

CHAPTER 9 – SAFETY AND EMERGENCY PROCEDURES

Despite a driver's attention to the care and driving of the bus, a mechanical breakdown or an accident may still occur. In this event, the driver must have knowledge of what to do, how to do it and when to do it. They must know how to use warning devices, when and how to evacuate, and what to do as various emergencies arise.

A. Proper Use of Emergency Equipment

1. After securing the bus, the four-way hazard lights should be the first item actuated in an emergency procedure involving a stopped bus.
2. A fusee is a flare used in case of an accident or if the vehicle becomes disabled.
 - a. How to safely light a fusee:
 - (1) Grasp fusee in right hand firmly.
 - (2) Twist and lift cap with left hand or flip off plastic lid.
 - (3) Strike fusee across cap, away from face and body.
 - (4) Point ignited end away from body so sparks will not ignite clothing.
 - b. Where to place (see Diagrams: 9-1; 9-2; 9-3): check proper diagram reference
Ohio Revised Code 4513.28 states:
“Whenever any motor truck, trackless trolley, bus, commercial tractor, trailer, semi-trailer, or pole trailer is disabled upon the traveled portion or shoulder of any highway outside any municipal corporation at any time when lighted lamps are required on vehicles and trackless trolleys, the operator of such vehicle or trackless trolley shall display the following warning devices upon the highway during the time the vehicle or trackless trolley is disabled.”
3. When stopped by the roadside for 10 minutes or more, the driver should place a lighted fusee on the roadway at the traffic side of such a vehicle or trackless trolley, unless red electric lanterns are displayed.
4. Within the burning period of the fusee and as promptly as possible, place three lighted fusees on the roadway as follows:
 - a. One at the traffic side of the bus within 10 feet of the rear.
 - b. One at a distance of 40 paces or approximately 100 feet to the rear of the bus.
 - c. One at a distance of 40 paces or approximately 100 feet in advance of the vehicle.

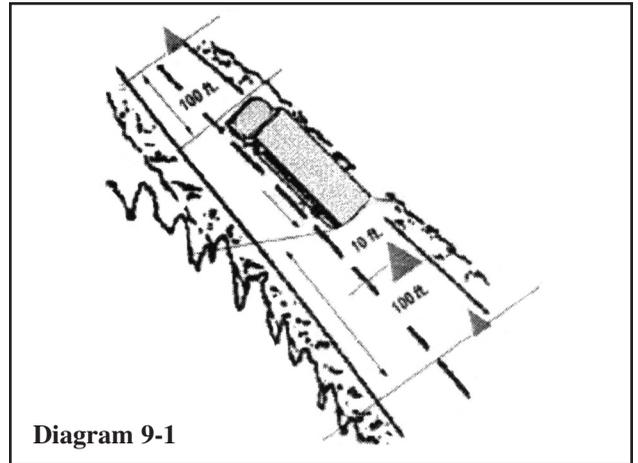


Diagram 9-1

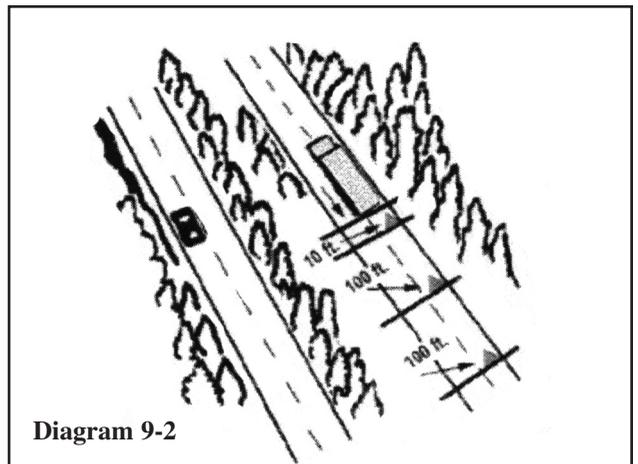


Diagram 9-2

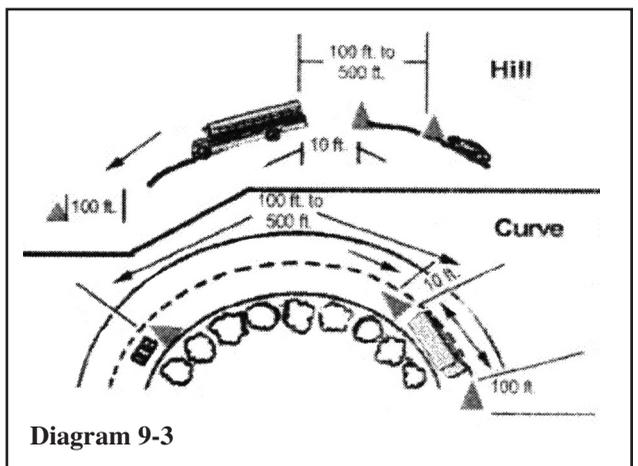


Diagram 9-3

5. Place fuses as follows on a divided highway:
 - a. One at the traffic side of the bus within 10 feet at the rear.
 - b. Two at the rear of the bus approximately 100 feet and 200 feet.
 - c. Warn oncoming traffic of the accident if on a curve or hill by placing fuses or reflectors 100 to 500 feet to rear and front (Diagram 9-3).
6. Place red reflectors as warning devices following the same directions as the fuses, except that the reflectors may be used both day and night.
7. To operate a dry chemical fire extinguisher:
 - a. Remove extinguisher from mounting bracket.
 - b. Hold extinguisher in vertical position for best discharge results.
 - c. Release safety device (small pin), twist to break plastic, holding the pin.
 - d. Squeeze handle to discharge chemicals and grasp the hose firmly and spray at the top of the flames side to side to smother the flames for a liquid fire. All other fires, aim at the source or base of the fire, not up in the flame. (Remember that a fire extinguisher has approximately 30 seconds of use.)
 - e. Recharge fire extinguisher after every use or if the gauge indicates red.
8. First Aid Kit.
 - a. The first aid kit should be located in the driver's compartment, be dust proof, well-labeled and conform to federal standards.
 - b. Standards require a 16-unit kit for buses carrying up to 42 passengers and a 24-unit kit for larger buses. Make sure to replace any item used from emergency equipment supplies as soon as possible.
9. Optional Equipment may Include:
 - a. Flashlight
 - b. Two-way communications (radio, phone). Except in cases of extreme emergency, cellular telephones, including hands-free and wireless devices, or other portable communication devices shall not be used by the driver while the school bus is in motion or while the driver is supervising the loading or unloading of students.
 - c. Fire blanket
 - d. Strap cutter

B. Emergency Techniques for Mechanical Breakdown

1. Move bus off road as soon and as safely as feasible, check traffic.
2. Set parking brake (emergency brake). You may want to leave vehicle in gear or in park if equipped.
3. Actuate the hazard lights.
4. Shut off engine and remove key.
5. Decide whether or not to evacuate. Be alert to danger of fire or the bus being in a hazardous position or in danger of being struck by another vehicle.
6. Employ safety devices (triangle reflectors, fuses).
7. Notify school by radio or ask a passing motorist to notify the school and the police. Send an emergency assistance card along with instructions. As a last resort, send two students to nearby homes with the same information.
8. Try to keep the children calm.

C. Responsibilities and Procedures in the Event of a School Bus Accident

1. Remain calm. Don't show nervousness. Prior preparation will help; plan ahead.
2. Stop the bus.
 - a. Set parking (emergency) brake.
 - b. Place gear in neutral or park.
 - c. Actuate hazard lights.
 - d. Shut off engine and remove key.
3. Reassure children and check for injuries.
 - a. Be clearly in command.
 - b. If students are injured:
 - (1) Obtain assistance from bystanders.
 - (2) Call 911.
 - (3) Apply basic first aid procedures.
4. Be alert for fire or possible fire. A bus is a potential furnace. Check for:
 - a. Ruptured fuel tank or lines.
 - b. Smoke.
5. Decide whether or not to evacuate.
 - a. Make a decision.
 - b. Locate a safe spot to evacuate, get away from bus.
6. Protect the scene of the accident by employing safety devices.

- a. Use a fusee or reflector 100 feet to the rear and front of the bus and also on traffic side, within 10 feet of the rear.
 - b. Warn oncoming traffic of the accident if on a curve or hill by placing fusees or reflector 100 to 500 feet to rear and front of vehicle involved.
7. Locate witnesses. This is extremely important for factual evidence. The position of the vehicles or road marks are generally not as important as good eyewitnesses.
8. Notify school and law enforcement officials:
- a. Contact them by radio or phone (if available).
 - b. Seek assistance from a passing motorist or bystander.
 - c. Send two students with emergency assistance card as last resort.

Ohio Pupil Transportation Operation and Safety Rules 3301-83-20 G states: "All buses shall be equipped with emergency assistance cards which list three telephone numbers to call. The cards shall provide space for describing the location of the school bus and the type of emergency." (1) Watch out for the safety of children sent with messages. They will be excited. Watch them if they must cross the highway. (2) Tell children to walk facing the traffic. (3) Advise children not to enter house but have owner call for them.

- 9. Do not discuss the accident with other drivers or bystanders. Cooperate with the investigating officer.
 - a. Be factual. Give your driver's license number, insurance company or school.
 - b. Provide a list of students (name, age, phone number and birthdays).
- 10. Work with the school administration to:
 - a. Continue transportation of the children. (There should be a plan.)
 - b. Prepare written reports required by the school.
 - (1) Transportation form T-10 report must be submitted to Ohio Department of Education within 15 days following any accident if any injury or damage exceeds \$500.
 - (2) Any driver of a vehicle involved in a motor vehicle accident that exceeds \$500 in property damages or causes a personal injury must file the Motor

Vehicle Crash Report Form with the BMV no later than six months after the accident if the other driver is uninsured.

- c. Expect drug/alcohol testing.

D. Tornado Disaster Plan

1. Transporting students in rural areas.
 - a. Try to pull the bus off the roadway away from large trees, electrical lines, telephone poles, or buildings.
 - b. Evacuate bus. Make sure to take along first aid kit.
 - c. Move away from the side of the bus without crossing the road.
 - d. Do not climb up the underside of an overpass. Try to find a ditch, ravine or embankment and use it for protection. Be aware of high or swift water.
 - e. When danger is over, check students for any injury or shock; administer first aid if needed.
 - f. Contact transportation office for further instructions.
2. Transporting students in urban areas.
 - a. Park bus immediately.
 - b. Evacuate bus and take first aid kit.
 - c. Send pupils to nearest homes or buildings, going into a room with no windows and assume the tornado position is near an exterior wall.
 - d. When danger is over, check for shock and injury; administer first aid if needed.
 - e. Contact transportation office for further instructions.
3. Bus in transit (no students).
 - a. Park bus and seek shelter.
 - b. When danger is over, contact transportation office for further instructions.

E. Emergency Drills and Evacuation

1. Rules cannot be made to fit all school situations. Use the following questions and suggestions to establish policies and procedures for specific situations.
 - a. Advance Preparation
 - (1) Does the administration approve of these drills?
 - (2) Are there any policies or rules on how drills are to be carried out?

- (3) Have children been told what to do and how to do it?
 - b. Has a step-by-step procedure for conducting the drill been developed?
 - c. Have the various age levels of the children been taken into consideration as well as the problems these age levels may create?
 - d. How many different situations should be practiced?
 - e. How many drills will be held in a year and how often?
 - f. How will these special problems be handled? Assign a “buddy” for special needs students and practice so students are comfortable.
 - (1) The child who freezes in his seat?
 - (2) The child who does not move fast enough and blocks the aisle?
 - (3) Personal belongings?
 - (4) The number of helpers needed to get children out of the emergency door; to get fuses, first aid kit and fire extinguisher?
 - (5) The procedure for unloading children. If you use both doors, where is the load split?
 - g. Should children be sent to summon help? How many are needed and how old should they be?
2. Some suggestions before performing the drills.
 - a. Select nine students as bus helpers. Four will be used as door helpers, four as line leaders and one for the equipment.
 - b. Explain duties and responsibilities to the helpers.
 - c. Select a bus helper captain. If the driver is incapacitated, the captain should carry out the drills.
 - d. Show helper how to use safety equipment in the bus.
 - e. Explain to the entire bus load the procedures for carrying out the evacuation drills several days before the drill. Ask them, “Is there anyone for any physical reason who cannot jump out the rear doors?” (e.g. pregnancy, back or knee surgery).
3. Other suggestions:
 - a. Obtain permission from school authorities (well in advance) to hold the drill.
 - b. Never plan the drill as a surprise.
 - c. Schedule the drill during school hours.
 - d. Conduct the drill on school grounds.
 - e. Select a safe spot. Use a gym mat or pad to jump out onto for elementary students for rear door.
 - f. Arrange for suitable help in supervising the drill.
 - g. Select a spot to the right and well away from the bus (approximately 100 ft.) where the children are to assemble and await the “all clear” signal. Other school personnel can be helpful in providing adequate supervision.
 - h. Use the rear door for at least one drill each year. Use both doors at least once each year and front door once each year {O.A.C. 3301-83-15 (B)}.
 - i. Let each child decide how much assistance he/she will need and how they will go about jumping out of the rear door. Never reach up and pull them out.
 - j. Keep accurate stopwatch timing for each drill. Announce the results to the riders. Strive to cut time for each successive drill.
 - k. Always remember that the driver may not be able to get back to the rear door in a real emergency. Plan accordingly. Arrange for someone to make certain the bus is really empty.
 - l. Schedule the drills as follows: one set as soon as possible after school starts in the fall; a second set within a week or two after the first drill to work out problems discovered during the first drill; a third and fourth drill set sometime during the winter and spring. More drills may still be needed. O.A.C. 3301-83-15B states:
“Superintendent or designee shall organize and conduct emergency exit drills for all students who ride school buses to and from school. Each of the following emergency procedures shall be conducted at least once annually:
 - (1) Everyone exits through the front entrance door.

- (2) Everyone exits through the rear emergency door.
- (3) Front half exits through the front door and rear half exits through the rear door.”

REMEMBER, the driver is responsible for the safety of the children. In a real accident or emergency situation, it may be safer to keep the students in the bus. The driver’s experience and judgment counts here.

Evacuate the bus only when the danger of fire, water, or further accident is imminent. If in doubt, play it safe and unload!

- 4. Hints passed along by knowledgeable drivers:
 - a. Warn all students to duck as they go out the back door. Look out for a low transom.
 - b. Advise girls that they may want to gather their skirts around their knees before jumping so their skirts will not catch on the door sill when the next passenger may step on it and cause the girl to fall.
 - c. Instruct students to use only the front door for reloading. In drills, on signal to reload, the children often try to climb back into the bus through the rear door.
 - d. Advise students that “it’s a big jump out of the back door. Some riders may fall.”
 - e. Advise students that it is better to remain calmly seated until the aisle is available for them. When the “everybody out” signal is given, there is a tendency to crowd the aisles. The resulting traffic jam and confusion can breed panic in a real emergency.
 - f. Treat kindergarten students with extra care. Some kindergartners move up the aisles slowly or find the back door jump difficult. They may need special drills.
 - g. Remind kindergarten students they may have to sit and
 - (1) Jump from the rear exit by pushing out with their hands or
 - (2) Turn around and jump, pushing out with both hands.
- 5. The helping hand support method for rear door evacuation consists of the following:
 - a. Two helpers stand facing each other, one on each side of the open door.
 - b. The helpers assist the students by:
 - (1) Holding their outside arm at a 90 degree angle so exiting students can grasp their hand or wrist.

- (2) Supporting students with their inside hand under the armpit of the jumping student.

- c. Descending students should grasp the hand or wrist of helpers to support themselves.
- d. The descending students will then follow the line leader in the direction the line pointer designates. The pointer should stand 10 feet from the bus and point in the direction to follow the leader.

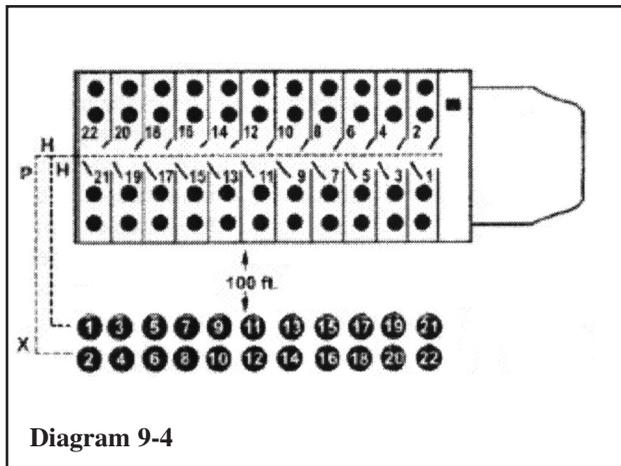
NOTE: The students should use the alternate seat or “zig-zag” method of evacuating the bus.

- 6. Training procedures:
 - a. Front door evacuation.
 - (1) Train two students to act as line leaders to lead students a safe distance away from the bus. (Second leader points the direction to go.)
 - (2) Locate two student helpers at the front door to assist when necessary and to count disembarking students.
 - (3) The fifth helper should assist the driver in carrying emergency equipment.
 - (4) Explain the alternate seat or “zig-zag” method of evacuation.
 - b. Rear door evacuation.
 - (1) Train two students to open the rear door upon command from the driver and jump out.
 - (2) Explain how to descend from the rear door with knees flexed to absorb the shock.
 - (3) Caution the taller students to duck or they may bump their heads when evacuating.
 - (4) Appoint two students to act as line leaders to lead students a safe distance from the bus.
 - (5) Appoint a fifth helper who will assist the driver in carrying the emergency equipment.
 - c. Front and rear door evacuation.
 - (1) The students will be assigned a door from which to exit (front or rear). Students in seats 1-11 should exit by the front door, students in seats 12-22 should exit by the rear door.

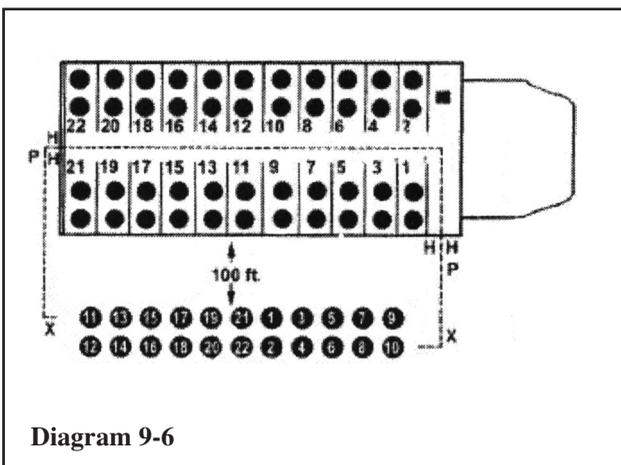
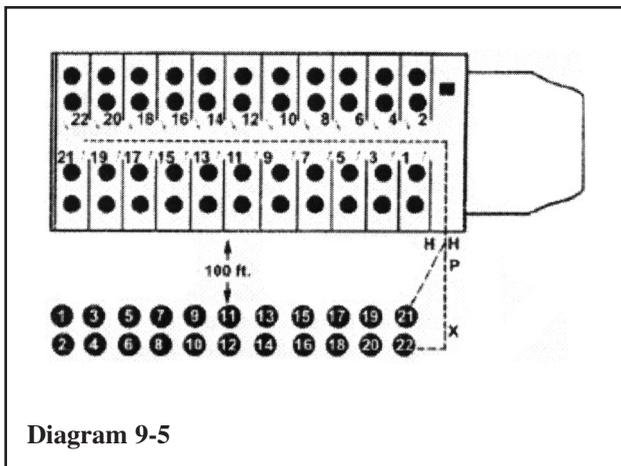
- (2) Train two students to act as line leaders for the front door exit and two to act as line leaders for the rear door exit.
- (3) Use the same procedure outlined for front and rear door evacuations except

that the students will have to move out themselves.

- (4) If possible, encourage students to move approximately 100 feet from the bus.



Legend:
 H = Helper
 P = Pointer
 X = Safe Place



Radio/Cellular Communications

The proper use of the radio equipment is described in this chapter. Practicing these procedures when using the radio equipment will aid in the formation of correct communication skills. Each driver must make every effort to obtain and practice these procedures and correct any weakness from past experience in order to communicate effectively when transporting children.

A. The Communication Act of 1934 created the Federal Communications Commission (FCC). This agency of the federal government is authorized to enforce all laws pertaining to the use, licensing and repair of the public service radio.

1. The following actions are violations of the U.S. Criminal Code. All carry a maximum penalty of one to five years in prison and \$100 to \$10,000 fine for each violation.
 - a. Willful damage to any radio installation.
 - b. Transmission of superfluous radio communication containing profane or obscene words.
 - c. Willful transmission of a false or deceptive signal or communication.
 - d. Willful or malicious interference with any radio communication.
2. All radio communications transmitted over a public airwave may be monitored by the public. Since the airwaves are owned by the public, it is not illegal to monitor any radio transmissions. However, it is illegal to use any of the information obtained from a monitored radio call to commit a crime.

B. A variety of basic radio communication equipment is available for use in the transportation system.

1. Walkie-Talkie: This is a handheld two-way portable receiver.
2. Mobile Radio: The mobile radio performs essentially like a walkie-talkie. These units are mounted in a vehicle. At no time should these be used to convey personal messages.
3. Base Station: A base station is a receiver/transmitter used at a location to talk to one or more units.
4. Scanner: A scanner enables the communications officer to monitor multiple channels of any police, fire, rescue, boat, weather, or ham radio frequencies. In general, the following are monitored:
 - a. Police districts
 - b. Fire department
 - c. Emergency medical service
 - d. United States weather service

C. Proper radio procedure is an integral part of communications.

1. The following four “C’s” are essential to effective broadcasting:
 - a. Calm
 - (1) Keep emotion out of your voice.
 - (2) A calm attitude may lessen the anxiety of an individual who is already excited.
 - b. Courtesy
 - (1) Remember you are a public servant.
 - (2) Never lose your temper on the air.
 - (3) Don’t become an “air hog.” There may be someone waiting with an urgent message.
 - c. Correct
 - (1) There is no place for errors in public safety.
 - (2) Use standard phrases.
 - (3) Read back names and addresses and other vital information.

- d. Concise
 - (1) Pass your information through the dispatcher to avoid confusion.
 - (2) Maintain a professional attitude.
- 2. When talking into the microphone these speaking procedures are an important phase of radio communication:
 - a. Always hold the microphone two inches away from your mouth.
 - b. Speak directly across from the microphone.
 - c. Before speaking, hold the transmitter button for two seconds. This enables the repeater system to open up.
- 3. Proper structure of messages will assure better understanding.
 - a. When calling a unit give the name of the unit being called. Example: sending receiving, “Base #2 to Bus #1 or Bus #4 to Base #1.”
 - b. At the end of a transmission, use the words “go ahead.”
- c. You may end your message with “O.K.,” “10-4,” or “Clear.”
- 4. Priority calls must be honored.
 - a. Never play games. Never use an emergency code unless you need it. Review the criteria for priority 1 calls.
 - b. Universal emergency codes
 - (1) Mayday
 - (2) 10-33
 - c. “Emergency” versus “Assistance.” Remember there is a difference between “emergency” and “assistance.” The word “assistance” indicates a lesser degree of urgency.

Remember the 4 basic words of radio communication

- 1. Calm
- 2. Courteous
- 3. Correct
- 4. Concise

Cell Phone

Except in cases of extreme emergency, cellular telephones, including hands-free devices, or other portable communication devices shall not be used by the driver while the school bus is in motion or while the driver is supervising the loading or unloading of students.

Summary

Accidents will happen. It is essential to remain calm and to know what to do in an emergency situation. Foresight and proper actions may help save lives and prevent property damage. The driver must understand the proper use of all safety equipment and follow the correct procedures in an accident. Students under most circumstances will find the school bus a safe place to be. If and when an evacuation is necessary, the proper use of the methods studied will ensure student safety under all conditions.

Radio communication has an important function in the transportation of pupils to and from school. Since the use of all radio communication is controlled by the Federal Communication Commission, it is essential for the bus driver to abide by the rules and regulations. Proper techniques and respect for the rights of others using the radio can help assure the driver that in time of adversity, the message will be transmitted and received.