



Tips to Reduce Pollution & Its Effects on Your Health

Daily activities, such as driving, refueling, lawn mowing, home renovation, cleaning and gardening, create pollutants that can damage our environment -- and the health of those we love. This flyer describes some things you can do to reduce pollution as well as your exposure to pollution.

IN AND AROUND THE HOME

According to the EPA, indoor air pollution may be 2 to 5 times – and as much as 100 times higher – than outdoor pollution. Houstonians spend more than 95% of their time indoors, and therefore reducing indoor pollution is particularly important for improving health. In addition, home activities that pollute add to our outdoor pollution.

- Don't smoke or let others smoke inside the home.
- Reduce your use of chemicals indoors including cleaning products, mothballs, and room deodorizers. If you have clothes dry-cleaned, air out the clothes outdoors before bringing the items into the home.
- To reduce dust levels, use a vacuum with a HEPA filter or a damp mop. Change air conditioning filters often (monthly for standard fiberglass filters); consider using high efficiency filters that capture smaller particles.
- Fix any leaks or moisture problems that might encourage mold to grow. Use exhaust fans in the kitchen and bathroom. Keep humidity below 60% if possible to discourage proliferation of dust mites, which aggravate allergies in many people.
- Get your home checked for lead-based paint, especially if you have an older home.
- Use water-based paints and sealers whenever possible. Use paintbrushes and rollers rather than spraying.
- Reduce or eliminate the use of pesticides in and around your home. When watering your lawn and garden, avoid run-off into the street

and storm sewers. Such run-off encourages mosquito breeding and pollutes our bayous.

- Use hand-powered or electric lawn care equipment. An older gas-powered lawn mower operated for one hour emits the same amount of pollution as a new car driven 340 miles.
- Use gas grills instead of wood or charcoal.
- Most wood burning fireplaces create considerable pollution. Consider converting your fireplace to natural gas.
- Reduce your use of energy in the home. Power plants are a major source of pollution. Turn off lights not in use, use energy-efficient light bulbs and appliances, and use as little air conditioning as possible. Weather strip, caulk and insulate homes.
- Dispose of household hazardous waste properly. Oil-based paints, solvents, paint removers, caulk, pesticides, herbicides, automotive products, and cleaning products are considered hazardous waste and require special disposal. Inappropriate disposal can lead to air, water, and soil contamination, and can be dangerous to waste collectors and landfill workers.



CARS, TRUCKS & FREEWAYS

For many Houstonians, the most polluted environment they encounter is inside their car sitting on the freeway. Reducing your time in and around cars, trucks and traffic is good for everyone's health. Harmful gases and particles are emitted not only from tailpipes, but also from hot engines, tires and brake linings.

- Avoid rush-hour traffic whenever possible. Stop-and-go traffic and idling increase vehicle emissions.
- Avoid situations that encourage idling, such as drive-through lanes.
- Avoid quick starts and rapid acceleration. Both increase gas consumption and pollution.
- Avoid tailgating, which increases levels of pollutants within the interior of your vehicle.
- Use alternative commuting options. Carpooling, vanpooling, public transit, cycling, walking, telecommuting, and compressed work schedules are all alternative commuting options that significantly reduce the number of vehicles on the road, thereby reducing pollution. Most of these options also reduce your exposure to pollution.
- Don't top off your gas tank, which increases toxic gasoline emissions significantly.
- Keep tires properly inflated.
- If you drive, make certain your vehicle pollutes as little as possible. Regular tune-ups and routine oil changes reduce emissions of pollutants, increase fuel economy, protect your investment, and save you money.
- Make certain your gas cap is tightly sealed.
- Plan ahead and combine errands into one trip.
- Consider upgrading to a less polluting vehicle.
- Use air conditioning only when you really need it. The use of air conditioning in cars increases gasoline consumption (and resultant pollution) by approximately 15%.

WHAT ABOUT WATER POLLUTION?

While water quality in the Houston region has improved, it continues to pose some risks to human health and community well being.

- Inform yourself about water quality when planning swimming, water sports, boating and fishing activities.
- Consider eating smaller fish rather than large ones and avoiding game fish from lakes and reservoirs. Many pollutants, such as mercury and pesticides, are more concentrated in fish such as king mackerel, tuna, shark, and swordfish. In particular, young children and women of childbearing age should avoid any seafood for which state advisories have been issued.
- In homes built before 1988 with lead pipes or lead solder joints, run cold water for 30 seconds before using.
- Consider using a carbon or charcoal water filter to remove many chemical contaminants.
- Minimize use of chemical pesticides and fertilizers that can run off into waterways.

- Properly dispose of motor oil and other hazardous materials. Never dump them into yards or sewer drains where they can get into the water supply.
- Use water wisely and efficiently. Do not keep water running while brushing your teeth or shaving.

PROTECTING YOURSELF & YOUR FAMILY ON "BAD AIR" DAYS

In the Houston area, ozone smog levels often exceed the health guidelines, especially during the summer. On days with high ozone levels, other air pollutants are generally elevated as well. Children, the elderly, exercisers, and anyone with a lung or heart problem are especially at risk. Studies have shown that breathing problems, asthma attacks, heart problems and even the number of deaths are elevated on "bad air" days and for several days later.

- Be aware of pollution levels and area health warnings. Monitor the Air Quality Index and adjust your plans for the day accordingly.
- During the ozone season, exercise early in the day or in the evening. Avoid midday or afternoon exercise when ozone levels are generally highest.
- Do not exercise near heavy traffic.
- Make certain that your child's school, daycare facility and camp monitor pollution levels and have a plan in place to reduce exposure to outdoor pollution on bad air days.

WHAT TO DO IN A CHEMICAL EMERGENCY

There are areas in the Houston region where chemical releases occur that can pose a threat to human health. Staying indoors until such emergencies are over may be much safer than going outside where the air may be unsafe to breathe. In such emergencies, people will either shelter in place or evacuate an area.

SHELTER IN PLACE

- During chemical emergencies, parents should not go to the school to pick up children unless told to do so by school officials. Parents should also not try to call schools since phone lines are needed for official business.
- Turn off the A/C or heater. Close all windows and doors. Close the fireplace damper. Use tape to seal cracks or openings around doors and windows.
- Tune in to your local emergency radio or television station. Local officials will give emergency information over radio and television. For the Harris County area tune to AM 740 KTRH for emergency information.
- Use the telephone for emergencies only. For emergencies dial 911. For information on the chemical emergency call (281) 476-CAER (2237).

This number has been established by local industry to keep citizens informed of activities and emergencies at local chemical facilities.

EVACUATION

- Evacuate only if told to do so by local authorities.
- Stay calm and gather essential items (medicine, baby supplies, drivers license, checkbook, etc.).
- Don't forget to take care of pets before leaving home.
- Keep all windows and air vents in the car closed.
- Use special routes designated by local authorities.

HELPFUL NUMBERS

American Lung Association, for educational information on avoiding indoor air hazards, 1-800-586-4872

CAER (Community Awareness and Emergency Response) Line, emergency information for evacuation and sheltering in place, 281-476-2237

City of Houston Rat on a Rat Hotline, to report illegal dumping, water pollution, air pollution, or serious trash violations, 713-525-2728

City of Houston Bureau of Air Quality Control, to report outdoor air pollution, chemical or gas odors in Houston, 713-640-4200

Clean Air Action, public information and educational materials on the Houston - Galveston area and its progress in meeting ozone standards, 713-993-2438, <http://www.cleanairaction.org>

Clean Texas 2000 Program, 1-800-cleanup (253-2687), for information on where to dispose of motor oil, tips on composting, and recycling sites, <http://www.1800cleanup.org>

Consumer Product Safety Commission, for information on consumer safety and guidelines on formaldehyde, asbestos, and air pollutants, 1-800-638-2772, <http://www.cpsc.gov>

EPA Air Risk Hotline, for guidance on matters about health, exposure, and risk assessment of toxic air pollutants, 919-541-0888

Harris County Office of Emergency Management, <http://www.hcoem.org>

Harris County Pollution Control Hotline to report pollution incidents in Harris County 24 hours a day, 713-920-2831

Household Hazardous Waste Information Line, to learn safe disposal and storage of household hazardous wastes and less toxic materials to use, 713-551-7355

Indoor Air Quality Information Clearinghouse, for info on indoor air quality, 1-800-438-4318

Local Emergency Planning Committee (LEPC), for information on emergency planning for and public awareness of potential hazardous chemical substances, 713-589-1036, <http://greaterhoustonlepc.org>

Mothers for Clean Air, education about issues of air quality and their impact on human health, 713-526-0110

National Lead Information Center, to obtain safety information on lead, 1-800-532-3394

Ozone Watch and Warning Information, for the latest air pollution warnings, updated hourly for the Houston area, 1-888-994-9901

Pollution Response System, to report pollution in Galveston Bay and in Brazoria, Chambers, Harris, Galveston, and Liberty Counties, 1-800-368-7229

Recycling Hotline, to answer questions about where and what to recycle, 713-837-9130 (inside Houston, dial 311)

Safe Drinking Water Hotline, for information and materials on the policies and regulations for drinking water, 1-800-426-4791

Texas Children's Hospital: *Tips for a Healthy and Safe Environment for Children*, <http://www.texaschildrenshospital.org/pcac/phasec.htm>

Texas Natural Resource Conservation Commission (TNRCC), to report water pollution, land contamination, and air pollution in Harris County and the surrounding 13 counties, 713-767-3712, <http://www.tnrcc.state.tx.us>

Texas Smoking Vehicle Program Hotline, to report polluting vehicles by license number, 1-800-453-7664, <http://www.smokingvehicle.org>

These tips were adapted from the following sources: Citizens Environmental Coalition 2001 Environmental Resource Guide, Houston - Galveston Area Council Air Quality Reference Guide for the Houston-Galveston Area - September 2000, Mothers for Clean Air, Houston Advanced Research Center, American Lung Association, and Business Coalition for Clean Air.