

(201) 792 3544

50 Harrison Street Suite 316
Hoboken, NJ 07030

Newsletter

JUNE 2012

The Toxic Home

No one can deny that industrialization has created quite a few conveniences. No one wants to go back to the day of the buggy, and give up our comfortable cars. But along with those modern day conveniences have come modern day health hazards. The worst of these being those that are toxic to ourselves and our children.

What is Off-Gassing?

This word was first used in 1966 to describe the release of gaseous chemicals from a solid. For instance, the Construction Dictionary defines “off-gassing” as the release of airborne particulates, often from installed construction materials such as carpeting, cabinetry, or paint that can cause allergic reactions and other health problems in building occupants. The problem is, this is just the tip of the iceberg. Off-gassing, while commonly attributed to carpeting, can be caused by several unexpected sources.

The top ten sources of off-gassing in order of concern include the following:

- Mattresses
- Stains/varnishes
- Carpeting
- Insulation
- Flooring materials (vinyl, finishes, adhesives)
- Countertops
- Cabinets
- Particle board
- Paint strippers
- Cleaning supplies

Mattresses

Every night you could be falling asleep in a toxic haze of petroleum based chemicals from toxic foams and synthetic fabrics that were treated with chemical fire retardants. Mattresses and bedding made using these particular chemicals can potentially cause reactions in people with chemical sensitivities. Furthermore, the majority of these chemicals have not been tested on young children and have rarely been tested for long term exposure.

For instance, the average person spends 8 hours a day in bed; this means that you are going to spend a third of your life in proximity of chemical emitting materials. Probably the most disturbing fact of all is that some mattresses will off-gas for many, many years.

Additionally, Dr. Jim Sprott, a New Zealand scientist and chemist, has studied the possibility of a relation between off-gassing baby mattresses and SIDS. Chemical compounds containing phosphorus, arsenic and antimony have been added to mattresses as fire retardants and for other purposes since the early to mid 1950's.

How to Avoid Mattress Off-Gassing

For the concerned consumer there are actually many good choices for non off-gassing mattresses but it's important to speak to a reputable retailer. Don't just ask your average salesperson because they might not be familiar with the term.

For those without a latex allergy, many memory foam mattresses made with latex are gas and chemical free; however, it should be specified that they are chemical free. Not all memory foam mattresses are the same.

Others might consider a 100% organic cotton mattress as these are made intentionally without chemicals and are not treated with chemicals at the factory. For those concerned about how hard a cotton mattress typically is, consider a pure wool or rubber mattress topper.

If all else fails consider an organic cotton dust mite allergy barrier

mattress cover. They will protect your home and your family from the gasses being put off by your mattress.

“Green” Light Bulbs

Highly efficient fluorescent light bulbs are supposedly environmentally friendly but this is one of those times when “going green” might just be a bad thing.

These bulbs contain mercury and are not supposed to be disposed of in the garbage, but instead at an approved recycling facility or a toxic waste dump. If you are going to throw them in the trash (because these approved facilities are rare and may not be available in your community) they are to be sealed and double-wrapped in plastic bags. “They’re very efficient, but once they’re used up they become a ticking toxic time bomb,” said Leonard Robinson, chief deputy director of the California Department of Toxic Substances Control. He added that they need to be “captured and recycled;” but what average person knows this? More often than not they end up in a local landfill where the chemicals eventually leak into the soil and water.

The major concern arises when these bulbs break releasing a toxic gas that you are advised to handle by getting everyone out of the house and ventilating the room for at least one hour. Then you are supposed to carefully clean up the pieces of glass without actually touching them, seal them in a plastic bag and then take them to a toxic waste dump.

As bad as all that sounds, it actually gets worse. German scientists have discovered that these particular types of bulbs actually off-gas an invisible toxic haze and, therefore, should not be used close to your head or in an unventilated room.

Peter Braun, and other scientists from Berlin’s Alab Laboratory, determined that several different gasses are emitted when the lights were switched on, including phenol, naphthalene and styrene. These are carcinogenic toxins.

More Information About Off-Gassing

The Environmental Protection Agency defines “off-gassing” as volatile organic compounds (or VOCs) emitted as gases from

certain solids or liquids. The typical symptoms of exposure include eye, nose and throat irritation, headaches, nausea or vomiting, dizziness, and/or worsening of asthma symptoms. For those who have long-term exposure to VOCs there is an increased risk of cancer, liver and kidney damage or central nervous system damage.

The elderly and very young or anyone with a history of asthma, allergies or lung problems will generally be more susceptible to the effects of off-gassing. With regards to the off-gassing of carpeting, flooring or other building materials, infants or toddlers and even pets may be more affected due to prolonged, close proximity to the materials that are off-gassing.

In Summary

The likelihood of VOCs in your home causing health problems varies widely based on what actual chemicals are off-gassing from a particular product. Yet, regardless of whether or not you know the VOCs involved, there are things that you can do to protect your family.

Be sure to purchase organic and holistic cleaners and use caution when purchasing new products. Anything that falls under the category of an item that could off-gas, purchase these items during cool to moderate weather. This will make a way for you to have your home open and well ventilated. It's important to make sure that your home is exposed to outside air and that fans are blowing to circulate the toxic air out and bring in fresh air from outside.

If you believe that an item may potentially off-gas, do not bring it into your home during extremely warm or extremely cold weather. If you're using a heater or air-conditioner then your home is closed up and the VOCs have no way to escape.