

How to Reduce Idling on the School Bus

Video Reference Guide

Introduction

Nearly 600,000 school buses are the carriers for roughly 25 million students. Diesel fuel is what most school buses use today. Diesel fuel fumes have been ruled as 'harmful' by the Environmental Protection Agency. The video shows several ways that a school bus driver can do their part in reducing emissions from their school bus. ALL school bus drivers should be aware and remain pro active in doing their part to reduce harmful pollutants. Not just for the environment in general, but also for students' health, their own health, and more.

WHY IT MATTERS

Human Health

1) Fumes from excessive idling can affect human health. Diesel exhaust contains significant levels of particles, which are so small that they are invisible to the human eye. These particles can pass through the nose and throat and become lodged in the lungs. Children are more susceptible to air pollution than healthy adults because their respiratory systems are still developing and they have a faster breathing rate.

Air Pollution

2) Exhaust from school buses can enter school buildings through air intakes, doors, and open windows. Diesel exhaust contains harmful pollutants that contribute to ozone formation, acid rain, and climate change. The fine particles emitted from diesel engines also contribute to haze.

Money and Budget

3) Saving money on fuel should sound good to any school district. When a school bus is idling, it burns about half a gallon of diesel fuel per hour. If a school district operates 100 buses, and each bus reduced its idling by only 30 minutes per day, at \$1 per gallon of diesel fuel, **the district would save \$4,500**. School districts that reduce unnecessary idling can have significant savings in fuel costs each year.

Wear and Tear

4) Excessive idling can cause carbon buildup and cause the engine to 'slobber'. It

may even reduce oil life. This is harmful to the engine. School bus engines are expensive to repair or replace.

5) The bottom line is by limiting the amount of idle time on your bus, you are not only reducing the amount of air pollution emitted, but you are also making a health impact and saving the district money.

IDLE REDUCTION PRACTICES

6) School bus drivers can make a significant impact on protecting the health of their passengers and their own health by limiting engine idling whenever it is practical to do so.

Warm Up Time

7) School bus drivers must do a thorough pre trip and warm up the engine of the school bus. This is one of the times that unnecessary idling becomes an issue.

a) You should limit the idling time during the morning warm up to what the school bus manufacturer recommends.

b) Usually this is no longer than 5 minutes.

c) If it is extremely cold out, you would slightly increase the warm up time.

d) You should idle no longer than is necessary to bring the bus to proper operating temperature and to defrost the windows if needed.

School Bus Stops

8) Most school bus stops require that the bus idles while loading and unloading students. This is because it takes a short amount of time to load the students if the bus driver is efficient in doing so.

9) If loading a wheelchair student, or you need to secure the bus to address a student putting themselves in harms way, you should turn off the engine and

secure the bus. ***Turning off the engine will also help to cut down on unnecessary idling.*** The exception to this is whenever a lift or other safety operational necessity requires that the bus is running to operate them.

Loading Zones

10) When you arrive at school loading and unloading areas to drop off or pick up students, ***you should turn off your bus as soon as possible to eliminate idling time*** and reduce harmful emissions:

a) The school bus should not be restarted until it is ready to depart and there is a clear path to exit the pick up area.

b) DO NOT ALLOW YOUR BUS TO IDLE WHILE WAITING FOR PASSENGERS.

11) The exception to this would include conditions that would compromise passenger safety, such as extreme temperature or having to idle in traffic. If warmth on the bus is an issue, you should keep idling at a minimum. This should occur outside of the loading zone. You can then enter the loading zone as close to the pick up time as possible to maintain warmth, then shut off the engine as students begin to load.

Trips and Functions

12) It is important to also keep in mind that buses should not idle while waiting for students during field trips, extracurricular activities, or other school functions where students are transported off school grounds.

The Parent Factor

13) School bus drivers are not the only ones that have to be aware of idling reduction, but also the many parents picking up or dropping off their child. ***Parent car idling can become a serious issue***, depending on the size and layout of the school.

14) In the morning, idling is not as much of a problem as the afternoon. In the

morning, parents or caregivers simply drop off children and move on. In the afternoon, ***many parents arrive 10-15 minutes before school is out and sit with the engine idling.***

15) Much of the time students are walking straight into dangerous fumes to get to the bus or their parents vehicles. This poses a health risk to students. As a school bus driver, you should do your part in making parents aware of such matters. Tell them about the dangers of idling and the health risks it poses to students.

Signs and Reminders

16) You can even put up signs in the loading zone claiming it to be an 'Idle Free Zone'. Even something as simple as decals on bus windows will not only remind co-workers to reduce idling, but will also warn parents of the same.

CLOSING

Throughout the video, we covered many issues concerning the affects of school bus idling. We have given reasons why it should matter to you. We have shown the health impact it has on students. We have also shown the reason it can be applied to help save your district money. We have gone over several idling reduction techniques, and the importance of informing parents about idle reduction. And now it's up to you to take these practices and put them into motion. Do not become complacent; Do your part to actively make fellow bus drivers aware of the need to put idle reduction into practice on the school bus.

TEST QUESTIONS

1) Diesel fuel fumes have been ruled as 'harmful' by the Environmental Protection Agency.

TRUE or FALSE

2) Healthy adults are equally as susceptible to dangerous exhaust particles as children are.

TRUE or FALSE

3) Idling doesn't have that much of an impact on fuel costs.

TRUE or FALSE

4) Diesel exhaust contains harmful pollutants that contribute to ozone formation.

TRUE or FALSE

5) Excessive idling can cause carbon buildup.

TRUE or FALSE

6) Warming up the school bus in the morning takes at least 20 minutes.

TRUE or FALSE

7) You should turn off your bus as soon as possible to eliminate idling time when in loading zones.

TRUE or FALSE

8) It is okay to let the bus idle on field trips.

TRUE or FALSE

9) Parent idling is more of an issue in the morning than in the afternoon.

TRUE or FALSE

10) If extremely cold out, you should let the bus idle in the loading zone for heat.

TRUE or FALSE

Idling Reduction Pledge

I _____, hereby pledge to the children in my charge that I will further protect them by shielding them from unnecessary exhaust fumes. I will not unnecessarily idle the buses I drive. I will turn off my engine in the schoolyard. I will not unnecessarily idle my own vehicle.

Signature of Driver _____ **Date** _____

ANSWER KEY

- 1) TRUE**
- 2) FALSE**
- 3) FALSE**
- 4) TRUE**
- 5) TRUE**
- 6) FALSE**
- 7) TRUE**
- 8) FALSE**
- 9) FALSE**
- 10) FALSE**