

National Healthy Schools Day



**PSEA
Invites You
to
Participate in a
Clean Air Event**

April 26, 2010

PSEA PENNSYLVANIA
STATE EDUCATION
ASSOCIATION
The Power of a Great Education

Please join together in a day of Clean Air on April 26, 2010!

Use the examples on the following pages to clean up the environment that you breathe, or come up with some activities for your workplace on your own, but make clean air a choice!

Make Clean Air Your Choice!

Motor vehicles are a main source of carbon dioxide. Break the automobile addiction:

- When you must drive, combine trips.
- Don't idle (run your engine needlessly). If you're stopped for more than 10 seconds, except in traffic, turn off the engine. Idling causes air pollution and wastes fuel.
- When starting your vehicle on a cold day, the best way to warm up your vehicle is to drive it. You only need 30 seconds of idling to circulate the engine oil. Driving will then warm the other moving parts, such as the tires, transmission, steering, suspension and wheel bearings. The exception to this rule is if it's very cold outside.
- Choose a fuel-efficient vehicle. Keep it in top condition with a regular tune-up and make sure the tires are properly inflated.
- Walk, cycle, use public transit or join a carpool. Even leaving the car at home just once a week will significantly lower emissions.
- Consider a condensed work week or telecommuting as a way to work effectively and cut air pollution.
- Remember that cyclists have chosen an environmentally friendly way to travel. Share the road!

Make your home energy-efficient:

- When choosing a space-heating system for your home, consider a high-efficiency furnace.
- Convert to cleaner, more efficient fuels. Natural gas burns more efficiently than oil, but it's still a fossil fuel, producing carbon dioxide and other pollutants. Hydroelectricity is preferable to both. Solar energy and ground-source heat pumps are exciting new options.
- Insulate and weather-strip your home effectively, and install windows that are efficient at preventing heat loss. An energy-efficient (R-2000) house that traps passive solar energy and retains it by minimizing air leaks can reduce annual energy consumption by over half that of a conventional home.
- Set your thermostat no higher than 68°, and turn it down when you're asleep or going out.
- Switch to energy-efficient light bulbs and appliances.
- To reduce the amount of energy required to heat water, insulate hot water pipes and use low-flow showerheads.
- Avoid using garden tools (e.g. lawn mowers) that run on gasoline.

Put a lid on smoke:

- Instead of burning your garden leftovers, start a backyard compost. Recycle paper and cardboard. Never burn plastic, tires and other toxic materials.
- Make sure your woodstove burns efficiently, and burn only dry, untreated wood.

Keep ozone-depleting substances safe on earth:

- Make sure your car (and home) air conditioner, refrigerator and freezer don't leak ozone depleting substances. If they do, get them repaired by a certified technician.

Do you think nothing you can do will help? Wrong! Each one of us can help make a difference in the quality of the air we breathe, and in the health of the atmosphere, just by reducing our own emissions.

We all share the air. We can all care for it.

What you can do

The challenge of ensuring clean air and a healthy climate can be met. Choices made by businesses, communities and individuals can lead to meaningful reductions in air pollutants and greenhouse gas emissions. Home energy improvements, tree planting programs, alternative transportation and increased use of public transit are just some of the choices that can be acted upon at the community level. In many cases, one action will reduce both air pollutants and greenhouse gas emissions. Some actions will reduce both air pollutants and greenhouse gas emissions. Some actions can even save you money! Actions taken now and continued over the long-term can make a difference.

Here are some simple ways you can reduce your GHG emissions at work:

- Turn all equipment off when not in use, including computers, photocopiers, cash registers, and coffee machines, particularly overnight and on weekends (it will not damage the components).
- If your computer has integrated power management capabilities, ensure the system is configured to use them. If printers and photocopiers have an energy-saver mode, make sure it is operating (machines are often shipped with this feature disabled).
- Use as little paper as possible. Printing, photocopying, faxing all use energy. Communicating electronically through e-mail and fax/modems is quicker, less expensive, more productive, and healthier for the environment.
- Print and copy both sides of the page. Double-sided printing or photocopying reduces paper costs, saves filing space, and minimizes the amount of energy and fiber required for paper production.

- Use recycled paper (including unbleached paper) whenever possible.
- Turn off lights when a work area isn't being used – or, even better, don't turn them on in the first place! Natural light saves energy and is easier on the eyes. Open the curtains and blinds to bring more natural light into your work area.

Here are some simple ways you can reduce GHG emissions at home:

- All of the cracks and gaps in the average house, added together, are equal to a 1.5 square foot hole. Using caulking and weather stripping to seal all leaks around doors, windows, and cracks where heat escapes from your home can save up to 20% on your heating bill.
- Insulate when you renovate your home. Over the years, a small up-front cost can pay for itself several times over in energy savings.
- Use an automatic set-back thermostat for your home's heating and air conditioning.
- Clean your furnace filter regularly to ensure good airflow and keep your furnace properly tuned. Install low-flow showerheads and fix leaky or dripping faucets.
- Get rid of that old fridge! An inefficient refrigerator with an ill-fitting door can cost hundreds of dollars a year to operate. A new, more efficient refrigerator will consume less energy and provide many new features.
- When buying that new refrigerator, or any household appliance, check the EnerGuide label to help you select the most energy-efficient model that meets your needs.
- Almost all of the energy used by clothes washers is for heating water. Only about 10 percent or less is actually used by the electric motor that runs the machine.
- Use cold water whenever you can to improve your clothes washer's efficiency.
- Let dishes air-dry rather than using the dishwasher's drying cycle. Microwave cooking can reduce energy consumption by two-thirds and produces much less waste heat than your stove.
- Use energy-efficient lighting products such as compact fluorescent bulbs. They last 10 times longer and use 75% less energy than regular incandescent light bulbs.

Here are some simple ways you can reduce your GHG emissions on the road:

- Leave the car at home whenever you can. Walk or bike for short trips; for longer trips, take the bus. One busload of passengers takes 40 vehicles off the road, saving 18,500 gallons of fuel, 175 tons of carbon dioxide emissions and nine tons of pollutants per year.
- Avoid idling your vehicle. Ten seconds of idling uses more fuel than restarting your engine and produces more air pollution.

- Keep to the speed limit. On the highway, use cruise control to maintain a steady speed and reduce fuel consumption.
- In the city, stop-and-go traffic means that your air conditioning can increase fuel consumption by as much as 20 per cent. At low city speeds, open windows can be a fuel-saving alternative.

Children's Environmental Health

Safe Household Cleaners

Keeping a clean house is important for protecting your family's health, but it is also important to make sure that what you are cleaning with is not even more harmful than what you are cleaning up! Fortunately, many safe products can be used to replace the toxic cleaners. Many less toxic commercial brands are available, or you can make your own out of common household products.

Whatever products you use, make sure you store them properly. Even household products like baking soda and vinegar are harmful to children if ingested. Always store products out of reach of children or in a locked cabinet. If you do mix your own products, make sure to store them in a labeled container. In case of accidental ingestion, contact your poison control center. Having the product labeled will allow you to quickly tell the center what was ingested and receive help as quickly as possible.

Homemade Cleaners

Air Freshener:

Place bowls of vinegar or baking soda around the house to absorb odors. To make the air scented, boil some herbs in water for a few minutes and place in a bowl. Add salt to discourage the growth of fungus. **MAKE SURE TO PLACE BOWL OUT OF REACH OF PETS AND CHILDREN.**

Drain Cleaner:

To clear a clogged drain, pour $\frac{1}{2}$ cup of baking soda down the drain. Add at least a cup of vinegar. It will start to fizz. Cover the drain. Finish by pouring a mixture of boiling water and salt down the drain. You may have to repeat the process a few times.

Toilet Bowl Cleaner:

Sprinkle baking soda in the toilet bowl and brush. Or, add white vinegar and let sit for a few minutes, then brush.

Oven Cleaner:

Wipe residual grease away, and then scrub with a paste of baking soda and water.

Window Cleaner:

Spray window with a mixture of water and vinegar - 3 Tbs. vinegar to 1 qt water.

Kitchen Cleanser:

Use baking soda on non-scratch surfaces and a vinegar and water mixture on other surfaces.

Tub and Tile Cleanser:

Mix 1 2/3 cups baking soda, ½ cup liquid soap and ½ cup water. After mixed, add 2 Tbs. vinegar (adding vinegar too soon will cause it to react with the baking soda). Apply, wipe, and scrub.

Disinfectant:

Make a solution of 3 Tbs. liquid soap, 2 cups water, and 20-30 drops of tea tree oil (which is a natural disinfectant).

Metal Polish:

For brass and copper, cut a lemon in half, sprinkle it with salt, and rub it on metal. Buff with cloth to remove excess lemon juice. For silver, put a sheet of aluminum foil in a plastic or glass bowl. Sprinkle the foil with salt and baking soda and fill bowl with warm water. Just soak silver in the bowl and the tarnish will migrate to the foil. Dry and buff.

Commercial Cleaners

There are many brands of commercial cleaners available that offer less toxic alternatives. Read the packaging. Organic and biodegradable are generally the safest. Natural products tend to be the next safest and conventional cleaners are the least safe. These products are available at many major supermarkets as well as at organic and natural grocery stores. Some brand names are Ecover, Earth's Best, Seventh Generation, Earthrite, Bio Kleen, Life Tree, Dr. Bronner's, and Sun and Earth. The Sun and Earth Headquarters is located in Norristown, PA.

Children Are Different From Adults!

Children are both exposed to more pollution and are more susceptible to the effects of this exposure.

Increased Exposure

Children are exposed to more pollution per unit of body weight than adults are.

Children breathe, eat, and drink more for their body weight than adults. This increase percentage of intake means that the amount of pollution in our air, food, and water has a much more significant effect on children's health than it does on the health of an adult.

Children's behavior also increases their exposure to environmental toxicants. Children touch more things and put more things in their mouths as a way of exploring their environment. Also, their close proximity to the ground and car exhaust pipes increases their exposure.

Increased Susceptibility

Children's bodies react differently to environmental toxicants than adults' do.

Children are often less able to metabolize and remove foreign compounds than adults. In addition, children's bodies often absorb these compounds at a higher rate than adults do.

Children's immune systems are still immature and are often not developed enough to provide adequate protection from environmental toxins.

Children's bodies are still developing, and exposure to environmental toxins has an impact on how this development progresses. Developmental problems can manifest themselves as physical deficits and disorders as well as disorders of the central nervous system resulting in psychological deficits.

Because children are still at the beginning of their lives, the effects of environmental toxicants have more time to accumulate and manifest themselves.