

# OUR ENVIRONMENT

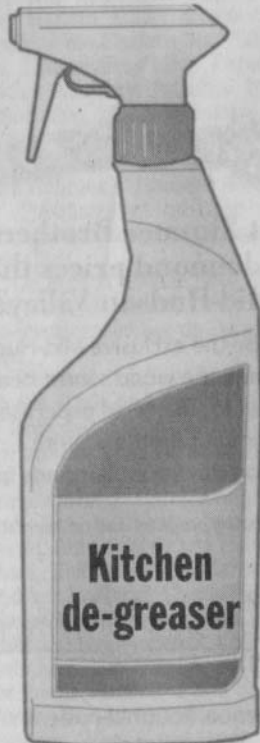
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## POLLUTION: DANGER AT HOME

**Know the risks:** These warnings are included in the federal database of name brand products.



**Warning:** Reports have associated blood and bone marrow damage with exposure. Substance can be absorbed through the skin.



**Warning:** Avoid contact with food and food utensils. May cause irritation to nose, throat and respiratory tract. May trigger asthma attacks.



**Warning:** Can cause burns on contact. Harmful if swallowed. May burn eyes, skin and mucous membranes on contact.



**Warning:** Corrosive. Causes eye and skin damage. Do not get in eyes or on clothing.



**Warning:** Breathing vapors may aggravate heart or chronic respiratory problems such as asthma, chronic bronchitis or obstructive lung disease. Wear safety glasses and rubber gloves.

Sten Miller/  
Journal

# Products can harbor hazards

## Many cleaners, personal care items never tested for health effects

By Ann LaGoy  
For the Poughkeepsie Journal

Household products intended to make our lives easier have a life cycle and a negative impact all their own. From manufacture, to use, to disposal, these products have ample opportunity to contaminate our air, water, soil, food and bodies.

Since World War II, the United States has developed more than 85,000 chemicals for use in cleaners, plastics, personal care products and other modern-day conveniences. More than 90 percent have never been tested for their effects on human health. Few, if any, have been tested in combination. Approximately 1,800 new chemicals are registered with the Environmental Protection Agency each year, according to "State of the Evidence," a report by the Breast Cancer Fund. The nonprofit organization focuses on potential environmental causes of breast cancer.

This proliferation of synthetic chemicals parallels the increased incidence of many diseases. According to the Mount Sinai School of Medicine, the number of asthma sufferers has increased 75 percent between 1980 and 1994. For children under four, the disease has exploded by 160 percent. An estimated 12 million U.S. children suffer from developmental, learning or behavioral disabilities. In the last 50 years, the lifetime risk of breast cancer has more than tripled, and the incidence rate for non-Hodgkin's lymphoma has increased 30 percent for both children and adults.

### On the Web

#### Discover products' ingredients

The National Institute of Health maintains an online database of more than 6,000 consumer brands. People can use the database to find out what chemical ingredients occur in products around the house, what acute and chronic health effects may result from exposure and other information. Visit: <http://householdproducts.nlm.nih.gov>

Some studies link environmental contaminants to health problems, but cause-and-effect relationships are difficult to prove, especially at low levels associated with exposure to cleaning products.

#### High toxin content

New Jersey and Massachusetts, the only states requiring such data, reported more than 1 billion pounds of more than 100 chemicals known or suspected to be neurotoxins, carcinogens, or reproductive or developmental toxins, were included in products shipped from manufacturing facilities in those states between 1995 and 2000. For every 42 pounds of those toxins, one pound was released into the environment (about 2.3 million pounds), according to "Cabinet Confidential," a report produced by the environmental group, National Environmental Trust.

Toxic byproducts produced during manufacturing have been reduced by the landmark environmental laws of the 1970s, like the Clean Water Act, Clean Air Act and Comprehensive Environmental Liability and Compliance Act. However, these laws have failed to reduce all toxins the individual consumer can be exposed to.

Humans are exposed to a complex array of hundreds, possibly thousands, of chemicals. Studies by the Centers for Disease Control and Prevention show Americans of all ages carry a body burden of chemicals — many with at least 116 chemicals, some of which have been banned for more than two decades because of toxicity.

"Liquid bleach starts as salt water and ends as salt water," reads the Clorox Bleach Web site "Facts and myths" section.

It's not that simple. Small amounts of organochlorines (compounds made up of chlorine and carbon) are formed whenever chlorine bleach is used, according to the environmental group Washington Toxics Coalition. Organochlorines build up and are stored in fatty tissue and fluids such as breast milk, and can be passed on to fetuses and infants during pregnancy and lactation.

Contaminates called dioxins, evident in every human being on earth — including newborn babies — are byproducts of the manufacture and incineration of products containing chlorine. Studies show dioxins

Please see **Chemicals**, 7B

# Chemicals: Products may disrupt hormones

Continued from 6B

are endocrine disruptors, mimicking, blocking and/or interfering with the natural instructions of hormones to cells in animals. Dioxins are suspected of doing the same in humans. The endocrine system works closely with the nervous and immune systems: it controls growth, learning, behavior, reproduction and more.

Solvents, or inert ingredients, such as formaldehyde, p-dichlorobenzene, cresol, phenol, hydrochloric acid, ethylene glycol and naphthalene, are found in some common cleaning agents and air fresheners. Manufacturers are not required by law to list these ingredients on product labels.

## Ailments may be linked

Some of these chemicals may be linked to cancer, central nervous and respiratory system depression, cardiopulmonary effects, damage to the liver and kidneys, corrosion to the skin, eyes and mucous membranes, and alteration of how our bodies process our own naturally produced chemicals, according to the Environmental Protection Agency.

Does it make a difference to eliminate toxic cleaners from your home? Consider this:

The average American home contains as much as 100 pounds of household hazardous waste at any given time. Disposal of that waste amounts to 3.36 million tons, or about 1 percent of the nation's trash, annually. The average American uses 25 gallons of hazardous household waste every year, releasing toxic substances into their own immediate surroundings.

Solvent-based cleansers can eventually end up in, and contaminate, drinking water. For example, the New Jersey Department of Health and Senior Services has found volatile organic compounds

such as benzene, xylene and many chlorinated solvents in drinking water. The sources of large spills often stem from industrial and commercial facilities that use large volumes of chemicals, but low levels of many contaminants have been discovered in water supplies associated with household use.

Massachusetts has reduced the amount of toxic chemicals released into the environment by 73 percent, from 20.6 million pounds to 5.5 million pounds, by passing the Toxics Use Reduction Act in 1990, according to Cabinet Confidential. The act requires corporations to disclose the names and quantities of chemicals they use and set specific goals for reducing the use of toxic chemicals.

Unfortunately, on the national level, the Toxic Substances Control Act of 1976 was designed to provide a safeguard against dangerous chemicals manufactured and imported into the United States. Chemicals already on the market at the time of its passage, however, have been "grandfathered." The EPA must show a chemical presents an "unreasonable risk" and demonstrate likely human exposure before requiring it to even be tested, according to the "Cabinet Confidential" report.

Although effective government policy plays an important role in altering manufacturer's practices, consumers do have options. The demand for natural alternatives reached \$20 billion in 2002, and is projected by the Natural Marketing Institute to reach \$33 billion in 2007. Some safe alternatives are as simple as baking soda and vinegar.

*Ann LaGoy, a Fishkill resident, is the owner of Sound Earth, which sells natural cleaning products. The business changed its name from Clearly Natural on Sept. 1.*