City County Insurance Services Proudly Presents…

"DRIVEN TO DISTRACTION"

A Safe Driving Program

OESAC Course ID #1630 (0.2 CEU)

Instructed By Risk Management Consultant:
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Safe Driving Practices

Ground Rules

- **Stand up and stretch at any time**
- **Ask questions**
- **Share examples with the group**
- **Use the bathroom if you need to**
- **Be prompt returning from breaks**

Have fun!!

Our goals today:

- To inform you of the risks of distracted driving
- To offer you tools to reduce distractions
- To help you stay focused on your driving
- To keep this from happening to <u>you</u>!

Motor Vehicle Crash Statistics

Annual Estimates

Crashes	7,000,000
Deaths	43,000
Disabling Injuries	2,900,000

Leading cause of work related fatalities year after year after year

Oregon Statistics

- Motor Vehicle Collisions are the single largest killer of Oregon workers.
- Motor Vehicle Collisions are the number one killer of people ages 16-24
- 456 Oregonians were killed on Oregon roads in 2004
- 27,314 people were injured in traffic collisions in 2004

Three Major Causes of Fatalities in Traffic Collisions

- **Safety Belts:** Oregon has a 92.6% usage rate – 4th best in USA…But 50% of MV Fatalities in 2004 were NOT using them
- **Speed:** 50% of all Traffic Fatalities are speed related
- **Impaired Driver:** 1/3 of all MV Fatalities in Oregon are results of an impaired driver

How Serious Is DD?

- NHTSA study released late 2005
- Installed video cameras in 100 vehicles for over a year
  - Almost 2 million miles driven
- 78 of 100 were operated by their owners
  - They knew the cameras were there!

How Serious Is DD?

- 80% of all crashes & 65% of all near crashes
- “Driver inattention” within 3 seconds of crash!
- 5 million crashes and 184 billion dollars in damages in the U.S. per year

Current Approach to Problem?

- 60% of Oregon Cities and Counties do not have a systematic approach addressing Traffic related injury and death
- There is no single coordinated effort addressing the problem.

Personal Effects of Crashes

List ways a crash would cost or affect:

- You
- Your family
- Your friends
- Your job

Safe Driving Practices

Prime Time for Crashes

Most common day for crashes?	➢ **Monday and Friday**
Most common day for fatal crashes?	➢ **Friday and Saturday**
Most common time for crashes during the week?	➢ **Afternoon Rush Hour (2pm to 7pm)**
Most common time for crashes during the weekend?	➢ **12 midnight to 6 am**
Most common weather for crashes?	➢ **Clear, warm, dry days)**

Occupant Restraints

- Triple Crash
  - The vehicle crash
  - The human crash
  - The internal organ crash
- Safety belts/airbags minimize the human crash
- Safety belts/airbags will prevent the organ crash

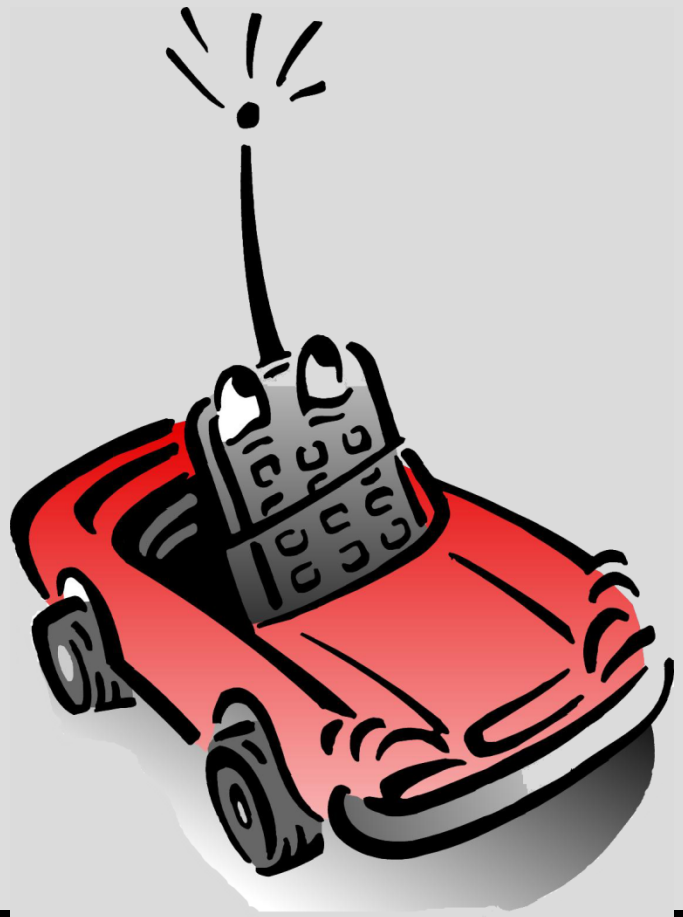
SAFETY BELT VIDEO

Can you read this?

Olny srmat poelpe can. Cdnuolt blveiee taht I cluod aulaclty uesdnatnrd waht I was rdanieg. The phaonmneal pweor of the hmuan mnid, aoccdrnig to a rscheearch at Cmabrigde Uinervtisy, it deosn't mttaer in waht oredr the ltteers in a wrod are, the olny iprmoatnt tihng is taht the frist and lsat ltteer be in the rghit pclae. The rset can be a taotl mses and you can sitll raed it wouthit a porbelm. Tihs is bcuseae the huamn mnid deos not raed ervey lteter by istlef, but the wrod as a wlohe. Amzanig huh? Yaeh and I awlyas tghuhot slpeling was ipmorantt!

DRIVEN TO DISTRACTION VIDEO

Car Phone Hazards



- Reaching for phone
- Dialing
- Holding during conversation
- Talking
- Writing numbers/notes
- Wires dangling (earphone hands free)

Safe Driving Practices

Do you use your cell phone and drive?

Research shows . . .

- That reaction time while driving and using a cell phone is worse than reaction time when driving under the influence of alcohol. Breaking distance traveled when driving at 70 mph;

Normal reaction	102 ft (31 meters)
Alcohol affected	115 ft (35 meters)
Using Hands-free phone	128 ft (39 meters)
Using Hand-held phone	148 ft (45 meters)

- That drivers are also less able to maintain a constant speed
- That drivers found it difficult to keep a safe distance from the car in front

Harvard Center for Risk Analysis for the U.S. believes that the use of cell phones by drivers may annually contribute to:

- 2,600 deaths
- 330,000 moderate to critical accidents
- 240,000 minor injuries
- 1.5 million instances of property damage

Driving and Cell Phones Don't Mix

Safe Driving Practices

Large verdict issued against driver using cell phone: are employers the next target?

- A Los Angeles jury recently awarded $7.3 million to a police officer who was seriously injured in an automobile accident allegedly caused by a teenage driver who was talking on a cell phone.

- Florida juries also recently awarded nearly $21 million to one individual and $5.2 million to another who were involved in accidents that may have stemmed from cell phone distraction.

- Although individuals were sued in those cases, employers could be held liable for injuries arising from their employees' cell phone use.

SOURCE: Oregon Employment Law Letter November 2003

Safe Driving Practices

EMPLOYER LIABILITY

- In Virginia, for example, a law firm was sued for $30 million after an attorney hit and killed a 15-year-old. According to the suit, the attorney was using her cell phone to make business calls when the accident occurred.

- In another case, an individual was awarded $21 million after an employee of a lumber company was involved in an accident shortly after placing a “brief” sales call on his cell phone.

- These cases serve as a warning for employers that provide their employees with cell phones or encourage their use while away from the workplace. Should an accident occur while the employee is driving and conducting business on the phone, employers should expect to be named in any subsequent litigation.

SOURCE: Oregon Employment Law Letter November 2003

Safe Driving Practices

Vehicle Backing

- The National Safety Council reports that one out of every four accidents is caused by poor backing techniques. Backing accidents often result in costly damage to vehicles, equipment and buildings, and may even cause serious injury and death.
- A recent review of auto claims reported shows that, for the last four years, vehicle backing has been the most frequent cause of damage to our Members' vehicles.
- Remember, all backing accidents are preventable. A reduction of backing accidents will help keep your vehicles on the road, out of the repair shop, and working for you. Like all aspects of vehicular safety, supervisors should review and emphasize the importance of safe backing procedures with their drivers.

Safe Driving Practices

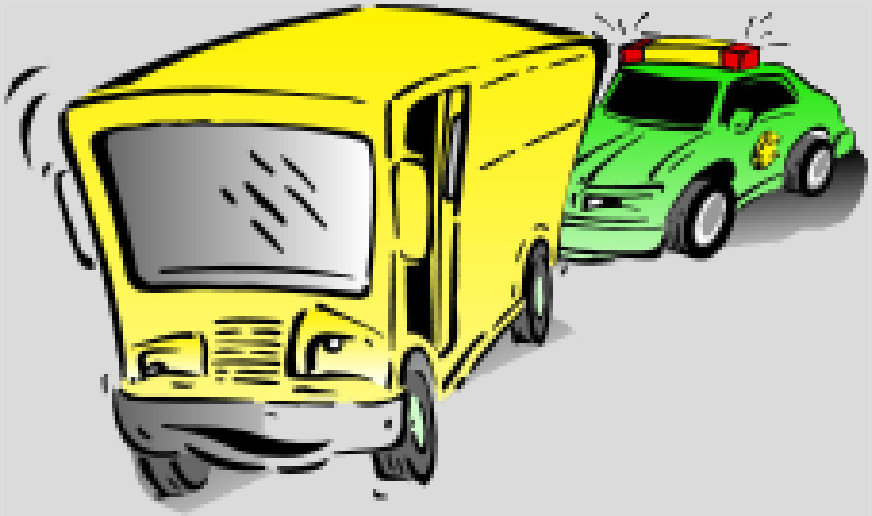
Backing Tips

Backing accidents are preventable. Drivers can control parking and backing as effectively as other vehicle maneuvers. Most backing accidents occur because drivers fail to exercise caution. Often, they rely too heavily on vehicle mirrors and ignore blind spots. To help reduce the number of backing accidents, make drivers become familiar with these prevention measures.

- Select parking locations where backing will not be necessary. A backing accident will be prevented if a vehicle can be driven forward.
- Choose to back in to the space upon arriving, and when not in a rush. This will enable the driver to pull out forward, at times when in a rush to respond to an emergency call, thus, minimizing backing accidents.
- Avoid making “Y” turns in driveways or roads.
- If possible, choose a parking location away from moving or parked vehicles.
- Avoid parking too close to a corner, driveway, constructions site, or where your vehicle will crowd other vehicles.
- Walk around the vehicle to check for children, other vehicles or obstacles.
- Back slowly and use your mirrors
- Back and turn toward the driver’s side whenever possible.
- Look for “back up” lights

Driver Stress

- Stress leads to aggressive driving
- Aggressive driving results in
  - Crash
  - Ticket
  - Road rage



Causes of Driver Stress

- Traffic
- Late
- Tight schedules
- Other driver's actions
- Personal problems

Effects of Speeding

- Increases perception and reaction distance
- Creates need for greater following distance
- Intimidates others
- Increases force of crash

Safe Driving Practices

Is speed really dangerous?

The driver struck a pole while driving fast.

Visualise this. If the vehicle was travelling at low speed and strikes the pole, the driver faces minimal damage and survives.

At high speed the result is catastrophic !

Remember speed increases the stopping distance. If you drive too fast, you may not be able to stop in time to avoid a crash.

5 Fatalities in Single Car Crash

- **DAYTON, Ore. --** Five people were killed in a single-car crash in rural Yamhill County on Tuesday.
- Police said a Toyota Camry was headed south on Highway 221 when it left the road at a high rate of speed and crashed into a large tree. (Reported going 100 mph)
- Five people, including 20-year-old driver Lena Bucholz of McMinnville, were pronounced dead at the scene. Four of them were not wearing seat belts, according to police.

5 Fatalities in Single Car Crash

- Wendy George, 27, and her two daughters, ages 7 and 5, died in the crash. Seven-year-old Richard Ramos was also pronounced dead at the scene.
- A LifeFlight helicopter took two other victims -- Ramos' father Ricardo Ramos Zolario and Bucholz's 2-year-old son Sabian Martinez -- to Portland-area hospitals. Their conditions are unknown.
- The wreck happened near the tiny town of Hopewell.
- 2-year old Sabian was properly strapped, belted, in a child safety car seat. Small scar on the side of left eye area is the only injury received.

5 Fatalities in Single Car Crash

Sabien—2 ½ years old
Only survivor of crash
Properly buckled up in Child Restraint Car Seat
Photo taken 5 weeks post accident

Safe Driving Practices

Stopping Distance

- Factor of
  - **Perception Distance**
    - Age
    - Attention/distractions
    - Medical, drugs, alcohol
  - **Reaction Time**
  - **Brake Lag** *(if air brake)*
  - **Braking Distance**
    - Condition of brakes
    - Surface conditions
    - Load weight and stability

Safe Driving Practices

Stopping Distance at 60 MPH for a Passenger Car

Dry **366’**

Wet **550’**

Snow **850’**

Ice **1700’**

Speed Calculations And Travel Distances

- 5,280 (feet in a mile) ÷ 3,600 (seconds per minute) = 1.47
- 65 mph X 1.5 (rounded) = 97.5 fps (feet per second)
  - Examples: 30 mph X 1.5 = 45 fps
    55 mph X 1.5 = 82.5 fps
- Perception / reaction time usually 1.5 seconds
- 97.5 fps X 1.5 seconds = 146 feet traveled to observe something and begin taking evasive or defensive action
- 97.5 fps X 5 seconds = 487.5 feet traveled
- 487.5 traveled plus 146 feet reaction time = 633.5 feet traveled without knowing where you are, what is going on, and before breaking, steering, evasive action, etc.

300 Feet

300 Feet

Plus

How Far Will You Go

- It takes 5 seconds to dial a phone number

35 mph — 262.5 ft

55 mph — 412.5 ft

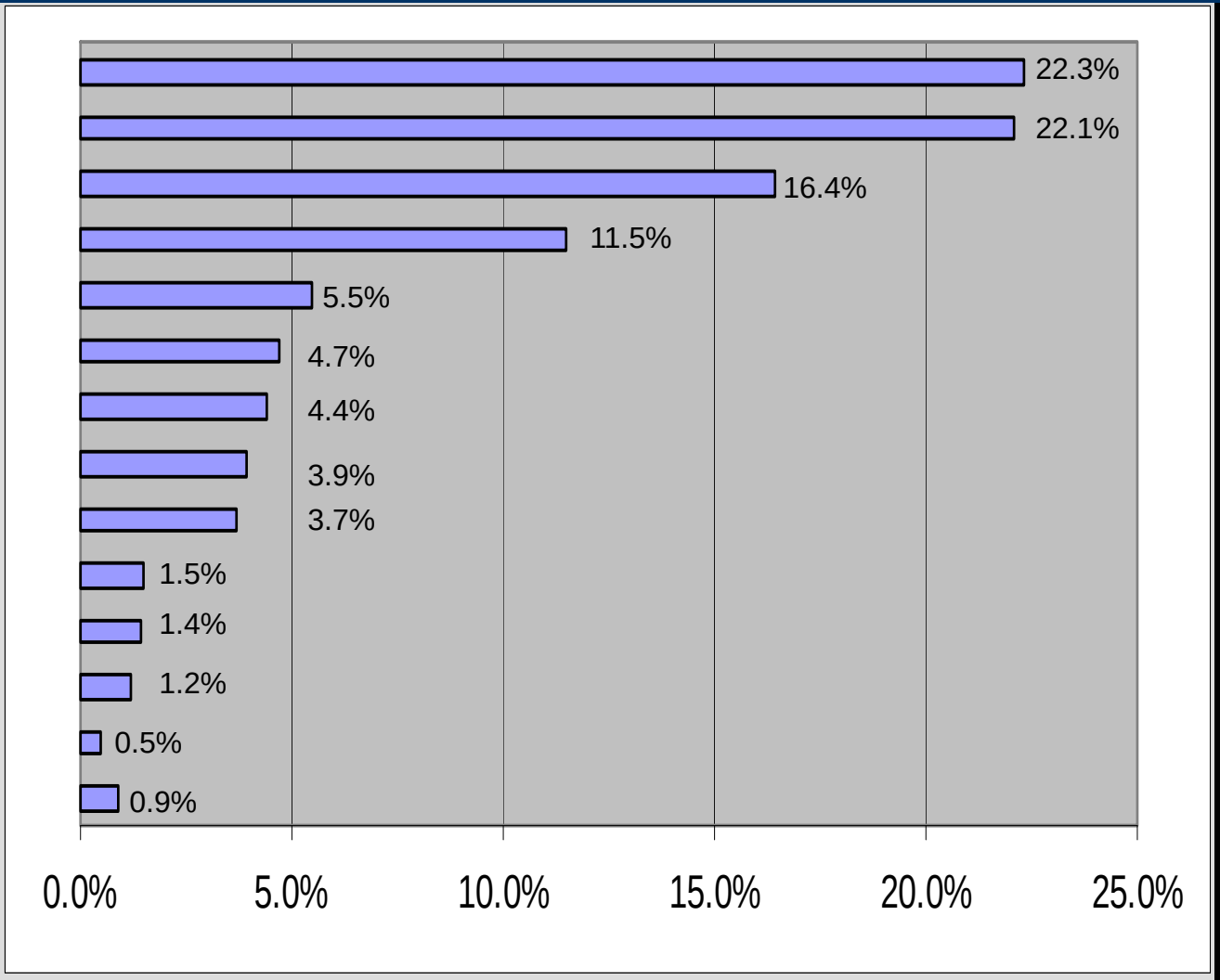
65 mph — 487.5 ft

FOOTBALL FIELD = 300 FEET

“Driver Inattention”

- Secondary tasks
  - Doing something else while you drive
- Driving-related inattention
  - Checking mirrors, blind spots, answering and using cell phone for routine calls, scanning GPS, high-speed driving, eating while driving, putting on makeup, etc.
- Other “looking away from forward roadway”
  - Scenery, advertising, vehicles, pedestrians, license plates, suspicious activity, etc.
- Drowsiness

What Distracts Drivers?



National Highway Traffic Safety Administration, 2006

Common Distractions & Risk Factors

▪ Talking on “hand-held device”	1½ times
▪ Dialing “hand-held device”	3 times
▪ Reading	3 times
▪ Grooming	3 times
▪ Looking at an external object	4 times
▪ Drowsy driving	4-6 times
▪ Reaching for an object	9 times

National Highway Traffic Safety Administration, 2006

NHTSA Says:

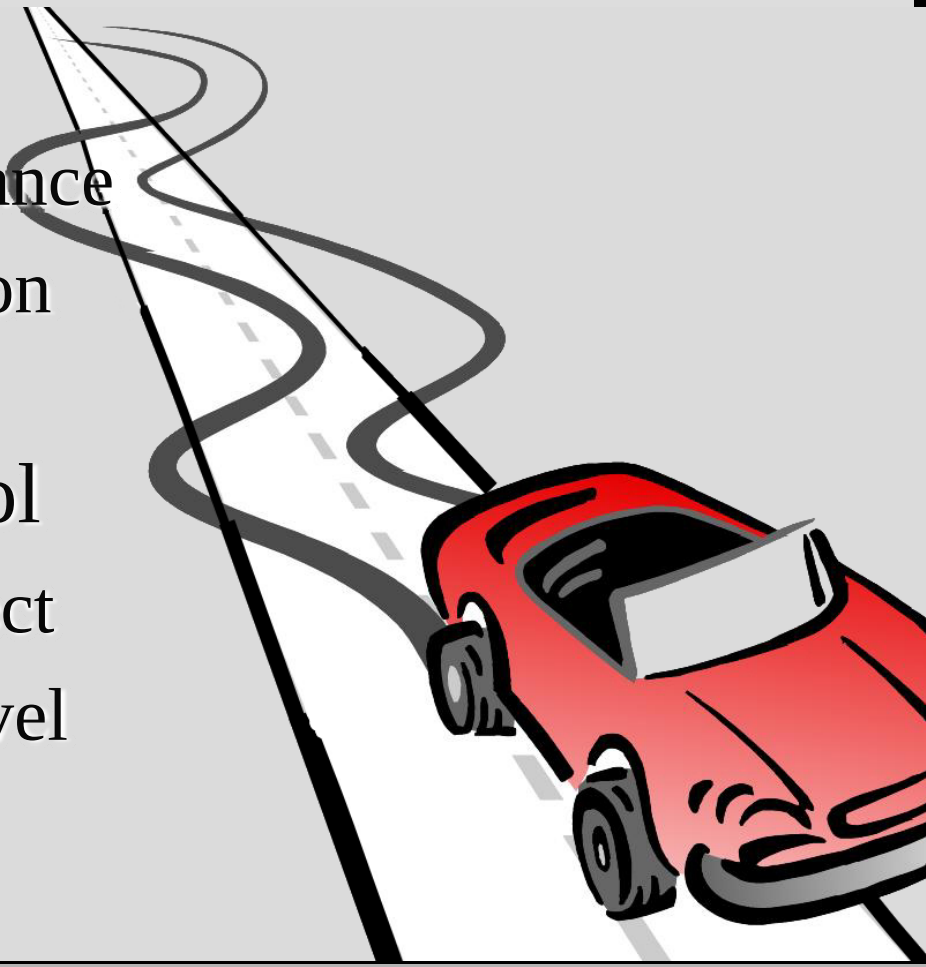
- "Drivers who engage frequently in distracting activities are more likely to be involved in an inattention-related crash or near-crash"
- "Drivers are often unable to predict when it is safe to look away from the road because situations change abruptly leaving the driver no time to react even when looking away only briefly"

Weather Risks

- The hazards
  - Reduced visibility
  - Increased stopping distance
  - Skidding out of control
- Solution
  - Reduce speed
  - Increase following distance
  - Increase visibility

Skid Avoidance and Control

- Skid Avoidance
  - Reduce speed slowly
  - Brake on/off far in advance
  - Cannot brake and turn on ice
- Skidding Out of Control
  - If over-correct, re-correct
  - Turn in direction of travel



Head On Crash Avoidance

- Slow down
- Steer to the right
- Run off the road if needed
- Do NOT
  - Flash lights
  - Blow horn
  - Steer to the left

Drowsy Driving

Handout #4

VIDEOS

Symptoms of Drowsiness

- Can’t focus or keep your eyes open
- Having trouble lifting your head
- Persistent yawning
- Wandering, confused thoughts
- Can’t remember last few miles driven
- Drifting out of your lane or hitting rumble strip
- Can’t maintain constant speed
- Missed your exit

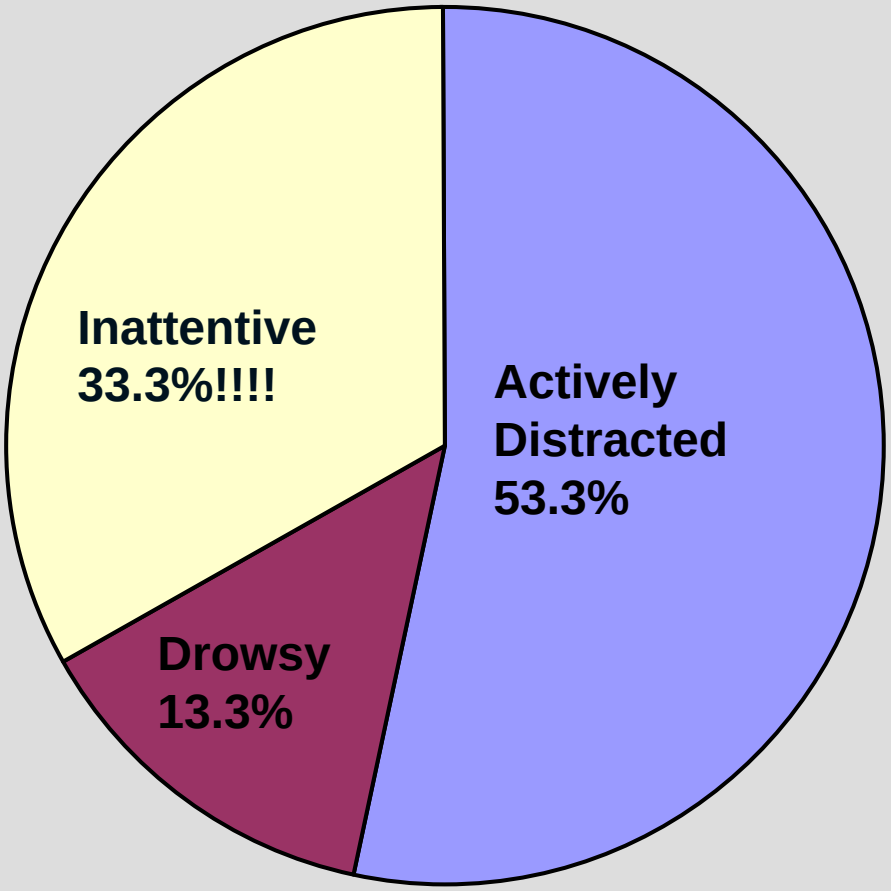
Cognitive Inattention

"Looked,
But Didn't See"

“Looked, But Didn’t See”

- Human beings are serial processors
  - Your mind can only deal with one thing at a time (Medical Fact)
- What we call “multi-tasking” is actually not
  - Your brain is dealing with one thing at a time
  - It’s shifting between things very quickly, or “channeling” rapidly
- Driving already requires this
  - Adjusting speed, avoiding hazards, etc.
- When you throw in another task, **look out!**

Cognitive Inattention



University of North Carolina Highway Safety Research Center, 2001

Dealing with Inattention

- Avoid “automatic mode”
  - As soon as driving becomes **the *second* most important thing** on your mind, you are in serious trouble!
- Use the “What if…” technique

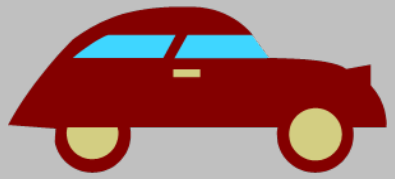
The “What If…” Technique

- Look at what’s happening around you
- Imagine what could go wrong (what if…?)
- If you can’t see, imagine what could be just out of sight
- Develop a plan to deal with each actual or potential hazard

The “What If…” Technique

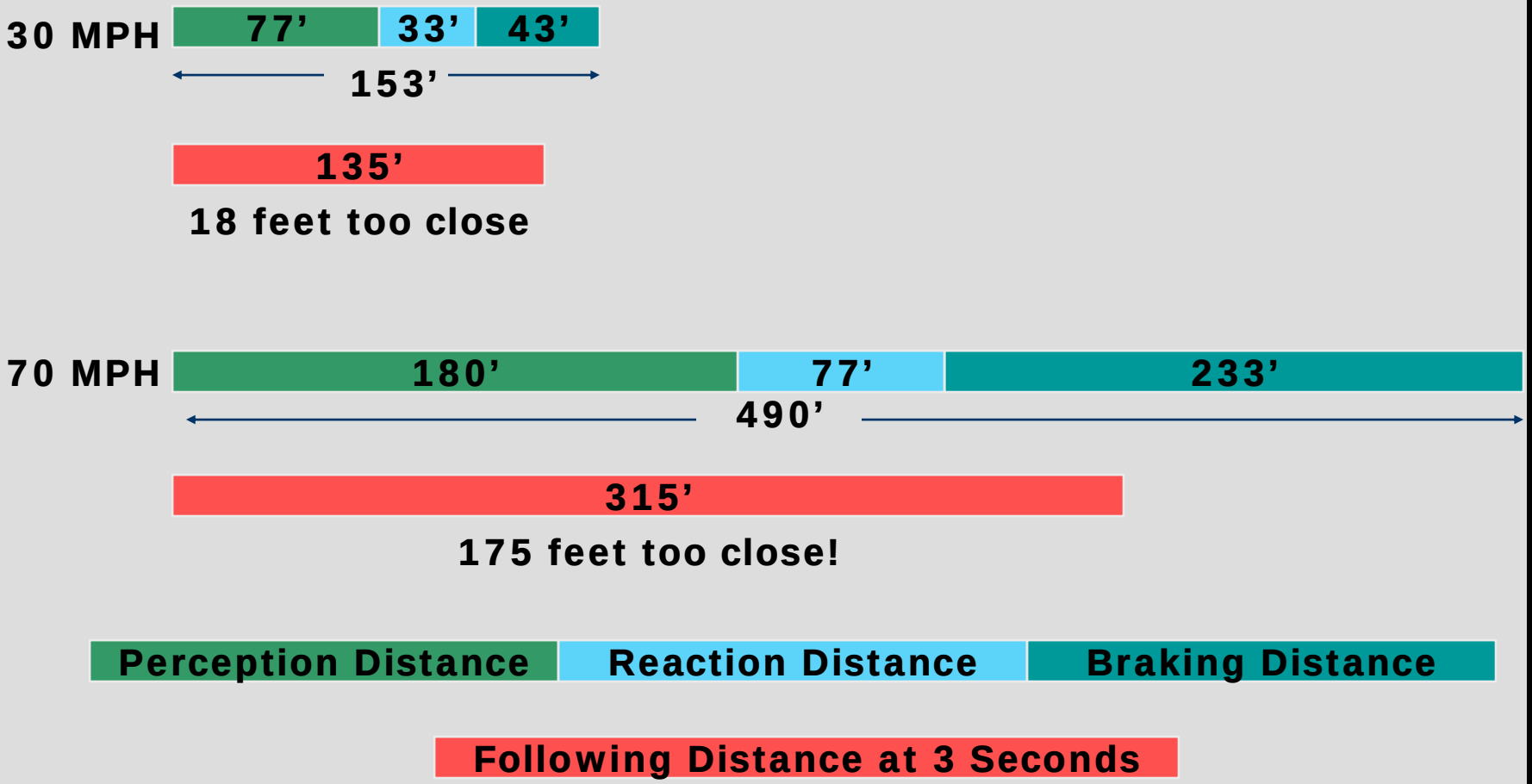
Increase Following Distance

Stopping Distance =



Perception Distance + **Reaction Distance** + **Braking Distance**

Increase Following Distance



Acceptable Guidelines AND A Few Good Practices

- Eyes up, Eyes up, Eyes up; have horizon eyes; keep a minimum 4 second following distance at 50 mph, increase as speed increases, increase as weather deteriorates
- No cell phone/text messaging while driving and limit radio/GPS communications while driving
- Do not overdrive your vehicle beyond road, weather conditions, or vehicle's capabilities
- Continue taking driving classes periodically.

YOUR LIFE and the PUBLIC'S DEPENDS ON IT!

Generally Accepted Guidelines; Always Exercise Due Regard!

- **The National Safety Council reports that crashes (from all causes) are the leading cause of death among persons aged 1 to 34 and the fifth leading cause of death among all persons (Injury facts 05-06 edition p. 10-11)**
- **Driving includes habits and driving behaviors. Realize that some habits need to be improved. Thus human factors and driver attitude all contribute to potential operator error, aka "pilot error"**
- **Know and memorize Oregon State motor vehicle law regarding authorized use of lights and sirens:**
- **ORS Chapter 820.300, ORS 820.320, and ORS 820.350 requirements.**

The Safety Cushion (the Empty Space Around Your Vehicle) Allows You to:

- Identify hazards, decide your response in time, react correctly
- Maintain a good driving attitude, despite the other driver! Take it Seriously.

Smooth Driving / Low-Force Driving

- Acceleration is smooth and even as you build vehicle momentum slowly
- Smooth braking of the brake pedal, look far ahead and anticipate; 1-2 blocks city, 1/4 mi. highway
- Brake early and brake light, and “bleed the speed” upon entry into corners
- Four (4) second following distance under ideal driving conditions, 2-3X for poor conditions
- 360 degree space cushion with mirror check, eyes moving, and speed control
- Enter corners wider and deeper to achieve a late apex corner & to maximize the radius of the curve

8 SAFE DRIVING TIPS

TIP 1-- "Cover the brake" at intersections

TIP 2-- Practice "when/then" thinking and mental imagery to prepare to respond to events that occur on the roadway.

TIP 3-- Scan using the 2-Second Rule

TIP 4-- Manage your vehicle spacing

TIP 5-- Check your tire pressure

TIP 6-- Think twice before speeding

TIP 7-- Adjust your speed before curves

TIP 8-- TRAIN, TRAIN, TRAIN

Summary

- Know the causes of crashes
- Know your vehicle/equipment
- Control yourself
- Compensate for road and weather conditions and other drivers
- If you are a supervisor, ensure you are not encouraging unsafe driving

QUIZ