

# TEENS & TRUCKS

share the road



:: LESSON PLAN ::



# **TEENS & TRUCKS**

# **SHARE THE ROAD**

## **Lesson Plan**

**Teaching Teens and Other Young Drivers  
about Sharing the Road Safely with Large Trucks**

Developed by

The Arizona Trucking Association  
The Commercial Vehicle Safety Alliance (CVSA)  
The Federal Motor Carrier Safety Administration (FMCSA)  
The Arizona Department of Public Safety - Commercial Vehicle Bureau

In Cooperation with  
Tennessee Trucking Association  
Tennessee Trucking Foundation  
Tennessee Governor's Highway Safety Office  
Tennessee Department of Safety  
The American Trucking Association  
PrePass

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Dear Educator,

The developers of the *Teens & Trucks: Share the Road* program want to thank you for sharing our interest in making the highways safer for all, especially teenagers and other young drivers.

As front-line educators teaching young drivers how to drive safely, hopefully you will find these training materials to be a valuable addition to the basics you already teach. We developed *Teens & Trucks* because our research concluded that most driver education materials in use today spend little if any time on this important aspect of safe driving.

Consequently, the curriculum is structured in such a way that you can teach its key points in small, separate segments or present all of them as one entire unit over a period of one or two 50-minute class periods. The curriculum addresses five key points:

- Don't cut in front of trucks.
- Stay out of blind spots, or the "No Zones."
- Follow trucks at a safe distance.
- Watch for trucks making wide right and left turns.
- In the case of mechanical or other problems, pull off the highway as far as you can.

The curriculum also includes a case study involving a young driver killed in a crash with a commercial vehicle in 2008. It was selected because the young driver failed to observe basic "Share the Road" principles. The names of those involved have not been included at the request of the police department that conducted the crash investigation.

Please contact the Tennessee Trucking Association and Foundation at 615-777-2882 if you have questions or comments pertaining to the *Teens & Trucks: Share the Road* program. Thank you for your support of safe driving and for your input on this curriculum.

Tennessee Trucking Association  
Tennessee Trucking Foundation  
Tennessee Governor's Highway Safety Office  
Tennessee Department of Safety  
Arizona Trucking Association  
Federal Motor Carrier Safety Association  
Commercial Vehicle Safety Alliance  
American Trucking Association  
Arizona Department of Public Safety

## Instructor Curriculum Introduction

### Objective

To present students with information about large commercial motor vehicles (trucks) and how to share the road safely with large trucks. Content includes:

- Brief overview and facts about teens and trucks
- Why cutting off trucks is dangerous
- Why driving in the Blind Spots/No Zones is dangerous
- Why following at a safe distance is important when traveling behind large trucks
- Why driving near trucks making turns can be dangerous
- What to do when stopping on the shoulder of a highway and, correspondingly, why it's important to abide by and be aware of the "Move Over" law

As a final test of knowledge, students will "investigate" an actual crash involving a teenager's death to find out how this crash could have been avoided and a life saved, and to help all students make sound, safe decisions when they are behind the wheel.



## Instructor Curriculum Introduction (continued)

### Students should:

- Participate in teacher-led discussions about the characteristics of large trucks;
- Identify the “No Zones” of large trucks;
- List the procedures for passing and following large trucks;
- Identify hazards associated with trucks making left and right turns;
- Analyze the stopping distance of trucks vs. passenger vehicles;
- Actively participate in the case study exercise.

### Teaching materials provided:

- Lesson Plan
- Workbook
- Accompanying *Teens & Trucks* video/DVD
- US DOT FMCSA Large Truck and Bus Crash Facts 2007

### Equipment Needed

- Audio/visual Equipment
- Whiteboard/flip chart (optional)

## Instructor Curriculum Introduction (continued)

**Unit frame:** 50 minutes, or five 10-minute segments (as indicated with suggested module times)

**Optional unit time frame:** 100 minutes or five 20-minute segments (by doubling suggested module times)

### **Instructor preparation:**

- Review workbook/fact sheets.
- Review video/DVD.
- Review and become familiar with case study material.
- Prepare an adequate supply of workbooks.
- Administer pre-test to students at least two days before class and before handing out workbook.
- Distribute workbook to students along with the assignment to read and study before class. This must be done after the pre-test is administered.
- Verify audio/visual equipment functionality.

### **Additional instructor guidance for measuring outcomes:**

- Instructor may develop and administer any other quizzes or tests.
- Instructor may grade participants based on their participation and accuracy of facts during the case study.
- Accompanying video/DVD coincides with Modules 5, 6, 7, 8 and 9, by the same name.
- The video/DVD segments may be used in support of these modules (recommended by the producers of this program).
- The video/DVD has a file to play all segments at once and files for each individual segment.

## Historical Data

### *FATAL MOTOR VEHICLE TRAFFIC CRASHES*

### *COMMERCIAL MOTOR VEHICLE (CMV) AND YOUNG DRIVER INVOLVEMENT*

### *FATALITY ANALYSIS REPORTING SYSTEM (FARS)*

Year	CMV Involvement Fatal Crash Involving a CMV			Non CMV Involvement All Other Fatal Crashes			Total		
	Total Number of Fatal Crashes	Crashes Involving 16-25 Year Old Drivers		Total Number of Fatal Crashes	Crashes Involving 16-25 Year Old Drivers		Total Number of Fatal Crashes	Crashes Involving 16-25 Year Old Drivers	
		Number	Percent of Total		Number	Percent of Total		Number	Percent of Total
2003	4,609	1,220	26.5%	33,868	12,833	37.9%	38,477	14,053	36.5%
2004	4,734	1,218	25.7%	33,710	13,017	38.6%	38,444	14,235	37.0%
2005	4,805	1,235	25.7%	34,447	12,816	37.2%	39,252	14,051	35.8%
2006	4,643	1,210	26.1%	34,005	12,768	37.5%	38,648	13,978	36.2%
2007	4,455	1,200	26.9%	32,793	11,984	36.5%	37,248	13,184	35.4%
2003-2007	23,246	6,083	26.2%	168,823	63,418	37.6%	192,069	69,501	36.2%

This chart comes from the National Highway Traffic Safety Administration (NHTSA) Fatality Analysis Reporting System. (FARS) 2003—2006 final 2007 Annual Report File (ARF)

### *LICENSED DRIVERS, BY YEAR AND AGE*

### *FEDERAL HIGHWAY ADMINISTRATION (FHWA)*

Year	Driver's Age							
	< 16		16-24		25+		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
2003	37,409	0.0%	25,962,639	13.2%	170,165,619	86.7%	196,165,667	100.0%
2004	24,930	0.0%	26,207,298	13.2%	172,656,684	86.8%	198,888,912	100.0%
2005	23,902	0.0%	26,320,869	13.1%	174,204,201	86.9%	200,548,972	100.0%
2006	211,351	0.1%	26,578,116	13.1%	176,020,971	86.8%	202,810,438	100.0%
2007	251,562	0.1%	26,858,208	13.1%	178,632,075	86.8%	205,741,845	100.0%
2003-2007	549,154	0.1%	131,927,130	13.1%	871,679,550	86.8%	1,004,155,834	100.0%

This chart comes from the Federal Highway Administration (FHWA) website

## Module 1: Introduction to *Teens & Trucks*, History and Facts

(3 minutes—this module)

Performance Objectives	Learning Activities	Resources
<p>Students will understand the need for safe driving around large commercial motor vehicles through review of some facts about basic physics.</p> <p><b>Teaching Method:</b> Lecture and discussion</p>	<p>Review pages 6-7 of workbook</p> <p>Discuss overall crash stats from NHTSA chart “Causes of Death” and overall young driver statistics (Fig 1)</p> <p>Discuss NHTSA “Time Clock” chart (Fig 2)</p> <p>Emphasize that the facts show passenger car drivers are the cause of the majority of collisions with large trucks and buses in which a death occurs.</p> <p>How many students have been in a crash or know of someone who has been in a crash?</p> <p>How many know someone who has died in a crash?</p>	<p><i>Teens &amp; Trucks</i> workbook</p> <p>NHTSA chart “Causes of Death” (Fig 1)</p> <p>NHTSA “Time Clock” chart (Fig 2)</p> <p>Refer to Crash Facts (page 37) of this lesson plan</p> <p>Cite number and percent of young drivers in crashes/fatalities. Refer to NHTSA FARS chart on page 11</p>

## Module 2: Types of Vehicles on the Road

(5 minutes)

Performance Objectives	Learning Activities	Resources
<p>Students will be able to generally describe the size, weight and different handling characteristics of cars and trucks.</p> <p>Students will be able to identify the different types of large commercial vehicles and their operating characteristics.</p> <p><b>Teaching Method:</b> Lecture and discussion</p>	<p>Instructor to review pages 8-9 of workbook and lead discussion about the following:</p> <p>Compare the size of a straight truck and tractor trailer to something of common interest to the class</p> <p>Compare the weight of a large tractor trailer to something of common interest to the class</p> <p>Compare the size and weight difference of cars and trucks. Why is that important?</p> <p>Explain that the pivot point of the tractor trailer makes handling/ responsiveness more difficult and is much different from that of a car</p>	<p><i>Teens &amp; Trucks</i> workbook</p> <p>Classroom/building/parking lot, etc.</p> <p>Classroom/building/ parking lot, etc.</p> <p>Size and weight differences affect vehicle handling characteristics.</p> <p>Page 9 of workbook</p>





## Module 4: Don't Cut Off Trucks

(3.5 minutes—this module)

Performance Objectives	Learning Activities	Resources
<p>Students will be able to list the proper procedures for passing large trucks on the roadways, and also describe why it is not a good idea to “cut off” trucks.</p> <p><b>Teaching Method:</b> Lecture, discussion and video</p>	<p>Instructor to play “Introduction” and “Don’t Cut Off Trucks” video segments</p> <p>Instructor to review page 12 of workbook</p> <p>Ask the students to list the procedures for passing trucks on the roadways</p> <p>Ask the question, “When passing a large tractor trailer what would you do with your vehicle speed and lane position”?</p> <p>When is it safe to pull back in front of the tractor trailer?</p> <p>Cite number of rear-end crashes</p>	<p><i>Teens &amp; Trucks</i> video/ DVD</p> <p><i>Teens &amp; Trucks</i> workbook</p> <p>Answer is on page 12 of workbook</p> <p>Answer is on page 12 of workbook</p> <p>Answer is on page 12 of the workbook</p> <p>Crash Facts, page 37 of this lesson plan</p> <ol style="list-style-type: none"> <li>1. Cars crash into rear of truck—28,383 crashes</li> <li>2. Trucks crash into rear of passenger vehicle— 31,123 crashes</li> </ol>



## Module 5: Stay Out of the Blind Spots or “No Zones”

(4 minutes—this module)

Performance Objectives	Learning Activities	Resources
<p>Students will be able to identify the “No Zones” around a large commercial vehicle.</p> <p><b>Teaching Method:</b> Lecture, discussion and video</p>	<p>Instructor to play “Blind Spots/No Zones” video segment</p> <p>Instructor to review page 13 of workbook</p> <p>Discuss the blind spot areas around a large truck, and how accidents occur in this area, using information in the workbook and video. Emphasize that blind spots around large trucks are referred to as the “No-Zones”</p> <p>Cite number of lane change/side-swipe crashes</p>	<p><i>Teens &amp; Trucks</i> video/ DVD</p> <p><i>Teens &amp; Trucks</i> workbook</p> <p>Page 13 of workbook</p> <p>Crash Facts, page 37 of this lesson plan</p> <ol style="list-style-type: none"><li>1. Cars crash into side of truck—65,566 crashes</li><li>2. Trucks crash into side of car—81,764 crashes</li></ol>

## Module 6: Following Distance

(3 minutes—this module)

Performance Objectives	Learning Activities	Resources
<p>Students will be able to identify the hazards of following large trucks and buses too closely, and the correct ways to reduce risks when behind them.</p> <p><b>Teaching Method:</b> Lecture, discussion and video</p>	<p>Instructor to play “Following Distance” video segment</p> <p>Instructor to review page 14 of workbook</p> <p>Ask the students to list the procedures for passing trucks on the roadways</p> <p>Ask the question, “What are some of the hazards of following a large truck too closely?”</p> <p>Safe Following Distance rule of thumb?</p> <p>Explain to students that a safe following distance is the distance required to follow another vehicle without colliding into the vehicle in front. It is not the same as and should not be confused with “total stopping distance”</p>	<p><i>Teens &amp; Trucks</i> video/ DVD</p> <p><i>Teens &amp; Trucks</i> workbook</p> <p>Page 14 of workbook – each paragraph has an answer</p> <p>Answer is on page 14 of workbook</p> <p>Three-second following distance rule.</p> <p>Page 14, last paragraph of workbook</p>

## Module 7: Turns – Trucks Make Wide Turns

(4 minutes—this module)

Performance Objectives	Learning Activities	Resources
<p>Students will be able to define the hazards of large commercial vehicles making left and right turns.</p> <p><b>Teaching Method:</b> Lecture, discussion and video</p>	<p>Instructor to play “Turns - Driving Safely Around Tractor Trailers Making Turns” video segment</p> <p>Instructor to review page 15 of workbook</p> <p><b>Instructor to ask:</b></p> <ol style="list-style-type: none"><li>1. What is one of the main causes of collisions between cars and trucks at intersections?</li><li>2. Why do trucks and other large vehicles have a larger turning radius?</li><li>3. What should a driver look for before passing a large tractor trailer on the right?</li></ol>	<p><i>Teens &amp; Trucks</i> video/ DVD</p> <p><i>Teens &amp; Trucks</i> workbook</p> <p><b>Answers:</b></p> <ol style="list-style-type: none"><li>1. Inability to determine the speed of an approaching truck</li><li>2. Overall longer length of trucks</li><li>3. Is the right turn signal on and is the vehicle is moving left to make a right turn?</li></ol>

**Module 7: Turns – Trucks Make Wide Turns**  
(continued)

<b>Performance Objectives</b>	<b>Learning Activities</b>	<b>Resources</b>
<p>Students will be able to define the hazards of large commercial vehicles making left and right turns (continued).</p> <p><b>Teaching Method:</b> Lecture, discussion and video</p>	<p>Instructor to review page 15 of workbook</p> <p>Ask students: “What does the term ‘sandwiched’ mean in this context?”</p> <p>Have students explain what intersection stop lines are, and why they are needed to give the clearance trucks need when turning.</p>	<p><i>Teens &amp; Trucks</i> workbook</p> <p><b>Answers:</b> Trapped or stuck between turning truck and curb or other object</p> <p>Lines painted at intersections to keep motorists back far enough to be safe and allow large vehicles to turn</p>

## Module 8: Moving Off the Road

(3 minutes—this module)

Performance Objectives	Learning Activities	Resources
<p>Students will be able to recognize the importance of moving far enough off the road to the right when stopping by the side of the road.</p> <p><b>Teaching Method:</b> Lecture, discussion and video</p>	<p>Instructor to play “Moving Off the Road” video segment</p> <p>Instructor to review page 16 of workbook</p> <p><b>Instructor to ask:</b></p> <ol style="list-style-type: none"><li>1. Why are crashes that involve striking a parked vehicle some of the most deadly crashes?</li><li>2. What are some reasons drivers drift off the road?</li><li>3. What are some reasons why motorists pull off onto the shoulder of a highway?</li><li>4. What is the “move over” law?</li><li>5. Does your state have one?</li></ol>	<p><i>Teens &amp; Trucks</i> video/ DVD</p> <p><i>Teens &amp; Trucks</i> workbook</p> <p><b>Answers:</b></p> <ol style="list-style-type: none"><li>1. Because the driver is inattentive or impaired, crash investigations have revealed there is a lack of braking actions, resulting in the impact force being much greater in this type of crash.</li><li>2. Distracted driving, which includes fatigue and/or impairment of the driver</li><li>3. Dust storms, other inclement weather, reduced vision</li><li>4. Page 16 of <i>Teens &amp; Trucks</i> workbook</li><li>5. Yes, Tennessee has a move over law</li></ol>

**Module 9: Real-Life Case Study – “Local Teen Killed in Wreck”**  
**(10 minutes—this module)**

<b>Performance Objectives</b>	<b>Learning Activities</b>	<b>Resources</b>
<p>Students will participate in the case study. They will apply all information that has been learned previously to this and develop a reason why the death occurred, and how this crash could have been prevented, thus saving lives.</p> <p><b>Teaching Method:</b> Lecture, discussion and video</p>	<p>Instructor to have students open workbook to page 19</p> <p>Instructor to review page 19 in workbook “News Headline—Local Teen Killed in Wreck” and Police Report with students</p> <p>Instructor to have students open workbook to page 21</p> <p>Students to complete worksheet individually</p> <p>Instructor to lead review of student worksheets, reinforcing answers as per information in workbook</p>	<p><i>Teens &amp; Trucks</i> workbook</p> <p>Accident case study, page 19 of workbook</p> <p>Student worksheet on pages 21-22 of workbook</p>

## Module 10: Final Test and Review

(10 minutes—this module)

Performance Objectives	Learning Activities	Resources
<p>Students will take final test</p> <p>Students will participate in review of final test</p> <p><b>Teaching Method:</b> Lecture, discussion</p>	<p>Instructor to proctor final test to all students</p> <p>Instructor to review final test with all students participating</p> <p><b>Instructor to submit:</b></p> <ol style="list-style-type: none"><li>1. Pre-test grades</li><li>2. Final test grades</li><li>3. Student evaluation</li><li>4. Instructor evaluation</li></ol> <p><b>To the Tennessee Trucking Foundation</b> 4531 Trousdale Drive Nashville, TN 37204</p> <p><b>Phone:</b> 615-777-2882 or 615-478-9797</p> <p><b>Fax:</b> 715-777-2024</p> <p><b>Email:</b> mandee@multi-tasksolutions.net</p>	





**Class  
Materials:  
Worksheets, Tests,  
and Evaluations**



## ACCIDENT CASE STUDY LOCAL TEEN KILLED IN WRECK

### [ANSWER KEY]

STUDENT NAME : \_\_\_\_\_ INSTRUCTOR: \_\_\_\_\_

SCHOOL NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

**1. Who was involved?**

The 16-year-old driver, the 16-year-old passenger and the truck driver.

**2. What happened?**

Two tractor trailers were traveling, one following the other, and one was swinging wide to the left to make a right turn. A speeding pickup truck was attempting to pass them on the right.

**3. What time of day did the crash happen?**

In the morning, shortly after 8:30AM.

**4. On what type of road did the crash happen?**

The crash occurred on a one-way, two-lane road at an intersection with another two-lane road.

**5. Why did the crash happen?**

The teenager was passing and being passed by a friend in another vehicle. They had been speeding and kept passing each other as they were driving down the road. The crash occurred when the 16-year-old driver failed to observe the truck making a right turn shortly after passing the other vehicle.

**6. How could the crash have been avoided?**

According to the investigating officer, the teen had just passed a friend in another vehicle, pulled back into the right lane and was passing the two trucks traveling in the left lane. The teen was passing the trucks at a minimum of 60– 65 mph in a 55 mph zone. The investigating officer indicated the teen did not have time to react to the truck making the right turn due to excessive speed. Had the driver been traveling at or near the speed limit, the crash would not have occurred.

**7. What were the road conditions?**

Clear and dry. There were no visual obstructions to either driver and the sun was not a factor as it was to the east.

**8. Were there any driver errors?**

The truck driver attempted to make a right turn from the left lane (swinging wide) and initiated the turn in the front of a pickup truck passing him on the right. A contributing factor was the teen driver playing “cat and mouse” with a friend in another vehicle and driving at a high rate of speed. The investigating officer concluded the crash could have been avoided if the teen was not speeding and had his full attention on the road instead of the vehicle following him.

**9. What were the speed conditions?**

The exact speed is unknown; however, the investigating officer indicated the minimum speed of the pickup was 60-65 mph. Furthermore, he believed the speed was a bit higher than the minimum indicated due to the type and nature of damage to the pickup.

**10. What Share the Road principles could have been applied to avoid this crash and needless death?**

- Stay out of the blind spots or “No Zones”
- Following too closely (possibly)
- Not allowing the truck enough room to turn safely

**ACCIDENT CASE STUDY  
LOCAL TEEN KILLED IN WRECK**

**[WORKSHEET]**

STUDENT NAME : \_\_\_\_\_ INSTRUCTOR: \_\_\_\_\_

SCHOOL NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

**1. Who was involved?** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**2. What happened?** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**3. What time of day did the crash happen?** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**4. On what type of road did the crash happen?** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**5. Why did the crash happen?** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**6. How could the crash have been avoided?** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**7. What were the road conditions?** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**8. Were there any driver errors?** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**9. What were the speed conditions?** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**10. What Share the Road principles could have been applied to avoid this crash and needless death?**  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**TEENS AND OTHER YOUNG DRIVERS  
SHARING THE ROAD WITH LARGE TRUCKS**

**[ANSWER KEY]**

**TEST (Pre-test) or (Final) – Please Circle**

STUDENT NAME : \_\_\_\_\_ INSTRUCTOR: \_\_\_\_\_

SCHOOL NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

**There is only one correct answer. Please circle the correct answer.**

1. Out of all crashes between passenger vehicles and large trucks, where is the point of contact with the vehicle most prevalent?
  - a. At the front of vehicles
  - b. At the rear of the vehicle
  - c. At the sides of the vehicle**
  - d. All of the above
  
2. The typical passenger vehicle weighs:
  - a. 1,000 to 2,000 pounds
  - b. 3,000 to 5,000 pounds**
  - c. 6,000 to 8,000 pounds
  - d. 10,000 to 12,000 pounds
  
3. The typical fully loaded tractor trailer can weigh up to:
  - a. 80,000 pounds**
  - b. 70,000 pounds
  - c. 60,000 pounds
  - d. 50,000 pounds
  
4. A typical passenger vehicle traveling at 55 mph under ideal conditions will take:
  - a. 50 feet to stop
  - b. 100 feet to stop
  - c. 125 feet to stop
  - d. 225 feet to stop**
  
5. A fully loaded tractor trailer traveling at 55 mph under ideal conditions will take:
  - a. 630 feet to stop
  - b. 530 feet to stop
  - c. 430 feet to stop**
  - d. 330 feet to stop
  
6. Total stopping distance is made up of:
  - a. Perception time, braking distance, and stopping distance
  - b. Perception time, reaction time, and braking distance**
  - c. Braking distance, brake lag time, and vehicle speed
  - d. Vehicle speed, braking distance, and condition of the road

7. When passing a large tractor trailer, wind turbulence will cause the vehicles to push apart.
- a. **True**
  - b. False
8. The blind spot behind a truck can be up to 100 feet.
- a. True
  - b. **False**
9. When making a right turn, a truck driver will never swing to the left before making a right turn.
- a. True
  - b. **False**
10. According to national statistics, most crashes between passenger vehicles and large trucks were determined to be the fault of the professional truck driver.
- a. True
  - b. **False**
11. A safe following distance means the same thing as a safe stopping distance.
- a. True
  - b. **False**
12. When driving around large vehicles, passenger car drivers should be aware of seeing the truck driver's mirrors.
- a. **True**
  - b. False
13. The pivot point on a tractor trailer has nothing to do with that vehicle's handling characteristics.
- a. True
  - b. **False**
14. Common laws of physics dictate that the shorter an object is, the harder it will be to roll over and, conversely, the taller an object is, the easier it will be to roll over.
- a. **True**
  - b. False
15. The correct safe following distance rule of thumb is:
- a. 2 seconds from the vehicle in front
  - b. **3 seconds from behind the vehicle in front**
  - c. 4 seconds from the vehicle in front
  - d. 5 seconds from the vehicle in front

**[Correct answers are in bold print]**



**TEENS AND OTHER YOUNG DRIVERS  
SHARING THE ROAD WITH LARGE TRUCKS**

**TEST (Pre-test) or (Final) – Please Circle**

STUDENT NAME : \_\_\_\_\_ INSTRUCTOR: \_\_\_\_\_

SCHOOL NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

**There is only one correct answer. Please circle the correct answer.**

1. Out of all crashes between passenger vehicles and large trucks, where is the point of contact with the vehicle most prevalent?
  - a. At the front of vehicles
  - b. At the rear of the vehicle
  - c. At the sides of the vehicle
  - d. All of the above
  
2. The typical passenger vehicle weighs:
  - a. 1,000 to 2,000 pounds
  - b. 3,000 to 5,000 pounds
  - c. 6,000 to 8,000 pounds
  - d. 10,000 to 12,000 pounds
  
3. The typical fully loaded tractor trailer can weigh up to:
  - a. 80,000 pounds
  - b. 70,000 pounds
  - c. 60,000 pounds
  - d. 50,000 pounds
  
4. A typical passenger vehicle traveling at 55 mph under ideal conditions will take:
  - a. 50 feet to stop
  - b. 100 feet to stop
  - c. 125 feet to stop
  - d. 225 feet to stop
  
5. A fully loaded tractor trailer traveling at 55 mph under ideal conditions will take:
  - a. 630 feet to stop
  - b. 530 feet to stop
  - c. 430 feet to stop
  - d. 330 feet to stop
  
6. Total stopping distance is made up of:
  - a. Perception time, braking distance, and stopping distance
  - b. Perception time, reaction time, and braking distance
  - c. Braking distance, brake lag time, and vehicle speed
  - d. Vehicle speed, braking distance, and condition of the road

7. When passing a large tractor trailer, wind turbulence will cause the vehicles to push apart.
  - a. True
  - b. False
  
8. The blind spot behind a truck can be up to 100 feet.
  - a. True
  - b. False
  
9. When making a right turn, a truck driver will never swing to the left before making a right turn.
  - a. True
  - b. False
  
10. According to national statistics, most crashes between passenger vehicles and large trucks were determined to be the fault of the professional truck driver.
  - a. True
  - b. False
  
11. A safe following distance means the same thing as a safe stopping distance.
  - a. True
  - b. False
  
12. When driving around large vehicles, passenger car drivers should be aware of seeing the truck driver's mirrors.
  - a. True
  - b. False
  
13. The pivot point on a tractor trailer has nothing to do with that vehicle's handling characteristics.
  - a. True
  - b. False
  
14. Common laws of physics dictate that the shorter an object is, the harder it will be to roll over and, conversely, the taller an object is, the easier it will be to roll over.
  - a. True
  - b. False
  
15. The correct safe following distance rule of thumb is:
  - a. 2 seconds from the vehicle in front
  - b. 3 seconds from behind the vehicle in front
  - c. 4 seconds from the vehicle in front
  - d. 5 seconds from the vehicle in front

# TEENS AND OTHER YOUNG DRIVERS SHARING THE ROAD WITH LARGE TRUCKS

## Student Evaluation

Student name: \_\_\_\_\_ Date: \_\_\_\_\_

School/Organization: \_\_\_\_\_

The producers of this training module are interested in saving lives and making our highways safer. We welcome your feedback so we can improve the effectiveness of this class. For this reason, we are asking you to provide some feedback and also an opportunity to tell us in your own words what you thought of the class. We thank you for your time in this endeavor.

Please circle the number that best corresponds with your experience.

Not at all = 1	Occasionally = 2	Somewhat = 3	Most of it = 4	All of it = 5	
Did you find the class helpful?	1	2	3	4	5
Was the material presented in a logical sequence?	1	2	3	4	5
Was the proper amount of time spent on each topic?	1	2	3	4	5
Did you feel that the class was taught with quality material?	1	2	3	4	5
Did the class material correspond with the DVD?	1	2	3	4	5
Was the material easy to understand?	1	2	3	4	5
Would you recommend this class to your friends?	1	2	3	4	5

What was the best part of the Teens and Trucks class?

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What improvements can be made to this class?

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# TEENS AND OTHER YOUNG DRIVER SHARING THE ROAD WITH LARGE TRUCKS

## Instructor Evaluation

**Instructor:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**School/Organization:** \_\_\_\_\_

Agreeing to teach this class is proof of your sincerity in helping make our highways safer and saving young drivers' lives. The producers of this curriculum welcome your feedback so we can improve its effectiveness. For this reason, we are asking you to provide answers to our questions "in your own words." We thank you for your time in this endeavor.

Did you find the lesson plan layout helpful? Please explain. \_\_\_\_\_

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Did the lesson plan present the material in a logical sequence? If not, please submit your opinion on improvements. \_\_\_\_\_

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Please express your opinion on allotted time constraints. \_\_\_\_\_

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Please express your opinion on quality of material presented. \_\_\_\_\_

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How do you feel the material in the text interacted with the visual material? \_\_\_\_\_

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Please express any other suggestions not addressed for improvement of this training module. \_\_\_\_\_

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## Crash Facts

In 2007, there were 95, 216 total crashes in which the passenger vehicle struck the large commercial truck.

Out of all these crashes:

- In 28, 383 (or 30%), the passenger vehicle crashed into the rear of the truck.
- In 1,267 (or 2%), the passenger vehicle crossed the center median and hit the truck head on.
- In 65,566 (or 69%), the passenger vehicle crashed into other areas of the truck.

Additionally in 2007, there were 196,909 total crashes in which the truck struck the passenger vehicle. Out of all these crashes:

- In 31,123 (or 16%), the truck crashed into the rear of the passenger vehicle.
- In 5, 022 (or 3%), the truck crossed the center median and hit the passenger vehicle head on.
- In 81, 764 (or 42%), the truck crashed into other areas of the passenger vehicle.

Consequently in 2007, out of 228, 359 crashes between passenger vehicles and large commercial trucks, 147,330 (or 65%) of these crashes were not at the front or rear of the vehicles but at the sides of the involved vehicles!

According to the Federal Highway Safety Administration (FHSA) and the National Highway and Traffic Safety Administration (NHTSA):

- More than 220,000 crashes involving at least one car and one large truck happen each year.
- In 2007, 67% of the crashes that involved at least one death were caused by the car, not the truck.
- Most crashes involving passenger cars and trucks occur in daylight on straight, dry pavement, and good weather conditions.
- Because trucks are so much bigger and heavier than cars, when a fatal collision occurs between the two, 80% of the time it is the driver of the car who is killed.

Source: FMCSA Large Truck Crash Facts

## Large Truck Crash Facts

The mission of the Federal Motor Carrier Safety Administration (FMCSA) is to promote the safe operation of commercial vehicles on our Nation's highways. Of all the people killed in motor vehicle crashes in 2007, 12% (5,099) died in crashes that involved a large commercial motor vehicle. Another 124,000 people were injured in crashes involving large trucks. Only about 14% of those killed and 20% of those injured were occupants of large trucks.

From 1997 to 2007, the number of large trucks involved in fatal crashes has declined by 10%, from 4,917 to 4,584. The number of large trucks in fatal crashes per 100 million vehicle miles traveled declined in these years from 1.80 to 1.44—down 21%. The rate for passenger vehicles fell from 2.10 to 1.90—down 10%. Proper education, among other factors, will continue to help achieve positive results.

In 2007, 4,584 large trucks were involved in fatal crashes; 77,000 were involved in injury crashes; and 333,000 were involved in property damage only crashes.

Large trucks made up 8% of all vehicles in fatal crashes, 2% of all vehicles in injury crashes, and 4% of all vehicles in property damage only crashes.

Singles (truck tractors pulling a single semi-trailer) accounted for 62% of the large trucks involved in fatal crashes. Doubles (truck tractors pulling three trailers) accounted for 0.1% of all large trucks involved in fatal crashes.

Source: FMCSA Large Truck Crash Facts





# TEENS & TRUCKS

## SHARE THE ROAD PARTNERS

TENNESSEE TRUCKING FOUNDATION • TENNESSEE TRUCKING ASSOCIATION  
 AAA OF ARIZONA • AIT SCHOOLS • ARIZONA DEPARTMENT OF TRANSPORTATION/  
 MOTOR VEHICLE DIVISION • DRIVING MBA • ARIZONA GOVERNOR'S OFFICE OF  
 HIGHWAY SAFETY • NATIONAL SAFETY COUNCIL – ARIZONA CHAPTER • PATRICIA  
 RESETAR/MOUNTAIN RIDGE HIGH SCHOOL • PHOENIX INTERNATIONAL RACEWAY  
 SJV CONSULTING, INC. • SWIFT TRANSPORTATION CO.



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