

Appendix A

Lesson Plans

Lesson Plan #1

Title: Advantages of Using POV Restraint System (Lapbelt and Shoulder Strap Combination)

Training

Objective: Action: The student will be able to list the advantages of using his restraint system and state supporting statistical data. He will also be able to state the ways in which his use of the restraint system satisfies his personal needs.

Conditions: Given a training film, 16mm projector, screen or restraint system convincer, if available, and classroom.

Standard: The student will be able to provide statistical data relevant to the advantages of using restraint systems from at least two different studies. He will demonstrate an appreciation of the personal motivation for wearing a restraint system by listing three motivational aspects that are appropriate to him.

Media and

Equipment: TF 20-6045, "Why Seatbelts?"
MF 20-9403, "Safety Through Restraint System" or
MF 20-9982, "Interrupted Morning"

Also, 16mm projector, screen, or restraint system convincer.

References: None

Methods of Instruction: Conference, demonstration

Time: 50 minutes

1. Introduction.

a. Attention. To get the attention of the students, the instructor takes an egg and, holding it about 3 feet over the table, drops it. When it breaks, he comments on its resemblance to a head that has just hit a windshield at 50 mph.

b. Motivation. The instructor states that each student is as fragile as an egg when we are inside our automobiles. When a crash comes (and one in four will be killed or injured in a traffic accident sooner or later) the way in which we are "packaged" inside our car can determine whether we live or die.

c. Objective. The instructor explains that the students are going to examine the reasons why a driver should wear a restraint system, pinpointing at least three needs that are satisfied by using a restraint system. At the end of the class the students will know the facts and benefits in using their POV restraint system.

2. Body.

a. POV accidents continue to account for a tremendous number of deaths and injuries each year. One out of every four men, women and children can expect to be killed or hospitalized during their lifetime as a direct result of a motor vehicle

accident. That 25-percent chance is very high indeed. Here at Ft. _____ in the course of a 3-year tour, you have better than a 1 in 1,000 chance of being killed and 1 in 150 chance of being injured in a POV accident. Think about it! Those are pretty small odds when the stakes are your life. Many think that it can't happen to them because of their expert driving skill or their defensive driving ability. The fact that, on the average, 1 out of 20 drivers on the road is drunk can place even the best driver in the position of becoming a POV accident victim, unable to avoid a crash no matter what he does.

b. What's the answer? There are many things a driver can do to improve his chances of avoiding death or injury. These include use of defensive driving techniques, driving a well-maintained car, controlling alcohol intake, "yes, controlling alcohol intake," and many others. The easiest and certainly one of the most effective actions is simply to wear your POV restraint system. Study after study has demonstrated the lifesaving effectiveness of these restraint systems. For example:

(1) A Cornell University laboratory report states that drivers wearing a restraint system have a 70% better chance

of avoiding death or serious injury in an accident than individuals who do not wear a restraint system.

(2) The Cornell University laboratory also advises that chances of being killed are 30 times greater if you are thrown out of the vehicle.

(3) A Swedish Government research study reports that the three-point lapbelt/shoulder strap restraint system reduces injury potential 40 to 90 percent depending on the type of crash and almost guarantees survival at impact speeds up to 60 mph.

(4) Ft. _____, studies indicate that _____ person(s) who were wearing a restraint system were killed in the last 3 years. There can be no doubt of the value of restraint systems. Why then do most people still not wear them? One reason is that many people fear being trapped if their vehicles catch fire or if the vehicle plunges into the water. Such fears are almost totally groundless. The simple truth is that:

(a) Vehicle fires occur in less than 1 percent of all vehicle crashes. Even when it does occur, survival chances are increased by the fact that a restrained driver is more likely to be conscious and uninjured to permit escape.

(b) Accidents involving the vehicle submerging take place in less than .3 percent of all accidents. Again the restraint system enhances survival chances by increasing the chances of staying conscious and remaining uninjured, thus permitting escape. Obviously, these fears don't hold water and can't be used to justify not using your restraint system.

c. Practical exercise or movie. At this point, the group is taken to the restraint system convincer to allow each student to ride the convincer. As an alternative, show a restraint system movie, giving it a proper explanation.

d. Attitude enhancement. We can see that POV restraint systems can do the job. What's in it for a driver to wear his restraint system? Depending on the individual, many things can be pointed out. Here are a few.

(1) Survival. No one wants to die. To leave loved ones, the fresh air of life ... simply because you are too lazy to spend 2 seconds to put on your restraint system.

(2) Avoid disfigurement, pain, and disability. An egg doesn't look like much after hitting the floor. Faces don't look like much either after going through a windshield. Each year hundreds of thousands of skulls, limbs, backs, necks and ribs are broken simply because the driver or passenger didn't wear his restraint system.

(3) Security of loved ones. The possibility of your death or disability may not cause you loss of sleep, but you may have a wife, children, a girlfriend or some valued purpose in life that should make you respond to safe driving suggestions. The acceptance of the fact that "an accident can happen to me and I don't want it to" can be a very powerful motivator. The same motivation applies to seeing that others in your car use their restraint system.

(4) The many joys of life should also be a powerful motivator. A spring day, a loveable wife, can in fact be motives for wearing your restraint system if it is pointed

out that restraint systems can help us live through an accident. (The instructor should make reference to such factors, adding his examples.)

(5) Wearing your restraint system puts you in compliance with Army regulations when you drive on post. The Army made it mandatory for POV drivers to use their restraint systems because the evidence is so strong that the restraint system saves lives. The Army is hoping that your use of the restraint system on post will carry over to your off-post driving. The Army has nothing to gain by the requirement except protecting the Army's finest—you.

(6) Restraint system use may also protect your legal rights in the event your car is hit by someone else and you are injured. A New York court threw out an accident damage claim because of contributory negligence. The victim failed to use her restraint system which resulted in increased injuries and damage. You could lose your chances of recovering thousands of dollars in losses in a similar case because you didn't take 2 seconds to buckle up.

e. Restraint systems have additional advantages. Tests and accident experience have shown that the restrained driver is able to retain control of his vehicle in the event of an impact much better than the unrestrained driver. Many crashes involve an initial glancing impact, followed by brief periods of travel in which it is possible for the driver to regain control of his vehicle if he is still restrained behind the wheel. Since so many accidents involve multiple impacts, this can be a real lifesaver. Many people have said that the restraint system helps them drive more comfortably, especially on long trips, by providing support and making it easy to keep a good posture.

3. Conclusion.

a. Questions. Allow time for questions and answers.

b. Summary. The POV restraint system does work; it can save your life. Even

in those unusual cases where many people look at the restraint system as a hazard, it actually saves lives. It is a fact that there is a 1 in 4 chance that a POV accident could happen to you. If it does, your restraint system can definitely be the difference between life and death. We all have too much to live for to risk dying in a POV accident simply because we are too lazy or forgetful to spend literally a second or two to buckle up. In brief, here is how the statistics line up:

(1) Fact 1: One in four Americans will be hospitalized or killed in a motor vehicle accident during their lifetime.

(2) Fact 2: At the average Army post, one in 1,000 soldiers will be killed during their 3-year tour and 1 in 150 will be injured if POV accidents continue at the current rate. Those odds are certainly not in your favor.

(3) Fact 3: On the average, 1 in 20 drivers on the road is drunk. No matter how "expert" a driver you feel you are, there are times when there is no way you will be able to keep out of the way of these drunk drivers.

(4) Fact 4: Your automobile restraint systems can keep you and your loved ones alive at impact speeds of up to 60 mph. It will also reduce chances of injury from 40 to 90 percent.

(5) Fact 5: The use of the restraint system by drivers will reduce fatalities by 70 percent.

(6) Fact 6: Unless you are a suicide candidate, you need to wear your automobile restraint system.

At this point, ask the students to think over these facts and ask them to make a commitment now for their own good to use their automobile restraint system for at least the next 30 days every time they drive a car or ride in one.

c. Closing statement. Isn't it time you carefully evaluated the place that the restraint system should have in your driving routine? Doesn't it really belong around your waist and over your shoulder and shouldn't you insist that your loved ones also wear the restraint system?

Lesson Plan #2

Title: Controlling Drowsiness and Falling Asleep at the Wheel

Training

- Objective:** Action: The student will be able to describe his susceptibility to drowsiness. He will be able to describe the nature of the threat drowsiness poses to safe driving and he will be informed of eight measures to control drowsiness while driving.
- Condition: Give each student the questionnaires on determining their individual susceptibility to drowsiness and fatigue control measures.
- Standard: Without reference to notes, the student will be able to state his susceptibility to drowsiness, identify 2 to 3 seconds as the lapse period for drowsiness and will be able to state six of eight measures to control drowsiness while driving.

Media and

Equipment: TF 20-6044, "The Rest of Your Life"

References: None

Methods of

Instruction: Conference, self-quiz and handout

Time: 45 minutes

1. Introduction.

a. Attention or motivation. (1/1000, 1/150 written on chalkboard). These numbers are not blood pressure readings or vision measurements; they are body count ratios. On the average, during a 3-year tour at this post, 1 of every 1000 soldiers will die in a POV accident. One in every 150 will be hospitalized. Many of those deaths and injuries will occur because the driver falls asleep. Now sleep is supposed to freshen the body, not lead to a crash and death. We are going to look at this problem and see just how drowsiness gets to us behind the wheel. We are going to see just how susceptible each of you is to drowsiness and look at ways it can be controlled.

b. Objective. At the end of the class, you will be able to describe how drowsiness affects a driver and how to control it.

2. Body.

a. How drowsiness creeps up on you. Many people think that drowsiness is a threat only when the body or mind is tired. Actually, people have a tendency to get sleepy when performing very quiet, boring tasks like driving on a highway. A few people called narcoleptics can hardly keep from dozing off in such situations and must be very careful about driving. Every driver has a tendency to become drowsy. The following make the tendency for drowsiness worse:

(1) Physical or mental fatigue.

(2) Alcohol—a real problem in the Army with many accidents involving alcohol and falling asleep at the wheel.

(3) Soothing, repetitive music or road sounds.

(4) Driving beyond normal sleeping time. When you go to bed 6 days a week at 11 p.m., your body gets used to shutting down at 11. Run past that time while driving and you had better be careful. Most of us think that drowsiness causes problems by generally degrading our driving capability. That's true to an extent. However, the kind of drowsiness that kills is the kind in which you actually fall asleep for 2 to 3 seconds, more than enough to cross the centerline or run off the road. How many students ever had one of these momentary lapses? Hold up your hands. (Have a couple of students comment.) Think how close you were to dying. One or two more seconds, a couple of inches, a curve on the road or a soft shoulder or an oncoming car, and you might not be here today. It is these moments of dozing off that we have to prevent.

b. The quiz. Let's find out just how careful you have to be by looking at your handout. Take 5 to 10 minutes to answer the questions on the first page. This quiz is for your information only, so be honest with yourself. (Wait while students complete quiz.) Evaluate yourself by adding up your pluses and minuses. Those who have a plus score of 12 or above are relatively

safe. If you scored 9 to 11 pluses you need to take some special precautions. If you scored 8 or below on pluses, we seriously suggest you consult a doctor to see if any special precautions are needed to prevent drowsiness on long trips.

c. Let's look at some of the ways you can control drowsiness:

(1) If you're on a long trip, avoid the overextended driver pattern—too little sleep, late starts, more than 3 hours at a stretch behind the wheel, and rest stops that are too brief or no rest stops at all. You should allow 25 percent of your travel time for rest outside the vehicle. Use DB notices to seek a rider to help you drive. Your trip will be safer and cheaper.

(2) If you must drive for more than 3 or 4 hours at a stretch, be aware that your performance deteriorates and compensate by taking precautions against sleep mentioned below.

(3) If you must drive well beyond your normal bedtime, avoid alcohol and drugs, but eat something. Lack of food can lower your blood sugar and cause drowsiness. Snacking on pretzels or crackers can be a good way to stay awake.

(4) If you have a radio, try a talk show or news program instead of music. Music may be too soothing.

(5) If possible, try playing games like long distance truck drivers do; e.g., looking for license plate number combinations or counting those from out of state.

But avoid monotonous games like counting telephone poles or signs.

(6) If you know you tend to get sleepy behind the wheel, avoid driving beyond your normal hours of wakefulness or without enough sleep. How many of you occasionally drive at 1 or 2 o'clock in the morning? When you do, use special caution.

(7) If you tend to get sleepy easily, check in at the hospital. The doctor may be able to prescribe an alert medicine to take before you drive that will be much more effective than nonprescription drugs or caffeine.

(8) If you're a passenger in a car whose driver performs many movements like rubbing his face or head, stiffening his

arms, or even closing his eyes briefly, he's sleepy. Suggest a rest break, or change drivers. In one recent study, women were found to remain alert at the wheel longer than men, suggesting it's wise for a husband to let his wife drive while he dozes for a while.

(9) If you have been drinking and are driving after your normal bed time, take special precautions. (Ask the class about their experiences using these techniques or other techniques that they have found effective in preventing drowsiness.) (Show TF 20-6044 and discuss the film with the class after showing.)

3. Conclusion.

a. Questions. Allow students to ask questions.

b. Summary. Make no mistake about it, sleepiness behind the wheel is killing soldiers. Our soldiers must know how to keep from falling asleep behind the wheel. When you drive, remember:

(1) Drowsiness kills too often.

(2) It works by putting you away for 2 to 3 seconds and then putting you away for good.

(3) We are all vulnerable to drowsiness to some extent.

(4) You can prevent it. Have the students explain, then summarize using handout.

c. Close. Guard against drowsiness while driving. Don't get killed by drowsiness; know how to prevent it.

Student Handout

Are YOU A Sleepy Driver?

Experts believe there may be certain signs in drivers' behavior that are a forewarning of falling asleep at the wheel. **Science Digest** compiled the following 15 questions, based on recent research, to help spot sleepy drivers. The **Digest** says that if your score includes more minuses than pluses, you should probably take special precautions, even though the test is by no means conclusive.

1. Do you doze off while watching a movie, listening to a sermon, attending class? often sometimes never
2. Are you ever startled to find your wheels off the pavement of the road? occasionally rarely never
3. Do you take many long automobile trips? yes no
4. Do you drive past your normal hour of retiring on long trips? often occasionally never
5. Do you habitually drive with loud rock and roll music playing? yes no
Soft, soothing music? yes no
6. Do you regularly drive at maximum posted highway speeds on long trips? yes no
7. How long do you drive before stopping or changing drivers? 2 hours 3-4 hours 5 or more hours
8. Do you often camp out, using the car as shelter? yes no
9. Do you do most of your long trip driving on highways with:
2 lanes? 4 lanes? 4-6 lane super-highways?
10. Is your driving performance noticeably better when you are well-rested? yes no
11. How many traffic convictions have you had in the past 2 years? 1 2 3 or more
12. Do you ever use tranquilizers while driving? yes no
13. When do you have the most trouble remaining alert in the car? Morning afternoon evening and night
14. Do you ever feel weak or unable to move after awakening from a nightmare or after strong emotion? yes no
15. How many hours sleep do you need to feel your best? 8 or under 8½ 9 or more

Answers

Score yourself
Circle one

- + - 1. If you checked "often" or "occasionally," circle a minus. People who doze off in other situations are more liable to get sleepy while driving.
- + - 2. If you checked "often," chalk up a minus. Narcoleptics often wake up to find their car on the shoulder, but it happens occasionally to normal fatigued drivers.
- + - 3. Mark yourself a minus if you checked "yes." A group called the overextended drivers tend to drive too far, too long, too late, and too fast. Their accident rate exceeds that of other drivers.
- + - 4. "Often" or "occasionally" means a minus. Overextended drivers often drive past their normal hour of retiring, a practice particularly dangerous for sleepy drivers.
- + - 5. If you checked "yes" to either rock and roll music is thought to cause some accidents because it prevents drivers from hearing road noises, but soft music can lull you to sleep.
- + - 6. "Yes" rates a minus. Overextended drivers regularly exceed maximum speed limits.
- + - 7. If you checked any time over 2 hours, give yourself a minus. Overextended drivers usually drive at least 3 hours before stopping.
- + - 8. "Yes" gets a minus. People who camp out in their cars on long trips tend to be overextended drivers.
- + - 9. Circle the minus if you checked "2 lanes." Overextended drivers do much of their driving on two-lane highways.
- + - 10. "Yes" rates a minus. One study indicates that the driving performance of overextended sleepy drivers is worse after a day's work than that of normal drivers.
- + - 11. Circle the minus if you had any convictions. Overextended drivers' convictions average between one and two in 2 years.
- + - 12. If you checked "yes," score a minus, but only if you use them after missing a night's sleep. The combination of tranquilizers and sleep loss results in a deterioration of driving.
- + - 13. "Afternoon" rates a minus. In one study, sleepy drivers had more trouble staying awake in the afternoon. True narcoleptics, however, seem to have trouble remaining awake at any time.
- + - 14. Circle a minus for "yes." Weakness or paralysis after nightmares, or even strong emotion, is a symptom of narcolepsy.
- + - 15. Only "8 or under" rates a plus. In one study, narcoleptics needed at least 8½ hours sleep to function well.

Student Handout

Fatigue Control Measures

1. If you're on a long trip, avoid the overextended driver pattern: too little sleep, late starts, over 2 hours at a stretch behind the wheel, too-brief rest stops. You should allow about 25 percent of your total travel time for rest outside the vehicle.
2. If you must drive more than 3 or 4 hours at a stretch, be aware that your performance is deteriorating.
3. If you miss a night's sleep and must drive, avoid alcohol or tranquilizers but do eat something. Lack of food can lower your blood sugar and cause drowsiness.
4. If you have a radio, try a talk show or news program instead of music. Music may be too soothing or drown out needed auditory input.
5. If possible, try playing games like long-distance truck drivers do; e.g., looking for license plate number combinations, or counting those from out of state. But avoid monotonous games like counting telephone poles.
6. If you know you tend to get sleepy behind the wheel, avoid driving beyond your normal hours of wakefulness or without enough sleep.
7. If you tend to get sleepy easily, check with the doctor at your dispensary or hospital. He may prescribe an alerting medicine to take before you drive that will be much more effective than nonprescription drugs or caffeine.
8. If you're a passenger in a car with a driver who performs many movements like rubbing his face or head, stiffening his arms, or even closing his eyes briefly, he's sleepy. Suggest a rest break, or change drivers. In one recent study, women were found to remain alert at the wheel longer than men, suggesting it's wise for a husband to doze while his wife drives for a while.

Lesson Plan #3

Title: Alcohol and Driving

Training

Objective: Action: The student will be able to identify the impact of alcohol in POV accidents at his post. He will be able to state a personal drinking formula that will assure him of safe driving ability. He will be able to determine when he is probably drunk and should not drive.

Condition: He will, without notes, be able to describe how he can adjust his personal drinking procedures so as to allow him to drive with less than a .05 blood alcohol level.

Standard: He should remain knowledgeable of procedures to follow to refrain from driving under the influence of alcohol for up to at least 30 days following training.

Media and

Equipment: Alcohol and safe driving card (boozemeter inclosed in packet).

Reference: TF 20-6043, "Drink and Drive - Why Not?"

Method of

Instruction: Conference, practical exercise

Time: 50 Minutes

1. Introduction.

a. Attention. The instructor asks how many students drink alcoholic beverages once in a while? How many have ever driven within 3 hours of having had two or more drinks. As can be seen, most people in the group drink at least occasionally. Of more interest is the fact that most people have also driven with alcohol in their systems. Probably not drunk, but with alcohol still in their systems. Many Americans are just like you. Most have had some drinks and driven their cars soon after. Is that necessarily bad? Yes, if they drink so much they can't drive safely.

b. Motivation. You have probably heard about the epidemic in the Army. The instructor asks a student what he knows about the epidemic. Then the instructor discusses the epidemic of deaths resulting from POV accidents. Investigations of the accidents indicate that drunk drivers are a major contributing factor. Too many people who drink drive while drunk. And they are killing themselves and others as a result.

c. Objective. The instructor tells the students that he will teach them a method that will tell when they are too drunk to drive safely. He will explain how the students will be able to determine when they can drive after drinking. The students will also learn exactly when it is safe to drive after having a few drinks.

2. Body.

a. Soldiers have about a 1 in 1,000 chance of being killed and a 1 in 150 chance of being injured in POV accidents. Over half of these accidents involved alcohol to some degree. The instructor then provides the students actual figures for a typical Army post. They are as follows for 1986:

(1) 18-25 years old - 68%

(2) E2 through E5 - 78%

(3) Time of day, 2000 to 0200 -50%

Clearly, alcohol is central to the problem of vehicle fatalities and injuries in the Army. Alcohol doesn't always work alone. Many POV fatalities are the result of drunks falling asleep or actually passing out and running off the road or having a head-on collision. The instructor provides information on case histories provided from the post safety office files.

b. Sobering myths: Too many people believe they have some special techniques for sobering up—drink a lot of coffee, get plenty of fresh air, take a cold shower. The facts are these: Your body can burn off alcohol at about the rate of one ounce per hour and there is virtually nothing you can do to speed it up. This means that if you get drunk, you have to wait until enough alcohol has burned off if you want to drive safely. If you have eight or ten drinks, it will certainly take a while to burn those drinks off. This brings up your first decision point.

If you plan a night on the town that involves travel and you expect to get loaded, arrange transportation. I repeat, if you expect to really tank up, plan some way to get home that doesn't involve driving. Don't trap yourself into a situation where you are drunk and have no way to get home without driving. It is close to suicide. Here's why:

(1) Reactions are slowed sharply.

(2) Vision narrows.

(3) Self-control vanishes.

But what if you are just going to have a few drinks with the guys and then come home?

How can you be sure that you can drive safely? There is an answer to this question. It depends on time, body weight since larger people on the average drink a little more since they spread it over more body tissue, and the amount of alcohol consumed. The instructor shows TF 20-6043 and discusses the key points afterward.

c. Developing a personal drinking formula. The instructor asks the students to get out their "boozemeters." He states that a typical GI weighs 150 pounds. This GI wants to go out with the guys, get a buzz on, shoot the bull, and then drive back to post. The boozemeter weight chart shows that he can drink 4 drinks the first hour and get his buzz and then drink one drink about every hour and a half for the next 4 hours. At the end of that time, he could go out, get in his car and drive,

knowing that his blood alcohol level is at or close to .05 which is well below the generally accepted blood alcohol level of .10 for arrests for driving under the influence (DUI). It takes one decision—get drunk and don't drive, or drink socially (do it right) and drive. There is no middle ground. The instructor then asks each student to figure out his individual plan by determining his weight category, then find how many drinks he can take the first hour and how many minutes between additional drinks in the next 4 hours. A good way to

remember the number is the number of first hour drinks (3 for example), the minutes between additional drinks (approximately 90) (thus 3-90) and the hours to wait from the time of your first drink (for example, 4) (thus 3-90-4). Come up with that number now. What's your number? How did you get it? Is it right?

3. Conclusion.

a. Questions. The instructor allows time for questions and answers.

b. Summary. The instructor reviews the key points. First, if you think there is a

possibility of getting drunk, plan ahead so you won't have to drive. There is no way a person can get loaded and drive safely. Coffee and cold showers won't help a bit, only time. Second, if you decide to drink socially, follow your boozemeter number and stick to it.

c. Closing statement. The instructor restates the Army's epidemic of vehicle deaths and zeroes in on the causes of POV accidents at his post, telling the students to follow their formula if they drink and plan to drive afterwards.

Answers to Skills and Knowledge Test, Appendix B

1. A
2. B
3. B
4. Personal answer
5. Avoid an extended driver pattern. Keep your mind busy. Avoid driving after normal sleeping time.
6. C
7. B
8. D
9. C
10. Personal answer