



SEVEN BROAD PRINCIPLES – FOR HEALTHIER HOMES, FAMILIES, and COMMUNITIES

1. SHOP SMART – Because so much **food** is treated with pesticides, there's always a possibility that pesticide chemical residues remain. To be on the safe side, choose certified organic foods, and wash and peel fruits and vegetables. Reduce consumption of meat, dairy products, and fatty or predatory fish (because pollutants accumulate in fat), and eat low fat versions of these when they are consumed. Do not put hot foods and plastics together (e.g., don't microwave in plastic or store hot foods in plastic), because heat increases the likelihood of chemicals leaching from plastics into the food.

Whenever possible, do NOT use the following. (Less toxic alternatives exist for many of these.)

- (1) **Pesticides**, many of which have been linked to cancer, birth defects, developmental disorders, and other problems;
- (2) **Particle board, plywood, pressed wood, or pressure-treated wood**, from which there can be formaldehyde (a probable carcinogen), arsenic, and other exposures;
- (3) **PVC (polyvinyl chloride) plastic** (which is plastic sometimes marked with #3, PVC, or V); PVC is the plastic in vinyl -- such as vinyl pipes, siding, shower curtains, and floors – and in some soft children's toys; PVC's manufacture and disposal leads to dioxin (one of the most toxic chemicals), and PVC usually is combined with troubling additives like phthalates (see below);
- (4) **#6 (polystyrene) and #7 (if polycarbonate) plastics** if they are being used as food containers, since polystyrene may leach styrene (a hormone disruptor and possible carcinogen) and polycarbonate may leach bisphenol A (a suspected hormone disruptor);
- (5) **Cleaning products with toxic chemicals** (see below); and
- (6) **Cosmetics or personal products containing phthalates**, because phthalates have been associated with problems such as birth defects, hormone disruptions, and damage to the liver, lungs, male reproductive organs, and kidneys.

2. VENTILATE – Many items -- including cleaners, insect sprays, carpets, wet paints and finishes, air fresheners, candles and incense, art supplies, fires, and gas appliances -- give off fumes that contain chemicals. These chemicals don't simply disappear. Without an escape route, they attach themselves to dust particles on the floor and fibers in carpets, curtains, and upholstered furniture. Children can easily pick up these chemicals.

The easy solution is ventilation. Open windows; use exhaust fans. Make sure your home and other buildings breathe! Fresh air dilutes concentrated chemical fumes, and open windows allow chemicals to escape instead of remaining inside.

3. KEEP IT OUT -- If you can do only one thing to make your home, schools, and other buildings safe for your family, avoid pesticides. Most people in the U.S. use some kind of lawn and garden product. Using these products outdoors doesn't mean they won't come indoors. In fact, numerous studies show that chemicals in soil and lawns can be tracked indoors.

And that's not all that comes inside. Pollutants carried on wind and in rain can be deposited miles from where they were produced -- on your yard, playground, or the sidewalk. When we walk, our shoes collect these pollutants and carry them inside, where they get lodged in carpets.

The easy way to avoid exposure: Wipe your feet on a doormat or leave your shoes at the door.

4. CLEAN WATER – Industrial pollutants and run-off from farm fields can easily contaminate our water supply. Most public municipalities test water frequently for more than 90 water

contaminants, and you can obtain test results from your water utility. Anyone who gets drinking or bathing water from a private well should test their water regularly. If you suspect your water may be contaminated by lead pipes or something else, you should also have your water tested.

In the morning after many hours of non-use, run your tap water for 30-90 seconds before consuming it (to flush out water more likely to contain lead because it has been sitting in the pipes). Never consume hot water from the tap (which is more apt to contain lead).

5. *CLEAN WITH CARE* -- Cleaners are full of chemicals that make chores simpler. But these chemicals have their costs. Many give off unhealthy fumes that can irritate children's eyes, nose and lungs. Some cleaners are corrosive and can harm your children's delicate skin. Some even contain ingredients that are suspected of causing cancer.

Cleaners also have hidden dangers. Though most seem to disappear, they can leave behind chemical residues. Children tend to touch everything, put their hands in their mouths, and eat food off the floor and other surfaces. They may be putting chemicals in their mouths along with their toys and food. Small amounts may not be immediately harmful, but can accumulate to cause health problems over time.

The simple solution is to avoid extra-strength cleaners, which may contain dangerous solvents, acids, and other corrosive chemicals. Use mild cleaners, such as unscented, general purpose soaps and detergents -- or try homemade cleaners, such as those containing baking or washing soda, club soda, vinegar, lemon juice, hydrogen peroxide, or borax. Also, remember: Don't mix cleaners, because the ingredients can combine to form dangerous gases.

6. *RENOVATE RIGHT* -- At one time or another, many of us decide to tackle a home or building improvement project.

It's important to remember that structures built before 1978 may contain lead paint. Sanding or demolishing walls covered with lead paint, even if it's buried under layers of newer paint, will result in lead dust. This dust can spread throughout the building or wind up in the soil outside.

Children are vulnerable to lead. Lead poisoning continues to be the number one children's environmental health problem in the United States. Always test the paint for lead before painting and renovating if you live in a pre-1978 home. You should also test if your paint is chipping or deteriorating in any way.

Other Decorating Tips: Use least-toxic supplies to avoid subjecting your family to chemical fumes. See "SHOP SMART" above for items to avoid. Clean up well -- Leave no dust behind! Pregnant women and children should not be allowed on the scene!

7. *HELP SPREAD THE WORD and KEEP LEARNING* -- For groups with which you are involved, schedule a presentation by CHANGE, Californians for a Healthy and Green Economy (see contact information below). Follow up a first presentation on these issues with other workshops or a study group. Possible items for follow-up discussions include showing movies (e.g., the Bill Moyers NOW May 2002 special "Kids and Chemicals" or "Not Under My Roof! Protecting Your Baby from Toxins at Home" by CHEC); reading an article together and talking about it; or forming a group to read a book like *Raising Healthy Children in a Toxic World: 101 Smart Solutions for Every Family*. In addition, there are many helpful organizations and web sites that have further information.

For further materials or to discuss any of the suggestions above, feel free to contact Ansje Miller at Ansje@ceh.org or 510.655.3900 x315. Remember to check out www.changecalifornia.org