

Stop Needless Idling Campaign Guide for Schools



LICA
ENVIRONMENTAL STEWARDS

Stop Needless Idling Campaign Guide for Schools



Introduction

Stopping needless idling at schools prevents students, parents, and staff from breathing air polluted by vehicle idling on school property. Some benefits of stopping needless idling include keeping the air healthy, saving fuel and money, among many other environmental benefits. Especially important are the health benefits from stopping needless idling at schools, since children are more vulnerable to vehicle emissions than adults. Children breathe faster and they inhale more air per kilogram of body weight, so they are more susceptible to pollution from vehicle emissions.

This guide provides step-by-step information for how a classroom (or classrooms) can implement a campaign to stop needless idling at their school. This guide has been adapted from Clean Air Partnership's 2009 [Idle-Free Campaign Kit](#). The Clean Air Partnership's resources have been modified to fit the key messaging developed by the Alberta Airsheds Council and LICA.



Learn about the Idling Issue

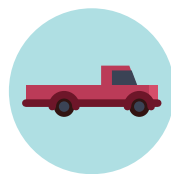
LICA can present information on the health, environmental, and financial impacts of vehicle idling to interested classrooms. Fact sheets and flyers with specific details about the impacts of needless idling can be found in the resources section [here](#) and in the Resources section of this guide.



It is important to distinguish between needless idling and necessary idling. This guide focuses on stopping needless idling, but idling can be necessary for safety reasons. While resources in this guide make a recommendation to warm up vehicles for 60 seconds, if a vehicle's windshield is not clear after 60 seconds of warming up, the vehicle may need to idle for longer to ensure the driver can safely see out of the windshield. Likewise, if a driver is at a remote site in extreme cold and there is a safety concern that the vehicle may not start again, the driver may have to leave the vehicle idling to not put himself/herself at risk. In contrast, examples of needless idling include idling a vehicle until the interior is a comfortable indoor temperature before driving it, or idling while waiting to pick up children at school.

Collect Baseline Data

Students collect baseline data to determine the amounts and types of idling occurring around their school during drop off and pick up times. They measure the amount of time vehicles idle and use AirBeam technology, borrowed from LICA, to measure particulate matter concentrations. Example data collection sheets are available in the Resources section of this guide.



Inform the School Community

Consult school administration to determine a campaign launch date. Send letters to parents and bus companies to inform them about the upcoming campaign. Example letters are included in the Resources section of this guide.



Funding

Acquire funding and purchase Idle-Free Zone signs to place in drop off and pick up areas, and purchase cling-on “stop needless idling” stickers for vehicle windshields. Funding can be acquired through fundraising or through grants. [Alberta Council for Education](#) provides a summary of grants available. Some noteworthy funding opportunities include the [Climate and Environment Student Action Challenge](#) and [Caring for our Watersheds](#). Contact LICA for more information about grant opportunities.

Ask the School Community to Pledge to Stop Needless Idling

With help from parent volunteers and staff, to ensure the safety of students, students approach cars in school parking areas and inform them about the campaign. Students must be reminded to use caution when approaching vehicles. They provide the drivers with information about the campaign and answer any questions. They ask drivers if they are interested in committing to idling for 60 seconds or less. Interested drivers sign a pledge form and receive a cling-on sticker for their windshield to display their commitment to stopping needless idling. Sample scripts and a pledge form for students to use when approaching drivers are available in the Resources section of this guide.



Expanding Beyond the School

Students are encouraged to get parents of teammates on sports teams or other extracurricular activities to sign up for the Stop Needless Idling campaign. Students can be given extra stickers to give to community members that pledge to Stop Needless Idling.

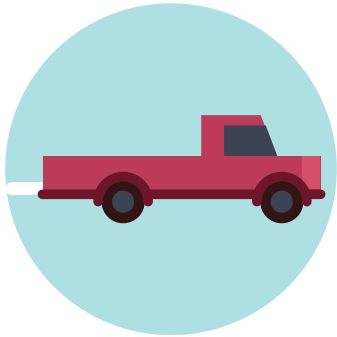
Motivate Student Participation

Students can create posters to put around the school about stopping needless idling. A contest can be held to see which students can get the most community members to pledge to stop needless idling.



Measure Success: Collect and Evaluate Data

After the campaign has been running for a month or two, students collect data to determine the amounts and types of idling occurring around their school during drop off and pick up times. They measure the amount of time they observe vehicles idling and use AirBeam technology, borrowed from LICA, to measure particulate matter concentrations. They compare this information to the baseline data. They can also compile the number of pledges received over the course of the campaign.



Share Success Stories

Share the evaluated data with the entire school community through letters or bulletin board updates. Students involved can also present the results at a year-end assembly so parents can hear about the results and be encouraged to stop needless idling. Students may also want to share their success stories with other schools. If a Grade 5 classroom at one school participates in the campaign, they could request to do a presentation to a grade 4 classroom at another school to encourage them to do a similar project next year.



Celebrate

Conclude the year with a celebration or reward for students involved. Environmental stewardship can be a lot of work. Giving students something to anticipate and enjoy will continue to motivate them in the following years and show that their work is appreciated.



Resources

Information About Needless Idling

Keep the Air Healthy Flyer
Save Fuel and Money Flyer
Poster
Facts and References
Infographic

Data Collection Forms

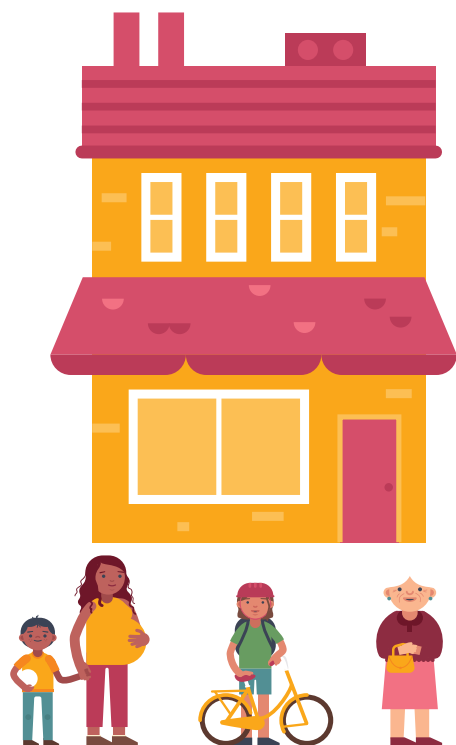
General Idling Observation Form
Bus Idling Observation Form

Letters to Inform School Community

Letter to Parents
Letter to Bus Company

Sample Scripts and Pledge Form

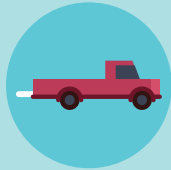
Sample Script
Pledge Form



Stop Needless Idling



Keep the Air Healthy



Excessive idling increases emissions of pollutants, such as particulate matter that negatively affect air quality.



Particulate matter can aggravate many health problems particularly among people with heart or lung conditions, older adults and children.



Children are especially at risk because their lungs are still developing and they inhale more air per pound of body weight.



Turn off your vehicle if you're parked for longer than 60 seconds



Air monitoring at schools has shown elevated levels of toxins during pick up times as parents idle their cars while they wait for their kids.



Carpool, take public transit, or active transport to reduce emissions.



Watch the [Vehicles Idling at Schools Video](#).

Do Your Part

Pledge Now

To Stop Needless Idling

Drive Smarter



Use a timer to turn on a block heater ~2 hrs before driving (below -20°C).

The best way to warm up your vehicle is to drive.

Limit warm-up times and remote car starter use to 60 seconds.

References can be found at:
albertaairshedsCouncil.ca



Stop Needless Idling



Save Fuel & Money



Idling for 10 seconds wastes more fuel than restarting your vehicle.



For the average vehicle with a 3 litre engine, every 10 minutes of idling costs over one quarter of a litre (over 1 cup) in wasted fuel – and up to one half of a litre if your vehicle has a 5 litre engine.



Three minutes of idling per vehicle wastes 1.73 million litres of fuel per day in Canada.



Idling strips oil from critical engine components like cylinders and pistons.



If all drivers reduced needless idling by 3 minutes a day, we would save \$630 million per year, equal to taking 320 000 cars off the road for a year.



Do Your Part

Pledge Now

To Stop Needless Idling

Drive Smarter



Use a timer to turn on a block heater ~2 hrs before driving (below -20°C).

The best way to warm up your vehicle is to drive.

Limit warm-up times and remote car starter use to 60 seconds.

References can be found at:
albertaairshedsCouncil.ca





Save Fuel & Money



Instead of needless idling, use a timer to switch on a block heater ~2 hours before you plan to leave. At -20°C, block heaters can improve overall fuel economy by as much as 10 percent.



Even idling diesel engines longer than 7 minutes is typically ill-advised and provides no benefit regardless of climate conditions. A diesel will almost always require driving to reach full operating temperature.



Turn off your vehicle if you're parked for longer than 60 seconds

Annual Fuel Use for Various Vehicle Engine Sizes and Idle Times

Idle Time (Minutes Per Day)	Fuel Use (Litres Per Year)		
	1 Litre Engine	3 Litre Engine	5 Litre Engine
1	4	11	18
2	7	22	37
3	11	33	55
4	15	44	73
5	18	55	91
6	22	66	110
7	26	77	128
8	29	88	146
9	33	99	164
10	37	110	183

Do Your Part

Pledge Now

To Stop Needless Idling

References can be found at:
albertaairshedsCouncil.ca



Stop Needless Idling



Save Fuel & Money

Idling for 10 seconds wastes more fuel than restarting your vehicle

Canadians would save \$630 million/year if all drivers reduced idling by 3 mins/day

Idling strips oil from critical engine components



Turn off your vehicle if you're parked for longer than 60 seconds

Keep the Air Healthy

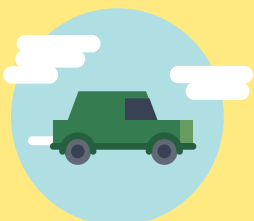
Idling increases emissions of pollutants, such as particulate matter

Particulate matter can aggravate many health problems

Carpool, take public transit, or active transport to reduce emissions



Do Your Part **Pledge Now** **To Stop Needless Idling**



Drive Smarter

Use a timer to turn on a block heater ~2 hrs before driving (below -20°C)

The best way to warm up your vehicle is to drive

Limit warm-up times and remote car starter use to 60 seconds

albertaairshedsCouncil.ca

AAC
ALBERTA AIRSHEDS
COUNCIL

Facts & References

Keep the Air Healthy



Air monitoring at schools has shown elevated levels of toxins during pick-up times as parents idle their cars while they wait for their kids.¹

Children are especially at risk because their lungs are still developing and they inhale more air per pound of body weight.¹

[Vehicles Idling at Schools Video from Sustainable America²](#)

Save Fuel & Money



For the average vehicle with a 3 litre engine, every 10 minutes of idling costs over one quarter of a litre (over 1 cup) in wasted fuel – and up to one half of a litre if your vehicle has a 5 litre engine.³

If all drivers reduced needless idling by 3 minutes a day, we would save \$630 million per year, equal to taking 320 000 cars off the road for a year.⁴

Idling strips oil from critical engine components like cylinders and pistons.⁵

Instead of needless idling, use a timer to switch on a block heater ~2 hours before you plan to leave. At -20°C, block heaters can improve overall fuel economy by as much as 10 percent.⁶

Even idling diesel engines longer than 7 minutes is typically ill-advised and provides no benefit regardless of climate conditions. A diesel will almost always require driving to reach full operating temperature.⁷

[Table: Annual fuel use for various vehicle engine sizes and idle times.⁸](#)

¹<https://iturnitoff.com/resources.html>

²<http://bit.ly/VehicleIdlingatSchools>

³<http://oee.nrcan.gc.ca/transportation/idling/facts.cfm?attr=8>

⁴nrcan.gc.ca/sites/www.nrcan.gc.ca/files/oeef/pdf/transportation/idling/material/pdf/idling-e-f-low-res.pdf

⁵www.businessinsider.com/heres-what-idling-your-car-in-the-morning-is-doing-to-your-engine-and-its-not-good-2016-1

⁶<https://www.nrcan.gc.ca/energy/efficiency/communities-infrastructure/transportation/idling/4465>

⁷<http://www.dieselhub.com/tech/warm-up-cool-down.html>

⁸<https://www.nrcan.gc.ca/energy/efficiency/communities-infrastructure/transportation/idling/4457>

Stop Needless Idling



Turn off your vehicle if you're
parked for longer than 60 seconds



Keep the Air Healthy



Excessive idling

increases emissions of pollutants,
such as

particulate matter

that negatively affect air quality.

Particulate matter can aggravate many

health problems

particularly among people with heart or
lung conditions, older adults and children.

If all drivers reduced needless idling by

3 Minutes

a day, we would save

\$630,000,000

per year,

equal to taking 320,000 cars off the road for a year.

Save Fuel & Money



Drive Smarter

Instead of
needless idling,
use a timer to
switch on a block
heater

~2 Hours

before you
plan to leave.

At **-20°C**

block heaters can improve overall fuel

10%.



Do Your Part Pledge Now

To Stop Needless Idling

Alberta's Airsheds

Stop Needless Idling



Turn off your vehicle if you're
parked for longer than 60 seconds



Keep the Air Healthy



Excessive idling

increases emissions of pollutants,
such as

particulate matter

that negatively affect air quality.

Particulate matter can aggravate many

health problems

particularly among people with heart or
lung conditions, older adults and children.

If all drivers reduced needless idling by

3 Minutes

a day, we would save

\$630,000,000

per year,

equal to taking 320,000 cars off the road for a year.

Save Fuel & Money



Drive Smarter

Instead of
needless idling,
use a timer to
switch on a block
heater

~2 Hours

before you
plan to leave.

At **-20°C**

block heaters can improve overall fuel

10%.



Do Your Part Pledge Now

To Stop Needless Idling

Alberta's Airsheds





General Idling Observation Form

Student Name: _____

Date: _____ Time of Day: Start: _____ End: _____

Weather: _____
(I.E. Sun, Rain, Snow)

Outside Temperature: _____
(I.E. Hot, Cool, Degree Celsius)

Average Particulate Matter: _____

Description of Vehicle (i.e. regular-sized or small)	Idling Engine? Y/N	Idling time in Minutes	Particulate Matter





Bus Idling Observation Form

Student Name: _____

Date: _____ Time of Day: Start: _____ End: _____

Weather: _____
(I.E. Sun, Rain, Snow)

Outside Temperature: _____
(I.E. Hot, Cool, Degree Celsius)

Average Particulate Matter: _____

Description of Bus (i.e. regular-sized or small)	Idling Engine? Y/N	Idling time in Minutes	Particulate Matter



<DATE>

RE: STOP NEEDLESS IDLING AT <SCHOOL NAME>

Dear Parents and Guardians,

On <DATE> we will be launching our Stop Needless Idling Campaign. Please join us and offer your support. As of this date, no vehicle should needlessly idle outside the school.

Studies by Health Canada and community health departments and agencies have shown a direct link between air pollution and significant respiratory health effects. These studies have concluded that poor air quality and smog – caused in part by vehicle exhaust – are resulting in increased hospital admissions, respiratory illnesses, and premature deaths, particularly in urban areas.

The Government of Canada's 2019 report on the *Health impacts of air pollution in Canada: estimates of morbidity and premature mortality outcomes* estimates that 14,600 premature deaths per year in Canada can be linked to air pollution from fine particulate matter, nitrogen dioxide, and ozone.

Children are particularly vulnerable to air pollution because they breathe faster than adults and inhale more air per kilogram of body weight. For these reasons, and the fact that vehicle exhaust contains greenhouse gas emissions which contribute to climate change, <SCHOOL NAME> will, as of <DATE> be asking all vehicles to Stop Needless Idling outside the school.

In the coming weeks, you will notice students attempting to communicate messages to Stop Needless Idling to drivers waiting to pick up students. The students will be asking drivers to pledge to idle for 60 seconds or less. Please keep a look-out and take the time to hear their message for cleaner air. More information about the campaign can be found at www.airshedsalberta.ca/60-seconds

Sincerely,

<Principal Name>

<DATE>

RE: STOP NEEDLESS IDLING AT <SCHOOL NAME>

Dear <Bus Company Contact>,

On <DATE> we will be launching our Stop Needless Idling Campaign. Please join us and offer your support. As of this date, no vehicle should needlessly idle outside the school.

Studies by Health Canada and community health departments and agencies have shown a direct link between air pollution and significant respiratory health effects. These studies have concluded that poor air quality and smog – caused in part by vehicle exhaust – are resulting in increased hospital admissions, respiratory illnesses, and premature deaths, particularly in urban areas.

The Government of Canada's 2019 report on the *Health impacts of air pollution in Canada: estimates of morbidity and premature mortality outcomes* estimates that 14,600 premature deaths per year in Canada can be linked to air pollution from fine particulate matter, nitrogen dioxide, and ozone.

Children are particularly vulnerable to air pollution because they breathe faster than adults and inhale more air per kilogram of body weight. For these reasons, and the fact that vehicle exhaust contains greenhouse gas emissions which contribute to climate change, <SCHOOL NAME> will, as of <DATE> be asking all vehicles to Stop Needless Idling outside the school.

In the coming weeks, you will notice students attempting to communicate messages to Stop Needless Idling to drivers waiting to pick up students. The students will be asking drivers to pledge to idle for 60 seconds or less. Please keep a look-out and take the time to hear their message for cleaner air. More information about the campaign can be found at www.airshedsalberta.ca/60-seconds

Sincerely,

<Principal Name>

FOR IDLING DRIVERS:

Hi, my name is _____ and <SCHOOL NAME> is asking drivers to Stop Needless Idling. Would you like to hear about the benefits of reducing vehicle idling?

If NO – Say *thank you* and move to another vehicle.

If YES – *Did you know that by idling your vehicle you are emitting toxic gases into the air that contribute to air pollution and waste fuel and money? Children are more vulnerable to air pollution because they breathe faster than adults and inhale more air per kilogram of body weight. These fact sheets explain the health and financial benefits of stopping needless idling (pass sheets to driver). Would you be willing to commit to idling for 60 seconds or less, especially in our school parking lot?*

If YES – Drivers sign the pledge form and students give them a sticker to put on their windshield.

FOR NON-IDLING DRIVERS:

Hi, my name is _____ and <SCHOOL NAME> is asking drivers to Stop Needless Idling. We appreciate you turning off your vehicle while you wait for your children. These fact sheets explain the health and financial benefits of stopping needless idling (pass sheets to driver). Would you be willing to commit to idling for 60 seconds or less, especially in our school parking lot?

If YES – Drivers sign the pledge form and students give them a sticker to put on their windshield.



***Please include your email address if you are interested in being entered in LICA's Stop Needless Idling prize draw and would like to receive occasional updates from LICA, your local Airshed.**

[illegible]



LICA
ENVIRONMENTAL STEWARDS

lica.ca
outreach@lica.ca
780-812-2182

@infolica

