

## MODULE A-2

### INTRODUCTION TO THE ALCOHOL/DRUG TRAFFIC SAFETY PROBLEM

45 MINUTES

#### I. PURPOSE

This module is designed to define terms, explain the nature of the problem of alcohol/drugs and traffic safety, and provide possible solutions.

#### II. PERFORMANCE OBJECTIVES

Participants will:

- A. Identify how transportation has become more complex and risky.
- B. Describe the scope of the problem of DWI in Texas and the U.S.
- C. Identify possible DWI problem solutions.
- D. Describe three purposes of the course.
- E. Give the final objective of the course.
- F. Define basic course terms.

#### III. ACTIVITIES AND CONTENT

- A. Explanation of Objective and Purposes of the Course (10 minutes)

To help participants understand the nature of the course, the instructor should use **PP Slide 3 "Course Objective and Purposes"** to briefly cover the objective and purposes of the DWI Education course. (Note: PP Slide 1 is a course title slide only and should not be shown to the class and #2 is purposely blank.)

1. **DWI course final objective** – This objective is: **To have people carry out responsible decisions which will prevent future DWI behavior.** The instructor should stress that this is **not** something which may be measured in the class, but it is the ultimate test of the success of the

COURSE OBJECTIVE

To have people carry out responsible drinking/drugged driving decisions which will prevent future DWI behavior.

COURSE PURPOSES

1. Gain information about the effects of alcohol and drugs on driving skills.
2. Identify your own drinking or drugged driving pattern.
3. Develop a plan to reduce the chance that you will be involved in future DWI behavior.

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***PP Slide 3***

program. If students achieve the three purposes, they will be much more likely to be able to complete the objective of avoiding future DWI behavior (drinking alcohol or consuming drugs before driving). The instructor should stress the “behavior” concept as NHTSA data for 2002 indicate that 92% of all alcohol-related fatal crashes involve a driver who has **never** been previously convicted of a DWI offense (NHTSA, 2003).

2. **DWI course purposes** – In order to achieve the final objective, three different but related steps on the part of the students are necessary:
- a. To gain knowledge about the effects of alcohol/drugs on driving skills.
  - b. To identify their own drinking/drugged driving pattern.
  - c. To develop a plan to reduce the chance that they will be involved in future DWI behavior.

*The instructor should cover each of these briefly and note that each will be measured at some time during the class.*

**Purpose 1 (gain knowledge)** – To illustrate that knowledge is important, the instructor should ask several questions. For example:

- a. **What is “BAC”?**  
(Answer: Blood Alcohol Concentration.)
- b. **Is reaction time slowed by alcohol?** (Answer: Not in all cases. This will be covered in Module B-2.)
- c. **Does Texas law require a person to sign his/her license in order to be required to take a breath test?** (Answer: No, this will be covered in Module A-3.)

*This should be only a **brief** process to demonstrate the type of information to be covered and lack of knowledge by many people. The instructor should also give the class pre-test average score, if available, to demonstrate their level of knowledge. Specific questions missed by a significant number of students may be given as examples of lack of knowledge. The instructor should also be sure to specifically cover weak areas, as revealed by the pre-test, during the course of instruction for the remaining modules.*

**Purpose 2 (pattern)** – The instructor should state that there will be in-class and take-home exercises (BD-1 for example) which will help them see if a pattern of alcohol/drug use and driving exists. The instructor should ask what is meant by a pattern of alcohol or drug use.

Example: Do you only drink on weekends or always after work or...?  
Was the situation which led to your arrest unique or had similar situations previously occurred?

**Purpose 3 (plan)** – The instructor should go over the necessity for each person to make a specific plan based on the knowledge he/she will gain in the class and any pattern which might be identified as part of class activities. This plan is designed to help them prevent future DWI behavior that could lead to arrests, crashes, etc. A specific procedure for making this plan is presented later in the curriculum.

*In **summary**, successful completion of the three course purposes (gaining knowledge, identifying a pattern, and development of a plan) should provide students with the ability to achieve the final objective of preventing future DWI behavior. These purposes and this objective give the background and rationale for the entire DWI education program.*

**B. Introduction to Nature of the Problem** (10 minutes)

1. As a lead-in to introducing the nature of the drinking/drug use and driving problem, the instructor must set the stage of this section. To do this, **one** of the two trigger videos must be used. These short videos (**Snort History** –5 minutes or **Don't Fence Me In** – 3 minutes) are **not** intended to impart educational concepts about alcohol or drugs, but rather to demonstrate several facts:
  - a. Alcohol has been available for centuries.
  - b. Powered motor vehicles have only been available for about 100 years.
  - c. Alcohol, in **some** amount, can impair persons and thus cause driving problems.

2. These videos also have the advantage of being an “ice-breaker” for the group, as they employ humorous characterizations. The procedure for using these videos is as follows:
  - a. Tell the class that they will be watching a video about alcohol and driving which has no narration so they must watch it closely.
  - b. Ask the class to look for the themes of the video and be ready to discuss these after the video.
  - c. Show the video.
  - d. Follow the video with these types of questions as well as generating any others which are appropriate:
    1. What are the themes of this video?
      - (a) Alcohol, in **some** amount, distorts the perception of reality;
      - (b) Alcohol has been present for centuries, but modes of transportation have become more complicated.

*The instructor should **not** get into an explanation of BAC, accident statistics, etc. at this time. The only purpose of this exercise is to introduce the fact that alcohol/drugs and driving a motor vehicle today may produce problems not faced one hundred years ago.*

- (2) Ideas and Questions for **Snort History**:
  - (a) Give examples of how alcohol distorted reality for the characters in the video.
    - i. Caveman – log got wider with a stripe down the middle;

- ii. Roman – opening got wider;
- iii. Bicycle – man thinking the pond was a puddle;
- iv. Roaring 20's man & train – train appeared to go backwards.

**(b)** What was the last thing the man did prior to pulling onto the heavily traveled highway? (Pop the top of his last can of beer in his six-pack)

**(c)** Why is driving today more risky than in the early 1900s? (More vehicles and higher speeds)

**(d)** What were some of the signs that the driver may have been impaired? (Poor judgment and poor decision-making)

**(3)** Ideas and Questions for **Don't Fence Me In:**

**(a)** What are the themes of this video?

- i. Alcohol, in some amount, distorts the perception of reality.
- ii. Alcohol has been present for many years, but modes of transportation have become more complicated.

**(b)** What were some signs that indicate the cowboy was intoxicated?

- i. Tried to get horse to go forward without having reins.
- ii. Didn't notice man in the street.
- iii. Tried to act straight when he saw the sheriff.
- iv. Ran into buggy.
- v. Rode through a herd of cattle.
- vi. Fell off horse in creek.
- vii. Went to sleep under tree.

**(c)** What were the signs the modern day cowboy was impaired?

- i. Backed into people when leaving parking lot.
- ii. Vision impaired.
- iii. Speed up to beat train at crossing.
- iv. Cut in front of woman at intersection.

- v. Reaction when car stopped ahead of him quickly.
- (d) Why is driving today more risky than in the Old West?
- i. More vehicles.
  - ii. Higher speeds.
  - iii. Vehicles do not respond as animals would because an animal's nature is to avoid a hazard.
  - iv. A vehicle's impact is more deadly than a horse or a buggy.

**C. Student Knowledge of the Problem (5 minutes)**

After completing activities on the historical problem of drinking related to transportation, the instructor should focus upon the extent of the problem today. Unless people are being killed or injured, or property is damaged, there is little need to be concerned about whether a person drinks/ uses drugs and drives or not. The purpose of the following exercise is to see what the class knows about problems related to DWI and give accurate information. **PP Slide 4** "**Traffic Deaths and Alcohol/Drugs**" should be used for this.


*The instructor should show the questions on the slide one at a time. Student answers should be placed on the board.*

**TRAFFIC DEATHS & ALCOHOL**

Number of traffic deaths in 2007...

- US?
- Texas?

Have traffic related deaths increased or decreased since 1997?



What percent of traffic deaths involve alcohol?

Has the percentage of alcohol traffic related deaths increased or decreased since 1997?

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**PP Slide 4**

**1. How many traffic deaths occurred in the U.S./Texas last year?**

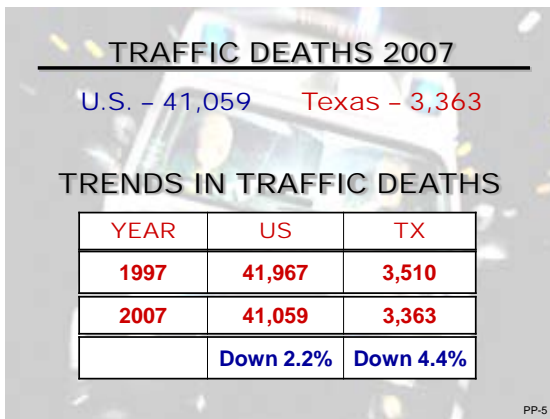
U.S.?            Texas?

2. **Is the number of traffic deaths up or down in the last five years?** U.S.? Texas?
3. **What percentage of U.S./Texas traffic deaths involve alcohol/drugs?** U.S.? Texas?
4. **Have alcohol/drug related traffic deaths increased or decreased in the last five years?** U.S.? Texas?

**D. Nature of the Problem and Solutions** (15 minutes)

After all four questions in Activity C have been “guessed at” by the students, the instructor should use **PP Slides 5 and 6** to explain the true nature of the problem and compare with student guesses. The purpose of this activity is to demonstrate that they probably do not know the true nature of the problem and to provide them with accurate information.

1. **How many traffic deaths occurred in the U.S./Texas last year?** The instructor should use **PP Slide 5 "Traffic Deaths/Trends in Traffic Deaths"** (top portion) to give the correct answer and then compare these numbers with the numbers given by the students.



**U.S. = 41,059 in 2007**

**Texas = 3,363 in 2007**

**PP Slide 5**

*The instructor should update all of these figures annually from state and federal sources. **NOTE THAT SLIDE 5 REFERS TO 1997-2007 WHILE SLIDE 6 REFERS TO 2002-2007.***

**2. Is the number of traffic deaths up or down from previous years?**

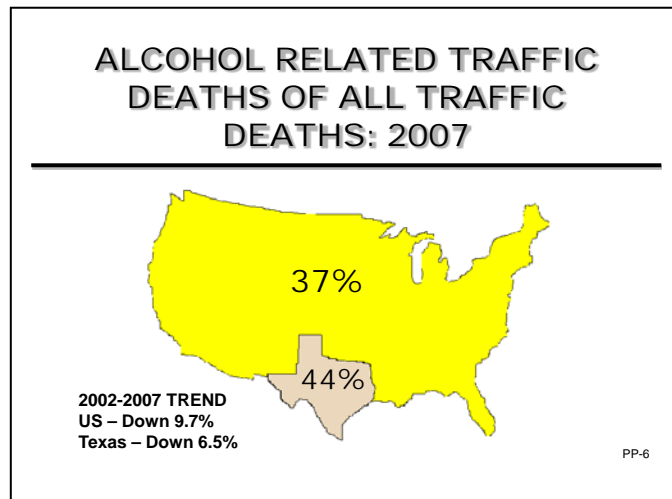
The instructor should use **PP Slide 5** to compare deaths in 1997 with 2007. The number of traffic deaths in the U.S. decreased 2.2% and the number of traffic deaths in Texas decreased 4.4% between 1997 and 2007.

**3. What percentage of U.S. and Texas traffic deaths involve alcohol/drugs?**

The instructor should use **PP Slide 6 "Alcohol Related Traffic Deaths 2007"** to provide this information.

**U.S. = 37% in 2007**

**Texas = 44% in 2007**



**PP Slide 6**

Recent data from the country as a whole shows that 37% of all traffic deaths involve alcohol. In addition, alcohol was involved in 50% of all nighttime (6 p.m. to 6 a.m.) single vehicle crashes (NHTSA, 2007). The instructor should also note that 35% of all pedestrian deaths involve a pedestrian who was intoxicated and 27% of motorcycle fatalities involved alcohol. This demonstrates that alcohol problems involve more than just cars. In Texas, data has demonstrated that 44% of all fatal crashes involve alcohol. *The instructor should point out that comparable data is not currently available for other drugs.*

4. **Has the percentage of alcohol-related traffic deaths increased or decreased in recent years?** The instructor should refer again to **PP Slide 6** to provide this information.

**U.S. – Decreased 9.7% from 2002 to 2007**

**Texas – Decreased 6.5% from 2002 to 2007**

The instructor should point out that these are important reductions in the percentage of alcohol-related traffic deaths in Texas, but that our state is still 19% higher than the U.S. average.

$$\frac{44-37}{37} = \frac{7}{37} = 19\%$$

1. **What might account for the decrease in the percentages of alcohol-related traffic deaths in Texas in recent years?** The purpose of this portion of the exercise is to try and lead class members to the conclusion that education programs are worthwhile. To do this, the instructor should use **PP Slide 7 "Possible Reasons for Decline in Alcohol-Related Deaths in Texas"** to cover possible reasons that people may think have caused the decline, but actually may not have influenced the decline in any way.

- a. More enforcement?** While DWI arrests climbed in the early 1980's (89,466 in 1981 to 149,621 in 1983) they have declined since that time to 94,605 in 2007.



**PP Slide 7**

- b. Stronger laws?** While some laws have been made stronger, this is not true in all cases. In some ways, penalties are not as stiff today as in 1982. For example, while the first offense fine limit was \$500 in 1981, compared to up to \$2,000 now, the maximum fine for a second DWI offense was \$5,000 compared to \$4,000 today. The maximum jail time in 1981 for a second offense was five years compared to one year today. Some also argue that laws which are perceived as too severe result in fewer convictions as people are more likely to contest the charge.
- c. Lower BAC level?** The legal limit for intoxication was at .10% BAC until September 1, 1999 when it was lowered to .08%. Having a lower BAC level could influence drivers to reduce alcohol consumption before driving. As the average BAC at arrest in Texas is .16, this may not be a significant factor.

However, the average BAC is declining. *The 2007 National Roadside Survey of Alcohol and Drug Use by Drivers* found the percentage of weekend nighttime drivers in the U.S. with BACs equal or greater than 0.08% declined from 7.5% in 1973 to 2.2% in 2007.

*At this point the instructor should explain that BAC means Blood Alcohol Concentration and is a ratio between alcohol and blood. A .08% ratio means eight (8) drops pure alcohol for 9992 drops of blood and body fluid.*

- d. More breathe tests given?** If more breath tests were given, this would be expected to increase convictions, which in turn could have a deterrent effect on DWI and, thus, lower deaths. Breath tests in Texas actually declined from 100,855 in 1983 to 57,402 in 2002 to 50,006 in 2007. Therefore, this cannot be a reason.

**e. Education?** Education programs for persons convicted of DWI have been implemented, especially since 1984, and general education in alcohol/drug use has been improved. Studies by the Texas Commission on Alcohol and Drug Abuse (which is now the Department of State Health Services) have indicated that a person is 50% less likely to be rearrested for a DWI offense if he/she has completed such a program (Liu, 1993). At this point, the instructor should be careful not to overstress the value of the DWI education program. As with any education program, it will work only if people apply what they learn, not just gain information.

*In addition, the instructor should note the possible influence of MADD, designated driver programs, general education, and overall increased public awareness of the problems associated with drinking and driving.*

#### **IV. EVALUATION (5 minutes)**

The instructor should use these questions as a brief review before beginning Module A-3. It is also recommended that a ten-minute break be taken after the review is completed.

**A. What is “BAC”?**

(Blood Alcohol Concentration)

**B. What are three possible reasons for the decline in DWI deaths in Texas?** (Education, Enforcement, Stronger Laws)

**C. What percentage of drivers killed in Texas in 2007 had alcohol in their system?** (44%)

#### **V. RESOURCES**

- A. PowerPoint Slides 3-7**
- B. "A Snort History" video or "Don't Fence Me In" video**

## **VI. REFERENCES**

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