbes.</li> </ul>
	2. Moth repellents (pesticides) / Dry cleaned goods (organic gases)	<ul style="list-style-type: none"> <li>• Avoid breathing vapors. Keep moth repellents in trunks or other containers and store away from living areas.</li> <li>• Do not accept dry cleaned goods with chemical odor until they have been properly dried.</li> </ul>
	3. Dust mites (biologicals)	<ul style="list-style-type: none"> <li>• Use allergen-impermeable covers on pillows and mattresses.</li> <li>• Wash bedding in hot water at least once a week.</li> <li>• Use smooth, easy-to-clean furniture.</li> </ul>
<b>All Rooms</b>	1. Animal dander, hair, skin or feathers (botanicals)	<ul style="list-style-type: none"> <li>• Keep pets clean.</li> <li>• Clean house regularly.</li> </ul>
	2. Floor tiles containing asbestos (asbestos)	<ul style="list-style-type: none"> <li>• Periodically inspect for damage or deterioration. Do not cut, rip, sand or remove any asbestos-containing materials.</li> <li>• 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.</li> </ul>
	3. Carpets (biologicals if water damaged, organic gases if new)	<ul style="list-style-type: none"> <li>• Clean and dry water-damaged carpets immediately. Replace when necessary.</li> <li>• Ask retailer to air out new carpeting before installing. Ask for low-emitting adhesives, if adhesives are needed.</li> <li>• Keep rooms well ventilated during carpet installation. Leave premises during and after installation. Open windows and doors, use window fans or room air conditioners.</li> <li>• Vacuum regularly.</li> </ul>
	3. Draperies (formaldehyde)	<ul style="list-style-type: none"> <li>• Keep rooms ventilated when new draperies are installed.</li> <li>• Maintain 30-60% humidity levels and moderate temperatures.</li> </ul>
	4. Secondhand smoke (environmental tobacco smoke, carbon monoxide, and combustion products)	<ul style="list-style-type: none"> <li>• Do not smoke in the house, and insist that others smoke outside.</li> <li>• If smoking cannot be avoided, open windows or use exhaust fans.</li> </ul>
	5. Dust mites (biologicals)	<ul style="list-style-type: none"> <li>• Clean house and vacuum often.</li> <li>• Wash fabric throws and pillow covers in hot water.</li> </ul>
	6. Lead-based paint (lead)	<ul style="list-style-type: none"> <li>• Lead paint that is in good condition should be left alone, use a damp cloth to dust.</li> <li>• Hire a professional to replace, enclose or encapsulate deteriorating lead paint.</li> </ul>

	7. Moisture encourages mold to grow (biologicals)	<ul style="list-style-type: none"> <li>• Cooking, baths and showers increase the humidity or moisture in the home.</li> <li>• Use a dehumidifier to maintain 30-60% relative humidity.</li> <li>• Use properly vented exhaust fans.</li> <li>• Frequently wipe off moisture that collects on windows and window areas.</li> <li>• Remove mold and mildew deposits promptly.</li> <li>• Increase ventilation or air circulation where moisture (mold) appears.</li> <li>• Open closet doors</li> <li>• Increase heat in closed off rooms</li> <li>• Check for vapor barrier or insulation problems along outside walls.</li> <li>• Keep furniture away from wall to allow for air circulation.</li> </ul>
<b>Basement/ground floor</b>	1. Asbestos pipe wrap insulation (asbestos)	<ul style="list-style-type: none"> <li>• Inspect for damage or deterioration.</li> <li>• Consult a professional to repair or remove any asbestos products.</li> </ul>
	2. Moisture (biologicals)	<ul style="list-style-type: none"> <li>• Clean and disinfect floor drain.</li> <li>• Use dehumidifiers to keep humidity levels below 60%. Empty and clean often.</li> <li>• Remove mold and mildew deposits promptly.</li> <li>• Keep basement air dry by using fans, a heat source, an absorbent marine product or a dehumidifier.</li> </ul>
	3. Radon (radon)	<ul style="list-style-type: none"> <li>• Test for radon levels with an inexpensive do-it-yourself kit.</li> <li>• Consult professionals if radon levels are high (4 picocuries per liter).</li> </ul>
	4. Unvented clothes dryer (biologicals, combustion byproducts)	<ul style="list-style-type: none"> <li>• Vent to the outdoors.</li> </ul>
<b>Garage</b>	1. Car exhaust (carbon monoxide and combustion byproducts)	<ul style="list-style-type: none"> <li>• Do not idle car in garage. To keep exhaust out of house, use weather stripping on door from garage to house.</li> </ul>
	2. Paint/hobby products (organic gases)	<ul style="list-style-type: none"> <li>• Use only in well-ventilated areas or outdoors.</li> <li>• Follow manufacturer's directions for use and safety.</li> <li>• Buy limited quantities.</li> <li>• Reseal containers well.</li> <li>• Clean brushes and other materials outside.</li> </ul>
	3. Pesticides	<ul style="list-style-type: none"> <li>• Use non-chemical methods of pest control.</li> <li>• Follow manufacturer's directions for use and safety.</li> <li>• Avoid using or mixing indoors.</li> <li>• Take plants or pets outside when applying pesticides.</li> <li>• Clean shoes and hands to avoid tracking pesticides indoors.</li> </ul>

	4. Stored fuels (e.g. gasoline or kerosene) (organic gases)	<ul style="list-style-type: none"> <li>• Buy limited quantities.</li> <li>• Use well-sealed containers.</li> <li>• Do not store inside the home.</li> </ul>
<b>Heating/cooling systems</b>	1. Air conditioner (biologicals)	<ul style="list-style-type: none"> <li>• Change filter when needed.</li> <li>• Empty and clean water tray often.</li> <li>• Follow proper service and maintenance procedures.</li> </ul>
	2. Furnace (carbon monoxide, combustion byproducts)	<ul style="list-style-type: none"> <li>• Inspect and service each year.</li> <li>• Follow proper service and maintenance procedures, including changing filters.</li> </ul>
	3. Fireplace (carbon monoxide, combustion byproducts)	<ul style="list-style-type: none"> <li>• Open flue when fireplace is in use.</li> <li>• Inspect flue and chimney annually for blockage or other damage.</li> <li>• Always extinguish fires before going to bed for the night.</li> </ul>
	4. Kerosene heater /gas space heater (carbon monoxide, combustion byproducts)	<ul style="list-style-type: none"> <li>• Vent to the outside.</li> <li>• Only use fuel recommended by the manufacturer. Refill outside.</li> <li>• If unvented, open a door to the rest of the house and open a window slightly.</li> </ul>
	5. Wood stove (carbon monoxide, combustion byproducts)	<ul style="list-style-type: none"> <li>• Vent to the outside.</li> <li>• Choose a properly sized wood stove that meets EPA emission standards.</li> <li>• Make sure all woodstove doors fit tightly.</li> <li>• Use aged or cured (dried wood only) never use pressure-treated wood.</li> <li>• Follow manufacturer's directions.</li> </ul>
<b>Crawl space</b>	Moisture in the crawl space will increase indoor humidity levels and may lead to wood decay.	<ul style="list-style-type: none"> <li>• Cover crawl space soil with a 6 mil polyethylene moisture barrier.</li> <li>• Keep crawl space vents open in spring, summer and fall.</li> <li>• Rainwater and watering systems need to drain away from the home.</li> </ul>
<b>Attic</b>	Water vapor may condense in the attic, damaging ceilings, walls and contributing to humidity problems.	<ul style="list-style-type: none"> <li>• Properly seal around plumbing, spaces around chimneys and light fixtures.</li> <li>• Maintain vents in the attic to promote good air circulation.</li> <li>• Inspect for moisture annually; promptly remove damp insulation.</li> </ul>