

Clean Air at Home

Clean Air Counts is a nonprofit campaign that is working to improve air quality in the Chicago area by targeting the problem of urban smog. Smog, or ground-level ozone, is formed when nitrogen oxide gases (NOx) and volatile organic compounds (VOCs) react in the presence of heat and sunlight. With this in mind, Clean Air Households offers a variety of simple ways in which citizens like you can decrease your own emissions of these compounds, and help all of Chicago breathe easier.

Simple Steps Toward Cleaner Air

Clean Air Counts aims to reduce smog-forming emissions by 5 tons/day. Many daily activities, from driving your car to cleaning your home, release these emissions. By making a few small changes in habits and consumption, you can join over a thousand households and businesses in helping to improve our air. Here are a few examples:

- Use energy-efficient compact fluorescent light bulbs
- Purchase no- or low-VOC cleaning products and paints
- Drive less, use public transit, and walk or bike whenever possible
- Mow your lawn and fill your gas tank in the evening or cooler part of a summer day

Join Clean Air Households today for more information on how to keep the air clean and how to identify environmentally friendly household products. As you adjust your habits, you can track how you have benefited our air quality through your Clean Air Counts personal online profile, and see Clean Air Counts' progress toward our 5 tons/day goal.

Help us prove that voluntary citizen action can make a difference for our air!

Benefits of Clean Air Counts

- Breathe easier. Breathing polluted air is unhealthy for everyone, but children, the elderly, and people with asthma are especially vulnerable. People who exercise or work outdoors are also at high risk.
- Have a healthier home. Inhaling VOCs can cause headaches and respiratory problems. Especially in homes with children, seniors, or asthmatics, it is crucial to eliminate these pollutants.
- Prevent asthma attacks. Hospital admissions for asthma attacks are higher on days when smog levels are high. Both outdoor smog and indoor air pollution can trigger attacks.
- Save money...
- ...on energy bills. By using energy-efficient lighting and appliances in your home, you can save money on your electric bills.
- ...on gasoline. By driving less, you can save money on gas and tune-ups.
- ...on products. Homemade cleaners are effective, and cheaper than pre-packaged products. And in stores, no- and low-VOC products are comparably priced with regular products.
- Protect wildlife. Ground-level ozone interferes with plants' ability to produce and store food, compromising their growth and reproduction. When these plants are destroyed, animal habitats are also lost.
- Improve visibility. Smog makes the sky hazy, obscuring our beautiful skyline.

<<http://www.cleanaircounts.org/households/index.php>>

Here are some suggestions for how you can reduce your emissions of smog-forming NOx and VOCs:

- [Drive less and walk, bike, or use transit whenever possible](#)
- [Keep your car running efficiently](#)
- [Fill up your gas tank and mow your lawn in the evening](#)
- [Use air-friendly cleaning products](#)
- [Use low- and zero- VOC paints](#)
- [Replace old lightbulbs with compact fluorescent bulbs](#)
- [Use energy-efficient appliances and activate energy-save settings](#)
- [Plant Illinois-native species in your yard and garden.](#)

Drive less and walk, bike, or use transit whenever possible.

It is estimated that motor vehicles contribute 55% of the nitrogen oxides (NOx) and 42% of the volatile organic compounds (VOCs) emitted in the United States (U.S. EPA). While cars today are much cleaner than in the past, we have not seen an overall drop in NOx and VOC emissions, due to the increasing number of cars on the road.

So, one of the best ways you can help reduce smog is to use your car less frequently. Walking and biking are the best options for the environment and for your health. Public transit is also a great option: it's less polluting, and cheaper, than driving a car. Carpooling is a great way to get the benefits of using a car while still eliminating all the excess emissions that would be caused by multiple single-occupancy vehicles.

Keep your car running efficiently

Keeping up with your car's scheduled maintenance (of oil, air filters, belts, etc.) and ensuring your tires are properly inflated actually decreases your vehicle's emissions. Taking care of your car can also extend its life, increase its resale value, and optimize its gas mileage.

When driving your car, you can also avoid certain behaviors that increase your car's emissions and decrease your fuel economy. These include idling, stop-and-go driving, and air conditioning. Here are some suggestions for avoiding these behaviors:

- Park your car and walk into restaurants and banks instead of idling in drive-up lanes
- Accelerate and decelerate smoothly
- Avoid rush-hour traffic when possible
- In pleasant weather, open windows instead of using air conditioning
- Park your car in the shade to keep it cool. This will also keep gasoline from evaporating from your engine and gas tank.

Finally, when buying a new car, look for hybrids or gas-efficient models. You'll save money at the gas pump, and help decrease air pollution.

Fill up your gas tank and mow your lawn in the evening during the summer.

Since heat and sunlight are two of the necessary ingredients for smog formation, it is no surprise that NOx and VOC emissions released during the day will be more likely to become smog. If these emissions are instead released in the evening, they have time to dissipate with wind, before heat and sunlight are present to complete the reaction. Mowing your lawn in the evening instead of at midday will therefore decrease smog-formation, and keep you

out of the heat! Also, consider replacing your gasoline-powered lawnmower with an electric or manual model. Even with new gas pumps and cans, designed to prevent the release of VOCs into the atmosphere, some gasoline will still evaporate and release VOCs when you fill up your gas tank on a hot summer day. These emissions can be avoided altogether! By filling your gas tank in the evening, you can prevent gasoline evaporation, and the release of VOCs. Also, never top off your gas tank!

Use air-friendly cleaning products.

Air-friendly cleaning products release less toxic, ozone-forming chemicals than traditional cleaning products. Currently, consumer products used in the Metropolitan Chicago area are releasing about 20 tons of VOCs every day, but with a few smart substitutions, this number can be drastically decreased. Switching to low-VOC cleaning products also helps protect your family's health, by reducing or eliminating exposure to harsh chemicals.

These low-VOC products are available in most stores, and are typically labeled by the manufacturer as "green" or "eco-friendly". Many stores group these air-friendly products together in one section or aisle. Please be sure to enter your purchases on your Clean Air Counts profile!

Report a purchase of [air-friendly cleaning products](#).

Use low and zero-VOC paints. Many paints are made with a high percentage of volatile organic compounds (VOCs). However, you or your contractor can complete most indoor and some outdoor painting projects using low- or zero-VOC paints. These paints release fewer smog-forming emissions and produce fewer fumes as they dry. This is especially beneficial to individuals who are sensitive to paint fumes, suffering headaches or eye or respiratory irritation when exposed to paint high in VOCs. Children are also especially sensitive to the chemicals released in paint fumes, as well as to the ozone produced from VOC emissions.

When painting, you should also remove soft materials, like pillows and blankets, from the area because they absorb VOCs and release them into the air later.

You can find recommendations for air-friendly paint on the [Green Seal website](#).

Report a purchase of [low or zero-VOC paints](#).

Replace old lightbulbs with compact fluorescent bulbs.

The electricity we use in our homes is often produced by power plants that burn fossil fuels such as coal. Therefore, reducing your home energy use reduces the amount of fuel that must be burned to produce that energy, in turn, reducing smog-forming emissions.

Switching from your old lightbulbs to the much more efficient compact fluorescent bulbs can save you money on your energy bills and help you reduce your contribution to smog. If you don't think this will have a big impact on the air, think again: if 5,000 households replaced 5 burned-out incandescent bulbs with compact fluorescent light bulbs, the Chicago region's NOX emissions would be reduced by 4 tons every year.

Report a purchase of [energy-efficient lighting](#).

Use energy-efficient appliances and activate energy-save settings

Home appliances also rely on energy produced at fossil-fuel-burning power plants. When purchasing new appliances, look for the EnergyStar logo; this label means that the appliance is certified as being energy-efficient.

Also, make sure to use your existing appliances efficiently. For example, by activating power management settings in your computer's control panel, you can save energy and money (as much as \$100/year!) Finally, make sure to turn appliances off when they are not in use.

Report your monthly appliance use.

Plant Illinois-native species in your yard and garden.

Instead of planting traditional turf grass, consider planting native grasses in your yard. Native flowers, shrubs, and trees can also add a natural beauty to your yard or garden, and help the environment too.

Because these native plants are adapted to the Midwestern geography, hydrology and climate, they are much easier to maintain: these plants require less watering and fewer pesticide and fertilizers. Using natural landscaping instead of a turf grass lawn not only helps to conserve water, but also helps air quality by reducing the use of VOC-releasing pesticides and minimizing or eliminating the need to mow. A conventional gasoline-powered lawnmower creates as much air pollution as driving a car for 100 miles, and cumulatively, produce about 5% of the nation's air pollution.

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