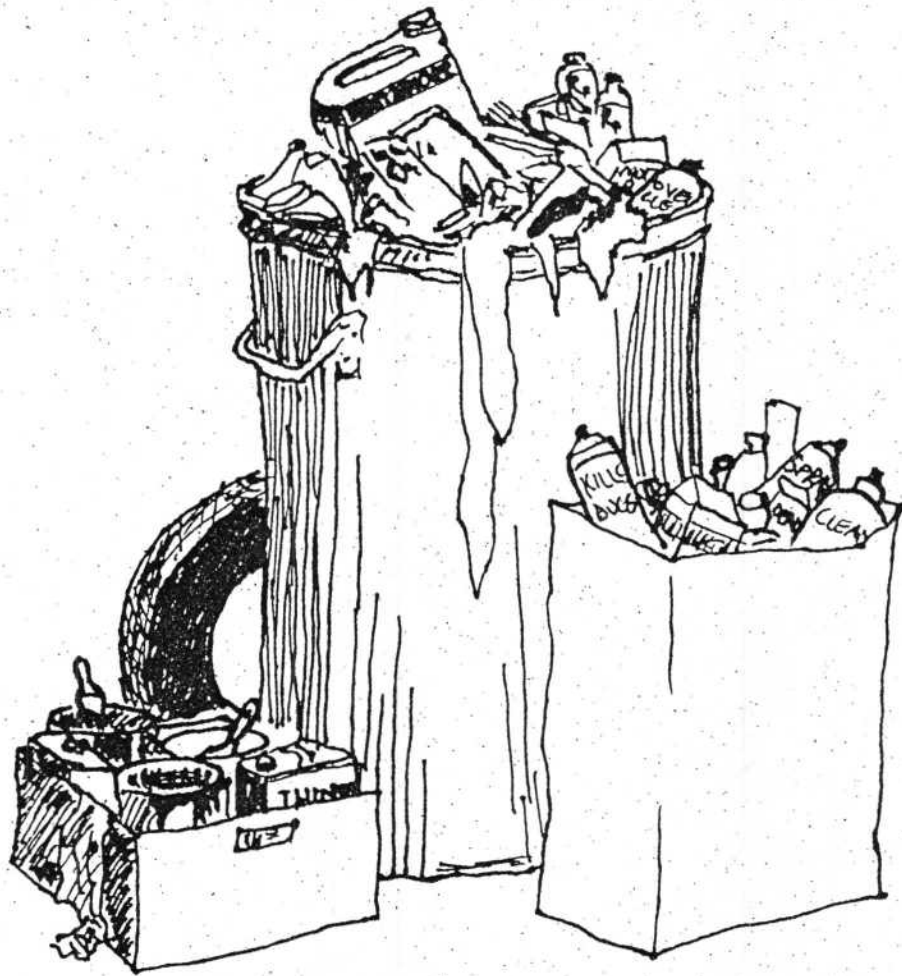


Detoxifying Your Home



Protecting Your Family and
Community



FACT PACK P011

Fact Pack P011: Detoxifying Your Home

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INTRODUCTION

Pollution is taking a deadly toll on all of us, especially on our communities in the inner city. The dirty air we breathe, the chemicals we use for the simplest tasks, the trash and grime we have come to accept: these everyday facts eat away at our health and our lives. Even when we can't always see their effects, they are real.

The companies that sell us floor cleaner, bug killers, chrome polish and vinyl preservatives have spent a lot of money to make sure our lives include their products. We like to use them. They supposedly make our chores easier. They keep selling and we keep buying. **We must hold industry accountable for poisoning the people and the land. We are rarely provided with viable non-toxic alternative products or with things produced without hazardous by-products. But we must share some of the blame, either because (1) of our improper use and disposal of hazardous substances, or (2) because we passively accept the continued reliance on hazardous substances at the expense of our own health.**

This pattern has been going on for years. The companies have gotten rich. Many of us have gotten sick and often don't know why. Whatever the amount of time or effort a chemical cleaner seemingly saves us, it costs us now and will go on costing us into the future. **The toxic products we throw out in the trash, pour down the drain, or dump in the storm sewer never really leave us.** They end up in the air we breathe, in our harbors, on our beaches, in streams, ponds, rivers and lakes. These products cost us money in taxes and fees for cleanup, and they cost us our health. They create an expensive, dangerous cycle of pollution that each of us can help stop by keeping hazardous materials out of our trash and sewer systems.

IN THE TRASH

Hazardous household and auto products thrown in the trash end up in incinerators or landfills, which pollute the air we breathe and the water we drink:

- **in land fills, toxic chemicals and metals eventually seep into the ground and mix with the underground water that feeds the lakes and reservoirs that provide our drinking water;**

- **burning trash in incinerators releases tons of dioxins and acid gases into the air, the toxics that are not released into the air remain in the incinerator ash which is then taken to landfills.**

DOWN THE DRAIN

Toxic products such as household cleaners, solvents, used motor oil and pesticides thrown down the drain enter the sewer system.

- **even the best sewage treatment plants cannot treat all the toxic chemicals and metals in these products, much remains in the wastewater that's discharged into harbors and bays, the rest**

More than a 100 chemical contaminants, including toxic dioxins, have been found in the milk of nursing mothers in industrialized areas of the US.

Environmental factors have been identified as the cause of birth defects in 5,000 to 7,500 infants per year in the US alone, and are suspected as contributing to birth defects in an additional 150,000 infants in the US.

People of color are disproportionately affected by society's dependence on chemicals: 40% of all Latinos in the US and 50% of African Americans live in communities with uncontrolled toxic waste sites.

Number of
registered
man-made
chemicals
in the US

in 1978
4,000,000

in 1990
10,000,000

remains in the wastewater sludge dumped in landfills or burned in incinerators;

•poisons, especially toxic metals, discharged into harbors and bays end up in fish that we eventually buy at the market.

OTHER DANGERS

•Children can be injured by playing with hazardous products not stored safely.

•Trash collectors can be injured by fumes or explosions of toxic materials in the trash.

•Improper storage of certain hazardous materials create fire hazards and endanger fire fighters when they burn in house fires.

ONE PERSON CAN MAKE A DIFFERENCE

Our city streets and homes, our habitat, should be places that nourish our bodies and spirits, not places that cause us disease and death. Many problems we face seem too big to overcome, but through individual action we can reduce the immediate risk to ourselves and our families:

We can stop buying toxic products.

We can handle safely those we cannot avoid.

We can dispose of hazardous waste properly.

You can distribute copies of this manual to your neighbors and host a Non-Toxic Home Workshop.

You can hold a community meeting to organize a Hazardous Waste Collection Program.

You can organize a community group to fight for non-toxic alternatives to household products.

You can build coalitions with other communities to oppose industry's lust for chemicals.

**THROUGH ORGANIZED, GRASSROOTS
ACTION WE CAN REDUCE THE RISK
TO OUR COMMUNITY AND
THE CAUSES OF THAT RISK**

HAZARDOUS MATERIALS AT HOME

We often think that household products must be safe if we find them on the shelves of a store. Many of them are powerful cleaners. Their power comes from poisonous chemicals that can cause illness and injury. **Hazardous household products create the same problems for our communities that toxic industrial wastes do.** They must be handled just as carefully.

Each day, people in the US produce 4 million pounds of household hazardous waste. Our own health is at stake, both in the privacy of our homes and in the wider world, as these poisons return in our drinking water and in the air we breathe.

Commonly Used Hazardous Products

DRAIN CLEANERS

OVEN CLEANERS

SPOT REMOVERS

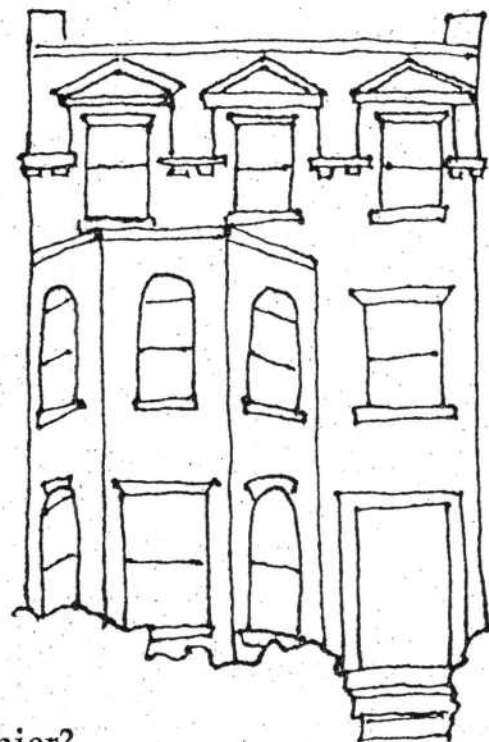
MOTHBALLS

OLD MEDICINES

BUG SPRAYS

PAINT THINNERS

ENAMEL- AND OIL-BASED PAINTS



What Can I Do To Make My Home Safer And Healthier?

Read the labels, know what you are using.

Beware of products that: **have a skull and crossbones**



on the label

or have the words:

WARNING or CAUTION — a warning on the label is usually placed in order to comply with federal regulations requiring disclosure when a product contains toxic chemicals or otherwise presents a health hazard.

POISON — a poisonous substance or material can be harmful if swallowed or if a person is exposed to its vapors.

CORROSIVE — a corrosive substance eats away at the surface of other materials.

CAUSTIC — a chemical that can corrode animal tissue.

FLAMMABLE — liable to catch on fire.

EXPLOSIVE -- liable to explode.

VOLATILE — that evaporates easily at ordinary temperature and conditions.

HARMFUL OR FATAL IF SWALLOWED — this one is self explanatory.

What's All The Fuss?

Special Problems for Children: Each year 5 to 10 million household poisonings are reported, most of the victims are children. They can confuse auto and cleaning products with soda and candy. Because of their small size and immature systems, children are especially sensitive to the toxic chemicals in some products. Since children are shorter than adults, they breathe in more vapors because toxic chemicals concentrate in air closer to the floor.

Special Problems for Allergic People: Many people are sensitive to the chemicals found in household products. For them, contact with amounts that would not affect others, can cause headaches, difficulty breathing, lack of concentration, confusion and symptoms of mental illness.

Problems for All of Us Poisons from hazardous products build up in our bodies. We may not show any symptoms at first, but in time they can cause disease and death. At the very least, the harmful part of many household products can cause dizziness, nausea, allergic reactions, itching, burning, watering eyes, rashes, coughs and susceptibility to colds. Scientists know that exposure to some of the chemicals in the following products can cause asthma attacks, bronchitis, cancer and damage to lungs, liver, kidneys and the nervous system.

What Are These Products? What Can I Do?

PRODUCT TYPE	HEALTH EFFECTS	ALTERNATIVES
Aerosol Sprays	When inhaled, can cause headaches, nausea, shortness of breath, itching, burning, watering eyes, coughing, skin rashes, sore throats, liver damage, and heart problems. Aerosol cans can explode when exposed to a flame or excessive heat.	Most products also come in creams, liquid and pump sprays, which will save you money. Keep aerosol containers away from radiators and other heat sources.
Chlorine Bleach	Can form dangerous gases when mixed with vinegar, ammonia or toilet bowl cleaners that at least can cause burning and itching skin, eyes and nose when breathed or touched.	Use non-chlorine, oxygen bleach, or vinegar.
Oven Cleaners	Contain lye and other chemicals that can irritate and burn skin and eyes.	Wipe your oven out after baking; apply baking soda dissolved in water, let stand for several hours, then scrub clean with a damp cloth.
Rug and Upholstery Cleaner	Can cause nausea when inhaled. Large quantities can cause liver damage, anemia, convulsions and possibly induce coma.	Use soap or club soda and salt. Wear gloves and open windows if cleaning with commercial products.
Enamel- and Oil-Based Paint	Can irritate eyes, skin and lungs. Breathing paint fumes can cause headaches, nausea, breathing problems, muscle weakness, and liver and kidney damage.	Paint with windows open, use water-soluble latex paint. Don't paint indoors during the winter.
Pesticides	Immediate effects can range from nausea, breathing problems and dizziness to depression; in the long term can cause damage to the liver and lungs.	Avoid pesticides.

More Hazardous Household Products and Substitutes

PRODUCT	ALTERNATIVE
Toilet Cleaners	Brush toilet using baking soda or borax.
Disinfectants	Combine 1/2 cup borax and 1/4 cup vinegar in 2 gallons of hot water — can be used on all surfaces, including floors.
Mold Killers	Use vinegar at full strength —without diluting in water.
Drain Cleaners	Pour 1/4 cup of baking soda, follow with 2 oz. of vinegar, wait 10 to 15 minutes and then flush with boiling water — do this on a regular basis, weekly or every other week depending on size of household, age of the system, etc.
Furniture Polish	Use a mixture of 1/8 cup lemon juice and 1/4 cup of olive or vegetable oil.
Mothballs	Use cedar chips, newspapers, flower petals.
Ammonia-based Cleaners	For surfaces use a mixture of vinegar, salt and water; for the bathroom mix baking soda and water.
Abrasive Cleaners or Powders	Using a sponge or a scrub brush rub baking soda.
Metal Cleaners/Polishers	For brass and copper use white toothpaste; otherwise you may use a mix of 2 tablespoon salt, 1 tablespoon lemon juice and 1 tablespoon vinegar.
Room Deodorizers/Air Fresheners	Simmer a dry flower pot pouree or cinnamon and cloves in water.
Spot Removers	Club soda, or 1/4 cup vinegar and 1/4 cup water, rub into stains, rinse well.
Pesticides	Ants: wash surfaces with vinegar, sprinkle borax where they enter. Roaches: spread mixture of equal amounts baking soda and powdered sugar.
Rat/Mouse Poisons	Mousetraps.
Plant Insecticides	Spray leaves with soapy water, rinse well.
Paint Strippers	Use sand paper or water based strippers. Never use a heat gun on lead paint.
Paint Thinners, Turpentine	Use latex-based paint, which can be thinned with water.
Stains and Finishes, Wood Preservatives	Use water-based or earth pigment wood finishes.

WHAT'S BETTER ABOUT SUBSTITUTES?

They are made
from common
ingredients.

They are less
expensive.

They are easy to
prepare and use.

They will do the
job as well.

Your family will
not be exposed to
hazardous sub-
stances.

WHAT ELSE CAN I DO?

Doing the job right:

Read the label before you buy the product — buy the safest product available.

Look for citrus and natural oil based cleaners — beware of long and complicated chemical names.

Buy only the amount you need — leftovers give off fumes as long as they are on the shelf.

Use protective equipment — rubber gloves, goggles, etc.

Open windows and use a fan or extractor, or work outside when possible — avoid breathing fumes

Do not wear contact lenses when using solvents and pesticides — lenses deteriorate and can trap fumes.

Do not eat, drink or smoke when using hazardous products — this avoids accidental intake, smoking may cause combustion or other reactions with hazardous fumes (for example: smoking while working with bleach can cause dizziness, nausea and irritation of mucus membrane).

Use pump sprays, creams or liquids — do not use aerosol sprays.

Soak up spills with sand — store the material in a sealed container until you can dispose of it properly.

Disposal:

Find a friend or neighbor that will use-up the remainder — avoid storing it.

If you must store it, carefully seal leftovers hazardous products in the original container — keep in a dry, cool place out of reach of children.

Do not mix different hazardous products — they may react, explode or otherwise create a deadly brew.

Do not pour anything down the drain or toilet — take the waste to a hazardous waste collection center near you.

Soak up spills with sand — store the material until you can take it to a collection center.

TOXIC BUILDINGS

LEAD

Lead in paint, dust, soil, drinking water and food can lead to severe exposure in children, which (1) at low levels can cause slow growth and development, and lower intelligence; (2) at higher levels can cause severe problems in the nervous system, kidneys and blood; (3) at even higher levels can cause convulsions, induce coma, even cause death. Fetal lead exposure causes lower birth weights and premature births.

Lead does not decay. Other toxic substances decay, that is lose their toxicity as time goes by. A lead particle will be as dangerous 50 years from now as it is today. Lead in soil or dust threatens your family's health until it is removed. Lead pipes can contaminate your tap water up until the pipes are replaced.

LEAD TIPS

Lead Paint

Tape over window sills or lower wall areas where lead paint chips and lead dust can accumulate.

Do not try to remove lead paint yourself. Sanding it will release lead dust into the air and floors where it will accumulate. A hot gun will release lead vapors into the air.

Use a wet mop to clean away paint chips and dust, sweeping or vacuuming only disperses lead particles into the air.

Lead in Water Pipes

Run the tap for at least 30 seconds before using for drinking or cooking if tap has not been used for 4 or more hours. The first-drawn water can be used for plants to avoid waste.

Use bottled water to prepare baby formula.

Use cold water for cooking or drinking, hot water dissolves lead more quickly.

Have your water and soil tested.

ASBESTOS

If asbestos fibers are inhaled or swallowed they can have serious effects on your health, which may not appear until 15, 20 or 40 years later. Asbestos can scar the lungs, leading to breathing problems and heart failure. It can also cause cancer of the lungs, chest or abdominal lining. It may be linked to cancer of the stomach, intestines and rectum as well.

More than 3,000 products in use today contain asbestos. Here are some common products to beware of:

Ceiling Panels

Carpet Underlays

Roofing Materials

Artificial Fireplaces

Floor Tiles

Electrical Wires

Textured Paints

Cements

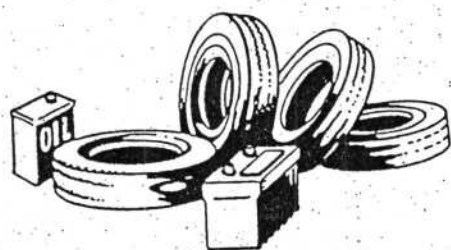
Patching and Spackling Compounds

Pipe, Duct and Building Insulation

Do not try to remove suspect materials yourself!!!

DO keep unused products in their original, labeled container.

DO take used oil to gas stations, stores that sell it, or a waste oil collection center.



DO buy recycled or "re-refined" oil, it's just as good.

AUTO MAINTENANCE: SAFETY AND SENSE

What you should know about your car and your health

Parts, fluids, and accessories for our cars and trucks create a major neighborhood health hazard when used and disposed improperly. Brief contact with many of these materials, or repeated contact with small amounts, can cause serious health problems now and years down the road.

Parts and products that can cause health and environmental problems

TIRES

GASOLINE

FREON

BRAKE FLUID

OIL AND FILTERS

BATTERIES

DEGREASERS

RADIATOR FLUSH

ANTIFREEZE

METAL PARTS

GAS ADDITIVES

CAR WAX

Motor Oil, Gasoline, Brake and Transmission Fluids are all highly flammable (can burst into flames or burn easily) and when burned can cause nausea, headaches and breathing problems now, and years later can cause cancer and brain dysfunction, particularly with repeated exposure. We all know that gasoline is extremely flammable; it's also highly volatile, constantly giving off toxic fumes.

Motor Oil and Gasoline contain lead and benzene, which cause cancer. Gasoline also contains ethylene dichloride, which can cause brain damage.

Brake and Transmission Fluids contain lead and other heavy metals after use.

One Gallon of Oil Ruins One Million Gallons of Water when spilled on the ground or dumped in the storm sewer, water that cannot be cleaned up in our lifetime.

All Liquids Used in Car Maintenance contain poisonous chemicals that produce toxic fumes and poison the air when heated or burned. They may also irritate or burn skin and eyes. Repeated contact with the skin can cause heightened sensitivity. These poisons also contaminate water when poured down the storm sewer or spilled on the ground.

More toxic auto liquids and pastes:

AUTOMOTIVE PAINTS

PAINT THINNERS AND FILLERS

WHITEWALL CLEANERS

BUG, WAX AND TAR REMOVERS

CARBURETOR CLEANERS

DRY GAS

CHROME POLISH

Auto Batteries when discarded self destruct and leak corrosive sulfuric acid. The acid can corrode trash cans and burns the skin. Batteries also contain lead. Fumes from discarded batteries poison the air while the acid and the lead poison the soil and water.

Freon/Air Conditioner Refrigerant leaks out of discarded air conditioners. It contains chloroflourocarbons (CFCs) that destroy the ozone layer, high in the atmosphere, which protects our skin and eyes from the sun. Car air conditioners account for 25% of the CFCs that are destroying the atmosphere.

Brake Pads and Clutches on older model cars are made with asbestos, which crumbles and creates fiber dust that can be inhaled and cause lung cancer and other serious breathing problems.

Tires, Hoses and Belts can be a fire hazard, if allowed to pile up. Tires are breeding grounds for mosquitoes and homes to rats. Used belts and hoses are often coated with oil and antifreeze.

DO NOT dump
any automobile
liquid on the ground,
down a sewer, or in a
river or lake.

DO NOT store
automotive liquids
and pastes in open
containers where
fumes can escape.

DO NOT mix left-
over auto liquids of
any kind.

**USE PUBLIC
TRANSPORTATION
MORE OFTEN**

On a single day in 1991, Boston collected 5,205 gallons of household hazardous waste from only about 1,000 households — this means that in the city's 250,000 households maybe stored up to 1,301,250 gallons of household hazardous wastes.

STEPPING OUT

Spreading the Word in Your Community

Home generated hazardous waste is a problem that can be tackled by the community working together. There's nothing complicated about it if you concentrate on your local concerns. As a group, you and your neighbors will find it easier to solve the problems of (1) substituting hazardous household products, (2) disposing of the waste from those products that you cannot substitute, and (3) getting neighborhood businesses to reduce their use of toxic materials and to use and dispose of them properly.

Talk It Up

Person to person communication works! Start a conversation with friends and neighbors about how they handle used motor oil, paint thinners, or some other toxic product. Talk about the health risks of those hazardous products.

Find Out Which Industries and Businesses in Your Community Produce, Sell or Use Toxic Materials

Auto-mechanic and auto-body shops, dry cleaners, garbage transfer stations, hardware stores and many others handle very hazardous materials on a daily basis. What substances do they use or sell? Do they recycle what they use? Will they collect for recycling what they sell? Where do they store the materials? Do they use them properly?

Identify Those in Key Positions to Change Things

In community agencies, businesses, city and state government. Who knows what is going on? Who regulates these matters? Are there licenses involved? Do the sanitation or public health departments have some say?



ORGANIZE

A leader is the person that first identifies a problem and decides to do something about it. Discussions with friends can lead to a larger effort. You may want to get the word out to a wider audience in your neighborhood. **As you spread the word on hazardous wastes and as you identify others who share your concerns you are identifying potential allies for that larger effort.** You could start with a small meeting of friends in your house, by raising the issue at a larger community meeting, or by securing the back-up of an existing community organization like HOPE.

Planning the Meeting

To organize an effective meeting you can use some help. Arrange a planning meeting with a small group (maybe you and a neighbor, maybe three or four of you) of those that have expressed the same concerns that you have. You will plan the agenda, decide on a time and place, and divide the work necessary to organize the meeting.

Publicize the Meeting

If your neighbors don't know about the meeting or if they find out late, they may not be able to come.

Distribute a flyer in the neighborhood

— make sure the time, the place and the purpose of the meeting are clear and prominently displayed on the flyer.

Make phone calls and knock on doors

— get a personal commitment from your neighbors to attend.

Use existing networks

— the neighborhood association, the church, a community agency ... they all have an existing network of communications and can bring people to the meeting (*"I wasn't sure but the priest says it is an important meeting."*).

You Can Always Use More Help

As you publicize the meeting you will come in contact with others who are ready to join the effort or have ties to other people and resources that may be of help. To make a volunteer effort work, more people doing smaller jobs gets things done.

Households in Massachusetts are storing an estimated 42 million pounds of household hazardous waste.

In Massachusetts, 45 communities have closed water supply wells because of groundwater contamination.



Pam Riley

Check Your Progress

Either by phone or by having a follow-up meeting to the planning meeting you must keep track of how things are developing. Was the flyer distributed as planned? How many people have said they are coming? Did you find a baby sitter for the parents coming to the meeting?

Decide on a Facilitator

The facilitator should be someone from the planning group who is at ease speaking in public, **is a good listener** and can keep the meeting on track. You may want to take turns facilitating the meetings.

Keep an Accurate Account of Events and Developments

Make sure someone will be taking notes. People can also take turns with this job. It is important to have notes on what is said at meetings — no one will remember everything that is said. You can act on your ideas only when those ideas are clearly spelled out. A written account of your experience can help other communities later.



Running a Good Meeting

Refreshments

Gathering neighbors together is more fun and effective if there is room for socializing. If people attending the meeting bring refreshments they will be part of the effort even before the meeting starts. The planning group may have to take care of this for the first meeting but afterwards it should be a cooperative effort involving all.

Introductions

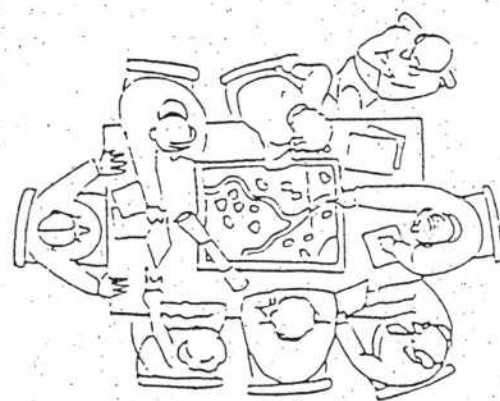
During the first meeting and whenever new people join the group, give each person the chance to speak about who they are, what they do, why they have come and what they would like to see come out of the meeting. See what they can do to help the effort —have access to a photocopy machine? can type? have a computer at home? know someone in the radio or the newspapers? know someone in the department of public health?

Keep to the Agenda

It is important not to deviate too far from what brought people to the meeting in the first place. Starting the meeting on time is very important, but even more so is finishing on time. There are no golden rules of what is "too far off the subject" or what is "too long a meeting." You can only judge by the interest and active participation of the majority of the people attending. Schedule the next meeting before the group breaks up.

Who Will Do It?

No matter how good an idea is, it will remain only an idea until someone assumes responsibility for it and carries it through. If something can be done before the next meeting it should be done before the next meeting. Small accomplishments (finding someone who is willing to come talk about pesticides, finding out that XYZ & Co.'s license is about to expire) build up the group. And remember: **usually the person that has the idea is the one most likely to get it done.** Before the meeting ends it must be clear to all who will do what — from who will call a government agency to find out about the law, to who will make the flyer for the next meeting, to who will bring coffee.



A multitude of common symptoms can be related to exposure to household toxics --headaches, depression, even ordinary flu symptoms might not be flu at all, but a pesticide poisoning or a reaction to your furniture polish. --Debra Lynn Dadd, The Nontoxic Home.





**FACT
PACK
P011**

***detoxifying your home -
protecting yourself and
your family***

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CHEJ continually updates our fact packs with information we receive from the grassroots. If you have any information to add to this pack, please send a copy to our Science department at the address above.