Chemical Safety at Home

All information taken from ehstoday.com and environmentalchemistry.com

All of us have many products in our homes and garages that may be hazardous if used, stored or disposed of improperly. They may pose serious fire, health or environmental hazards. However, if they are used, stored, and disposed of properly they can be relatively safe.

Guide to Chemical Safety in the Home

Inventory all products in your home

Familiarize yourself with each product, its location and purpose. More products are hazardous than you may think. Here are a few of the common ones:

- Automotive fluids (oil, anti-freeze, fuel, brake fluid, windshield washer fluid, transmission fluid etc.)
- Household cleaners (bleach, ammonia, disinfectants, carpet freshener, air freshener, window cleaner, furniture polish, etc.).
- Laundry products (laundry detergent, fabric softener, etc.)
- Health and beauty products (hairspray, hair remover, fingernail polish, fingernail polish remover, hair coloring products, medications, etc.).
- Lawn and garden products (fertilizer, pesticides, herbicides, gasoline, oil, etc.)
- Barbecue products (propane, charcoal briquettes, lighter fluid, etc.)
- Home maintenance (paint, varnish, stains, oils, mouse/rat poison, etc.)

Know the characteristics of potentially harmful substances used in homes

The potentially harmful substances used daily in homes usually have one or more of the following characteristics:

Poison: can injure or kill if absorbed through the skin, ingested or inhaled.

Toxic: can cause injury or death if swallowed, inhaled, or absorbed through the skin.

Irritant: causes soreness or swelling of skin, eyes, mucous membranes, or respiratory system.

Flammable: easily catches fire and tends to burn rapidly.

Corrosive: a chemical or its vapors that can cause a material or living tissue to be destroyed.

An inordinate number of the standard household cleaning products that we use on a daily basis can be poisonous, so be cautious. Also, for some medicines, even one adult-strength pill can be deadly to a child.
Follow these guidelines suggested by the American Society of Safety Engineers (ASSE) to increase chemical safety at home:

- Read the warning label. Much time has gone into developing it for good reason. Be sure to understand and follow what it says on how to use the product safely, how to protect yourself when using it and how to properly store it. The manufacturer's contact information always is on the label if more information is needed. More is not better, just more dangerous. Use all chemicals sparingly in the home. Words to look for:  **DANGER - WARNING - CAUTION**

- Don't take the hazardous chemical out of the original container and place it in something else, such as an old plastic milk jug or an empty liter soda bottle. Not only are these containers not likely to be capable of safely storing the substance, but it also may be hard to remember later what was put in there in the first place. And remember, a young child may not know the difference between a yellow-colored cleaning product in an old Mountain Dew plastic container and the real thing.

- After using, immediately wash hands - or any other part of the body that may have come into direct contact with the substance - with warm soapy water.

- Follow safety recommendations when using hazardous substances.

- Properly ventilate the area by turning on the fan and opening the windows. If recommended, wear gloves, long sleeves and masks.

- Don't leave chemical products unattended. If you must leave the room in the middle of a task, either put the product away or take it with you.

- Keep all hazardous chemicals out of the reach of young children or locked up. Properly mark and store under lock and key all household and pool chemicals, paints and poisons. Keep these on a high shelf, out of children's reach.

- Dispose of household and chemical products that are leaking, expired or look bad. Know how to properly dispose of chemical products. If you don't know how to dispose of the products, contact your local waste management authority.

- Post the poison control center number near every phone - in the United States it is (800) 222-1222.

- Never store hazardous chemicals near food or food products. Keep hazardous chemicals away from items used to prepare and cook foods in, such as pans and silverware. Never contaminate pots, pans and cooking utensils with a hazardous substance.

- It is dangerous to combine two common household cleaners - chlorine bleach and ammonia. It forms a highly toxic gas, which has caused serious respiratory injury and even some deaths.

- **When applying pesticides or other household chemicals, remove children and their toys, as well as pets, from the area. Keep children and pets away until the pesticide has dried or as long as is recommended on the label.**