

OBJECTIVE 2.9 Identify the importance of safety belts and other occupant protection devices.

INTRODUCTION

Statistics show that traffic collisions kill or injure approximately seven Americans each minute. That amounts to one death every 12 minutes and one injury every 10 seconds. Traffic collisions account for approximately one-quarter of officer deaths and are the leading cause of injury and disability to police officers. Occupant protection is the most important and basic safety measure for reducing these officer deaths and injuries.

Officers are even more vulnerable to injury or death from vehicle collisions because of the number of hours spent in law enforcement vehicles and the varying conditions they encounter. Developing a habit of wearing restraint systems will significantly increase body protection and control the vehicle. Officers should become more aware of the types of occupant protection devices inside the vehicle and the ways to be protected while in the vehicle. Officers need to understand the importance of wearing restraint systems, not only for protection from death and injury in the event of a collision, but also for reducing the chances of becoming involved in a collision, and staying in the driver's seat.

CONTENT

ADVANTAGES FOR SAFETY BELT USE BY OFFICERS ON AND OFF THE JOB

1. Better vehicle control thereby reducing the chances of becoming involved in a collision
2. Less chance of injury or death if involved in a collision while using the restraint systems
3. Lower medical costs to self and community if involved in a collision while using the restraint system
4. Less time lost from work due to the reduction in the severity of injuries
5. Role model to community

LOSS STATISTICS FOR LAW ENFORCEMENT OFFICERS.

1. Approximately 25% of officers' line of duty deaths are traffic related.
2. 12% of state and 24% of municipal collisions result in injury to an officer.
3. On the average, law enforcement officers can expect to be involved in a collision every 28,000 miles of driving.

LOSS STATISTICS FOR THE GENERAL PUBLIC.

1. Collisions cost society in excess of \$137 billion annually.
2. On the average, one American dies every 12 minutes and one is injured every 10 seconds.
3. Collisions kill nearly 40,000 people annually, about 107 a day. (similar to a major airline crash every day).
4. Collisions injure about 5 million people annually.
5. Collisions are the number one cause of death for people ages 6 to 33 and one of the leading killers of children under age 14.

PROPER USE OF RESTRAINT SYSTEMS

1. They are 45-60 percent effective in reducing deaths to front seat passenger vehicle occupants and are 50-65 percent effective in preventing serious injuries.
2. Saved about 5,226 lives of front seat occupants over four years old and prevented nearly 136,100 moderate-to-critical injuries in 1992.
3. At 100% usage, would save 14,100 lives annually.

A VARIETY OF OCCUPANT PROTECTION DEVICES EXIST

1. Some of these are:
 - a. Head restraints - Adjusted to the middle of the head, level with the ears, they protect the neck from whiplash.

- b. Door locks - Lock all doors. Can provide better protection in a collision, preventing occupants from being ejected.
 - c. Collapsible steering columns - Collapses in a collision so that a driver's chest is protected from injury. The steering column absorbs some of the impact forces in a collision.
 - d. Padded dashboards - Designed to cushion the occupant if contact is made with the dashboard.
 - e. Recessed knobs and door handles - Designed to be recessed and smooth to minimize injury if contact is made by occupants.
 - f. Air bags - An air bag is a porous, fabric bag designed to supplement the restraint system in a collision. It is installed in the steering wheel hub for the driver and in the dashboard of some vehicles for the front passenger. The bag is activated in a serious frontal collision. The bag is activated by a collision sensor or switch that can discriminate between a collision severe enough to cause injury and a fender-bender or panic stop. Sealed within the system is a small amount of sodium azide. The impact of the collision triggers the conversion of the sodium azide to nitrogen, a harmless gas. In 1/25 of a second the bag is inflated and creates a protective cushion between the occupant and the steering wheel, dashboard and windshield. It begins to deflate immediately after deployment. Once deployed, the air bag cannot be used again.
2. How are they used correctly? Restraint system belts must be utilized with air bags.

SUMMARY

Officers are exposed to great risk while driving a patrol vehicle. One of the easiest ways to minimize that risk is to take advantage of the protection equipment in the vehicle.

SUGGESTED INSTRUCTIONAL METHODOLOGY

LECTURE WITH VIDEO AND GROUP DISCUSSION

Have the students fill out a questionnaire on their present usage rate for safety belts on and off duty. Have them write any questions, concerns, problems, or fears they have regarding safety belt use. Show a safety belt video such as "Room to Live" and, after the video, promote a group discussion relative to the facts presented in the video and the concerns expressed on the questionnaires.

SMALL GROUP

1. Divide the class into groups of 3-6 students. Have the group members list the problems they are concerned with regarding safety belt use in the patrol vehicle. After responses are gathered from all groups, have students state ways in which officers can overcome these problems.
2. Have the groups list those items such as a nightstick, radio equipment, briefcase, and so on normally found in a law enforcement vehicle that could cause problems if the vehicle was involved in a collision. List responses on a chalkboard and discuss ways in which these items can be secured.

RESOURCES AND AIDS

1. "Occupant Protection Usage and Enforcement Publications" - NHTSA
2. "Room to Live," a film
3. "Dynamics of a Crash," a NHTSA film

SUGGESTED EVALUATION METHODOLOGY**STUDENTS**

1. Written or verbal response to questions concerning advantages of safety belt use, techniques for use, and types of occupant protection equipment
2. Observation of safety belt use habits during driving activities

COURSE

1. Observation of safety belt use habits during on-job performance and off-duty driving

Systems of Driving

The Smith System

- **“Aim High in Driving”**
- **“Keep Your Eyes Moving”**
- **“Get the Big Picture”**
- **“Leave Yourself an Out”**
- **“Make Sure They See You”**