

Diesel health hazards



Diesel exhaust is a mixture of smog-forming pollutants, soot particles, and other toxic constituents. These small particulates can penetrate deep into the lungs, exacerbating a wide variety of respiratory problems including asthma, a growing health problem now afflicting some nine million American children.

Smog and soot also exacerbate cardiac disease with particulate matter directly linked to premature death. More than 40 compounds found in diesel exhaust are believed to cause cancer. These harmful emissions pose an especially high risk to children because their respiratory systems are still developing and they spend more time outdoors than adults, increasing their relative exposure to air pollution.

There is no known safe level of exposure to diesel exhaust for children. According to a 2002 Yale University study, children riding buses were exposed to five to 15 times more particulate matter than normal ambient levels. Additionally, a 2003 California Air Resources Board (CARB) study estimates that children traveling two hours per school day from kindergarten through high school experience a five percent increase in lifetime cancer risk.

Help "Stop the Soot" from school buses

There are almost 22,000 school buses in New Jersey. School bus loading and unloading is such a familiar sight that we forget that diesel exhaust coming out the tailpipe is a potent health hazard – unless we happen to get a whiff of the unpleasant diesel odor or see a cloud of black soot.

The average school bus in New Jersey is seven years old and releases 50 percent more soot pollution per mile than a tractor-trailer – 11.7 pounds of soot annually. When exhaust seeps into buses or schools through doors, windows, and ventilation systems, children, drivers, and school staff are at risk. Also at risk are those who live, travel, work, go to school, or shop near the thousands of school-bus routes in New Jersey.

Thirty-six percent of all New Jersey students, or well over 500,000 students, ride school buses for a total of 225 million trips a year on our streets. Trips range from five minutes to over an hour, tending to be particularly long for suburban and special school district students.

Controls for dirty diesel have been fought for and won by NJEA and partners like the New Jersey Environmental Federation (NJEF) and New Jersey Work Environment Council (WEC). In 2005, New Jersey voters approved a dedicated fund to retrofit diesel vehicles with emission controls. Soon pollution controls will be as common as other school bus safety measures such as bus inspections, driver licensing, seat belts, and crossing control arms.

Local associations can help clear the air, starting with what follows below.

- Encourage school districts and private school bus contractors to take the N.J. Department of Environmental Protection (NJDEP) "No Idling Pledge," promising to:

- Turn off engines while waiting to load and unload students.

- Use newest school buses for longest routes.
- Maintain buses to eliminate visible exhaust.
- Complete school bus driver training on eliminating idling.

- Encourage school districts and private school bus contractors to:

- Retrofit with closed crankcase controls by 2009, with no cost to vehicle owners. This starts with an inventory of current buses and creation of a compliance plan by the district or contractor.

- Purchase model year 2007 and newer buses since they have much lower emissions and will not need to be retrofitted. Pre-2007 buses have been estimated to emit as much as 10 times more pollution as buses that meet the 2007 standards.

With a few exceptions, diesel vehicles are prohibited from unnecessary idling, that is having the engine running while the vehicle is stationary for longer than three minutes. School buses are also prohibited from idling when passengers are not on board or when in a stop-and-go queue, such as waiting in front of a school to load or unload. Idling in a queue on a highway is allowed as well as 15 minutes in any 60 minutes while actively loading and unloading passengers.

Local associations should confirm that school district transportation policies are in alignment with the law. Associations are encouraged to consult with their UniServ field reps and work with their districts to ensure that all school-bus drivers are properly trained.

Fines for school-bus owners are \$250 for a first offense, \$500 for a second, and \$1,000 for each subsequent offense. Fines for a school district that does not own its bus fleet are zero for a first offense, \$500 for a second, and \$1,000 for each subsequent offense. Fines

are not assessed against an individual driver unless the driver is also the owner.



For more information

- N.J. Dept. of Environmental Protection Diesel Risk Reduction Team
609-292-7953
www.StopTheSoot.org
- N.J. Dept. of Education Office of Student Transportation
609-984-5757
www.state.nj.us/njded/finance/transportation/trans.htm
- N.J. Environmental Federation Healthy Towns, Healthy Schools Campaign Kids Clean Air Zones Campaign
732-280-8988
www.cleanwateraction.org/njef/
- U.S. Environmental Protection Agency Clean School Bus USA
www.epa.gov/cleanschoolbus/
- Union of Concerned Scientists School Bus Pollution Report Card 2006
www.cleanschoolbus.org/
- School Transportation News
www.stnonline.com/stn/

- Order and post NJDEP "No-Idling" signs around the school.