A healthy home is one that provides a safe environment with clean air to breathe, clean water to drink, and minimal environmental contamination. Air within homes and other buildings can be more polluted than the outdoor air.

Because most people spend the majority of time indoors, having a healthy home is important for both parents and children, but especially for children. Children are more susceptible to the effects of pollutants than adults. In proportion to their size, children breathe, drink, and eat more than adults. Children, and especially babies, also do things that may expose them to contaminants such as lead. For example, children put everything in their mouths. Because it’s not known for sure what concentrations or periods of exposure are necessary to produce specific health problems, health effects from contaminants may be experienced soon after exposure or possibly even years later.

Whether you are bringing a new baby home or have older children, it is important to have a healthy home. Here are the most common pollutants and tips on preventing and treating them.

**Mold**
All homes have some mold. Excessive levels of mold are unacceptable. To prevent and eliminate indoor mold growth, you must control indoor moisture.

- Repair leaking pipes.
- Use exhaust fans while cooking and bathing; make certain that exhaust fans are vented to the outdoors.
- Make sure that crawl spaces and attics are properly vented.
- Place a six mil plastic vapor retarder in your home’s crawl space to prevent ground moisture from migrating to your home.
- Make sure that outdoor water drains away from your home.
- Keep the humidity level in your home below 60 percent; check the amount of moisture in the air using a hygrometer.

**Lead Poisoning**
Lead poisoning due to ingestion of lead-based paint, chips, and dust is the number one environmental health problem for children. Lead is a heavy metal that when absorbed in a child’s body can cause neurological damage. Lead interferes with the healthy development of neurons, which, among other reasons, can affect a child’s ability to learn and perform well at school. Lead is most often found in homes built before 1978. Lead is also found in some toys, jewelry, pottery, folk remedies, and water pipes. It is important to prevent lead dust from decaying paint or painted surfaces to become airborne and enter a child’s blood stream. To learn more about lead and specific ways to prevent lead poisoning, contact your local Family and Consumer Sciences County Extension Agent.
Chemical Toxic Exposure  A variety of chemicals are used in homes. Some household chemicals are highly toxic, and some have no known health effect. Chemicals include but are not limited to cleaners, detergents, and pesticides. Follow these tips to reduce exposure to chemicals and prevent poisonings.

- Before you purchase a product, read the label. Is the product right for your project? For example, don’t use chemicals meant for outdoor use inside of your home.
- Buy only the products you need.
- Before using any product, read, understand, and follow all directions on the label.
- Once you have finished with a chemical product, put it away immediately in an area where children can’t get to it. Don’t leave chemical products on a counter.
- Discard partially full containers of old or unneeded chemicals safely.
- Keep children away from all harmful chemicals.
- Most importantly, keep the number for Poison Control handy: (800) 222-1222. Don’t be afraid to use it.

Asthma and Allergy Triggers  Pets, tobacco smoke, cockroaches, and mold can affect your home’s air and aggravate allergies and asthma. To reduce and prevent asthma and allergy triggers in your home:

- **Keep your home clean.** Regular cleaning can reduce the amount of dust mites, pollens, animal dander, pests, and other allergy-causing agents in your home. Reduce the amount of things that collect dust, such as carpets, upholstered furniture, and knick-knacks. In the bedroom, wash sheets and other bedding at least once a week with hot water and dry in the dryer to control dust mites. Wash soft toys regularly. Remove those that cannot be washed from the bed area. Cover mattresses and pillows with dust-proof (allergen-impermeable) zippered covers.

- **Control pests.** Starve pests out of your home by keeping trash covered, storing food in sealed containers, keeping dishes clean, and fixing any water leaks. Also, do not let bags, boxes, stacks, or piles of stuff become cozy homes for pests. To prevent future invasions, repair your home by sealing pest entry points. To control roaches, place baits and traps in areas that children can’t reach.

- **Keep mold levels down.** As discussed earlier, control moisture in your home. If you use a humidifier, fill it with fresh water and clean it daily.

Water Testing  Unlike users of public water systems, people with private water supplies such as wells, springs, and cisterns are responsible for ensuring the quality of their own drinking water. If you have a private water supply, use the following tips to make sure your family has safe, clean water to use.

- **Protect it from contaminants.** This means that wells should be sealed, chemicals should be stored far away from wells, motor oil should not be dumped on the ground, and household chemicals and medications should not be flushed down the toilet.
- **Have your private water supply tested routinely,** particularly for bacteria and nitrates. Private water supplies should also be tested anytime there is a change in the smell, taste, or clarity of the water.

Radon  Radon is an odorless, tasteless radioactive gas. Radon is produced by uranium found in soil and rock all over the United States. Once radon enters a home, it moves freely throughout the indoor air and can be breathed into your lungs, causing a higher risk of lung cancer. To prevent radon exposure, test your home for radon. Performing a radon test on your own is easy, inexpensive, and can be done privately. Every home is unique due to its local soil, construction details, maintenance, and degree of depressurization. Therefore, test results from nearby homes cannot be relied upon to predict the radon level in another home. Likewise, previous test results may not reflect current and future radon levels for a home that has been remodeled, weatherized, or had changes made to its heating, air conditioning, or other ventilation systems such as exhaust fans.

If your radon test kit comes back with a reading of four picoCuries per liter or higher, take immediate action to reduce radon levels. Seal the cracks in your home with caulk, then retest. If radon levels are still elevated, you can have a professional install a ventilation system that sucks air from beneath the home and vents it to the outside where it safely dilutes. For more information about radon, visit www.ugaradon.com.

The Bottom Line  Analyze your lifestyle. Make certain that you are doing things that keep your home healthy and safe for your family. Most importantly, take a proactive approach to keep contaminants out of your home.

Pamela R. Turner, PhD, Gina G. Peek, PhD, Former Doctoral Student and Jorge H. Atiles, PhD
Department of Housing and Consumer Economics
College of Family and Consumer Sciences