

# Engine idling: Just the facts

**The average American  
breathes 3,400 gallons  
of air a day.**

**Children breathe 50% more  
air per pound than adults.**

**A single vehicle dropping  
off and picking up kids  
at one school puts  
three pounds of  
pollution into the  
air per month.**

## HEALTH EFFECTS:

- Children's asthma symptoms increase as a result of car exhaust.
- Asthma is the most common chronic illness in children and the cause of most school absences.
- Asthma is the 3rd leading cause of hospitalization among children under 15 years.
- Auto exhaust emits pollutants into your vehicle as well as the atmosphere. The smallest pollutants can lodge deeply into the lungs and cause lung damage, aggravate respiratory conditions such as asthma and bronchitis, increase the risk of strokes and heart attacks, lead to cancer and contribute to premature death.

## POLLUTION:

- Vehicle exhaust is the leading source of toxic air pollution in Oregon.
- Idling vehicles emit significant amounts of pollution, including carbon dioxide, nitrogen oxide and volatile organic compounds. Carbon dioxide is a major contributor to global warming.

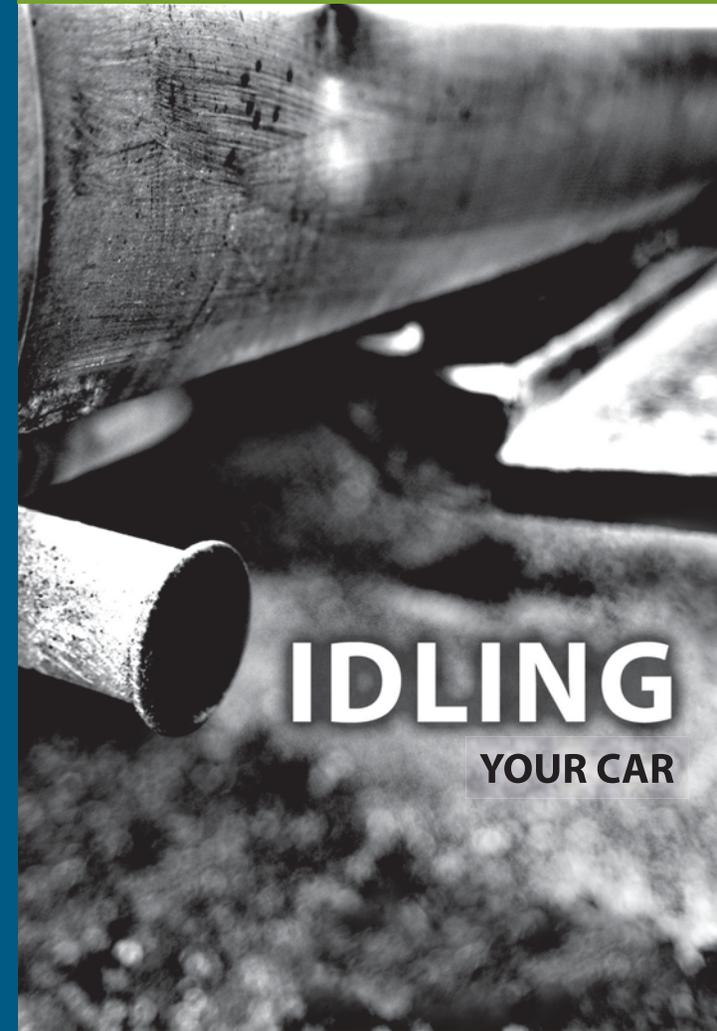
## VEHICLE IMPACTS:

- An idling engine delivers zero miles to the gallon.
- Frequent restarting has little impact on engine components like the battery and starter.
- Excessive idling can be hard on your engine because it isn't working at peak operating temperature. Fuel doesn't undergo complete combustion, leaving spark plugs dirty and contaminating engine oil.

**What can you do?  
It's easy:  
just turn the key**



Transportation Options  
1120 SW 5th Avenue, Rm 800  
Portland, Oregon 97204  
503-823-6114  
Commissioner Sam Adams



**It's a toxic health hazard,  
it's hard on your engine,  
and it wastes expensive gasoline.**

**Idling gets you  
nowhere**

# Don't stay idle: Take action.

Have you ever left your vehicle idling for more than 10 seconds while waiting to pick up your child at school or while at the drive-up window at the bank?

Most of us have.

Here are some very good reasons to rethink this common habit.

## Vehicle exhaust is the leading source of toxic air pollution in Oregon.

While sitting in an idling vehicle, drivers are more exposed to the vehicle's pollution than when the vehicle is in motion because airflow vents the emissions

About 40 to 50 percent of toxic air pollutants in Oregon come from vehicle exhaust. The combustion of fossil fuels releases sulfur dioxides, particulate matter, carbon monoxide and air toxins. These pollutants cause respiratory or nervous system damage as well as cancer and other health problems. Carbon dioxide (CO<sub>2</sub>) the primary global warming gas, is also released from burning fossil fuels.

## Vehicle exhaust is hazardous to human health, especially children's.

Children's asthma symptoms increase as a result of car exhaust

Studies have linked pollution from vehicles to increased rates of cancer, heart and lung disease, and asthma. Exposure to most vehicle exhaust is much higher inside vehicles than at the

roadside. Children, whose lungs are still developing, breathe more rapidly and inhale more pollutants per pound of body weight than adults. Asthma is the third leading cause of hospitalization for children under the age of 15.

## Vehicle idling is expensive and hard on your engine.

Shutting off your engine, rather than idling for more than 10 seconds, not only improves air quality, it saves fuel, too

Over 10 seconds of idling uses more fuel than restarting your engine. Just 1 hour of idling burns about 1 gallon of gas and gets 0 miles per gallon. An idling engine isn't working at peak operating temperature (since your vehicle, designed to move, is still when idling), and fuel doesn't undergo complete combustion. This can damage your engine components, including cylinders, spark plugs, and exhaust systems. Frequent restarting of a vehicle has little impact on engine components such as the battery and starter motor.

## Here's What You Can Do:

### Turn it off after 10 seconds

If you are going to be stopped for more than 10 seconds (except in traffic), turn off your engine.

### Reduce warm-up idling

Today's modern engine needs no more than 30 seconds of idling on winter days before driving. Driving is the best way to warm it up.

### Spread the word

Talk to your family, friends, and neighbors about the benefits of reduced idling. Encourage them to join you in protecting the environment, contributing to a healthier community, and saving money.

