

# DIESEL SCHOOL BUSES

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Designed and produced by the Green Flag Program with information from the Green Squad website, a project of the Natural Resources Defense Council and the Healthy Schools Network.

**Some areas of your school may be off-limits without permission from your teacher or principal, and some projects should be done with at least one partner. Check with your teacher before beginning any activities or projects related to this fact sheet.**

## WHY IT MATTERS

**Exhaust** from diesel school buses is harmful to your health.

**Many school buses run on diesel, a kind of fuel that's different from the gas that cars use.** When a bus runs on diesel fuel, the exhaust that comes out of the tailpipe contains hundreds of chemicals, and dozens of them are harmful. For instance, diesel trucks and buses are one of the biggest sources of nitrogen dioxide, which causes smog. Diesel smoke also contains many tiny particles that can get stuck in your lungs. Like smog, these particles can make it hard for you to breathe, especially if you have asthma or allergies. People who breathe in diesel exhaust for long periods are also at higher risk for some kinds of cancer.

**Have you ever seen black smoke coming out of a school bus?** You probably thought "Yuck!" and stayed away. But even when you don't see the smoke, diesel buses are still releasing exhaust. Wherever a diesel school bus travels — through your neighborhood, near your school — it's emitting diesel exhaust. Diesel exhaust even gets inside school buses. Exhaust levels can actually be higher inside the bus than outside — especially in the back when the windows are closed.

## WHAT YOU CAN DO

First, find out if your school buses use diesel. You can ask a bus driver, or just look at the buses. If they don't run on diesel, they'll probably announce it. Look for signs on the buses that say something like: "This bus runs on clean natural gas."

Although cleaner buses are catching on, they're still not that common. So there's a good chance your school district still uses diesel buses, and it could take time to make the switch to cleaner buses. Until then, follow these tips to limit the amount of diesel exhaust you inhale.

- **Open bus windows:** If the weather is nice — and the heat or air conditioning aren't on — open the windows so diesel exhaust won't build up inside. (Before you do, be sure to ask the bus driver for permission.)
  - **Make sure buses turn off their engines when they're not moving:** Buses shouldn't keep their engines running while they're sitting outside your school. If they do, ask the drivers to turn the engines off, or ask your teacher to have someone talk to the drivers or the bus company.
  - **Learn about cleaner fuels:** The more you know about buses that run on cleaner fuels, the more likely you'll be to persuade your school district to switch to them. Two of the most promising fuels are compressed natural gas (or CNG) and propane (also called liquefied petroleum gas or LP gas). But if you come across references to "clean diesel" or "green diesel," watch out! It sounds good, but it's not a big enough improvement over regular diesel.
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## WHAT YOUR SCHOOL CAN DO

The only way to solve the problem of dirty diesel school buses is to replace them with buses that use cleaner fuels. Buses are big, expensive items, so your school district might not be able to buy new ones right away. But when the time comes, the people responsible for choosing new buses need to have some important information.

First, they need to know the basics about cleaner buses. What are the different choices? Which one is better for your area? Then they need to find out about ways to save money when they buy the new buses.

Buses, trucks and cars that run on cleaner fuels are often called "alternative fuel vehicles." Many government programs have been set up to get more of these vehicles on the road. These programs can help school officials as they investigate cleaner buses and ways to help pay for them. A good place for your school to start is Clean Cities Alternative Fuel Vehicle Fleet Buyer's Guide at <http://www.fleets.doe.gov/>.

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For more facts, tips and project ideas, visit the Green Squad website at [www.nrdc.org/greensquad](http://www.nrdc.org/greensquad). The Green Squad is a project of the Natural Resources Defense Council and the Healthy Schools Network.

To learn about the Green Flag School Program's three-step approach to making your school a healthier place to work and learn, go to [www.greenflagschools.org](http://www.greenflagschools.org)

