

Student Workbook



Maryland Driver
Education Curriculum
2016





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Disclaimer: The information in the Driver Education Classroom and In-car Curriculum is, of necessity, generic in nature and is for general instructional purposes only. Student drivers and their supervising drivers should refer to their vehicle's owner's manual for specific information on their automobile and state motor vehicle law for specific information regarding traffic law and regulation and to obtain the most current information.

Eight Danger Zones

Danger Zone #1: Driver Inexperience

What Coaches Can Do

Provide at least 60 hours of supervised driving practice over at least nine months.

Practice on a variety of roads, at different times of day, and in varied weather and traffic conditions.

Stress the importance of continually scanning for potential hazards including other vehicles, bicyclists, and pedestrians.

Danger Zone #2: Driving With Teen Passengers

What Coaches Can Do

Follow Maryland's Graduated Licensing System for passenger restrictions, which forbids provisional license holders under the age of 18 from carrying passengers under the age of 18, except for family members. Violations may result in a suspension of driving privileges.

Follow this rule for at least the first five months that your teen is driving.

Danger Zone #3: Nighttime Driving

What Coaches Can Do

Maryland's Graduated Licensing System restricts provisional license holders under the age of 18 from driving between 12 Midnight and 5 AM unless for school, sports, job or volunteer work.

Practice nighttime driving with your teen when you think they are ready.

Danger Zone #4: Not Using Seat Belts

What Coaches Can Do

Require your teen to wear a seat belt on every trip. This simple step can reduce your teen's risk of dying or being badly injured in a crash by about half.





Eight Danger Zones

Danger Zone #5: Driver Inexperience

What Coaches Can Do

Don't allow activities that may take your teen's attention away from driving, such as talking on a cell phone, texting, eating, or playing with the radio.

Learn more about distracted driving. Visit www.distraction.gov.

Danger Zone #6: Drowsy Driving

What Coaches Can Do

Know your teen's schedule so you can be sure he or she is well rested before getting behind the wheel.

Danger Zone #7: Reckless Driving

What Coaches Can Do

Make sure your teen knows to follow the speed limit and adjust their speed to match road conditions.

Remind your teen to maintain enough space behind the vehicle ahead to avoid a crash in case of a sudden stop.

Danger Zone #8: Impaired Driving

What Coaches Can Do

Be a good role model: never drink and drive.

Reinforce this message with a Parent-Teen Driving Agreement.

Learn more about impaired driving.

Get the statistics on teen drinking and driving.

Expectations & Responsibilities for Coaches

How can I help my new driver to become a safe and confident driver?

What will my new driver do to become a safe and confident driver?

How will the driving school help the new driver to become a safe and confident driver?



Expectations & Responsibilities for New Drivers

How will my driving coach help me to become a safe and confident driver?

What will I do to become a safe and confident driver?

How will the driving school help me to drive safely?

Rookie Driver-Coach Agreement

This agreement gives you and your new driver an opportunity to set some ground rules for both of you. These can be rules for your driver while learning to drive and can be updated after receiving a provisional license. The more involved you are as a coach, the safer your new driver will be.

Rookie Driver

- I can drive from _____ (times) to _____ (times) with _____ and _____ but may have no more than _____ passengers in the vehicle at any time.
- I may drive on the following roads: _____
- I will focus on driving when driving.
- I may not text at any time while driving or use a phone for any reason while driving.
- I will always wear my safety belt and make sure that all my passengers are also wearing their safety belts even if we are just driving around a parking lot.
- I will not drink alcohol and drive for any reason.
- I will not use any illegal drug and drive.
- I will obey the restrictions of my provisional license.
- If I violate these rules, I will face the following consequences.
 - First offense: _____
 - Second offense: _____
 - Third offense: _____

Signed: _____ Date: _____

For the coach

- I agree to supervise the completion of 60 hours of supervised driving.
- I agree to be a model driver and follow all Maryland driving laws.
- I agree to be supportive and provide CONSTRUCTIVE, HELPFUL comments to my new driver.
- I agree to set limits to ensure safe driving and to enforce the Maryland driving law with my new driver.

Signed: _____ Date: _____

HOW DO I DRIVE?

Fill in the Best Answer

- 1) When I drive, I focus _____ of the time.

ALL	MOST	SOME	NONE
-----	------	------	------

- 2) I use my seat belts _____ of the time.

ALL	MOST	SOME	NONE
-----	------	------	------

- 3) I _____ text when I drive.

NEVER	SOMETIMES	FREQUENTLY	ALWAYS
-------	-----------	------------	--------

- 4) I am _____ rested before I set out for a long drive.

NEVER	SOMETIMES	FREQUENTLY	ALWAYS
-------	-----------	------------	--------

- 5) I _____ drive with two hands on the steering wheel in an appropriate place.
(Bonus: What is the appropriate hand placement?)

NEVER	SOMETIMES	FREQUENTLY	ALWAYS
-------	-----------	------------	--------

- 6) I _____ yell at other drivers when they do something careless or dangerous.

NEVER	SOMETIMES	FREQUENTLY	ALWAYS
-------	-----------	------------	--------

- 7) When I drive, I maintain my speed _____.

WITHIN 10 MPH OF POSTED LIMIT	TO KEEP UP WITH THE FLOW OF TRAFFIC	AT THE POSTED SPEED LIMIT
-------------------------------	-------------------------------------	---------------------------

- 8) The driving rules established by the Maryland Graduated Licensing System are _____ that _____ be followed.

SUGGESTIONS	GUIDELINES	LAWS
SHOULD	CAN	MUST

- 9) Graduated licensing has made driving for new drivers _____.

SAFER	THE SAME	MORE DANGEROUS
-------	----------	----------------

Taking the Road Test

1 What are the two components of the skills test or behind-the-wheel test?

2 What were the specific points about your vehicle and getting it ready to go to the MVA to take the test?

3 Who must accompany you to the MVA to take the driving test?

4 What must a new driver bring to the MVA to take the test?

5 What were some specific driving problems that the video discussed which may cause a new driver to fail the driving test?



The Highway Transportation System

Every time you drive, you are part of an extensive system known as the Highway Transportation System

The three main parts of the Highway Transportation System (HTS)	People, vehicles, and highways.
The purpose of the HTS	To move people, vehicles, and cargo from one place to another in a safe, efficient, and economical manner.
Users of the HTS	Drivers, passengers, motorcyclists, bicyclists, pedestrians, trucks, buses, recreational vehicles, horse-drawn vehicles, and other users.
The least trained and most vulnerable users of the HTS	Pedestrians, some of whom don't drive and may not know driving rules and regulations.
Some dangers on the HTS	Children, the elderly, the distracted, animals, bad weather and poor road conditions.
The HTS is a sub-system of the National Transportation System (NTS)	The NTS is made up of the highway, rail, water, air, pipeline and transit systems.

The Highway Transportation System

1 Who do you know on the road right now?

2 How would you feel if someone violated the rules of the HTS and hurt someone in your family?

3 What behaviors do irresponsible users of the HTS demonstrate?

4 How can you be a responsible member of the HTS community?















Highway Transportation System: Language of the Road

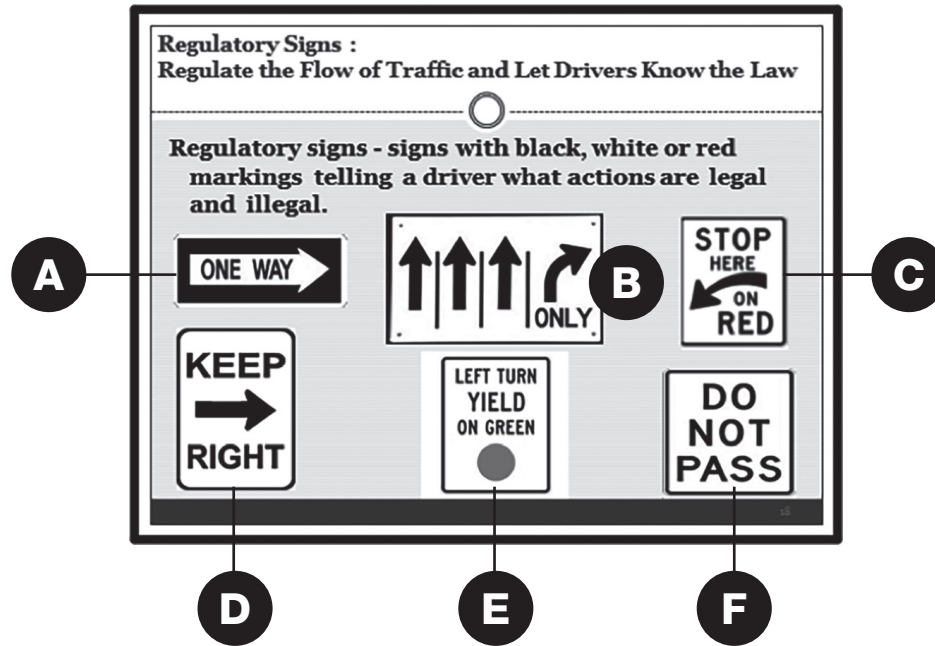
1	How does communication get used on the road?
2	Why is communication important on the road?
3	Does effective communication have anything to do with safety?
4	How is it possible to successfully communicate when a driver cannot “speak” to the other drivers around him/her?
5	How do signs, signals, and pavement markings communicate to other drivers?
6	How do signs, signals, and pavement markings contribute to safety?
7	How would distraction impact the communication of signs, signals, and pavement markings?

Warning Signs

What are the messages being conveyed by these warning signs?

Regulatory Signs



1	What are each of the above signs telling a driver that he/she can or cannot do?	
A		D
B		E
C		F
2	Where might a driver find each of these types of signs?	
A		D
B		E
C		F
3	What does each sign allow a driver to do or prohibiting them from doing?	
A		D
B		E
C		F
4	What might the risks for each sign be if a driver failed to obey or recognize the sign?	
A		D
B		E
C		F

Toward Zero Deaths in Maryland - Speeding

1 Why do police officers feel so passionately about speeding and its effects?

2 According to the video, what are some of the most significant consequences of speeding?

3 What are at least three pro's and three cons of speeding?

4 What is your reaction to this statement made by Dr. Thomas Scalea from Shock Trauma, "Speeding makes everything worse. It amplifies the effects of all injuries. It takes a relatively minor set of injuries and makes them life-threatening"



Does Anybody Stop at Stop Signs?

Did most of the drivers in the video stop correctly? Did they stop safely and legally? Check off below whether the stop was legal or illegal and why you thought so.

1	Red SUV turning right	Legal	Illegal
Why?			
2	Green SUV turning right	Legal	Illegal
Why?			
3	Red Passenger car turning right	Legal	Illegal
Why?			
4	Gold van turning right	Legal	Illegal
Why?			
5	Blue passenger car turning right	Legal	Illegal
Why?			
6	Black passenger car turning right	Legal	Illegal
Why?			
7	Light brown passenger car turning right	Legal	Illegal
Why?			
8	Green passenger car turning left	Legal	Illegal
Why?			
9	Silver SUV turning right	Legal	Illegal
Why?			
10	Black pickup truck turning right	Legal	Illegal
Why?			
11	Gold SUV turning right	Legal	Illegal
Why?			

**What kinds of risks did these drivers create?
How could their errors be corrected?**

Special Lanes

HOV Lanes	HOV lanes may be separated from traffic by a concrete barricade or may be separated by a double white line and have a white diamond shape in the lane.
Bike Lanes	Usually separated by double lines and usually have BIKE LANE written in white in the lane. Bike lanes may also be indicated by a picture of a bicycle on the pavement.
School or Pedestrian Crossings	Indicated by a series of diagonal white lines. May also have yellow warning signs to prepare drivers to stop or pay attention.
Stop Line for Rail Crossings	Indicated by white lines. Drivers are also usually warned of an upcoming railroad crossing by a warning sign or a crossbuck.
Shared Left Turn Lanes	Special lanes for turning left from a highway and onto a highway.
Extension of Lane Indicators into an Intersection	Special guides through very large intersections.
Reversible Lanes	Special commuter lanes. They change direction depending on time and the direction of commuter traffic.

Steps in a Pre-Entry Check

Lock Doors

Why?

Adjust Seats for Best Control

Why and how?

Adjust Inside and Outside Mirrors

Why and how?

Fasten and Adjust Safety Belt

Why and how?

Make Sure All Passengers Buckle Up

Why and how?

Adjust Head Restraints

Why and how?

The Area Around the Vehicle

Because of the structural design of the vehicle, the driver is not able to see the spaces immediately around the vehicle. This unnoticeable space consists of the area between the vehicle and the nearest point where the driver can see the ground when seated properly in the driver's seat.

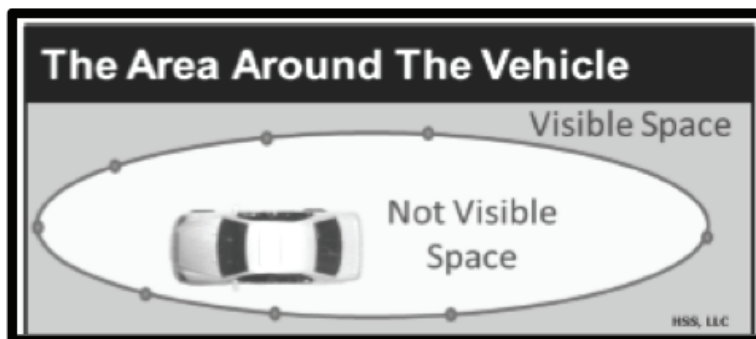
Blind Spots Around Your Vehicle

Front Blind Spot	12 to 15 feet or about one vehicle length
Right Blind Spot	1 ½ to 2 car widths
Left Blind Spot	½ to 1 car width
Rear Blind Spot	About 40 feet or 2 vehicle lengths

To compensate for this space, it is important to learn:

- where the vehicle's unseen boundaries are
- how large they can be
- techniques to help prevent collisions

Proper adjustment of the vehicle's features (mirrors, seat, and head restraint) should help to maximize the driver's view from inside the vehicle in all directions.





Car Fluids

Transmission Fluid

Color, thickness, smell	
Function	
Possible problems if low or empty	

Oil

Color, thickness, smell	
Function	
Possible problems if low or empty	

Coolant

Color, thickness, smell	
Function	
Possible problems if low or empty	

Fuel

Color, thickness, smell	
Function	
Possible problems if low or empty	

For more information visit www.KidsAndCars.org or contact us at email@KidsAndCars.org.

Backover Fact Sheet

In the U.S., 50 children are backed over EVERY WEEK because a driver could not see them.

Rear view cameras can be installed on any vehicle to end these predictable tragedies.

Blind zones... every vehicle has them

A blind zone is the area behind a vehicle where the driver cannot see even when looking back and using their rear and side view mirrors correctly. (Blind zones are also in front of cars but are not as large)

- Average blind zone = 15 to 25 feet
- Shorter drivers = larger blind zones
- Over 60% of backovers involve a larger vehicle (truck, van, SUV)



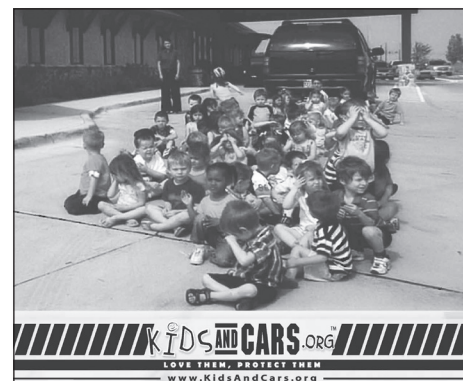
Circumstances

- Backovers take place mainly in driveways and parking lots.
- In over 70% of these incidents, a parent or close relative is the driver behind the wheel.
- Bye-Bye Syndrome™: Children don't want to be left behind when they hear the words 'bye-bye.' Many times children follow behind the person who is leaving. The driver is unaware the child snuck out, thinking they are still safe inside. The child stands behind the vehicle where they cannot be seen and is backed over.

Contributing Factors

You cannot avoid hitting something you literally cannot see.

- Most drivers are unaware of the very large, dangerous blind zone that is found behind ALL vehicles.
- Children do not understand the danger of a slow-moving vehicle; they believe if they see the vehicle, the driver can see them.
- Children do not recognize boundaries (property lines, sidewalks, driveways or parking spaces) and are very impulsive.



Age

- The predominant age of backover victims is one year old. (12-23 months). Toddlers have just started walking/running at this age, testing the limits and trying new things.
- Children younger than 5 years old are at the most risk, but children of all ages can be backed over.

Statistics

- On average 232 fatalities and 13,000 injuries occur every year due to backovers.
- Thousands of children are seriously injured or killed every year because a driver backing up was not able to see them behind their vehicle. Many elderly people are also backed over by vehicles.

Rear Visibility Standard:

To reduce the risk of devastating backover crashes involving vulnerable populations (especially very young children), KidsAndCars.org and their partners, worked to prevent these predictable and preventable tragedies for over one decade. A rear visibility standard was issued on April 7, 2014 as mandated by the Cameron Gulbransen Kids Transportation Safety Act.

For more information visit www.KidsAndCars.org or contact us at email@KidsAndCars.org.



The Department of Transportation (DOT) issued the final rule to expand the required field of view for all passenger vehicles weighing less than 10,000 pounds.

This new standard specifies the area behind a vehicle which must be visible to the driver when the vehicle is placed into reverse. The agency anticipates that in the near term, vehicle manufacturers will use rear view camera systems and in vehicle visual displays to meet the requirements of this rule. All motor vehicles sold or leased in the U.S. must comply with this regulation by May 2018.

KidsAndCars.org anticipates that the rear visibility rule will significantly reduce backover crashes. Education and awareness of backover crashes will continue to be critical for decades because most older-model vehicles do not have rear view cameras. All vehicles can and should be retrofitted to include rearview technology.

Prevention/Safety Tips:

KidsAndCars.org urges everyone to install a rear view camera and sensors on their vehicle. Many drivers [incorrectly] believe they have to wait until they purchase a new vehicle to have a rear view camera system; but an after-market rear view camera and/or sensors can be installed on ANY vehicle.

Drivers should also heighten their awareness before engaging a vehicle into reverse; especially when children are present. Young children are impulsive and unpredictable; and they still have very poor judgment and little understanding of danger.

- Always walk around and behind a vehicle prior to moving it.
- Know where your children are. Make sure they move away from your vehicle to a place where they are in full view before moving the car. Verify that another adult is directly supervising children before moving your vehicle.
- Install a rear view camera, back-up sensors and/or additional mirrors on your vehicles. Use these devices in addition to looking around and behind your vehicle carefully to detect if anything is in your path before backing.
- Make sure children hold hands with an adult in parking lots at ALL times. If you have multiple children and not enough hands, create a hand-holding train or fasten the younger children into a stroller and make sure everyone stays together.
- Teach children that “parked” vehicles might move and make sure they understand that the driver might not be able to see them, even if they can see the driver.
- Teach your children to never play in, around or behind a vehicle. The driveway is not a safe place to play.
- If you have an adult passenger with you, ask them to stand outside the vehicle and watch for children or animals as you back out. Ensure they are a safe distance away from the vehicle so that they are not in any danger.
- Be aware that steep inclines and large SUVs, vans and trucks can add to the difficulty of seeing behind a vehicle.
- Keep toys, bikes and other sports equipment out of the driveway.
- Trim landscaping around the driveway to ensure drivers can see the sidewalk, street and pedestrians clearly when backing out of their driveway. Pedestrians also need to be able to see a vehicle pulling out of the driveway.
- Install extra locks on doors inside the home high enough so children cannot reach them and toddlers cannot slip outside on their own.
- Roll down the driver’s side window when backing so you can hear if someone is warning you to stop.
- Be especially careful about keeping children safe in and around cars during busy times, schedule changes and periods of crisis or holidays.

Please share these important safety tips with your childcare providers, teachers, relatives, friends, family and neighbors...

THESE PRECAUTIONS CAN SAVE LIVES.

Pre-Drive Procedures

1 How should the seat be positioned?

2 Where should the inside rearview mirror be aimed?

3 What is the area between the inside mirror view and what we cannot see to either side?

4 How should the outside mirrors be set?

5 How should the head restraint be positioned?



Enhanced Mirror Settings

Advantages

Increased Visibility	With the side mirrors more slightly angled, the driver will gain increased visual coverage of blind spots.
Increased Visibility	With the side mirrors more slightly angled, the driver will gain increased visual coverage of blind spots.
Less Time	Brief glances to mirrors takes less time than turning head to side.
Night Glare	Night glare is eliminated until vehicle moves into mirror blind zone.

Setting Your Mirrors

Left Mirror	To set the left side mirror, the driver must rest their head against the closed window and set the mirror to barely show the rear edge of the vehicle.
Right Mirror	To set the right side mirror, the driver should lean to the right so the head is directly below the rear view mirror or above the center console. The mirror should be adjusted the same way as the left side, so that the edge of the right side of your vehicle can barely be seen.

Concerns

Alongside	Vehicles visible in side mirrors will be alongside your vehicle.
Head checks	If the driver needs to see alongside the car, a movement of the head to the left window or to the center of the vehicle will give the traditional view as well as the enhanced mirror view.

Mirror Usage

Mirror checks answer three important questions:

- Are there vehicles present?
- If yes, what is their location?
- If yes, what is the size and relative speed of the detected vehicles?

When stopping

Stopping	Anytime a driver prepares to slow or stop, the driver's eyes should scan first to the rear view mirror.
Rear View	Direct attention to the rear view mirror until two cars have stopped behind the vehicle.
Quick	Use multiple, quick glances, not a long stare.

When turning

Before	Mirrors should be checked before any change of speed or position is made to enable assessment and control of rear and side space.
After	The driver should assess the space to the rear as soon as the turn is completed, and then assess the space to the front.

When changing lanes

Changing Lanes	When a driver is attempting to change lanes, they should check mirrors as well as perform head checks before any change of speed or position is made. This enables assessment and control of rear and side space.
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Checking mirror blind areas

Head Checks	Regular side view mirrors, even when angled out an additional 12 to 16 degrees (enhanced setting), do not provide sufficient information to safely make a movement to the side without first making a mirror blind spot check.
Quick	A mirror blind spot check involves making a quick eye movement over the shoulder to the left or right in the direction of intended vehicle movement.

Myths and Facts: Seat Belts

MYTH	FACT
Seat belts are uncomfortable or inconvenient.	Initially people may find that seat belts are uncomfortable, confining or inconvenient; the serious discomfort and inconvenience of motor vehicle crash injury in no way compares to the imaginary discomfort or the inconvenience you may think you feel wearing a seat belt the first few times.
The seat belts in my car don't work.	Newer shoulder belts are made so that you can move comfortably but they will lock up during sudden stops or crashes. Many people mistake this freedom of movement as a broken mechanism. Newer shoulder belts are designed to lock up only when the car changes speed or direction suddenly.
Drivers in air bag – equipped vehicles don't need to wear seat belts.	Air bags provide supplemental protection in frontal crashes, but motorists can slide under them if they are not wearing a seat belt. Air bags will not help in side or rear impact crashes or rollover crashes.
I don't want to be trapped in a fire or underwater.	Crashes involving fire or water happen in only 1/2 of one percent of all crashes. When they do occur, your best chance of surviving rests in remaining conscious, alert, and uninjured. The greatest danger is with the impact that precedes the fire or submersion in water. If you're not using a seat belt, it's very likely that you will be knocked unconscious or severely injured.
I'd rather be thrown clear in a crash.	Being thrown safely clear in a crash is almost impossible. You are more likely to be thrown through the windshield, scraped along the pavement, or even crushed by your own vehicle or another one. The idea of being thrown from a car and gently landing in a grassy area beside the road is pure fantasy. Your best bet during a crash is to stay inside the vehicle, securely held by your seat belt.
Seat belts can hurt you in a crash.	Properly worn seat belts seldom cause injuries. If they do, the injuries are usually surface bruises and are generally less severe than would have been the case without any belt. Without seat belts, you could have been thrown out of the vehicle and severely injured. Sometimes the force of a crash is so great that nothing could have prevented injuries. Injuries in most serious crashes would have been much more severe had seat belts not been worn.
I'm not going far and I won't be going fast.	This is the comment that so many people living in rural areas use when asked why they do not buckle up. Most crash deaths occur within 25 miles of home and at speeds of less than 40 miles per hour.
The chance that I'll have an accident is so small; those things only happen to other people.	It's comfortable to think that accidents only happen to other people; one out of three people will be seriously injured in a car crash sometime during their lives. This is really a significant risk. We never know when it will occur or how it will occur. The answer -- buckle up every trip, every time.
I'm a good driver. It won't happen to me.	You may be a good driver but you cannot always control the other drivers on the road. A drunk driver coming around the next curve may not be a "good driver". Again, you never know what might happen. Buckle up every trip, every time.

Staying Safe

Seat Belt Do's and Don'ts

When properly adjusted, seatbelts are among the most important safety features in a motor vehicle.

Seat Belt Do's	Seat Belt Don'ts
Wear seat belts across the top of your shoulder and over your chest.	Never wear the seat belt loose or twisted.
Wear it low across the hips.	Never wear it under your arm or behind your back.
Check it frequently for a snug fit.	Never wear it riding up over your stomach.
Wear it with your seat in an upright position, your back against it and your feet on the floor.	Never wear it slouching or reclining in your seat.

Head Restraints

Reduce the risk of neck injury caused by whiplash from the impact of a crash.

Head Restraint Do's	Head Restraint Don'ts
Your head restraint should contact the back of your head.	Avoid slouching or leaning forward.

Air Bags

Work in conjunction with safety belts and help absorb crash forces to minimize impact to the body

Air Bag Do's	Air Bag Don'ts
There should be 10-12 inches between the driver's chest and the steering wheel.	Avoid sitting too close or having the air bag directed at your face.

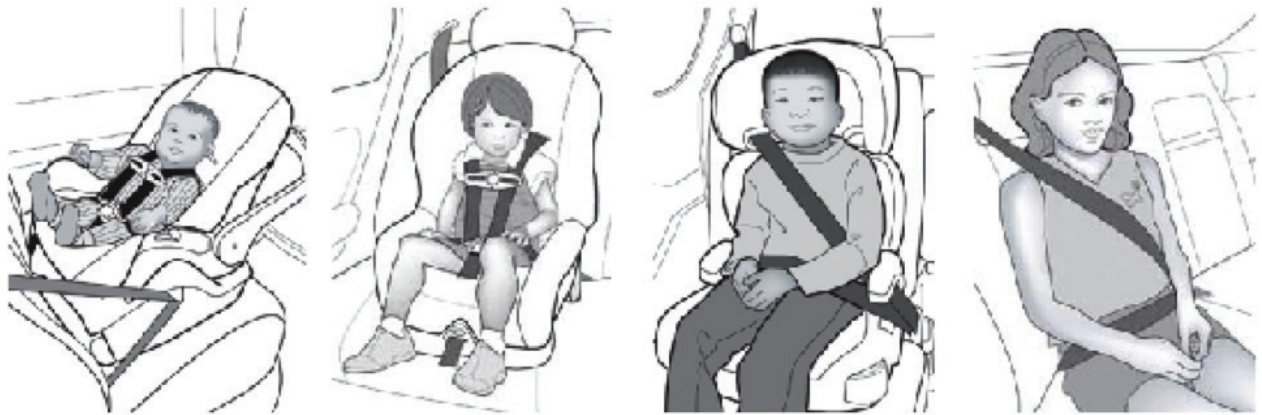
Child Safety

A good driver makes sure that all of their passengers arrive safely, including the youngest and most prone to injury

Infants	Rear-facing car seats until they're at least 12 months old and 20 pounds.
Children 1-3	Forward-facing car seats.
Children 4-7	Must remain in a child safety seat, or a booster seat, until the child is 4'9" or taller.
Children 8 +	Must remain belted at all times.

Maryland's Child Passenger Safety Law

(Effective October 1, 2013)



- Every child under 8 years old must ride in an appropriate child restraint* unless the child is 4 feet, 9 inches or taller.
- Every child from 8 to 16 years old who is not secured in a child restraint must be secured in a vehicle seat belt.

* "Child restraint" includes car seats, booster seats, or other federally approved safety devices.

Protect your children as they ride!

Children under 13 years old should ride in the back seat.

The back seat is the safest.

Questions?

Call Maryland Kids In Safety Seats (KISS)

at 1-800-370-SEAT or (410) 767-6016,

e-mail: dhmf.kiss@maryland.org

or visit us online at www.mdkiss.org



Maryland KISS
Program
Larry Hogan,
Governor
Boyd Rutherford,
Lt. Governor
Van Mitchell,
Secretary, DHMH

Safety, Communication, Comfort and Convenience Devices

Directions: Use this worksheet to determine whether your family's or friend's vehicle is equipped with the following Safety, Communication, Comfort and Convenience devices, and if so equipped, where the control levers, switches or buttons are located.

Equipped	Yes/No	Location of control lever or switch
Tilt steering wheel		
Automatic transmission		
Manual transmission		
Parking brake		
Cruise control		
Mirror controls		
Hazard flashers		
Headlights		
Instrument panel light switch		
Hood release		
Trunk release		
Seat control, manual		
Seat control, electric		
Separate turn indicator lever		
Washer/wiper lever		
Air bag cut-off switch		
Electric door locks		
Childproof rear door locks		
Power windows		
4-wheel drive		



Advances in Vehicle Safety for Today and Tomorrow

Many new technological advances in vehicle integrity are available in cars to lessen the effects of a crash for today's drivers. Some advances are uncommon or will be used in the future.

Active head restraints	Automatically moves forward upon impact to catch the head and increase neck protection.
Adaptive cruise control	Uses radar to monitor and regulate the distance between vehicles. If a crash is imminent, the system will brake, deploy airbags, and tighten safety belts.
Adaptive headlights	Illuminates the area around a corner with a 15-degree range of motion.
Advanced airbags	Isolates and protects various body parts and, in some systems, deploy at different depths or velocity depending on the occupant's size and position, the severity of the crash, and use of the clasped or unclasped safety belt.
Advanced safety belt pretensioners	Tenses up when a collision is imminent and are sometimes paired with seats that automatically adjust for increased crash protection.
Electronic stability control (ESC)	Monitors traction loss and steering angle and automatically applies one or more of the brakes to keep the vehicle on course. ESC helps to prevent the sideways skidding and loss of control that can lead to rollovers, helping drivers to maintain control during emergency maneuvers when their vehicles otherwise might spin out.
Fatigue warning	Monitors the driver's eye blink rate and blink duration and alerts the driver if it detects inattention or drowsiness.
Forward collision warning systems	Alerts the driver when the vehicle is getting too close to a vehicle in front. Some systems are able to brake the vehicle if the driver doesn't stop or steer clear.
Lane departure warning systems	Signals to a driver with alarm or flashing light when the driver's vehicle drifts from its lane by capturing an image of the highway and the lines on either side of the vehicle.
Park assist and back over prevention	Helps drivers park and back the vehicle by using cameras and radar to look for objects located behind a vehicle and by alerting drivers to hazards. Some systems are capable of automatically parallel parking the vehicle.
Side view assist	Uses sensors to monitor the side of the vehicle for vehicles approaching blind spots. A visual alert appears on the side view mirrors if a vehicle is detected. An audible alert activates if the driver signals a lane change when there is a vehicle in the blind spot.

What Am I?

List of Descriptions

1. I automatically turn on at the rear of the vehicle when the driver shifts to reverse. Tell me my color.

1.

2. I have five or more settings. I clean the windshield, front or back, by moving back and forth, sweeping rain, snow, and washer fluid.

2.

3. I am activated by the driver when the car is disabled on the roadside.

3.

4. I will come on and flash if there were a problem with the supplemental restraint system.

4.

5. I am the lever that allows the driver to shift the gears of the transmission.

5.

6. I inform the driver whether the electrical current to the engine and all accessories is normal or abnormal.

6.

7. I would sound a buzzer and flash a dashboard light when the driver forgets to put me on.

7.

8. I allow a parent to secure a child seat with more than the regular safety belt straps.

8.

9. When I am set or engaged I keep the vehicle from rolling when the driver is not in the vehicle.

9.

10. I allow the driver to use me to adjust his position to reach the pedals under the dash area.

10.

11. I inform the driver how fast the vehicle is moving.

11.

12. I have a snowflake on my button that turns me off and on.

12.

13. I alert another person. You must push the hub of the steering wheel to activate me.

13.

14. I make it possible for the driver to check traffic to the rear without turning around and looking.

14.

15. I hold the passengers or driver upright in the vehicle in the event of sudden, hard braking, a swerve, or a crash.

15.

16. When the driver activates me, I keep backseat passengers or kids from opening the windows.

16.

17. I tell how far the vehicle has travelled in its entire life or on a short trip. There are sometimes two of me. One can be reset to 0, and the other cannot.

17.

18. I allow the driver to change the intensity of the dashboard background lighting.

18.

19. I lubricate the engine on the inside. I am brown and should be changed every 3000 to 4000 miles. There is a light on the dash to indicate any problems with my system.

19.

20. I protect the front seat passengers' heads from striking the side window or the side of the vehicle in the event of a side crash.

20.

21. I have five positions. The driver uses a key to turn me and start or turn off the engine.

21.

22. I tell the driver if the engine is overheating.

22.

23. I indicate the gas level in the fuel tank when the vehicle is on.

23.

24. Part of me is red and part of me is blue. I indicate cold or hot in the passenger compartment.

24.

25. I allow the driver to maintain a desired speed so the driver can remove their foot from the accelerator pedal

25.



Review: Unit Three

1 What is a pre-entry check?

2 What are some of the things a pre-entry check is designed to find?

3 What are some reasons why a seat belt is important for safe driving?

4 What are some examples of vehicle control equipment?
When is it appropriate to use that equipment?

5 What is vehicle communication equipment? When is it appropriate to use?

6 What is a parking brake and how does a driver use one?

7 What types of gauges are found on the instrument panel?
What kinds of information do those gauges provide?

8 How should a driver wear his/her seat belt?

9 How should a head restraint be positioned?

10 What does a red indicator light mean?

11 What does a yellow/orange indicator light mean?

12 What does a blue/green indicator light mean?

Starting Out

Ignition settings

What are each of these ignition settings? When would they be used?

OFF	
ACC	
ON	

Gear selection

What do each of these gears mean? When would they be used?

P	
R	
N	
D	
1	
2	

When starting a car, where should your feet be?

When starting a car, where should you be looking?



Dashboard Warning Symbols

A red warning light indicates that an emergency repair is immediately required.

A yellow warning light means to check and repair the problem when possible.

Review the list below and check off if the warning light would be red or yellow.

Dashboard Warning Symbols	Red	Yellow
Temperature light or gauge		
Oil pressure light or gauge		
Brake system light		
ABS light		
Air bag light		
“Check Engine” light		
Door ajar light		
Low fuel light		
Alternator/generator light or gauge		

Texting and Driving

Have one person be the timer and another person be the texter. The “texter” should send three messages to the timer. The timer should time and record how long it takes the texter to type in the text and hit send. After sending the text, multiply the time by the speed to see how far a driver would travel sending a text at each speed.

For example: if it takes the text 30 seconds to send a “long” text, a driver would travel 1200 feet at 25 mph or 40 ft/second.

	Time to send text	Speed	Distance Traveled
Short text		25 mph (40 ft/second)	
		35 mph (51 ft/second)	
		55 mph (81 ft/second)	
		65 mph (95 ft/second)	
Medium Text		25 mph (40 ft/second)	
		35 mph (51 ft/second)	
		55 mph (81 ft/second)	
		65 mph (95 ft/second)	
Long Text		25 mph (40 ft/second)	
		35 mph (51 ft/second)	
		55 mph (81 ft/second)	
		65 mph (95 ft/second)	

Just for reference

1 mile = 5280 feet	1 football field or soccer field = 300 feet
1 NBA regulation basketball court = 94 feet	1 lap of a swimming pool = 25 feet

Using Your Feet While Driving

1 When you're driving, where should your right and left foot be?

2 Why can't you just drive with two feet?

3 How do you move your foot from one pedal to the other?

4 Can you define the term "dead pedal"?

Searching

Set Your Sights High	Look ahead to where your vehicle will be at least 15 seconds into the future.
What Are You Searching For?	What is between you and your vehicle 15 seconds ahead of you? What possible risks are ahead of you?
How Far Ahead?	At 30 mph, a driver should see at least a block and a half ahead of his/her vehicle. Fifty miles per hour requires a driver to see nearly a quarter mile ahead.
Lengthen Your Lead	When possible, double your eye lead time to 30 seconds, looking three blocks ahead on surface streets, and a half mile ahead on highways.
Three-Second Sequence	Within a one-second window a driver scans for a hazard, then has 2 seconds to detect and recognize it, as well as decide how to respond in order to avoid or lessen the severity of a crash.
New Driver Dangers	Because their search skills are underdeveloped, new drivers often detect a hazard later than experienced drivers, increasing crash risk. Among crashes attributed to a critical teen driver error, 21 percent were due to lack of scanning that is needed to detect and respond to hazards.
Potential Hazards	Anything that moves on the sidewalk or the street. Vehicles, pedestrians and animals or the shadows they cast from locations that are hidden from your view could all become relevant. Items that could conceivably cause a reaction from the driver are significant and relevant.
Search to the Sides	Search to the sides to make sure other roadway users will not cross your travel path. You must make a conscious effort to maintain wide-ranging eye movements.
Look Behind	Developing skills to check traffic behind you will help avoid collisions when conditions change suddenly. Check your rear view and side mirrors to see if anyone is following too closely, approaching fast or preparing to pass. Use your mirrors to check behind you when you slow down.
Blind Spots	Look over your left or right shoulder to check the mirror blind spot, which is the area around the vehicle that you cannot see from the driver's position or any of your mirrors.

Evaluating

Once you have identified the hazard(s), the next step is to quickly determine if they could affect you. Ask yourself, "what if?" Think about how hazards can interact to create risks for you.

Anticipate potential problems and have a plan to reduce or eliminate the risk.

Think about the dangers around your vehicle and what adjustments you must make to your speed or lane position to maintain your safety.

You must leave yourself time to react if a dangerous situation occurs.

Your most important decisions will involve how to manage available time and space to minimize risk.

Selecting the Best Path of Travel

One of your tasks as a driver is to identify your intended travel path, defined as the space into which you can safely drive your vehicle with the lowest possible risk. Selecting a travel path is a continual process of deciding which options are best.

When evaluating your potential travel path ask yourself:

Which path offers maximum visibility?

Which path provides clear space ahead?

Which path provides the clearest space to the side?

Which path provides the smoothest flow of traffic?

Which path provides the best roadway surface?

What traffic laws apply?

Executing

Executing requires that you adjust speed, determine lane position, and decide if communication is needed. These decisions should be based upon your evaluation. Remember that you will be making these adjustments continuously.

Try to keep as much space between you and the surrounding vehicles as possible. You should attempt to determine what other drivers are going to do and to leave space to escape if a dangerous situation arises.

Traffic Flow	Time of day	Traffic controls	Weather conditions
Visibility	Lane width	Roadway conditions	Speed limits

Speed Adjustments

By controlling your speed, you can control the space between your car and other cars or obstacles. If a car or obstacle moves dangerously close, you have the following options:

- Continue at the same speed.
- Increase your speed.
- Reduce your speed.
- Take your foot off the accelerator and cover the brake.
- Take your foot off the accelerator and apply pressure to the brake pedal.

Lane Position Adjustments

Changing your position within the lane is a great way to avoid driving conflicts. Most of these lane position changes will be minor. For example, you might move from the center of the lane to the left side of the lane to avoid a small pothole on the right side of the road.

Communication

By appropriately using communication, you make it easier for other drivers to see you. You also make it easier for you to see other drivers. Ensuring that you can see other drivers and that they can see you will dramatically reduce the chance of an accident. The following communication devices are part of your “execution arsenal”:

Turn signals	Let's other drivers know that you are turning, changing lanes, pulling out of a parking space or pulling out from the curb. Signal at least four seconds before you plan to take action.
Hazard Lights	Warns other drivers that you are experiencing car trouble.
Horn	Tapped lightly when trying to gain the attention of another driver or pedestrian. It should not be used to vent frustration at other drivers' actions.
Headlights	Daytime headlight use helps other drivers see you. You can flash your lights to oncoming traffic to warn them of dangers up ahead such as accidents or obstructions in the roadway. They should not be used to warn other drivers of the location of police cars.

Search, Evaluate, Execute

Search

1 What should a driver search for entering the vehicle?

2 What should a driver search for before driving away from the curb?

3 What should a driver search for when driving down a road?

4 How does what a driver searches for change depend on the environment where driving?

Evaluate

5 What does it mean to “evaluate” a situation?

6 How could a driver use the information from a search to evaluate conditions?

7 Give some examples of things that a driver may need to evaluate.

Execute

5 What does it mean to “execute”?

6 How does executing a maneuver relate to the process of searching and evaluating?

7 Give some examples of things that a driver may need to do when executing.

Video: How to Start and Stop Smoothly

1 What's the best way to apply pressure to the gas pedal to get it to accelerate?

2 What happens if you mash your gas pedal hard when you first start out?

3 What's the best way to apply pressure to the brake pedal to get it to decelerate?

4 What happens if you mash your brake pedal hard when you're slowing or stopping your vehicle?





Backing Procedure

1 What's the best way to remain safe while backing?

2 How should you shift your body?

3 What should you do with your right arm?

4 Would should you do with your left hand?

5 Which window(s) should you be mostly looking at when backing?

6 The video said to take quick peeks. Where should you take them?

Unit Four Review

1 What are the basic steps to turn a vehicle on?

2 What is idling and do you need to idle your car before driving?

3 What is risk?

4 What are the steps in the SEE system and why are they important?

5 What are the types of steering methods?

6 What is the best (and safest) hand placement and why?

7 Do you need to push the accelerator to make the car move?

8 Is it safe to drive with two feet? Why or why not?



From One Second to the Next – The X Man

Discuss each of the following questions based on the video and what a new driver might say to excuse his/her actions or make a victim feel better in this type of circumstance.

1 What happened in this video?

2 How do you believe the injuries to X could have been avoided?

3 Who else was affected in this crash?

4 What are some of the risks of driving in neighborhoods that this video highlights?

5 X's sister says that she was walking across the street holding her brother's hand and then he was gone. How would you as a driver explain your texting to X's sister? How would you as an older brother or sister feel in the same situation?

6 X's mom talks about her memories of her son before the accident. As a texting driver, how would you explain your actions to X's mom? What explanations would your mom or dad find acceptable if you had been the victim of a similar crash?

Risks in Neighborhoods

Children

Risk Posed

Safe and Legal Response

Joggers

Risk Posed

Safe and Legal Response

Pet Walkers

Risk Posed

Safe and Legal Response

Cyclists

Risk Posed

Safe and Legal Response

School buses

Risk Posed

Safe and Legal Response

School Zones

Risk Posed

Safe and Legal Response



School Buses: Safe and Legal Driving

Warning to Drivers	Buses can be equipped with flashing lights, a stop sign, and a crossing arm.
Yellow Lights	Before a bus prepares to stop, its yellow lights will begin to flash.
Red Lights	When the bus actually stops, red lights will flash, stop sign will come out and extended arms will come out.
Where to Stop	A driver must stop at least 20 feet behind a school bus and at least 20 feet in front if there is no physical barrier between a driver and the school bus such as a grass median, raised concrete barrier, or wall between the driver and a stopped school bus with its red lights on.
When to Go	Drivers may not resume travel until vehicle resumes motion or the flashing red lights are deactivated
It's the Law	Stopping for a school bus with its red lights flashing is required by law. Failing to stop is currently punishable by a 3 point citation and a \$250 fine.
Cameras	While not uniform across the state, jurisdictions are implementing cameras on school buses, similar to red light and speed cameras.

Pedestrian Safety in Maryland

Motor vehicle crashes are a huge threat to public health. Over the past decade, the number of crashes reported on the nation's roadways has declined annually. However, motor vehicle crashes continue to be a leading cause of death in the United States.

Pedestrian Crashes Are Increasing	While other types of crash rates are dropping crashes with pedestrians are either holding steady or increasing
High Fatalities	Annually, Maryland drivers were involved in nearly 3,000 pedestrian crashes, more than 86 percent of which resulted in an injury or fatality. Pedestrian crashes account for 3% of the State's crashes, but close to 25% of statewide fatalities. One out of every four people killed in Maryland in a traffic-related fatality crash is a pedestrian.
Dangerous Areas	Metropolitan areas have the highest concentration of pedestrian-involved crashes.
Dangerous Seasons	Pedestrian-involved crashes are highest during the spring and fall seasons. Fatal pedestrian crashes increased the most between September and December.
Dangerous Times	Fridays, Saturdays, and evening hours are dangerous times for pedestrians. Fatal crashes also occurred most often on Fridays. Nearly half of all pedestrian crashes occurred between 3 p.m. and 10 p.m.; however, pedestrian crashes resulting in fatalities occurred most often during the mid- to late evening hours (6 p.m. – 11 p.m.).
Dangerous Ages	Teen and young adult drivers and pedestrians accounted for a large share of those involved in pedestrian crashes. Approximately 3 out of 10 pedestrian crashes in Maryland involved drivers ages 34 and younger. Pedestrians between the ages of 10 and 29 accounted for nearly 40 percent of those struck by vehicles; however, older pedestrians (ages 45–59) comprised over 30 percent of those involved in fatal crashes.
Dangerous Groups	Males are most often the victims and drivers in pedestrian-involved crashes. Males accounted for the greatest number of pedestrians involved in crashes. Nearly 70 percent of all pedestrian fatalities were male. Approximately half of all drivers involved in a pedestrian crash were male.



Maryland's Pedestrian Safety Laws For Drivers

Law	Description	Penalty
TR§21-502(a)2 Failure to stop for pedestrian in crosswalk	Driver of a vehicle shall come to a complete stop when a pedestrian crossing the roadway in a crosswalk is: (i) on the half of the roadway on which the vehicle is traveling or (ii) approaching from an adjacent lane on the other half of the roadway.	\$80 or up to \$500.00. One Point.
TR§21-502(c) Passing a vehicle stopped for a pedestrian	It is unlawful for a driver to pass a vehicle that is stopped for a pedestrian either in a marked or unmarked crosswalk.	\$80 or up to \$500.00. One Point.
TR§21-202(c, e) Failure to yield right-of-way when turning on green signal or green arrow	Vehicles facing a circular green signal, including any vehicle turning left or right, shall yield right-of-way to any pedestrian lawfully within an adjacent crosswalk.	\$90 or up to \$500.00. One Point.
TR§21-202(h) Failure to stop at clearly marked stop line	Vehicles facing a steady circular red signal or red arrow signal shall stop at the near side of the intersection at a clearly marked stop line, or before entering the crosswalk.	\$140 or up to \$500.00. Two Points.
TR§21-202(k) Failure to yield to pedestrian before turn on red	Vehicles facing a red signal shall, after stopping, yield the right-of-way to any pedestrian lawfully within an adjacent crosswalk	\$90 or up to \$500.00. One Point.
TR§21-504(a, b, c) Failure to exercise due care to avoid hitting a pedestrian	The driver of a vehicle shall exercise due care to avoid colliding with any pedestrian, shall warn any pedestrian by sounding a horn, and shall exercise proper precaution on observing any confused or incapacitated pedestrians.	\$70 or up to \$500.00. One Point.
TR§21-801(h) Special dangers as to pedestrians	The driver of a vehicle shall drive at an appropriate, reduced speed when any special danger exists as to pedestrians.	\$90 or up to \$500.00. One Point.

Safety Tips for Drivers

Always come to a complete stop at stop signs and stop lights.

Always yield to pedestrians and stop for pedestrians in a crosswalk, even if it is not marked.

Pay attention. Slow down. Be especially attentive around school zones and in neighborhoods where children are active.

Avoid distractions while driving. Keep your eyes on the road and focus on getting where you need to go safely.

Keep your windshield and headlights clean for maximum visibility.

Maryland's Pedestrian Safety Laws For Pedestrians

Law	Description	Penalty
TR§21-202(l) Failure to obey red traffic signal	Pedestrian facing a steady red traffic signal alone may not enter the roadway.	\$80 or up to \$500.00
TR§21-203(c) Failure to obey pedestrian control signal	Pedestrian may not start to cross the roadway in the direction of a solid "don't walk" or "upraised hand" signal.	\$40 or up to \$500.00.
TR§21-503(a) Failure to yield right-of-way to vehicle	If a pedestrian crosses a roadway at any point other than in a marked crosswalk or in an unmarked crosswalk at an intersection, the pedestrian shall yield the right-of-way to any vehicle.	\$40 or up to \$500.00.
TR§21-503(c) Failure to cross at signalized intersection	Between adjacent intersections at which a traffic control signal is in operation, a pedestrian may cross only in a marked crosswalk.	\$40 or up to \$500.00.
TR§21-503(d) Crossing intersection diagonally	Pedestrian may not cross an intersection diagonally unless authorized by a traffic control device.	\$40 or up to \$500.00.
TR§21-506(a, b) Pedestrian unlawfully on roadway	Where a sidewalk is provided, a pedestrian may not walk along and on an adjacent roadway. Where no sidewalk is provided, a pedestrian may walk only on the left shoulder or on the left side of the roadway, facing traffic.	\$40 or up to \$500.00.

Safety Tips for Pedestrians

Walk smart. Be predictable when walking. Use sidewalks where provided and cross only at crosswalks. Stay off highways and restricted zones.
Pay attention and always look left, right, and left again before crossing the street.
Avoid distractions and the use of electronic devices while walking. Focus on getting to your destination safely.
Crosswalks and traffic lights don't stop cars! The WALK signal does not mean it is safe to cross. It only means it is your turn to cross. Check that traffic has come to a stop before crossing.
Always look both ways before stepping between stopped vehicles as they may block your view of moving traffic.
Wear brightly colored clothing to be easily seen day or night. At night, also wear reflective materials.
Walk only on the sidewalk. If there isn't a sidewalk nearby, walk on the side of the road facing traffic.
Stand a safe distance away from the roadway and traffic while waiting for a bus.
Remember to look left, right and left again before crossing the street.



“Close Call” Video

1 What could Chris have done differently at the start of the video?

2 What are some clues to look for that pedestrians may be present?

3 Who has the right-of-way when a pedestrian is crossing in a crosswalk?

4 Can you have a crosswalk with no painted lines on the road? What would it look like?

5 How long can a driver divert their attention from their intended travel path?

Cyclist Video

1 Who has the primary responsibility to watch out for whom on the road?

--

2 How would a driver know if a cyclist is planning to:

Turn right?

--

Turn left?

--

Slow down?

--

3 Where should cyclists be when on a road?

--

4 Under what circumstances would a driver see a cyclist in a different place?

--

5 When should a driver plan to give a cyclist more room in a lane?

--

6 What is the best way for a driver to make a right turn when driving next to a bike lane or when there are cyclists around?

--

7 What are some of the risks a driver might encounter when making a left turn across a bike lane?

--

8 What are some additional hazards a driver might encounter when driving around cyclists?

--

9 How could aggressive driving be a problem for drivers and cyclists?

--



Turning Your Vehicle

Search	Evaluate	Execute
What's in front of you?	Have you come to a complete stop?	Begin to signal your intention to turn at least 100 feet ahead.
What's beside you?	Have you searched in all directions?	Start the process of searching and evaluating.
What's behind you?	Are there other unexpected factors that you need to evaluate?	Check your mirrors on both sides and in the back
Do you see any risk groups like children, animals or distracted pedestrians?	What is the speed and traffic pattern of roads around you?	Watch for other road users in the crosswalk or preparing to enter the crosswalk
Search the crosswalks	What's your time of day?	As you approach your turn, brake and slow down.
Make sure no one is about to step into the road without paying attention.	What are the road conditions?	Pick a line at the center of the intended path of travel and focus on that line.
Pay particular attention to any bicycles or motorcycles.	What kind of road are you driving on?	As you approach the corner, begin to turn the wheel slightly to the right using hand over hand steering to follow the travel path.
Look for other vehicles coming in multiple directions.	Are there other road users with you?	Shadow the brake.
Check your mirrors and your blind spot	How fast or slow is everyone else moving?	Once you have completed the turn, begin to accelerate slowly to return to the safe, legal speed.

Common Driver Errors While Turning

Approaching the turn hesitantly or indecisively.
Forgetting to use S.E.E.
Forgetting to signal at least 100 feet in advance.
Forgetting to stop at an intersection when required before turning.
Forgetting to take the turn slowly, shadowing the brake.
Straying over lane lines into other lanes when turning on a multiple lane road.
Failing to turn into the nearest lane.
Trying to back-up if you missed the turn.

Roundabouts – The Safer Way to Travel

Safer

Conflict points	Roundabouts have fewer conflict points in comparison to conventional intersections.
Lower speeds	They allow drivers more time to react and reduce crash severity.
Visibility	Since the central “round” area is flat, all vehicles have better visibility.
Pedestrians	Pedestrians do not have to look in multiple directions to cross.

The potential for high-severity conflicts is greatly reduced with roundabout use.



Multi-Lane Roundabouts

Turning right	Unless posted otherwise, use only the right-hand lane if there are multiple approach lanes. Use your right-turn signal.
Going straight ahead	Unless posted otherwise, you may use any lane to go through. Do not use any turn signals on approach.
Turning left or making a U-turn	Unless posted otherwise, use the left-hand lane if there are multiple approach lanes. Use your left-turn signal.



Roundabout Precautions

Yield	Traffic entering a roundabout always yields to traffic in it.
Large Vehicles	Do not overtake large vehicles like trucks or buses. Large vehicles may have to swing wide on the approach or within the roundabout.
Emergency Vehicles	Do not enter a roundabout when an emergency vehicle is approaching on another leg. This will allow traffic within the roundabout to clear in front of the emergency vehicle.

Potholes

Avoiding Potholes

Inspect tires	The tire is the most important cushion between a car and a pothole. Make sure tires have enough tread and are properly inflated by checking the sticker in the door frame or owner's manual.
Look ahead	Make a point of checking the road ahead for potholes. An alert driver may have time to avoid potholes, so it's important to stay focused on the road.
Keep it Clean	Have a clean windshield! Your field of vision is critical.
Observe traffic ahead of you	If other cars are swerving and stopping, it's because of a problem in the road.
Beware of puddles	What might look like a little surface water might have a nasty, deep and sharp-edged pothole lurking below.
Slow Down	Reduce your speed on roads prone to potholes. Slower hits generally involve less damage, a simple matter of physics.
Focus	Stay focused and pay attention to the amount of traffic in front, behind and alongside you. You might be able to avoid potholes but do not want to cause an accident while doing so.

Damage From Potholes

Tires	If your wheels ram into a pothole, your tire's sidewall can bulge. It needs to be fixed very soon.
Rims	Unless your car is equipped with older steel rims, they're likely aluminum-based. That means they're susceptible to dents.
Undercarriage	Hitting a pothole can dent or puncture the undercarriage of your vehicle. In other words, fluid leaks and wear leading to rust formation are just the beginning.
Suspension	Your control is compromised and you feel your car bottoming out or bouncing erratically. You may feel swaying, especially on turns. This indicates your suspension has taken a hit, and can negatively affect many parts including shocks, struts, ball joints, steering rack, bearings, seals and tie rods.

Unit 5 Review

1 What are some of the significant risk groups a driver encounters in neighborhoods?

2 When does a driver have to stop for a school bus?

3 How far does a driver need to be from a cyclist?

4 In a school zone, when might a driver need to stop?

5 What are some of the risks of a making a right turn?

6 What are some of the risks of making a left turn?

7 What are the appropriate steps to make a left turn or a right turn?

8 When a driver gets to a stop sign with no stop line, where does he/she need to stop?

9 What should a driver do when he/she gets to a speed bump?

10 How might a driver know if he/she is at risk of hitting a pothole?

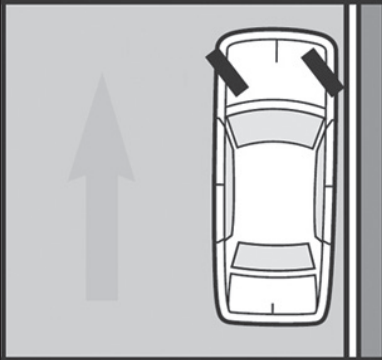
11 Describe the rules for entering and exiting a roundabout.

12 What do you think is the most risky aspect of driving in a neighborhood?

Parking On Hills

Parking on a Hill - Uphill

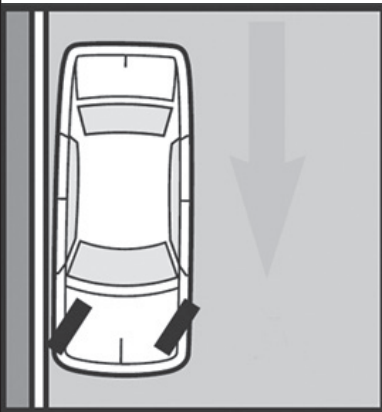
**Uphill with Curb
Turn Wheels from Curb**



When headed uphill at a curb, turn the front wheels away from the curb and let your vehicle roll backwards slowly until the rear part of the front wheel rests against the curb using it as a block.

Parking on a Hill - Downhill

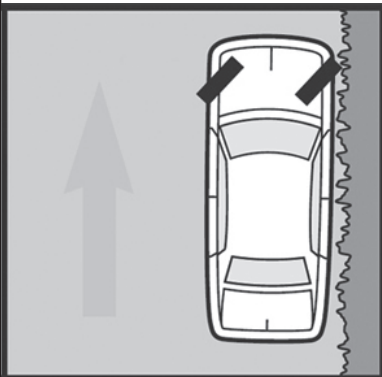
**Downhill with Curb
Turn Wheels to Curb**



When you stop your car headed downhill, turn your front wheels toward the curb. Let your tires roll forward slightly and rest against the curb, using it as a block.

Parking on a Hill Without a Curb

**Uphill or Downhill
without Curb
Turn Wheels to Right**



When parking on a street with no curb, uphill or downhill, your front wheels should be turned to the right, away from the street. If the brakes fail the car won't roll into the street.

From One Second to the Next – A Letter From Martin

Discuss each of the following questions based on the video and what a new driver might say to excuse his/her actions or make a victim feel better in this type or circumstance.

1 What happened in this video?

2 How do you believe the injuries to Martin's family could have been avoided?

3 Who else was affected in this crash?

4 What are some of the risks of driving on urban divided highways that this video highlights?

5 Martin is able to write a letter and forgive the person who killed his family. Would you be able to write the same letter?

6 Both Martin and the driver talk about the long range impact of the crash. What are some of the impacts not only on Martin's family but also on the young man who killed the family and the police officer who found the crash?



S.E.E. Buses & Light Rail

Search

Look for passengers boarding and exiting that might cross into your path.

Watch for buses and light rail trains that have stopped. They may block your view of pedestrians about to cross the street, or they may be about to pull into traffic.

Look for passengers boarding and exiting that might cross into your path.

Search for traffic signals used to control traffic for light rail vehicles. The lights on these signals are marked with a "T" and the tracks are marked with railroad crossing signs and flashing red signals.

Evaluate

Do you need to pass?

Use great caution. These vehicles have massive blind spots.

Do you need to turn in front of an oncoming light rail train?

Use patience. Let the train completely pass you before making your turn.

Do you need to cross the light rail tracks?

Do not proceed across the tracks until you can see clearly in both directions or a signal indicates you may proceed.

How's your following distance?

Use a greater following distance. These vehicles can't start or stop as quickly as you.

Execute

If you have to cross tracks, do it quickly. Never linger on a light rail track. Never stop or park your car on the tracks or at bus stops.

Stay well away from the backs of buses in slow-moving traffic. You may be inhaling their exhaust.

If you get in trouble, you may not be able to rely on your usual communication devices. Bus drivers and light rail operators may not be able to hear your horn or see your hazard flashers.

When executing a vehicle maneuver, remember that it takes buses and light rail trains longer to stop. Don't rely on these vehicles to avoid you.

The Risks of Urban Driving

Risk?		Why?	
1		1	
2		2	
3		3	
4		4	
5		5	
6		6	
7		7	
8		8	
9		9	
10		10	
11		11	
12		12	
13		13	
14		14	
15		15	



Urban Roads

A wide variety of vehicles

Look carefully at the phrases below. Circle what would be most true for the vehicles listed at the bottom. There may be more than a single correct answer for each phrase. Mark all that apply.

A	B	C	D	Are allowed an entire lane to themselves.
A	B	C	D	Do not tailgate – if possible, allow more than the usual 3-4 seconds of following distance.
A	B	C	D	Drivers may be paying more attention to delivering packages than they are to traffic.
A	B	C	D	Large turning axis
A	B	C	D	Limited visibility
A	B	C	D	May or may not have a separate lane.
A	B	C	D	May be making unannounced and unpredictable stops.
A	B	C	D	May veer into traffic to avoid potholes, grates, or other impediments.
A	B	C	D	Need to maintain 3 feet between them and your vehicle
A	B	C	D	People getting off and on without necessarily paying attention.
A	B	C	D	People possibly hurrying to make a connection
A	B	C	D	When you pass, if you're too close, your vehicle's draft may affect their steering

A	Bicycles	C	Commercial Trucks
B	Bus	D	Motorcycles

Urban Roads

Why Honking My Horn Doesn't Help

Take a look at the list below. Have you ever seen any of this behavior?
If you haven't, try to speculate.

Are these successful strategies to get drivers to move forward or adjust their behavior? Would they help the drivers do them to get ahead or get to their destination any faster? What usually happens to these drivers?

Drivers that blow their horns?

Drivers that push their way through traffic or speed to get ahead of the flow of traffic?

Drivers that frequently swear or gesture at other drivers?

Drivers that frequently criticize other drivers?

Drivers that engage in constant rushing and lane jumping?

Drivers that ignore road signs and regulations?

Drivers that drive with distraction, low alertness, or inattention?

Drivers that prevent others from passing?

Drivers that tailgate to pressure a driver to go faster or get out of their way?

Driving on Urban Roads

How should a driver safely adjust to the following situations in an urban environment?

Parked cars

Search

Evaluate

Execute

People crossing randomly and distracted

Search

Evaluate

Execute

An emergency vehicle on a narrow street

Search

Evaluate

Execute

Heavy traffic

Search

Evaluate

Execute

Narrow, littered alleys

Search

Evaluate

Execute

Mixed-Use Roads

Why do mixed-use roads pose a greater risk especially for distracted drivers?

How does mixed-use make a road riskier?

Drivers and pedestrians more focused to getting somewhere than driving:

Drivers who are lost and distracted using GPS to figure out where they are :

Drivers who may be looking for a parking space or are stopping to park:

How would driving distracted impact driving in a mixed use urban area?

What would happen if the driver in the white car was distracted?

Is the pedestrian paying any attention to what he is doing or where he is going?



Train Crossings: Staying On the Right Track

When you approach a railroad crossing

Slow down!	Pay attention to signs, warning lights and gates.
Stop at the stop line, prior to the tracks.	If there are no flashing lights or gates at the crossing, use extra caution.



When you cross a railroad crossing

Look both ways and cross the tracks quickly, without stopping.	Never attempt to beat a train. A train can travel much faster than your vehicle
Wait to cross until the train has passed and well down the track or until railroad devices indicate it is safe to cross.	Always wait for the vehicle ahead of you to clear the tracks before you start across.



If you are stalled on the tracks

Check in both directions for approaching trains.	Get everyone out of the vehicle and a safe distance from the tracks.
Call 911. Give the operator the six digit number and letter that identify the crossing. An oncoming train may be stopped by the dispatcher.	Returning to your stalled vehicle is dangerous. Trains could approach at any time.

Passing On Rural Roads

1 What are some of the important points the video describes to help drivers pass on rural roads?

2 Why is communication such an important part of driving on rural roads?

3 What is the difference between this type of passing and passing in front of another vehicle?

4 Why is speed management such an important component of driving on rural roads?



Unit 6 Review

1 What are some of the significant risks of driving in an urban environment?

2 How can a driver effectively address those risks?

3 What are some of the significant risks of driving on suburban roads?

4 How can a driver reduce those risks?

5 What are some of the significant risks of driving on rural roads?

6 How can a driver reduce those risks?

7 What is the move-over law?

8 How can a driver successfully navigate congested traffic?

9 What type of sign indicates a one-way street?

10 Why are intersections dangerous?

11 What are conflict points?

Unit 6 Review *Continued*

12 What steps does a driver need to take to make a right turn on red?

13 If a driver wants to make a left or right turn at an intersection, what is one of the first things he/she must do?

14 What is a shared left turn lane?

15 What are some the common mistakes a driver can make when parallel parking?

16 What does it mean to yield when driving?

17 What is right of way?

18 What are rules when approaching or preparing to cross a railroad crossing?

19 When is a driver most likely to see deer on the road and how should he/she react?

20 Describe the best practices for passing another vehicle.

21 Describe some of the significant problems distraction causes on urban, suburban, and rural roads.

From One Second to the Next – Reaching for the Stars

Discuss each of the following questions based on the video and what a new driver might say to excuse his/her actions or make a victim feel better in this type of circumstance.

1	What happened in this video?
2	How do you believe the injuries to the two engineers could have been avoided?
3	Who else was affected in this crash?
4	What are some of the risks of driving on expressways that this video highlights?
5	Megan O'Dell, the daughter of one of the men killed, forgave the young man in the accident. Would you have been able to do that?
6	The texting driver, Reggie Shaw, said, "To be a good member of society you have to give back more than you take." If you caused a fatal crash because of texting how would you make amends to the families of your victims? Could you ever make it right?

Driving on Interstates

How should a driver safely adjust to the following situations on a high-speed interstate highway?

Motorcycles

Search

Evaluate

Execute

First Responders

Search

Evaluate

Execute

Construction zones

Search

Evaluate

Execute

Large commercial trucks and buses

Search

Evaluate

Execute

Tunnels, bridges and toll plazas

Search

Evaluate

Execute

Aggressive drivers

Search

Evaluate

Execute

Driving with Motorcycles

A motorcyclist is SIX TIMES MORE LIKELY TO BE HURT than a car driver in a crash.

Yield!	Yield right—of--way to an oncoming motorcycle when turning left. Violating a motorcyclist's right of way can result in a citation with significant penalties if you cause a serious injury. Drivers are at fault in just over half of car crashes with motorcycles.
Search!	Look twice before changing lanes or merging into traffic. Use your mirrors and look over your shoulder to be sure it is safe before merging or changing lanes. Motorcycles can be hidden in a vehicle's blind spot or missed in a quick look due to their smaller size.
Space!	Do not share a lane with a motorcycle. Motorcyclists often adjust their position in the traffic lane to avoid road hazards like potholes or oil spills, because of wind, or to be seen by other road users. Motorcyclists are entitled to use the entire lane.
Passing!	Allow plenty of space between your vehicle and the motorcycle when passing. After passing a rider, make sure you can see the motorcycle's headlight in your rearview mirror before moving back into the lane. If you are being passed by a motorcycle, simply maintain your speed and allow the motorcyclist to complete his/her passing.
Don't Tailgate!	Allow at least 3 to 4 seconds of following distance between your vehicle and the motorcycle in front of you. Motorcycles may need to slow for road hazards like gravel, wet road or railroad crossings that don't affect cars the same way. Motorcyclists often reduce speed by downshifting or merely rolling off the throttle, which does not activate the brake light. So, be alert and leave plenty of space around motorcycles.
Groups!	Use care when driving near a group of motorcyclists. Motorcyclists participate in organized rides which can involve many motorcycles. Driving around these groups requires communication and patience. If you need to change lanes or reach an exit, signal your intention early and wait for the riders in the group to create a gap for you. Do not merge in between groups or riders unless there is sufficient space to do so. If it is a small group, it may be easier to slow and let the group pass before making your lane change.
Dangerous Groups	Males are most often the victims and drivers in pedestrian-involved crashes. Males accounted for the greatest number of pedestrians involved in crashes. Nearly 70 percent of all pedestrian fatalities were male. Approximately half of all drivers involved in a pedestrian crash were male.

Sharing the Road with Motorcycles

1 What are some possible risks of driving on the road with motorcycles?

2 What can drivers do differently when traveling near a motorcycle?

3 What's the best way to practice S.E.E. when driving near a motorcycle?

Search

Evaluate

Execute





Expressway Hazards

Name the potential problems that might be encountered with the following interstate users and conditions.

Other cars and trucks
Motorcycles
Law enforcement and other types of emergency vehicles
Large commercial trucks and buses
Tunnels
Bridges
Toll plazas
Construction zones
Traffic

Cars and Trucks: Risks

Speeders

Distracted
Driving

Aggressive
Drivers

Tailgaters

1. What are some of the risks that road users have with each type of driver?

Speeders

Distracted Drivers

Aggressive Drivers

Tailgaters

2. What are some of the consequences of displaying each type of behavior on an interstate

Speeders

Distracted Drivers

Aggressive Drivers

Tailgaters

3. As a new driver, what makes these drivers particularly frightening?

Speeders

Distracted Drivers

Aggressive Drivers

Tailgaters

Merging On & Off the Interstate

Circle T (True) or F (False) for each of the statements below.

1	T	F	One of the dangers on a highway merge is stopped traffic ahead of you.
2	T	F	Prepare to use the shoulder of the interstate if no gap in traffic is available.
3	T	F	The best way to merge onto an interstate is to jump over two lanes at once to get out of the lane used by merging traffic.
4	T	F	If you miss your exit, pull over to the shoulder and back onto your exit.
5	T	F	The only place that you need to look to remain safe while merging is your rear view and side view mirrors.
6	T	F	When exiting, a good way to stay safe is to prepare to adjust your speed for a potential blocked ramp.
7	T	F	When merging onto the interstate using a weave lane, existing traffic has to yield to newly entering traffic.
8	T	F	When approaching your exit, reduce your speed to near the ramp's speed while still in the drive lane.
9	T	F	Move into the lane closest to your anticipated exit at least a half mile before reaching it.
10	T	F	You don't need to signal when merging onto an interstate since it's obvious that you'll need to move over.

Unit 7 Review

1 What is an expressway?

2 How is an expressway different from other types of roads?

3 What are some of the other types of vehicles a driver might encounter on an expressway?

4 Why are motorcycles risky?

5 Why are commercial vehicles risky to drivers?

6 What is the move-over law?

7 What are some of the risks of work zones?

8 How are work zone speed limits enforced?

9 What is a blind zone?

10 What are some of the risks of toll plazas?

11 What are some of the risks of bridges?

12 What are some tools used to control traffic on bridges?

Unit 7 Review *Continued*

13 How do you merge onto a highway?

14 Who has right- of-way when merging onto a highway?

15 What is one of the most important differences between driving on an urban road and on an expressway?

16 What is fatigued driving and why are highway drivers prone to drive fatigued?

17 What is the best way to avoid fatigued driving?

18 What is a weave lane?

19 What is an Exit Only lane?

Checking Tires

1 How do you check for the correct amount of tire tread?

2 How do you check for the correct amount of tire pressure?

3 How does tire tread and tire pressure relate to safe driving?

4 What is the relationship between safe tires and maintaining good traction on the road?

5 Why is maintaining traction important?



Winter Weather Driving

1 What are some of the objects suggested to put in your vehicle before winter?

2 Why are those things important?

3 What is oversteering?

4 What is understeering?

5 How do you correct?

6 What are some the tips given about driving in winter?

Moving Violations

With a Learner's Permit, 15-24 years old

- o You will have to enroll in the Driver Improvement Program
- o Your 9-month waiting period to take your skills test will re-start
- o Repeated violations can lead to suspension or revocation of your permit

With a Learner's Permit, 25 and older

- o You will have to enroll in the Driver Improvement Program
- o Your 45-day waiting period to take your skills test will be extended to 9-months from your violation
- o Repeated violations can lead to suspension or revocation of your permit

With a Provisional License

- o Your 18-month waiting period will re-start
- o You will have to enroll in the Driver Improvement Program
- o Repeated violations can lead to suspension or revocation of your license

With a Full License

- o With 5 or more points you will have to enroll in the Driver Improvement Program
- o With 8 or more points your license will be suspended
- o With 12 or more points your license will be revoked

Traffic Stops

1 According to the video, what is one of the greatest dangers many law enforcement officers face?

2 What were some of the things the driver was doing incorrectly/illegally that led to her being stopped?

3 Why did the officer approach the car the way that he did?

4 What did the driver do as soon as she was pulled over?

5 What did the officer ask the driver for when she was stopped? How did she get those materials?

6 What were the different types of citations that the driver received? What did each citation mean?

7 What did the officer request the driver do at the end of the traffic stop?

Unit 8 Review

1 What are some examples of mechanical failures?

2 What should you generally do if your vehicle has mechanical issues?

3 What is the best way to avoid mechanical issues with your vehicle?

4 How deep should your tread be on a tire?

5 Why are tires and tire safety important in rain, snow, or ice?

6 Should a driver use high beams or low beams in fog?

7 In any kind of bad weather, what is the first thing a driver should do?

8 What should an inexperienced driver do if the roads are icy?

9 What is oversteering?

10 What is understeering?

11 What should a driver do if he/she is stopped by law enforcement?

12 What happens when a driver with a learner's permit or a provisional license is given a citation?

Unit 8 Review *Continued*

13 What happens if the same driver receives multiple citations?

14 What are the best ways to avoid a collision?

15 If you cannot avoid a crash, what should you do?

16 After you are in a crash, when must you notify law enforcement?

17 What information must a driver leave if he/she hits an unattended vehicle?

18 When must a driver notify law enforcement of a crash?

19 What is a hit and run crash?

20 What are the penalties for a hit and run crash?



Safe Driving and Decision Making

1 What are our images of being a safe and legal driver?

2 What images does our culture give us about driving?

3 What makes a new driver a safe driver?

4 Is there a set of specific driving skills that are necessary to be a good driver?

5 What attitudes and beliefs does a safe driver display?

6 What is the connection between good decision making and good driving?

7 What is an unsafe driver?

8 Why is being a good decision maker an important part of being a safe driver?

9 What does it mean to be a good decision maker when driving?

Quiz on Alcohol: True or False?

1	Alcohol is a drug.	T	F
2	Alcohol is a stimulant.	T	F
3	Even if I have been drinking, coffee, a cold shower, or a meal can sober me up.	T	F
4	Drivers under the age of 21 are allowed to have one drink.	T	F
5	Teens have higher crash rates on weekends and at night.	T	F
6	Having friends in the car will help you drive more safely.	T	F
7	Using alcohol and other drugs while driving has no effect on brain activity.	T	F
8	Using alcohol and other drugs while driving has no impact on your perception of speed or distance.	T	F
9	Using alcohol or drugs while driving will make you feel more confident about your driving ability.	T	F
10	Using alcohol or drugs while driving can make you feel sleepy.	T	F



Someone Like You

1 What happened to the two young men in the video?

2 How would you contrast their old lives with their current lives?

3 Who is suffering lasting effects from the two crashes?

4 What types of effects are they suffering?

5 Who else suffered from the crash? How did those other people suffer?

6 Could these crashes have been prevented?

7 How would you have prevented the crash?

Quiz on Alcohol: True or False?

Teen Driver Agrees to:

contact _____ if I ever find myself in a situation in which I do not feel safe (i.e. the driver has been involved in an argument, is drinking or has taken drugs etc.) with the **code word** _____ to indicate I need help to get home safely. I understand that I will be asked to discuss what happened following a **cool off** period and will be expected to work on strategies that will assist me in avoiding **dangerous** situations in the future. I also agree to do my best to avoid situations involving risky behaviors.

X _____
New Driver

Parent/Guardian Agrees to:

pick up _____ if I receive a text or call that includes our **code word** _____ no matter the time of day or night. I will do my best to avoid a socially awkward situation for my teen by either creating an excuse for picking them up or by acting in an overprotective **manner** relieving them from any social judgment or pressure. I further agree to **reward** my teen for making a courageous and responsible decision by not penalizing or lecturing them. I will take the **cool off** period to gain more perspective before discussing what they've learned and work with them to develop strategies for avoiding situations that involve risky behaviors.

X _____
Parent/Guardian

LUV2XLR8: Reckless Driving

1 What happened in this crash?

2 Who was at fault in this crash?

3 Could this crash have been avoided?

4 What made the racers' actions particularly dangerous?

5 As a driver, would it be possible for you to anticipate and avoid this crash?

Sleep Quiz: True or False?

1	Everybody has a “biological clock.”	T	F
2	Drinking coffee cures drowsiness while driving.	T	F
3	I can tell when I’m going to fall asleep.	T	F
4	I’m a safe driver so it doesn’t matter if I’m sleepy.	T	F
5	I can’t take naps.	T	F
6	Nearly everyone gets enough sleep.	T	F
7	Being sleepy makes you misperceive things.	T	F
8	Young people need less sleep.	T	F
9	If I sleep a lot now, I won’t need to sleep as much later.	T	F

Maryland Motor Vehicle Administration Information:

Call the MVA Customer Service Center

410-768-7000

1-800-492-4575 TTY for the Hearing Impaired

www.MVA.Maryland.gov



6601 Ritchie Highway, N.E.
Glen Burnie, MD 21062