

YOU HOLD THE KEY—  
WHAT YOU SHOULD KNOW ABOUT

REDUCE POLLUTION  
AND SAVE MONEY

## BUS ENGINE IDLING

### WHAT CAN YOU DO?

#### Shut it down:

Follow the Massachusetts anti-idling rule.

#### You Hold the Key:

Use your common sense to reduce idling. You'll save fuel, wear and tear, and help clean the air.



For more information:  
Visit [www.epa.gov/ne/eco/diesel/](http://www.epa.gov/ne/eco/diesel/), or call the EPA Air Quality Hotline at 1-800-821-1237

**B**uses play an important role in transporting people from place to place. They are a key element of public transportation and tourism by making travel convenient and affordable. However, there is growing concern about the health effects associated with exposure to diesel exhaust. Like other vehicles on the road, buses contribute to the air pollution that causes ozone smog, acid rain, and global climate change.



Diesel exhaust affects everyone, but people with heart or lung disease, asthma, or other respiratory problems are most sensitive to the small particles in diesel exhaust. Fortunately, new emission standards and new technology for the diesel and gasoline vehicles of the future will dramatically reduce these health risks. If you drive a bus, there are several things you can do now to use less fuel, save money, and reduce pollution.

### THE ANTI-IDLING LAW IN MASSACHUSETTS

A Massachusetts law and regulation prohibit unnecessary idling of all motor vehicles that are stopped for a foreseeable period of time over five minutes (Chapter 90 section 16A and 310 CMR 7.11). So, if your vehicle is going to be stopped for more than five minutes, shut it down. The law does account for some exceptions, for example while an engine is being repaired.

Drivers and/or companies who violate this anti-idling rule may be subject to enforcement actions and fines. Local, state, or federal enforcers may levy fines and penalties. The penalty amounts vary, depending on which agency is enforcing the law, but they range from \$100 initial fines issued by local and state agencies to \$27,500 in civil penalties per violation imposed by the federal government.

### WHAT ARE SOME OF THE PROBLEMS ASSOCIATED WITH IDLING?

#### IDLING CAUSES POLLUTION

- Idling vehicles emit significant amounts of pollution including: carbon dioxide, which contributes to global climate change; nitrogen oxides and volatile organic compounds, both of which contribute to the formation of ozone smog; poisonous carbon monoxide; and particulate matter, which contributes to asthma, heart disease, lung damage, and possibly cancer.

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### SOME PROBLEMS ASSOCIATED WITH IDLING

- 1 Idling causes pollution.
- 2 Idling pollution poses health risks to everyone including drivers.
- 3 Idling wastes fuel and money, and causes excessive engine wear.

## **IDLING POSES HEALTH RISKS TO EVERYONE INCLUDING DRIVERS**

- While sitting in an idling vehicle, drivers are exposed to the vehicle's pollution more so than when the vehicle is in motion since there is no airflow to vent the emissions.

## **IDLING WASTES FUEL AND MONEY AND CAUSES EXCESSIVE ENGINE WEAR**

- It is more fuel efficient to turn off your motor than to idle. Recent studies found that fuel consumption during engine start-up is equal to about 30 seconds of engine idling if the engine is within normal operating temperature.
- Running an engine at low speed (idling) causes twice the wear on internal parts compared to driving at regular speeds.

## **MYTHS AND FACTS ABOUT DIESEL ENGINES AND IDLING**

### **PRE-TRIP SAFETY INSPECTION**

**MYTH:** The law says you can't idle for more than five minutes. I have to conduct a safety check, so I have to break one law to obey another.

**FACT:** One exception to the anti-idling rule (the "service" exception) allows idling for more than five minutes to conduct a pre-trip safety inspection. In most instances, when no serious defects are found, thorough pre-trip safety inspections can be completed in 15 to 20 minutes. After the pre-trip is done, shut it down until you're ready to drive.

### **FOR THE COMFORT OF PASSENGERS: EARLY BOARDING AND WAITING FOR PASSENGERS**

**MYTH:** I must keep the engine running for an extended period of time while waiting for passengers to board my bus. If I don't, they will complain about being too hot or too cold.

**FACT:** Depending on the weather, many buses will maintain a comfortable interior temperature for a while without idling. On a case-by-case basis, enforcement personnel may use their discretion to account for heating and cooling in extreme temperatures. To assure compliance, bus operators should consider installing auxiliary power units to maintain comfortable interior temperatures without idling.

**BACKGROUND:** In most cases, the five minutes of idling allowed under state law is enough to ensure that passengers will be comfortable when they reach their seats. Because many newer buses are equipped with air conditioning and windows that do not open, buses that do not have auxiliary power units must run their engines at some point to supply ventilation and climate control (air conditioning in summer and heat in winter) for passengers. But out of habit, some drivers leave their vehicles running for the entire waiting period. It's better for the environment—and it obeys the law—to shut it down between drop off and pick up times.

### **SPECIFIC TIPS FOR BUS AND FLEET OWNERS**

You may want to show your company officials this Fact Sheet. They can do their part to reduce idling, too.

- Reducing idling saves owners money in two ways: it reduces fuel use and reduces wear and tear on the engines. During in-service training, reinforce how important it is to the company to reduce idling as much as possible.
- When buying new buses, purchase ones already equipped with devices that minimize idling and warm-up time automatically.
- Consider installing small generators or auxiliary power units that help maintain comfortable interior temperatures while the bus engine is shut down. These devices substantially reduce the fuel consumed and emissions generated during long-duration idling, saving you fuel and maintenance costs.

This information about idling was developed by:



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