

Speed Kills Lesson Plans

Classroom Activities for Henrico County Public School Students

Developed By

Henrico County Community Criminal Justice Board

Henrico County Community Partners, Inc.

Henrico County Public Schools

CTE Resource Center

Developed For

Henrico County Public Schools

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Edited and produced by
CTE Resource Center
Margaret L. Watson, Administrative Coordinator
Darren E. Morris, Writer/Editor

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CTE Resource Center
2002 Bremo Road, Lower Level
Richmond, VA 23226
Phone: 804/673-3778
Fax: 804/673-3798
Web address: <http://www.CTEresource.org>

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The lesson plans were developed by

Julie Ballowe, Driver Education Instructor, Virginia Randolph Community High School

Fred Bibby, Driver Education Instructor, Virginia Randolph Community High School

Sergeant R.G. Netherland, Special Enforcement Unit, Henrico County Division of Police

Gail Taylor, Manager of Prevention Services, Henrico Area Mental Health and Retardation Services

Darlene Wilson Thomas, Driver Education Instructor, City of Richmond Public Schools and Henrico County Public Schools

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Margaret L. Watson, Administrative Coordinator

Darren E. Morris, Writer/Editor

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Henrico County Community

Partners, Inc.

Henrico County Public Schools

Bruce Cruser

Director, Community Corrections

County of Henrico

Mac R. Beaton

Director, Career and Technical Education

Henrico County Public Schools

George T. Drumwright, Jr.

Deputy County Manager for Community Services

Henrico County

Preface

Among all drivers, teenagers are disproportionately involved in automobile accidents, especially those resulting in serious injury or death. Lack of experience behind the wheel and lack of maturity are the chief contributing factors. When these circumstances are combined with ever-increasing distractions, a feeling of invincibility, and a desire to push the limits of new-found freedoms, it is easy to understand why young drivers often become a threat to themselves and to others on the roadways. In teen-driver crashes resulting in fatality, nearly two-thirds of those killed are people other than the teen driver.

It is questionable whether classroom driver education actually works, because the annual numbers of teen crashes have not changed significantly since the 1970s. Yet, the numbers show that more people are buckling up, and fewer teen accidents involve alcohol. Therefore, Henrico County would like to place a new emphasis on limiting reckless and careless driving behaviors such as speeding and to help young drivers recognize and avoid these behaviors in themselves and in others. To the inexperienced driver, speeding and thoughtlessness are potentially just as dangerous as drinking and driving.

To increase our awareness of this issue, the Henrico juvenile courts have already begun to use the *Speed Kills* DVD as part of a mandatory licensing ceremony in order to illustrate the very real dangers and responsibilities of driving. Attendees are asked to stop and think before getting behind the wheel. During such an occasion, Judge Richard Wallerstein stressed that "Driving is a privilege that must be consistently earned" and urged parents to prevent irresponsible or disobedient children from driving or to petition the courts to revoke their licenses, which he "would be happy to do" (until their children turn 18).

Now the DVD enters Henrico County Public Schools, accompanied by this set of lesson plans. It is hoped that the emotion, immediacy, and veracity of the DVD will leave a deeper impression if it is ultimately understood or reinforced through the lessons. Each lesson was created as part of a wider attempt to give young people the tools they need to make better decisions.

How to Use the Lesson Plans

Each lesson was created to reinforce at least one aspect of the DVD. In addition, each plan addresses a different learning objective to encourage responsible driving practice and behavior. The eight objectives include the following:

- ✦ Warning signs and crash avoidance
- ✦ Analysis of an accident (behaviors and age groups that are typically involved in vehicle accidents)
- ✦ Vulnerability (issues of speed, impact, and collision; identification of safe/dangerous vehicles and vehicle components that can become dangers)
- ✦ Driver distractions that may cause accidents
- ✦ Types of injuries associated with driving accidents
- ✦ Legal response (emergency personnel, police, and the legal process, including juvenile justice and associated punishments)
- ✦ Mental health consequences that arise from an accident—the victim and victimized
- ✦ Economic impact of an accident (public safety costs, auto insurance, personal costs)

For the class period in which the *Speed Kills* DVD is shown, teachers are asked to pre-select **one** of the lesson plans from this document, carefully read through its “Instructional Activity,” and ensure that they can acquire the “Materials Needed.” Comprehension of instructional steps will aid the success of the lesson during class time and limit student confusion. Planning is critical. Teachers should simply choose the lesson plan that most appeals to them or best compliments their experience or level of comfort.

Teachers may liberally modify these lessons as they see fit, or create entirely new lessons. Most will choose to cut steps or focus on questions, discussion ideas, or assessments included in many of the lesson plans. This is perfectly reasonable. Yet, if a teacher elects to follow the instructional steps to the letter, handouts and worksheets are included and marked as such. Teachers should print enough copies for their students. Each lesson also contains “Follow up/Extensions” which, if used, can expand the reach of the lesson beyond the classroom, or turn them into larger projects. “Internet Resources” are indexed, but Web site URL addresses may need to be updated. Additionally, teachers may teach any and all of the lessons over multiple class periods. If so, the DVD, or parts thereof, may need to be shown again.

Sensitivity Issues

The *Speed Kills* DVD focuses on one primary accident—a fatal crash involving Freeman High School students—and concludes with the examples of additional fatal car accidents involving Henrico County students. It is possible for a relation or friend of one of the deceased or injured to be a current student.

Some lessons will ask that students role play as accident victims of injury or as those accused of committing crimes that have led to the death or injury of another. It is likely that some will have suffered similar injuries and traumas depicted in the DVD or lessons. In addition, teachers will likely encounter students who maintain close relationships with those who have suffered and who continue to suffer from injuries or the loss of loved ones.

Therefore, teachers are asked to be familiar with the information in the DVD, the materials in the lesson plans, and the potential circumstances of their students prior to showing the DVD to the class. The contents of the DVD are powerful, and students may have a range of reactions when processing the reality of the information. Regardless of the circumstances of the viewers, an intimate portrait of the deceased and the heartfelt loss of those who were closest to him can be disturbing. For this reason, teachers are asked to consult with counselors and administrators to address reactions as they arise and should ask their students to remain respectful of the individuals in the DVD and respectful of each other.

It Won't Happen to Me

Overview

Students evaluate a variety of vehicles to mock-purchase one that has the best combination of safety features, economy, and appeal.

Related Courses

Driver Education, English, Economics, Automotive courses, Finance

Primary Lesson Objective

- ✦ Warning signs and crash avoidance

Additional Lesson Objectives

- ✦ Vulnerability (issues of speed, impact, and collision; identification of safe/dangerous vehicles and vehicle components that can become dangers)
- ✦ Types of injuries associated with driving accidents
- ✦ Mental health consequences that arise from an accident—the victim and victimized
- ✦ Economic impact of an accident (public safety costs, auto insurance, personal costs)

Materials Needed

- ✦ Internet connection
- ✦ Materials for writing a short essay

Teaching Strategies

Methods and practices might include

- ✦ Class projects/presentations
- ✦ Reading strategies
- ✦ Writing strategies
- ✦ Webquests or research

Instructional Activity

A. Bell-ringer Activity: Students list the brand names of the vehicles they will drive or are already driving as new drivers, ranking these vehicles on a safety scale from 1 to 5 (1 being extremely safe). If a student doesn't have a vehicle in mind, he or she should quickly browse sales sites (i.e., AutoTrader.com, Cars.com, [InvoiceDealers](http://InvoiceDealers.com), [CarsDirect](http://CarsDirect.com), [Autoweb](http://Autoweb.com), Autos.com, Edmunds.com, [AutoUSA](http://AutoUSA.com) and Car.com).

B. Watch the Speed Kills DVD.

C. Complete the following steps:

1. Students assess the damage to vehicles in the DVD, noting areas on the vehicle that incurred the most damage.
2. Students go to <http://safercar.gov/> and search for a safety rating for their own vehicles (or create a mock vehicle). Give students a price maximum (e.g., \$20,000) that may reflect current standards for a first-time driver buying a new vehicle. Used vehicle price should be much lower.
3. Use archive link http://www.nhtsa.dot.gov/CPS/CPS_Archive/safercar2001/contents.html to locate 2001 or equivalent vehicle information and identify vehicle-specific safety features.
4. Read the following facts to students.

Quick Facts~

- Rollover crashes have a higher fatality rate than all other kinds of crashes. More than 10,000 people die each year in rollover crashes.
- Driver behavior, speeding, distraction, and inattentiveness play significant roles in rollover crashes.
- By wearing your safety belt you can reduce your chance of being killed in a rollover by about 75 percent.

—from *Buying a Safer Car 2006*, NHTSA

5. Students write a one-paragraph description on the advantages and disadvantages of driving the vehicle they chose to purchase.

Sample Assessment

- ♦ Take the South Carolina Highway Patrol Quiz at <http://www.schp.org/finalexam/quiz.aspx>.

Follow-up/Extension

Select three students to compare the economies of gas mileage and how much money they would save annually if they drove 600 miles per month. Discuss how speeding behaviors can impact gas mileage. Discuss why the smaller, older vehicles are not the safest first-vehicle choices.

Just the Facts

Overview

Students familiarize themselves with a “Police Accident Report” and make assumptions based on vehicle diagrams and partially-completed information to reconstruct the scene of an accident.

Related Courses

Driver Education, Public Safety, Criminal Justice, Physics

Primary Lesson Objective

- ✦ Analysis of an accident (behaviors and age groups that are typically involved in vehicle accidents)

Additional Lesson Objectives

- ✦ Vulnerability (issues of speed, impact, and collision; identification of safe/dangerous vehicles and vehicle components that can become dangers)
- ✦ Driver distractions that may cause accidents
- ✦ Types of injuries associated with driving accidents
- ✦ Legal response (emergency personnel, police, and the legal process, including juvenile justice and associated punishments)
- ✦ Economic impact of an accident (public safety costs, auto insurance, personal costs)

Materials Needed

- ✦ Handout—“Causes and Number of Deaths” chart
- ✦ Handout—“Police Accident Report”
- ✦ Internet connection

Teaching Strategies

Methods and practices might include

- ✦ Reading strategies
- ✦ Writing strategies

Instructional Activity

A. Bell-ringer Activity: Students (individually or collectively) list what they think are the top causes of death for their age group: 16-20 years old.

B. Watch the Speed Kills DVD.

C. Complete the following steps:

1. Explain that 18% of all accidents involve teen drivers, and yet teenagers are a relatively small percentage of the total licensed population.
2. Give students the following handout, the “Causes and Number of Deaths” chart. Have them pay special attention to where the different age groups fall in the category, “traffic crashes.” The chart suggests that there is a substantial learning curve when developing safe-driving skills and behaviors. Read the following facts to students.

Quick Facts~

- Motor vehicle crashes are the leading cause of death among American teenagers, killing between 5,000 and 6,000 teenagers every year for the past decade (through 2003, the last year for which complete NHTSA data is available).
- From 1994 to 2003, a total of 57,142 teenagers were killed in motor vehicle crashes.
- Teenage drivers account for only 6.4 percent (12.5 million) of the total drivers in the United States, but account for 14 percent of all drivers involved in fatal crashes and 18 percent involved in police-reported crashes.

—from Allstate Insurance:

<http://www.allstate.com/Community/PageRender.asp?Page=teensafedrivingfacts.html>

3. Distribute the “Police Accident Report.” The crash report is based on the main accident on the DVD. You may wish to withhold this information.
4. By reading the partially-completed chart, students complete the “Description” section (at the bottom of the “Police Accident Report”), in which they must analyze the crash event and speculate on what may have caused the accident.
5. Point out that this is the same report that Henrico police use at an accident and that several sections address the issue of age and vehicle speed (students should locate and circle these references).
6. After the students have written their descriptions (on the report itself), encourage volunteers to share their work, and start a class discussion.
7. You may choose to read the actual description, which has been omitted from the handout:

Vehicle 1 was southbound in inside lane when driver 1 lost control of vehicle 1—vehicle 1 began sideslip and slid into northbound lanes where vehicle 2 was traveling—vehicle 2's front struck vehicle 1's right side—vehicle 1 then rotated and slid into curb, causing vehicle 1 to roll onto driver's side, where vehicle 1 came to rest facing northwest—vehicle 2, after striking vehicle 1, rotated clockwise and crossed curb line. Vehicle 2 then coasted down embankment and struck vehicle 3's rear, which was pushed into vehicle 4's right side.

8. The class should try to come to some consensus about causes of crashes and crash avoidance techniques.

Sample Assessment

Take the online quiz by Driving Skills for Life at

http://www.drivingskillsforlife.com/component/option,com_elearningquiz/Itemid,25/language,en/.

Follow-up/Extension

1. Read and sign the “teen driver contract” at <http://www.teendriving.com/drivingcontract2.htm>.
2. Play the games at <http://www.drivingskillsforlife.com/index.php>.

NOTE: Students must register at Driving Skills for Life. To access games, click on “Students” and then “Games.”

~HANDOUT~

Causes and Number of Deaths (2003)

Age	Youth (16-20)	Young Adults (21-24)	Adults (25-34)	Adults (35-44)	Adults (45-64)
1	Traffic crashes 5,988	Traffic crashes 4,312	Traffic crashes 6,675	Tumors/Cancers	Tumors/Cancers
2	Homicide 2,489	Homicide	Suicide	Heart disease	Heart disease
3	Suicide 1,813	Suicide	Homicide	Traffic crashes 6,780	
4	Accidental poisoning 752	Accidental poisoning	Tumors/Cancers	Suicide	
5	Tumors/Cancers 749	Tumors/Cancers	Accidental poisoning	Accidental poisoning	
6	Heart disease 450	Heart disease	Heart disease		
7	Accidental drowning 309	Accidental drowning		Homicide	Suicide
8	Congenital anomalies 241	Congenital anomalies			Traffic crashes 9,700
9	Nontraffic vehicle crashes (off-road) 108				Accidental poisoning
10	Accidental falls 106	Nontraffic vehicle crashes (off-road)	Congenital anomalies		
	All deaths including top 10 16,141	All deaths including top 10 16,030	All deaths including top 10 41,300	All deaths including top 10 89,461	All deaths including top 10 439,300
	Traffic deaths as a percentage of total deaths 37%	Traffic deaths as a percentage of total deaths 27%	Traffic deaths as a percentage of total deaths 16%	Traffic deaths as a percentage of total deaths 8%	Traffic deaths as a percentage of total deaths 2%

~HANDOUT~

COMMONWEALTH OF VIRGINIA - DEPARTMENT OF MOTOR VEHICLES
POLICE ACCIDENT REPORT

PAGE 1 OF 3 PAGES 3 AGENCY COPY FR 300P (REV. 1/90)

ACCIDENT DATE: 11/16/97 TIME: 2159 AM/PM COUNTY OF ACCIDENT: HENRICO MILE POST NUMBER: RAILROAD CROSSING ID. NO. IF WITHIN 150 FEET:

1 CITY OR TOWN: Cabin Creek LANDMARKS AT SCENE: NUMBER OF VEHICLES: 4 OFFICIAL USE ONLY: SUPPLEMENTAL REPORT

6 ROUTE NO. OR STREET NAME AT SCENE: Gaskins Road ROUTE NUMBER OR STREET NAME: Marywood Lane

AT INTERSECTION WITH OR 5.00 MILES X FEET N S E W OF

2 DRIVER'S NAME (LAST, FIRST, MIDDLE) OCCUPATION DRIVER'S NAME (LAST, FIRST, MIDDLE) OCCUPATION
 1 Wignall, Joshua James Freeman student [REDACTED] 3d driver
 3 ADDRESS (STREET & NO.) YEARS OF DRIVING EXPERIENCE YEARS OF DRIVING EXPERIENCE
 4 [REDACTED] 1 [REDACTED] [REDACTED]
 CITY STATE ZIP CODE CITY STATE ZIP CODE
 Richmond VA 23233 Glen Allen VA 23060
 DL CDL DL CDL STATE STATE
 1 VA VA

1 VEHICLE OWNER'S NAME (LAST, FIRST, MIDDLE) VEHICLE OWNER'S NAME (LAST, FIRST, MIDDLE)
 [REDACTED] S. [REDACTED]
 CITY STATE ZIP CODE CITY STATE ZIP CODE

MAKE & TYPE OF VEHICLE (SHOW MOPED, MOTORCYCLE, AMBULANCE, ETC...) YEAR REPAIR COST MAKE & TYPE OF VEHICLE (SHOW MOPED, MOTORCYCLE, AMBULANCE, ETC...) YEAR REPAIR COST
 Mitsubishi 0DSDn 95 10,000 Ford Pickup 90 3,000
 LICENSE PLATE NUMBER STATE NAME OF INSURANCE CO. (NOT AGENT) LICENSE PLATE NUMBER STATE NAME OF INSURANCE CO. (NOT AGENT)
 [REDACTED] VA State Farm [REDACTED] VA State Farm

DAMAGE TO PROPERTY OTHER THAN VEHICLES OBJECT STRUCK (TREE, FENCE, ETC.) OWNER'S NAME (LAST, FIRST, MIDDLE) ADDRESS REPAIR COST

7 VEHICLE NO. 1 DAMAGE CHECK POINTS OF IMPACT ACCIDENT DIAGRAM VEHICLE NO. 2 DAMAGE CHECK POINTS OF IMPACT

5 FRONT 1 8 2 7 3 6 4 5

SEE PAGE 3

INDICATE NORTH BY ARROW

8 SPEED BEFORE ACCIDENT LIMIT MAXIMUM SAFE
 65 48 40

8 SPEED BEFORE ACCIDENT LIMIT MAXIMUM SAFE
 35 40 40

9 10 11 12 13 14 15 16 NAMES OF INJURED - IF DECEASED, INCLUDE DATE OF DEATH

A	1	1	4	1	4 11 81	M	2	XXX	Wignall, Joshua James
B	1	3	4	1	6 12 83	M	2	XXX	Smith, Michael Robert-11-19-97
C	1	6	1	1	7 24 81	M	2	XXX	Smith, Jason Mario
D	2	1	4	1	3 23 60	M	2	XXX	[REDACTED]
E									

9 TROOPER/OFFICER'S NAME: D.L. Lambert BADGE/CODE NUMBER: 0480 DEPARTMENT NAME AND CODE NUMBER: Henrico Police 043 REVIEWING OFFICER: DATE REPORT FILED: 11-19-97

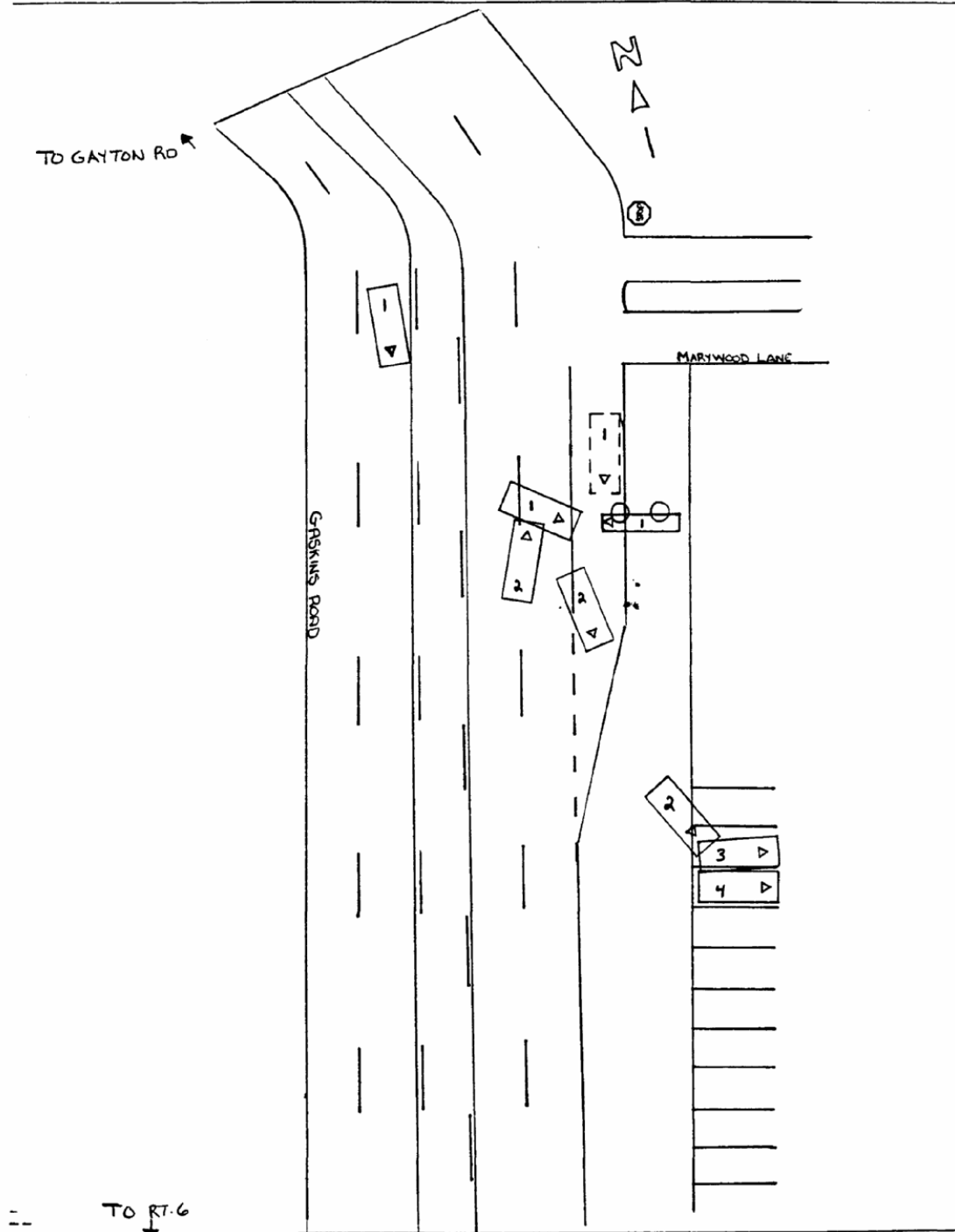
~HANDOUT~

COMMONWEALTH OF VIRGINIA - DEPARTMENT OF MOTOR VEHICLES																										
POLICE ACCIDENT REPORT						3 AGENCY COPY FR 300P (REV. 1/90)																				
PAGE 2 OF 3 PAGES																										
ACCIDENT DATE Month Day Year 11 16 97		DAY OF WEEK SUN		TIME 2159		AM PM <input checked="" type="checkbox"/> X		COUNTY OF ACCIDENT HENRICO				MILE POST NUMBER RAILROAD CROSSING ID. NO. IF WITHIN 150 FEET														
CITY OR TOWN 6		OF 971116229		LANDMARKS AT SCENE Cabin Creek				NUMBER OF VEHICLES 4		OFFICIAL USE ONLY																
ROUTE NO. OR STREET NAME AT SCENE Gaskins Road																										
ROUTE NUMBER OR STREET NAME AT INTERSECTION WITH OR 500 MILES <input checked="" type="checkbox"/> FEET N <input type="checkbox"/> S <input checked="" type="checkbox"/> E <input type="checkbox"/> W OF Marywood Lane																										
DRIVER'S NAME (LAST, FIRST, MIDDLE) 1 vehicle parked				OCCUPATION				DRIVER'S NAME (LAST, FIRST, MIDDLE) vehicle parked				OCCUPATION														
ADDRESS (STREET & NO.)				YEARS OF DRIVING EXPERIENCE				ADDRESS (STREET & NO.)				YEARS OF DRIVING EXPERIENCE														
CITY				STATE				CITY				STATE														
DATE OF BIRTH Month Day Year		SEX		DRIVER'S LICENSE NUMBER		<input type="checkbox"/> DL <input type="checkbox"/> CDL		STATE		DATE OF BIRTH Month Day Year		SEX		DRIVER'S LICENSE NUMBER		<input type="checkbox"/> DL <input type="checkbox"/> CDL		STATE								
[REDACTED]																										
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CITY				STATE				CITY				STATE														
Richmond				VA				Richmond				VA														
ZIP CODE				23229				ZIP CODE				23233														
MAKE & TYPE OF VEHICLE (SHOW MOPED, MOTORCYCLE, AMBULANCE, ETC...) <input type="checkbox"/> CMV <input type="checkbox"/> HAZMAT				YEAR		REPAIR COST		MAKE & TYPE OF VEHICLE (SHOW MOPED, MOTORCYCLE, AMBULANCE, ETC...) <input type="checkbox"/> CMV <input type="checkbox"/> HAZMAT				YEAR		REPAIR COST												
Mazda 2Dsdn				90		2,000		Ford Pickup				93		1,000												
LICENSE PLATE NUMBER				STATE				LICENSE PLATE NUMBER				STATE														
[REDACTED]				VA				[REDACTED]				VA														
NAME OF INSURANCE CO. (NOT AGENT)				A Progressive				NAME OF INSURANCE CO. (NOT AGENT)				GEICO														
DAMAGE TO PROPERTY OTHER THAN VEHICLES				OBJECT STRUCK (TREE, FENCE, ETC.)				OWNER'S NAME (LAST, FIRST, MIDDLE)				ADDRESS														
none				---				---				---														
VEHICLE NO. 1 DAMAGE CHECK POINTS OF IMPACT						VEHICLE NO. 2 DAMAGE CHECK POINTS OF IMPACT																				
FRONT						FRONT																				
SEE PAGE 3						INDICATE NORTH BY ARROW																				
BEFORE ACCIDENT			LIMIT			MAXIMUM SAFE			BEFORE ACCIDENT			LIMIT			MAXIMUM SAFE											
0			15			15			0			15			15											
VEHICLE NO. 1 DAMAGES:			OVERTURNED 3			UNDERCARRIAGE 5			BY FIRE 7			VEHICLE NO. 2 DAMAGES:			OVERTURNED 3			UNDERCARRIAGE 5			BY FIRE 7					
1 UNKNOWN			2 NO DAMAGE			MOTOR 4			TOTALLED 6			1 UNKNOWN			2 NO DAMAGE			MOTOR 4			TOTALLED 6			OTHER 8		
ACCIDENT DESCRIPTION See page 1																										
OFFENSES CHARGED DRIVER See page 1																										
NAMES OF INJURED - IF DECEASED, INCLUDE DATE OF DEATH																										
TROOPER/OFFICER'S NAME Bob. Lambert																										
BADGE/CODE NUMBER 0480				DEPARTMENT NAME AND CODE NUMBER Henrico Police 043				REVIEWING OFFICER				DATE REPORT FILED 11-19-97														

~HANDOUT~

Gaskins Road 500 ft. S of Marywood Lane

Page 3 of 3



Report Number 971116229

Off. D.L. Lambert Henrico Police 043

Dangerous Appeal

Overview

Students analyze the messages of vehicle advertisements that use “speed” or “power” as a selling feature, discuss the appeal and the intent of these messages, and modify a vehicle advertisement to focus on safety and responsible driving.

Related Courses

Driver Education, Marketing, English, Web Design, Journalism, Statistics, Persuasion/Debate, Business and Information Technology courses, Ethics

Primary Lesson Objective

- ✦ Vulnerability (issues of speed, impact, and collision; identification of safe/dangerous vehicles and vehicle components that can become dangers)

Additional Lesson Objectives

- ✦ Warning signs and crash avoidance
- ✦ Analysis of an accident (behaviors and age groups that are typically involved in vehicle accidents)
- ✦ Types of injuries associated with driving accidents
- ✦ Economic impact of an accident (public safety costs, auto insurance, personal costs)

Materials Needed (all optional)

- ✦ Advertisement from Web or publication
- ✦ Flip chart and markers
- ✦ Multimedia projector and computer to show visuals
- ✦ Desktop publishing program or graphic/image design program
- ✦ Pre-designed graphics

Teaching Strategies

Methods and practices might include

- ✦ Class projects/presentations
- ✦ Reading strategies
- ✦ Writing strategies
- ✦ Webquests or research

Instructional Activity

A. Bell-ringer Activity: Ask students to analyze the most appealing features of a “fast-car” advertisement. The medium could be print, televised (recorded), or shown via the Web (see car maker’s home sites, e.g.,

<http://www.cadillac.com/cadillacjsp/model/gallery.jsp?model=ctsv&primary=5&secondary=2&media=video>).

B. Watch the Speed Kills DVD.

C. Complete the following steps:

1. Students try to identify the types of vehicles they saw in the *Speed Kills* DVD, if possible.
2. Discuss what happens in an accident to the vehicle and its passengers.
3. Discuss how safety features become less effective as vehicle speed climbs.
4. Discuss the characteristics of unsafe vehicles for young or inexperienced drivers. Teacher should read aloud the “Quick Facts” below.

Quick Facts~

If you are shopping for a car, you may want to consider the following features:

- NHTSA (National Highway Traffic Safety Administration) for impact and rollover ratings
- Air bags (driver, passenger, side)
- ABS (Antilock Brake System)

If you are a parent who is planning on giving a car to your child, keep some obvious issues in mind:

- **Avoid flashy, powerful, “eye-candy” vehicles.** Teen drivers have trouble not testing the speed and power of these cars and trucks. In other words, keep the ego in check.
- **Avoid older vehicles.** Older cars are typically less safe than cars equipped with newer, more advanced safety technologies made to satisfy higher safety standards.
- **Avoid smaller vehicles.** Smaller cars can incur more damage from the same impact, resulting in a higher frequency of minor injury and serious injury, even at lower speeds.

5. Ask students to provide examples of “speed” or “power” used by advertisers as a selling feature. Examine the inherent dangers of this message, especially to the student age group.
6. Ask students to provide examples of “vehicle or driver safety” used by advertisers as a selling feature.
7. Using the “fast-car” advertisement, have students rewrite the copy and the company slogan to portray the vehicle in a different light that emphasizes both vehicle safety and safe driving behaviors. Remind students that this is an advertisement, not a public service announcement. The advertisement must continue to sell the vehicle.

Sample Assessment

- ✦ Take the online quiz at *Liberty Mutual*
(<http://www.libertymutual.com/omapps/ContentServer?cid=1058543032826&pagename=PMInternet%2FPage%2FPMQuizRed&c=Page>).

Follow-up/Extension

- ✦ Compete in “Project Ignition” from State Farm Insurance at
<http://www.sfprojectignition.com/00home.html>.

Eyes on the Road, Hands on the Wheel

Overview

Students participate in an exercise that tests their ability to complete specific simple tasks, both with and without distractions, to better understand the extent to which distractions may impair their safe driving ability.

Related Courses

Driver Education, Physical Education, Psychology, Mathematics

Primary Lesson Objective

- ✦ Driver distractions that may cause accidents

Additional Lesson Objective(s)

- ✦ Warning signs and crash avoidance
- ✦ Analysis of an accident (behaviors and age groups that are typically involved in vehicle accidents)
- ✦ Vulnerability (issues of speed, impact, and collision; identification of safe/dangerous vehicles and vehicle components that can become dangers)

Materials Needed

- ✦ PC, typewriter, or 10-key pad
- ✦ Timing device (classroom clock is acceptable)
- ✦ Other (various electronic devices the class members may possess)

Teaching Strategies

Methods and practices might include

- ✦ Scenarios
- ✦ Role playing
- ✦ Games

Instructional Activity

A. Bell-ringer Activity:

Students list driving distractions they encounter on a regular, if not daily basis. They can do this individually, or the teacher can create a collective list on the board.

B. Watch the Speed Kills DVD.

C. Complete the following steps:

1. Identify driver impairments and distractions in the DVD. Add to the list on the board to include time of day, number of passengers, speed and reaction time, radio, traffic, road type, style and conditions, and speculative possibilities, such as the driver's state of mind, including being excited or sleepy, distracted by others in the car, or by electronic devices.

The following should test the way reaction time is slowed by distractions:

2. One student volunteers, or is chosen, to key a string sequence of numbers and/or letters. The student is stopped at 30 seconds. Repeat the activity once.
3. Calculate the average amount of input per error made and the number of sequences completed.
4. Ask that student to leave the room and wait in the hall.
5. Arrange desks or chairs to resemble the interior seats of a car, two rows, facing the same direction.
6. Ask three students to act as distracting passengers. They fill three of the seats. The student in the hall will act as the "driver" when he or she is invited to return. The passengers should use electronic devices, and should talk, yell, and laugh directly with the driver. Ask the students to do whatever they want within reason, but no one is to touch the driver.
7. Invite the driver to take his or her seat in the "car."
8. The driver will repeat the timed exercise, keying a different string of numbers and/or letters, during which, the passengers will attempt to distract.
9. Repeat activity with distractions. This time the teacher taps the driver on the shoulder as he/she is being timed, and addresses him or her by name. (This is just another distraction.)
10. Calculate the average amount of input per error made and the number of sequences completed.
11. Calculate percentage of difference between the two sets of results. Assuming the student's score will worsen with distractions, the class should determine how much slower reaction time might be.

Quick Facts~

1 mile = 5280 feet. At 60mph, 1 second = 88 feet traveled. Average reaction time = 1.5 seconds or 132 feet traveled. Safe stopping distance required at 60mph = 142 feet or roughly 48 yards (under good conditions). 132 feet of reaction time to brake + required 142 feet of stopping distance = 274 feet (nearly the length of a football field).

—Vehicle Stopping Distance Calculator (<http://www.csgnetwork.com/stopdistcalc.html>)

D. Review and reflection: Ask the student “driver” what the main distractions were. How did those distractions affect his/her ability to complete the task?

Time permitting, read and discuss “7/10 of a Second to Die,” <http://www.tell-my-mom.com/seconds.htm>.

Sample Assessment

Take the online quiz at *Focus on Driving* (<http://www.focusondriving.ca/home.cfm?lang=e#>).

Follow-up/Extension

- ✦ Teacher can substitute other simple activities, including a word seek-and-find or any basic puzzle for keying a number and letter sequence.
- ✦ Students write their observations in a journal about the distractions they encounter as drivers or as passengers in motor vehicles. The journal should cover a set period of time (i.e., 24 hours). Students will share their observations in class.

First on the Scene

Overview

Students investigate types of injuries and first-aid techniques, common to car accident victims, by acting as pedestrians at the accident scene where there are no medical professionals.

Related Courses

Emergency Medical Technician, Anatomy, Biology, Medical Assistant, Criminal Justice, Public Safety, Firefighting, Citizenship, Drama

Primary Lesson Objective

- ✦ Types of injuries associated with driving accidents

Additional Lesson Objectives

- ✦ Vulnerability (issues of speed, impact, and collision; identification of safe/dangerous vehicles and vehicle components that can become dangers)
- ✦ Legal response (emergency personnel, police, and the legal process, including juvenile justice and associated punishments)
- ✦ Mental health consequences that arise from an accident—the victim and victimized
- ✦ Economic impact of an accident (public safety costs, auto insurance, personal costs)

Materials Needed

- ✦ “First Aid Caregivers” handouts—go to all class members. Give them to the students who are acting as “pedestrians” only when the role play is finished.
- ✦ “Injury Descriptions” handout—goes to the students who are acting as “injured.”
- ✦ “Additional Information” handouts—go to all at the conclusion of the role play

Teaching Strategies

Methods and practices might include

- ✦ Scenarios
- ✦ Reading strategies
- ✦ Lecture with discussion
- ✦ Brainstorming a problem
- ✦ Case studies
- ✦ Role playing

✦ Games

Instructional Activity

A. Bell-ringer Activity:

1. Students list major types of injuries that result from car crashes.

B. Watch the Speed Kills DVD.

C. Complete the following steps:

1. Discuss from the DVD, the lingering effects of injuries sustained from any involved in the accident.
2. Explain that while 6,000 teenagers are killed in motor vehicle crashes each year, another 300,000 are injured.

Quick Facts~

Possible spinal cord injury* should be assumed in the following cases:

- Any car accident at a speed greater than 45mph
- Any pedestrian hit by a car at a speed greater than 18mph
- Any car accident where there is a car rollover or where a passenger has been thrown from the vehicle (<http://www.braininjury.com/>)

*Auto accidents are the leading cause of SCI (Spinal Cord Injury) for the age group 16–20.

Glossary Terms~

- **Tetraplegia (a.k.a. quadriplegia)** results from injuries to the spinal cord in the cervical (neck) region, with associated loss of muscle strength in all four extremities.
- **Paraplegia** results from injuries to the spinal cord in the thoracic or lumbar areas, resulting in paralysis of the legs and lower part of the body.

3. Ask for three volunteers to play the “injured,” and give them each an “Injury Description” handout (pg. 33). One will play a shock victim with a broken arm, another will play a brain-injury victim, and the last will play a spinal cord injury victim.

Quick Facts~

Most Americans will be involved in a motor vehicle accident in their lifetime, and one quarter of the population will be involved in accidents that result in serious injuries. Annually, more than 3.5 million persons in the United States are injured in a motor vehicle accident, and nearly 42,000 die as a result of their injuries.

—(American Family Physicians 1999; 60:524-31.)

4. Now ask for three more volunteers to play the “pedestrians.” Have the “pedestrians” leave the room while you set the room up and give instructions to the “injured.”
5. The “pedestrians” are invited back in and given the following information:
 - You were walking down the street, when a car suddenly swerved, flipped, and rolled, coming to rest upright.
 - EMTs have not arrived on the scene, and it is up to you, the “pedestrians” to become caregivers.
 - One of the “injured” is bleeding profusely, indicated by the red bandana. The other “injured” will display symptoms related to their injuries.
 - NOTE to teacher: Neither the class nor the “pedestrians” will be told what types of injuries were sustained.
 - The “pedestrians” must act quickly.
6. NOTE to teacher: the appropriate behavior for all first aid caregivers (“pedestrians”) is to assess and act immediately following the “First Aid Caregivers” handouts (pgs. 31–32). Yet, the “pedestrians” are not to see this handout until the role play has concluded.
7. The rest of the class has copies of “First Aid Caregivers” handouts and circles the bullets that the “pedestrians” performed correctly. As the “pedestrians” finish, the class members put an “X” by bullets they failed to perform, and put a double “XX” next to the “DO NOT MOVE THE INJURED” bullet, if they moved without due reason.
8. When the “pedestrians” are finished, tell them that the vehicle has caught fire. This should force them to move the “injured” to safety.
9. Have the class discuss the positive and negative reactions of the “pedestrians,” under your guidance.
10. Have students guess the injuries of those in the role play.
11. Role players describe their injuries and their symptoms to the class (according to the “Injury Descriptions” handout).
12. Conclude by having students discuss the “Additional Information” handouts.

Sample Assessment

- ◆ Take the quiz at *FirstAidWeb.com* (http://www.firstaidweb.com/firstaid_quiz.html)

Follow-up/Extension

Try to find your vehicle in the “Injury, Collision, and Theft Losses” chart, to see how susceptible to injury your car makes you:

http://www.iihs.org/brochures/ictl/pdf/ictl_0905_bw.pdf. Keep in mind that a 100 means average for all vehicles in the class, so anything below that makes it a safer vehicle than average, and anything above makes it more risky.

~ First Aid Caregivers HANDOUT~

Should immediately address the following:

- ✦ DANGER: If present, remove the danger or remove the injured from the dangerous environment. A non-burning vehicle does not constitute a dangerous environment, but a burning vehicle does. If motors are running, turn ignitions off.
- ✦ RESPONSE: Check the injured person's conscious state.
- ✦ AIRWAY: Ensure the injured person's airway is clear. Remove vomit, blood, or dentures.
- ✦ BREATHING: Ensure the injured is breathing.
- ✦ CIRCULATION: Ensure that the injured person's heart is beating and if there is major external bleeding, control the bleeding by applying direct pressure.
- ✦ DO NOT MOVE THE INJURED. Prevent secondary spinal injury by not moving the injured if spinal injuries are suspected, unless there is a life-threatening reason to do so (see "Danger"). A real threat takes precedence over possible spinal injuries.
- ✦ ADVISE OTHERS NOT TO MOVE THE INJURED.
- ✦ SEND SOMEONE TO CALL 911, AND ASK FOR AN AMBULANCE.
- ✦ REASSURE THE INJURED. Care for shock should include
 - conducting an ongoing scene survey and ensuring body substance isolation
 - conducting a first-responder assessment
 - making sure the airway is open
 - ensuring that the patient is breathing and has a pulse (if not, administer CPR)
 - treating the injuries
 - maintaining the patient's body temperature
 - positioning the patient properly (on back, with legs elevated is generally best)
 - providing reassurance to the patient.
- ✦ TRY TO OBTAIN THE INJURED PERSON'S NAME AND ADDRESS.
- ✦ WAIT WITH THE INJURED FOR THE ARRIVAL OF THE AMBULANCE AND OFFICERS.

~ First Aid Caregivers HANDOUT~

In the case of possible broken bones:

1. Do not try to move a patient with a severely broken bone unless it is absolutely necessary. Calling EMS is the best course of action in this case.
2. However, if you must move the patient, you should, time permitting, immobilize the injured body part.
3. One way to immobilize an injured body part is to splint it, but do this only if it can be done without hurting the victim, and always attempt to splint the part in the position you found it.
4. Splint the injured area and the joints above and below the injured area. You may use another body part, like an injured leg to an uninjured one, or an injured arm to a chest; this is called an anatomic splint.
5. Make a soft splint from folded blankets or towels, or use a triangular bandage to make a sling, which is used to support an injured arm, wrist or hand. Use folded magazines and newspapers, cardboard or metal strips to support the injured body part with a rigid splint. Use several folded triangular bandages to secure the injured body part to the splinting material, tying them securely but not too tightly.
6. Apply ice and elevate the injured part, and prevent the victim from getting chilled or overheated.

~ Injury Descriptions HANDOUT~

Injured #1: Spinal Cord Injury

Description

1. Thrown from vehicle, not moving legs, but free to move hands, face up
2. Conscious, able to talk
3. Describes the following conditions:
 - Extreme pain or pressure in the neck, head, or back
 - Tingling or loss of sensation in the hand, fingers, feet, or toes
6. Partial or complete loss of control over any part of the body
7. Abnormal band-like sensations in the thorax (upper chest)—pain, pressure
8. Impaired breathing after injury
9. Unusual lumps on the head
10. Bandana wrapped around one arm, indicating heavy bleeding from that area

Injured #2: Brain Injury

Description

1. Positioned in chair, but unconscious
2. Will not wake for a while
3. Finally regains consciousness, but if asked questions, cannot remember details, the names of companions, where he/she lives

Injured #3: Shock Victim with Broken Bones

Description

1. Either ultra-conscious, restless, and anxious, or decreased level of consciousness
2. Weak and rapid pulse
3. Cold (possibly shivering) and wet skin, possibly pale
4. Breathing irregularly
5. Dilation of the pupils
6. Thirsty
7. Nauseous
8. Unable to move one arm, any movement causes sharp pain

~ Additional Information HANDOUT~

*What to Do When You Are a Driver or Passenger
Involved In a Car Crash*

1. Stop your vehicle if it is safe and legal to do so.
2. Move the vehicle out of the traveled roadway, if it is clear, safe, and legal to do so. (In some states it is against the law to move the vehicle from the place where the crash occurred. In Henrico County, it is acceptable.)
3. Turn off the ignitions of the cars involved.
4. Make a first-aid check of all persons involved in the crash.
5. Call the police and, if necessary, emergency medical services.
6. Mark the scene of the crash with flares or retro-reflective triangles.
7. Gather the names of all persons in the motor vehicles and people who witnessed the crash.
8. Make a quick diagram of where the vehicle occupants were seated, and indicate the vehicles' direction of travel and lane. Also note the date, time, and weather conditions.
9. Ask to see the other driver's license, and write down the number.
10. Exchange insurance information. Do not discuss "fault" or make statements about the crash to anyone but the police.
11. Get a copy of the police report of the crash from the local precinct.

Emergency Reporting

A motorist who has a cellular phone and happens upon an emergency should be prepared to give specific information to the agency called. Most dispatchers will ask for facts, and it is best if motorists have ready the following details:

1. **Location** of the emergency (road name or number, city, closest cross street or off-ramp, milepost or other identifier, direction of travel, and any distinguishing landmarks)
2. **Nature of the emergency** (e.g., accident, recklessness, or suspicion of alcohol involvement, traffic hazard, medical emergency, fire, crime in progress)
3. In every instance, the dispatcher will ask for **the caller's name, mobile phone number, and home and work phone numbers** in case more information is needed. Important: A caller should stay on the line until the dispatcher says he or she has enough information to be able to send help.

~ Additional Information HANDOUT~

Above all, after reporting an emergency, mobile phone users should never risk their own safety. Calling for trained, professional help is the best approach, although in an immediate life-threatening situation it may be appropriate to take rescue action provided the "rescuer" is not endangered.

What to Do If Your Car Catches on Fire while You Are Moving on a Roadway

1. Signal your intentions, and move to the right lane.
2. Get onto the shoulder or breakdown lane.
3. Stop immediately.
4. Shut off the engine.
5. Get yourself and all other persons out of the vehicle.
6. Get far away from the vehicle, and stay away from it. Keep onlookers and others away.
7. Warn oncoming traffic.
8. Notify the fire department.
9. Don't attempt to try to put out the fire yourself. (The unseen danger is the possible ignition of fuel in the vehicle's tank.)
10. While the vehicle is stopped in traffic or parked:
 - ◆ Shut off the engine.
 - ◆ Get far away from the vehicle.
 - ◆ Warn pedestrians and other vehicles to stay away.
 - ◆ Notify the fire department.
 - ◆ Do not attempt to try to put out the fire yourself. (The unseen danger is the possible ignition of fuel in the vehicle's tank.)
11. In all vehicle fire situations, the first thing to think about is personal safety; any vehicle can be replaced—humans cannot. Think and act quickly, in the safest way possible.

—from <http://www.pbs.org/wgbh/nova/escape/stratscar.html>

Law and Order

Overview

Students prepare for a mock trial to decide the guilt or innocence of a person for killing another, due to reckless driving, speeding, and driver error—the charge is “wrongful death.”

Related Courses

Driver Education, Debate, Citizenship, Social Studies, Criminal Justice

Primary Lesson Objective

- ✦ Legal response (emergency personnel, police, and the legal process, including juvenile justice and associated punishments)

Additional Lesson Objectives

- ✦ Warning signs and crash avoidance
- ✦ Analysis of an accident (behaviors and age groups that are typically involved in vehicle accidents)
- ✦ Vulnerability (issues of speed, impact, and collision; identification of safe/dangerous vehicles and vehicle components that can become dangers)
- ✦ Driver distractions that may cause accidents
- ✦ Types of injuries associated with driving accidents
- ✦ Mental health consequences that arise from an accident—the victim and victimized
- ✦ Economic impact of an accident (public safety costs, auto insurance, personal costs)

Materials Needed

Items needed for the lesson to be taught, such as

- ✦ Internet (for assessment)
- ✦ Scenario handouts
- ✦ Materials for short essay writing

Teaching Strategies

Methods and practices might include

- ✦ Scenarios
- ✦ Writing strategies
- ✦ Webquests or research

- ✦ Brainstorming a problem
- ✦ Case studies
- ✦ Role playing

Instructional Activity

A. Bell-ringer Activity:

Students brainstorm instances in which an unintended injury or death might result, due to the actions of another. See definition of “wrongful death” on scenario handout.

B. Watch the Speed Kills DVD.

C. Complete the following steps:

1. Distribute the scenario handout.
2. One student volunteers to act as the accused.
3. Two groups of five students each play the prosecuting and defense lawyers.
4. Groups are given 7 minutes to prepare their closing arguments, appointing one member to be the spokesperson.
5. While the teams prepare, the remainder of the class, acting as the jury, will write a short essay. The essay will include the guilt or innocence of the accused and the justification for an adequate punishment, if there is a conviction.
6. For assistance with forming their arguments, team members should consult the following Web site:
http://www.nytimes.com/learning/teachers/featured_articles/20040202monday.html.

Sample Assessment

Helpful Q and A is available through frequently asked questions at *Lawyers.com* (<http://www.lawyers.com/lawyers/A~1001887~LDS/WRONGFUL+DEATH.html>).

Follow-up/Extension

- ✦ In the *Speed Kills* DVD, the drivers are guilty of driver error and speeding. However, students may want to consider in their essays how the verdict or sentencing might have been different if the driver fault was caused by cell phone use or by drunk driving.
- ✦ Students may also calculate legal fees associated with such a trial.

~HANDOUT~

Law and Order Scenario

Think of the events in the *Speed Kills* DVD. Joshua, the driver, speeds up to catch his friends in another vehicle, loses control going around a curve, and overcompensates. When he begins to swerve, the car moves across the center line and into oncoming traffic. The car Joshua was driving, a Mitsubishi sedan, was struck by a Ford pickup, rolling the vehicle and killing Michael. The Mitsubishi was estimated to have been going 65mph and the truck was going 35mph at time of impact. The posted speed limit zone was 40mph.

Michael's mother did not press charges. But imagine if she had and enlisted the witness of her surviving son.

The class will elect two teams who will represent the prosecuting and defending lawyers. Each team will meet briefly to create arguments to present the case of Joshua's guilt or innocence. The teams will choose one representative member to give a closing argument, the prosecution first, and the defense last.

The remainder of the class will act as jury. A two-thirds vote is required to carry out the punishment. The charge is "Wrongful Death" (or criminally negligent homicide)—an unintentional killing that results from negligence, such as reckless or careless driving. If convicted, discuss what sentence should be handed down.

Definition of *wrongful death*: The death of a human being as the result of a wrongful act of another person. Such wrongful acts include: negligence (like careless driving), an intentional attack such as assault and/or battery, a death in the course of another crime, vehicle manslaughter, manslaughter, or murder. Wrongful death is the basis for a lawsuit (wrongful death action) against the party or parties who caused the death filed on behalf of the members of the family who have lost the company and support of the deceased. Thus, a child might be entitled to compensation for the personal loss of a father as well as the amount of financial support the child would have received from the now-dead parent while a minor, a wife would recover damages for loss of her husband's love and companionship and a lifetime of expected support, while a parent would be limited to damages for loss of companionship but not support. A lawsuit for wrongful death may be filed by the executor or administrator of the estate of the deceased or by the individual beneficiaries (family members).

—*The Free Dictionary* (<http://legal-dictionary.thefreedictionary.com>)

Itemize the Accident

Overview

Students complete a diagram of an accident, attributing estimated associated costs to various items or factors that play into the overall cost of an accident.

Related Courses

Driver Education, Finance, Accounting, Public Safety

Primary Lesson Objective

- ✦ Economic impact of an accident (public safety costs, auto insurance, personal costs)

Additional Lesson Objectives

- ✦ Types of injuries associated with driving accidents
- ✦ Legal response (emergency personnel, police, and the legal process, including juvenile justice and associated punishments)
- ✦ Mental health consequences that arise from an accident—the victim and victimized

Materials Needed

Items needed for the lesson to be taught, such as

- ✦ “Notes on Auto Insurance” handout
- ✦ “Discounts” handout
- ✦ “Average Expenditures for Auto Insurance” handout
- ✦ “Accident diagram” handout and “Teacher Key”

Teaching Strategies

Methods and practices might include

- ✦ Scenarios
- ✦ Panel of experts or guest speakers
- ✦ Worksheet/surveys

Instructional Activity

1. Give students a blank accident scenario handout (p. 46).
2. Take time to help the class understand the diagram.
3. In groups or alone, students circle expense items, estimating what they cost due to damage in the accident.

4. Students should also make assumptions of other associated costs and intangible costs.
5. Once they have finished, share the information from the “Teacher Key.” Students will get one point for all answers given that are similar to the key’s.
6. You may want to spend additional time on the sensitive area of intangibles, such as the loss of life.
7. Because insurance is so important to new drivers, it requires consumer education. You can distribute the insurance information handouts included for discussion.

Quick Facts~

Rates for auto insurance for teenage drivers are always higher than for other drivers, because as a group they pose a higher risk of accidents than more experienced drivers. Adding a teenager to an insurance policy can mean a 50 percent or even a 100 percent increase in the parents’ insurance premium. Some insurance companies offer discounts for students with good grades. The Good Student Discount is generally available to students who have a grade-point average of a B or higher.

—Insurance Information Institute

Sample Assessment

Take the “Get Smart about Auto Insurance Quiz” at http://www.insurance.state.pa.us/naic/quiz_auto.html.

Follow-up/Extension

A panel discussion consisting of an auto insurance agent, an EMT professional, and someone who was the victim of an accident can be extremely helpful to calculate the true cost of reckless driving and speeding.

Notes on Auto Insurance

The following are factors the insurance company will use to calculate your premium (cost to insure):

1. **Driving Record**—for any driver covered by the policy for the last 3–5 years. More violations mean higher costs to you or your family.
2. **Territory**—where you live can affect what you pay, based on the claims experience of people in your area and includes factors such as the amount of traffic, thefts, and vandalism.
3. **Gender and Age**—Statistics show that males still have more accidents than females. For that reason, young men may tend to pay more for insurance than young women. Insurers also have statistics that show a higher number of claims for some age groups than for others.
4. **Marital Status**—Insurance company claims records show a lower rate of auto insurance claims among married policyholders.
5. **Prior Insurance Coverage**—If you have previously been cancelled for non-payment of premiums, insurers want to know. If you have had insurance, your new insurer may ask your prior company about any claims you had.
6. **Vehicle Use**—On the application, you will be asked about how often and how far you drive the vehicle you want to insure. Higher annual mileage will generally mean higher premiums because of the higher exposure to claims.
7. **Make and Model of the Vehicle**—The type of car you drive will directly affect the cost of your automobile insurance. A make or model of car that has a high number of claims or costs more to fix, will be charged a higher premium for comprehensive and collision coverage.
8. **Licensed Drivers in Your Household**—You will be asked to list all licensed drivers in the household. Insurers are not allowed to include drivers with a learner's permit when they calculate your premium. However, they may want to know the ages of any individuals who may become drivers in the near future.

Discounts

The good news is that discounts are typically available for the following:

1. **Taking driver education courses.** Discounts for driver education courses are targeted primarily at younger and older drivers.
2. **Being a good student.** Insurers have found that students who are responsible enough to earn a B average or better tend to be more responsible drivers. For that reason, many companies offer a "Good Student Discount."
3. **Driving a vehicle with top-notch safety devices.** Automobile safety devices can lower insurers' costs by preventing accidents or limiting their severity. These savings are passed along to the policyholder through discounts for safety equipment. This equipment includes air bags, automatic seat belts, and anti-lock brakes.
4. **Driving a car with antitheft devices.** Devices or systems that discourage theft or vandalism also lower claims costs. Many companies offer discounts for antitheft devices.
5. **Driving fewer miles.** The fewer miles you drive, the less chance you have of getting into an accident. Insurers recognize this fact and generally offer discounts for low mileage drivers. Some companies also offer discounts for drivers who car-pool.
6. **Being a good driver.** Some insurers offer discounts to drivers who maintain a good driving record and renew their policy with the same insurer.

For terrific consumer information for new Virginia drivers, please go to *The Virginia Corporation Commission Bureau of Insurance* at

<http://www.scc.virginia.gov/division/boi/Forms/teenrev.pdf>.

~HANDOUT~

AVERAGE EXPENDITURES FOR AUTO INSURANCE Virginia, 2002-2003

(from Insurance Information Institute – <http://www.iii.org/media/facts/statsbyissue/auto/>)

State	2003 Average Expenditure (annually)					2002	
	Liability	Collision	Comprehensive	Average Expenditure	Rank	Average Expenditure	Rank
Virginia	381.03	253.29	117.26	657.37	39	625.32	41

Note: Average Expenditure = Total written premium for combined liability, collision and comprehensive coverages divided by the liability written for the number of car-years (A car-year is equal to 365 days of insured coverage for a single vehicle.) This assumes that all insured vehicles carry liability coverage but do not necessarily carry the physical damage coverages—collision and/or comprehensive. Therefore, collision and comprehensive figures are amounts in addition to the cost of liability. Liability is the lowest one can pay per vehicle.

Definitions

Liability Insurance—Insurance for what the policyholder is legally obligated to pay because of bodily injury or property damage caused to another person.

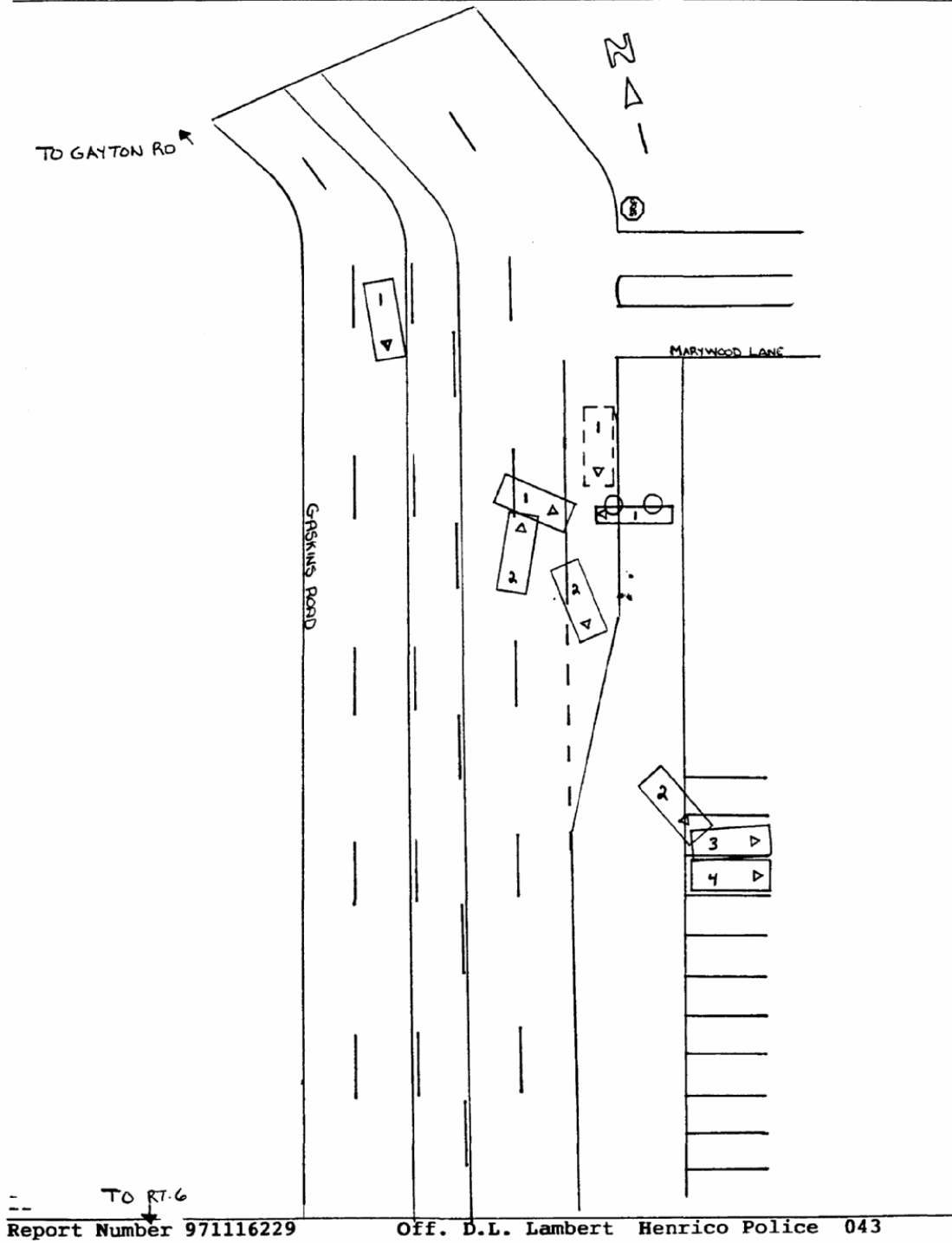
Collision Coverage—Portion of an auto insurance policy that covers the damage to the policyholder's car from a collision.

Comprehensive Coverage—Portion of an auto insurance policy that covers damage to the policyholder's car not involving a collision with another car (including damage from fire, explosions, earthquakes, floods, and riots), and theft.

Deductible—The amount of loss paid by the policyholder. Either a specified dollar amount, a percentage of the claim amount, or a specified amount of time that must elapse before benefits are paid. The bigger the deductible, the lower the premium charged for the same coverage.

Premium—The price of an insurance policy, typically charged annually or semiannually.

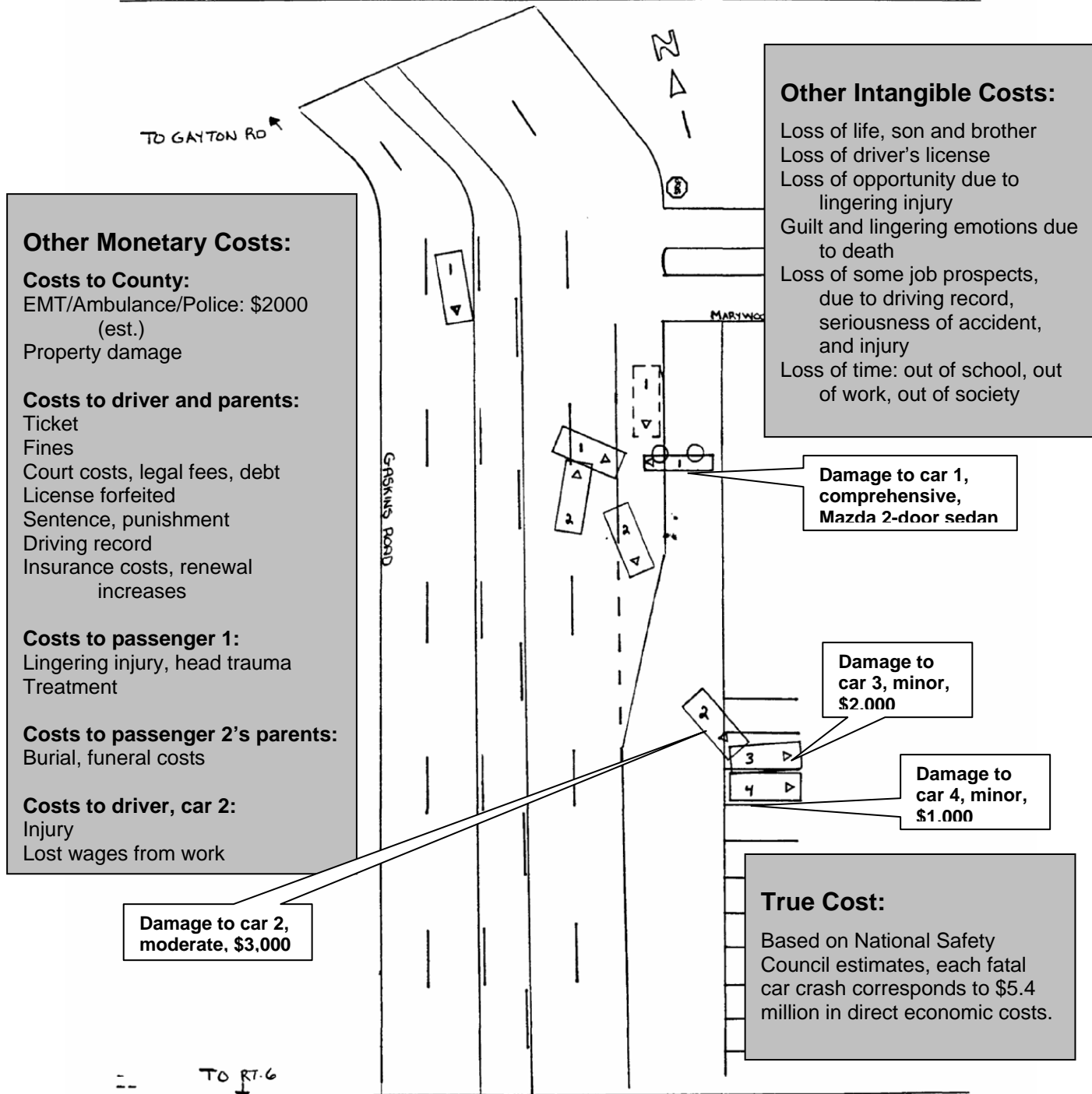
~HANDOUT~



~TEACHER KEY~

Gaskins Road 500 ft. S of Marywood Lane

Page 3 of 3



Other Monetary Costs:

Costs to County:
 EMT/Ambulance/Police: \$2000 (est.)
 Property damage

Costs to driver and parents:
 Ticket
 Fines
 Court costs, legal fees, debt
 License forfeited
 Sentence, punishment
 Driving record
 Insurance costs, renewal increases

Costs to passenger 1:
 Lingering injury, head trauma
 Treatment

Costs to passenger 2's parents:
 Burial, funeral costs

Costs to driver, car 2:
 Injury
 Lost wages from work

Other Intangible Costs:

- Loss of life, son and brother
- Loss of driver's license
- Loss of opportunity due to lingering injury
- Guilt and lingering emotions due to death
- Loss of some job prospects, due to driving record, seriousness of accident, and injury
- Loss of time: out of school, out of work, out of society

Damage to car 1, comprehensive, Mazda 2-door sedan

Damage to car 3, minor, \$2,000

Damage to car 4, minor, \$1,000

Damage to car 2, moderate, \$3,000

True Cost:

Based on National Safety Council estimates, each fatal car crash corresponds to \$5.4 million in direct economic costs.

Report Number 971116229

Off. D.L. Lambert Henrico Police 043

The Heart and Mind of the Crash

Overview

Students complete a worksheet that enhances their awareness of the mental and emotional consequences of an accident and how they might be personally impacted by irresponsible driving that leads to serious crashes.

Related Courses

Driver Education, Principles of Leadership, Psychology, Communications, Journalism

Primary Lesson Objective

- ✦ Mental health consequences that arise from an accident—the victim and victimized

Additional Lesson Objectives

- ✦ Analysis of an accident (behaviors and age groups that are typically involved in vehicle accidents)
- ✦ Types of injuries associated with driving accidents

Materials Needed

Items needed for the lesson to be taught, such as

- ✦ “Heart and Mind” worksheet
- ✦ “After a Traffic Accident” handout
- ✦ “Coping with Post-Traumatic Stress Syndrome” handout

Teaching Strategies

Methods and practices might include

- ✦ Class projects/presentations
- ✦ Writing strategies
- ✦ Scenarios
- ✦ Brainstorming solutions to a problem
- ✦ Case studies
- ✦ Role playing
- ✦ Worksheet/surveys

Instructional Activity

1. Select two students or two volunteers. Two subjects who are friends may work best.
2. Send one student out of the room, and explain the situation to the other and to the class members: *The remaining student was in an auto accident in which his/her family member was badly injured or killed.* Now explain that the student in the room, the “surviving student” will pretend to be suffering from post-traumatic stress syndrome. The other, the “reporter,” who is outside the classroom, will know that the remaining student was involved in an accident but will not know any of the other details.
3. While the “reporter” is out of the classroom, read the following:

Quick Facts~

“Over 3 million persons are injured in motor vehicle accidents each year. Many of these persons develop post-traumatic stress symptoms that can become chronic. Patients with post-traumatic stress disorder experience disabling memories and anxiety related to the traumatic event. Early identification of these patients is critical to allow for intervention and prevent greater impairment and restriction.”

—American Family Physicians 1999; 60:524-31

4. Discuss the feelings and behaviors that the “surviving student” may internalize or act out, symptoms of post-traumatic stress syndrome. See the “After an Accident: Post-Traumatic Stress Syndrome” handout. This list of behaviors is given to the “surviving student” and to the rest of the class.
5. Members of the class should provide details about the accident to help the “surviving student” get into character. However, the members of the class should avoid talking directly about it with the “reporter.”
6. The members of the class also receive the methods for communicating or helping those with post-traumatic stress syndrome, but neither student in the role play receives it. See “Coping with Post-Traumatic Stress Syndrome” handout.

Role Play

7. The “surviving student” will exhibit behaviors or feelings from the “After the Accident” handout, attempting to act them out or mentioning them when asked.
8. Invite the “reporter” into the classroom, and inform him or her to engage in conversation with the “surviving student,” who has been absent for several days from school following a car crash. Tell the “reporter” that he or she needs to know all the details for a story for the school paper. (Note: The “reporter” should not be told that this could be a sensitive issue.)
9. The “surviving student” was unhurt but suffers from post-traumatic stress syndrome.

10. While the two talk, the rest of the class circles behaviors that the “surviving student” exhibits, on their “After the Accident” handout.
11. The class also circles appropriate advice or solutions that the other student offers and notes when the student’s comments become inappropriate or insensitive.
12. The role play conversation should last for 3 minutes.
13. Once finished, the class will judge the sensitivity of the “reporter.” The members of the class will write a number (1–10) on the back of their handouts and hold them up (1 being insensitive and 10 being very sensitive).
14. A general discussion should ensue. Students discuss their roles and the class revisits both the behaviors of the “surviving student” and the responses of the “reporter.”

Sample Assessment

Worksheet response to the *Speed Kills* DVD.

Follow-up/Extension

As this can be a lengthy lesson, completion of the worksheet with the infusion of the handouts may suffice.

"Heart and Mind" Worksheet

1. What might the mother and surviving brother in the DVD be feeling? Can you detect something beyond appearances or the words they use? If so, what might it be?
2. Pretend you are Joshua (the driver in the DVD), whose decision to speed resulted in his friend's death. How would this change you and affect your relationships with others? Who would be most affected? Explain.
3. For new drivers, driving with even one passenger doubles the chances for being involved in a fatal crash; with two or more passengers, the risk is five times greater. Why do passengers so dramatically affect responsible driving?
4. Aside from obeying the speed limit, what are some ways any driver can reduce his or her chances of being involved in a fatal crash?

After a Traffic Accident: Post-Traumatic Stress Syndrome

Each year over 3 million Americans are directly involved in traffic accidents. Beyond physical injury, those who have been involved in serious accidents often experience life-altering emotional pain, especially in the days immediately following the trauma. If the accident results in a critical injury or death, those involved may be more deeply affected. Most reactions will subside over time, but some reactions can continue, increase, and even have a long-term impact on the personality itself. This condition is called *post-traumatic stress syndrome*. Those who are suffering post-traumatic stress may exhibit the following problems and behaviors:

1. Shock
2. Trouble believing it really happened
3. Anger
4. Nightmares or trouble sleeping
5. Overreactions, nervousness, or worry
6. An ongoing, general feeling of uneasiness or frightfulness
7. Guilt
8. Feeling of being disconnected and isolated from events and people
9. Generalized pain not linked to a physical injury
10. Unwillingness to have medical tests or procedures done
11. Ongoing, repetitious memories of the accident
12. Problems driving or riding in vehicles

~HANDOUT~

Coping with Post-Traumatic Stress Syndrome

Much of the therapeutic advice on dealing with post-traumatic stress has to do with getting back to normal, even forcing oneself to do it. The idea is that one might re-wire reactions by immersion into those elements of life and lifestyle that may cue typical personality traits, allowing them to break through the trauma that has enveloped the psyche. The following are actions that traumatized people may take to aid their return to normalcy:

1. Talk about the details of the accident. Talk to your friends and relatives about the accident and what you thought, and how you felt and acted at the time of the accident and in the days after.
2. Stay active. Exercise and take part in activities (anything that doesn't bother your injuries). Your family doctor can help you figure out how much you can do.
3. Follow up with your family doctor. He or she can give you any referrals you may need, watch over your recovery, and give you any medicine you might need.
4. Try to get back to your daily activities and routines. Traffic accidents make some people limit what they do. It's important to try to get back to your daily activities, even if you're uncomfortable or scared at first.
5. Learn to be a defensive driver. Driving or riding in cars might be hard after the accident. You can lower your risk of future accidents or injuries by driving carefully, wearing your seat belt at all times, and avoiding distractions while you're driving. Never drive when you're tired. Don't drive if you've had alcohol or taken drugs or medicines that affect your judgment.

(American Academy of Family Physicians, <http://www.aafp.org/afp/990800ap/990800c.html>)

Internet Resources

By Lesson Plans

It Won't Happen to Me

New and Used Car Pricing Sites

[AutoTrader.com](#), [Cars.com](#), [InvoiceDealers](#), [CarsDirect](#), [Autoweb](#), [Autos.com](#), [Edmunds.com](#), [AutoUSA](#) and [Car.com](#)

Government Vehicle Safety Rating Site

<http://safercar.gov/>

National Highway Transportation and Safety Administration for vehicle safety features

http://www.nhtsa.dot.gov/CPS/CPS_Archive/safercar2001/contents.html

South Carolina Highway Patrol Quiz

<http://www.schp.org/finalexam/quiz.aspx>

Just the Facts

Allstate Insurance

<http://www.allstate.com/Community/PageRender.asp?Page=teensafedrivingfacts.html>

Driving Skills for Life

Online Quiz

http://www.drivingskillsforlife.com/component/option,com_elearningquiz/Itemid,25/lang,en/

Matching Game

<http://www.drivingskillsforlife.com/index.php>

Teen Driver Contract

<http://www.teendriving.com/drivingcontract2.htm>

Dangerous Appeal

Cadillac Advertisement (for video)

<http://www.cadillac.com/cadillacjsp/model/gallery.jsp?model=ctsv&primary=5&secondary=2&media=video>

Mazda Speed Home Site (for video)

<http://www.mazdausa.com/MusaWeb/displayPage.action?pageParameter=upcomingMS3>

Car Commercials, Videos at TopSpeed.com

<http://www.topspeed.com/cars/car-videos/car-commercials-videos-ar1067.html>

Liberty Mutual Insurance Auto Safety Online Quiz

<http://www.libertymutual.com/omapps/ContentServer?cid=1058543032826&pagename=PMInternet%2FPage%2FPMQuizRed&c=Page>

Project Ignition (State Farm)

<http://www.sfprojectignition.com/00home.html>

Eyes on the Road, Hands on the Wheel

Tell-My-Mom.com, "7/10 of a Second to Die"

<http://www.tell-my-mom.com/seconds.htm>

Focus on Driving (Canadian Wireless Telecommunications Association)

<http://www.focusondriving.ca/home.cfm?lang=e#>

First on the Scene

Brain Injury Information

<http://www.braininjury.com/>

American Family Physicians

<http://www.aafp.org/online/en/home/publications/journals/afp.html>

Insurance Institute for Highway Safety

<http://www.iihs.org/brochures/default.html>

(See downloadable PDF brochures in left-hand column)

<http://www.iihs.org/research/default.html>

(Research topics related to highway safety—e.g., cell phone use, teenage drivers)

http://www.iihs.org/brochures/ictl/pdf/ictl_0905_bw.pdf

(“Injury, Collision, and Theft Losses” PDF)

Nova Online—PBS, for Survival Strategies/Car

<http://www.pbs.org/wgbh/nova/escape/stratscar.html>

Law and Order

NY Times Lesson Plan for Legal Arguments Regarding “Criminally Negligent Homicide”

http://www.nytimes.com/learning/teachers/featured_articles/20040202monday.html

Lawyers.com

<http://www.lawyers.com/lawyers/A~1001887~LDS/WRONGFUL+DEATH.html>

The Free Dictionary, search for “Wrongful Death”

<http://legal-dictionary.thefreedictionary.com>

Itemize the Accident

Insurance Department of Pennsylvania’s “Get Smart about Auto Insurance Quiz”

http://www.insurance.state.pa.us/naic/quiz_auto.html

The Virginia Corporation Commission Bureau of Insurance

<http://www.scc.virginia.gov/division/boi/Forms/teenrev.pdf>

Average Expenditures for Auto Insurance Virginia, 2002–2003

Insurance Information Institute

<http://www.iii.org/media/facts/statsbyissue/auto/>

The Heart and Mind of the Crash

American Academy of Family Physicians, "After a Traffic Accident"

<http://www.aafp.org/afp/990800ap/990800c.html>

Additional Resources

Drunk Driving Resources

Drunk Driving Legislative Session

http://www.courts.wa.gov/education/lessons/index.cfm?fa=education_lessons.display&displayid=Drunkdry

MADD, School Assemblies, Videos

<http://www.schoolassembly.org/>

National Association of School Resource Officers

<http://www.nasro.org>

General Sites, Statistics, Articles

AAA Article, "Teen Crashes: Everyone Is at Risk"

<http://www.aaapublicaffairs.com/Assets/Files/200611814220.TeenDriversRisk2.pdf>

AAA Crash Data. Aggressive Driving Data, Drowsy Driving Data

<http://www.aaafoundation.org/resources/index.cfm?button=links#Data>

A Day in the Life of John Henry, a Traffic Cop

<http://www.udel.edu/pbl/curric/acc12.html>

Brakes for Brett, Concerned with Teen Speeding

<http://www.brakesforbrett.com/mission.html>

Heather Bublick Rehabilitation Foundation (Brain Injury)

<http://www.fighting4heather.org/>

Home National Highway Traffic Safety Administration(NHTSA) U.S.

Department of Transportation

<http://www.nhtsa.dot.gov/>

National Crash Analysis Center

Papers & Publications

<http://www.ncac.gwu.edu/filmlibrary/publications.html>

Road Ready Teen by Daimler Chrysler

<http://www.roadreadyteens.org/TeenPage01.html>

SaferCar.gov
<http://www.safercar.gov/pages/ResourcesLinksOCTS.htm>

Teen Driving Home Site, Maryland-based Public Service
<http://www.teendriving.com/>

Teen Driving Resources and Links by Erik CB Olsen
http://www.teendrivinginfo.com/teen_driving_resources.htm

University of Sydney, Australia, Science Department
 Physics—Moving About
<http://science.uniserve.edu.au/school/curric/stage6/phys/moving.html#speed>

Insurance-Related Resources

Automobile Insurance and Accident Statistics
http://www.ideas.wisconsin.edu/ideas_resource.cfm?rid=16079&subjects=1&sid=62&startrow=1&keywords=automobile&rtype=1%2C46%2C87

Insurance Information Institute (III)
<http://www.iii.org/>

Insurance Institute for Highway Safety—Highway Loss Data Institute
 IIHS-HLDI Crash Testing & Highway Safety
<http://www.iihs.org/>

National Association of Insurance Commissioners
<http://www.naic.org/>

Ohio Insurance Institute
 2003 US Crashes by Age and Gender
http://www.ohioinsurance.org/factbook/2005/chapter2/chapter2_h.asp

Virginia Bureau of Insurance's Consumer Rights Auto Page
<http://www.scc.virginia.gov/division/boi/webpages/boiconsumerrightsauto.htm>

Legal Resources

ExpertPages.com (Legal)
 Car Accident Insurance Claims Impact Results from 2002 Through Mid-2005
http://expertpages.com/news/car_accident_impact.htm

FreeAdvice.com (Legal)
 Car Accident Claim Who is at Fault
<http://accident-law.freeadvice.com/auto/car-accident-claim-fault.htm>

Mock Trial Example from Everything.com
[mock trial@Everything2.com](http://mocktrial@Everything2.com)

Lesson Plans and Quizzes

Authentic Teaching Alliance Lesson Plan, “Automobile Accident Reconstruction”

<http://www.hsc.unt.edu/score/Labs/ATA/Math%20Cluster/Accident%20Reconstruction.pdf>

Cingular, Free Online Games—Driver's Ed Take Your Drivers Exam

http://www.cingular.com/be_sensible/sensiblesuggestions

Discovery Education Lesson Plan, “Risky Business”

<http://school.discovery.com/lessonplans/programs/riskyBusiness/>

Discovery Education Lesson Plan, “Safe Driving”

<http://school.discovery.com/lessonplans/programs/safedriving/>

Drivers Education Lesson Plans

<http://www.nasro.org/plans.asp#drid>

NY Times Lesson Plan, “Steer Clear of Trouble”

http://www.nytimes.com/learning/teachers/lessons/20020822thursday.html?searchpv=learning_lessons

NY Times Lesson Plan, “Collision Course”

http://www.nytimes.com/learning/teachers/lessons/20050428thursday.html?searchpv=learning_lessons

NY Times Lesson Plan, “Safe Driving Solutions”

http://www.nytimes.com/learning/teachers/lessons/20040513thursday.html?searchpv=learning_lessons

ProTeacher Lesson Plans

<http://www.proteacher.com/020002.shtml>

Quia Web, Web-based Education, Street Sign Quiz

<http://www.quia.com/de/mnsign.html>

Virginia Sites

CTE Resource Center

<http://www.cteresource.org/>

Henrico County Community Criminal Justice Board

<http://www.co.henrico.va.us/ccjb/>

Henrico County Public Schools

<http://www.henrico.k12.va.us/>

VA DMV General Information Safety Young Drivers

<http://www.dmvnow.com/webdoc/general/safety/youngdriver/index.asp>

VDOT Travel Center

<http://www.virginiadot.org/comtravel/default.asp>

