

Awake at the Wheel

Mentor Series on Drowsy Driving Prevention and Coping Skills Creative Brief

Purpose

This series will focus on the prevention of drowsy driving and provide users coping actions to combat fatigue that comes on suddenly or as the result of driving for an extended period of time.

Objectives

After viewing the series, Mentor users will:

- understand the dangers of drowsy driving
- learn the importance of restful sleep
- learn concrete steps to prevent drowsy driving
- learn how to recognize and combat fatigue when it comes on behind the wheel

Creative Approach

For this series, we propose using animation or “animate” to accompany the voice-over narrative of the SME. We hope to strengthen credibility and user compliance by having a medical doctor specializing in sleep and related issues as our SME/host.

The following are examples of the [animation style](#) we might employ—childlike animated drawings, or this one on [aggressive driving](#). as well as the [animated drawing style](#) * (RSA Animate) another example on [drowsy driving](#) from Australia, or [“animated explainer video”](#) via an ap, either of which could be accompanied by live driving video and/or our traditional animation for activities if needed. *VW Note: the example RSA ANIMATE: Drive: *The surprising truth about what motivates us* has some really great examples of how to motivate for innovation/excellence within organizations!

Module titles

1. Intro to Series & Topic w/ Dr. Shelby Harris (or other SME TBD)
2. Dangers of Driving while Drowsy (DWD)
3. Sleep Matters
4. Preventing DWD
5. Recognizing and Dealing with Fatigue

Module Content

1. Intro to Series w/ Dr. TBD

Learning objective: at the end of this module, the user should have a clear idea of what to expect in rest of the modules in the series.

Basic outline: Welcome to the Mentor series on drowsy driving. In this series you'll learn the basic facts about drowsy driving and why you should care about avoiding it, how sleep works and how to get more of it, how to avoid getting into the car while tired, and how to recognize and safely handle fatigue when you're driving.

2. Dangers of Driving while Drowsy (DWD)

Learning objective: At the end of this module, the user should care about avoiding drowsy driving.

Basic outline: Drowsy driving is a widespread problem. It's a factor in a significant number of collisions and fatalities each year. When your eyes start drooping, you're flirting with death: typical drowsy driving crashes are more likely than other crashes to be fatal. Many populations are at increased risk (and you're probably in one of these).

Content notes: We don't know exactly how many fatal motor vehicle collisions in the United States are caused by fatigue each year, but AAA estimates that it could be as high as 6,400. Fatigued driving is common: more than 4% of drivers report having fallen asleep at the wheel in the past month. And fatigued driving crashes are particularly dangerous, typically involving a single vehicle leaving the road at a high speed and crashing into a fixed object with no attempt made to avoid the collision. Populations at the highest risk of fatigued driving include people who don't get enough sleep, teenagers, students, commercial drivers, shift workers, people with sleep disorders like insomnia or sleep apnea, people using fatigue-inducing medications, people who work more than 60 hours per week, people driving alone, people driving on dark/rural/boring roads, and people traveling across time zones.

Emphasis: I think the focal point of this module should be that description of the typical drowsy driving crash. It's scary, and it's quite obvious why those crashes are so often fatal. I think highlighting this part with video and audio and emotion will help drive the point home and get the user to think "Ok, how can I avoid that?" *Psychology Today* Article by Dr. Shelby Harris: ["Don't Drive Drowsy."](#)

3. Sleep Matters

Learning objective: At the end of this module, the user should have a clear idea of how to get more and better sleep.

Basic outline: Sleep is a vital bodily function. Here are the basics about how it works. Here are some practical, realistic tips for getting more and better sleep.

Content notes: The body needs sleep regularly, and will forcibly shut down the brain in order to get it. Most people need about 7 to 9 hours a night, and it needs to be good sleep—deep sleep. The body has a regular cycle of wakefulness and sleepiness, called the circadian rhythm, that involves involuntary processes that make you more or

less tired at different times of the day. Even if you've gotten used to staying up late for studying or shift work, your body will still try to make you sleep between about midnight and 6am, and again around 2pm to 4pm. Practice good sleep hygiene. As much as possible, try to go to sleep and wake up at the same time every day. You may need to change your school or work schedule to do this. Get as much sleep as you need, usually 7 to 9 hours, but more for teens. Sleep in a quiet, dark, cool, and comfortable bed and room. Try not to consume spicy food, liquids, alcohol, caffeine, nicotine, or other stimulants before bed. As bedtime approaches, turn down room lights and minimize your use of cell phones, computers, and televisions. Don't skip meals or eat at odd hours. Don't go to bed hungry or too full.

Emphasis: I think the focal point of this module should be making the best of your options for sleep. Not everybody can realistically get 7 hours of good sleep every night, but for your overall health as well as your driving safety, it's important to do the best you can. I think it would be helpful to play up how good it feels to be well-rested, and how the tips in this module can really improve your life, even aside from helping you not fall asleep at the wheel and crash.

Tips to improve sleep:

1. Limit blue light exposure during the night time hours.
2. Stay hydrated and mineralized.
3. Distance yourself from high-output electrical devices.
4. Black out windows and curtains.
5. Avoid high sugar foods before going to sleep.

(above from Melatonin spray bottle, so we should verify w/second source.)

4. Preventing DWD

Learning objective: At the end of this module, the user should be equipped with strategies to avoid ever getting into a vehicle while fatigued, or driving drowsy.

Basic outline: The best way to keep yourself out of a drowsy driving collision is to never get in the car while you're impaired by fatigue. Here are some useful strategies regarding scheduling, napping, structuring your trips, and being aware of how drugs affect your alertness.

Content notes: If possible, try to avoid driving between midnight and 6am. If you're at all tired, try to avoid driving between 2pm and 4pm. Take a nap if you're tired. Avoid fatigue-inducing medicines. Think about whether you're tired before you get in the car. Plan on taking a break about every two hours while driving. Caffeine can be helpful for a short period, but makes things worse as it wears off.

Emphasis: I think the focal point of this module should be finding *easy* ways to prevent yourself from getting behind the wheel of a car while you're tired. Simple rules like, if you're tired, take a nap. If you can't take a nap, don't drive.

5. Recognizing and Dealing with Fatigue

Learning objective: At the end of this module, the user should be able to recognize and safely respond to feelings of fatigue while driving.

Basic outline: If you know you're tired, don't drive. That will do a lot of work helping you avoid falling asleep at the wheel, but there may still be times when you

don't feel tired, or don't notice it, until you're behind the wheel and your vehicle is in motion. Here's how to tell when you're impaired by fatigue while driving. If you realize you're fatigued while driving, immediately pull over and park your vehicle. Here are some tips for what to do next. Here are some tips for what to avoid/what isn't helpful.

Content notes: Signs of fatigue include wandering/disconnected thoughts/day dreaming, yawning, blinking, reduced short-term memory, difficulty keeping eyes open, missing a turn or exit, drifting from lane, slower reaction time, decreased alertness, restlessness/moodiness/irritability/aggression, nodding off. If you're driving and realize you're impaired by fatigue, pull over. The only safe thing to do is to stop driving. If you drink caffeine to increase your alertness, wait 20-30 minutes for it to take effect before you start driving again. Don't try to keep yourself awake by smoking a cigarette, turning up the radio, or rolling the windows down. If you notice any signs of fatigue, pull over immediately and rest. Otherwise you're risking your life and the lives of others.

Emphasis: The main thing I think we should focus on here is the fact that the only safe thing to do when you're fatigued is to pull over. There is no acceptable alternative, and there should be no hesitance. It's a matter of life or death—your work schedule or doctor appointment or baseball game is not worth risking your life. It's also important to note that you only have to lose about 20-30 minutes of time. Pull over, maybe have some coffee, take a nap, and when you're feeling alert you can get back on the road. It's not the end of the world.

Subject Matter Expert

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[Profile](#), [Selected media](#) (suggested host) ; [video clip media appearance](#)

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Statistics

- An estimated 1 in 25 adult drivers (aged 18 years or older) report having fallen asleep while driving in the previous 30 days.
(<https://www.cdc.gov/features/dsdrowsydriving/>)
- The National Highway Traffic Safety Administration estimates that drowsy driving was responsible for 72,000 crashes, 44,000 injuries, and 800 deaths in 2013.
(<https://www.cdc.gov/features/dsdrowsydriving/>)
- An estimated 2.5% of fatal MVC's and 2% of injury-only MVC's are reported to involve fatigued driving, but as many as one-third of all fatal MVC's might involve fatigued driving.
(<https://www.cdc.gov/mmwr/pdf/wk/mm6151.pdf>)
- AAA: "Results showed that an estimated 6% of all crashes in which a vehicle was towed from the scene, 7% of crashes in which a person received treatment for injuries sustained in the crash, 13% of crashes in which a person was hospitalized, and 21% of crashes in which a person was killed involved a drowsy driver. If these proportions are

applied to all reported crashes nationwide, results suggest that an average of 328,000 crashes annually, including 109,000 crashes that result in injuries and 6,400 fatal crashes, involve a drowsy driver."

(<https://www.aaafoundation.org/sites/default/files/AAAFoundation-DrowsyDriving-Nov2014.pdf>)

- As many as 5% of women and 7% of men in the United States may have obstructive sleep apnea, putting them at higher risk of fatigued driving.
(<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2645248/>)
- At least 25 million adults in the United States may have obstructive sleep apnea, putting them at higher risk of fatigued driving.
(<http://www.aasmnet.org/articles.aspx?id=5043>)

Resources

NHTSA/NCSDR Drowsy Driving and Automobile Crashes:

https://one.nhtsa.gov/people/injury/drowsy_driving1/human/drowsy.html

NHTSA doc Asleep at the Wheel, a national compendium of efforts to eliminate drowsy driving: https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/12723-drowsy_driving_asleep_at_the_wheel_031917_v4b_tag.pdf

Look into Volpe research: "A number of organizations involved in developing this compendium are involved in fatigue management training program research and development. One excellent example is recent research performed at the John A. Volpe National Transportation Systems Center. Volpe explored the effectiveness of training programs designed to reduce the effects of drowsiness. The research showed that drowsiness decreases critical hazard anticipation, hazard mitigation, and attention maintenance skills in nurses involved in shift work. The most exciting finding was that a Volpe-developed training program was able to successfully reduce the effects of drowsiness. Volpe is continuing this research and plans to extend it to other populations."

Check this out: "NHTSA, the National Association of State EMS Officials (NASEMSO), and the University of Pittsburgh Medical Center are working to improve awareness and eliminate hazards related to drowsy driving in high-risk professions through the development of Evidence-Based Fatigue Risk Management Guidelines for Emergency Medical Services. This partnership is working to systematically review, synthesize, and grade the quality of evidence related to the measurement and effect of fatigue among EMS personnel; the relationship of shift work and fatigue; effective fatigue countermeasures; sleep and rest strategies to mitigate fatigue; enhanced fatigue education and training; the use of statistical models to mitigate fatigue; and the relationship of workload to fatigue. [Additional background material is available.](#)"

UCLA Sleep Disorders Center: <http://sleepcenter.ucla.edu/drowsy-driving>

National Sleep Foundation (NSF): <http://drowsydriving.org/>

NSF handout for teens: <http://drowsydriving.org/wp-content/uploads/2009/10/DDPW-Teens-Drowsy-Driving-Facts.pdf>

NSF general handout: <http://drowsydriving.org/wp-content/uploads/2009/10/DDPW-Drowsy-Driving-Facts.pdf>

NSF parent/teen contract (translatable to fleets?): http://drowsydriving.org/wp-content/uploads/2009/10/DDPW_CONTRACT_FINAL.pdf

NSF key messages and talking points: <http://drowsydriving.org/wp-content/uploads/2009/10/Key-Messages-and-Talking-Points.pdf>

NHTSA drowsy driving page: <https://www.nhtsa.gov/risky-driving/drowsy-driving>

Federal Motor Carrier Safety Administration tips: <https://www.fmcsa.dot.gov/safety/driver-safety/cmv-driving-tips-driver-fatigue>

CDC sleep tips for truckers: <https://www.cdc.gov/niosh/docs/2014-150/pdfs/2014-150.pdf>

US DOT drowsy driving countermeasures: https://www.volpe.dot.gov/news/drowsy-driving-what-experts-are-saying?utm_source=GovDelivery&utm_medium=email&utm_campaign=January_newsletter

CDC drowsy driving page: <https://www.cdc.gov/features/dsdrowsydriving/>

Network of Employers for Traffic Safety: <http://trafficsafety.org/>

NSC safe driving toolkit section on fatigue: <http://www.nsc.org/learn/NSC-Initiatives/Pages/safe-driving-kit-materials.aspx#tab-3>