

# **Instruction for Use of e-book**

**You are to have 12 minutes to view this program.**

**You can only navigate forward through this program as there will not be time to go back. To move to the next page, click on the red arrow located in the lower left corner, as the one on this page.**



**Prepared for Montana Office of Public Instruction by Frederik R. Mottola**

**Montana Office of Public Instruction**  
presents

**e-book Period 4-5**

**Phase One**  
**Skid Monster Advanced Driving Training**

developed by

**Frederik R. Mottola**

**National Institute for Driver Behavior**



# Risk Factors

A risk factor is something that can, or does, contribute to a crash. Risk factors are generated by the vehicle, the driver, and by the roadway-environment. The more risk factors present at one time the greater the crash potential. Although some of the risk factors will not apply to every driver, most of them do. A crash doesn't happen because one or two things went wrong. There are always multiple factors that contribute to a crash.

- a. play in steering wheel
- b. signal lights inoperative
- c. smoke film on windshield
- d. driver is on medication
- e. talking on cell phone
- f. talking to passengers
- g. thinking about work
- h. coughing, sneezing
- i. drinking coffee
- j. listening to radio
- k. opening a window
- l. swatting a bee
- m. crossroad intersection
- n. hill crest
- o. left curve in road
- p. loose gravel on road
- q. angry
- r. happy
- s. swearing at other driver
- t. teaching others a "lesson"
- u. sleep deprivation

**Here are some examples  
of risk factors.**



Click when ready

## Risk Factors

### Question 1

**Q1. How many of the items listed to the left are risk factors?**

**The correct answer is all are risk factors that can contribute to a crash.**

- a. play in steering wheel
- b. signal lights inoperative
- c. smoke film on windshield
- d. driver is on medication
- e. talking on cell phone
- f. talking to passengers
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- t. teaching others a "lesson"
- u. sleep deprivation

**Q2. How many of these listed risk factors can the majority of drivers eliminate to be certain that they are never present while driving?**

- A. All of the listed risk factors can be eliminated.
- B. None of the risk factors can be eliminated.
- C. Most could likely eliminate "c,e,i,l,s,t,u " risk factors.
- D. Can not have control over which factors are to be eliminated.

**Click on the letter to indicate your selection:**

**A B C D**

## **Question 2, response A**

**Response “A” ( All of the listed risk factors can be eliminated.) is incorrect because there will always be the following risk factors that can be present:**

- m. crossroad intersection**
- n. hill crest**
- o. left curve in road**
- p. loose gravel on road**



## **Question 2, response B**

**Response “B” (None of the risk factors can be eliminated.) is incorrect because the driver has control over whether the following risk factors will be present:**

- c. smoke film on windshield**
- d. driver is on medication**
- e. talking on cell phone**
- i. drinking coffee**
- s. swearing at other driver**
- t. teaching others a “lesson”**
- u. sleep deprivation**



**Question 2, response C**

**Yes, you are correct!** Most drivers could eliminate the following from our list of risk factors:

- c. smoke film on windshield**
- e. talking on cell phone**
- i. drinking coffee**
- l. swatting a bee**
- s. swearing at other driver**
- t. teaching others a "lesson"**
- u. sleep deprivation**

There will always be risk factors present while driving. The more factors present at any given moment the greater the chances that a crash will occur.

***Most crashes involve nine or more risk factors!***



## **Question 2, response D**

**Response “D” (Can not have control over which factors are to be eliminated.) is incorrect because the driver does have control over whether the following risk factors will be present:**

- c. smoke film on windshield**
- d. driver is on medication**
- e. talking on cell phone**
- i. drinking coffee**
- s. swearing at other driver**
- t. teaching others a “lesson”**
- u. sleep deprivation**



# Good Habits Protect Against Risk Factors

**Click on  
photo to  
play  
movie.**



**When the movie ends,  
click on this arrow.**

## Objectives Phase 1:

During this phase, to help compensate for the risk factors that are always present while driving, you will be introduced to, and practice, the following key behavioral patterns :

- Driver-Vehicle Readiness
- Direct Vision to Target
- Steering Techniques
- Acceleration Techniques
- Braking Techniques
- Reference Point Usage
- Transition Pegs Introduction
- Targeting Practice



Click when ready

# W

hen you put the key into the ignition of your car it is like a tamed animal, ready to obey every command. However, without proper management of the forces of the car it turns into a monster. The trick is to know when the car turns into a monster and how to keep it caged.



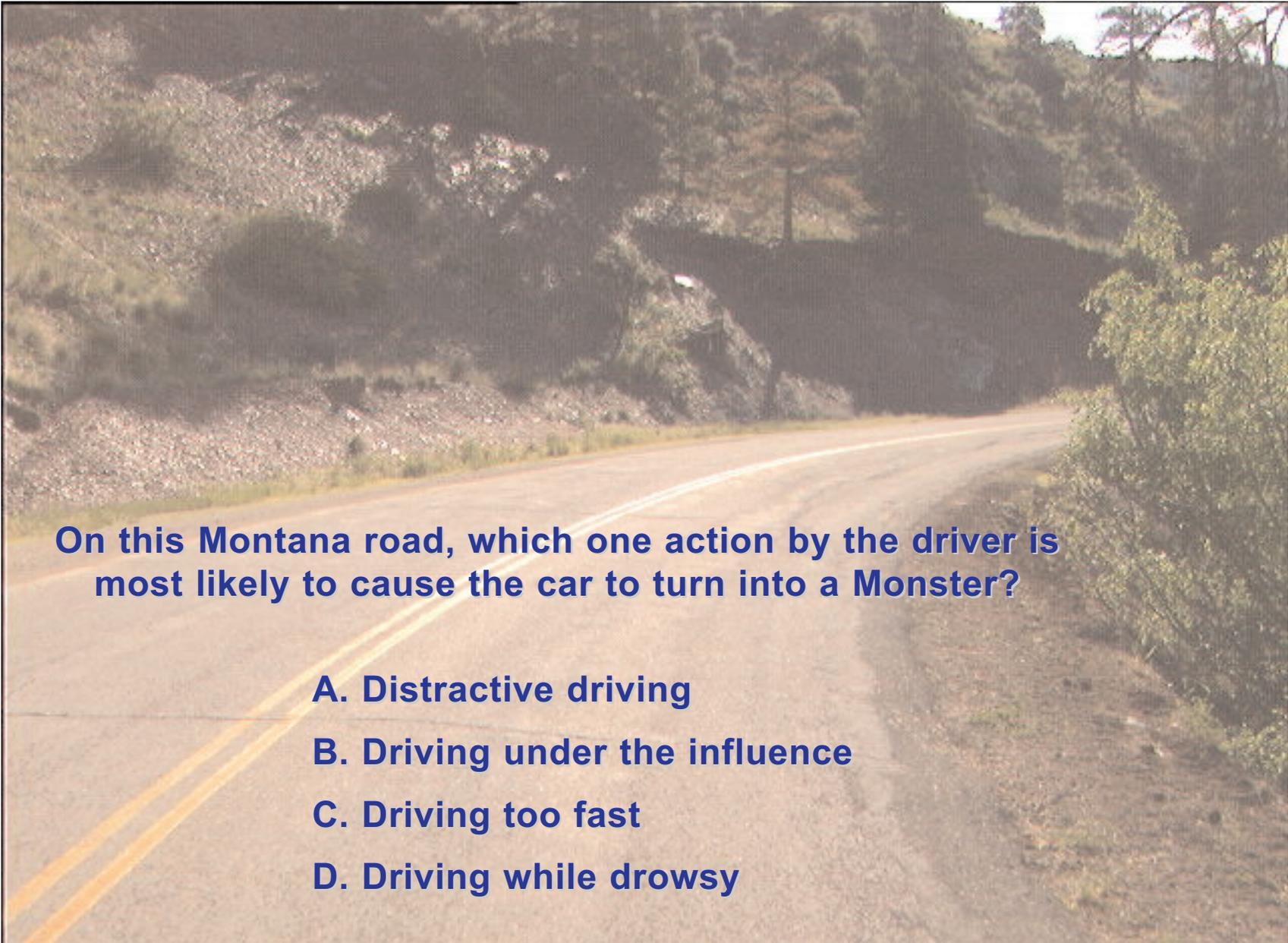
**“Caged” means “with constraints, to hold back, to have limitations.”**

If a driver fails to keep the monster caged it becomes difficult, sometimes impossible, to get it back into a controlled state.

Today you will have an opportunity to experience the car turning into a **MONSTER** and most importantly how to prevent that from happening.



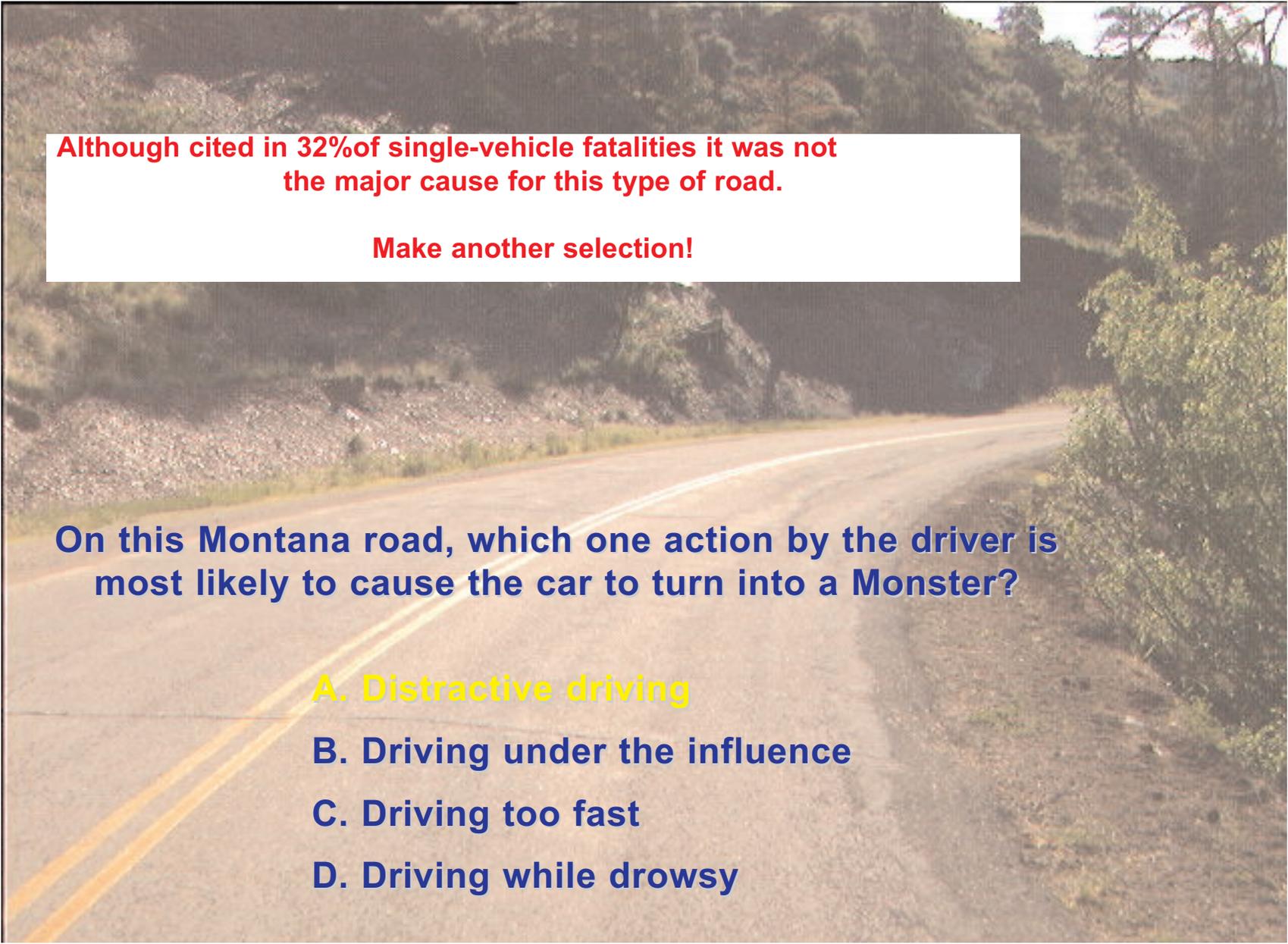
Click when ready



**On this Montana road, which one action by the driver is most likely to cause the car to turn into a Monster?**

- A. Distractive driving**
- B. Driving under the influence**
- C. Driving too fast**
- D. Driving while drowsy**

**Click on the correct answer.**



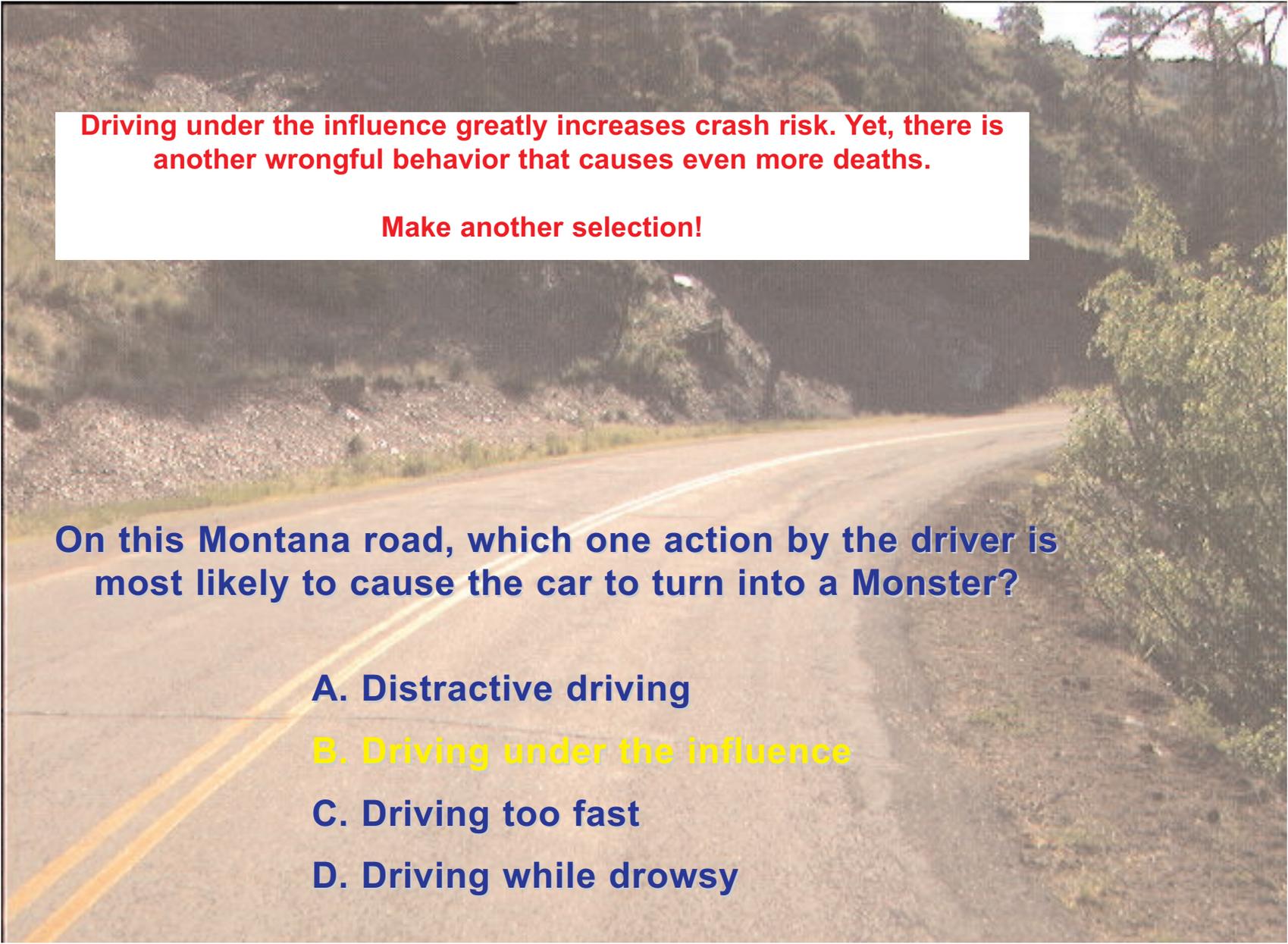
**Although cited in 32% of single-vehicle fatalities it was not the major cause for this type of road.**

**Make another selection!**

**On this Montana road, which one action by the driver is most likely to cause the car to turn into a Monster?**

- A. Distractive driving**
- B. Driving under the influence**
- C. Driving too fast**
- D. Driving while drowsy**

**Click on the correct answer.**



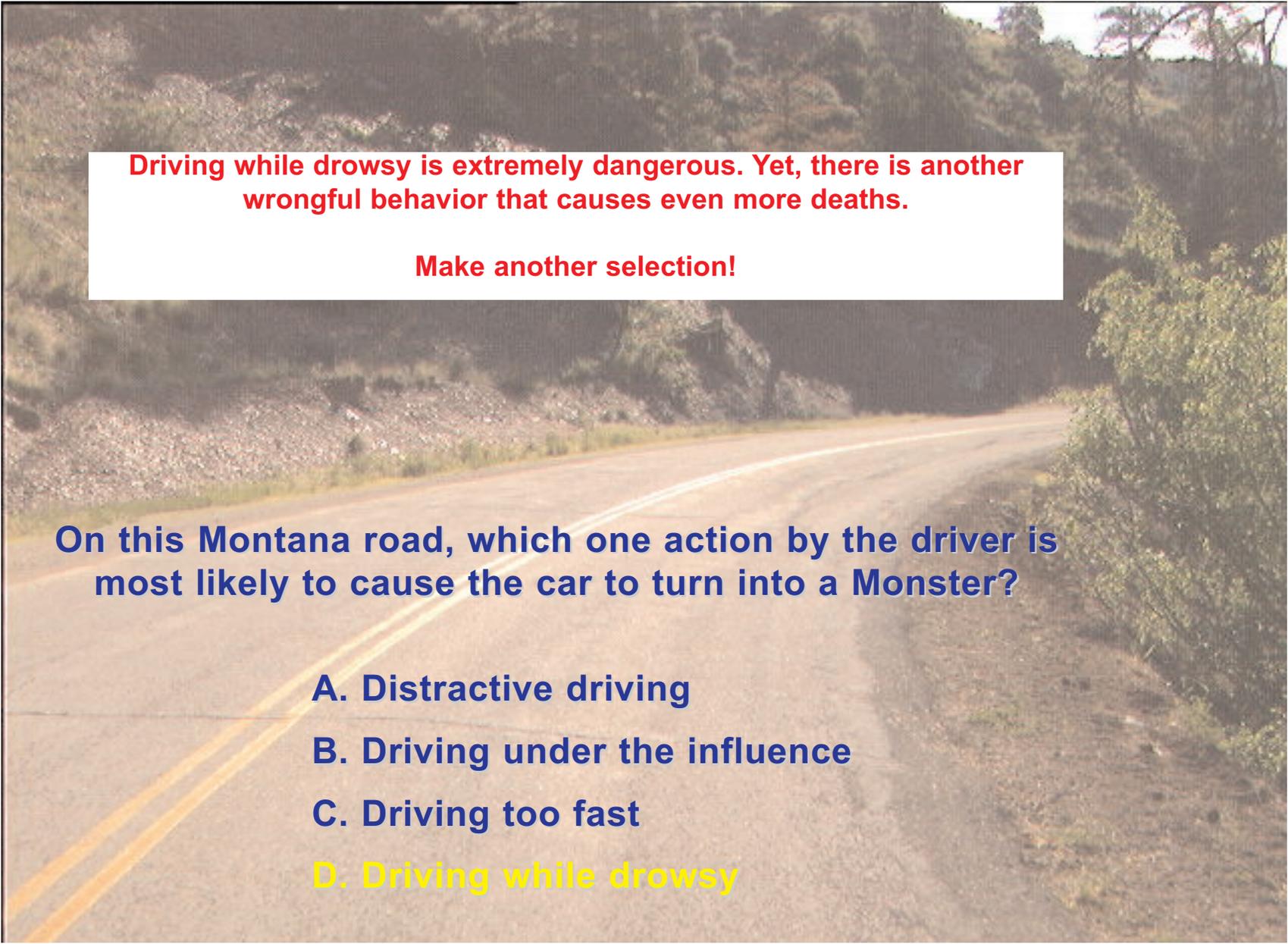
**Driving under the influence greatly increases crash risk. Yet, there is another wrongful behavior that causes even more deaths.**

**Make another selection!**

**On this Montana road, which one action by the driver is most likely to cause the car to turn into a Monster?**

- A. Distractive driving**
- B. Driving under the influence**
- C. Driving too fast**
- D. Driving while drowsy**

**Click on the correct answer.**



**Driving while drowsy is extremely dangerous. Yet, there is another wrongful behavior that causes even more deaths.**

**Make another selection!**

**On this Montana road, which one action by the driver is most likely to cause the car to turn into a Monster?**

- A. Distractive driving**
- B. Driving under the influence**
- C. Driving too fast**
- D. Driving while drowsy**

**Click on the correct answer.**

**Yes, you are correct. Driving too fast into curves resulted in 67% of Montana crashes for teen drivers.**

**On this Montana road, which one action by the driver is most likely to cause the car to turn into a Monster?**

- A. Distractive driving**
- B. Driving under the influence**
- C. Driving too fast**
- D. Driving while drowsy**



Click when ready

**Yes, you are correct. Driving too fast into curves resulted in 67% of Montana crashes for teen drivers.**

**Here are some of the risk factors that makes excessive speed turn the car into a monster:**

- 1. The right curve demands more traction to keep the car on the road than if the road was straight.**
- 2. In addition to the right curve there is a downgrade, which is a vertical curve.**
- 3. This road has a crown, which means the center of the road is higher than the edges. When the car goes too fast it crosses the center line and is exposed to a down slope from the crown, making it three curves the tires need to hold onto.**
- 4. When the car hits the embankment on the left side of the road it will bounce off of it like a ping-pong ball.**
- 5. And, when the driver, or occupants, are not wearing safety belts they bounce out of the car onto the road, just before the car comes bouncing on top of them. They don't have a chance!**



Click when ready

**Driving too fast into curves resulted in 67% of Montana crashes for teen drivers.**

**And, in 87% of those fatalities safety belts were not used.**

**The driver/occupant was ejected in 61% of these fatalities.**



Click when ready

# What You Gain by Using Safety Belts

## **Fact 1. With safety belts on you will stay in the driving compartment.**

You have a better chance of avoiding a crash if you can control the vehicle by staying behind the steering wheel.

## **Fact 2. With a safety belt on you stay in the vehicle.**

A large percentage of occupants who are thrown out of vehicles are crushed by the vehicle falling on top of them after they are ejected.

## **Fact 3. With a safety belt on you slow your body down gradually.**

When the body is abruptly stopped during a crash, traumatic injuries result as the brain crashes into the skull.

## **Fact 4. With a safety belt on you're not thrown into the crash.**

The momentum of the crash will cause unrestrained occupants to fly into the crash.

## **Fact 5. Occupants with safety belts on will not crash into you.**

If you take a sudden swerving or hard braking action, unbelted passengers can come crashing into you, causing bodily injury and loss of vehicle control.



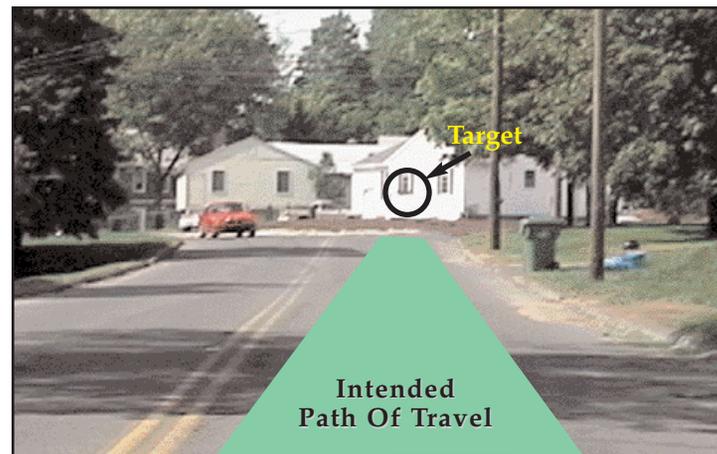
Click when ready

# Target Usage

A **Target** is a fixed object seen in the center of the path you intend to drive. **To learn target usage:** Project your vision as far ahead as possible to select a stationary object in the center of the path you will travel. *Selecting a specific target allows you to acquire the practice of projecting your vision.* Once you have your vision projected to the target, you will then be able to visualize and evaluate the path the car will take to get to the target. The average driver sees 3-5 seconds into the path he will take. By looking ahead to the target you will search the maximum distance available and gain these advantages:

## Target Usage Advantages:

- Helps to visualize the space you intend to occupy.
- Helps you to develop a systematic searching process.
- Helps you to search and plan your moves far in advance.
- Gives you a focal point for steering accuracy.
- Gives you the ability to spontaneously correct a skid.



This photo is taken from the driver's seat. **The target is the window on the house.**



Click when ready

We are in a parking lot to practice seeing a target in relation to our steering wheel.



We will use the pole as our practice target. This photo shows *the car is on target* for the pole. When the target appears in the center of the steering wheel, the car is on target.



Click when ready



*The car is  
off target.*



**Which way do you steer to get back on target?**

Click on the steering wheel in the direction you need to turn it.



*The car is off target.*



**Which way do you steer to get back on target?**  
Click on the steering wheel in the direction you need to turn it.

**No that is not the correct direction to steer. Try again.**



*The car is off target.*

**Which way do you steer to get back on target?**  
Click on the steering wheel in the direction you need to turn it.

**Yes,** steer to the right. If you lose traction to the rear wheels, causing a skid, steer towards the target to correct it.



Click when ready



*To correct for loss of traction to the rear wheels, turn toward the target.*



The car is off target to the right. If a correction is not made the car will go towards the stop sign. To get back on target, steer left.



Click when ready

**Targets, in addition to giving you a direction for where to steer, especially during a skid recovery, also serve as a guide for how far ahead you should be searching.**



**Your view is from the driver's seat. Click on your target.**

**No, that is not the target. Try again.**



**Your view is from the driver's seat. Click on your target.**

**Yes, this is your target.**



**Your view is from the driver's seat.**



Click when ready



**Your view is from the driver's seat. Click on your target.**



**Your view is from the driver's seat. Click on your target.**



**Your view is from the driver's seat.**



Click when ready

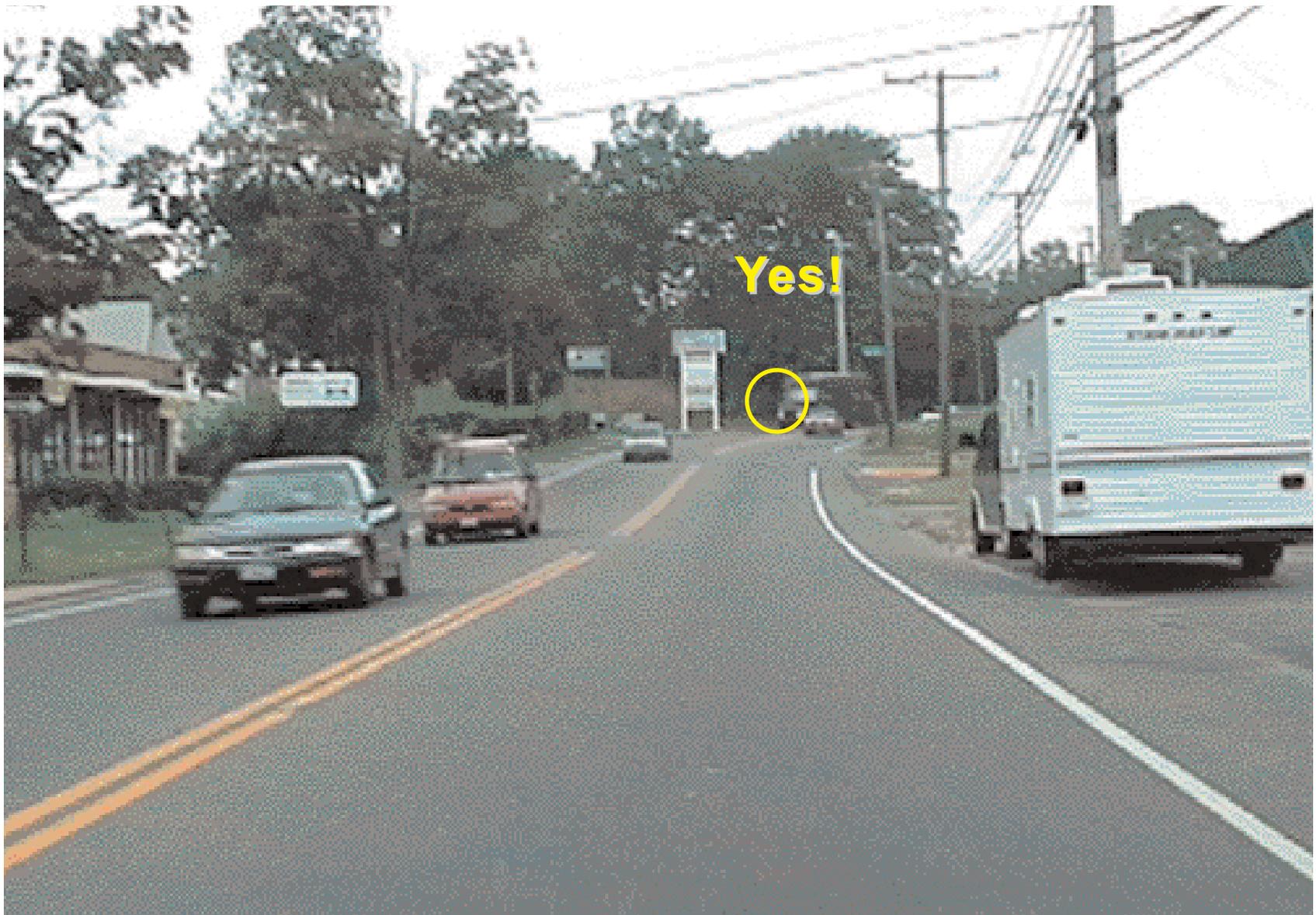


**Your view is from the driver's seat. Click on your target.**



**No, try again.**

**Your view is from the driver's seat. Click on your target.**



**Your view is from the driver's seat.**



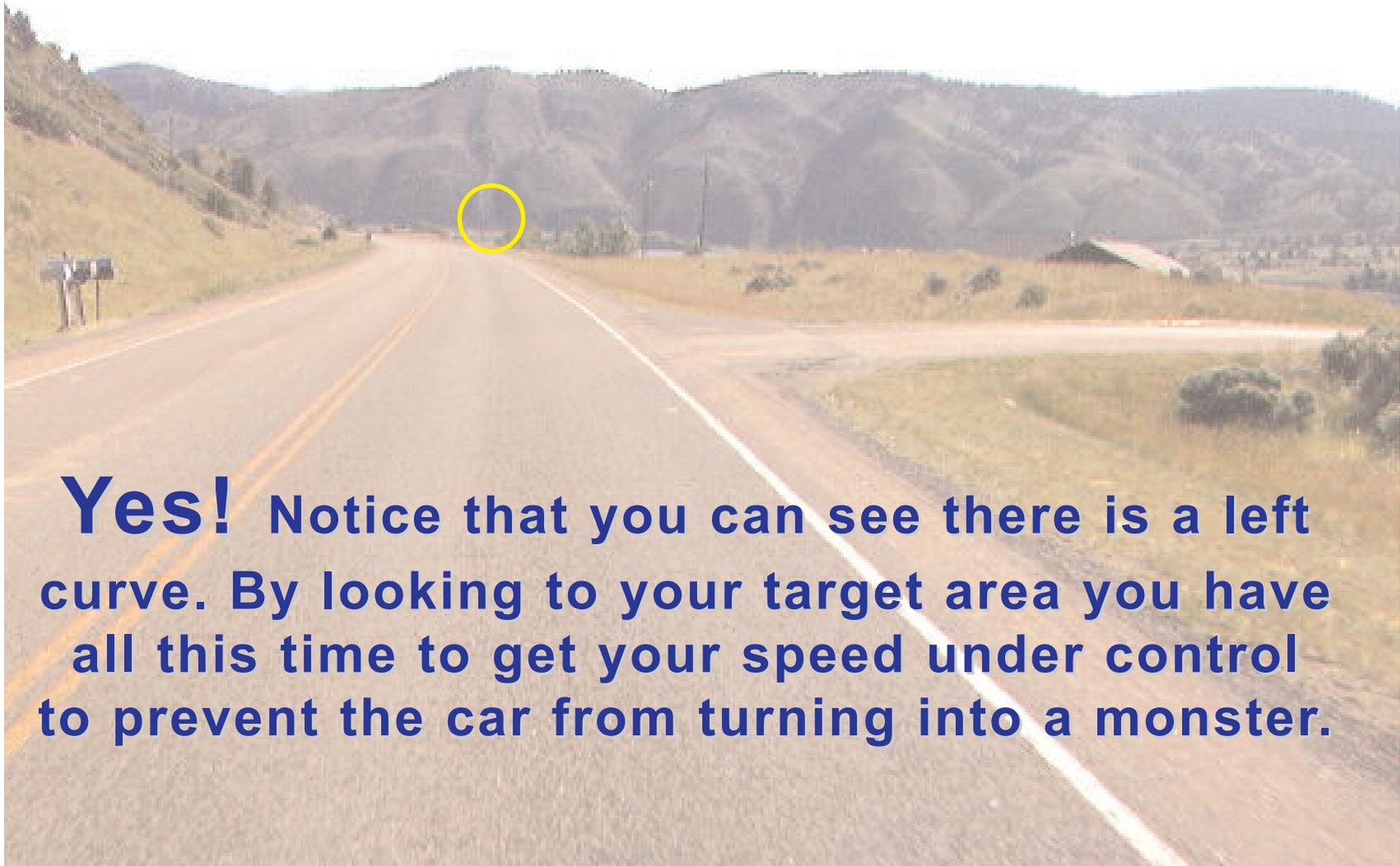
Click when ready



**Your view is from the driver's seat. Click on your target.**



**Your view is from the driver's seat. Click on your target.**



**Yes!** Notice that you can see there is a left curve. By looking to your target area you have all this time to get your speed under control to prevent the car from turning into a monster.

**Your view is from the driver's seat.**

## **Congratulations, you have completed period 4-5 e-book.**

During the day's activities you will have opportunity to explore, discover, discuss and experience all of the concepts that were presented during this segment.

**Go to your next scheduled in-car activity.**

**Please close this program!**

**or**

**Click on the house to go to the opening page.**

