



EarthWatch Rhode Island



Topic: Diesel Pollution and School Busses

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Introduction

Thousands of children across Rhode Island ride buses to and from school every day. School buses are a safe mode of transportation and their diesel engines are both durable and economical. However, there is growing concern about pollution from diesel engines. Scientific studies indicate that exposure to exhaust from diesel vehicles over time can cause cancer and other serious health problems.

The Rhode Island Department of Environmental Management (RIDEM) is working with school districts across Rhode Island to promote practical and effective actions for reducing our children's exposure to diesel pollutants.

Health Effects of Diesel Pollution

Blue clouds and black soot are the most noticeable forms of exhaust from buses, trucks and other heavy-duty vehicles, but it is the diesel pollution people can't see or smell that poses the greatest risks to their health.

Exhaust from school buses and other diesel-powered vehicles contains particulate matter, including fine particles that can penetrate deep into the lungs and even enter the blood



Children can breathe easier as they get ready to board the school bus at Winsor Hill Elementary School where they have a no idling rule.

stream, posing serious health problems for children, the elderly, and people with respiratory ailments. Fine particles can cause lung damage, aggravate respiratory conditions such as asthma and bronchitis, increase heart disease, lead to cancer, and even result in premature death.

Children and drivers can be exposed to diesel fumes when getting on and off school buses, and even while on board when the engines are running. Diesel exhaust from idling buses accumulates in and around school yards, and if air intake vents are located near bus stops, even the air inside school buildings can become polluted and pose health risks to children and teachers during the day.

Local Efforts

In 2004, DEM, with the Department of Elementary and Secondary Education and local health organization (see Attachment 1 for complete list of partners), launched a new program to protect school children and their bus drivers from breathing excessive amounts of diesel exhaust emissions. The three agencies invited all Rhode Island school superintendents to join the program, *Breathe Better Rhode Island*, by pledging to limit school bus idling time and to take other steps to reduce diesel exhaust emissions. Eighteen of the state's 36 school districts (see Attachment 1 for list) are currently participating.

The districts involved are reducing children's exposure to diesel exhaust by eliminating unnecessary idling, replacing older school buses with new ones and equipping existing buses with advanced emission control technologies. In order to participate, the towns must:

- Adopt a written no-idling policies that require bus drivers to shut off bus engines immediately upon reaching their destination and limit idling time for warming up buses
- Ensure that bus drivers complete no-idling training
- Redesign bus-parking zones to minimize the potential for diesel exhaust inside the bus and in the school.
- Post “no-idling” signage to alert drivers that engines should be turned off



A 'No Engine Idling' sign displayed outside of Winsor Hill Elementary School.

The Town of Johnston has adopted and implemented these policies. Some districts, such as Warwick and Cranston, have also retrofitted school buses with equipment to reduce emissions even further and are using less polluting fuels. A complete listing of communities participating in the *Breathe Better Rhode Island* program is attached.

While the *Breathe Better Rhode Island* program is currently voluntary, a new law passed by the General Assembly and signed by Governor Carcieri this year will require school districts to take steps to reduce diesel pollution from buses. The new law calls upon DEM to develop and implement regulations by next July to reduce diesel engine idling from school buses as well as other diesel-powered vehicles.

Cleaner school buses help not only the children who ride them, but also their bus drivers, teachers, families, and communities, all of whom benefit from cleaner air and reduced exposure to diesel exhaust. Channel 10 viewers should talk to their local school officials to find out what they are doing about this important issue and encourage them to take steps to reduce the harmful effects of diesel pollution from school buses.

Interviews:

- Frank Stevenson, Supervising Air Quality Specialist at DEM discussed Rhode Island air quality issues and DEM's efforts to protect school children from the harmful effects of diesel pollution (photo below, left)
- Morris M. Bochner, Director of Facilities/Transportation, Johnston Public Schools discussed specific steps Johnston has undertaken to reduce pollution from buses (photo below, middle).
- Molly Clark, Director of Environmental Health, American Lung Association of Rhode Island talked about asthma and the importance of these efforts in protecting children's health (photo below, right).



Breathe Better Rhode Island

Participating School Districts

Source: *Final Report – Breathe Better Rhode Island, September 2005*

Barrington
Central Falls
Coventry
Cranston
East Greenwich
East Providence
Foster
Middletown
Narragansett
Newport
Providence
South Kingstown
Tiverton
Warwick
Westerly
West Warwick
Bristol - Warren
Exeter – West Greenwich

Project Partners:

RI Department of Environmental Management
RI Department of Health
RI Department of Elementary and Secondary Education
American Lung Association of Rhode Island
First Student Transportation
Laidlaw Education Services of Southern New England
The Rhode Island Parent Teachers Association
Asthma Regional Council and their contractor ERT Associates
US Environmental Protection Agency (project funding)