NHSTA

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NEWSLETTER

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(Article from pages 3 and 4)

Protect Health, Save Money By Reducing School Bus Idling

Exhaust from buses and trucks can have a significant impact on public health and the environment. School bus drivers can help reduce these impacts by limiting their engine idling time whenever possible.

"Exhaust emissions from idling engines contribute to air pollution and haze and may affect the health of children and drivers, as well as the health of the general public," said Michael Fitzgerald, Air Pollution Control Engineer at the New Hampshire Department of Environmental Services.

The impact on human health from breathing diesel emissions has been well documented. Numerous scientific studies indicate that long term exposure to diesel exhaust can cause lung damage, respiratory problems, and even premature death. These effects are more pronounced in the very old, those with existing respiratory problems, or the very young (like school children) who breathe at a faster rate than the adult population. EPA has also classified diesel exhaust as a probable human carcinogen.

"Overall, emissions from diesel vehicles result in the yearly discharge of 40 million tons of air pollutants, (or roughly 30 tons per vehicle)," said Fitzgerald. "These pollutants contribute to ozone, smog, acid rain, regional haze and greenhouse gases."

New Hampshire regulations help reduce diesel exhaust emissions and minimize the impact from engine idling by establishing a limit on the amount of time that engines are permitted to idle. Limits are based on outside temperature, as follows:

Above 32 degrees F: 5 minutes
Between -10 and 32 degrees F: 15 minutes
Below -10 degrees F: no limit

School bus transportation fleets can help improve air quality and public health by voluntarily complying with the regulations whenever safety considerations permit, and by promoting a fleet policy to minimize the amount of time that school buses idle while waiting to pick up or discharge students.

An idling school bus releases emissions directly into the breathing zone of children. As children line up to board an idling school bus, they are exposed to the vehicle's emissions at the most concentrated levels. Limiting the amount of idling time not only reduces exposure of school students to the harmful pollutants in diesel exhaust, but also improves air quality, not to mention the image of the school bus transportation industry's image!

Fitzgerald said the American Trucking Association (ATA) estimates engine wear caused by idling one hour every day is equivalent to driving 64,000 miles per year.

In summary, reducing idling time is not only a good health and environmental policy, but it also makes good economic sense. Phil Dion, president of the N. H. School Transportation Association, said, "As a general matter, your association's board of directors encourage and recommend that our Association members, wherever practical, adopt and encourage compliance with a fleet voluntary policy limiting school bus idling. Implementing such a policy will minimize exposure to students to diesel exhaust emissions, save on fuel, reduce engine wear, and save school bus transportation companies thousands of dollars per each year!"

New DES initiative to limit school bus idling

by Barbara Fales, DES Air Resources Education/Outreach Planner

As we all know, tailpipe emissions from cars and trucks can pose serious air quality problems. This emissions problem is aggravated even more when vehicles idle for any length of time, and idling school buses in particular create a special health threat.

To address these concerns, DES, in partnership with the New Hampshire School Transportation Association (NHSTA), recently launched an initiative to protect school children and bus drivers from excessive exposure to exhaust emissions from school buses. As part of this initiative, fleet managers and school bus drivers are encouraged to implement policies and practices to reduce school bus engine idling time whenever possible.

As children line up to board an idling bus, they are exposed to the vehicle's emissions at the most concentrated levels. Limiting the amount of idling time not only reduces exposure of students to the harmful pollutants in diesel exhaust, but it also improves air quality in general.

EPA has classified certain constituents in diesel exhaust as probable human carcinogens. A recent study conducted by researchers from Yale University clearly shows that students' exposure to various concentrations of exhaust emissions increases dramatically while waiting to board and while riding on school buses. This study links the increased exposure directly to idling school buses.

"Numerous scientific studies indicate that long term exposure to diesel exhaust can also cause lung damage, respiratory problems such as asthma, and even premature death," said Michael Fitzgerald, Air Pollution Control Engineer at DES. "Health effects are more pronounced in the elderly, individuals with existing respiratory problems, or in children, who breathe at a faster rate than adults.

Maximum Idling Times

New Hampshire regulations establish limits on the amount of time that motor vehicles, including diesel-powered engines, are permitted to idle. Regulations are based on the following guidelines:

Outside temperature	Max. idle time
Above 32° F	5 minutes
-10° to 32° F	15 minutes
Below -10° F	No limit

School bus drivers can make a significant impact on the health of their passengers and their own health by limiting engine idling whenever possible. Reducing idling also saves fuel, reduces engine wear and tear, and saves school bus companies and school districts thousands of dollars each year.

"Nationwide, emissions from diesel vehicles result in the yearly discharge of 40 million tons of air pollutants, or roughly 30 tons per vehicle," said Fitzgerald. "These pollutants contribute to ozone, smog, acid rain, regional haze and greenhouse gases."

The American Trucking Association estimates that engine wear caused by idling one hour every day is equivalent to driving 64,000 miles per year. Idling reduces fuel economy and increases engine wear, requiring operators to invest more in maintenance and repair. Idling consumes one gallon of fuel per hour, and school buses idling 400 hours per year (about an hour per operating day) equates to an estimated cost of $600 per year.

In an effort to reach out to fleet managers and school bus drivers, the NHSTA Board of Directors recently sent a letter to its members encouraging them to adopt a policy restricting idling time. The voluntary policy states that school bus drivers should not only abide by the state regulations (see sidebar), but also go beyond the regulations whenever possible, to minimize school bus idling. School transportation providers or fleet managers should be aware of the state regulations and implement policies to curb unnecessary idling of school vehicles. If a school district has a yearly contract with a school bus transportation company, the district can require that the company implement an anti-idling policy as part of the contract.

Working together with the NHSTA, DES hopes to protect school children from unnecessary exposure to harmful air pollutants and improve air quality. DES and NHSTA are planning numerous outreach activities to publicize this effort throughout the state. Individuals can help support this initiative by talking with students, parents and community groups about the dangers of breathing diesel exhaust. If you have questions about this initiative or would like additional information on programs and opportunities to reduce diesel exhaust emissions from buses and trucks, contact Mike Fitzgerald, DES Air Resources, at (603) 271-6390. ■