

**Defensive Driving for
School Bus Drivers**

**Reference Guide and
Test Questions**

Produced by: Video Communications

Introduction

The main concern of all bus drivers is to transport students safely to their destination. Bus drivers must learn a number of defensive driving skills in order to do so. This includes: driving in difficult weather conditions, driving at night where low visibility is an issue, driving on steep inclines where braking procedures must be applied properly, and knowing how to respond to a front tire blow out. In addition, separate sections will cover how to adjust and use the bus's mirror systems and how to drive carefully and safely when transporting special needs students.

The focus of this video is to introduce the many challenges that a bus driver will face on any given school day. It takes experience over a period of time to learn all of these important skills. If you do not understand any of these requirements, please speak with a supervisor. Keep in mind that there are no stupid questions when the inquiry is about how to keep students safe while riding on a school bus.

The video is divided into six separate sections:

Section 1- Winter Driving

Section 2- Hills and Inclines

Section 3- Night Driving

Section 4- Front Tire Blow Out

Section 5- Mirror Usage

Section 6- Special Needs Students

Section 1 - Winter Driving

1. When driving a School bus in winter conditions, it is important to be ready and prepared.
 - a) Check the outside of the bus to make sure mirrors and lights are working and free of debris.
 - b) Check the inside of the bus to make sure the heaters, defrosters, and fans are in working order.
 - c) Don't forget to check road conditions and weather reports before beginning your trip.
 - d) Carry winter driving equipment including: chains, shovels, flashlights, etc.

2. School bus drivers must learn to drive in different weather conditions.
 - a) Oil builds up on roads during the dry season. Be aware that the first rain or snow will turn the oil

into slippery conditions that could lead to loss of control of the bus.

b) Water can freeze onto roads creating a condition called black ice. Whenever it appears that any type of ice has formed on a road, try to avoid using your brakes. Ice on roads is one of the most dangerous conditions for bus drivers.

c) Hydroplaning occurs when water comes between your tires and the road. To stop this from happening, take your foot off the accelerator. This slows down the bus and allows the bus to regain contact with the road.

3. Buses are large, heavy vehicles. Understand that it takes a bus 12 times longer to stop on a wet or slippery road, than it does on a dry road. Here are safety tips worth remembering:

a) When encountering icy or snowy conditions, be sure to leave **greater distances** between your bus and the driver in front of you. Drive according to the conditions of the road and not the speed limit.

b) When applying your brakes in winter conditions, make sure not to apply your brakes too hard. This could result in a slide. Also, remember to look in your mirrors and be aware of the traffic behind you.

c) Check your mirrors for students approaching the bus. This could prevent serious accidents from occurring.

Section 2 - Hills and Inclines

1. A bus driver must understand the configuration of their bus. Each manufacturer configures their buses differently.

2. The bus's transmission plays a key roll when descending hills.

3. Important safety issues to be aware of when descending hills:

a) Car sickness among children occurs frequently, so drive at slower speeds when descending inclines. This will cut down on the swing action of the bus.

b) Always stay to the right when climbing hills and maintain a constant speed.

c) Slow down when cresting a hill.

d) Honk your horn when going around blind curves to alert oncoming traffic.

e) Be sure to keep safe distances between your bus and traffic.

4. Breaking methods are critical when descending a steep hill.

a) Decide on a target speed and Do Not Let the Bus Exceed the target speed. If the bus slightly exceeds the target speed, lightly tap the breaks to slow down the bus.

- b) If the bus exceeds the target speed by a wide margin, it will be necessary to apply much greater force to brake or slow down the bus. However, if the driver constantly exerts maximum pressure on the brakes, this could lead to brake failure.
- c) If brake failure occurs, try to find an area on the side shoulder to stop the bus. This is one of the most dangerous procedures that bus drivers will ever encounter.
- d) Each school district mandates specific guidelines for drivers to follow when descending hills. Make sure that you are aware of these procedures before driving on hills.

Section 3 - Night Driving

1. Drowsiness and falling asleep at the wheel is deadly. Be sure to pull over and rest when feeling tired or sleepy. Do not continue to drive. If you do, you will be putting lives at risk!
2. Night blindness is a very serious safety issue. If your eyes take a very long time to adjust to night driving conditions, alert your supervisor.
3. Learn where all your bus's switches are before you drive at night. Fumbling with switches can distract you from the road and can lead to an accident.
4. A driver can't see beyond the reach of their headlights, so when driving at night, drive slowly and calibrate your speed to the conditions of the road.
5. When driving at night, objects that appear in your mirrors will appear to be further away than they actually are.
6. Leave plenty of room between the bus and the traffic in front of your bus.
7. Pay attention to road signs, traffic hazards or any other type of impediment.
8. When using mirrors at night, remember depth perception is extremely limited.

Section 4 Front Tire Blowout

1. Tire maintenance
 - a) Avoid rubbing tires against the curb. This could lead to tire damage.
 - b) Keep all tires properly inflated.
 - c) Report any imperfections or potential tire defects to maintenance immediately.
 - e) A bulging tire indicates a potential tire issue. Report it immediately.

2. Always keep your hands in the proper driving position when driving. This is important because when a tire blows out, the steering wheel can whipsaw causing broken wrists or fingers.

3. Procedure to follow when a tire blowout occurs:

a) When a blowout occurs, do not hit your breaks. This will force the bus to the side of the road and could possibly lead to a rollover.

b) Instead, hit the accelerator. This will force the bus's weight to shift to the rear of the bus.

c) To gradually bring the bus to a stop, engage the spring brake, not the serviced brake. As we previously mentioned, engaging the spring brake could cause a bus rollover.

d) Check with your school district and make sure that you follow the procedures mandated by your district.

Section 5 - Mirror Usage

1. Bus drivers must learn to rely on their mirrors.

2. Mirror systems on the bus includes: the flat mirror, the convex mirror, the crossview mirror and the rear view or student mirror.

a. Each one of these mirrors is designed to cover a specific angle of view.

b. Bus drivers must understand the specific areas that each mirror is designed to cover.

c. Mirrors must be properly adjusted to fit the size of the bus driver.

d. Mirrors must be adjusted to cover the proper angle of view.

e. The owners manual for each bus will indicate proper adjustment.

f. Talk with your supervisor and ask questions if your aren't sure of any issue.

Section 6 - Special Needs Students

1. School bus driver will need to be aware of the limitations of special needs students. Here are some of the issues that school bus drivers should be aware of.

a. Tender loving care is the motto for special needs bus drivers. This motto means that bus drivers must drive their special needs bus slowly and carefully, in order to avoid sudden stops or rapid acceleration. Special needs students often lack upper body strength and drivers must be aware of this limitation.

b) Never Turn quickly, Never stop suddenly and Never drive aggressively. A special needs bus driver has a unique responsibility to the students they are transporting. By adhering to the principles of tender loving care, they will be insuring a higher quality of care when transporting these students.

c) Prior to transporting special needs students, drivers should practice how to drive their bus according to the practices we just mentioned. Each district will have different parameters for implementing these practices and drivers should follow them or ask their supervisors about the suggested guidelines of their district.

Test Questions

1. When driving in winter conditions what tool(s) should you have?

- a. Shovel
- b. Flashlight
- c. Chains
- d. All of the Above

2. When a bus starts hydroplaning, the bus driver must immediately accelerate.

True _____ False _____

3. Always stay to the right when climbing hills and slow down when cresting a hill.

True _____ False _____

4. Once mirrors are adjusted by a qualified driver, they should never be readjusted to fit the size of a new driver.

True _____ False _____

5. If a school bus driver starts to feel drowsy, he should stop and buy a cup of coffee because coffee is a stimulant.

True _____ False _____

6. It's okay to place your hands inside the steering wheel because it gives you better leverage in case the bus has a front tire blowout.

True _____ False _____

7. What is the first thing you do when a front tire blows out?

- a. Engage the service brake
- b. Hit Accelerator and engage the spring brake
- c. Take your foot off the accelerator
- d. None of The Above

8. When driving special needs students, use the same driving procedures you use when driving regular ed students.

True _____ False _____

9. Target speed refers to the suggested speed limit on posted signs on the highway.

True _____ False _____

10. Black ice is difficult to detect because it blends into the color of the road.

True_____ False_____

ANSWERS:

1. d
2. False
3. True
4. False
5. False
6. False
- 7/ b
8. False
9. False
10. True