Texas Driver Education Classroom and In-car Instruction Model Curriculum

Module Seven

Driver Performance: Personal Factors

- · Introduction to Alcohol Problem Saying No
- · Nature of Alcohol-related Crashes
- Physiological and Psychological Effect of Alcohol on Driving Task
- . Affects on the Driving Task
- · DEALING WITH DRIVER FATIGUE
- · Preventing Road Rage

GRADE HS



Module Seven Introduction

Module Seven—Driver Performance: Personal Factors. The student develops an understanding of the effects of alcohol and other drugs, fatigue, and emotions on the driving task, assesses the dangers of these factors, and develops strategies to making health-promoting decisions throughout the life span.

- **Topic 1. Introduction of the Alcohol Problem** Saying No. The student synthesizes information and applies problem-solving skills for making health-promoting decisions regarding impaired driving.
- **Topic 2. Nature of Alcohol-Related Crash Problems.** The student analyzes data and statical information and utilizes critical thinking to evaluate the nature of the impaired driving crash problems.
- **Topic 3. Physiological and Psychological Effects of Alcohol on the Driving Task.** The student analyzes and evaluates the physiological and psychological effects of alcohol and understands how they effect the driving task.
- **Topic 4. Affects on the Driving Task.** The student understands the effects of alcohol and other drugs on the driving task, analyzes and evaluates the physiological and psychological effects of drugs other than alcohol on the driving task, and understands how they effect the driving task.
- **Topic 5. Dealing with Driver Fatigue.** The student recognizes the symptoms for fatigue and develops strategies to avoid driving when fatigued.
- **Topic 6. Preventing Road Rage.** The student understands the dangers of aggressive driving, avoids aggressive driving, and utilizes strategies to response appropriately to aggressive drivers.

Minimum Time Frames Module Seven- 8 Hours (Required topic areas)

Module Seven	Recommended Instructional Objective	Time I	nmended Frames (Mi Multi-phase	′
CLASSROOM INSTRUCTION				
TOPIC 1-INTRODUCTION-SAYING NO	YES	50	50	70
TOPIC 2-NATURE OF CRASH PROBLEMS	YES	50	50	50
TOPIC 3-EFFECTS OF ALCOHOL	YES	85	85	95
TOPIC 4-AFFECTS ON THE DRIVING TASK	YES	50	50	50
TOPIC 5-DEALING WITH DRIVER FATIGUE	YES	25	25	25
TOPIC 6-PREVENTING ROAD RAGE	YES	25	25	25
Instructional Breaks	No	35	35	35
In-car Instruction (Option 1)				
BEHIND THE WHEEL INSTRUCTION/BREAK	YES	25	25	25
OBSERVATION	YES	25	25	25
IN-CAR INSTRUCTION MULTIPHASE (OPTION 2) BEHIND THE WHEEL INSTRUCTION/BREAK	YES	25	25	25
OBSERVATION	YES	25 25	25 25	25 25
SIMULATION	YES	55 55	55	55 55
PARENTAL INVOLVEMENT	No	60	60	60

Module Seven Prerequisites:

Module Five completion

Topic Title: Introduction to Alcohol and

Other Drugs: Saying No

Topic 1 Time Frame:

55 minutes instructional time

5 minutes discretional break time

21.0 Non-credit course (32 hrs)

26.0 Multiphase course (40 hrs)

26.0 Credit course (56 hrs/semester)

Module Seven, Topic 1 is a required approved program element.

Needed Resources	Instructor Activities	Time Frame
	 Review recommended Module Seven Lesson Plans Review Suggested Video "Driving Drunk: Your Choice" 	15 minute (prior to lesson) 5 minutes (prior to lesson) 10 minutes (prior to lesson)
Transparencies T-7.0, T-7.1, T-7.2, and T-7.3.	 Review Module Seven, Topic 1Transparencies T-7.0, "Introductory Transparency" T-7.1, "Using or Not Using" T-7.2, "Your Choices and Responsibilities" T-7.3, "Your Choices and Responsibilities" 	25-40 minutes (1-3 minutes) (6-10 minutes) (6-10 minutes) (6-10 minutes)
Student Worksheet W-7.1	• Review Student Worksheet W-7.1, "Driving Drunk: Your Choice"	5-10 minutes
Resources Available:		
Video, "Driving Drunk: Your Choice"	• Review Module Assessment MA-7.1	10-15 minutes
"Drive Right" Ch. 14,15;		
"How to Drive" Ch. 10;		
"Handbook Plus" Ch. 4.1-4.12;		
"License To Drive" Ch. 18;		
"Responsible Driving" Ch. 3,4.		
Assessment MA-7.1		

TOPIC ACTIVITIES TOPIC RESOURCES

Knowledge and Skills The Student is expected to:

(A) investigate the consequences of impaired driving;

The Instructor:

- . **Presents an overview** of the scope of the alcohol and other drug related problems.
- . Shows suggested video "Driving Drunk: Your Choice" from NCADD to the point where the young driver is being given a field sobriety test,



Transparency T-7.0 Introduction

"Driving Drunk: Your Choice" NCADD Video, latest ed.

then stop. Sample questions found on Worksheet W-7.1 which may be used to follow the tape.

• It is important to introduce the video in a way that sets up the audience to view it with an open mind, to hear its messages, and to consider them in relation to their own choices and behaviors. "Driving Drunk: Your Choice?" can be used to complement discussion of themes such as alcohol misuse and abuse, choices, and their related consequences, and the relationship between freedom and responsibility.

Key Concepts to consider before viewing the video:

• Having a driver's license brings not only freedom and independence, but responsibility. Responsibility includes carefully considering the potential consequences of our choices. When watching the video, pay attention to the consequences caused by one person's decision to drive after drinking.





Introduction to Alcohol Problem - Saying No LESSON CONTENT (Instructor Support Information)

Making Choices and Taking Responsibility to Say "No"

Explain the importance of recognizing alcohol and other drugs as a serious problem related to operating a motor vehicle. Evidence demonstrates that combining alcohol with driving is the leading problem regarding youthful drivers.

The goal of this session is to have each student recognize the potential for injury and hopefully make reduced-risk decisions regarding the use of alcohol and other drugs. Although alcohol use is a choice made by people, use of alcohol and other drugs is controlled by laws and enforcement agencies.

Students will be provided with information regarding the risks associated with alcohol use. Students will look at why some people make choices to use alcohol and other drugs. Students will recognize that legal and moral responsibilities relate to not using alcohol or other drugs unless they are under the care of a physician.

Using the video titled "Driving Drunk: Your Choices"

This video focuses on 4 real-life situations in which someone made the choice to drive drunk. The video is designed to show the long-term effects of those choices. You will meet two moms who lost a young adult son and daughter to drunk drivers. You will meet a man responsible for his own single car crash. Now he lives with the result of his choice. Finally, you will meet a young man who insisted on driving drunk in spite of efforts to stop him, killing a young mother and her child. Their stories will affect your life and hopefully your choices in the future.

The facilitator should be aware that some viewers may strongly identify with and have a strong emotional reaction to the stories presented.

At some point the students may bring up the idea that it is easiest to just not use alcohol or other drugs and drive. The instructor may ask if passengers, also using alcohol are any more or less responsible with their choices.



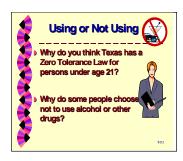
TOPIC ACTIVITIES TOPIC RESOURCES

Knowledge and Skills The Student is expected to:

(B) demonstrate knowledge of the alcohol and other drugs laws in Texas; and

The Instructor:

- . Continues showing suggested video "Driving Drunk: Your Choice" from NCADD to introduce the problem of making good choices.
- . **Asks students to think about** the lives of the survivors in this video and their families. Consider how many people have been affected, many of whom had no choice in becoming a victim. Think about how their lives have been permanently changed by one person's decision to drive drunk.
- . **Asks students to consider** the fact that none of the victims in the video thought they would ever find themselves in the situation they are in. "It can't happen to me" is a common theme that these people prove is untrue. It can, and does, happen to people just like you every day.
- . Show T-7.1, "Using or Not Using," to discuss the reasons why people under age 21 use alcohol or other drugs.
- **Asks students why they think Texas has** a Zero Tolerance Law for persons under age 21. (Accept all answers without criticism to assess what students know about the law.)



Transparency T-7.1 Using or Not Using

- Asks students why some people choose not to use alcohol or other drugs. (Accept all answers without criticism to assess what students feel about moral responsibilities.)
- . After showing "Driving Drunk: Your Choice" from NCADD and Transparency T-7.2, "Using or Not Using," develops a discussion about drinking and driving consequences.
- **Briefly discusses** the consequences regarding the arrest of a driver using alcohol or other drugs in Texas: evaluation at the scene, field sobriety testing, arrest, breath or blood testing and arrest
- **Briefly discusses** the variety of consequences associated with this problem and relate this to future concepts of physical, legal, social and economic consequences.



booking.



Introduction to Alcohol Problem - Saying No LESSON CONTENT (Instructor Support Information)

Develop a discussion about why young persons choose to use alcohol or other drugs:

Discussion may revolve around fairness of law rather than to protect the lives of young persons under age 21. Instructor may ask if they are aware of any evidence that supports the need for such a law.

The students need to think about the legal, ethical and moral reasons for making choices about alcohol and other drug use.



Develop a discussion concerning the enforcement risks:

The discussion should come from the students, so allow them to be free to discuss without judgment.

Evaluation at the scene, field sobriety testing, arrest, breath or blood testing and booking. Although this will be dealt with in more detail in a later session, it is important to allow students some flexibility to express themselves in regard to enforcement. The instructor should be careful not to make this a lecture.

Develop a discussion concerning consequences of using alcohol and other drugs and driving:

The students should recognize the need to be responsible for their choices and behavior. The criminal justice system is designed to protect the population from those people who are unable to or choose not to make responsible decisions and choices. Consequences of high risk decisions are sometimes not known by the young driver or



TOPIC ACTIVITIES TOPIC RESOURCES

Knowledge and Skills The Student is expected to:

(C) apply critical thinking and decision-making skills to generate strategies that project zero tolerance against impaired driving,

The Instructor:

- . Shows Transparency T-7.2, "Your Choices and Responsibilities," to close discussion of
- this topic area. Discuss the reasons why people under age 21 should choose not to use alcohol or other drugs.
- Briefly discusss the concept of short-term and long-term rewards and consequences.



Transparency T-7.2 Your Choices and Responsibilities

- . Shows Transparency T-7.3, "Your Choices and Responsibilities," to close discussion of this topic area. Discuss the reasons why people under age 21 should choose not to use alcohol or other drugs.
- Is alcohol and other drug use a short-term or long-term reward for the user?
- Are the consequences of alcohol use short-term or long-term consequences for the victim?
- What is the easiest way to avoid the consequences of alcohol and other drug use?



Transparency T-7.3 Your Choices and Responsibilities



Introduction to Alcohol Problem - Saying No LESSON CONTENT (Instructor Support Information)

passenger until after the collision does happen to them. Ask for any personal consequences that are part of this high risk decision-making process.

Discuss the reasons why people under age 21 should choose not to use alcohol or other drugs.

The instructor's goal is to discuss how choices and responsibilities are related. Continue with brief discussion using the transparency and some of the sample points below: Be sure to keep this as a brief discussion and not a lecture. The goal is to determine what students may already recognize. More discussion and lecture time will be devoted to this. It may be a good time to assess what is remembered from Module 1 alcohol and other drug laws topic area.

- Briefly discuss the concept of short-term and long-term rewards and consequences.
- Is alcohol and other drug use a short-term or long-term reward for the user?
- Are the consequences of alcohol use short-term or long-term consequences for the victim?
- What is the easiest way to avoid the consequences of alcohol and other drug use?

Give students permission to say "No" to alcohol and other drug use and driving an automobile.

The instructor's goal is to give the students a reason to choose "no" when confronted with short-term rewards. Continue with brief discussion using some of the sample points below:

- This should not involve alcohol or other drugs at this point. Ask about the differences in short-term vs long-term rewards. Relate to past discussions about risk-taking and decision-making.
- Ask about the differences in short-term vs long-term consequences. Relate to past discussions about risk taking and decision making.
- Encourage students to realize that the rewards involved in alcohol are short-lived in comparison to their lifetime. Most young persons do not have a keen relationship to the present vs the future.
- The emotional scars often outlast the physical, legal and moral consequences.
- Any medical professional will indicate that the easiest choice is to not use alcohol
 or other drugs to avoid the consequences.

Discuss "Module Topics: to close the introduction.

Discuss the upcoming topics in the alcohol and other drugs section.



Module Seven Topic 1 Resources

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Module Seven, Topic 1 Transparencies:
 T-7-0, Introduction;
 T-7.1, Using or Not Using;
 T-7.2, Your Choices and Responsibilities;
 T-7.3, Your Choices and Responsibilities.
Worksheet:
 W-7.1, "Driving Drunk: Your Choice".
Module Assessment:
 MA-7.1.
Resources:
 "Drive Right" Ch. 15;
 "Handbook Plus" Ch. 4;
 "How To Drive" Ch. 4;
 "License To Drive" Ch. 18;
 "Responsible Driving" Ch. 3;
 Video, "Driving Drunk: Your Choice".
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Module Seven Prerequisites:

Minimum age for entry into program

Topic Title: Nature of Alcohol-related

Crashes

Topic 2Time Frame:

50 minutes instructional time

10 minutes discretional break time

22.0 Non-credit course (32 hrs)

27.0 Multiphase course (40 hrs)

27.0 Credit course (56 hrs/semester)

Module Seven, Topic 2 is a required approved program element.

Needed Resources	Instructor Activities	Time Frame
Module Seven, Topic 2.	• Review recommended Module Seven: Topic 2.	15 minutes (prior to lesson)
Transparencies T-7.4 and T-7.5.	• Review Module Seven, Topic 2 Transpar- encies provided: T-7.4, "Traffic Death Comparisons"	5 minutes (prior to lesson)
	T-7.5, "Underage Alcohol-related Crashes"	10 minutes (prior to lesson)
Student Worksheet W-7.2, W-7.3, W-7.4, W-7.5, W-7.6, and W-7.7.	• Review Worksheets W-7.2, "Ghost Out" W-7.3, "Mock Car Crash Project" W-7.4, "Nature of Alcohol-related Problems: Crash Rates" W-7.5, "Nature of Alcohol-related Problems: What is a Drink" W-7.6, "Home Survey" W-7.7, "Alcohol Content of a Drink"	50-60 minutes (8-10 minutes) (8-10 minutes) (8-10 minutes) (8-10 minutes) (8-10 minutes)
Review Fact Sheets	• Review Fact Sheets F-7.1, "Factors Influencing Teenage Drinking"	5-10 minutes
Resources Available:	• Module Assessment, MA-7.1.	5-10 minutes
"Drive Right" Ch. 14,15;		
"How to Drive" Ch. 10;		
"Handbook Plus" Ch. 4.1-4.12;		
"License To Drive" Ch. 18;		10-15 minutes
"Responsible Driving" Ch. 3,4.		
Module Assessment		

TOPIC ACTIVITIES TOPIC RESOURCES

Knowledge and Skills The Student is expected to:

- (A) examine the effects of impaired driving on crashes;
- (B) discuss the consequences of impaired driving related crashes;

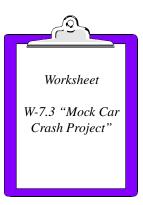
The Instructor:

. Discusses an optional student project which involves a dramatization of risk probability and consequences using alcohol and other drugs while driving using Worksheet W-7.2, "Ghost Out Project." Students



may become involved in dramatization of the number of persons killed in DWI related crashes in this TAAS related activity.

. Discusses another optional student project which involves a dramatization of risk probability and consequences using alcohol and other drugs while driving using Worksheet W-7.3, "Mock Car Crash Project." Students may become involved in dramatization of the number of persons killed in DWI related crashes in this TAAS related activity.



. Asks the class if they know anyone who has ever been involved in an alcohol or drug-related traffic offenses. (It is not necessary to know the details of any such incidents). Usually a significant percentage of the group will at least have known someone who has had such an involvement. The instructor should be prepared to provide an example if no students provide this information or use suggested video as an introduction.



Nature of Alcohol-related Crashes LESSON CONTENT (Instructor Support Information)

Nature of the Alcohol-Related Traffic Crash Problem

Although alcohol is a factor in accidents of all types, Topic Two focuses on traffic accidents. Students will be provided statistical data with attention to accidents involving young drivers and alcohol.

Present an introduction to the drinking and driving problem through generating a class discussion or reviewing concepts in the video presentation followed up by a discussion:

- DWI-related crashes occur approximately every 23 minutes
- · Friends of the people killed were affected by sadness and grief
- · Alcohol magnified the problems of fear and alcohol in the accident shown
- Experience is the most dangerous way to learn about the effects of alcohol

Getting students involved in TAAS related projects will enhance the understanding of the nature of the alcohol-related traffic crash problem. The instructor will need to get cooperation of school administration and faculty to effectively establish the ghost out and mock car crash. The commModuley will often get involved in projects like this around the Christmas break and just before prom time. These projects may become a class activity, local safety club, school-sponsored, or community-sponsored.

Discussion of alcohol-related crashes

The instructor presents statistical information supporting nature of the problem:

- · How often do DWI-related crashes occur?
- · How were the friends of the people killed affected?
- How were anger and alcohol related in the accident shown?
- Is experience the only way to learn about the effects of alcohol?

Statistical information (as up to date as possible) should be used to demonstrate the nature of the problem.

Using Texas and US Statistics

Stress comparisons and relationships rather than rote memorization of numbers.



TOPIC ACTIVITIES TOPIC RESOURCES

Knowledge and Skills The Student is expected to:

(C) appraise the over-involvement rate of underage drivers in impaired driving related crashes in Texas and the US;

The Instructor:

- . Reviews concepts of suggested video "Drunk Driving: Your Choice" as a lead in to discussion of statistics.
- Asks, "How often do DWI related accidents occur?"
- Asks, "How were the friends of the people killed affected?"



Transparency T-7.4
Traffic Death
Comparisons

Worksheet

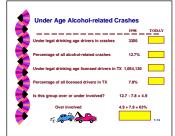
W-7.4 "Nature of Alcohol-

related

- · Asks, "How were anger and alcohol related in the accident shown?"
- Asks, "Is experience the only way to learn about the effects of alcohol?"
- . Shows the top of Transparency T-7.4, "Traffic Death Comparisons." The accompanying transparency has the spaces purposely left blank. Using an erasable felt-tip pen, fill in the numbers and update annually.
- . Repeats this exercise for drugs other than alcohol. After all guesses have been made, uncover the bottom portion of Transparency T-7.4, "Traffic Death Comparisons." Note that only question marks (?) are provided. The reason for this is that a realistic number is not available because of lack of uniform and comprehensive testing.
- . Hands out Worksheet W-7.4, "Nature of Alcohol-related Problem: Crash Rates." The students can then determine whether the under legal drinking age group is over or under involved in alcohol-related traffic incidents.
- . **Uses the top part of Transparency T-7.5, "Underage Alcohol Related Crashes," to provide these numbers.** Develops the concept of over or under involvement related to comparing the group percentages of licensed drivers to the

group percentages of alcohol related incidents. If, for example, a group represented 8% of all drivers and was involved in 8% of all incidents, there will be no under or over involvement (8 - 8 = 0; $0 \div 8 = 0$). If a group was 8% of the drivers but was in 12% of the incidents, there would be a 50% over involvement (12 - 8 = 4; $4 \div 8 = .50$ or 50%).

If a group was 8% of the drivers but was in 6% of the incidents, there would be a 25% under involvement (8 - 6 = 2; $2 \div 8 = .25$ or 25%). (This could also be expressed as 6 - 8 = -2; $-2 \div 8 = .25$ or -25%)



Transparency T-7.5 Under Age Alcoholrelated Crashes



Nature of Alcohol-related Crashes LESSON CONTENT (Instructor Support Information)

Traffic crash and violation data in this topic must include data from both the Moduleed States and Texas with emphasis on teenagers.

After all guesses have been made, use the top part of Transparency T-7.5 to give the correct information (keep the bottom part of Transparency T-7.5 covered). The transparency has the spaces purposely left blank, so using an erasable felt-tip pen, fill in the numbers and update annually.

ALCOHOL RELATED: TX = 1,138 (1995) US = 13,395 (1996)

After all guesses have been made, uncover the bottom portion of Transparency T-7.5. Note that only question marks (?) are provided. The reason is that a realistic number is not available because of lack of uniform and comprehensive testing. Even though we do not have reliable numbers relating the non-alcohol drugs and accidents, the instructor should ask the class whether they believe drugs are involved in traffic accidents and deaths. Most should agree that this is probable.

DRUG RELATED:

TX = ?

US = ?

Updating U.S. Data

Accident Facts (Year) National Safety Council 1121 Spring Lake Drive Itasca, IL 60143

NHTSA National Center for Statistics and Analysis

Traffic Safety Facts (Year)

400 Seventh Street, S.W. Washington, D.C. 20590

1-800/621-7619

1-800-934-8517

Updating Texas Data

Motor Vehicle Traffic Accidents Texas Department of Public Safety Post Office Box 4087 Austin, TX 78773 512/424-2000

The instructor should present information to support young driver involvement in the problem: What is teen driver involvement in alcohol-related crashes.

Ask the class if they know the legal drinking age in Texas. Most should know that it is 21. This should then mean that there are no drivers under age 21 involved in alcohol related crashes.

While this should be the case, in 1995 there were 3,723 under legal drinking age drivers involved in alcohol-related incidents in Texas. This represented 39.6% of all drivers involved in alcohol-related incidents in Texas.

The teacher should use the top part of Transparency T-7.6 to provide these numbers. The teacher should have the students then determine whether the under legal drinking age group is over or under involved in alcohol related traffic incidents using Worksheet W-7.4.

§ 110.42. English I (b) (4) The student uses **Texas Essential Knowledge and Skills:** writing as a tool for learning. (B) to discover, organize, and support what is known and what needs to be learned. (14) The student listens attentively for a variety of purposes. (A) focus attention on speaker's message.



TOPIC ACTIVITIES TOPIC RESOURCES

Knowledge and SkillsThe Student is expected to:

(D) list factors that influence underage drinking;

The Instructor:

. Asks the students to complete Worksheet W-7.4, "Nature of Alcohol-related Problem: Crash Rates." After the students have had 2-3 minutes to attempt to complete the worksheet,



Transparency T-7.5 Under Age Alcohol-

. **Uses the bottom portion of Transparency T-7.5, "Underage Alcohol-Related Crashes,"** to illustrate how the correct answer is determined. As the under legal drinking age group comprises only 5.8% of all licensed drivers in Texas, this is a 39.6% over involvement.

. Assigns Worksheet W-7.5, "Nature of the Alcohol-Related Problem: What Is A Drink," as homework or as class assignment depending on time available in session. The American society uses the term "drink" to mean "drink alcohol" in many ways, especially in every day conversation and advertisements. Provides discussion time for this worksheet in the next alcohol session class.

. The instructor should use Fact Sheet F-7.1, "Factors Influencing Teenage Drinking," as support material to help answer questions and lead a discussion about teenage drinking factors. While it is impossible to predict all responses, many common ones are given in the Fact Sheet.









Nature of Alcohol-related Crashes **LESSON CONTENT (Instructor Support Information)**

The instructor should present information to support young driver involvement in the problem.

After the students have had 2-3 minutes to attempt to complete Worksheet W-7.4, use the bottom portion of Transparency T-7.6 to illustrate how the correct answer is determined.

As the under legal drinking age group comprises only 5.8% of all licensed drivers in Texas, this is a 39.6% over involvement.

Lead a discussion about factors influencing teenage drinking:

The instructor should ask the class for reasons teenagers drink. These should be placed on the board without making any judgment about the appropriateness of the answer. Use Fact Sheet F-7.1 for additional information.

After all ideas have been listed, the instructor should lead a brief class discussion on all reasons given, use this as support material to help answer questions and lead the discussion.

Peer Pressure - Many times teenagers (and even adults) do not like to admit that they are influenced by others.

Influence of Parents - Parental influence could be either for good or bad. If a child comes from a home where alcohol is abused, this could lead the child to also abuse alcohol.

Sociological Factors - Our culture is one which, for the most part, readily accepts drinking. Even the word "drink" has often come to mean "drink alcohol."

Anxiety, Frustration, etc. - Worry about school, athletics, boy/girl friends, jobs, family, etc., are all part of growing up.

To Have a Good Time - Drinking is associated with "partying" for a large percentage of teenagers.



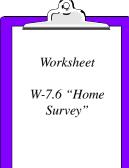
TOPIC ACTIVITIES TOPIC RESOURCES

Knowledge and Skills The Student is expected to:

- (E) calculate the alcoholic content of a beverage and relate the amount of alcohol to impairment; and
- (F) understand the zero tolerance concept of Texas Law as it relates to the use of alcohol and other drugs.

The Instructor:

- . The instructor should conclude this session with a brief review of the laws and penalties as time permits.
- . Worksheet W-7.6, "Home Survey," is used as a TAAS activity using a home survey tool as well as a classroom law organization activity for a study guide and comparison guide for survey answers.



Worksheet

W-7.7 "Alcohol Content of a

Drink"

- As a TAAS Activity, asks the students to prepare a three paragraph paper explaining the definition of BAC and what factors can affect a person's BAC as a preliminary to this topic. This is an effort to practice writing skills as well as gain some information about what the student may know about blood alcohol concentration and the influencing factors. The short paper should not be annotated, but reflect the student's prior knowledge of these physiological factors.
- . As a TAAS Activity, have each person write a one or two page paper on whether the penalties for DWI in Texas should be the same for persons under age 21 and over age 21.
- **. Uses Worksheet W-7.7, "Alcohol Content of a Drink,"** as a home project to stimulate discussion for next topical area.
- . Conducts a session evaluation using questions provided. This assessment may be used as a section quiz or as part of the Module 7 evaluation.
- . **Provides an opportunity to complete BTW-7.1** as this Module progresses.

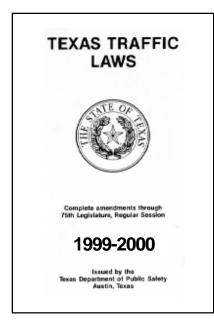


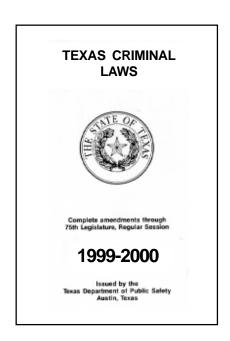


Nature of Alcohol-related Crashes LESSON CONTENT (Instructor Support Information)

The instructor should conclude this topic with a summary

It is usually not possible or even desirable to cover all the details of laws related to alcohol and driving. If questions arise about aspects of alcohol laws which are not covered in this topic, the teacher should refer to a current copy of the Texas Traffic Laws. This topic area may be evaluated by use of the questions appearing in the evaluation segment as an individual activity and/or as part of the Module test.





Module Seven Topic 2 Resources

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Module 7, Topic 2 Transparencies:
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- T-7.4, Traffic DeathComparisons;
- T-7.5, Underage Alcohol related Crashes.

Worksheets:

- W-7..2, Ghost Out Project;
- W-7.3, Mock Car Crash Project;
- W-7.4, Nature of Alcohol-related Problems: Cash Rates;
- W-7.5, Nature of Alcohol-related Problems: What is a Drink?;
- W-7.6, Home Survey;
- W-7.7, Alcohol Content of a Drink.

Fact Sheets:

F-7.1, Factors Influencing Teenage Drinking.

Resources:

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Texas Traffic Laws, 1999-2000;
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Texas Criminal Laws, 1999-2000;

"Drive Right" Ch. 15;

"Handbook Plus" Ch. 4:

"How To Drive" Ch. 4:

"License To Drive" Ch. 18;

"Responsible Driving" Ch. 3.

Assessment:

Module Assessment, MA-7.1.

Module Seven Prerequisites:

Module Five completion

Topic 3 Time Frame:

55 minutes instructional time

5 minutes discretional break time

Topic Title: Psychological and

Physiological Effect of Alcohol on DrivingTask

23.0 Non-credit course (32 hrs)

28.0 Multiphase course (40 hrs)

30.0 Credit course (56 hrs/semester)

Module Seven, Topic 3 is a required approved program element.

Needed Resources	Instructor Activities	Time Frame
Module Seven, Topic 3.	• Review recommended Module Seven: Topic 3.	15 minutes (prior to lesson)
Transparencies T-7.6, T-7.7, T-7.8, T-7.9, T-7.10, T-7.11. T-7.12, T-7.13, and T-7.14.	 Review Module Seven, Topic 3 Transparencies provided: T-7.6, "BAC Factors" T-7.7, "Are They the Same?" T-7.8, "How Much Light Beer (Male)" T-7.9, "How Much Light Beer (Female)" T-7.10, "Elimination of Alcohol" T-7.11, "Elimination Rate" T-7.12, "Alcohol Affects the Body" T-7.13, "Affects Persons Differently" 	50-60 minutes (8-10 minutes) (8-10 minutes) (8-10 minutes) (8-10 minutes) (8-10 minutes)
Student Worksheet W-7.7, W-7.8, W-7.9, 7,10, and W-7.11.	T-7.14, "Psychological Effects" • Review Worksheets W-7.7, "Alcohol Content of a Drink" W-7.8, "Alcohol Comparisons" W-7.9, "Psyiological Effect of Alcohol on Driving" W-7.10, "BAC Calculator Exercises" W-7.11, "Drugs Other than Alcohol and	5-10 minutes
Review Fact Sheets F-7.2, F-7.3, F-7.4, and F-7.5.	• Review Fact Sheets F-7.2, "BAC Factors"	5-10 minutes
Resources Available: "Drive Right" Ch. 14,15; "How to Drive" Ch. 10; "Handbook Plus" Ch. 4.1-4.12; "License To Drive" Ch. 18; "Responsible Driving" Ch. 3,4.	F-7.3, "Effects on the Body" F-7.4, "Affects Persons Differently" F-7.5, "Psychological Effects" • Module Assessment, MA-7.1.	10-15 minutes
Module Assessment		

TOPIC ACTIVITIES TOPIC RESOURCES

Knowledge and SkillsThe Student is expected to:

(A) define blood alcohol concentration and explain factors that affect blood alcohol concentration;

The Instructor:

- . Introduces this topic by asking the class what BAC means? Blood-alcohol concentration is the term used by legal definition and refers to the amount of alcohol per the amount of fluid in the body.
- **. Explains the difference** between the terms "concentration" and "content."
- Concentration is the percentage of alcohol related to the total amount of blood in the body. For example, one drop of alcohol per 999 drops of blood equals .10 BAC per every 1000 drops of fluid.
- Content is amount of alcohol consumed. For example, one 12 ounce Budweiser is .57 ounce of alcohol consumed or one 80 proof whiskey is .40 ounce of alcohol consumed per body fluid content.
- **. Uses Transparency T-7.6,** "BAC Factors," to explain how different factors affect the blood-alcohol concentration as follows (See Fact Sheet F-7.2, "BAC Factors").
 - . Body Weight of Individual
 - . Time Spent Drinking Alcohol
 - . Gender of Person
 - . Food Consumed Prior to and While Drinking Alcohol
 - . Alcohol Content of the Drink
 - . Size of Drink Consumed

The instructor should use Transparency T-7.7, "Are They The Same?," to help explain similarities and differences of the amount of alcohol in the different drinks.

- . Beer. Whiskey. Cooler
- . Margarita



Transparency T-7.6
BAC Factors



Transparency T-7.7 Are They The Same?



Physiological and Psychological Effect of Alcohol on Driving Task LESSON CONTENT (Instructor Support Information)

This topic is designed to provide basic information about the physiological and psychological effects of alcohol on humans. While a medical level of knowledge is not needed, it is important to provide accurate information about alcohol to enhance decision-making skills related to the driving task. The instruction of this topic involves use of a number of transparencies and other media.

Important Notation: Before, during, and after this topical area, the teacher should clearly stress that for this age group the acts of consuming, purchasing and possessing alcoholic beverages are illegal and should not be condoned. Explain to the class that BAC means blood alcohol concentration, not content and factors influencing BAC.

Blood Alcohol Concentration (BAC) - Concentration is the ratio between the alcohol consumed and the blood in the body.

Weight - Larger persons have more blood and other fluids in their body than smaller persons.

Time Spent Drinking - Alcohol, while it is not removed quickly from the body, begins to be processed by the liver shortly after it is absorbed.

Gender - Women do not process alcohol (due to liver function) as well as men under normal circumstances.

Food - Food does not soak up or absorb the alcohol, as alcohol is water soluble.

Alcohol Content - The higher the alcohol content is in a drink; the higher is the blood-alcohol concentration (BAC) produced.

Size of Drink - A larger-sized drink will usually contain more alcohol, compared to a smaller-sized drink

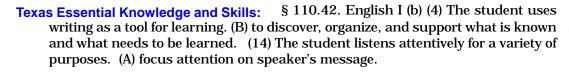
Explain similarities and differences in "Are They the Same?"

There have been many charts, cards, calculators and other materials developed to make comparisons among various beverages. While there is a common belief that there is the same amount of alcohol in normal servings of different alcoholic beverages, this may not be true.

The instructor should begin by pointing out that ethyl alcohol is the common factor in beer, wine, whiskey and all other alcoholic beverages and also that this is the reason why an intoxilyzer, blood test, or other measure of body fluids can be used to determine a person's BAC.

The math involved is not difficult, but the teacher should assist any students who may have problems in converting percentages to decimals. For example, beer at 4.5% (this is the average for regular beer in Texas) alcohol by volume equals to .045 when expressed as a decimal. A 5.1% cooler or breezer equates to a decimal of .051. The teacher should also explain the concept of "proof" as this is used for the whiskey and margarita examples.

Proof means twice the actual alcohol content and is expressed with a small circle above and to the right of the number. For example, 80 proof (80°) which is the most common whiskey sold, is 40% alcohol, i.e.: $80^{\circ} \div 2 = 40\%$. Whiskey at 90° is 45% alcohol and so on. The teacher should also be ready to explain how the answer to the margarita example





TOPIC ACTIVITIES TOPIC RESOURCES

Knowledge and Skills The Student is expected to:

(B) calculate the amount of alcohol in alcoholic beverages and make comparisons between the most common types of beverages and drinks;

The Instructor:

	I	low N	/fuch I	igl	nt Beer	r (IV	fale)
	Weight Male	BAC	Ounces of Light Beer	BAC	Ounces of Light Beer		Ounces of Light Beer
	200	0.03	22.cz.	0.05	37 cz.	0.07	52 az.
	190	0.03	21 cz.	0.05	34 cz.	0.07	50 cg.
	180	0.03	20 cz.	0.05	33 cz.	0.07	46 cz.
45	170	0.03	19 cg.	0.05	32 oz.	0.07	44 cg.
	160	0.03	18 cz.	0.05	30 cz.	0.07	41 cz.
	150	0.03	17 cg.	0.05	29 cg.	0.07	39 cg.
	140	0.03	16 cz.	0.05	27 cz.	0.07	37 cz.
	130	0.03	15 cz.	0.05	25 cz.	0.07	34 cz.
	120	0.03	14 cz.	0.05	22 cz.	0.07	32 cz.
	110	0.03	13 cz.	0.05	21 cg.	0.07	29 cg.
	100	0.03	11 cz.	0.05	20 oz.	0.07	28 cz.
	90	0.03	10 cz.	0.05	18 cz.	0.07	26 oz.
	80	0.03	8 02.	0.05	17 oz.	0.07	23 cg.
	70	0.03	602	0.05	15 cz.	0.07	19 oz.
	55	0.03	4 cm.	0.05	12 oz.	0.07	17 cg.

Transparency T-7.8	
How Much Light Beer (Male)?	

•	THE LE	over N/	luch L	iah	Poor	Œ,	moolo)
7	W	OW IV	ucii L	ıgıı	Deci	(1.6	ingue)
3	Weight Ferrale	BAC	Ounces of Light Beer	BAC	Ounces of Light Beer	BAC	Ounces of Light Beer
	255	0.03	22 02.		37 cz.		52 cz.
	230	0.03	21 02.	0.05	34 cz.	0.07	50 cz.
	220	0.03	20 oz.			0.07	46 cz.
	210	0.03	19 cz.				44 cz.
	200	0.03	18 oz.		30 cz.	0.07	41 cz.
K L	195	0.03	17 02.		29 cz.	0.07	39 cz.
	180	0.03	16 cz.		27 cz.	0.07	37 cz.
	170	0.03	15 oz.		25 cz.	0.07	34 cz.
	160	0.03	14 02.		22 cz.	0.07	32 cz.
37	150	0.03	13 oz.	0.05	21 oz.	0.07	29 oz.
	130	0.03	11 oz.	0.05	20 oz.	0.07	28 oz.
	120	0.03	10 02.	0.05	18 cz.	0.07	26 cz.
	110	0.03	8 02.	0.05	17 oz. i	0.07	23 oz.
	90	0.03	6 oz.	0.05	15 cz.	0.07	19 cz.
	80	0.03	4.02	0.05	12 oz.	0.07	17 or.

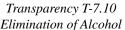
Transparency T-7.9 How Much Light Beer (Female)?

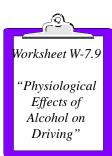
- . Uses Transparency T-7.8 and T-7.9, "How Much Light Beer? (Male or Female)," to calculate the amount of alcohol consumed to reach specified BAC levels based on weight, gender, and size of drink factors. The instructor should note that light beer (3.6-3.8%) is more similar to wine (12%) and whiskey at 83 proof (43%) than regular beers, ales, malt liquors, and coolers. This allows for more similar comparisons on BAC charts, since many charts are based on one drink of liquor at 83 proof.
- . **Uses Worksheet W-7.7**, "Alcohol Content of A Drink," **and Worksheet W-7.8**, "Alcohol Comparisons," to calculate the amount of alcohol in various beverages.
- **. Uses Worksheet W-7.9,** "Physiological Effects of Alcohol on Driving," to practice math skills for identifying the number of light beers related to the ounces for varying BAC levels for male and female students. This TAAS activity may be used as homework or classroom activity.
- . Uses Transparency T-7.10, "Elimination of Alcohol," in order to demonstrate how the time factors are used to predict when alcohol is eliminated from the body.
 - Process
 - . Time Factors













Physiological and Psychological Effect of Alcohol on Driving Task LESSON CONTENT (Instructor Support Information)

may be obtained. Since a margarita has two kinds of alcohol (tequila and triple sec) in addition to water and other mixers, each of these must be calculated separately, then added (see completed Worksheet W-7.8). After allowing time for completion and providing help as needed, the teacher should ask the class if the differences found are really significant.

Demonstrate how weight causes variations in BAC. While this chart can be useful, it is limited to a one-hour time frame. As most persons who drink do so for more than one hour, another measurement device is needed and this is part of the next exercise.

The chart demonstrates the calculations for ten pound weight ranges and is the basis for Transparency T-7.8 and T-7.9. The information is based on a multiple factors calculator designed by Rutgers University in 1983, considering multiple factors such as weight, sex and type of drink consumed.

Use Worksheet W-7.9 math skills to identify the number of light beers related to the ounces for varying BAC levels for male and female students. May be used as homework or classroom activity.

The instructor should use Transparency T-7.10 to explain why alcohol is removed slowly by the body.

The majority (90%) of the alcohol detoxified is oxidized (burned up) by the liver. The other 10% is eliminated in breath, urine and sweat. This fact is the prime reason the "sober-up quick" methods do not work. The bottom of Transparency T-7.10 shows the time factor involved in alcohol removal.

On the average, a person's BAC is lowered only 0.015 per hour. The concept of the body detoxifying "one drink per hour" has often been used but this has previously been shown to be inaccurate for small people. It is better to use the 0.015 per hour for several reasons. "One drink" is defined in many different ways. For example, a beer may be 6, 10, 12, 16, 32, or 40 ounces in size. While the most common size is 12 ounces, this may not be the "one drink" size a given person consumes. Some so-called "hard liquors" may really have more than twice the alcohol content of another. Transparency T-7.10 also shows how long it will take to completely remove alcohol for a person who has reached .05 and .07 BAC. The instructor may wish to demonstrate how this number of hours was determined by having students subtract 0.015 from 0.05 and 0.07 to show this concept.

Teachers should obtain and use the Drink/Drive calculator. (See below for ordering information for the calculator activity.)



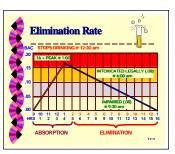
TOPIC ACTIVITIES TOPIC RESOURCES

Knowledge and Skills The Student is expected to:

(C) describe how alcohol is eliminated from the body and explain factors that affect the elimination:

The Instructor:

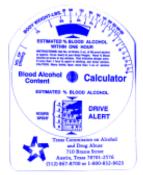
. Uses Transparency T-7.11, "Elimination Rate," in order to demonstrate how the time factors are used to predict when alcohol is eliminated from the body based on a peak level of .16 BAC.

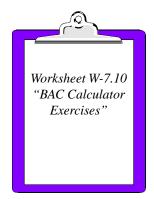


Transparency T-7.11
Elimination Rate

- . Obtains and uses the Drink/Drive calculator. (See Worksheet W-7.10, "BAC Calculator Exercisies," and Lesson Content section for ordering information and for the calculator activity.)
- . Uses the Drink/Drive calculator to complete the exercises found in Worksheet W-7.10, "BAC Calculator Exercises," and in the lesson content area.
 - . .07 Concept
 - . .05 Concept
 - . Weight and BAC
 - . Elimination Rate
- **. Shows optional video entitled "The Effects of Alcohol on Driving"** to illustrate the effects of .03 BAC and .07 BAC on driving task. Emphasize the BAC levels shown are below the legal intoxication level in Texas.

Note: One female driver pictured had a measurable .107 but did not drive until it dropped to .07 for the driving evaluation.









Physiological and Psychological Effect of Alcohol on Driving Task LESSON CONTENT (Instructor Support Information)

To develop the 0.07 Concept, have students set the arrow in the top window (estimated % blood alcohol within one hour) on .07 and then read the number of drinks needed to reach this BAC based on their weight. Note that this is in a one hour time frame only.

To develop the Multiple Hours Concept, ask the class to refer to the bottom window and determine their BAC if 2 hours had been spent (about .04). This helps illustrate the effects of time.

To explain the 0.05 Concept, have the class set the arrow in the top window on .05 and note the number of drinks needed to reach this in one hour for their weight. Note the color red begins at this point and indicates danger. Remind the class that young people are more affected by alcohol than older people and therefore no alcohol should be consumed.

Take care in explaining the One Drink Per Hour Concept, as this idea may be misleading and dangerous, especially for this age group. Conduct the following exercise:

Have students set the top window on 1 drink at 110 lbs. This should yield a reading of about .03. The average elimination ratio is 0.015 per hour. Thus, a person who peaks at .03 will be about 0.015 one hour later (0.03 - 0.015 = 0.015). Ask the class how many hours, at this rate, it would take a 110 lb. person to reach the .07 level (approximately 4-5 hours as $0.07 \div 0.015 = 4.7$). Therefore a young person who weighs 110 lbs. who only drinks 1 drink per hour would reach an illegal BAC in 4-5 hours. This illustrates that the idea of the body removing one drink per hour does not work for small people.

Note: The teacher may wish to take the calculators back from students after this exercise. If this approach is taken, an investment of about \$5.00 will provide calculators for an entire class.

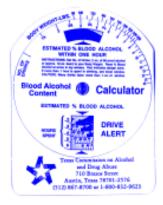
The instructor should use Transparency T-7.10 and the Fact Sheet F-7.3 as support materials to briefly cover the effects on the body.

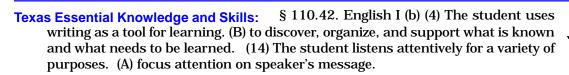
Write to:

Texas Commission on Alcohol and Drug Abuse

P.O. Box 80529

Austin, Texas 78708-0529







TOPIC ACTIVITIES TOPIC RESOURCES

Knowledge and Skills The Student is expected to:

(D) list and compare the physiological and psychological effects of alcohol on individuals and analyze the differences; and

The Instructor:

. Uses Transparency T-7.12, "Alcohol Affects the Body," and the accompanying

support materials to briefly cover the effects on the body. (See Fact Sheet F-7.3 "Effects on the Body" for additional information.)



- . Heart
- . Sexuality
- . Sleep
- . Stomach
- . Brain



Transparency T-7.12 Alcohol Affects the Body



- . **Uses Transparency T-7.13**, "Affects Persons Differently," and Instructor Fact Sheet F-7.4, " Alcohol Affects Persons Differently," support materials to briefly cover how alcohol affects persons differently.
 - . Tolerance
 - . Personality
 - . Mood
 - . Experience
 - . Fatigue
 - . Medication
 - . Weight
 - . Age



Transparency T-7.13
Affects Persons Differently





Physiological and Psychological Effect of Alcohol on Driving Task LESSON CONTENT (Instructor Support Information)

This information should not be presented in detail, as it is more appropriate for a health course than a driver education course.

LIVER - This organ detoxifies many substances in the blood

Heart - Alcohol causes direct damage to the heart by reducing its contractability and increasing fat infiltration

SEXUALITY - Alcohol has been shown to lower inhibitions about sex and affect sexual performance adversely, especially in males

SLEEP - Because it is a depressant, alcohol can put people to sleep

STOMACH - Alcohol irritates the lining of the stomach and increases acidity

Brain - There are short-term effects and long-term effects of alcohol on the brain

The instructor should use Transparency T-7.11 and Fact Sheet F-7.4 as support materials to help explain how alcohol affects persons differently.

As has been previously mentioned, a given amount of alcohol does not affect all persons the same way or a given person the same at different times.

TOLERANCE - Tolerance is defined as the need to consume more of a drug to reach a given effect or the body's ability to eliminate the drug faster

Personality - Each person has a distinct and unique personality

Moon - If a person is angry, happy, or sad, he or she may react quite differently to alcohol

EXPERIENCE - As mentioned previously, lack of experience in any area may be detrimental

FATIGUE - If a person is physically or mentally tired, it does not take much alcohol to produce an adverse effect

MEDICATION - Any other drug, whether prescribed by a doctor, bought over-the-counter, or taken illegally, will interact with alcohol to alter alcohol's effect

WEIGHT - The larger a person is, the more blood that person has

 $\mbox{\bf Age}$ - Experience is a factor as to how a person responds to the introduction of alcohol into the system

Use Transparency T-7.11 and Fact Sheet F-7.5 support materials to explain psychological factors related to consumption of alcohol.



TOPIC ACTIVITIES TOPIC RESOURCES

Knowledge and Skills The Student is expected to:

(E) understand the effects of alcohol and assess the impact of the effects on the driving task.

The Instructor:

. **Use Transparency T-7.14**, "**Psychological Effects**," and the accompanying support materials to briefly cover the psychological effects of alcohol on a person or personality.

- **. Uses Fact Sheet F-7.5**, "Pyschological Effects," to briefly cover the psychological effects of alcohol on a person or personality.
 - . Attention
 - . Memory
 - . Emotions
 - . Aggression
 - . Tolerance



Transparency T-7.14
Psychological Effects









Physiological and Psychological Effect of Alcohol on Driving Task LESSON CONTENT (Instructor Support Information)

ATTENTION - Alcohol usually affects a person's ability to concentrate on several sources of incoming information

Memory - This is not necessarily the "blackout" concept, but the inability to store and retain information **Emotions** - There is conflicting research in this area; simple observation demonstrates that emotional control tends to be lost as more alcohol is consumed

AGGRESSION - Aggressive behavior tends to be enhanced

TOLERANCE - Involves the person's ability to mask the effects of alcohol



Module Seven Topic 3 Resources

Module 7, Topic 3 Transparencies:

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T-7.6, BAC Factors;
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T-7.7, Are They the Same?;

T-7.8, How Much Light Beer (Male);

T-7.9, How Much Light Beer (Male);

T-7.10, Elimination of Alcohol;

T-7.11, Elimination Rate

T-7.12, Alcohol Affects the Body;

T-7.13, Affects Persons Differently;

T-7.14, Psychological Effects.

Worksheets:

W-7.7, Alcohol Content of a Drink;

W-7.8, Alcohol Comparisons;

W-7.9, Physiological Effects of Alcohol on Driving;

W-7.10, BAC Calculator Exercise:

W-7.11, Drugs Other than Alcohol and Driving Task.

Fact Sheets:

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F-7.2, BAC Factors;
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F-7.3, Effects on the Body;

F-7.4, Alcohol Affects Persons Differently;

F-7.5, Psychological Effects.

Resources:

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BAC Calculator:
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"Drive Right" Ch. 15;

"Handbook Plus" Ch. 4;

"How To Drive" Ch. 4:

"License To Drive" Ch. 18;

"Responsible Driving" Ch. 3;

Optional Video:

"The Effects of Alcohol on Driving"

Module Assessments:

MA-7.1.

Module Seven Prerequisites:

Module Five completion

Topic Title: Alcohol Effects on the

Driving Task

Topic 4 Time Frame:

55 minutes instructional time

5 minutes discretional break time

24.0 Non-credit course (32 hrs)

29.5 Multiphase course (40 hrs)

31.5 Credit course (56 hrs/semester)

Module Seven, Topic 4 is a required approved program element.

Needed Resources	Instructor Activities	Time Frame
Module Seven, Topic 4.	• Review recommended Module Seven: Topic 4.	15 minutes (prior to lesson)
Transparencies T-7.12, T-7.15, T-7.16, T-7.17, T-7.18, T-7.19, T-7.20, and T-7.21.	 Review Module Seven, Topic 4 Transparencies provided: 	50-60 minutes
1 7.20, and 1 7.21.	T-7.12, "Alcohol Affects the Body" T-7.15, "Alcohol and Space Management"	(8-10 minutes)
	T-7.16, "Impaired Vsion"	(8-10 minutes) (8-10 minutes)
	T-7.17, "Risk Taking Problem"	(8-10 minutes)
	T-7.18, "Chance of Death" T-7.19, "Drugs and Driving"	(8-10 minutes) (8-10 minutes)
	T-7.20, "Marijuana and Driving"	(8-10 minutes)
	T-7.21, "Other Types of Drugs and Driving"	(8-10 minutes)
Student Worksheets W-7.12 and W-7.13.	 Review Worksheets W-7.12, "The Effects of Alcohol on Driving" W-7.13, "Drugs Other than Alcohol and 	5-10 minutes
	the Driving Task"	
Review Fact Sheets F-7.5, F-7.7 and F-7.8.	 Review Fact Sheets F-7.5, "Psychological Effects" F-7.7, "Drugs Other than Alcohol" F-7.8, "Marijuana" 	5-10 minutes
Resources Available:	1 7.6, Margaara	
"Drive Right" Ch. 14,15;	• Module Assessment, MA-7.1.	10-15 minutes
"How to Drive" Ch. 10;		
"Handbook Plus" Ch. 4.1-4.12;		
"License To Drive" Ch. 18;		
"Responsible Driving" Ch. 3,4.		
Module Assessment		

TOPIC ACTIVITIES TOPIC RESOURCES

Knowledge and Skills The Student is expected to:

- (A) understand that the affects of alcohol and other drugs reduce an individual's ability to utilize the space management system;
- (B) describe how alcohol and other drugs alter vision;

The Instructor:

- . Uses Transparency T-7.15, "Alcohol and Space Mangement,"
- to conduct a very brief review of the Space Management System prior to dealing with the effects of alcohol on each of its parts.
 - . Searching For
 - . Evaluating Risks
 - . Executing Decision



Transparency T-7.15 Alcohol and Space Management

- . After completing this brief review, begins to cover the effects of alcohol on each part of the space management system, using Transparency T-7.16, "Impaired Vision," and Fact Sheet F-7.5, "Psychological Effects."
 - . Eye Focus
 - . Double Vision
 - . Distance Judgment
 - . Side Vision
 - . Visual Acuity
 - . Color Distinction



Transparency T-7.16 Impaired Vision





Alcohol Effects on the Driving Task LESSON CONTENT (Instructor Support Information)

This topic deals with a very important aspect of alcohol and traffic safety. It seeks to explain the effects alcohol has on various driving abilities and provides information about the nature of risk persons take when they drink and drive. The approach used will be based on an application of the effects of alcohol on the S.E.E. iT process. Since the S.E.E. iT Space Management System was introduced in Modules 3 and 4, the students should be able to relate well to this concept. Each part of the process will be individually addressed.

Conduct a very brief review of the SEE iT Space Management System prior to dealing with the effects of alcohol on each part, or a (S)IPDE Process or Zone Control System Review.

Use an example such as the following: While driving, a driver observes a bicyclist approaching at the extreme outside edge of the lane. The bicyclist is riding with his head down. Ask the following questions:

- What would the driver be searching for?
- How would the driver evaluate the problem?
- What prediction would the driver make about the bicyclist's actions and what decision will the driver make to change speed or position?
 - What execution (action) will the driver take?

Cover the effects of alcohol on each part of the space management system.

Searching/Identifying - The prime sense humans use in driving is vision

Eye Focus - The human eye has the ability to change focus rapidly from objects close to the viewer to objects far away

Double Vision - Although humans have two eyes, each eye must work in conjunction with the other

Distance Judgment - A driver must be able to determine how far objects are from his or her path of travel

Side Vision - Sometimes called peripheral vision, this ability is critical to the driving task

Visual Acuity - This is sharpness of vision

Color Distinction - Drivers get much information from different colors in the traffic scene

Night Vision - Humans have limited night sight at best, and alcohol reduces this ability further



TOPIC ACTIVITIES TOPIC RESOURCES

Knowledge and Skills The Student is expected to:

(C) relate risk taking to the use of alcohol and other drugs; and

The Instructor:

. Uses Transparency T-7.12, "Alcohol Affects the Body," to review the affects of alcohol. The effects of alcohol on the brain have been covered previously. Therefore, the in-

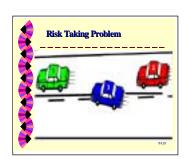
structor should only make a passing reference to the basic ways alcohol affects the brain.



Transparency T-7.12 Alcohol Affects the Body

- . Concentrates upon the likelihood of making inaccurate predictions because of alcohol's impairment of thinking. This may be done by using examples of the evaluation part of SEE iT. For example, ask the class:
- If the driver is approaching an intersection with a green light facing him or her, give reasons why the driver cannot be sure drivers approaching the red light from the left or right will stop. Follow this by asking why a person who has been drinking may fail to predict accurately in this situation (failure to concentrate and accurately judge action of other vehicles).
- Sets up a situation at an intersection where there are a number of elements about which a driver must make a prediction (bus, bicycle, pedestrian, dog, police car, motorcyclists, etc.).
- . Uses Transparency T-7.17, "Risk Taking Problem," to help explain why a driver will decide to take a greater risk after drinking.
 - . Evaluation process
 - . Handling multiple tasks





Transparency T-7.17 Risk Taking Problem



Alcohol Effects on the Driving Task LESSON CONTENT (Instructor Support Information)

The effects of alcohol on the brain have been covered previously. Therefore, the instructor should only make a passing reference to the basic ways alcohol affects the brain.

Based on what has been identified in the search process, drivers must evaluate what others will do and what they should do. The brain must process the information identified and make accurate predictions.

It is often difficult to determine in the evaluation phase where "predict" stops and "decide" starts. Both involve the brain and thinking process, and experimentation has shown that levels of alcohol as low as .03 reduce these abilities. One aspect of this process is the willingness of a driver to take risks.

Ask the class why having multiple predictions to make would cause more problems for a drinking driver than a sober driver (the mind will have difficulty sorting out and prioritizing a number of elements).

The instructor should use Transparency T-7.15 to help explain why a driver will decide to take a greater risk after drinking.

The red car (2) in the scene is traveling at 45 mph. Why might the driver of the blue car (3) risk passing here, even if sober? Why would the driver of the blue car be more likely to risk a pass if alcohol had been consumed? Alcohol tends to produce more aggressive behavior and, thus, poor decisions.

It is possible for a driver to search and evaluate correctly, yet fail to execute properly. While alcohol affects thinking and judgment first, it also affects muscular actions, whether in the eyes or arms and legs. After drinking, drivers tend to lose fine muscle control. This is often shown by failure to maintain their vehicles in a straight line (weaving). When they brake, they brake too hard or not enough. When they steer, they may steer too much or fail to return the wheel properly.

This is demonstrated in the video tape "The Effects of Alcohol on Driving" which will be shown later as part of this topic.

Sum up the effects of alcohol on the SEE iT system by briefly reviewing each area and asking questions about the effects of alcohol on each of the parts of the Space Management system.

The remainder of this topic involves the probability of being in a crash at various



TOPIC ACTIVITIES TOPIC RESOURCES

Knowledge and Skills The Student is expected to:

(D) associate the risk of death to the level of blood alcohol concentration.

The Instructor:

. Uses Transparency T-7.18, "Chance of Death," to explain the increased likelihood of

driver death as blood alcohol concentration increases. This comparison of single vehicle collisions demonstrates the level of risk regard-



Transparency T-7.18
Chance of Death

The Effects of Alcohol on Drivin

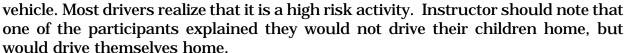
ing death in a collision with alcohol compared to a sober driver.

. Shows the optional video, "The Effects of Alcohol on **Driving.**" This video shows the results of a study using actual vehicles.

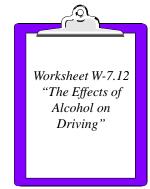
. Uses Worksheet W-7.12, "The Effects of Alcohol on Driving," as a guide to the video and as a note-taking resource for the student.

(Note: There are several opportunities to use this video, but it is only used once during the Module. The instructor can choose the time that is most suitable to topic and schedule.)

- **. Uses the attached evaluation questions as a quiz for this topical area** or as a question bank for a Module evaluation. The activities may be used for assessment purposes as needed.
- . **Assigns a writing project as homework** or as a combination of class and home activities. Asks the students to write a short paper about why they think drivers use alcohol and drive a motor



. Continues BTW-7.2 as this Module is completed.







Alcohol Effects on the Driving Task LESSON CONTENT (Instructor Support Information)

BACs and experimentation involving drinking drivers. The instructor should note that even low levels (.015–.049, or 1-2 drinks for some people) produce increased risk (Mayhem, 1983). This is an example of the rationale used for the implementation of "zero-tolerance" laws for young people.

Much research has been conducted on loss of driving ability due to consumption of alcohol. Most such experiments involve the use of driving simulators or actual cars driven in an off-street area.

Before drinking, drivers are tested in a variety of situations and maneuvers to determine their level of ability. Each driver then consumes an alcoholic beverage of his/her choice until a predetermined BAC is reached, then retested. Following the retest, more alcohol is consumed until a person reaches higher levels, and then another test is conducted. The performances at the various BACs are recorded and compared to the sober performance.

The instructor should show the video "The Effects of Alcohol on Driving." Use Worksheet W-7.12 as a guide to this video and as a note-taking resource for the student. This video shows the results of a study using actual vehicles. After showing the video, the instructor should ask the class to recall specific problems the drivers experienced which are related to ideas presented in this topic. Examples include:

- · Overreacting in skid situations
- Using braking instead of steering
- · Increasing their speed during the accident simulator exercise
- Misjudging the location of the car in its lane

Other issues to discuss as a lead-in to the writing assignment and culmination of the lesson include:

- Are students able to see signs of intoxication exhibited by the experimental group?
- Why do students think the participants were unable to determine their driving skills prior to getting into the vehicle?

Note that all the participants in the experimental group showed skill deterioration. It is concerning to realize that none of the drivers scored above 90 on the pretest. The resulting 20-30% drop in skill performance translates into scores that are inadequate to pass the evaluation.



TOPIC ACTIVITIES TOPIC RESOURCES

Knowledge and Skills The Student is expected to:

(E) describe the psychological and physiological effects of legal and illegal drugs other than alcohol and driving; and

The Instructor:

. **Asks the class,** "What drug effects do you know of that could impair a person's ability to drive?"

Drugs and Driving



Transparency T-7.19
Drugs and Driving

. After the students have supplied answers, uses Transparency T-7.19, "Drugs and Driving," to cover possible negative effects of various drugs on abilities related to driving (see Fact Sheet F-7.7, Drugs Other than Alcohol).





Transparency T-7.20 Marijuana and Driving

. Uses Transparency T-7.20, "Marijuana and Driving," and the accompanying support materials to cover marijuana effects which can impair driving (see Fact Sheet F-7.8 "Marijuana").





Alcohol Effects on the Driving Task LESSON CONTENT (Instructor Support Information)

Drugs Other Than Alcohol and the Driving Task

This topic deals with a very important aspect of the driving task, as many students lack knowledge about drugs other than alcohol and their effect on driving. This topic is also limited in scope due to time, and should be dealt with more fully in health education courses. While limited research on drug effects on driving has been conducted, specific drug effects on humans are known. These have the potential to negatively affect driving.

Ask the class, "What drug effects do you know of which could impair a person's ability to drive?" Note: The drugs given are examples only and it is possible that many other drugs may cause adverse effects (see Fact Sheet F-7.7).

Perception - This involves giving meaning to human senses of vision, hearing, etc. **Judgment** - Accurate decisions are based on a driver's ability to assess and judge a given driving situation

Coordination - Drivers must coordinate hand, eye and foot movements to successfully operate a motor vehicle

Vision - As has been previously stated, vision is the key to the driving process and safe driving

Mood - A driver's mood may cause unnecessary risk taking.

The accompanying support materials cover marijuana effects which can impair driving (see Fact Sheet F-7.8).

Marijuana is the drug most often found in drivers involved in crashes (after alcohol) and because more research data is available on marijuana than other drugs, specific attention is provided. Effects of 300 µg/kg include:

Loss of tracking ability - This is the ability to maintain the vehicle in a given line **Following Distance** - Both following at too close or too great a distance can cause problems

Vigilance - Not remaining attentive to the driving task can cause a driver to follow too closely, drift into another lane, etc.

Divided Attention - Driving is a task which requires constant but changing attention to traffic, roadway and weather conditions, passengers, gauges, etc.



TOPIC ACTIVITIES TOPIC RESOURCES

Knowledge and Skills The Student is expected to:

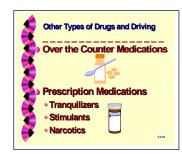
(F) describe the synergistic effects of drugs including alcohol.

The Instructor:

. Uses Transparency T-7.21, "Other Types of Drugs and Driving," and the Worksheet W-7.13, "Drugs Other than Alcohol and

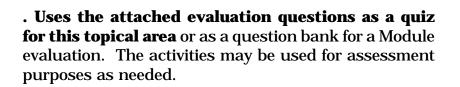
Driving Tasks" as accompanying support materials to cover other drug and synergistic effects which can impair driving.

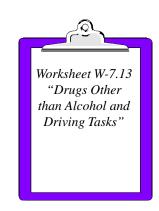
- .Over the Counter
- . Prescription



Transparency T-7.21 Other Types of Drugs and Driving

. Summarizes this segment by leading a discussion on the synergistic effects of drugs or show the video, "Medical Aspects of Mind Altering Drugs."







. **Completes BTW-7.2** as this Module is completed.





Alcohol Effects on the Driving Task LESSON CONTENT (Instructor Support Information)

Use Transparency T-7.27 "Other Drugs and Driving" to discuss other drugs and their impact on the ability to drive a car.

Over-the-Counter Medications. Any drug can affect driving abilities. It makes no difference whether it is legal, illegal, or over-the-counter. The instructor should note that over-the-counter drugs may contain alcohol or other substances which can cause reduced driving ability by producing drowsiness and fatigue. Because there are over 300,000 such drugs, it is difficult to know their effects without reading any warnings carefully.

Prescription Medications. The instructor should use the accompanying narrative to explain driving task effects of such drugs.

Tranquilizers. These agents, including Valium, Halcyon, and Librium, have effects similar to those of alcohol, and this can cause driving task misjudgments.

Stimulants. While there may appear to be an initial benefit for drivers, negative effects may include hallucinations, paranoia, and over-reliance to ward off fatigue.

Narcotics. Often used as pain relievers, narcotic drugs dull the senses and may produce inattention to driving.

Instructor should summarize this segment by leading a discussion on the synergistic effects of drugs or show the video, "Medical Aspects of Mind Altering Drugs."

The key thing to remember is that any change a drug produces may also cause a lessening of driving ability. Drugs should never be mixed with alcohol because of a The key thing to remember is that any change a drug produces may also cause a lessening of driving ability. Drugs should never be mixed with alcohol because of a possible synergistic effect (chemical reaction between two or more drugs which may produce a reaction greater than either drug alone).

- Over-the-Counter Medications
- Prescription Medications
- Tranquilizers
- Stimulants
 - Narcotics

The videotape entitled, "Medical Aspects of Mind Altering Drugs" is recommended, where available. This 30-minute video is long, but a valuable summary tool for this section of Module 7.



Module Seven Topic 4 Resources

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Module 7, Topic 4 Transparencies:
 T-7.12, Alcohol Affects the Body;
 T-7.15, Alcohol & Space Management;
 T-7.16, Impaired Vision;
 T-7.17, Risk Taking Problem;
 T-7.18, Chance of Death;
 T-7.19, Drugs and Driving;
 T-7.20, Marijuana and Driving;
 T-7.21, Other Types of Drugs and Driving.
Worksheet:
 W-7.12, The Effects of Alcohol on Driving;
 W-7.13, Drugs Other than Alcohol and Driving Task.
Fact Sheet:
 F-7.5, Psychological Effects;
 F-7.7, Drugs Other than Alcohol;
 F-7.8, Marijuana.
Resources:
 "Drive Right" Ch. 15;
 "Handbook Plus" Ch. 4:
 "How To Drive" Ch. 4:
 "License To Drive" Ch. 18;
 "Responsible Driving" Ch. 3.
Video:
 "The Effects of Alcohol on Driving"
Module Assessment:
 MA-7.1
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Module Seven Prerequisites:

Module Five completion

Topic 5 Time Frame:

55 minutes instructional time

5 minutes discretional break time

Topic Title: Dealing with Driver Fatigue

25.0 Non-credit course (32 hrs)

31.0 Multiphase course (40 hrs)

33.0 Credit course (56 hrs/semester)

Module Seven, Topic 5 is a required approved program element.

Needed Resources	Instructor Activities	Time Frame
Module Seven, Topic 5.	• Review recommended Module Seven: Topic 5.	15 minutes (prior to lesson)
Transparencies T-7.22, T-7.23, T-7.24, T-7.25, T-7.26, T-7.27, and T-7.28.	 Review Module Seven, Topic 5 Transparencies provided: T-7.22, "Definition of Fatigue" T-7.23, "Causes of Fatigue" T-7.24, "Physical Fatigue Symptoms" T-7.25, "Physical Fatigue Symptoms" T-7.26, "Mental Fatigue Symptoms" T-7.27, "Delaying Fatigue Onset" T-7.28, "Delaying Fatigue Onset" 	50-60 minutes) (8-10 minutes) (8-10 minutes) (8-10 minutes) (8-10 minutes) (8-10 minutes) (8-10 minutes)
Student Worksheet W-7.14	 Review Worksheet W-7.14, Dealing with Driver Fatigue 	5-10 minutes
Resources Available: "Drive Right" Ch. 14,15; "How to Drive" Ch. 10; "Handbook Plus" Ch. 4.1-4.12; "License To Drive" Ch. 18; "Responsible Driving" Ch. 3,4. Module Assessment	Module Assessment, MA-7.1.	10-15 minutes

TOPIC ACTIVITIES TOPIC RESOURCES

Knowledge and Skills The Student is expected to:

(A) describe the causes and symptoms of fatigue;

The Instructor:

- . Uses Transparency T-7.22, "Definiton of Fatigue," to provide a base definition for fatigue.
- . State following a period of mental or bodily activity
- . Characterized by a lessened capacity for

work and reduced efficiency of accomplishment

- **. Distributes Worksheet W-7.14,** "Dealing with Driver Fatigue," as a classroom activity or as a homework assignment when completing this topic.
- . Uses Transparency T-7.23, "Causes of Fatigue," to discuss typical causes of fatigue in youth.
 - Extended Physical Activity
 - Disruption of Circadian Rhythm
 - Sleep period danger: 12 a.m to 6 a.m
 - Sleep period danger: 1 p.m to 3 p.m
 - Emotional Fatigue
 - Disease-induced Fatigue
- . Uses Transparency T-7.24, "Physical Fatigue Symptoms" (Part 1), to discuss physical symptoms of fatigue.
 - Tired Muscles
 - General Body Sensation of Tiredness
 - Sleepiness
 - · A Tired Feeling in Head



Transparency T-7.22 Definition of Fatgue



Transparency T-7.23
Causes of Fatigue



Transparency T-7.24 Physical Symptoms of Fatgue



Dealing with Driver Fatigue LESSON CONTENT (Instructor Support Information)

Transparency T-7.22 Definition of Fatigue

Fatigue is that state following a period of mental or bodily activity characterized by a lessened capacity for work and reduced efficiency of accomplishment.

Keep in mind that youthful drivers are a high risk for fatigue-related crashes due to high level of activities in a teen's life.

Transparency T-7.23 Causes of Fatigue

- · Extended Physical Activity
- Disruption of Circadian Rhythm
- Sleep period danger: 12 a.m to 6 a.m
- Sleep period danger: 1 p.m to 3 p.m
- Emotional Fatigue
- · Disease-induced Fatigue

Transparency T-7.24 Physical Fatigue Symptoms (Part 1)

- Tired Muscles
- General Body Sensation of Tiredness
- Sleepiness
- · A Tired Feeling in Head



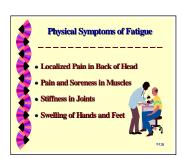
TOPIC ACTIVITIES TOPIC RESOURCES

Knowledge and Skills The Student is expected to:

- (A) describe the causes and symptoms of fatigue;
- (B) explain the dangers of fatigue in relation to the driving task; and

The Instructor:

- . Uses Transparency T-7.25, "Physical Fatigue Symptoms" (Part 2) to continue discussion of physical symptoms of fatigue.
- Localized Pain in Back of Head
- Pain and Soreness in Muscles
- Stiffness in Joints
- Swelling of Hands and Feet



Transparency T-7.25 Physical Symptoms

- . Uses Transparency T-7.26, "Mental Fatigue Symptoms," to discuss mental symptoms of fatigue.
 - Inability to Keep Fixed Attention
 - Impaired Memory
 - Failure To Grasp New Ideas
 - · Difficulty/Slowness in Reasoning
- . Uses Transparency T-7.27, "Delaying Fatigue Onset," to discuss the delay of fatigue onset.
 - Avoid Long Drives Unless Fit
 - Avoid Leaning Forward
 - Avoid Driving Long Stretches
 - Keep Your Eyes Moving
 - Let In Fresh Air



Transparency T-7.26
Mental Symptoms



Transparency T-7.27
Delaying Onset



Dealing with Driver Fatigue LESSON CONTENT (Instructor Support Information)

Transparency T-7.25 Physical Fatigue Symptoms (Part 2)

- · Localized Pain in Back of Head
- · Pain and Soreness in Muscles
- Stiffness in Joints
- Swelling of Hands and Feet

Transparency T-7.26 Mental Fatigue Symptoms

- Inability to Keep Fixed Attention
- Impaired Memory
- Failure To Grasp New Ideas
- · Difficulty/Slowness in Reasoning

Transparency T-7.27 Delaying Fatigue Onset

- Avoid Long Drives Unless Fit
- · Avoid Leaning Forward
- Avoid Driving Long Stretches
- Keep Your Eyes Moving
- · Let In Fresh Air



TOPIC ACTIVITIES TOPIC RESOURCES

Knowledge and Skills The Student is expected to:

(C) formulate strategies to avoid fatigue especially in application to the driving task.

The Instructor:

. Uses Transparency T-7.28, "Delaying Fatigue Onset," to continue discussion of delaying fatigue onset.

Delaying Fatigue Symptoms



Transparency T-7.28 Delaying Symptoms

. Uses the brochure, "Wake Up!" AAA Foundation, to introduce the concept of fatigue factors related to driving. Uses the pretest found on page three or the transparency provided, to introduce concepts to the class.

. Uses group discussion techniques to stimulate thought about each of these issues.

F Coffee Overcomes the Effects of Drowsiness.

F I Can Tell When I'm Going To Sleep.

F I'm A Safe Driver So It Doesn't Matter If I'm Sleepy.

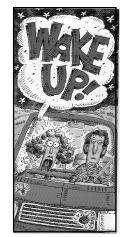
F I Can't Take Naps.

F I Get Plenty of Sleep.

T Being Sleepy Makes You Misperceive Things.

F Young People Need Less Sleep.

- . Reviews each concept area and ask for relationships to individual experiences.
- **. Uses the attached evaluation questions as a quiz for this topical area** or as a question bank for a Module evaluation. The activities may be used for assessment purposes as needed.
- **. Completes BTW-7.2** as this Module is completed.







Dealing with Driver Fatigue LESSON CONTENT (Instructor Support Information)

Transparency T-7.28 Delaying Fatigue Onset

- · Change Drivers at Regular Intervals
- Wear Your Safety Belt
- Avoid Getting Angry
- Proper Adjustment of HVAC

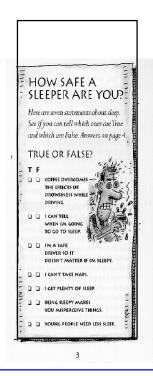
Use the brochure, "Wake Up!" AAA Foundation, to introduce the concept of fatigue factors related to driving. Use the pretest found on page three or the transparency provided, to introduce concepts to the class.

Use group discussion techniques to stimulate thought about each of these issues.

- **F** Coffee Overcomes the Effects of Drowsiness.
- F I Can Tell When I'm Going To Sleep.
- **F** I'm A Safe Driver So It Doesn't Matter If I'm Sleepy.
- F I Can't Take Naps.
- **F** I Get Plenty of Sleep.
- T Being Sleepy Makes You Misperceive Things.
- F Young People Need Less Sleep.

Review each concept area and ask for relationships to individual experiences.





Texas Essential Knowledge and Skills: § 110.42. English I (b) (4) The student uses writing as a tool for learning. (B) to discover, organize, and support what is known and what needs to be learned. (14) The student listens attentively for a variety of purposes. (A) focus attention on speaker's message.



Module Seven Topic 5 Resources

Transparencies:

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T-7.22, Definition of Fatigue;
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T-7.23, Causes of Fatigue;

T-7.24, Physical Fatigue Symptoms;

T-7.25, Physical Fatigue Symptoms;

T-7.26, Mental Fatigue Symptoms;

T-7.27, Delaying Fatigue Onset;

T-7.28, Delaying Fatigue Onset.

Worksheet:

W-7.14, Dealing with Driver Fatigue.

Resources:

Wake Up! Brochure;

"Drive Right" Ch. 14;

"Handbook Plus" Ch. 4;

"How To Drive" Ch. 4;

"License To Drive" Ch. 3;

"Responsible Driving" Ch. 3.

Module Assessment:

MA-7.1

Module Seven Prerequisites:

Module Five completion

Topic 6 Time Frame:

55 minutes instructional time

5 minutes discretional break time

Topic Title: Preventing Road Rage

26.0 Non-credit course (32 hrs)

32.0 Multiphase course (40 hrs)

34.0 Credit course (56 hrs/semester)

Instructor Activities • Review recommended Module Seven:	Time Frame
Topic 6.	15 minutes (prior to lesson)
Review Module Seven, Topic 6 Transpar- opcies provided:	50-60 minutes
T-7.29, "Formula forRoad Rage"	(2-3 minutes)
	(2-3 minutes)
T-7.33, "Do you Drive Aggressively?"	(2-3 minutes)
T-7.34, "Do you Drive Aggressively?"	(2-3 minutes)
	(2-3 minutes) (2-3 minutes)
	(2-3 minutes)
	(2-3 minutes)
	(2-3 minutes)
T-7.43, Anger Managment"	(2-3 minutes)
T-7.44, "Managing Anger"	(2-3 minutes)
Review Worksheets	
W-7.15, Road Rage Factors	5-10 minutes
Review Fact Sheets	5-10 minutes
• Module Assessment, MA-7.1.	10-15 minutes
	encies provided: T-7.29, "Formula forRoad Rage" T-7.30, "Three Types of Aggressive Driving" T-7.31, "Driving Errors May Include" T-7.32, "Other Driving Errors May Include" T-7.33, "Do you Drive Aggressively?" T-7.34, "Do you Drive Aggressively?" T-7.35, "Do you Drive Aggressively?" T-7.36, "Do you Drive Aggressively?" T-7.37, "Do you Drive Aggressively?" T-7.38, "Irrational Actins While Driving" T-7.39, "Self-Imposed Anxiety" T-7.40, "Dangerous Maneuvering" T-7.41, "Anger Containment Techniques" T-7.42, "Anger Containment Techniques" T-7.43, Anger Managment" T-7.44, "Managing Anger" • Review Worksheets W-7.15, Road Rage Factors

TOPIC ACTIVITIES TOPIC RESOURCES

Knowledge and Skills The Student is expected to:

- (A) list the dangers or aggressive driving;
- (B) identify the characteristics of an aggressive driver;
- (C) list common errors made by aggressive drivers; and

The Instructor:

- . Uses Transparency T-7.29, "Formula for Road Rage," to explain a basic formula for road rage engagement.
- Cultural Norms of Disrespect
- Condoning Hostility
- More Cars
- Less Space
- More Driver Interactions
- Aggressive Driving
- Road Rage Battles
- . Uses Transparency T-7.30, "Three Types of Aggressive Drivers," to discuss basic types of aggressive drivers.
- Quiet Road Rage: complaining, rushing, competing, resisting.
- **Verbal Road Rage:** yelling, cussing, staring, honking, insulting.
- **Epic Road Rage:** cutting off, blocking, chasing, fighting, shooting.



Transparency T-7.29 Formula for Road Rage



Transparency T-7.30 Types of Agressive Drivers

- . Uses Transparency T-7.31, "Driving Errors May Include...," to discuss types of errors.
 - Braking suddenly to scare a tailgater.
 - Exceeding speed limits by more than 10 mph.
 - Changing lanes without signaling.
 - Cruising in the passing lane.
 - Criticizing other drivers.



Transparency T-7.31 Driver Errors May Include



Preventing Road Rage **LESSON CONTENT (Instructor Support Information)**

Transparency T-7.29 Formula for Road Rage

- Cultural Norms of Disrespect
- Condoning Hostility
- More Cars
- Less Space
- More Driver Interactions
- Aggressive Driving
- Road Rage Battles

Transparency T-7.30 Three Types of Aggressive Drivers

- Quiet Road Rage: complaining, rushing, competing, resisting
- Verbal Road Rage: yelling, cussing, staring, honking, insulting
- Epic Road Rage: cutting off, blocking, chasing, fighting, shooting

Transparency T-7.31, Driving Errors May Include...

- Braking suddenly to scare a tailgater.
- Exceeding speed limits by more than 10 mph.
- Changing lanes without signaling.
- Cruising in the passing lane.
- Criticizing other drivers.



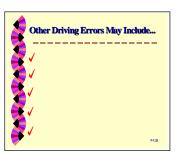
GRADE: HS MODULE: SEVEN TOPIC: 6
TOPIC ACTIVITIES TOPIC RESOURCES

Knowledge and SkillsThe Student is expected to:

(C) list common errors made by aggressive drivers; and

The Instructor:

- . Uses Transparency T-7.32, "Other Driving Errors May Include...," to list additional errors.
 - Ask students for additional errors they have observed.



Transparency T-7.32 Other Driving Errors May Include...

- Other errors they have made.
- . Uses Transparency T-7.33, "Do You Drive Aggressively?," (Part 1) for evaluating space management skills.
 - Learning how to evaluate your driving space area is crucial.
 - Learning how to adjust your driving space area is critical.



Transparency T-7.33
Do You Drive Aggressively?

. Uses Transparency, T-7.34 "Do You Drive Aggressively?," (Part 2) to discuss the "Rush In" concept.

The "Rush In" Area.

- Constant rushing and lane jumping is your style.
- Others are just in your way. Get ahead.
- Ignore road signs and regulations. They're for other drivers.
- Driving with distraction, low alertness, inattention.



Transparency T-7.34
Do You Drive
Aggressively?



Preventing Road Rage LESSON CONTENT (Instructor Support Information)

Transparency T-7.32 Driving Errors May Include...

- Ask students for additional errors they have observed.
- Ask students some errors made that made others upset.

Transparency T-7.33 Do You Drive Aggressively? (Part 1)

Learning how to evaluate your driving space area is crucial.

Transparency T-7.34 Do You Drive Aggressively? (Part 2)

The "Rush In" Area

- Constant rushing and lane jumping is your style.
- · Others are just in your way. Get ahead.
- Ignore road signs and regulations. They're for other drivers.
- Driving with distraction, low alertness, inattention.



TOPIC ACTIVITIES TOPIC RESOURCES

Knowledge and Skills The Student is expected to:

(C) list common errors made by aggressive drivers; and

The Instructor:

gression" concepts.

- . Uses Transparency T-7.35, "Do You Drive Aggressively?," (Part 3) to discuss the "Total Ag-
 - Ridiculing others.
 - Closing gap.
 - Give the "look" to show your disapproval.
 - Speeding past.



Transparency T-7.35
Do You Drive Aggressively?

- . Uses Transparency T-7.36, "Do You Drive Aggressively?" (Part 4) to continue the "Total Aggression" concept.
 - Prevent others from passing you.
 - Tailgating to pressure a driver to go faster or get out of your way.
 - Fantasizing physical violence.
 - Honking, yelling through the window.
 - Making visible insulting gestures.
- . Uses Transparency T-7.37, "Do You Drive Aggressively?" (Part 5) to discuss the "Violence" concepts.
 - Carrying a weapon just in case... .
 - Deliberately bumping or ramming.
 - Trying to run a car off the road to punish.
 - Getting out of the car, beating or battering someone.
 - Trying to run someone down.
 - Shooting at another car.
 - Thoughts of killing someone.



Transparency T-7.36
Do You Drive Aggressively?



Transparency T-7.37 Do You Drive Aggressively?



Preventing Road Rage LESSON CONTENT (Instructor Support Information)

Transparency T-7.35 Do You Drive Aggressively? (Part 3)

The "Total Aggression" Area

- Constantly ridiculing and criticizing other drivers to self or passengers.
- · Closing gap to deny entry into your lane.
- Give the "look" to show your disapproval.
- Speeding past another car, revving engine.

Transparency T-7.36 Do You Drive Aggressively? (Part 4)

The "Total Aggression" Area

- Prevent others from passing you.
- · Tailgating to pressure a driver to go faster or get out of your way.
- Fantasizing physical violence.
- · Honking, yelling through the window.
- Making visible insulting gestures.

Transparency T-7.37 Do You Drive Aggressively? (Part 5)

The "Violence" Area

- Carrying a weapon just in case... .
- Deliberately bumping or ramming.
- Trying to run a car off the road to punish.
- Getting out of the car, beating or battering someone.
- Trying to run someone down.
- · Shooting at another car.
- · Thoughts of killing someone.



TOPIC ACTIVITIES TOPIC RESOURCES

Knowledge and SkillsThe Student is expected to:

(C) list common errors made by aggressive drivers; and

The Instructor:

. Uses Transparency T-7.38, "Irrational Actions While Driving,"

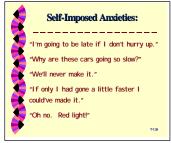
to discuss how anger is the basis for rage. Anger is controlled, rage is uncontrolled anger.

- Creates Anger
- Potential for Rage



Transparency T-7.38 Irrational Actions

- . Uses Transparency T-7.39, "Self-Imposed Anxieties," to explain the basis for driver anxieties.
 - "I'm going to be late if I don't hurry up.
 - "Why are these cars going so slow?"
 - "We'll never make it."
 - "If only I had gone a little faster I could've made it."
 - "Oh no. Red light!"



Transparency T-7.39 Formula for Road Rage

- . Uses Transparency T-7.40, "Dangerous Maneuvering," to explain the basis for danger.
 - "All of these cars are trying to squeeze in!"
 - "I have a lead foot."
 - "Ha! I'll speed up and show him a lesson!"
 - "Everyone else is speeding!"
 - "Let's tailgate this car in front of me."
 - "He's driving too slow!"



Transparency T-7.40 Formula for Road Rage



Preventing Road Rage LESSON CONTENT (Instructor Support Information)

Transparency T-7.38 Irrational Actions While Driving

- Creates Anger
- Potential for Rage

Transparency T-7.39 Self-Imposed Anxieties

- "I'm going to be late if I don't hurry up.
- "Why are these cars going so slow?"
- "We'll never make it."
- "If only I had gone a little faster I could've made it."
- "Oh no. Red light!"

Transparency T-7.40 Dangerous Maneuvering

- "All of these cars are trying to squeeze in!"
- "I have a lead foot."
- "Ha! I'll speed up and show him a lesson!"
- "Everyone else is speeding!"
- · "Let's tailgate this car in front of me."
- "He's driving too slow!"



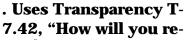
TOPIC ACTIVITIES TOPIC RESOURCES

Knowledge and SkillsThe Student is expected to:

(D) develop strategies for responding to aggressive drivers.

The Instructor:

- . Uses Transparency T-7.41, "Anger Containment Techniques," to discuss anger management.
 - Don't respond.
 - Don't engage.
 - Don't up the ante.
 - Swallow your pride.
 - Choose the road "less traveled."



spond?," to introduce video and group discussion.

- . Shows video from AAA Foundation entitled "Preventing Road Rage" or "Don't Bug Out!" from The National Road and Safety Foundation.
- . **Develops a small group discussion** or uses portions of the video entitled, "Preventing Road Rage," AAA Foundation as method to identify driver errors associated with collisions and the response of other drivers who cause problem situations by using Worksheet W-7.15, "Road Rage Factors."
- ... Involve groups of four to six participants in determining the types of driver errors that they have experienced and any unusual responses to the problem by other drivers.
- ... Use the handout sheet to have each group report on critical driver errors and the situations discussed.
- ... Use the handout sheet to have each participant identify at least two driver errors that may produce a road rage incident.

Identifies the types of driver errors and the recommended response as identified by each small group or in the video provided by using Worksheet W-7.15, "Road Rage Factors." and pamphlet from AAA Foundation entitled, "Preventing Road Rage"



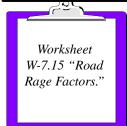
Transparency T-7.41 Anger Containment



Transparency T-7.42 Anger Containment









Preventing Road Rage LESSON CONTENT (Instructor Support Information)

Transparency T-7.41 Anger Containment Techniques

- Don't respond.
- Don't engage.
- Don't up the ante.
- Swallow your pride.
- Choose the road "less traveled."

Transparency T-7.42 How will you respond? Introduce video for preventing road rage

Video from AAA Foundation, "Preventing Road Rage"

Develop a small group discussion or use portions of the video entitled, "Preventing Road Rage" AAA Foundation as method to identify driver errors associated with collisions and the response of other drivers who cause problem situations.

- ... Involve groups of four to six participants in determining the types of driver errors that they have experienced and any unusual responses to the problem by other drivers.
- ... Use the Worksheet W-7.14 sheet to have each group report on critical driver errors and the situations discussed.
- ... Use the Worksheet W-7.15 to have each participant identify at least two driver errors that may produce a road rage incident.

Identify the types of driver errors and the recommended response as identified by each small group or in the video provided.

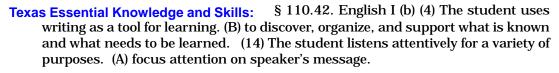
Aggressive driving curriculum and materials are available from The National Road and Safety Foundation, Inc. Contact at The National Road ans Safety Foundations, Inc. at www.nationalroadsafety.org, 212-837-4938, or email at nrsf@compuserve.com, and found at 3 New York Plaza, NY,

Out!" logo.

This pamphlet is available from the AAA Foundation, Inc. entitled, "Preventing Road Rage"

NY 10004. T-shirts, hats, stickers are available with the "Don't Bug







TOPIC ACTIVITIES TOPIC RESOURCES

Knowledge and Skills The Student is expected to:

(D) develop strategies for responding to aggressive drivers.

The Instructor:

- . Uses Transparency T-7.43 "Anger Management," to discuss reac-
- tion to problems.
 - Making errors.
 - Responding to errors.
 - Controlling emotions .
 - Response to problems.



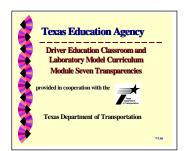
Transparency T-7.43
Anger Management

- . **Uses Transparency T-7.44, "Managing Anger,"** to discuss manner of approach to problem situations.
 - Act Tolerant.
 - Be Forgiving.
 - Be Helpful.



Transparency T-7.44
Managing Anger

. May use the attached evaluation questions as a quiz for this topical area or as a question bank for a Module evaluation. The activities may be used for assessment purposes as needed.



Transparency T-7.45 Closing Transparency

Complete BTW-7.2 as this Module is completed.





Preventing Road Rage LESSON CONTENT (Instructor Support Information)

Transparency T-7.43 Anger Management

- Making errors
- Responding to errors
- Controlling emotions
- Response to problems

Transparency T-7.44 Managing Anger

- Act Tolerant
- Be Forgiving
- Be Helpful

The instructor may use the attached evaluation questions as a quiz for this topical area or as a question bank for a Module evaluation. The activities may be used for assessment purposes as needed.

Complete BTW-7.1 as this Module is completed.



Module Seven Topic 6 Resources

Transparencies:

- T-7.29, Formula for Road Rage;
- T-7.30, Three Types of Aggressive Driving;
- T-7.31, Driving Errors May Include...;
- T-7.32, Other Driving Errors May Include;
- T-7.33, Do You Drive Aggressively?;
- T-7.34, Do You Drive Aggressively?;
- T-7.35, Do You Drive Aggressively?;
- T-7.36, Do You Drive Aggressively?;
- T-7.37, Do You Drive Aggressively?;
- T-7.38, Irrational Actions While Driving;
- T-7.39, Self-Imposed Anxieties;
- T-7.40, Dangerous Maneuvering;
- T-7.41, Anger Containment Techniques;
- T-7.42, Anger Containment Techniques;
- T-7.43, Anger Management;
- T-7.44, Managing Anger;
- T-7.45, Texas Education Agency.

Worksheet:

W-7.15, Preventing Road Rage.

Resources:

- "Preventing Road Rage" Brochure;
- "Drive Right" Ch. 9/14;
- "Handbook Plus" Ch. 4;
- "How To Drive" Ch. 4;
- "License To Drive" Ch. 3;
- "Responsible Driving" Ch. 3.

Video:

- "Don't Bug Out!;"
- "Preventing Road Rage."

Module Assessment:

MA-7.1

Module Seven Prerequisites:

Minimum age for entry into program

Topic Time Frame:

- 60 minutes instructional time
- 0 minutes discretional break time

Topic Title: Parent Supplement

- 25.0 Non-credit course (32 hrs)
- 31.0 Multiphase course (40 hrs)
- 35.0 Credit course (56 hrs/semester)

Module Seven, Parent Supplement is not a required program element.

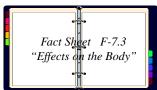
Needed Resources	Instructor Activities	Time Frame	
Fact Sheets F-7.1, F-7.3, and F-7.4, F-7.5, F-7.6, F-7.7, and F-	Review video segments (optional use)		
7.8	Review Fact Sheets		
Student Worksheets W-7.1. W-7.2, W-7.3, W-7.4, W-7.5, W-7.7, W-7.8, W-7.9, W-7.10, W-7.11, W-7.12, W-7.12, W-7.13, W-7.13 and W-7.15.	F-7.1 "Factors Influencing Teenage Drinking" F-7.3 "Effects on the Body" F-7.4 "Alcohol Affects Persons Differently" F-7.5 "Psychological Effects" F-7.6, "Psychological Effects" F-7.7 "Drugs Other than Alcohol" F-7.8 "Marijuana"		
Video, "Driving Drunk: Your Choice" NCADD	Review Worksheets		
Video, "The Effects of Alcohol on Driving" CADES, TAMU	W-7.1 "Driving Drunk: Your Choice" W-7.2 "Ghost Out Project"		
Video, "Teaching Your Teens to Drive," AAA	W-7.3 "Mock Car Crash Project" W-7.4 "Nature of Alcohol-related Problem: Crash Rates"		
Video, "Medical Aspects of M.A.D.S." AMA	W-7.5 "Nature of Alcohol-related Problems: What Is A Drink" W-7.7 "Alcohol Content of a Drink" W-7.8 "Alcohol Comparisons"		
Resources Available:	W-7.9 "Physiological Effects of Alcohol on Driv-		
"Drive Right" Ch. 14,15;	ing" W-7.10 "BAC Calculator Exercises"		
"How to Drive" Ch. 10;	W-7.11 "Drugs Other than Alcohol and Driv- ing Task"		
"Handbook Plus" Ch. 4.1-4.12;	W-7.12 "The Effects of Alcohol on Driving" W-7.13 "Drugs Other than Alcohol and Driv-		
"License To Drive" Ch. 18;	ing Tasks"		
"Responsible Driving" Ch. 3,4.	W-7.15 "Road Rage Factors."		
In-car Laboratory			
BTW-7.1 Review			
BTW-7.2 Review			

TOPIC ACTIVITIES TOPIC RESOURCES



The Instructor:

. . . F-7.1 "Factors Influencing Teenage Drinking"



Fact Sheet F-7.4

"Alcohol-Affects
Persons Differently"

















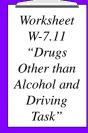




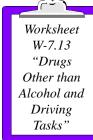
















Parental Supplement

LESSON CONTENT (Instructor Support Information)







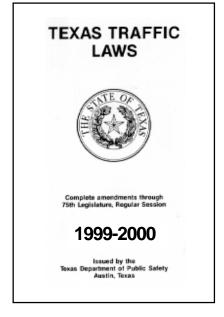


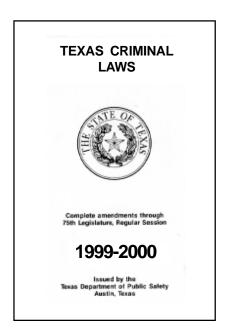












Texas Essential Knowledge and Skills: § 110.42. English I (b) (4) The student uses writing as a tool for learning. (B) to discover, organize, and support what is known and what needs to be learned. (14) The student listens attentively for a variety of purposes. (A) focus attention on speaker's message.



Prerequisites: Classroom Module 6, BTW-6.1

Learning Goals:

In BTW-7.1, the student should communicate with other users and responsibly execute lane changes in a high volume traffic setting. While performing speed

execute lane changes in a high volume traffic setting. While performing speed and position changes, they should integrate experience and knowledge to avoid

crisis situations in speeds up to 65 mph.

Performances:During this session the student will: Use area control responses.

Position the vehicle in a proper location for conflict avoidance.

Demonstrate three lane changes in traffic flow, merging, and exiting.

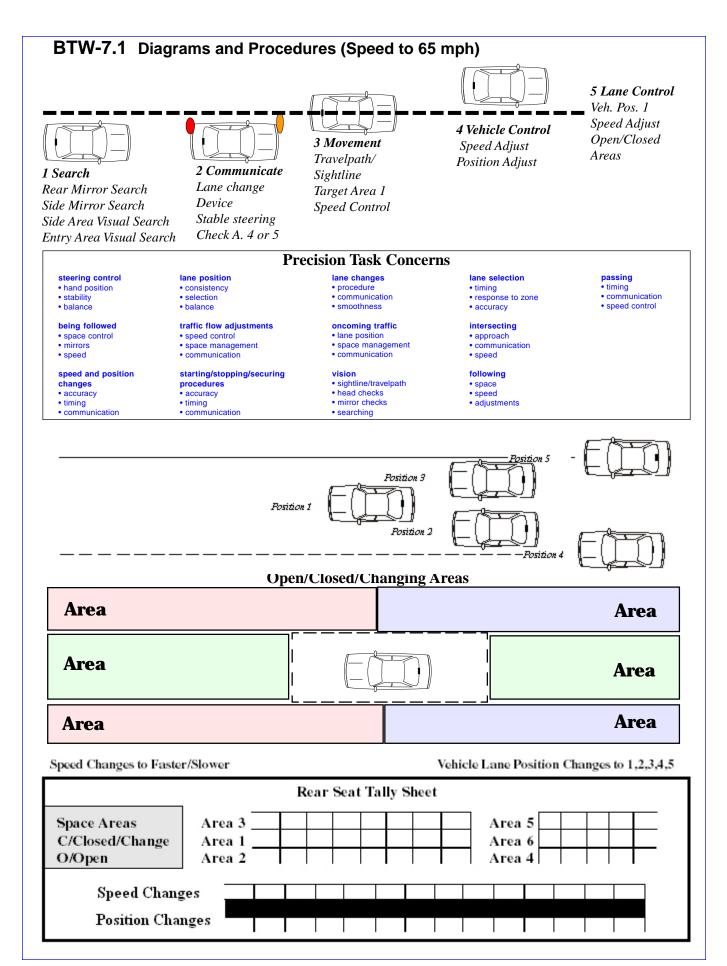
Demonstrate speed and position changes in response to changes in space

around vehicle at speeds up to 65 mph.

Assessment: Self-assessment of space and area control skills, teacher evaluations of

procedures and techniques on the Texas Driver Skills form.





Prerequisites: Classroom Module 6, BTW-7.1

Learning Goals: In BTW-7.2, the student should communicate with other users and responsibly

execute lane changes in a high volume traffic setting. While performing speed and position changes, they should integrate experience and knowledge to avoid

crisis situations in speeds up to 70 mph.

Performances:During this session the student will: Use area control responses.

Position the vehicle in a proper location for conflict avoidance.

Demonstrate three lane changes in traffic flow, merging, and exiting.

Demonstrate speed and position changes in response to changes in space

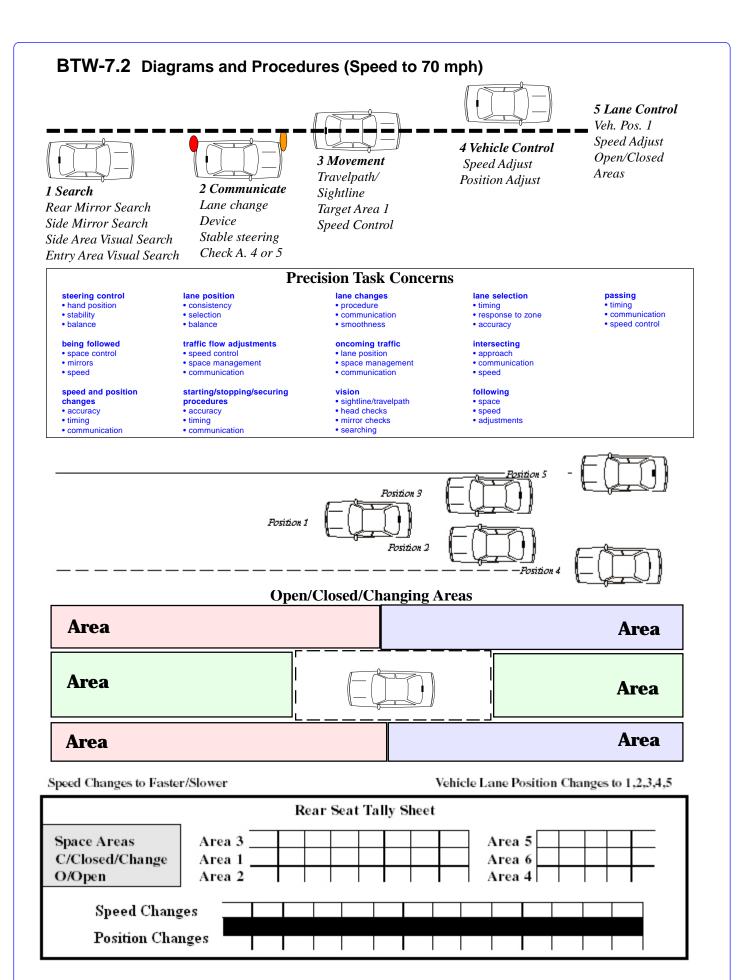
around vehicle at speeds up to 70 mph.

Assessment: Self-assessment of space and area control skills, teacher evaluations of

procedures and techniques on the Texas Driver Skills form.



Instructor Activities	Ref	Student Activities	Materials Needed or Rear Driver Activities	Notes
 Review on-street route for changes or obstructions. Review objectives for lesson with drivers. Prepare vehicle for lesson. Evaluate pre-start, start, and moving from curb procedures. Review space and area control procedures with driver. Review lane change procedures and need for precision in performing task in high volume traffic flow at speeds up to 70 mph. Involve rear seat driver in area control and lane changes procedures. Mark area changes and speed adjustments. Involve driver in a minimum of 3 lane changes in each of the following areas: traffic flow, merging, exiting roadway at speeds up to 70 mph. Evaluate speed and space changes in response to changes in space around vehicle. Evaluate stopping, securing procedures. Repeat tasks with next driver. 	Mod 6 Assess on Student Record Card	 Group activity segment Review objectives, show permit, ask questions regarding lesson activities. Session activity 1st driver performs pre-start, starting, and moving from curb procedures. Enters traffic flow with smooth and precise movements from curb. Reviews zone control process. Hears example from rear seat driver and instructor. Vocally responds to open and closed zones and changes to speed and position. Performs 3 lane change procedures in traffic flow as explained at speeds up to 70 mph. Performs 3 lane change procedures while merging with traffic flow at speeds up to 70 mph. Performs 3 lane change procedures while exiting traffic flow at speeds up to 70 mph. Performs speed and position changes in response to changes in space around vehicle at speeds up to 70 mph. Performs stopping, securing procedures. Reviews and assesses tasks performed in lesson. 	Rear Seat Driver Shows permit at the start of lesson. Listens to review of procedures and zone control concepts. Asks questions regarding procedures. Verbally performs area control procedures for driver and instructor. Verbally reviews lane change procedures while driver is making 1st lane change in each area. Charts changes in areas/ space and marks changes in speed/position. Prepares for driving sequence.	Driving Through A New Century



Module 7 Recommended Simulation Laboratory Session

Page 74

Suggested Titles:

"Stopping in Time"

"Threat Recognition"

"Testing Driver Performance I"

... DORON Video or Laserdisc

... DORON Video or Laserdisc

... SSI Safe Driver Training Series

Learning Goals: The simulation student demonstrates comprehension of speed control and vehicle

positioning in lane which will increase student's ability to position vehicle for complex

risk vehicle maneuvers.

Performances:

Performances are based on simulation video used for this section. Demonstrate the

correct position for vehicle control.

Assessment: Instructor assessment of speed, positions, and techniques on the district on-street

records form. Student assessment of simulation activities may be added to the

student portfolio.

Instructor Activities	Student Activities	Materials Needed and Notes
		Driving Through A New

Module 7 Recommended Simulation Laboratory Session

Page 75

Suggested Titles: "Vans:Reducing the Risk"

"Vans: Changing Environments" Testing Driver Performance II" ... DORON Video or Laserdisc

... DORON Video or Laserdisc

... SSI Safe Driver Training Series

Learning Goals:

The simulation student demonstrates comprehension of speed control and vehicle positioning in lane which will increase student's ability to position vehicle for complex

risk vehicle maneuvers.

Performances: Performances are based on simulation video used for this section. Demonstrate the

correct position for vehicle control.

Assessment: Instructor assessment of speed, positions, and techniques on the district on-street

records form. Student assessment of simulation activities may be added to the

student portfolio.

Instructor Activities	Student Activities	Materials Needed and Notes
		Through