

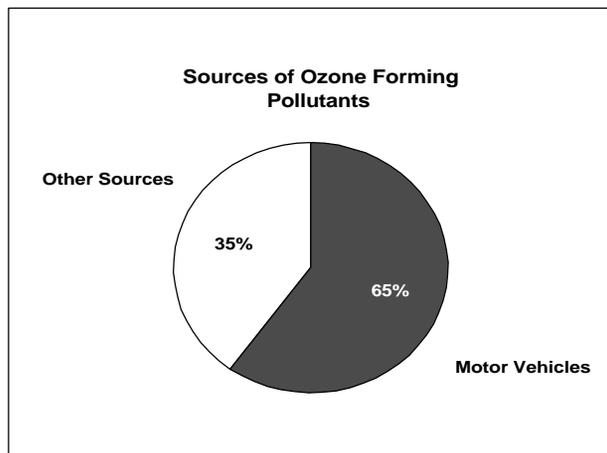
## How Much of Vermont's Air Pollution Comes From Motor Vehicles?

Motor vehicles are the largest source of toxic and carcinogenic air pollutants in Vermont. Each year, motor vehicles emit about 2 million pounds of toxic and carcinogenic compounds like benzene, formaldehyde, and 1,3-Butadiene.

Motor vehicles are the largest source (about 65%) of ozone-forming pollutants in Vermont. Each year vehicles emit over:

- 234 million pounds of carbon monoxide,
- 20 million pounds of hydro-carbons,
- and 28 million pounds of nitrogen oxides.

As industries have reduced their emissions, motor vehicles have become an increasing portion of the air pollution created in Vermont.



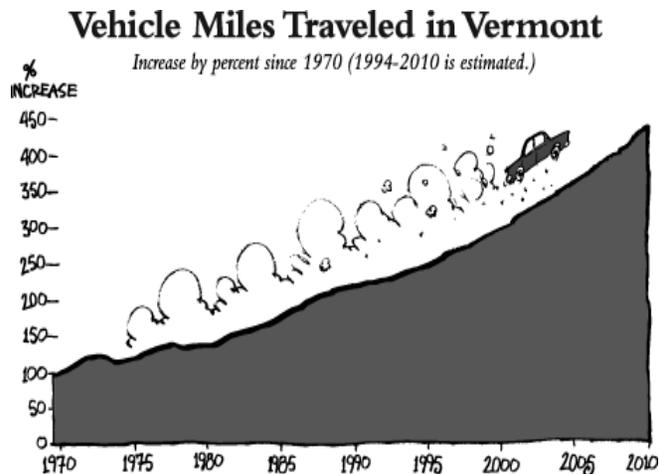
The number of vehicles and the miles they travel are increasing. Motor vehicles now travel over 6 billion miles annually in Vermont, double the amount traveled in 1972.

## How Much Air Pollution Does an Average Motor Vehicle Emit?

The average Vermont driver puts 17,000 miles a year on his/her car. This equals 935 pounds of carbon monoxide, 13,600 pounds of carbon dioxide, 114 pounds of hydrocarbons, and 68 pounds of nitrogen oxides emitted every year. That's nearly 7.5 tons of air pollution each year, from just one vehicle!



A vehicle with a malfunctioning or faulty emission control system can emit over 800% more air pollution than a properly operating vehicle!



## What are the Health and Environmental Effects of Motor Vehicle Emissions?

Because motor vehicles are so common and so widely used, humans are continuously exposed to air pollution from motor vehicles.



*We all breath air, all day, every day.*

Toxic and carcinogenic air pollutants from motor vehicles are of concern because they are known or suspected of causing cancer in humans, and pose a threat even at very low levels.

Hydrocarbons and nitrogen oxides from motor vehicles form smog (ground-level ozone), which damages lung tissue and aggravates respiratory disease.

Children and the elderly are especially vulnerable to smog. According to the American Lung Association of Vermont, nearly 200,000 children and elderly Vermonters are frequently exposed to unhealthy levels of smog.

Smog from motor vehicles inhibits plant growth and can cause widespread damage to crops and forests.

Air pollution from motor vehicles contributes to the formation of acid rain and global warming.



## Doing your part

If you have to drive, these simple rules will help you minimize emissions:

- Keep tires inflated to required pressure and front end aligned.
- Follow manufacturers maintenance schedule - especially regarding tune ups and oil changes.
- Drive sensibly. Avoid jack rabbit starts and stops.
- Warm up your car - even in cold weather - by driving it. Idling for long periods in cold weather can actually damage your engine.
- Don't let your car idle unnecessarily (30 seconds or less). Avoid drive up service windows!
- Avoid high speeds. You will get 15% better mileage driving 55 mph versus 65 mph.

Higher emissions means lower engine efficiency and lower miles per gallon, which costs you \$\$\$.

***Thank you for your cooperation and helping do your part to clean up the air.***

For more information call the Air Pollution Control Division at (802) 241-3840

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Visit our website at:  
[www.anr.state.vt.us/dec/air](http://www.anr.state.vt.us/dec/air)

## What Can Be Done to Reduce Motor Vehicle Emissions?

### ALTERNATE TRANSPORTATION

The most effective way to reduce emissions from motor vehicles is to use them less. The trend of more cars driving more miles is starting to outpace the progress in vehicle emission control technology. Carpool, take a bus or train, ride a bike, walk- every effort helps.

**MAINTENANCE** Proper maintenance of motor vehicles is critical to pollution prevention. Following maintenance guidelines can reduce vehicle emissions and enhance vehicle performance and reliability.

**INSPECTIONS** A well designed vehicle emissions inspection and maintenance program is a practical and cost-effective way to reduce air pollution from vehicles currently in use.

**CLEAN CARS** Advances in vehicle emission control technology are making it possible to produce new vehicles with lower emissions. Electric vehicles, sometimes referred to as "zero-emission vehicles," are gaining attention as an option for improving air quality.

**CLEAN FUELS** New fuel blends and alternative fuels have the potential to produce less air pollution and greenhouse gases than conventional fuels.



Carpool!

## Air Pollution Control In Vermont

# Air Pollution from Motor Vehicles in Vermont



Your Car and Clean Air