



10 MINUTE
TRAINING
TOPIC

Drowsy Driving

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SafetyFirst

Drowsy Driving

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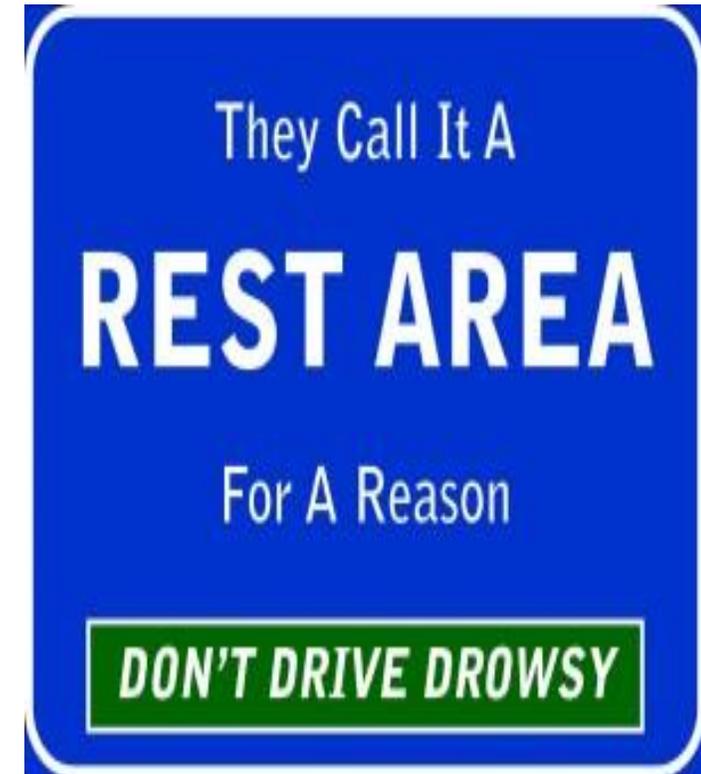
Overview

- Drowsy driving occurs when a person who is operating a motor vehicle is too tired to remain alert. As a result, the driver may have slow reaction times, reduced vigilance and impaired thinking. In the worst case the driver may fall asleep behind the wheel.
- Drowsy driving, while not capturing as much media attention as during the past several year, remains a leading cause of crashes and injuries.
- National Sleep Foundation points out that ‘driving while drowsy’ is similar to driving under the influence of alcohol in that...
...“sleepiness slows reaction time, decreases awareness, impairs judgment and increases your risk of crashing.”



Statistics

- Nearly nine out of every ten police officers reported they had stopped a driver who they believed was drunk but turned out to be drowsy.
- The AAA Foundation for Traffic Safety also indicated that:
 - 89% of police officers agreed that drowsy driving is as dangerous as drunk driving
 - 97% agreed that drowsy driving is a serious problem for commercial drivers
 - 95% agreed that drivers who cause a crash because they are fatigued should be charged with a driving violation
- Cognitive impairment after approximately 18 hours awake is similar to that of someone with a blood alcohol content (BAC) of 0.05%.
- After about 24 hours awake, impairment is equivalent to a BAC of 0.10%, higher than the legal limit in all states.
- A recent National Sleep Foundation study revealed that one-half (51%) of adults have driven while drowsy and 17% report having fallen asleep while driving within the past year.



Who is most at risk

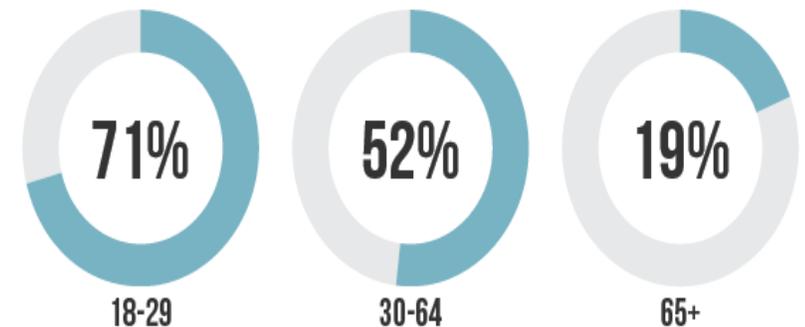
- Pretty much anybody who hasn't gotten enough sleep is at risk and dangerous. Other people at risk include:
 - Teenagers
 - People working long hours (over 60 hours a week) and shift workers
 - Long-haul drivers and commercial drivers
 - People with untreated and undiagnosed disorders (people with sleep apnea are at an increased risk of drowsy driving and falling asleep behind the wheel)
 - People with jet lag or business travelers who spent many hours driving
 - **Time** - Accidents are most common late at night and early in the morning. This is the body's natural sleep period.
 - **Driver Behavior** - In many cases, drivers who are drowsy make no effort to brake or avoid an accident. Oftentimes, at least one vehicle may veer off the road
 - **Medication Side-Effects** - Many medications cause sleepiness as a side effect

LIKELIHOOD OF DRIVING DROWSY BY GENDER



Source: National Sleep Foundation

LIKELIHOOD OF DRIVING DROWSY BY AGE



Source: National Sleep Foundation

Warning signs

- Yawning repeatedly
- Inability to keep eyes open
- “Nodding off” and trouble keeping your head up
- Inability to remember driving the last few miles
- Ending up too close to nearby cars
- Missing road signs or turns
- Drifting into other lanes or onto rumble strips on the shoulder
- Wandering and disconnected thoughts



Preventive measures

- Rolling down the windows or turning up the volume on the radio will do little to increase your alertness while driving. These are some better ways to avoid drowsy driving:
 - Get a full night of seven to eight hours of sleep before driving
 - Avoid driving late at night
 - Avoid driving alone
 - On a long trip, share the driving with another passenger
 - Pull over at a rest stop and take a nap
 - Use caffeine for a short-term boost
 - Take a short nap after consuming caffeine to maximize the effect
 - Arrange for someone to give you a ride home after working a late shift
 - If you have a sleep disorder, make sure to seek treatment
 - Refrain from drinking alcohol or taking sedating medications before driving



Using technology

Modern technology is beginning to catch up with drowsy driving. There are several external devices which can also be used to assist with the prevention of drowsiness while driving. Here are some which are available:

- **Anti Sleep Pilot:** Analyzes data for the day which has been input into the system. Uses audio and visual signals to let the driver know that it is time to take a break.
- **Stopsleep:** Is worn on a finger and monitors drivers' levels of awareness and concentration.
- **Advicy Drive:** A bracelet which measures a driver's heartbeat.
- **Vigo:** Vigo tracks eyes and head motion to measure the levels of alertness

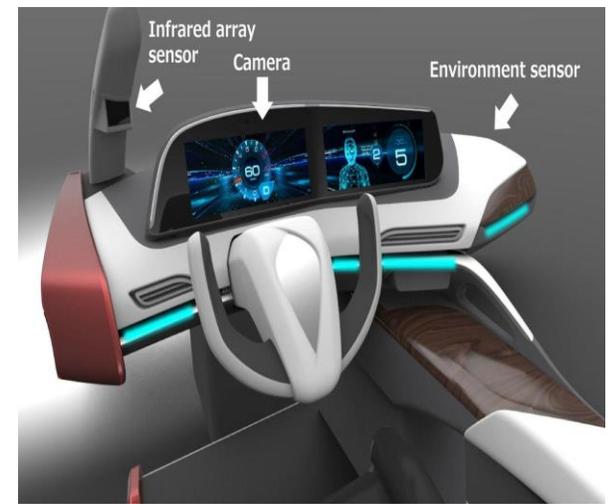
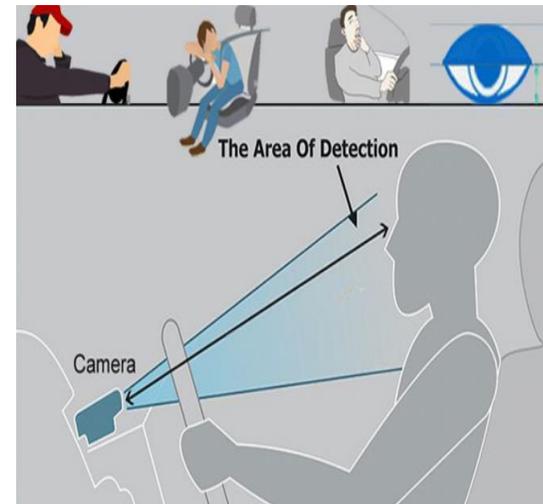


Disclaimer: None of these devices are endorsed by SafetyFirst Systems, LLC. Please use at your own discretion.

Prevention systems built in vehicles

There are several different built-in technologies used in the automotive industry to ensure the safety and security of drivers and passengers. When purchasing a new vehicle, these systems should be inquired about.

- Vehicle Safety Technologies
 - Electronic stability control (ESC)
 - Warning and emergency braking systems
 - Blind spot monitoring
 - Speed alert
- Driver drowsiness detection
 - Steering pattern monitoring
 - Vehicle position in line monitoring (video, laser or infrared sensors)



Drowsy driving

- No one expects to fall asleep behind the wheel.
 - Many drivers have nodded off without suffering a crash which may provide a false sense of security.
 - Most studies show that people can not control when they nod off or “make themselves wake up” on demand.
 - Too many people push themselves to keep going despite the warning signs.
- Pay attention to the warning signs.
- Follow the preventive measures like getting a good night's sleep or having someone else drive you, if tired.
- Use existing technology to assist in the prevention of drowsy driving.
- Buy vehicles with built in technology to warn a driver.