



Maryland
Department of
the Environment

Clean Air for Maryland's Kids

How to start an idle reduction program at your school





Air Pollution Primer

The air we breathe is polluted by activities we do every day.

These activities add gases and particulates to the air, which can accumulate in high enough concentrations to harm human health and the environment.





The Problem

Personal vehicle idling creates about **half** of all idling emissions.

Those emissions impact health, affect the environment, and waste money.





Children and Air Pollution



Because of their developing lungs and higher breathing rates, air pollution is especially dangerous to children

Car exhaust increases the symptoms of **asthma**—the most common chronic illness in children, and the cause of most school absences.



Who Wants To Buy Zero MPG Fuel?

Idling wastes approximately **6 billion gallons** of fuel each year in the U.S.





One Solution



Idle reduction is the low-hanging fruit of fuel economy.

It's one easy habit to help you **Go Green.**



What's the Cause for Idling?

Old Habits and Myths

- “Doesn't restarting the engine use more gas than idling?”
- “Won't I wear out the starter?”
- “Isn't idling good for the engine?”





“Doesn’t restarting my engine use more gas than idling?”



Idling for more than **10 seconds** uses more fuel and results in the production of more CO₂ than stopping and restarting your engine.



“Won’t I wear out my starter?”



Under normal use, drivers of passenger cars can turn their engines on and off without concern about wearing out the starter motor or the battery prematurely.



“Isn’t idling good for your engine?”

Idling damages engines and decreases engine life.

Modern cars warm up faster by being driven than by idling.





“Isn’t idling good for your engine?”



Idling can produce sulfuric acid, which eats away at the engine and other components.

Idling results in lower temperatures in the cylinders, which can build up unburned fuel in the engine and cause unnecessary engine wear.

Idling leaves residue on spark plugs that decrease performance and increase fuel consumption.



Idle Free MD Schools

Implementing an Idle Reduction
Campaign at your school





Vehicle Idling at Schools

The Problem:

- Monitoring at schools have shown elevated levels of **air toxins** during the afternoon hours coinciding with school dismissal.
- Personal vehicles, buses and delivery trucks all contribute to the pollution.





What Schools Can Do to Reduce Idling

Schools can play an important part in protecting children from the health hazards of idling by:

- Starting the conversation.
- Creating a policy.
- Encouraging participation.

A summary of steps schools can take are available by downloading *Schools & Idling: Pledging to Be Idle Free*.

SCHOOLS & IDLING
PLEDGING TO BE IDLE FREE

IDLE FREE MD

SCHOOLS PLAY AN IMPORTANT ROLE IN PROTECTING CHILDREN FROM THE HEALTH HAZARDS OF IDLING ENGINES. HERE ARE WAYS THAT YOUR SCHOOL CAN START IMPLEMENTING ITS OWN IDLE REDUCTION PLAN.

TALK ABOUT ENGINE IDLING WITH OTHERS
Make students, parents and bus drivers aware that:

- Exhaust fumes contain pollutants that cause cancer, birth defects, asthma, low fertility, and other serious illnesses.
- Children are particularly vulnerable to the pollutants in exhaust.
- Occupants inside an idling vehicle are breathing in a much higher concentration of exhaust than a car in motion.
- Ground-level pollutants around a concentrated amount of idling vehicles—such as outside the school during pick up—increases the risk even more.

CREATE AN IDLE REDUCTION POLICY
Set specific guidelines that let others know what they should do.

- Make an announcement that the school is an idle free zone. Instruct drivers of all types to turn off their engines while waiting in their vehicles.
- Detail the specifics of the policy and how your school will implement the plan.

ENCOURAGE PARTICIPATION
Develop methods to help sustain an idle free school zone:

- Incentivize participation by recognizing those who turn their engines off.
- Educate students about how the school's idle free policy protects them, their community, and the environment. Encourage them to get involved in the fight for cleaner air.
- Communicate with the school community about ongoing idle reduction efforts and continue to encourage them to turn their engines off.
- Document idling guidelines in school policy literature. Provide school policies to all new and returning families.

GETTING STARTED
Resources are available to help announce, implement and sustain your idle reduction program.

- Take the *Pledge to be Idle Free*. Gather at a school assembly, PTA meeting, or other event to demonstrate your school's commitment with a pledge-signing ceremony.
- Share information from the *Idle Reduction Fact Sheet* with students so that they can start a conversation at home about the impact of idling.
- Distribute *Idle Reduction and You* to parents so they can start recognizing opportunities for reducing engine idling in their lives.
- Develop a *social media plan* to help spread the word in a viral-friendly way.
- Hang *Idle Free Zone* signs in the school's parking and driveway areas.
- Post *Idling's Impact on Maryland Communities* in your lobby or other common areas.
- Share your idle reduction efforts with *Maryland Department of the Environment* and use *#idlefreeMD*.

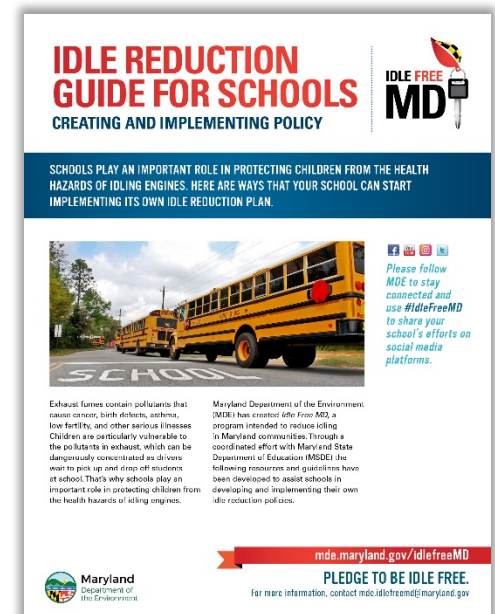
mde.maryland.gov/idlefreeMD

PLEDGE TO BE IDLE FREE.
For more information, contact mde.idlefree@mda.state.md.us



Idle Reduction Toolkit

- Idle Free MD is an MDE program that helps Maryland communities address idle reduction.
- Resources in the Idle Free MD Toolkit are available to help schools educate the school community about the hazards of idling and create idle reduction policies.
- The *Idle Reduction Guide for Schools* provides schools with guidance on how to use the resources in the toolkit to implement an idle reduction policy.





Making it a Student Project

Students can:

- Help to implement your school's idle reduction policy
- Learn how to run a public service campaign.
- Learn about air quality issues.
- Coordinate and measure participation.
- Learn interpersonal skills.
- Collect and present real-life data.





Idle Free MD Schools Toolkit

- *Idle Reduction Guide for Schools*
- *Clean Air for Maryland Kids* presentation
- *Schools and Idling* flier
- *Idling's Impact on Maryland Communities* poster
- *Sample Idle-Reduction Policy*
- *Idle Reduction Fact Sheet*
- Sample letters to parents, bus drivers, and teachers
- Signage and decals
- Pledges for individuals and administration
- *Teacher's Guide to Idle Reduction*
- *Spreading the Word About Idle Reduction Through Facebook*



The entire Idle Free MD toolkit is located at mde.maryland.gov/idlefreeMD.



Policies, Letters and Pledges

Set up policies: Include an *Idle-Reduction Policy* in the student handbook and provide to bus drivers.

Inform all drivers: Regularly tell parents, teachers, staff, delivery truck drivers and bus drivers about the new policy and the campaign.

Pledges: Ask all drivers to sign a pledge not to idle unnecessarily. Hold a contest to see which class returns the most pledges.

THE IDLE REDUCTION PLEDGE

IDLE FREE MD

PLEDGE TO BE IDLE FREE

I PLEDGE MY COMMITMENT TO IMPROVING AIR AND WATER QUALITY IN MARYLAND BY WORKING TO REDUCE UNNECESSARY IDLING.

Name _____ Date _____

mde.maryland.gov/idlefreeMD

Maryland Department of the Environment



Idle Free MD School Signs



Install external idling signs:

- Where parents will easily see them when picking up students.
- Where buses congregate.
- Where truck drivers stop to make deliveries.



Idle Free School Decal

Hang idle-free school window decals in a prominent window to announce your pledge to be idle free to visitors. Distribute them to school admin, bus drivers and parents to place in the rear-view windows of their vehicles and show their support.





Incentives

Provide incentives to encourage participation from drivers and students.

- Incorporate your idle reduction rollout into classroom learning. Refer to the *Teacher's Guide to Idle Reduction* on ways to get started. In addition to assigning a grade for student's effort, track the number of pledges collected by class or group through a competition. Reward the winning class with a pizza or ice cream party, if appropriate.
- Recognize participants in your idle reduction program through social media. Create key chains, t-shirts, coffee mugs, or other specialty media with the school's logo and/or the Idle Free MD logo as additional incentives, or collect gift cards from local establishments to give out.



Recommended Schedule

- **Month 1:** Pre-campaign preparations
- **Month 2:** Announce campaign to the school and PTA
- **Month 3:** Publish policies, send home letters, conduct pledge drive, publish articles in school newsletter.





Green Certification & Literacy Standards

Fulfills 2.6 of MAEEOE “Responsible Transportation” requirements.

Maryland Green Schools' environmental efforts can be used as a platform to apply for U.S. Green Ribbon School recognition.

Schools may also joint certify with Eco-Schools USA as they work towards Maryland Green School status.



Keep MDE in the Loop

Share your idle reduction efforts with MDE via [Facebook](#), [Youtube](#), [Instagram](#), and [Twitter](#). Use #idlefreeMD when posting about on social media.

Let us know about your efforts, and contact us with any questions at mde.idlefreemd@maryland.gov





Additional Assistance

For more information visit:

- mde.maryland.gov/idlefreeMD
- turnyourengineoff.org
- epa.gov/schools/idle-free-schools-toolkit-healthy-school-environment
- epa.gov/cleandiesel/clean-school-bus

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