

ACTION PLAN: CHEMICAL STORAGE



Prevent exposure to hazardous chemicals and reduce exposure to common chemicals by managing their use and storage in your home.

QUICKSTART GUIDE: CHEMICAL STORAGE

Chemicals have become part of almost every part of modern life - present in everything from cleaning, laundry, and personal care products to furniture, carpet/flooring, paint and more. Hormone emulators, carcinogens, and even pesticides have been detected in humans in even the most remote regions of the world. Currently there are over 80,000 chemicals in use, many in fragrances, dyes, and preservatives that manufacturers are not even required to list. Research has shown that presence and use of chemicals inside homes can place health burdens on occupants. Some of that burden can be lifted, and your Hayward Score increased, by minimizing chemical use and practicing safe storage methods.

1. Educate yourself. It is important to "know" your chemicals and you may be surprised by what is considered hazardous or unhealthy.
2. Safely gather all the chemical products in one well ventilated place.
3. Sort the products into two categories: hazardous and generally regarded as "safe."
4. Store the two categories of products in appropriate locations. Appropriate "storage" locations for some may be disposal in the trash bin. An even better solution is not buying them in the first place.

IMPLEMENTATION MANUAL

OVERVIEW

Chemical ingredients in the manufacture of materials and products often include solvents, formaldehyde, and other complex formulas. More than 80,000 chemicals are in current use in everything from consumer products to materials used to construct homes and buildings. While it is hard to avoid all of the unintentional chemicals that are part of your home (though they can be managed with ventilation), you can avoid intentionally adding chemicals to your indoor environment.

Even if you are not among the 30% of people who have some level of "chemical intolerance," research has shown numerous health effects of exposure to chemicals ranging from eye, nose, and throat irritation to endocrine system disruption and cancer.

Examples chemicals are perfumes, fragranced cleaning and laundry, and personal care product, plug-in deodorizers, and odor masking/neutralizing aerosols. Others include paint, art supplies, pesticides and gasoline. These are product you can avoid buying when possible and store safely when they are absolutely necessary.

This short action plan will help you prevent or limit exposure and make your house more supportive of good health. Completion of all the steps, in the order listed below, will provide the most benefit.

STEP 1: EDUCATE YOURSELF: KNOW YOUR CHEMICALS

STEP 2: GATHER ALL THE PRODUCTS CONTAINING CHEMICALS IN ONE PLACE

STEP 3: SORT THE PRODUCTS INTO TWO CATEGORIES

STEP 4: TORE, DISPOSE OF, OR DON'T PURCHASE CHEMICAL PRODUCTS

STEP 1:

EDUCATE YOURSELF: KNOW YOUR CHEMICALS

This is actually quite hard to do. There are over 80,000 chemicals in active use. In the US only about 3000 individual ones have been evaluated. Combinations and synergistic creation of new compounds have not been evaluated at all. While you will likely recognize warning labels and "hazard" symbols for the few that manufacturers are required to put on certain products, it is important to remember manufacturers frequently are not required to list "ingredients" that comprise <7% of some product's total composition. At the other extreme, pesticides are only required to identify the "active ingredients," which typically comprise <7% of the total. While some of those unevaluated and non-disclosed substances may actually be "safe," others are known to be harmful to human health - including phthalates, ammonia, chlorine, and triclosan. Even a "Green" designation on the label doesn't always translate to non-toxic or chemical-free. It is an unregulated term, manufacturers aren't held to specific standards for the labels, and occasionally the only thing green is the name of the product.

The Environmental Working Group (EWG) and the US EPA do a comprehensive job of deciphering the labels of 7000s of household cleaners and personal care products:

www.ewg.com | www.epa.gov/saferchoice

In the meantime, assume all products contain chemicals of some kind. Educate yourself about what is disclosed, what should be disclosed, and what isn't disclosed so you can make better decisions about purchasing and use.

STEP 2:

SAFELY GATHER ALL THE PRODUCTS CONTAINING CHEMICALS IN ONE PLACE

Open all of your cabinets and closets and do a thorough check of storage spaces. This may seem like an unnecessary hassle. But aside from making the next step a little easier, this will demonstrate how much of a chemical "load" is in your home. In our experience, most people are surprised at how many products they really have.

- Typical household items to look for include: cleaners, solvents, laundry products, and personal care items containing any kind of fragrances.
- Don't overlook less obvious sources of chemicals such as: room spray deodorizers, plug-ins, scented candles, and other "fragranced" products designed to deodorize, mask, or otherwise "scent" your home.

Other products include: paint and related

- solvents, fertilizers, pesticides, gasoline, and "industrial strength" cleaning products.

BE SAFE

We suggest doing steps 2 and 3 either outdoors, in the garage with the door open, or in another well-ventilated area. It is a good idea to have a few windows open as well as you are moving chemicals around in the house. Although getting so many chemicals in one place can be overwhelming for some people, the way they can combine to form even different chemicals add to the challenge. If you feel un-well while doing this, take a break and get some fresh air. If you are able to go back to the task, try moving fewer chemicals at a time. If you consistently feel unwell, you may need someone to help you do this.

STEP 3:

SORT THE PRODUCTS INTO TWO CATEGORIES

CATEGORY 1 - HAZARDOUS PRODUCTS.

These typically have labels indicating that they contain chemicals known to be harmful to human health.

- PAINT AND RELATED SOLVENTS, SEALANTS, PRIMERS, CAULKS, AND GLUES
- FERTILIZERS
- PESTICIDES
- GASOLINE
- INDUSTRIAL CLEANING PRODUCTS - DIFFERENT THAN ORDINARY CLEANING PRODUCTS.

CATEGORY 2 - GENERALLY REGARDED

AS "SAFE." These products don't typically carry any kind of warning, and may not have all the chemical ingredients listed on the label.

- COMMON HOUSEHOLD CLEANING PRODUCTS AND SOLVENTS (EVEN THE ONES LABELED "GREEN")
- LAUNDRY DETERGENTS, DRYER SHEETS, AND FABRIC SOFTENERS
- PERSONAL CARE ITEMS INCLUDING LOTIONS, SOAPS, AEROSOLS, AND FRAGRANCES
- ROOM SCENT OR DEODORIZING PRODUCTS INCLUDING CANDLES, SPRAYS, AND PLUG-INS

STEP 4: **STORE, DISPOSE OF, OR DON'T BUY** **CHEMICAL PRODUCTS**

Move all hazardous chemicals to storage outside the house, preferably to a vented shed, storage bin, or other structure not attached to the house. If you do need to store in a room that is attached to the house, like the garage, attic, basement, or crawlspace, verify that the air in the area where the chemicals are stored isn't migrating into your living spaces. If air is migrating, usually simple changes like improving the weather seal on the door that connects the garage or basement to the home is a good start as is closing up any other cracks and crevices. Also, make sure products are:

- Stored in tightly sealed, undamaged containers
- Placed away from heat sources, vents, and ducts

"Generally regarded as Safe" products can be stored inside the house in kitchen or bathroom cabinets, laundry rooms, or closets. We recommend storing personal care items in the bathroom, rather than the bedroom where you are likely to spend more time thus increasing exposure. Some personal care items only should be in the bedrooms.

WARNING

Most household cleaning and laundry products can be safely disposed like regular waste or recycling. However, some chemical products, like paints, solvents, oils, and other similar items must go through your city's hazardous waste collection program. Read the manufacturer's label for specific disposal instruction.

We recommend disposal of deodorizing sprays, scented candles, and plug-ins as they release chemicals that can be harmful directly and, in the case of aerosol sprays, forcefully into the air! Better yet, don't purchase them. If homes need fragrance so they smell fresh, that means they aren't fresh. The only way to truly "freshen" them is to clean them, not to increase the exposure burden by applying chemicals.

NOTE:

Some individuals have become highly sensitized to various chemicals and odors, and experience severe impact on their ability to function. An excellent description of this phenomena is by Claudia Miller, M.D. at the University of Texas Health Science Center, San Antonio.

Her free information on Toxicant Induced Loss of Tolerance (TILT) is at

<http://drclaudiamiller.com>

Her free evaluation tool to determine whether you are experiencing TILT is the Quick Environmental Evaluation Sensitivity Inventory (QEESI) available from

<http://familymed.uthscsa.edu/qeesi.pdf>.

MAINTENANCE MANUAL

OVERVIEW

Once chemicals are managed in your house, it is important to keep them that way, especially if you know or suspect you are chemically sensitive.

To reduce the chemical load in your home, consider switching to non-toxic and unscented products whenever possible. The Environmental Working Group (EWG) and the US EPA have comprehensive databases of cleaning/laundry and personal care products to help you make the switch.

www.ewg.com

www.epa.gov/saferchoice

IDENTIFY NEW CHEMICALS

Locate any new chemicals that have been brought into the house

MAINTENANCE ACTION:

- Ensure products are stored appropriately
- Remove anything that causes you to have a reaction

CHECK AIR PATHWAYS

Check that the air in the chemical storage location is still isolated from air in the living spaces.

- If not, determine what changed. You may need a professional to make that determination and to take corrective action.

CHECK SEALS, CLOSURES, AND CONTAINERS

Check to make sure that containers of all stored chemicals, regardless of their location, are closed and haven't leaked because of punctures or corrosion. This is especially important for hazardous chemicals.

- Close any open containers. Remove and properly dispose of leaking containers according to local regulations.

BROUGHT TO YOU BY:



WWW.HAYWARDScore.COM

Privacy Policy available at
haywardscore.com/privacy-policy

