

# **UNIT ELEVEN**

## **SAFETY EQUIPMENT/EVACUATIONS**

Every school bus driver, bus paraprofessional and student must acknowledge that some day a disaster might strike. Whether it is a motor vehicle crash, fire, or some other catastrophe, planning for an emergency and knowing what to do if and when it happens will prevent panic and confusion. This plan could help you save a life, or many lives someday.

### **ACCIDENTS**

When you come upon an accident, use caution and continue moving. Staring too long at an accident can lead to another accident, and puts the drivers behind you at risk.

#### **Precautionary Measures**

- Remain alert and briefly size up the accident scene.
- Resist the urge to rubber neck.
- Begin braking early to warn other drivers to slow down, but do not stop completely.

Be prepared in case you are involved in an accident or are stopped by law enforcement. Always carry your Driver's License, DOT Medical Card, First Aid Card, and the Vehicle Insurance and Registration.

### **EMERGENCY VEHICLES**

When an emergency vehicle is approaching you from behind or is approaching you from the opposing lane, get out of the way. Carefully move to the right side of the road and slow or stop your vehicle. Pull back into traffic only when it is safe to do so.

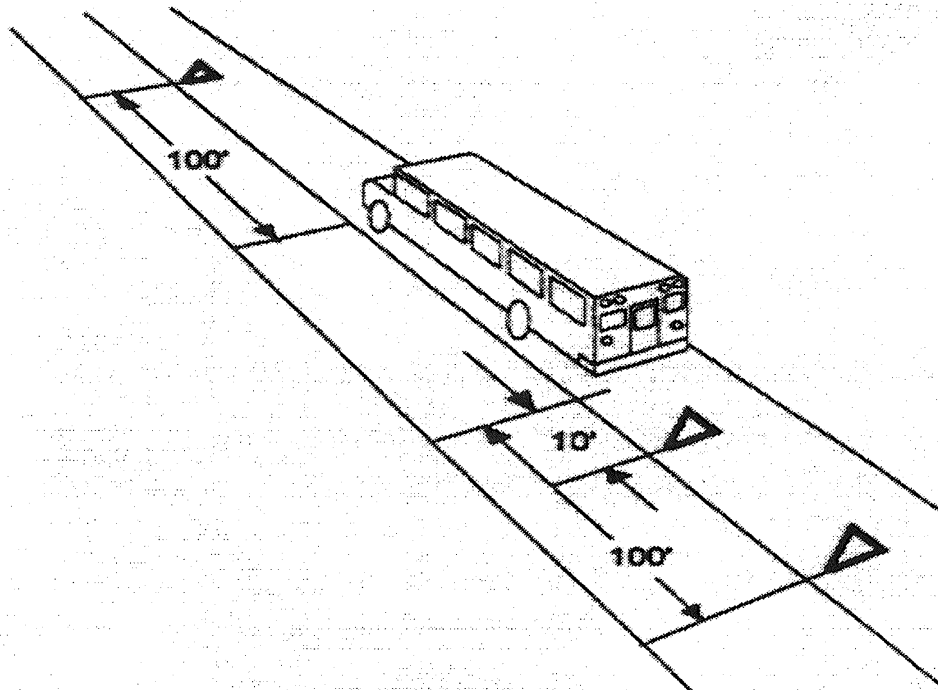
## REQUIRED SAFETY EQUIPMENT (42-4-230, C.R.S.)

**Emergency Triangles** - Each school bus is equipped with three emergency reflective triangles. In case of a breakdown, accident or other emergency, the driver, paraprofessional, or qualified individual will place the triangles as the law requires. SEE FOLLOWING EXAMPLES.

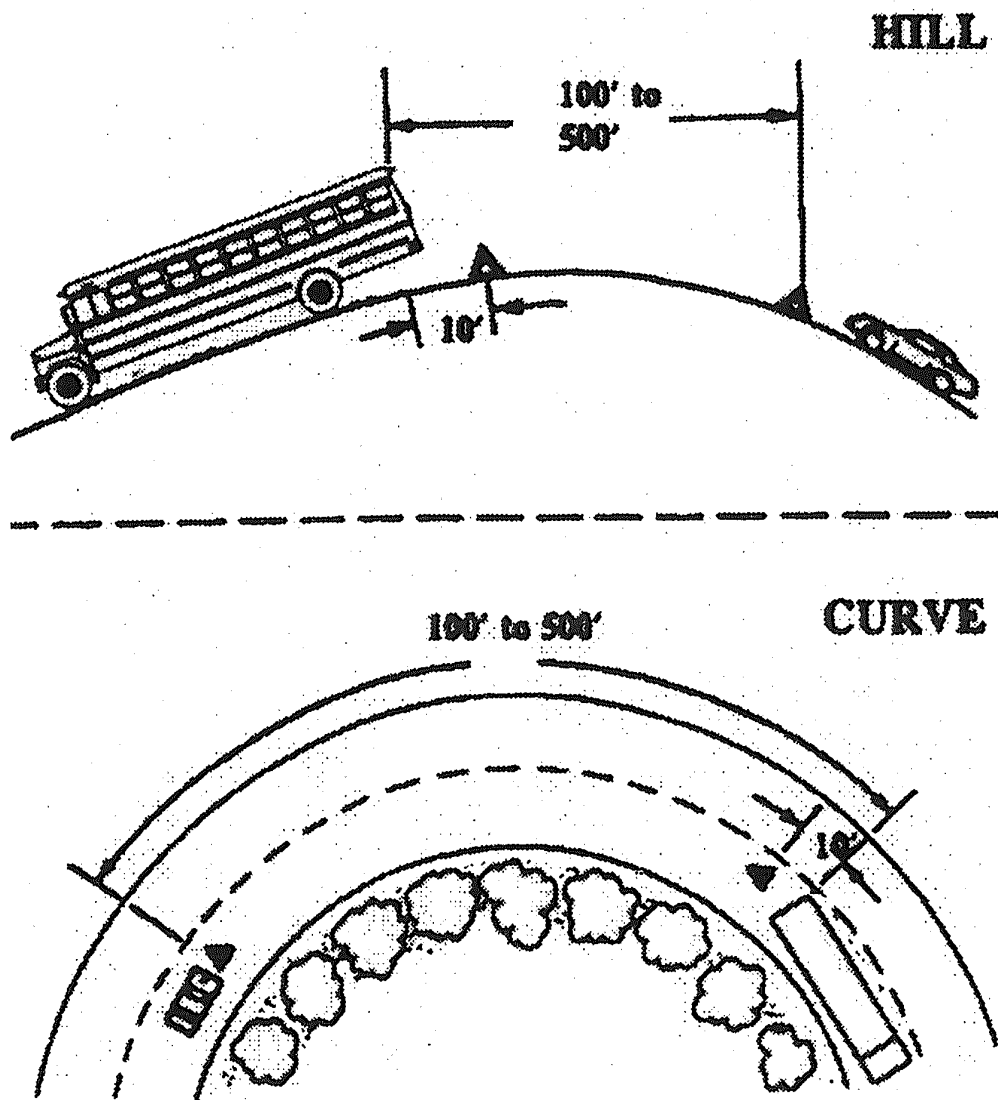
When you pull off the road and stop, activate the 4-way hazard lamps. Taillights may not provide adequate warning to motorists. Drivers have crashed into the rear of a parked vehicle because they thought it was moving normally.

If you must stop on a road or shoulder of a road, set your emergency reflective triangles within 10 minutes. Placement should be at the following locations:

- On the traffic side of the vehicle, within 10 feet from the front or rear corners to mark the location of the vehicle.
- About 100 feet behind and ahead of the vehicle, on the shoulder or in the lane you are stopped in. (See figure below).

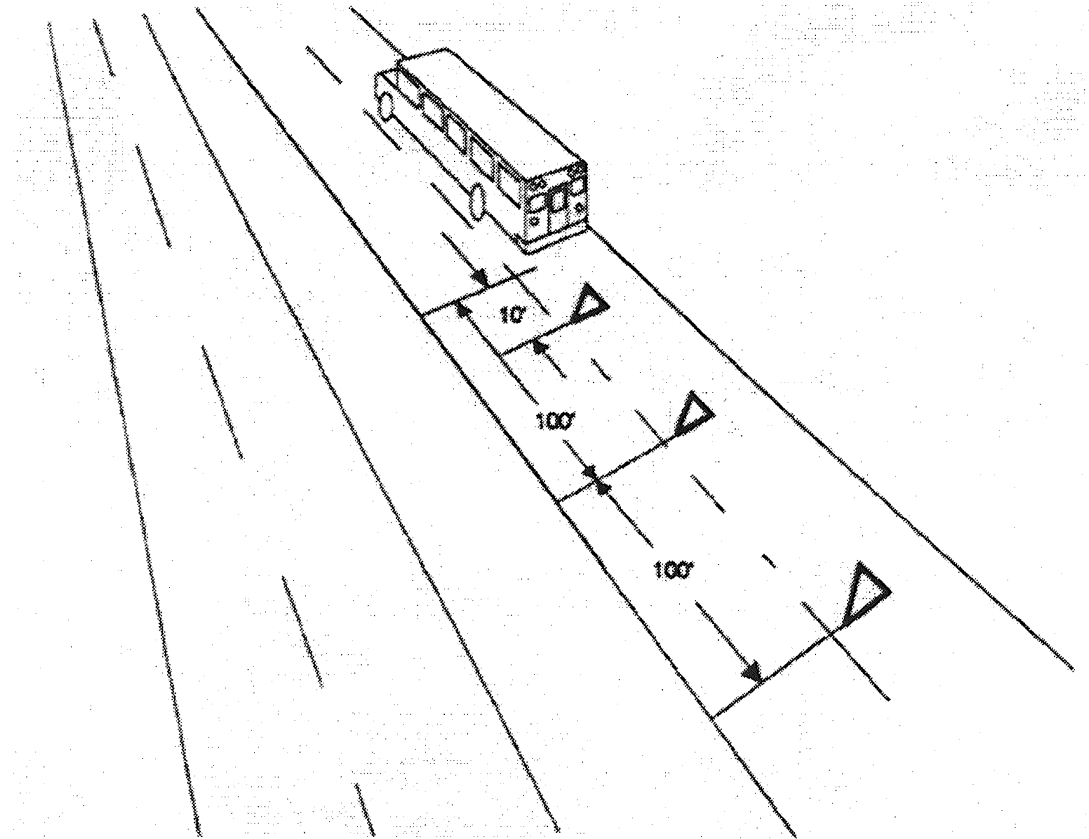


Back beyond any hill, curve, or other obstruction that prevents other drivers from seeing the vehicle within 500 feet. (See figure below).



**Reminder:** If the line of sight is obstructed due to a hill or curve, move the rearmost triangle to a point giving adequate warning.

If you must stop on or by a one-way or divided highway, place warning devices 10 feet, 100 feet, and 200 feet toward the approaching traffic. (See figure below)



When placing the triangles, hold an assembled triangle toward the oncoming traffic. This enhances safety by increasing visibility to other drivers (especially at night).

When the triangles are unfolded for use, the weighted base must be turned so it makes a cross with the bottom of the triangle to keep the triangle from tipping over.

**Fire Extinguisher** – The bus shall be equipped with at least one pressurized 5-pound, dry-chemical fire extinguisher of a type approved by UL, with a total rating of not less than 2A10BC. The operating mechanism shall be sealed with a type of seal that will not interfere with use of the fire extinguisher. [1 CCR 301-25, 2251-R-59.01]

***The fire extinguisher contains a dry powder that can become compacted. Remove the extinguisher occasionally and shake upside down several times to loosen the compacted powder to make the extinguisher more effective.***

Fire extinguisher shall be mounted in the extinguisher manufacturer's bracket (automotive type) and located in the driver's compartment in full view of, and readily accessible to the driver. A pressure gauge shall be mounted on the extinguisher as to be easily read without removing the extinguisher from its mounted position. [1 CCR 301-25, 59.01 (a)]

### **Fire Extinguisher Operation**

- Hold the extinguisher upright. It should not be held on its side when operating.
- Twist and pull safety pin, breaking seal.
- Squeeze handle to discharge powder. Aim at the base of the fire closest to you and progress forward, moving the discharge cone from side to side in a sweeping motion.
- Turn extinguisher on and off as desired to control the fire.
- After use, report extinguisher for replacement or recharge.

With engine fires, never open the hood, it could cause a flashback. Do your best to direct the fire extinguisher stream through grill or under fenders.

If possible, stand upwind from burning material to prevent standing in smoke and heat. Avoid standing near areas of flammable, unburned materials that could catch fire in a flashback.

The fire extinguisher is to help you safely evacuate students from a burning vehicle. It does not have sufficient capacity to extinguish a major vehicle fire.

***Reminder: Safety of the students is your first priority, not the fire!***

**First Aid Kit(s)** - 1 CCR 301-25, 2251-R-59.02 - The bus shall carry a first aid kit which shall either be mounted securely in full view or the location plainly indicated by appropriate markings, in the drivers compartment. Additional kits may be installed. The kits shall be mounted in such a manner that they can be removed, if necessary.

1 CCR 301-25, 2251-R-59.02(a) - The kit shall be sealed. The seal verifies the integrity of the contents without opening the kit. The seal shall be designed to allow easy access to the kits content.

**Contents of the 24 unit First Aid Kit:**

<b><u>Item</u></b>	<b><u>Unit(s)</u></b>
Adhesive Tape	1
1" adhesive bandage	2
2" bandage compress	1
3" bandage compress	1
4" bandage compress	1
3" x 3" plain gauze pads	1
Gauze roller bandage 2" wide	2
Plain absorbent gauze - 1/2 square yard	4
Plain absorbent gauze - 24" x 72"	3
Triangular bandages	4
Scissors, tweezers	1
Space rescue blanket	1
Non-Latex disposable gloves, pair	1
CPR mask or mouth to mouth airway	1
Moisture and dustproof kit of sufficient capacity to store the required items.	

***Caution: Replace gloves on a yearly basis. Be aware that people can be allergic to latex. Never administer medicines, ointments, sprays, or other chemicals.***

**Body Fluid Cleanup Kits** - Body fluids of all persons should be treated as if they contain infectious agents (germs). The term "body fluids" includes blood, semen, drainage from scrapes and cuts, feces, urine, vomit, respiratory secretions (e.g. nasal discharge) and saliva. Contact with body fluids presents a risk of infection with a variety of germs. However, in general, the risk is very low and dependent on a variety of factors including the type of fluid with which contact is made. Put on disposable gloves prior to the clean up process. Body fluids must be contained or removed immediately, using established district procedures. Wash contacted area with warm, soapy water as soon as possible. [1 CCR 301-25, 2251-R-59.04]

## **Contents For Body Fluid Cleanup Kit:**

<b><u>Item</u></b>	<b><u>Unit(s)</u></b>
Antiseptic towelette	1
Disinfectant towelette	1
Absorbing powder(capable of ½ gallon absorption)	1
Non-latex disposable gloves, pair	1
Disposable wiper towels	2
Disposable scoop bag with closure mechanism and scraper	1
Moisture and dustproof kit of sufficient capacity to store the required items.	

Supplies to be disposed of must be secured in the scoop bag and placed in a hazardous materials (haz-mat) container. A second bag is required if items must be placed in a container other than an approved haz-mat receptacle. Replenish supplies as soon as possible after they are used.

## **SMALL VEHICLE REQUIRED EMERGENCY EQUIPMENT**

1 CCR 301-25, 2251-R-59.05(a) - Three (3) emergency triangle reflectors in a securely mounted case.

1 CCR 301-25, 2251-R-59.05 (b) - One 24 unit first aid kit meeting the same list as the school bus.

1 CCR 301-25, 2251-R-59.05 (c) - The small vehicle, shall be equipped with one securely mounted 2½ pound dry chemical fire extinguisher of a type approved by UL, with a minimum rating of 1A10BC.

**1. Optional Emergency Equipment may include:**

- Blankets
- 2-way radio, cellular phone
- Emergency information forms
- Accident check list
- Student list
- Flashlight
- Disposable mask
- Bag of salt, kitty litter, or sand

**2. Documents** - If involved in an accident, the investigating officer may ask the driver to provide:

- The appropriate driver's license
- DOT medical card
- Proof of insurance
- Vehicle registration
- Pre-trip documentation
- Current CDE Affidavit of Annual Inspection

**3. Emergency Packet** – Your District may require additional information.

- Seating Charts (2)
- CDE Accident Form, Stu-5
- Exchange of Information Form
- Witness Information Form

## **EMERGENCY PROCEDURES**

Despite good design, engineering, and preventative maintenance programs, there may be mechanical failures. The driver should do the following in case of a bus breakdown:

### **Mechanical Failure/Breakdown Procedure**

1. Stop the bus as far to the right of the road as possible or on the shoulder of the road, as conditions permit.
2. Activate 4-way hazard lamps, if operable.



3. Keep passengers in the bus unless conditions are unsafe.
4. If location of the bus is unsafe, evacuate the children to a safe place away from traffic. Conditions such as possibility of fire, bus stalled on railroad tracks or other dangers may warrant evacuating the students.

***Reminder: If emergency conditions exist, evacuate the students first and then worry about securing the external area around the bus.***

5. Notify your school authorities, giving bus number, location of the bus, description of the breakdown and if you have to evacuate the vehicle.
6. Place emergency triangles as specified previously in this unit.

**Accident Procedures** - In the case of an accident the driver should:

- Stop and secure the vehicle immediately.
- Activate 4-way hazard lights, if operable.
- Remain at the scene of the accident (there is a severe penalty for any person convicted of leaving the scene of the accident).
- Make certain all passengers are safe. If it is determined that it is unsafe to keep passengers inside the school transportation vehicle, evacuate the passengers to a safe place, away from traffic.
- Notify the proper law enforcement authority and school administrator immediately. If necessary, request emergency medical assistance. On accident alert days, follow the reporting procedures as set out by the local law enforcement agency.
- Check for injuries; render any person injured in the accident reasonable assistance. *Remember: Never do more than you are trained to do.*
- Remain alert regarding fire or the possibility of fire in any of the vehicles involved in the crash.
  - Check for ruptured fuel tank and fuel lines.
  - Check for electrical fire.
  - Check for hot tires that may catch fire. This is caused by metal rubbing against a tire from impact to the final resting place.
- Mark the scene with emergency reflective triangles as specified earlier in this unit if possible.
- Information such as names, license numbers, registration numbers, location, time, road and weather conditions, insurance information, and witnesses, should be obtained and accurately written down.
- If possible, a transportation staff member should be at the scene to render assistance and take pictures.

***Do not move the bus unless instructed by a law enforcement officer/fire department or as posted.***

Exceptions: C.R.S. 42-4-1602 (2). When an accident occurs on the traveled portion, median, or ramp of a divided highway and each vehicle involved can be safely driven, each driver shall move such vehicle as soon as practicable off the traveled portion, median, or ramp to a frontage road, the nearest suitable cross street, or other suitable location.

If vehicles have to be moved, mark the pavement around each tire, if possible.

Never admit fault, but be cooperative with the investigating officer. Provisions will need to be made for transporting children to their homes or to school.

1 CCR 301-26, 4204-R-210.02 - When a bus approaches the scene of an accident in which the school transportation vehicle is not involved, the operator should determine the necessity of being of assistance and provide reasonable assistance. Thereafter, immediately continue on the routine schedule.

***Remember: Never do more than you are trained to do.***

## **SCHOOL BUS EMERGENCY EVACUATIONS**

Planning for emergencies and knowing what to do at the time of an emergency will prevent panic and confusion. When a large number of passengers are moving rapidly to evacuate a bus, there is always the possibility of panic and injury. The safety of the students is to be given first priority. In the majority of emergency situations, the bus is the safest place for the passengers unless extenuating circumstances warrant evacuation from the bus.

**The following are examples of serious types of emergencies that may require emergency evacuation. In most cases, the front door evacuation is the safest.**

- **Front-end accidents** - Determine which of the exits may be used. Check for any serious injuries. Look for fire.
- **Rear-end accidents** - Follow the same procedures for a front-end accident. Do not use the rear exit. Look for fire.
- **Broadside accidents** - Determine which exit may be used. Follow the same procedures as for front/rear-end accidents.
- **Rollover accidents** - Remain as calm as possible; use rear exit, roof hatches, if available, and windows along top if they are free of broken glass. If fire does not exist and the bus is not lying on the front door side, this exit may also be used. Follow steps outlined for front/rear-end evacuation.

- **Fire** - Follow the evacuation procedures outlined for rear-end and front-end accidents. Use the exit furthest from the fire. DO NOT PANIC. Many injuries are caused by panic rather than by fire itself. This can be avoided if everyone stays calm.
- **Railroad crossing** - Use front-end or rear-end accident evacuation procedures. Stay clear of all traffic, and keep students in a group. DO NOT re-enter the bus. Have students move away from tracks, in the direction of the oncoming train at a 45° angle from the tracks.
- **Blizzard** - (visibility zero). Remember, it is warmer inside than out.
- **Flood waters** - Remain calm. Do not drive through water rushing across the roadway unless instructed to do so by a law enforcement officer. If the vehicle stalls during a water crossing, notify dispatch. Evacuate passengers if situation warrants. What is the safest option for the students?

***Reminder: Under no circumstances should any student move another student who is injured without the permission of the bus driver or emergency responder attending the accident. The driver needs to be aware of language barriers and prepare ahead of time to address the situation.***

## **General Procedures for Evacuations**

Follow these general procedures in any evacuation. Above all—remain calm.

### **Evaluate the situation.**

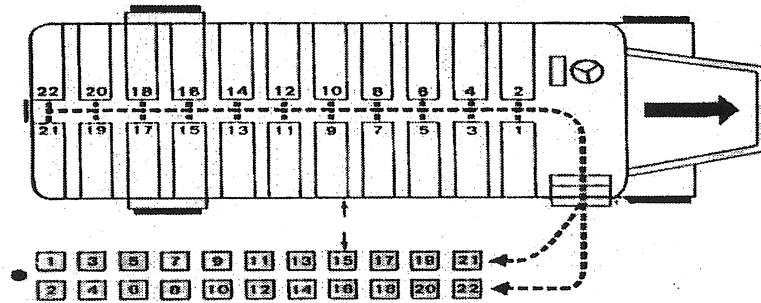
- Is evacuation necessary?
- Injuries?
- Which exit is best to use?
- Determine a safe waiting area.
- Notify proper authorities.

There may be different procedures and practices between practice drills and real evacuations.

### **Secure Vehicle (all drills)**

- Set park brake.
- Put transmission in reverse (manual) or neutral (automatic) or Park if so equipped.
- Turn off engine.
- Turn on 4-way hazard lamps (if operable).
- Determine which door is best to use for the evacuation.
- Know the number of students on the bus.

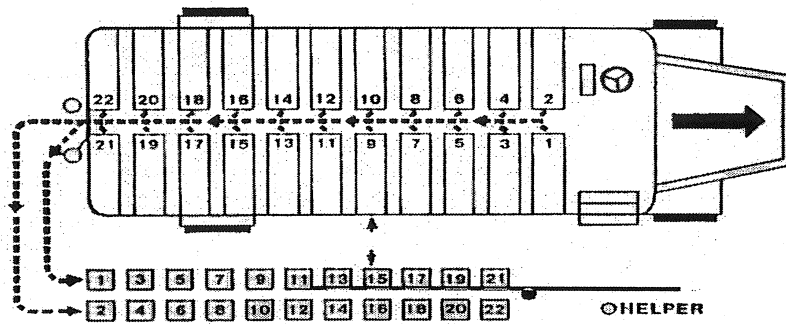
## Front Door Evacuation



### Emergency Evacuation Using Front Door

- Notify the proper authorities and school administrators as soon as possible.
- Driver should stand and face students.
- Get students' attention - speak clearly and concisely.
- Announce - "Remain seated, emergency evacuation, front door." Tell students the location of the safe waiting area, at least 100 feet or more from the bus and roadway. All belongings are to be left on the bus. Students should be supervised, if possible.
- Evacuate the bus by dismissing students. Driver should move backwards down the aisle, dismissing the students row by row.
  - If possible, give the first aid kit(s) to the first two responsible students exiting the bus. Do not impede the flow of the students exiting.
  - Begin at the front of the bus, starting at the right side; alternate side-to-side, row by row, until students have exited the bus.
- Check each seat as you move back to the front of the bus to make sure all students have evacuated the bus.
- Account for all students.
- Render first aid if necessary.

## Rear Door Evacuation



### Emergency Evacuation Using Rear Door

Use the rear door when front door evacuation is impossible or unsafe to use, or when it is imperative to evacuate as quickly as possible by using rear exits.

- Notify proper authorities and school administrators as soon as possible.
- Announce, "Remain seated, emergency evacuation, rear door." Tell students the location of the safe waiting area. All belongings are to be left on the bus.
- Assign two (2) "helpers" to assist students. Have them "sit" on the floor at the emergency door and "scoot" out of the door onto the ground. One helper is positioned with their back to the emergency door, so door will not swing against the students. The other helper is positioned on the other side of door area.
- Helpers need to hold a hand open, palm upward and extended for the student to place his/her hand on it. The other hand will support the upper part of the arm of the student to minimize the possibility of the student falling forward.

***Helpers are very important in preventing injuries when exiting the bus from the rear door.***

- Evacuate the bus by dismissing students. Driver will move backwards from rear row of seats, dismissing students row by row.
- Begin at the back row and continue to the front; alternate side-to-side, row-by-row, until students have exited the bus. If possible, give the first aid kit(s) to the last two responsible students when they are out of the bus.
- Students should sit at the rear door, then scoot through the door onto the ground with the helper assistance.
- Students should walk to the safe waiting area.
- Check all seats for students as you move towards the back of the bus.
- Have the helpers "assist" you out of the rear of the bus.
- Account for all students.
- Render first aid as necessary.

## **Emergency Evacuation - Front & Rear Doors (Combined)**

Follow procedures outlined for both front door and rear door evacuations. (Driver will not be able to dismiss the rows.)

*The fastest method for bus evacuation is the combined evacuation, using front and rear doors.*

## **Side Door Evacuation**

Follow the above procedures for a rear door evacuation with the following exception to dismissing the students:

Begin at the seat nearest the exit, approximately 6<sup>th</sup> from the rear. Work to the rear alternating side-to-side, (a closed space), then return to seat immediately in front of the rear side exit and work to the front alternating side to side.

Using a side door exit is a more difficult evacuation procedure because of the height of the door from the ground. With small children you might have to assist them from the door to the ground.

## **Emergency Evacuation Using Side & Front Door Exits**

Begin at the seat nearest the side exit, work to the rear alternating side to side (a closed space). Use a helper to evacuate front door students. Driver should return to the front of the bus, check for students while exiting through the front door.

## **Emergency Evacuation - Students With Special Needs**

Care should be taken to plan for students with special needs who are riding on the bus. Know procedures to be followed to safely evacuate each student. It is advisable to talk to parents or guardians of the students with disabilities to properly plan for an emergency evacuation. Teachers and school staff who work with these students can also help communicate the individual needs of each child. The [CDE Guidelines for Transporting Students With Disabilities](#) gives guidelines for preparing an evacuation plan. Responsible students may be assigned to help a student with special needs get to a safe area away from the bus, traffic and other dangers. The plan should address each student's characteristics and abilities. A written plan should be developed, maintained with the route sheet, and out of sight of everyone who may get on the bus. All drivers should be familiar with where the plan is located and review it prior to departing on a route.

## EMERGENCY EVACUATION DRILLS REQUIRED

### 1 CCR 301-26, 4204-R-216.00 Emergency Evacuation Drills

- 216.01 Emergency evacuation drills shall be conducted at least twice during each school year for route operators and students who are transported the day of the drill.
  - 216.01 (a) One drill shall be through the emergency door(s) unless district/service provider policy precludes such practice.
  - 216.01 (b) One drill shall be conducted in the fall and the second drill conducted in the spring.
  - 216.01 (c) Substitute and activity trip operators of 16 or greater capacity vehicles shall be involved in the drills.
- 216.02 Students on activity trips shall receive emergency evacuation instruction prior to departure.
- 216.03 Records shall be maintained documenting that the required evacuation drills were conducted or evacuation instruction was given.

Students should know the location of the first aid kits, how to shut off the engine, and set the park brake; unless disabilities of students preclude this.

The emergency evacuation drill should be as close to the real thing as possible. The drill should be discussed with the students prior to the day of the drill. The drill should follow the evacuation procedures for the appropriate exit(s) used. When possible, make sure to include students with special needs in the discussion, as well as having them participate in the actual drill. If you wish to include students with special needs in the drill, get permission from parents/guardians.

Stand, facing students and tell them they are having an emergency evacuation drill. Remind students to leave books, lunches, etc., on the bus. The drill should be timed. Most important is how the students exit the bus; calmly, orderly, and following directions. When the drill is over, have the students get back on the bus. Spend a few moments discussing the drill. Point out the positive things that occurred and discuss ways to improve the drill.

## MEDICAL EMERGENCIES

**CHECK** - the student's condition.

**CALL** - the appropriate district representative. Give bus/route number, location, and type of emergency.

**CARE** - administer first aid, if necessary, until assistance arrives.

Refer to the CDE 1<sup>st</sup> Aid Guide For School Bus Drivers and Bus Assistants found in Unit 14.