Overview

Unit 7 combines classroom discussion about emergency scenarios bus drivers may face when transporting children with special needs, and on-the-bus practice in evacuation techniques.
# Unit 7 Framework

## Core Content Outline

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## Objectives

By the conclusion of this unit, drivers will be able to:

1. Explain why fires pose a serious threat for bus drivers transporting children with disabilities.
2. Describe a bus driver’s responsibilities after a crash.
3. Create a written evacuation plan.
4. Explain what a “best exit” is in an emergency evacuation.
5. Demonstrate how to cut a seat belt.
6. Demonstrate how to safely drag a heavy child to an exit.

## Suggested Time

60 minutes

## Preparation

1. Review Best Practice Backgrounders regarding crash responsibilities and emergency evacuation.
2. Arrange for a lift-equipped bus, wheelchair, and safety seat for the on-the-bus activities.
3. Projector, screen, and PowerPoint in place.
Best Practice Backgrounder

The reality of the unexpected.
Emergencies of every conceivable type occur on school buses in Virginia and across the country every year.

Collisions. Although school buses have an excellent safety record, the road is a dangerous place and collisions are a fact of life. Modern school buses are built to survive most collisions remarkably well, but the potential for a severe crash, for instance with a larger vehicle such as a truck, always exists. And when transporting children with special needs and conditions, even a “minor” crash can pose a serious threat to their safety.

Fires. Thankfully, school bus fires don’t happen every day but they do occur more frequently than is commonly thought. School bus fires can result from mechanical failures or defects, collisions, or other causes.

School bus fires involving children with disabilities are especially frightening because of the extra time it may take to evacuate them. Quickly removing children using wheelchairs from a bus, for instance, can be a challenge. Surprisingly, school buses can burn very quickly in some situations. Once the bus seats are on fire there may be as little as one minute to get children off the bus before toxic fumes and heat are unsurvivable.

A few terrible school bus tragedies involving fire drive home the reality of the danger.

- In 1988 near Carrollton, Kentucky a school bus that had been sold to a church was involved in a head-on collision with a drunk driver. No one was seriously injured by the collision, but the bus fuel was punctured and flames poured in through the front door. As bus seats caught fire, temperatures inside reached 2000 degrees. Of 67 passengers, 24 children and 3 adults, including the bus driver, were killed. Most victims were found near the single emergency exit at the rear of the bus.

- In 1981 in Hermanville, Mississippi, a school van overloaded with preschool children slid off a bridge and rolled over. Fuel ignited when the driver failed to turn off the ignition and, four children and the aide could not get out in time and perished.

- In 1997, a child with intellectual disabilities died of smoke inhalation in a school van fire in Toronto. The rear emergency door could not be opened.

- Many other “close calls” involving special needs bus fires have taken place in recent years.

Other types of emergencies.

- Severe weather emergencies (hurricanes, tornadoes, blizzards, floods) can create hazardous situations for children on school buses.

- Although rare, school bus immersions have occurred, including two (one in Texas and one in Iowa) resulting in fatalities when children could not get out fast enough and drowned.

- School bus incidents involving downed electrical lines (from a crash or storm) are not uncommon and can pose serious dangers.

Instructional Strategies

Discussion questions

✓ Why do fires pose a serious threat to buses transporting children with special needs?

PowerPoint

✓ Slide 7.1: “Special Preparation for Emergencies”

Workbook

✓ 7.1
UNIT 7.2
CORE CONTENT

Driver responsibility after a crash

BEST PRACTICE
BACKGROUNDER

Children come first. A school bus driver’s first responsibility is to the children on the bus.

Ten responsibilities. Every crash is unique, but drivers should try to remember the following responsibilities:

1. Stop. Even in a minor crash, the bus shouldn’t be moved until authorities arrive unless absolutely necessary. This includes non-collision incidents, such as an onboard injury to a student due to a fall.

2. Assess the situation. Before reporting the crash by radio, drivers must calmly assess the situation. Are there injuries? What is the exact location? Must children be evacuated?

3. Reassure children. In any emergency, adults should reassure children that everything’s “OK” - even if the adults aren’t sure it is.

4. Contact base. A calm radio voice in an emergency is one sign of a professional. If base does not answer an initial radio call, drivers should repeat the basic message, giving their bus number each time. (Base may hear the driver, but the driver may not be able to hear base.) Other drivers must clear the air. Unnecessary information should not be given out over the radio. For instance, children’s names should not be mentioned unless absolutely necessary. If possible, the driver should periodically update base by radio until help arrives.

5. Protect the scene. 4-way flashers should be activated at once. Drivers should ask bystanders for assistance in placing reflectors or alerting traffic. Reflectors should be placed according to prescribed methods, far enough back to protect the bus from another collision.

6. Make the evacuation decision. In most cases, children will be safer inside the bus after a crash. Evacuation is hazardous and should never be undertaken lightly. But if there is danger of fire, a rollover, or a second collision, evacuation must begin at once. Children must never be left unsupervised.

7. Initiate first aid. Until help arrives, life-saving first aid measures should be undertaken. Injured children should never be moved unless necessary. Drivers shouldn’t exceed the limits of their training.

8. Account for children. The student roster should be double-checked to confirm exactly which children were on the bus. Uninjured children should not be released until authorities arrive.

9. Cooperate with authorities. Emergency personnel need to know exactly how many children were on board and if any have special conditions. In severe incidents, a command post will be established to coordinate rescue efforts. As rescuers arrive, they will take over. Driver and aide must let them do their job.

10. Do not argue. Drivers shouldn’t argue with the other motorist or discuss the incident with anyone other than police or their supervisor. Statements at a crash scene may be admissible in court. If approached by reporters, at the scene or afterwards, drivers should remain professional but tell them to talk to their supervisors.

Instructional Strategies

Discussion questions

✓ What is the bus driver’s main responsibility after a crash? Why?

PowerPoint

✓ Slide 7.2: “Driver Responsibility After a Crash”

Workbook

✓ 7.2
UNIT 7.3
CORE CONTENT
Preparing for an emergency evacuation

BEST PRACTICE BACKGROUNDER

Emergency planning is essential for drivers transporting children with special needs.

Know your bus. School buses come in many designs. Drivers, aides, and substitutes must know the location of all emergency equipment and how to use it.

- Drivers should learn how to locate and open every exit with eyes closed, using seat backs as a reference. In a fire, the bus could be filled with smoke. (Latches on roof hatches can be complicated.)
- Drivers should know how to “sit and slide” from an emergency exit door.
- Drivers should know how to exit from a side (or rear) emergency window “feet first - face down.”
- Drivers should know the location of the fuel tank and battery to help emergency responders assess fire dangers.
- A seat belt cutter should be within reach of a seated bus driver. Drivers should know how to use cutters (by holding the belt taut and cutting at an angle).

Know your children. Awareness of children’s abilities and disabilities can be extremely important in an emergency.

- Drivers should know where every child sits, to help account for children in an emergency. A seating chart should be maintained.
- Drivers should be aware of physical, mental, emotional, and medical conditions that could affect how children react in an emergency.
- Students with special needs must actively participate in evacuation drills.

Have a plan. A written evacuation plan should be created and practiced by drivers and aides on every special needs route. “Crossed wires” could be disastrous in an emergency. Two basic scenarios should be considered: an engine fire and a fire at the rear of the bus. It must be decided ahead of time whether children in wheelchairs should be evacuated in or out of their chairs. The child’s medical condition must be taken into account; occupational therapists can help make the decision. The best sequence for taking students off the bus should be determined.

The plan must be revised when the route changes. Substitute drivers should review plans before driving routes and should be familiar with the equipment.

Professional judgment and common sense. No plan can cover every contingency. A driver’s most valuable asset in an emergency is professional judgment, common sense, and the ability to stay calm.

Professional judgment means keeping children’s safety as the priority, and a willingness to take charge of a chaotic situation until help arrives. Common sense means acting decisively in the best interests of children when faced with unforeseeable events.

Instructional Strategies

Discussion questions

- Why should drivers be able to locate and open emergency exits with their eyes closed?

PowerPoint

- Slide 7.3: “Preparing for an Emergency Evacuation”

Optional activity

- See Activity 7.3, “Creating an Evacuation Plan”

Workbook

- 7.3
BEST PRACTICE BACKGROUNDER

Last resort. Evacuation should be a last resort. For instance, can the bus be driven away from a burning vehicle after a crash?

Don’t hesitate. Buses burn quickly in some conditions. If fire is suspected, evacuation should begin at once. Drivers should never leave children on board while they investigate or fight a “small” fire. Extinguishing a bus fire is best left to professional fire fighters. A school bus can be replaced - children can’t.

Determining the “best exit.” Evacuation should proceed away from the source of danger, but some exits might not be safe or usable. An exit could be blocked by debris, or a dangerous situation could exist just outside. Crashes can jam emergency doors. Children should not be directed to an exit until the driver knows it’s functioning and safe.

Shut engine off. Shutting off the ignition may retard a fire.

Opening a hood. The bus hood shouldn’t be opened if an engine fire is suspected. An influx of air could cause an explosion.

Bystanders can help. Drivers may need help getting children off the bus in time. Bystanders should be told what to do.

Downed wires. If electrical lines come in contact with a bus (in a crash or ice storm), all passengers should stay inside. Stepping off a “charged” vehicle can be fatal. (The radio can still be used to call for help.) If immediate evacuation is unavoidable (fire, etc.), passengers must exit so they don’t touch the ground and the bus at the same time.

Oxygen. Student oxygen should be turned off if fire danger exists.

Removing children from the bus. Decisions about how to best evacuate each child should be part of the evacuation plan.

- Reassure children. Before an evacuation begins, children should be calmly told what will happen.
- Release seat belts or securement straps. Removing children from wheelchairs is usually faster than unhooking wheelchairs from their restraints, but some medically fragile children cannot be safely removed from the wheelchair. It’s usually faster to evacuate children in their safety seats. With practice, it’s possible to carry two safety seats at a time to an exit. Leaving children in the safety seats also keeps them from wandering off.
- Cutting securement straps or belts is usually faster than unbuckling them.
- It may be necessary to use a “Fireman’s drag” to evacuate heavier children. Lower them onto their backs, on a fire blanket if possible, head pointed towards the exit - always drag headfirst. Grasping them under their armpits, support children’s heads with your forearms. By kneeling at a child’s head, even a small adult can safely move a heavy child by “scooting” backwards a little at a time.
- Lower children to the ground. Drivers and aides must work together, using care with fragile children.
- Move children to a safe distance. Once all children are off the bus, they should be moved to a safe location at least 3 bus lengths away. Children cannot be left unsupervised.

Retrieve wheelchairs. Wheelchairs are important to children’s well being and should be retrieved, when possible, once children are safe. Emergency personnel may help.

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Instructinal Strategies

Discussion questions
✓ How can bystanders help in an evacuation?

PowerPoint
✓ Slide 7.4: “Evacuation Techniques”

Activity
✓ See Activity 7.4, “Evacuation Techniques”

Workbook
✓ 7.4
BEST PRACTICE BACKGROUNDER

When transporting children with special needs, emergency preparation depends on both a high level of awareness of the potential dangers involved, and adequate hands-on training and practice.

Unit 7 utilizes both classroom and on-the-bus sessions. During the on-the-bus activity, drivers should be required to demonstrate, as well as explain, proper techniques for cutting seat belts and dragging heavy children to an exit.

Ample time should be devoted to Review Questions. Make sure all drivers in the class have mastered the important material covered. Drivers should be strongly encouraged to ask additional questions.

Instructional Strategies

Review questions

✓ Why do fires pose a serious threat for bus drivers transporting children with disabilities?
✓ What are a bus driver’s responsibilities after a crash?
✓ What is the purpose of a written evacuation plan and how is one created?
✓ What’s a “best exit”?
✓ What’s the correct procedure for cutting seat belts?
✓ How can heavy children be moved to an exit?

PowerPoint

✓ Slide 7.5: “Unit 7 Review”

Workbook

✓ 7.5