

CHAPTER 13

The Effects of Distractions, Drowsiness and Emotions on Driving

Chapter Objectives:

- ◆ Describe how distractions, drowsiness and emotions can cause traffic crashes.
- Identify distractions that increase risk while driving.
- Describe strategies to reduce driving distractions.
- ◆ Identify techniques to reduce the risk of being involved in a drowsy-driving crash.
- ◆ Describe actions you can take to control emotional responses to events that occur when driving.



HOW to **DRIVE**



Distracted Driving

Driving requires your full attention. Alcohol and other drugs are not the only factors that can cause a driver to be impaired. Driver distraction and inattention are also major causes of impairment, resulting in thousands of collisions and deaths each year. Consider these facts:

- An estimated 80 percent of collisions involve some form of driver inattention.
- ◆ Each year, driver inattention is a factor in more than 1 million crashes in North America.
- ◆ Looking away from the path of travel for two or more seconds doubles the likelihood of a crash.
- Young drivers are especially susceptible to becoming distracted while driving.
- Every state has legislation under which drivers can be charged for inattentive driving.



Inattention and distraction. Distraction results when a situation, event or person draws a driver's focus away from driving. Inattention, on the other hand, occurs when a driver's attention drifts away from driving without having been influenced by a situation, event or person. Both can result in the same outcome — a collision. When you drive, you are already multitasking — do not make it more difficult by performing additional tasks while behind the wheel.

Effects of distraction. It does not take long to become distracted, and a lot can happen in a second or two. Distractions can affect driving performance in at least three ways:

1. **Slowed perception.** Distracted driving may cause drivers to be delayed in perceiving or completely fail to perceive an important traffic event. For example, a distracted driver may fail to perceive another vehicle pulling out of a parking lot directly into his or her path of travel.

- **2. Delayed decision-making.** Distraction can cause a driver's decision-making process to be delayed, or cause a driver to choose an action inappropriate for the situation at hand. For example, a distracted driver may not decide quickly enough on a specific course of action to avoid a collision.
- **3. Improper action.** Once drivers make a decision, they need to execute the chosen action. Distraction can cause drivers to be delayed in taking the intended action, or to make incorrect inputs to the steering, accelerator or brakes. For example, a distracted driver who decides to change direction in response to sudden blockage of the lane ahead may turn the steering wheel too slowly or too late to avoid a collision.



Types of distractions. Some are more obvious than others. When windshield wipers were first introduced on vehicles at the beginning of the last century they were considered a distraction. Today, we would not drive without them. There are many causes of distraction, all with the potential to increase risk.

Distractions can be physical or mental in nature and are often a combination of both. A physical distraction is one that causes a driver to take his or her hands off the wheel or eyes off the road, such as reaching for an object. Mental distractions are activities that take the driver's mind away from the road, such as engaging in conversation with a passenger or thinking about something that happened during the day. Both increase the risk of a collision substantially. When physical and mental distractions are combined, there is an even greater chance a crash could happen.



Distractions inside the vehicle. There are many potential causes of distractions related to events and objects inside the vehicle. Some of these include:

Passengers. Other occupants' behavior can be very distracting to the driver, especially for young drivers. Research shows that for each additional passenger, risk of a collision increases dramatically. Specifically, for teen drivers, the addition of just one teen passenger doubles the likelihood of experiencing a fatal crash. With two or more teen passengers, the risk of a fatal crash jumps by 300 percent.

Adjusting the radio. Many young drivers enjoy listening to the radio while driving. However, research shows that each time a driver adjusts the radio, the risk of a collision increases. Adjustments to the radio could include changing a CD, selecting a song from an MP3 player or changing the radio station. All of these functions involve taking hands off the steering wheel, eyes off the road, or both.

Reaching for a moving loose object. Similarly, research shows that teens are especially vulnerable to collisions when reaching for a loose object. This frequently involves taking eyes off the road.

Using a cellular phone. Using a cellular (cell) phone while driving can be extremely risky. While using a cell phone might seem simple, it requires significant concentration that takes attention away from the driving task. It is estimated that cell phone use accounts for approximately 2,600 motor vehicle fatalities and 300,000 collisions each year. Overall risk of a collision while using a cell phone increases by 400 percent.



Teen driver alone



Teen driver with one teen passenger – collision risk increases by 100%



Teen driver with two teen passengers – collision risk increases by 300%

Young drivers are especially vulnerable to becoming distracted while using a cell phone. Additionally, modern cell phones are capable of far more than spoken communication; many can perform navigational functions, access the Internet, share photos and send and receive text messages. As such, today's cell phones hold even more potential for increased risk while driving.

- Dialing. While it may not take long to dial a phone number, doing so may require a driver to remove one hand from the steering wheel and look down at the phone's keypad.
- Talking and listening. Holding a conversation requires mental effort, which diverts attention away from driving. One study indicated that talking on a cell phone was over four times more likely to cause a near crash than the next-most frequent cause of distraction. Drivers talking on cell phones frequently vary their speed and weave along the roadway.
- Hand-held versus hands-free. Some drivers choose to use a headset that eliminates the need to physically hold a cell phone. While a hands-free device may initially appear to be less distracting,
- research indicates no differences in risk between the two modes. Both methods of cell phone use are fully capable of diverting a driver's attention so much that a collision results.
- ◆ Text messaging. Text messaging is the common term for sending short (160 or fewer characters) text messages from cell phones. Faster than email, cell phone users receive incoming text messages almost immediately after they are sent. Evidence suggests that text messaging is even riskier than talking on a cell phone, as text messaging often requires the driver to both look at the phone and manipulate the keypad with one's hands.





Navigating. Every driver has a destination, and driving an unfamiliar route can be challenging enough without being distracted. Using a map while driving can cause distraction, not to mention significant reductions in visibility. Even drivers who use an electronic navigation system can become distracted.

Other internal distractions. Additional causes of distractions inside the vehicle include eating, drinking, grooming, adjusting vehicle controls such as climate systems, and attending to pets.

Distractions outside the vehicle. Distractions can also be caused by objects, people and events outside the vehicle. These could include:

Crash scenes. It can be tempting to reduce speed and divert attention to a nearby crash scene. Sometimes this is referred to as "rubbernecking."

Emergency vehicles. Emergency vehicles are often present at crash scenes or to deliver roadside assistance. With their flashing lights and other warning devices, they can easily divert a driver's eyes from the path of travel.

Objects. There are many objects outside the vehicle that could compete for a driver's attention, including other vehicles, pedestrians, road debris, collisions and billboards and other signs. Some signs may electronically alternate among different messages, and thus be even more likely to catch a driver's eye. Construction zones may contain unusual vehicles or machinery that can also divert a driver's attention.

Animals. On certain types of roadways, animals are more likely to cross into the path of travel. Often, animals move very quickly onto the roadway, surprising the unwary driver. Even if there is no risk of colliding with an animal, it may still draw a driver's attention away from the roadway.

Other roadway users. Although full-size motor vehicles are the most common users of the roadway, other users could attract a driver's attention. These could include horse-drawn buggies, motorcycles, scooters, bicycles and pedestrians.

Eyes off the road. Regardless of the cause of distraction, drivers can be tempted to look away from the roadway. While this might appear harmless, it is actually very risky. When a driver looks away from the roadway for two or more seconds, the risk of a collision doubles. The bottom line: regardless of what may be occurring that could draw your attention and vision away from the road, keep your eyes on your intended path of travel.

Preventing and Managing Distractions

Preventing and managing distractions. The key to preventing becoming distracted is to prepare as much as possible before you drive. With a little forethought, you can anticipate potential distractions and address them before getting behind the wheel. Despite your best efforts, distractions can arise while driving. Handling distractions effectively is critical to minimizing your risk. Techniques for preventing and managing distractions include:

- Familiarize yourself with the vehicle's features.
- Preset radio stations and climate control.
- Secure items such as backpacks, purses and cell phones that may move around when the car is in motion.
- ◆ Do your personal grooming at home not in the car.
- Complete your dining (eating and drinking) before you drive.
- ◆ Avoid smoking while driving.
- ◆ Familiarize yourself with directions before driving and give yourself extra time by starting your trip early.
- ◆ Ask a passenger to help you deal with disruptive children in your vehicle.
- ◆ Safely pull off the road if you must deal with disruptive children by yourself.
- Turn off the radio when traveling in unfamiliar areas that require extra attention.



Cell phones. Some specific tips regarding cell phones and preventing distracted driving include:

- ◆ Familiarize yourself with the features of your cell phone before you get behind the wheel.
- Put your cell phone on silent so you are not tempted to answer or make a call. Let your voicemail take incoming calls, and then return your calls when you are stopped at a safe location.
- Use the cell phone only when absolutely necessary. Limit casual conversations to times when you are not operating a motor vehicle.
- Plan your conversation in advance, and keep it short — especially in hazardous conditions such as bad weather or heavy traffic.
- ◆ Let the person you are speaking with know you are driving.
- Do not engage in emotional conversations while driving. Pull off the road to a safe spot.
- ◆ Ask a passenger to place the call for you and, if possible, speak in your place.
- ◆ Avoid text messaging while driving.

Remember, driving is a full-time job. You have learned it involves more than controlling the vehicle and keeping it on the road. Driving involves searching where you plan to go, identifying problems and potential conflicts, making decisions on what you perceive, judging what may occur and carrying out appropriate actions. To do all of this competently and safely you must stay focused and avoid distractions. When you do anything else while you are driving, you increase risk to yourself and others.

