

**Driver Education  
Classroom and In-Car  
Curriculum**

**Unit 6**

**Personal Factors Influencing  
Operator Performance**

## **Driver Education Classroom and In-Car Instruction Unit 6-2**

### **Unit Introduction**

Unit 6 is designed to give the student an understanding of the significant effects of alcohol and other drugs on a person's ability to perform the driving task. Statistics will indicate that alcohol is a significant factor in fatal motor vehicle crashes for individuals between 15 and 24 years of age. Many who use alcohol also use other drugs. This use compounds the effects and creates a serious problem for the new driver.

Unit 6 also will have the new driver explore the effects of fatigue, drowsy driving and impact of emotions on one's driving ability.

### **Goals**

**Time Frame: 7 hours**

### **Students will:**

- Make choices and take responsibility to say "No" in regard to using alcohol and other drugs while operating a motor vehicle.
- Recognize the nature of the alcohol-related traffic crash problem.
- Relate your state's alcohol and other drug laws to driving.
- Understand physiological and psychological effects of alcohol on the driving task.
- Recognize how alcohol affects driving ability.
- Understand how drugs other than alcohol affect the driving task.
- Recognize how fatigue affects driving and how to reduce the effects of fatigue.
- Relate emotions to driving and discuss "road rage."
- Complete Unit 6 Test.

### Driver Education Classroom and In-Car Instruction Unit 6-3

<p>Title: Personal Factors Influencing Operator Performance</p>	<p>Time Frame: 7 hours</p>
<p><b>Resources Needed</b></p>	<p><b>Instructor Preparation</b></p>
<p>Textbooks:  <u>Drive Right</u> Ch. 11, 14  <u>How to Drive</u> Ch. 4  <u>Handbook Plus</u> Ch. 4  <u>Responsible Driving</u> Ch 2, 3</p> <p>Slides 6.1-6.29          Fact Sheets 6.1-6.8          Included Videos:          “LOV2XLR8” (11 minutes 50 sec)          “Driving Drunk: Your Choice” (19 minutes)</p> <p>Your state’s Driver’s Handbook          Your state’s vehicle law</p> <p>Optional Videos:</p> <ul style="list-style-type: none"> <li>• <i>Preventing Road Rage—Anger Management for Drivers</i> (19 minutes)              Available at: <a href="http://www.aaafoundation.org">http://www.aaafoundation.org</a> (Item # 963)</li> </ul> <p>Unit 6 Test</p>	<p>Review recommended learning activities          Review textbooks</p> <p>Review on-street lesson plan used in combination with this unit and textbook</p> <p>Review slides          Review fact sheets          Review included videos</p> <p>Included</p>

## Driver Education Classroom and In-Car Instruction Unit 6-4

Performance Objectives	Learning Activities	Resources
<p>Students will make wise choices and take responsibility in regard to not using alcohol and other drugs while operating a motor vehicle.</p>	<p>Use Slide 6.1 and discuss the topics covered in Unit 6.</p> <p>Key concepts to consider before viewing the film:</p> <ul style="list-style-type: none"><li>• 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.</li><li>• 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.</li><li>• As you view the film, consider that fact that none of these victims 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.</li></ul>	<p>Slide 6.1 "Choices"</p> <p>Video 6.1 "<i>Driving Drunk: Your Choice</i>" (19 minutes)</p>

## **Driver Education Classroom and In-Car Instruction Unit 6-5**

### **Content Outline**

#### **Making choices and taking responsibility to say “No”**

The unit will cover the topics listed in Slide 6.1. Briefly discuss these with the class.

It is important that the student recognizes the significant effects of alcohol and other drugs on the driving task; specifically, the student shall identify alcohol and other drugs as major factors in fatal motor vehicle crashes for individuals between 15 and 24 years of age. The student must also recognize that alcohol use among youth can spiral into a series of problems including poor driving performance, poor academic achievement, disruption of classroom learning, family life, as well as delinquency or other problems with society and unlawful behaviors. Consequently, the younger students begin use, the more likely they are to abuse, become dependant upon, or move onto more extreme drug use.

#### **Session introduction**

It is important to recognize the use of alcohol and other drugs as a serious problem related to operating a motor vehicle. Evidence demonstrates that combining alcohol with driving is a leading problem among drivers.

Each student should recognize the potential for injury and make reduced risk decisions regarding the use of alcohol and other drugs. Although alcohol use is a choice made by people, laws and enforcement agencies control the use of alcohol and other drugs.

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 Choice”**

This video focuses on four real-life situations where someone made the choice to drive drunk. The video is designed to show the long-term effects of those choices. You will meet two mothers 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 results 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 your choices in the future.

## Driver Education Classroom and In-Car Instruction Unit 6-6

Performance Objectives	Learning Activities	Resources
<p>Students will make wise choices and take responsibility in regard to not using alcohol and other drugs while operating a motor vehicle</p>	<p>Show Video 6.1 to introduce the problems of making poor choices.</p> <p>“Video 6.1 can be used to compliment discussion of themes such as alcohol misuse and abuse, choices and their relationship between freedom and responsibility</p> <p>Continue using Slide 6.1 and discuss the reasons why people under age 21 use alcohol or other drugs. Also use Fact Sheet 6.1 to guide discussion.</p> <p>Ask student this question to begin discussion: Why do some people choose not to use alcohol or other drugs?</p> <p>(Accept all answers without criticism to assess what students feel about moral responsibilities. Some answers will be similar to those listed during the discussion of choices).</p>	<p>Video 6.1 “<i>Driving Drunk: Your Choice</i>” (19 minutes)</p> <p>Continue using Slide 6.1 “Choices”</p> <p>Fact Sheet 6.1 “Factors Influencing Drinking”</p>

## Driver Education Classroom and In-Car Instruction Unit 6-7

### Content Outline

#### **Develop a discussion about why people choose to use alcohol or other drugs:**

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

Students need to think about the legal, ethical and moral reasons for making choices about alcohol and other drug use. They should also focus on why age 21 may be the standard, as it is an age where, in terms of physical development, the body had concluded different phases of development where alcohol would inhibit those body processes.

#### **Develop a discussion about stopping another person from driving drunk:**

Can you really stop another person from driving drunk?

What would you say to someone who is impaired and about to drive?

Is it your responsibility to keep another friend from driving drunk?

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

Consequences of high risk decisions are sometimes not known by the driver or passenger until after the collision happens to them. Ask for any personal consequences that are part of this high risk decision-making process.

When a motorist drives drunk, is he/she thinking about the impact on their family and friends when a problem does occur? We are still talking about the number one method for a person age 16-19 to die. Car crashes are constantly the number one killer of young people. Thirty-nine percent (39%) of all driving fatalities involved alcohol use by the driver. Drivers age 21-24 have the highest percentage of alcohol use involved in fatal crashes. Drivers age 25-44 have the second highest number of alcohol-related fatal crashes.

## Driver Education Classroom and In-Car Instruction Unit 6-8

Performance Objectives	Learning Activities	Resources
<p>Students will relate the scope of the overall alcohol/ traffic safety problem.</p>	<p>Question the class:</p> <ul style="list-style-type: none"><li>• How often do DWI related crashes occur?</li><li>• How were the friends of the people killed affected?</li><li>• Is experience the only way to learn about the effects of alcohol?</li></ul> <p>Discuss the serious nature of alcohol and driving by showing Slide 6.2</p>	<p>Slide 6.2 "Traffic Death Information"</p>

## **Driver Education Classroom and In-Car Instruction Unit 6-9**

### **Content Outline**

#### **Nature of the Alcohol-Related Traffic Crash Problem**

**INSTRUCTOR: PLEASE UTILIZE YOUR STATE SPECIFIC INFORMATION  
HERE**

Although alcohol is a factor in crashes of all types, the focus will be on traffic crashes.

- DWI-related crashes occur approximately every 2 minutes.
- Friends of the people killed were affected by sadness and grief.
- Experience is the most dangerous way to learn about the effects of alcohol.

## Driver Education Classroom and In-Car Instruction Unit 6-10

Performance Objectives	Learning Activities	Resources
<p>Students will describe why alcohol is the most commonly used drug and why people drink or use drugs and drive.</p>	<p>Continue to use Fact Sheet 6.1 as support material to help answer questions and lead the discussion. While it is impossible to predict all responses, many common ones are given in Fact Sheet 6.1.</p> <p>Lead a discussion. Ask the students to list why people drink and drive. Use chalkboard or dry-erase board to record answers.</p> <p>Lead a discussion on media and the audience that is often influenced by drinking ads and how this can be influential to youth.</p>	<p>Fact Sheet 6.1 “Factors Influencing Drinking”</p> <p>Chalkboard Dry-erase board</p>

## Driver Education Classroom and In-Car Instruction Unit 6-11

### Content Outline

#### **Factors influencing drinking:**

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

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

**Sociological Factors** - Our culture is one that, 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 excuses for drinking.

**To have a good time** - Drinking is associated with “partying” for a large percentage of people.

**Custom** - Certain cultures give alcohol consumption a symbolic or religious meaning.

**Hospitality** - Serving alcohol is often a central element in being hospitable at parties.

**Happy Hour** - This idea originated in the U.S. and continues as a promotion at bars and restaurants.

**Special Occasions** - These include toasting at events, a drink before a meal or at bedtime.

**Mass Media** - This publicity shows drinking to be a normal, natural thing to do in our society. INSTRUCTOR: PLEASE RESEARCH SPECIFIC MEDIA BEING AIRED IN YOUR AREA FOR DISCUSSION



## Driver Education Classroom and In-Car Instruction Unit 6-13

### Content Outline

**The instructor should refer to their state's vehicle law and then relay important information about driving and the use of drugs and alcohol. The following is intended to give the instructor ideas about what to cover.**

- Intoxication
- Intoxicated
- Measurements
- Consumption of alcoholic beverages
- Operating a vehicle while intoxicated
- Operating a vehicle while under the influence
- License restriction (alcohol use)
- Illegal use of a license
- Violation of restriction penalties
- Loss of license
- Court fines
- Jail
- Implied consent and refusal laws
- Preliminary Breath Test (PBT)
- Request by police officer
- Advice to person to be tested
- Test failure/refusal

**Driver Education Classroom and In-Car Instruction Unit 6-14**

<b>Performance Objectives</b>	<b>Learning Activities</b>	<b>Resources</b>
<p>Students will explain the penalties associated with driving under the influence.</p>	<p>Continue discussion about laws using Fact Sheet 6.2.</p>	<p>Fact Sheet 6.2 “Your State’s Alcohol Laws”</p>

## **Driver Education Classroom and In-Car Instruction Unit 6-15**

### **Content Outline**

#### **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 their state's vehicle laws. This topic area may be evaluated by use of questions.

## Driver Education Classroom and In-Car Instruction Unit 6-16

Performance Objectives	Learning Activities	Resources
<p>Students will describe why a given amount of alcohol may affect persons differently.</p>	<p>Introduce this topic by asking the class what BAC means. Explain difference between concentration and content. Use Slide 6.3 and Fact Sheet 6.3 to guide discussion.</p> <p>Important Notation: Before, during and after this topic, clearly stress that for those under 21 years of age consuming, purchasing and possessing alcoholic beverages are illegal and should not be condoned.</p> <p>Discuss alcohol content and the definition of "one drink." It should be emphasized that this is a simple generalization, and generally every drink and brand of drink may contain a slightly different amount of alcohol. Use slide 6.4 to guide discussion.</p>	<p>Slide 6.3 "BAC Factors" Fact Sheet 6.3 "BAC Factors"</p> <p>Slide 6.4 "Are They the Same"</p>

## Driver Education Classroom and In-Car Instruction Unit 6-17

### Content Outline

#### Physiological and Psychological Effects on Driving Task

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. Physiological affects deal with movement and coordination of the body (i.e., legs, arms, hands, feet, balance, etc.). Psychological affects deal with the mental aspects of driving such as judgment, reason, inhibitions, mood and the like.

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 alcohol and blood. This is expressed in a ratio of 1 drop of alcohol to 1000 drops of blood.

**Weight** - Larger persons have more blood and other fluids than smaller persons.

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

**Gender** - Women do not process alcohol as well as men.

**Food** - Food does not soak up or absorb the alcohol.

**Alcohol Content** - The higher alcohol content a drink has, the higher BAC produced. "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 have more than twice the alcohol content of another.

**Driver Education Classroom and In-Car Instruction Unit 6-18**

<b>Performance Objectives</b>	<b>Learning Activities</b>	<b>Resources</b>
Students will explain ways the body eliminates alcohol and length of time required.	Use Slide 6.5 to explain how alcohol is removed slowly by the body.	Slide 6.5 “Elimination of Alcohol”
Students will explain how alcohol affects the body.	Use Slide 6.6 and the accompanying support materials to cover briefly the effects of alcohol on the body.	Slide 6.6 “Alcohol Affects the Body”

## Driver Education Classroom and In-Car Instruction Unit 6-19

### Content Outline

#### **Alcohol Affects the Body:**

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

On 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.

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.

This information should not be presented in detail, as it is more appropriate for a health course than for a driver education course. Know that alcohol affects every body system, in some cases immediately and also over time. Some examples of effects includes:

**Liver** - This organ detoxifies many substances in the blood.

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

**Sexuality** - Alcohol tends to adversely affect a person’s sexual ability.

**Sleep** - Alcohol is a central nervous system depressant and will make a person sleepy. However, once asleep, it is a very restless 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.



## Driver Education Classroom and In-Car Instruction Unit 6-21

### Content Outline

#### Alcohol affects people differently:

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.
- **Mood** - If a person is angry, happy, or sad, he or she may react quite differently to alcohol.
- **Experience** - As mentioned, 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.
- **Sleep** - Alcohol is a central nervous system depressant and will make a person sleepy. However, once asleep, it is a very restless sleep.
- **Sexuality** - Alcohol tends to adversely affect a person's sexual ability.
- **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.
- **Age** - Experience is a factor as to how a person responds to the introduction of alcohol into the system.

#### Psychological factors related to consumption of alcohol:

- **Judgment/Reasoning** - These psychological functions are the first ones affected by alcohol. A person's ability to judge right from wrong, good from bad or to reason is affected.
- **Attention** - Alcohol usually affects a person's ability to concentrate on several sources of incoming information more than to concentrate on just one source of information. Since the driving task requires attention to a large number of items, this is an important concept.
- **Memory** - This is not necessarily the "blackout" concept, but rather, the inability to store and retain information. Decreased ability has been found to occur with BAC as low as .03%
- **Emotions** - Does drinking alter emotions? Does it decrease or increase tension? While 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, especially in males, when they are placed in a competitive situation. This is easily observable in driving task situations.
- **Tolerance** - Psychological tolerance to alcohol involves the person's ability to mask the effects of alcohol, usually during the early stages of drinking. People learn to develop coping behaviors or not to participate in activities which might reveal their impairment. Unfortunately, such masking may prevent others from helping the intoxicated person because they do not see impairment.

**Driver Education Classroom and In-Car Instruction Unit 6-22**

<b>Performance Objectives</b>	<b>Learning Activities</b>	<b>Resources</b>
Students will gain an understanding of the theories of addiction	Discuss theories of addiction using Slide 6.9.	Slide 6.9 "Theories of Addiction"

## **Driver Education Classroom and In-Car Instruction Unit 6-23**

### **Content Outline**

Sociological theorists have developed many reasons to explain why one individual is more likely to become addicted or dependant on a substance than another. They also describe four different types of usage patterns.

1. Genetic theory: If a biological ancestor has a history of addiction, you are genetically wired or biologically predispositioned to have a higher chance of becoming addicted to a substance.
2. Environmental: If you grew up in a household where you witnessed another adult or sibling utilizing a substance to help them cope with a problem, you are more likely to model that behavior to cope with your own problem
3. Societal/peer theory: You may socialize with a group that conveys a message that is acceptable or necessary to drink or use with them. Through persuasion, you adapt to their norm and use.
4. Mixture of all three: A person can experience a combination of one, two or three of the above.



## Driver Education Classroom and In-Car Instruction Unit 6-25

### Content Outline

#### How alcohol affects driving ability

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 information processing. Each part of the process will be individually addressed.

#### Effects of alcohol on each part of the space management system:

**Searching/identifying** - The prime sense humans use in driving is vision. Alcohol blurs vision and reduces muscle control.

**Eye focus** - The human eye has the ability to change focus rapidly from objects close to the viewer to objects far away. Alcohol slows focusing.

**Double vision** - Although humans have two eyes, each eye must work in conjunction with the other. Alcohol impairs the coordination of the eyes.

**Distance judgment** - A driver must be able to determine how far away an object is located and the object's relationship to his or her path of travel. Alcohol reduces the ability to judge distances.

**Side vision** - Sometimes called peripheral vision, this ability is critical to the driving task. Alcohol reduces the ability to take in information.

**Visual acuity** - This is sharpness of vision. Alcohol blurs vision.

**Color distinction** - Drivers get much information from different colors in the traffic scene. Alcohol reduces the ability to distinguish colors.

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

**Slowed response time** - Alcohol slows a driver's ability to process information and respond to critical driving tasks.

**Impaired motor skills** - A driver's eye, hand, and foot coordination is impaired by alcohol.

## Driver Education Classroom and In-Car Instruction Unit 6-26

Performance Objectives	Learning Activities	Resources
<p>Students will describe the effects of alcohol on space management including perception, vision, reaction time, and risk-taking.</p>	<p>Concentrate on the likelihood of making inaccurate predictions because of alcohol's impairment of thinking. This may be done by using examples of the prediction process. For example, ask the class:</p> <p>If you are approaching an intersection with a green light facing you, give reasons why you cannot be sure drivers approaching the red light from your 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).</p> <p>Set 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.).</p>	

## Driver Education Classroom and In-Car Instruction Unit 6-27

### Content Outline

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

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

It is often difficult to determine where “search” stops and “evaluation” 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.

#### **Drivers take greater risks after drinking:**

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.

**Driver Education Classroom and In-Car Instruction Unit 6-28**

<b>Performance Objectives</b>	<b>Learning Activities</b>	<b>Resources</b>
<p>Students will describe the common signs of the drinking driver.</p>	<p>Create a list of the common signs of the drinking driver on the chalkboard or dry-erase board and lead a short discussion.</p>	<p>Chalkboard Dry-erase board</p>

## **Driver Education Classroom and In-Car Instruction Unit 6-29**

### **Content Outline**

#### **Common signs of the drinking driver:**

- Turns in a wide radius
- Straddles center or lane marker
- Almost strikes an object
- Weaves
- Drives on shoulder of roadway
- Swerves
- Slow speed
- Stops for no apparent reason
- Follows too closely
- Drifts
- Tire on center or lane line
- Brakes erratically
- Drives into opposing or crossing traffic
- Signals inconsistently
- Responds slowly to traffic signals
- Illegal or abrupt turns
- Rapid acceleration and/or deceleration
- Drives at night with lights off
- Fails to dim high beam headlights

### Driver Education Classroom and In-Car Instruction Unit 6-30

<b>Performance Objectives</b>	<b>Learning Activities</b>	<b>Resources</b>
<p>Students will recognize the physiological and psychological effects of other drugs on the driving task.</p>	<p>Ask the class, "What drug effects do you know of that could impair a person's ability to drive?" After the students have supplied answers, use Slide 6.11 to cover possible negative effects of various drugs on abilities related to driving. Resource information is found in Fact Sheet 6.5.</p>	<p>Slide 6.11 "Drugs and Driving" Fact Sheet 6.5 "Drugs Other than Alcohol and the Driving Task"</p>

## Driver Education Classroom and In-Car Instruction Unit 6-31

### Content Outline

#### **Drugs other than alcohol:**

- Over-the-Counter Medications - those that can be purchased legally without a prescription
- Prescription Medications
- Tranquilizers
- Stimulants
- Narcotics

**Perception** - This involves giving meaning to human senses of vision, hearing, etc. Unless a driver accurately understands what he/she sees, it is impossible to react appropriately. Both amphetamines and cocaine can cause perceptual problems.

**Judgment** - Accurate decisions are based on a driver's ability to assess and judge a given driving situation. Poor judgments often result in collisions.

**Coordination** - Drivers must coordinate hand, eye and foot movements to operate a motor vehicle successfully. Loss of such ability greatly handicaps performance.

**Vision** - Vision is the key to information gathering and processing and safe driving. Visual impairments make it difficult to search, evaluate and execute appropriately.

**Mood** - A driver's mood may cause him/her to take unnecessary risks or be so lethargic as to fail to act correctly in a dangerous situation.

**Marijuana** - 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 include:

- **Loss of tracking ability** - This is the ability to maintain the vehicle in a given line.
- **Distance judgment** - Following too closely 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.

The key factor 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 that may produce a reaction greater than either drug alone).

## Driver Education Classroom and In-Car Instruction Unit 6-32

Performance Objectives	Learning Activities	Resources
<p>Students will explain the synergistic effects of drugs</p>	<p>Use Slide 6.13 and accompanying support material to cover other drug and synergistic effects that can impair driving. (See Fact Sheets 6.5-6.7 for additional information)</p>	<p>Slide 6.13 “Other Types of Drugs and Driving”                      Fact Sheet 6.5 “Drugs Other than Alcohol and the Driving Task”                      Fact Sheet 6.6 “Marijuana”                      Fact Sheet 6.7 “Drugs and Their Effects”</p>
<p>Students will describe the causes of fatigue and how it affects a driver’s abilities.</p>	<p>Discuss the definition, types and causes of fatigue. Use Slides 6.14 and 6.15 to guide discussion. Also see Fact Sheet 6.8 for additional information.</p>	<p>Slide 6.14 “Definition of Fatigue”                      Slide 6.15 “Causes/Effects of Fatigue”                      Fact Sheet 6.8 “Drowsy Driving Facts”</p>

## **Driver Education Classroom and In-Car Instruction Unit 6-33**

### **Content Outline**

**Fatigue** - Physical or mental weariness resulting from exertion or other effect.

#### **Causes of fatigue**

- Physical Strain (hard work)
- Mental strain (stress)
- Monotonous tasks (long driving trips)
- Illness
- Lack of sleep

#### **Effects of fatigue**

- Impairs vision
- Impairs perceptual abilities
- Slows reaction time
- Causes misjudgment of speed and distance
- Increases risk-taking
- Induces “highway hypnosis”
- Causes drowsiness at the wheel

#### **Drowsy driving - who is most at risk?**

- Drivers who are:
  - Sleep deprived
  - Driving long distances without rest breaks
  - Driving through the night or at other times when they are normally asleep
  - Taking medicine that increases sleepiness or drinking alcohol
  - Driving alone
  - Driving on long, rural, boring roads
  - Frequent travelers, e.g. business travelers
- Young people
- Shift workers
- Commercial drivers

**Driver Education Classroom and In-Car Instruction Unit 6-34**

<b>Performance Objectives</b>	<b>Learning Activities</b>	<b>Resources</b>
Students will discuss physical and mental fatigue symptoms.	Show Slides 6.16 through 6.17 and discuss fatigue symptoms.	Slides 6.16 “Physical Fatigue Symptoms” Slide 6.17 “Mental Fatigue Symptoms”
Students will list ways to delay fatigue onset and symptoms.	Show Slides 6.18 and 6.19 and discuss delaying fatigue onset and related symptoms.	Slide 6.18 “Delaying Fatigue Onset” Slide 6.19 “Delaying Fatigue Symptoms”

## Driver Education Classroom and In-Car Instruction Unit 6-35

### Content Outline

#### **Physical fatigue symptoms:**

- Tired muscles
- General body sensation of tiredness
- A tired feeling in head
- Localized pain in back of head
- Pain and soreness in muscles
- Stiffness in joints
- Swelling in hands and feet

#### **Mental fatigue symptoms:**

- Inability to keep fixed attention
- Impaired memory
- Failure to grasp new ideas
- Difficulty/slowness in reasoning

#### **What won't help fatigue:**

- "Toughing it out"
- Playing the radio loudly
- Alternating speed up and down
- Opening the windows

#### **Delaying fatigue onset:**

- Avoid long drives unless you are fit
- Avoid leaning forward
- Avoid driving long distances
- Keep your eyes moving
- Fresh air

#### **Delaying fatigue symptoms:**

- Change drivers at regular intervals
- Wear safety belt
- Avoid getting angry
- Properly adjust heater/air conditioner (HVAC)

## Driver Education Classroom and In-Car Instruction Unit 6-36

<b>Performance Objectives</b>	<b>Learning Activities</b>	<b>Resources</b>
Students will describe the kinds of emotions that can affect driving behavior.	Ask the class to create a list of emotions that affect driving and discuss how those do affect driving. Use chalkboard or dry-erase board to create list.	Chalkboard Dry-erase board
Students will examine the effects of emotions on driving.	Discuss the effects that emotions have on the body.	
Students will describe ways to control one's emotions.	Discuss how to control emotions before getting behind the wheel.	

## **Driver Education Classroom and In-Car Instruction Unit 6-37**

### **Content Outline**

#### **Emotions that affect driving:**

- Anger
- Anxiety
- Joy, happiness
- Fear
- Hate
- Grief
- Love

#### **General effects of emotions:**

- Interfere with your ability to think
- Create mental distractions
- Create inattentiveness
- Can cause you to act out your emotions
- Increase risk taking
- Create a lack of concentration
- Interrupts ability to process information

#### **Physical effects of emotions:**

- Heartbeat increases
- Breathing quickens
- Digestion slows
- Palms sweat
- Feeling of exhaustion
- Physical stress

#### **Controlling emotions:**

- Understand one's emotional makeup
- Identify situations that cause emotional stress
- Expect other drivers to make mistakes
- Understand that emotions are contagious
- Direct emotions toward actions, not individuals
- Delay driving when upset
- If upset, ask someone else to drive

## Driver Education Classroom and In-Car Instruction Unit 6-38

Performance Objectives	Learning Activities	Resources
Students will describe how passengers affect emotions and one's driving ability.	Have the class generate a list of ways that passengers can affect a driver. Use chalkboard or dry-erase board to generate list.	Chalkboard Dry-erase board
Students will describe aggressive driving characteristics and "road rage."	Use Slide 6.20 to discuss the formula for road rage.  Optional Video: <i>"Preventing Road Rage - Anger Management for Drivers"</i>	Slide 6.20 "Formula for Road Rage"  Optional Video: <i>"Preventing Road Rage - Anger Management for Drivers"</i>
	Use Slide 6.21 to describe the characteristics of the three types of aggressive drivers.	Slide 6.21 "Three Types of Aggressive Drivers"
	Discuss various errors that drivers can make that can generate a negative response from other drivers. Use Slide 6.22 to aid in leading this discussion.	Slide 6.22 "Driving Errors May Include"
	Included Video: View and discuss included Video 6.2 "LOV2XLR8"	Included Video 6.2 "LOV2XLR8" (11 minutes 50 seconds)

## Driver Education Classroom and In-Car Instruction Unit 6-39

### Content Outline

#### **Passengers and emotions:**

- Peer pressure or group pressure to take risk
- Influences the way a driver thinks, feels and drives
- Responsible for passengers
- Safe travel
- Safety belt usage

#### **Formula for road rage:**

This formula comes into play when we look at how our society has normalized disrespectful and hostile behavior. When these elements are added to our roadways that contain more cars, less space and more driver interactions, the result is a social normalization of behaviors that are more aggressive and violent in nature.

#### **Road Rage:**

Definition:

- Lost control of emotions
- Triggered by an accident
- Use of vehicle to “attack” other drivers

Three types of:

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

#### **Driving errors that may cause a negative reaction by other drivers:**

- Braking suddenly
- Exceeding speed limit by 10 mph or more
- Changing lanes without signal
- Cruising in passing lanes
- Criticizing

## Driver Education Classroom and In-Car Instruction Unit 6-40

Performance Objectives	Learning Activities	Resources
<p>Students will examine different degrees of aggressive driving behaviors and describe characteristics of each.</p>	<p>Discuss Slides 6.23 through 6.26. Focus on driving space area and how that can precipitate aggressive driving behaviors.</p>	<p>Slides 6.23-6.26 “Do You Drive Aggressively”</p>
<p>Students will develop strategies for anger management and for responding to aggressive drivers.</p>	<p>Use Slides 6.27 to discuss how self-imposed anxieties can affect driving behaviors.</p> <p>Use Slides 6.28 and discuss how driver actions precipitate anger.</p> <p>Lead a class discussion focusing on anger containment techniques. Use Slides 6.29 to aid in discussion.</p>	<p>Slide 6.27 “Self-Imposed Anxieties”</p> <p>Slide 6.28 “Dangerous Maneuvering”</p> <p>Slide 6.29 “Anger Containment Techniques”</p>

## **Driver Education Classroom and In-Car Instruction Unit 6-41**

### **Content Outline**

#### **Do you drive aggressively?**

1. Learning how to evaluate your driving space
2. Learning how to adjust your driving space area
3. Learning how to manage disrespectful drivers

#### **Anger is the basis for rage**

The irrational actions of others create anger. There is potential for rage if a driver feels they have been violated or their safety has been threatened.

#### **Self-imposed anxieties and dangerous reactions/maneuvers**

Anyone can enter a driving situation with varying amounts of anxiety which can negatively influence driving behavior. The idea is to recognize these thoughts and not allow them to influence their driving.

#### **Dealing with anger:**

Just like all other driving skills, containing or managing your anger on the roadway requires training and thought prior to engaging in the driving task. One should realize that responding to another driver's negative behavior can lead to a dangerous situation. Keep in mind, that everyone makes errors in their driving.

**Driver Education Classroom and In-Car Instruction Unit 6-42**

<b>Performance Objectives</b>	<b>Learning Activities</b>	<b>Resources</b>
	Assign reading material	<u>Drive Right</u> Ch. 5, 12, 18 <u>How to Drive</u> Ch. 8, 11 <u>Handbook Plus</u> Ch. 13, 14, 18 <u>Responsible Driving</u> Ch. 11, 13, 17
Students will complete the Unit 6 Test	Distribute, collect and grade the Unit 6 Test	Test Included

## Driver Education Classroom and In-Car Instruction Unit 6-43

### Fact Sheet

6.1

#### Factors Influencing Drinking

Just as there is no single reason adults drink alcohol, there is no one reason teenagers drink. The instructor should ask the class for reasons teenagers drink. Responses should be placed on the board without making any judgment about the appropriateness of the answer.

Once all ideas have been listed, the instructor should lead a brief class discussion on all reasons given. While it is impossible to predict all responses, many common ones are given herein. The instructor should 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. Teenagers are, however, very susceptible to peer pressure. No one enjoys being thought of as different or as an outsider. The instructor should not deal extensively with how to cope with pressure at this time, as that will be covered in depth in later topics. The instructor should point out, however, that peer pressure can be channeled toward not drinking as well as toward drinking.

**Influence of parents** - Parental influence could be either good or bad. If a child comes from a home where alcohol is abused, this could lead the child to also abuse alcohol. If the child comes from a broken home or there is a poor relationship between the child and the parents, the child may turn to alcohol in an attempt to relieve problems. Children who come from homes of parents who do not drink are less likely to drink themselves. Thus, parental influence is great in either direction.

**Sociological factors** - American culture is one which, for the most part, readily accepts drinking. Even the word “drink” has often come to mean “drink alcohol.” The instructor should have the class come up with as many ways as possible that Americans use “drink” to mean “drink alcohol.” For example: “Let’s stop off and have a drink,” or, “He has a drinking problem.” The instructor should ask the class to refer to the homework assignment on ways that using “drink” means drinking alcohol. As with other factors, sociology may work for no drinking or for less drinking, if that is the nature of the cultural surroundings.

**Anxiety, frustration, etc.** - Worrying about school, athletics, boy/girl friends, jobs, family, etc. are all part of growing up. Young people often turn to alcohol to seek relief from such tensions. Unfortunately, the relief is short-lived and often produces worse problems than those the teenager was trying to escape.

**To have a good time** - Drinking is associated with “partying” for a large percentage of teenagers. The idea of “Let’s get drunk and have a good time,” “Party till you puke” and “Avoid hangovers—stay drunk” are often thought of as normal behavior. This is probably brought on by a combination of advertising, misconceptions, peer pressure and feelings of inadequacy. If a person needs alcohol to relax and have a good time, that person may be headed toward serious problems that will be discussed at a later time.

## **Driver Education Classroom and In-Car Instruction Unit 6-44**

**Fact Sheet**

**6.2**

### **Your State's Alcohol Laws**

The instructor should provide information about their state's alcohol laws as they apply to driving and this Unit.

## Driver Education Classroom and In-Car Instruction Unit 6-45

### Fact Sheet

6.3

### BAC Factors

#### **Blood Alcohol Concentration (BAC):**

Concentration is the ratio between alcohol and blood. For example: a 0.08% BAC means that there is eight drops of alcohol to 9,992 drops of fluid based on the volume of 10,000. Therefore, it can be seen that an illegal level may be reached with small amounts of alcohol. For those under age 21 or anyone with an alcohol restriction, any amount of alcohol is illegal.

#### **Weight:**

Larger persons have more blood and other fluids than smaller persons. The instructor may use a visual example which compares the blood alcohol concentration by placing the same amount of red dye into two different size containers of water (a one-gallon container versus a two-gallon container). In which will the dye be most concentrated? (The smaller container.) The same concept holds true for different size people.

#### **Time spent drinking:**

While alcohol is not removed quickly from the body, it begins to be processed by the liver shortly after it is absorbed into the blood stream which may take 20-60 minutes. A longer time factor will result in a lower BAC, other factors being equal.

#### **Gender:**

Women do not process alcohol as well as men due to weight and limited production of the breakdown enzyme, alcohol dehydrogenate.

#### **Food:**

Food does not soak up or absorb the alcohol, but it may coat the lining of the stomach and somewhat slow absorption. This is only a "pay now or pay later" situation, however, as the alcohol will eventually reach the blood stream.

#### **Alcohol content in drink:**

The higher alcohol content a drink has, the higher BAC it will produce.

## Driver Education Classroom and In-Car Instruction Unit 6-46

### Fact Sheet

6.4

### Effects of Alcohol on Space Management

**Searching:** The prime sense humans use in driving is vision. Even low levels of alcohol (.03) have been found to reduce this ability. Alcohol affects vision in a number of ways. This is particularly important since about ninety percent of what a driver “identifies” is by use of his or her eyes. The prime reason for visual problems after use of alcohol is lessened muscular control. Alcohol relaxes the fine muscles of the eye that focus and control eye movement. The instructor should note that dynamic (vision of motion) is more affected than static (vision related to non-moving objects).

**Eye Focus:** The human eye has the ability to change focus rapidly from objects close to the viewer to objects far away. Alcohol delays this process; thus, a driver may experience difficulty, especially at higher speeds.

**Double Vision:** Although humans have two eyes, each eye must work in conjunction with the other. Alcohol impairs this coordination and may produce a double image. Some drivers close one eye to cope with this, but this greatly affects the next two areas—distance judgment and side vision.

**Distance Judgment:** A driver must be able to determine how far objects are from his or her path of travel. This is complicated by movement of other objects. Alcohol reduces the ability to judge distance accurately. (The instructor might demonstrate the problems humans have in judging distance, even when sober, by having each person in the class silently estimate the length of the classroom. After all have had a chance to do this, the instructor should put the range of estimates on the board. In most classes, there will be at least a fifty percent variation.)

**Side Vision:** Sometimes called peripheral vision, this ability is critical to the driving task. A person’s central vision is very narrow and drivers must be able to take in a number of things to each side of their path of travel. Speed also reduces side vision.

**Visual Acuity:** This is sharpness of vision. Alcohol may make images blur for the driver and thus impair the ability to identify properly what is in the traffic scene.

**Color Distinction:** Drivers get much information from different colors in the traffic scene. Red is used on three types of signs: stop, yield, or some prohibition of action. If alcohol is impeding a driver’s ability to determine accurately the color of a sign or traffic light, problems in information processing will occur.

**Night Vision:** Humans have limited night sight at best, and alcohol reduces this ability further. In addition, alcohol reduces the control of light entering the eye. This is important, since drivers must adapt from the situation of no oncoming light to that of headlights shining in their eyes.

After covering each of these areas, sum up this part by stating that most of these impairments (double vision being the possible exception) will be unnoticed by a driver. Thus, the ability to employ accurately the first part (search) of the process may be affected without the driver realizing this has occurred.

## Driver Education Classroom and In-Car Instruction Unit 6-47

Fact Sheet

6.5

### Drugs Other Than Alcohol and the Driving Task Schedules of Controlled Substances

Schedule I: High potential for abuse and dependence. No accepted medicinal use in the U.S. Not available with prescription. Available for research purposes only. Included in this category are narcotics and hallucinogens.

#### **Heroin, Lysergic acid diethylamide (LSD), Peyote, Dimethyltryptamine (DMT), Mes- caline, Quaalude, Psilocybin, Marijuana**

Schedule II: Medicinal drugs with accepted therapeutic use. High potential for abuse and dependence. Requires written prescription. No refills allowed for user without first being seen again by doctor for new prescription. Providers must keep these drugs in a secured area. Included in this category are certain narcotic (e.g., opium, morphine, and codeine), stimulant, and depressant drugs.

#### **Opium, Cocaine, Morphine, Benzedrine, Codeine, Dexedrine, Percodan, Dilaudid, Ritalin, Demerol**

Schedule III: Medicinal drugs with accepted therapeutic use. Potential for abuse and dependence greater than for Schedule IV and V drugs but less than for drugs in Schedule I or II. Abuse can lead to moderate or low physical dependence or high levels of psychological dependence. Prescription can be written or phoned in by doctor. Prescription can be written every six months and can be refilled up to five times. Included in this category are the less abusable sedative-hypnotics and narcotics.

#### **Empirin with codeine, Butisol, Tylenol with codeine, Florinal, Paregoric**

Schedule IV: Medicinal drugs with accepted therapeutic use. Less potential for abuse and dependence than for Schedule III drugs. Abuse can lead to limited physical and psychological dependence. Requires written prescription. Prescription can be written or phoned in by doctor. Prescription can be written every six months and can be refilled up to five times. Included in this category are the less abusable sedative-hypnotics, weight reduction drugs, and tranquilizers.

#### **Luminal, Serax, Darvon, Dalmane, Valium, Tranxene, Librium, Miltown**

Schedule V: Medicinal drugs with accepted therapeutic use. Lowest potential for abuse and dependence. Abuse leads only to limited physical and psychological dependence. Prescription not needed for many of these drugs, which often are sold over the counter. Need to be 18 years of age. Purchaser in some cases needs to sign a dispensing log maintained by the pharmacist. Included in this category are medicines containing small amounts of a narcotic.

#### **Cheracol with codeine, Cosadein, Robitussin A-C**

## Driver Education Classroom and In-Car Instruction Unit 6-48

### Fact Sheet

6.6

### Marijuana

Because 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.

A  $\mu\text{g}/\text{kg}$  refers to the number of micrograms of chemical per the weight of the body in kilograms. About 300  $\mu\text{g}/\text{kg}$  are needed to reach a high for most people. It is not possible to state exactly how many “joints” this represents because any given “joint” could vary greatly in tetrahydrocannabinol (THC) content.

## Driver Education Classroom and In-Car Instruction Unit 6-49

Fact Sheet

6.7

### Drugs and Their Effects Marijuana and Related Substances

**Street Names:** Grass, pot, joint weed, roach, hash, hash oil

**Appearance:** Greenish/brown plant matter. Brown or black cake.  
Brown or gold nearly clear oil.

**Method of Use:** Smoked, swallowed

**Effects:** Psychological: euphoria, relaxed inhibitions, disorientation, perceptual chemotherapy.  
Physical: dilated pupils, dizziness, impaired short-term memory, impaired reaction time, occasional anxiety

**Duration of Effects:** Onset: (smoked) within several minutes  
Peak: approximately 30 minutes  
Subside: begin to subside 2-4 hours  
Half-life: 7 to 10 days

**Tolerance to Effects:** Tolerance to larger and larger doses of marijuana

**Physical Dependence Potential:** Minimal

**Psychological Dependence  
Potential:** Moderate

**Effects of Overdose:** Fatigue, acute anxiety or psychosis

## Driver Education Classroom and In-Car Instruction Unit 6-50

Fact Sheet

6.7

### Drugs and Their Effects

#### Heroin

**Drug Family:** Depressant

**Street Names:** H., horse, junk, smack, Mexican mud

**Appearance:** Fluffy powder, white to brown in color

**Method of Use:** Injected, smoked, inhaled

**Effects:** Euphoria, drowsiness, constricted pupils

**Duration of Effects:** 3-6 hours  
80 percent excreted in urine in eight hours  
Traces to be found 72-100 hours later

**Tolerance to Effects:** Yes

**Physical Dependence Potential:** High

**Psychological Dependence Potential:** High

**Effects of Overdose:** Slow and shallow breathing, convulsion, coma, possible death

**Special Notes:** One of the most addictive substances known

**Drugs and Their Effects**

**Phencyclidine (PCP)**

**Drug Family:** “Dissociative anesthetic” (has properties of many different drugs)

**Street Names:** Flakes, dust, killer weed, animal tranquilizer, elephant tranquilizer

**Appearance:** Colorless liquid; white crystalline powder sometimes sprinkled on parsley or other flakes

**Method of Use:** Generally smoked, occasionally injected or taken orally

**Effects:** Psychological: Hallucinations, illusions, feelings of detachment, distortion of time, persons and places

Physical: Dulled touch and pain sensations, loss of coordination, increased pulse and respiration, dizziness and nausea

**Duration of Effects:** Onset: 3-5 minutes

Peak: 15-30 minutes

Last: 4-6 hours

Effects wear off: 24-48 hours, 60 percent excreted within 12 hours, traces found up to 8 days

**Tolerance to Effects:** Probably not physically

**Physical Dependence Potential:** Minimal

**Psychological Dependence Potential:** High

**Effects of Overdose:** Loss of muscle coordination, fever, convulsions, flushing, psychotic episode

**Drugs and Their Effects**  
**Tranquillizers**

**Drug Family:** Depressant

**Street Names:** Val, Big E., Lib., tranks

**Appearance:** Tablet and capsules

**Method of Use:** Swallowed or injected (rarely)

**Medical Uses:** Anxiety, muscle relaxant, sedation, treatment, alcoholism detox

**Effects:** (Similar to alcoholic intoxication), depressed reflexes, peaceful - calm state, reduced aggression, euphoric sense of well-being

**Duration of Effects:** 4 to 8 hours, peaks about 2 hours after ingestion, usually

**Length of Time Substance can be Detected in the Body:** Several days before blood and brain levels of the drug decreases. Stores in fatty tissue.

**Tolerance to Effects:** Yes, to the behavioral but not the respiratory depressant effects as with barbs but less intense and severe

**Physical Dependence Potential:** High

**Psychological Dependence Potential:** High

**Overdose and Treatment:** Stupor, coma, and the inability to communicate in extreme cases, especially dangerous when combined with alcohol or other depressant. Death is rare, unless combined with other depressants.

Treatment of overdose: requires medical evaluation; treatment of mild intoxication may not, although it is recommended.

**Drugs and Their Effects**

**Barbiturates**

**Drug Family:** Depressant

**Street Names:** Barbs, reds, yellow jackets, goofballs, blues, nemmies, 714's (Quaaludes)

**Appearance:** Usually bright colored capsules, over 2500 types have been synthesized with those currently on the market

**Method of Use:** Swallowed, injected

**Medical Uses:** Central nervous system disorders, anxiety, insomnia

**Effects:** Central reduction of central nervous system activity similar to alcoholic intoxication, constricted pupils, in-coordination, lethargy, slow/slurred speech, drowsiness, relief from anxiety, mood swings, difficulty thinking

**Duration of Effects:** 1 to 16 hours, depending on type of depressant ingested

**Length of Time Substance can be**

**Detected in the Body:** Approximately 72 hours, stored in fatty tissues

**Tolerance to Effects:** Yes, develops only to the sedative (behavioral) effects, not to respiratory depressant effects (so tolerated dose may exceed lethal dose and cause death) without symptoms of intoxication

**Physical Dependence Potential:** High

**Psychological Dependence Potential:** High

**Drugs and Their Effects**

**Amphetamines**

**Drug Family:** Stimulant

**Street Names:** Dexies, uppers, bennies, crossroads, black beauties, speed, Christmas trees

**Appearance:** Capsules, tablets, white crystalline powder, liquid

**Method of Use:** Swallowed, injected

**Medical Uses:** Short-term weight reduction, hyperactivity in children, narcolepsy

**Effects:** Intense stimulation, increased alertness, insomnia, euphoria, excitation, increased stamina, quickened reaction time, anxiety, decreased appetite, increased blood pressure and breathing, restlessness

**Duration of Effects:** Approximately 4-12 hours, depending on type of stimulant

**Length of Time Substance can be**

**Detected in the Body:** Approximately 48 hours

**Tolerance to Effects:** Yes, especially to appetite reducing and euphoric effects. User may increase dose in attempt to obtain original effects.

**Physical Dependence Potential:** No

**Psychological Dependence Potential:** High

**Overdose and Treatment:** Agitation most common, hallucination and convulsions are possible though rare in most cases of severe abuse and requires hospitalization. Physical withdrawal is characterized.

**Drugs and Their Effects**

**Cocaine**

**Drug Family:** Stimulant

**Street Names:** Coke, snow, nose candy

**Appearance:** White, crystalline powder

**Method of Use:** Inhaled, injected

**Medical Uses:** Local anesthetic

**Effects:** Intense stimulation, excitation, nervousness, talkativeness, euphoria

**Duration of Effects:** Duration: 15 to 30 minutes  
Half life: 2-5 hours

**Tolerance to Effects:** Probably

**Physical Dependence Potential:** Possible

**Psychological Dependence Potential:** High

**Effects of Overdose:** Fast and irregular breathing, extreme agitation, convulsions, possible death

**Special Note:** Extreme abuse can produce paranoid behavior

**Drowsy Driving Facts**

**Drowsy Driving**

It is difficult to attribute crashes to sleepiness because there is no test to determine sleepiness as there is for intoxication (i.e., a sleep “breathalyzer”). In addition, there are no standardized criteria for making the determination of a driver’s sleepiness, and there is little police training to identify sleepiness as a cause in the event of a crash. Eight states do not have a code for sleepiness on their accident (crash/collision) report form.

The U.S. National Highway Transportation Administration estimates that approximately 100,000 reported crashes annually (about 1.5 percent of all crashes) involve drowsiness/fatigue as a primary causal factor.

Drowsiness/fatigue may play a role in crashes attributed to other causes. About one million crashes annually, one-sixth of all crashes, are thought to result from lapses in driver attention. Sleep deprivation and fatigue make lapses of attention more likely to occur.

In a recent survey of 9,000 male drivers in Britain (4,600 - 51 percent responded), the drivers attributed 7 percent of their crashes in the previous three years to tiredness (sleepiness and/or fatigue).

At the recent National Truck Safety Summit, organized by the Federal Highway Administration, and involving representatives from government, industry and the research community, driver fatigue was designated the number one priority for truck safety.

People tend to fall asleep more on high-speed, long/boring, rural highways. For example, New York State police estimate that 30 percent of all fatal crashes along the New York Thruway occurred because the driver fell asleep at the wheel.

### Drowsy Driving Facts

#### Who is Most at Risk?

- All Drivers Who Are:
  - Sleep deprived
  - Driving long distances without rest breaks
  - Driving through the night or at other times when they are normally asleep
  - Taking medicine that increases sleepiness or drinking alcohol
  - Driving alone
  - Driving on long, rural, boring roads
  - Frequent travelers, e.g., business travelers
- Young People:

Sleep-related crashes are most common among young people who tend to stay up late, sleep too little and drive at night. In a North Carolina study, 55 percent of fall asleep crashes involved people 25 years old or younger. Seventy-eight percent were males. The peak age at time of occurrence was 20 years.
- Shift Workers:

25 million Americans are rotating shift workers. Studies suggest that 20 to 30 percent of those with nontraditional work schedules have had a fatigue related driving mishap within the past year. The drive home from work after the night shift is likely to be a particularly dangerous one.
- Commercial Drivers:

Truck drivers are especially susceptible to fatigue related crashes. In addition to the high number of miles driven each year, many truck drivers drive during the night when the body is generally the sleepiest. Truckers may also have a high prevalence of a sleep and breathing disorder called sleep apnea.