

Driver Drowsiness in 2023-2024: The Silent Killer on Our Roads

Exploring the hidden dangers of fatigued driving and its profound impact on road safety.



The Deadly Toll of Drowsy Driving

1

Fatalities on the Rise

In 2023, drowsy driving claimed approximately **633 lives** nationwide, a stark reminder of its devastating impact (NHTSA).

2

Widespread Crashes

Over **100,000 crashes** annually are linked to driver fatigue, leading to 71,000+ injuries and \$12.5 million in damages (NHTSA, NSF).

3

Major Factor in Fatalities

Drowsy driving contributes to **1 in 5 fatal crashes** in the U.S., underscoring its significant role in road tragedies (AAA Foundation for Traffic Safety).

When and Where Drowsy Driving Strikes

Drowsy driving crashes are most prevalent during specific times when our body's natural rhythms are at their lowest point.

- **Peak Hours:** Midnight to 6 a.m. and late afternoon, aligning with natural dips in circadian rhythm.
- **Common Scenarios:** Often involves single vehicles running off the road at high speed with no evidence of braking, indicating a sudden loss of control.
- **High-Risk Zones:** Rural roads and highways experience the highest incidence of these fatigue-related collisions.



The Human Cost: Stories Behind the Statistics

Vulnerable Demographics

Young drivers (16-25) and shift workers face the highest risks. A 2023 NSF survey revealed that **1 in 6 teens** admitted to drowsy driving within their first two years of driving.

Lifestyle Pressures

The relentless demands of jobs, schoolwork, and modern lifestyles contribute to chronic sleep deprivation, fueling this dangerous behavior.

Preventable Tragedies

Each incident shatters families and communities, highlighting the critical need for increased awareness and proactive prevention efforts to avert these entirely preventable tragedies.

Why Drowsy Driving Is Underestimated



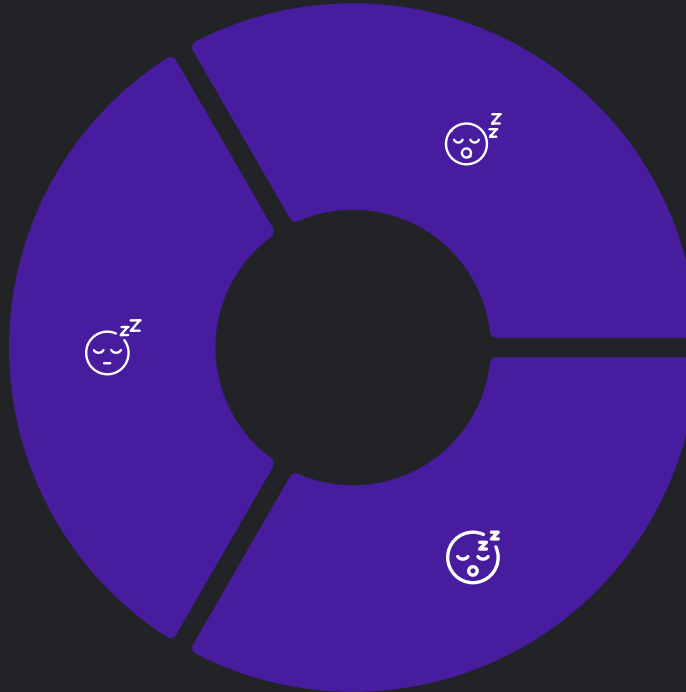
Despite its significant impact, drowsy driving remains a largely underestimated and underrecognized threat to road safety.

- **Data Challenges:** Precise crash data is elusive, with many drowsy-driving incidents going unreported or misclassified due to difficulty in attributing fatigue as a primary cause.
- **Public Perception:** There's a dangerous public misconception that drowsy driving is less hazardous than impaired driving (e.g., drunk driving), despite research showing similar impairment levels.
- **Regulatory Gaps:** As of 2024, only two U.S. states have active drowsy driving legislation, creating a significant regulatory void that hinders enforcement and prevention (NSF).

The Science of Sleep and Driving Impairment

Equivalent to Intoxication

Driving after 20 hours awake is comparable to having a blood alcohol concentration of **0.08%**, the legal intoxication limit.



Clear Warning Signs

Recognize drowsiness by frequent yawning, heavy eyelids, head nodding, and drifting out of your lane.

Dangerous Microsleeps

Brief, involuntary lapses in attention lasting mere seconds can have catastrophic consequences on the road.

Emerging Technologies to Detect & Prevent

Innovative advancements are paving the way for a safer future, actively combating drowsy driving through real-time detection and alerts.

Driver Monitoring Systems (DMS)

Leveraging advanced cameras, DMS track eye closure, blinking patterns, and facial expressions to identify fatigue in real-time, alerting the driver.

Vehicle-Based Sensors

These systems analyze steering input, lane positioning, and sudden changes in driving behavior to detect signs of driver impairment due to drowsiness.

Hybrid Detection Systems

Combining biometric data, vehicle telemetry, and image analysis, hybrid systems offer comprehensive early warning alerts for maximum safety.

Public Awareness & Prevention Efforts in 2024

- **National Sleep Foundation:** Its 17th annual Drowsy Driving Prevention Week promotes the vital message: “Sleep First. Drive Alert.®”
- **Public Campaigns:** Emphasize the critical importance of 7-8 hours of quality sleep before getting behind the wheel.
- **State Initiatives:** New York, with over 5,000 drowsy-driving crashes in 2023, launched its impactful “Stay Awake! Stay Alive!” program.






NATIONAL SLEEP FOUNDATION

AVOID DROWSY DRIVING
#Awake2Drive



MAKE SURE YOU GET BETWEEN **7 and 9 hours** OF SLEEP A NIGHT!



IF YOU'VE BEEN AWAKE FOR **24 hours** OR MORE, DON'T DRIVE. IT IS NOT SAFE.



IF YOU KNOW YOU HAVE A LONG ROAD AHEAD, AND YOU'RE FEELING SLEEPY, DRINK SOMETHING WITH **caffeine.**



IF YOU'RE ON A ROAD TRIP, MAKE SURE YOU PLAN **regular stops** for short naps.



TRY STOPPING FOR A BREAK EVERY **100 miles** OR EVERY 2 HOURS ON THE ROAD.



TRAVEL DURING TIMES YOU ARE **normally awake!**

Facts About DROWSY DRIVING



ADULTS AGES 18-29 are much more likely to drive while drowsy compared to other age-groups!



MEN are more likely than women to drive while drowsy! (56% vs 45%)



SLEEP DEPRIVATION increases the risk of a sleep-related crash! The more you sleep, the better you drive.



People tend to fall asleep while driving on **HIGH SPEED, LONG, OR RURAL HIGHWAYS.**



NEARLY 1/4 of adults in the US say they know someone personally who has fallen asleep at the wheel.

Visit sleepfoundation.org/drowsy-driving for more information.
#Awake2Drive

American Automobile Association Foundation for Traffic Safety, 2010. | Asleep at the wheel: the prevalence and impact of drowsy driving www.aaafoundation.org/pdf/2010-Drowsy-Driving-Peep-1.pdf | Institute of Medicine, 2003. Sleep disorders and sleep prevention: an unmet public health problem. National Academies Press, Washington, D.C. | National Sleep Foundation: www.sleepfoundation.org/article/how-sleep-works/how-much-sleep-do-we-really-need

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What Drivers Can Do: Practical Tips to Stay Alert

1

Prioritize Adequate Sleep

Aim for **7-8 hours of quality sleep** nightly. It's not a luxury, but a necessity for safe driving.

2

Avoid High-Risk Hours

Steer clear of driving during your body's natural low points (midnight-6 a.m. and late afternoon) when drowsiness is most likely to occur.

3

Take Regular Breaks

On long trips, stop every two hours or 100 miles. Stretch, grab a coffee, or switch drivers if possible.

4

Recognize & Respond to Warnings

If you yawn frequently, struggle to keep your eyes open, or drift, **pull over safely immediately**. A quick nap can save lives.

The Road Ahead: A Call to Action

Drowsy driving is a preventable epidemic.

It demands societal change, stronger laws, and technology adoption.

Sleep Well

Drive Alert

Stay Alive

Everyone shares responsibility: drivers, employers, policymakers, and communities. Together, we can save thousands of lives by waking up to the dangers of driving drowsy.