

Defensive Driving In the Commercial Vehicle

Jeff Lanning
Loss Control Representative



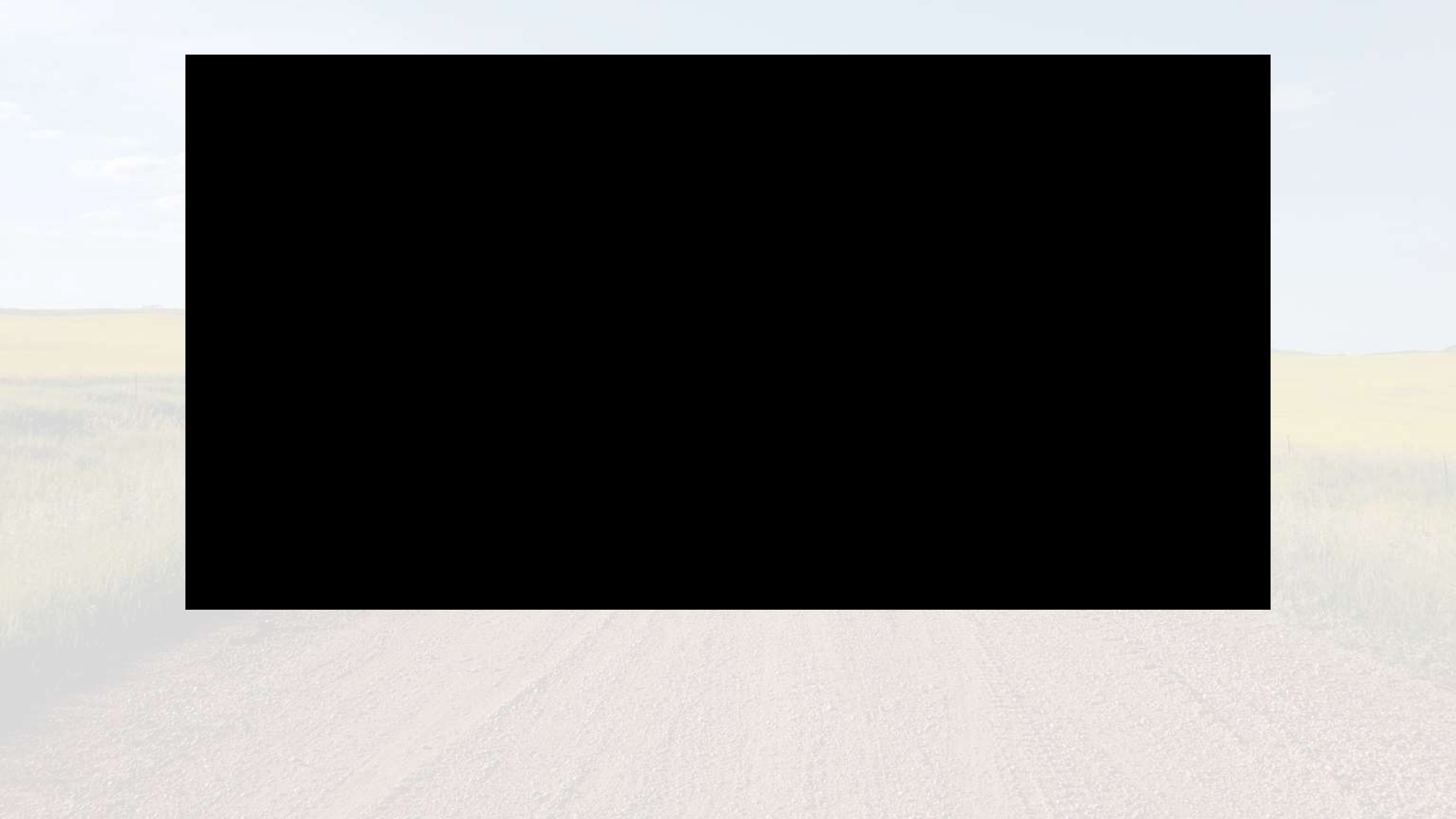
37th Annual North Central Local Roads Conference

Rapid City, SD - October 18-20, 2022

Defensive Driving



Safety Benefits Inc.
1-888-313-0839
www.safety-benefits.com



#1 cause of workplace fatalities in 2021



Transportation Incidents

Defensive Driving Statistics

NHTSA Fact Sheet

- **2020 NATIONWIDE TRUCK CRASHES**
- 5,005 people killed in crashes involving large trucks
- 71% were occupants of other vehicles
- 77% occurred during weekdays
- 2% of the truck drivers were intoxicated (far less than national average of 29% for motorcycles, 20% for cars, 19% for light trucks)

Defensive Driving Statistics

- **2021 SOUTH DAKOTA TRUCK CRASHES**
- 148 total fatal crashes (all vehicles)
- 1 fatality involved semi trucks
- 0.6% - Percentage of large trucks involved in fatal crashes in SD (compared to 9.8% nationwide)

SD Sees Increase in Traffic Deaths in 2021

- 148 motor vehicle fatalities
- 38% higher than 2020
- Key contributing factors:
 - Alcohol
 - Speeding
 - Not wearing a seatbelt

Defensive Driving

Why does this continue
to happen?



Most people are
unaware that crashes are
violent and life changing

The Reality

MANY DRIVERS DON'T

- Pay attention
- Drive at appropriate speed
- Follow traffic laws consistently



Why defensive driving?

**Defensive driving
protects us from what's
happening around us.**

**The goal of defensive driving is to
avoid the crash entirely.**



Video Review

1. What were the conditions?
2. Was this the first crash?
3. What were the factors in this crash?
4. Was this preventable?

Keys to Being a Defensive Driver

- Take responsibility for what you can control
- Don't blame weather, road, traffic or other drivers when something happens
- Look at collisions and violations from point of view of this crucial question:

Preventable Collision

One in which the driver failed to do everything reasonable to avoid it.

- Facts show majority of collisions are preventable
- More important - same facts show violations are cause of most collisions

Defensive Driving Concepts

- **3 key defensive driving concepts:**
 - 1) Scanning
 - 2) Communicating
 - 3) Cushion of Safety

**Each is critical to
collision prevention**

Scanning Anticipating Hazards

- Scan road ahead and behind
- In town - scan to next intersection or block
- Rural and interstate driving, scan ahead to next overpass, hill or curve
- Check mirrors every 3 - 5 seconds

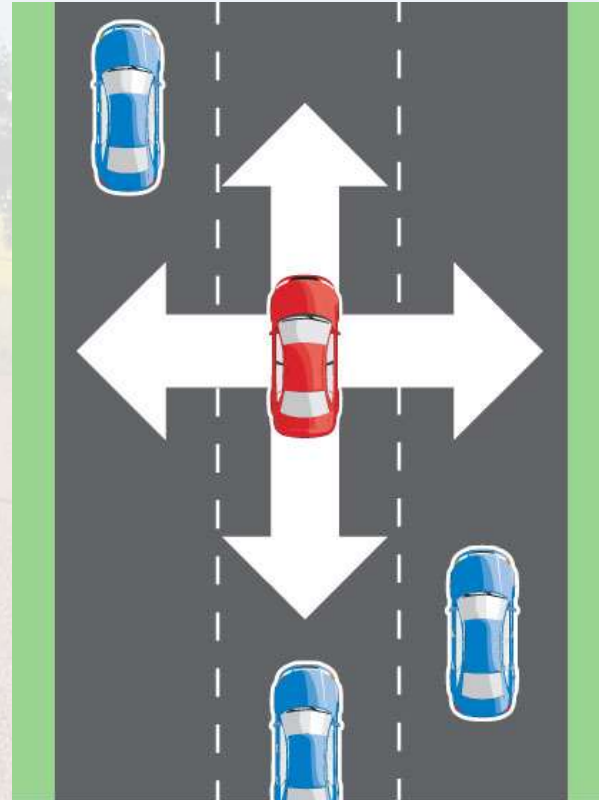
Communicating

- **What methods can we use?**
- Signaling
- Tapping the horn
- Using 4-way flashers
- Lane position



Cushion of Safety

- **How can you check it?**
- Do a second count on the vehicle ahead
 - 3 seconds - small vehicle
 - 5 seconds - truck
- Scan mirrors every 3 - 5 seconds



When To Add Time/Distance

- For every adverse condition, add another second of following distance
- In rain add 1 second
- In rain and low visibility add 2 seconds
- For speeds over 65 mph add 1 second

In poor conditions ask: Should I be driving?

Braking: Perception Distance

- The distance your vehicle travels from the time you spot a problem to the time you decide to do something about it.
- On average this takes $\frac{3}{4}$ of a second.



This distance is not affected by the type of vehicle/equipment you are operating.

Braking: Reaction Distance

- The distance your vehicle travels while you move your foot from the accelerator to the brake pedal
- Average reaction time is about $\frac{3}{4}$ of a second



In a large truck, this accounts for an additional 60 ft. when traveling at 55 mph

Braking: Brake Lag Distance



- Distance your vehicle travels after brake is applied, but before air brakes are actuated
- On dry pavement at 55 mph this adds about 32 feet to stopping distance

Braking: Braking Distance












- Distance vehicle travels after the brakes have started to work, until vehicle comes to a complete stop

Effect of Vehicle Weight on Stopping Distance

- The heavier the vehicle, the more work brakes must do to stop it and the more heat they absorb
- Brakes, tires, springs and shock absorbers on heavy vehicles are designed to work best when the vehicle is fully loaded
- Empty trucks require a **GREATER** stopping distance

Distracted Driving

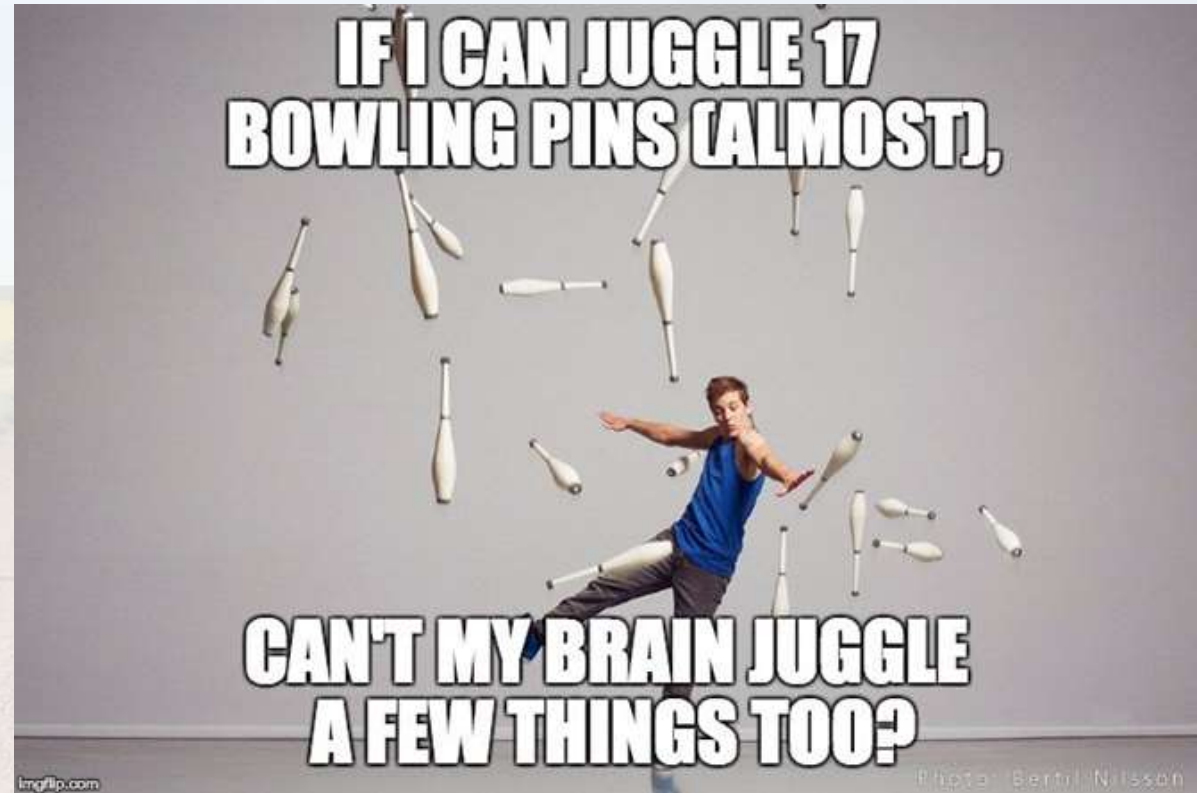
 VISUAL	 PHYSICAL	 COGNITIVE	 AUDITORY
			
<p>Keep your eyes on the road.</p> <p>Pull over to read directions.</p> <p>Put your phone in "Do Not Disturb" mode.</p>	<p>Keep your phone out of reach.</p> <p>Make all adjustments before driving.</p> <p>Don't reach for items while driving.</p>	<p>Avoid phone calls, even hands-free.</p> <p>Stay focused on the road.</p> <p>Keep your emotions in check.</p>	<p>Turn down your radio</p> <p>Listen out for hazards</p> <p>Put your phone in "Do Not Disturb" mode</p>
			

Distracted Driving

- The typical reaction time without texting was between one and two seconds. While texting it increased to four to six seconds, regardless of whether the driver was typing or reading a text.



**Can the
brain
multitask?**



Can the brain multitask?

NO

Physiological studies show that we can do multiple things while our brains quickly shift from one task to another. However, the quality of each **high-level task** will suffer.

Seatbelt Use



	2017	2018	2019	2020	2021
SD	74.8%	78.9%	75.2%	68.3%	86.9%
US	89.7%	89.6%	90.7%	90.3%	90.4%

Largest Increase Nation Wide of 18.6%!!

SD Seat Belt Use June 2022, report prepared in cooperation with SD DPS, Office of Highway Safety, US DOT, NHTSA

Airbags & Seatbelts

- Excellent safety systems on vehicles but not 100% effective in all types of crashes
- Very effective for rollovers
- They reduce injuries and fatalities by 50%

Defensive driving is key to preventing the crash. Don't depend on safety equipment to save you.

Seat Belts Save Lives

Prevents crashing into dashboard, steering wheel or windshield



Seat Belts Save Lives

Keeps you inside vehicle – more likely to be killed when thrown from vehicle



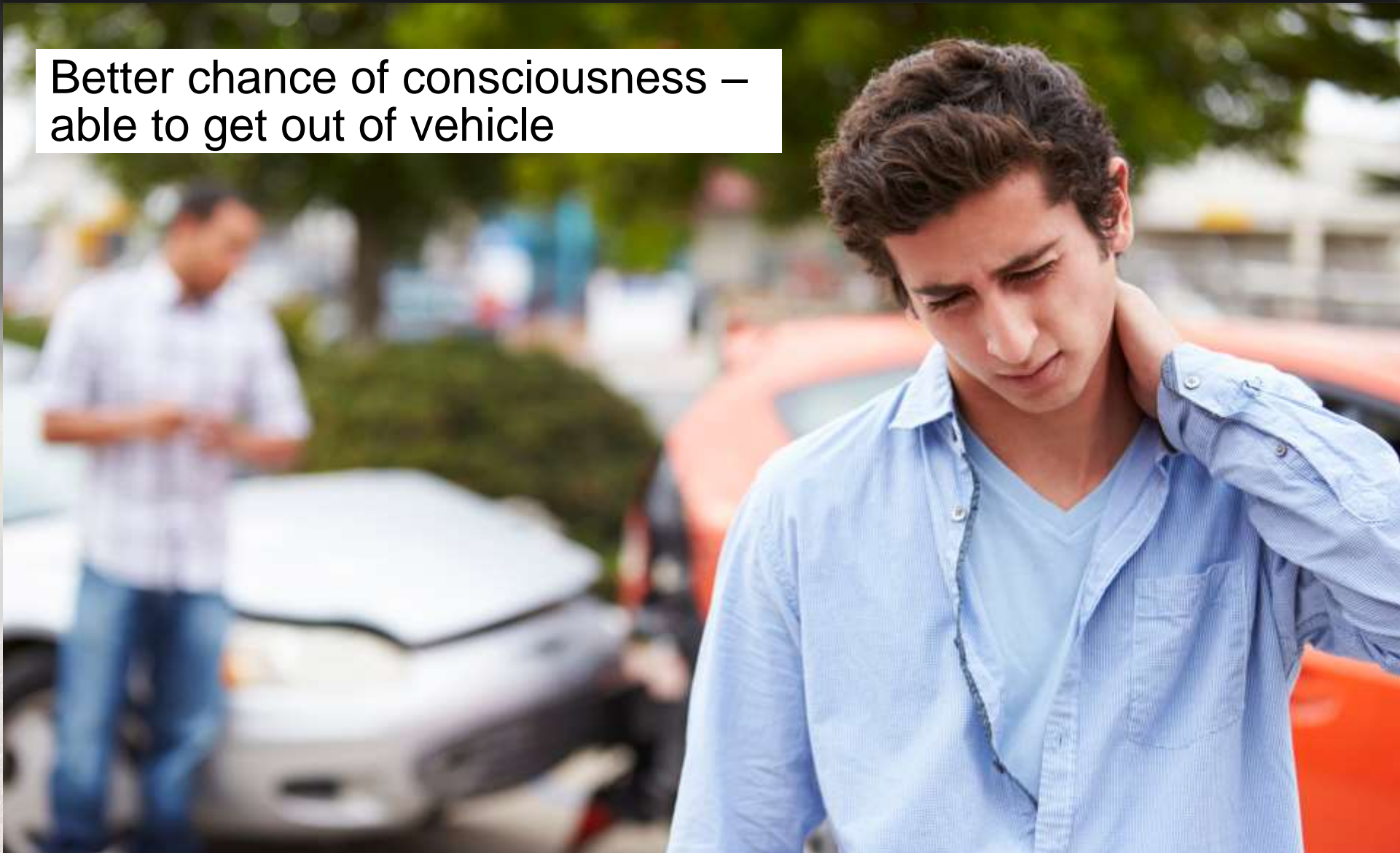
Seat Belts Save Lives

Allows strong bones to take shock rather than delicate internal organs



Seat Belts Save Lives

Better chance of consciousness –
able to get out of vehicle



Seat Belts Save Lives

Keeps you behind wheel and in control of your vehicle if forced to swerve or brake suddenly



Blind Spots



SDCL **Intersections**

SDCL 32-26-13

Right-of-Way

- When two vehicles approach or enter an intersection at approximately the same time, the driver of the vehicle on the left shall yield the right-of-way to the vehicle on the right.

**Law only states who shall yield the right-of-way
and does not give it to anyone**

Delayed Acceleration Technique



40% traffic crashes occur at intersections



When stopped at an intersection and the light turns green



Delay acceleration by 2 seconds



Scan the road before accelerating

Defensive Driving Tips

- Never drive when under the influence of drugs or alcohol
- Manage your time
- Monitor speed continually
- Wear your seat belt
- Be alert - rest when needed



Alcohol | Speeding | Not Wearing Seatbelt



WINTER IS COMING!!!



QUESTIONS?



More Information/Resources

Safety Benefits Inc.

605-334-9567 | (888) 313-0839

www.safety-benefits.com

Defensive Driving In the Commercial Vehicle

Jeff Lanning
Loss Control Representative



37th Annual North Central Local Roads Conference

Rapid City, SD - October 18-20, 2022