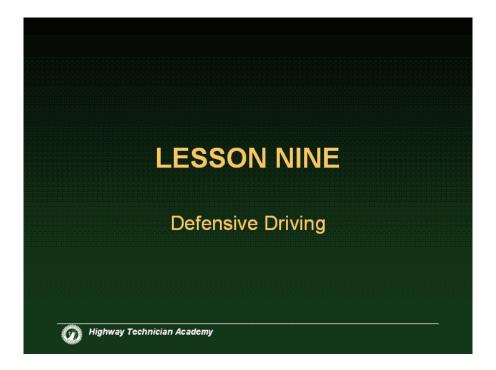
# Lesson Nine: Defensive Driving



# **Exercise# 1: Your Driving Risks**

1.	<b>Circle the answer</b> that indicates your current driving attitudes and behaviors. When you are finished add the number of circled answers in each column and total them.			
	a.	I get irritated when I think other drivers are driving too slowly		
			Agree	Disagree
	b.	I think I am the best judge of how fast I should be able to drive		
			Agree	Disagree
	c.	When n	o one is arou	nd, I may sneak through traffic signals and signs
			Agree	Disagree
d. I obey speed limits only when I think I m				nly when I think I may get caught speeding
			Agree	Disagree
	e. I often take chances in traffic just for the fun of it			
			Agree	Disagree
	f.	If another driver does something that gets me angry, I sometimes try to		
		get back	at them	
			Agree	Disagree
	g.	When I am in a hurry, I get as close as I can to the vehicle in front of me		
		to make	that driver n	nove out of the way
			Agree	Disagree
	h.	I am a g	ood driver, s	o I do not need to wear a seat belt
			Agree	Disagree
	i.	I try to get ahead of other drivers at stop signs or stop lights		
			Agree	Disagree
	j.	I can do	other things	in the vehicle while I am driving
			Agree	Disagree
	Totals:		Agree	Disagree

# A. What is Defensive Driving?

- 1. Defensive driving is driving to save lives, time and money in spite of the surrounding conditions and the actions of others
- 2. Road hazards and poor weather conditions are two of the worst possible conditions a driver can face
  - a. Having better control of the vehicle and anticipating these situations can prepare operators for these conditions when they occur

## B. Conditions, Dangers, and Defenses

- 1. Fog
  - a. Dangers
    - i. Reduced visibility
    - ii. Increased glare
  - b. Defenses
    - i. Slow down
    - ii. Use windshield wipers
    - iii. Keep headlights on low beam
    - iv. Practice using anti-lock brakes before an emergency occurs
    - v. Delay the trip if possible

## 2. Snow and ice



Figure 9-1 Snowy road

- a. Dangers
  - i. Reduced visibility
  - ii. Reduced vehicle traction
  - iii. Reduced steering control
  - iv. Reduced braking ability
  - v. Increased glare
- b. Defenses
  - i. Slow down
  - ii. Increase following distance
  - iii. Use the squeezing technique for braking unless the vehicle has anti-lock brakes

# 3. Rain

- a. Dangers
  - i. Reduced visibility

- ii. Reduced vehicle traction
- iii. Reduced steering control
- iv. Reduced braking ability
- v. Increased glare
- b. Defenses
  - i. Slow down
  - ii. Use wipers and washer fluid
  - iii. Keep headlights on
  - iv. Use defrosters on all windows
    - a) Using outside air can help vent the cab. Recycled air in the cab may fog the windows.
- 4. Night driving



Figure 9-2 Night driving with glare from oncoming headlights

- a. Dangers
  - i. Reduced visibility
  - ii. Headlight glare

- iii. Reduced peripheral vision
- iv. Reduced ability to judge distance, see movements and detect colors
- b. Defenses
  - i. Slow down
  - ii. Use headlights in reduced light conditions
  - iii. Increase following distance
  - iv. Keep windows clean by washing regularly
  - v. Adjust rear view mirror to night position

#### 5. Daytime driving

- a. Dangers
  - i. Too much light due to
    - a) Sunrise
    - b) Sunset
    - c) Glare
    - d) Headlights
    - e) Daytime running lights
- b. Defenses
  - i. Sun visor
  - ii. Sunglasses
  - iii. Safe following distance
  - iv. The recommended safe following distance for cars is three seconds
  - v. For larger vehicles it is one second for every 10 feet of vehicle length
  - vi. If the vehicle is over 40 feet long, the following distance is four seconds at 40 mph or under

- vii. If the vehicle is exceeding 40 mph, add another second
- viii. In adverse weather conditions, add another second or two

# 6. Trucks/tractor trailers

- a. Dangers
  - i. Larger and harder to see around
  - ii. Cause wind gusts
  - iii. Larger blind spots
  - iv. Recapped tires
  - v. Reduced maneuverability
- b. Defenses
  - i. Do not tailgate
  - ii. Allow plenty of room
  - iii. Stay out of blind spots when following
    - a) If the vehicle is following too closely to see the truck/tractor trailer's mirrors, the truck/tractor trailer driver cannot see the vehicle
    - b) When driving ahead of the truck, if the entire cab is not visible in the rear view mirror, pull ahead farther

### 7. Accidents

- a. Dangers
  - i. Rubber necking (i.e. slowing down to look at the accident)
  - ii. Reduced speed
  - iii. Possibility of causing another accident due to stop and go of traffic flow
- b. Defenses
  - i. Slow down
  - ii. Remain alert

- iii. Continue moving when possible
- iv. Brake early to warn others
- v. Pay attention to the road and to traffic

### 8. Emergency vehicles

- a. Dangers
  - i. Quick stopping
  - ii. Erratic traffic patterns
  - iii. Running red lights and stop signs

### b. Defenses

- i. Keep eyes on surrounding traffic and give the emergency vehicle room
  - a) On a two lane road, move to the right and stop
  - b) On a four lane road, move as far to the right as possible
    - 1) It is not necessary to stop on a four lane road but be aware that some people may still stop
  - c) The emergency vehicle will take the left or center lanes

### 9. School buses

- a. Dangers
  - i. Quick stopping
  - ii. Children running into traffic while entering or exiting buses

### b. Defenses

- i. Slow Down
- ii. Watch for stopped traffic and for children entering or exiting the bus
- iii. Traffic in both directions must stop on a two lane road when the bus's red lights are flashing

#### **10. Road construction**

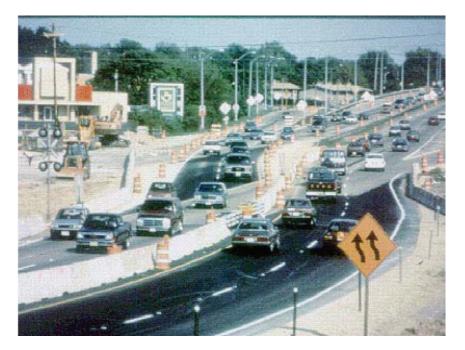


Figure 9-3 Traffic in a construction zone

- a. Dangers
  - i. Congestion
  - ii. Smaller lanes
  - iii. Slower speeds
  - iv. Construction equipment
  - v. Construction workers
  - vi. Unhappy drivers
- b. Defenses
  - i. Slow down
  - ii. Follow road signs and flagger's directions
  - iii. Remain calm
  - iv. Stay focused

### 11. Animals

- a. Dangers
  - i. Unpredictable
  - ii. Fast
  - iii. Sometimes hard to see
    - a) They are more active in the morning and evening hours
- b. Defenses
  - i. Stay alert
  - ii. Look for animal crossing signs
  - iii. Try to maintain lane

### 12. Personal security issues

- a. Dangers
  - i. High crime areas
  - ii. Car jacking
  - iii. Staged accidents
- b. Defenses
  - i. Keep doors locked
  - ii. Keep distance from other vehicles
  - iii. If a suspicious-looking stranger approaches
    - a) Sound horn
    - b) Remain in vehicle
    - c) Leave and go to a gas or police station
    - d) Attempt to get the license plate number, if possible
    - e) Radio local garage

# C. <u>Why Drive Defensively?</u>

### 1. In the past 30 years

- a. The number of licensed drivers has doubled
- b. The number of registered vehicles has tripled

## 2. National survey of driving behaviors

- a. Drivers reported committing these unsafe acts during the week prior to taking the survey
  - i. 30% entered an intersection just as the light was turning red
  - ii. 26% slowed but did not completely stop at a stop sign
  - iii. 23% drove 10 miles per hour over the speed limit on an interstate highway
  - iv. 22% drove 10 miles per hour faster than most other vehicles on the road with them
  - v. 8% drove when affected by alcohol
    - a) Alcohol is involved in almost half of all fatalities on our highways (48%)

### 3. Alcohol

- a. As mentioned earlier, 48% of all motor vehicle fatalities are alcohol related. Often, the offender will say
  - i. "I only had a couple"
  - ii. "I was only drinking wine with dinner"
- b. What is one drink?
  - i. One 12 ounce beer at 6% alcohol
  - ii. One 6 ounce glass of wine at 12% alcohol
  - iii. One 1<sup>1</sup>/<sub>2</sub> ounce shot of 80 proof alcohol
    - a) Each has the same effect inside the body
  - iv. The illegal blood/breath alcohol concentration for drivers over 21 years of age in Ohio is .08% for non CDL holders

- v. For CDL holders it is .04%
  - a) CDL holders are also subject to tighter punishments if caught driving while intoxicated, just by virtue of being CDL holders

# 4. Annual fatalities

- a. In the United States
  - i. The annual vehicle fatality number averages about 43,000. That number is down from around 50,000 in the 1990's.
  - ii. Seat belts, air bags and other safety devices are credited with the decline in fatalities

## D. Seat Belts

## 1. Why are they necessary?

- a. Seat belts, when worn properly, are credited with saving lives.
- b. Even with air bags, seat belts must still be worn
  - i. A 15 pound baby at 35 mph weighs 300 pounds
  - ii. A 165 pound person at 35 mph weighs 6,000 pounds

### 2. Use of seat belts

- a. Ohio/ODOT
  - i. Ohio has a primary seat belt law
  - ii. A driver cannot be stopped for a seat belt violation alone, but will be cited if stopped for any other traffic violation and found to be without a seat belt
  - iii. Seat belts must be worn, and worn properly, according to manufacturer's recommendations
  - iv. ODOT has made it mandatory that any state employee riding in a state vehicle MUST wear a seat belt

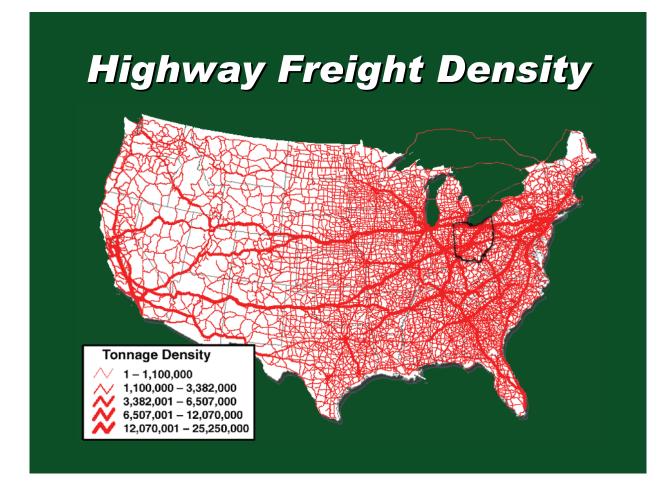
# E. Air Bags

# 1. Driver recommendations

- a. If possible, the driver should be at least 11 inches away from the steering wheel. This reduces impact and rash burns from the air bag.
- b. Hand position should be at eight o'clock and four o'clock on the steering wheel
  - i. This position allows the hands to remain on the wheel if the air bag deploys
  - ii. This position keeps drivers from hitting themselves in the face with their own hands

# F. Highway System

1. Truck traffic in Ohio



# G. Driver Behavior

### 1. Road rage



Figure 9-4 Dartmouth Towing slowly drags the damaged van from heavy brush using a winch and chains. The vehicle was forced off the road I-195 west, about 2 miles west of the Faunce Corner Road overpass. The driver of the van alleges he was forced off the main roadway intentionally.

- a. Using a vehicle as a weapon with intent to do harm
  - i. Physical assault of a driver or vehicle is a criminal offense
- b. Most of what we see on our highways is aggressive driving, not road rage

### 2. Aggressive driving

- a. Driving in a selfish, bold or pushy manner without regard for the rights or safety of other road users
- b. Aggressive driving behaviors
  - i. Excessive speed
  - ii. Unsafe lane change
  - iii. Failure to signal
  - iv. Tailgating

- v. Failure to yield the right of way
- vi. Disregarding traffic controls
- vii. Impaired drivers
- viii. Obscene or threatening gestures
- ix. Inattention to driving
  - a) Reading
  - b) Cell phone usage
  - c) Shaving
  - d) Applying makeup
- x. Obstructing traffic
  - a) Blocking an intersection
  - b) Driving slowly
  - c) Blocking the left lane of a multi lane highway
- xi. Aggressive horn use
- xii. Aggressive headlight use
- c. Many drivers believe that traffic laws, especially speed limits, are guidelines