

NSF's Key Messages/Talking Points

NSF has prepared a selection of Key Message/Talking Points which address a variety of subjects relating to sleep and drowsy driving.

- **Importance of Sleep** addresses the importance of good sleep. NSF has included quick, memorable “sound bites” that remind everyone that sleep impacts every aspect of a healthy lifestyle.
- **Teens' Sleep Patterns** focuses on the unique sleep needs of high school students.
- **College Students and Young Adults** covers sleep habits and challenges of this group.
- **Drowsy Driving** concentrates on the importance of being well-rested and alert before getting behind the wheel of a vehicle.

For more information about drowsy driving, please visit www.DrowsyDriving.org.

For information on sleep and sleep disorders, please visit www.sleepfoundation.org.

Importance of Sleep

- Make sleep a priority!
- Sleep: As important as diet and exercise, only easier!
- Be good to yourself and make time for sleep. Experts recommend 8.5-9.5 hours of sleep for teens and many young adults, and 7-9 hours for adults.
- When a person doesn't get enough sleep, a “sleep debt” accumulates that must be repaid—often at unexpected times, such as behind the wheel of a car.
- Sleep is a necessity, not a luxury. A good night's sleep should be a regular part of everyone's daily schedule.
- Sleep affects every part of one's life, including health, safety, mood, learning, appearance, relationships and productivity.
- Sleep is as vital to our well-being as food and water, yet many put it last on their list of priorities.
- Sleep represents a third of our lives and it has a tremendous impact on how we live, function, perform, and think during the other two thirds of our lives.
- Learn to recognize sleep problems. Problems sleeping or daytime sleepiness can signal a sleep disorder, which usually can be treated, or another medical condition. Talk to your doctor.
- About 70 million people in the U.S. have a sleep problem. About 40-50 million adults suffer from a chronic sleep disorder; an additional 20-30 million have intermittent sleep-related problems related to stress, anxiety and depression. (NIH)
- Three-quarters of America's adults (75%) said they frequently experienced at least one symptom of a sleep problem in the past year. (NSF 2005 *Sleep in America* poll)
- Effects of sleep loss on work performance may be costing U.S. employers some \$18 billion in lost productivity. (NSF 1997 poll on Sleeplessness, Pain and the Workplace)
- Untreated sleep disorders and poor sleep habits contribute to accidents, impaired work productivity and academic performance, reduced quality of life, poor health, and even death.
- Sleepiness, whether the result of untreated sleep disorders or volitional sleep deprivation, has been identified as a causal factor in a growing number of on-the-job accidents and highway automobile crashes.

Teens' Sleep Patterns

- Physiological changes like puberty, inadequate regulation of bedtime and rising time, increasing socialization, the start of work and a large amount of time spent in extracurricular activities limit the actual amount of time spent sleeping.
- Only 20% of adolescents get the recommended nine hours of sleep on school nights, and nearly one-half (45%) sleep less than eight hours on school nights. (NSF's 2006 *Sleep in America* poll)
- At least once a week, more than one quarter (28%) of high school students fall asleep in school, 22% fall asleep doing homework, and 14% arrive late or miss school because they oversleep. (NSF's 2006 *Sleep in America* poll)
- As children reach adolescence, their circadian rhythms—or internal clocks—tend to shift, causing teens to naturally feel more alert late at night and wake up later in the morning. This phase delay can make it difficult for them to fall asleep before 11 pm.
- According to an NSF poll, more than one half (54%) of high school seniors go to bed at 11 pm or later on school nights. However, the survey showed that on a typical school day, adolescents wake up around 6:30 a.m. in order to go to school, leaving many without the sleep they need. (NSF's 2006 *Sleep in America* poll)
- In the competition between the natural tendency to stay up late and early school start times, a teen's sleep is often what loses out.
- Sending students to school without enough sleep is like sending them to school without breakfast. Sleep serves not only a restorative function for adolescents' bodies and brains, but it is also a key time when they process what they've learned during the day.
- Adolescents need 8.5-9.5 hours of sleep each night. It is also important for teens to maintain a consistent sleep schedule across the entire week, including weekends.
- Many teenagers are juggling classes, after-school activities and social lives while they are chronically sleep deprived. This pervasive sleepiness is affecting their health, safety, productivity and learning abilities.

College Students and Young Adults

- College students get an average of 42 hours of sleep a week, which is less than six hours a night. (Haynes M and Jenkins T., 1996)
- College students who are chronically sleep deprived are more likely to report excessive drowsiness, tension and nervousness. (Oginska H and Pokorski J, 2006)
- Sleep in college students is generally inadequate, irregular and of poor quality. As sleep quality and quantity decrease, academic performance worsens. Students who pull all-nighters tend to have a lower GPA than students who make time for sleep. (Thacher PV, 2007)
- Among students carrying a full course load, those reporting poorer sleep quality perform worse on academic tests than those reporting better quality sleep. (Howell AJ et al, 2004)
- Sleep deprivation impairs young adults' ability to recognize and correct errors. (Hsieh S et al, 2007)
- During adolescence, a person's circadian rhythm—or internal clock—tends to shift, causing young people to naturally feel more alert late at night and wake up later in the morning. Since these sleep patterns can last into young adulthood, many college students experience this phase delay, which can make it difficult to fall asleep before 11 pm.
- College students may need more sleep than they think—young adults can need up to 8.5-9.5 hours of sleep each night to function at their best. It is also important to maintain a consistent sleep schedule across the entire week, including weekends, when possible.

- Starting off the day without enough sleep is like going to classes without breakfast or lunch. Sleep serves a restorative function for the body and brain, and is also a key time when the information that is learned during the day is processed.
- Many college students are juggling classes, after-school activities and social lives while they are chronically sleep deprived. This pervasive sleepiness affects their health, safety, productivity and learning abilities.

Drowsy Driving

- Lack of sleep has serious consequences at home, in the workplace, at school, and on roadways. Tragically, drowsy driving claims many lives and injures thousands of Americans each year.
- Traffic crashes are the leading cause of death of young people in the U.S, taking the lives of at least 5,600 teens each year. Simply put, traffic crashes are the number one killer of U.S. teens. (NHTSA)
- Sleep-related crashes are most common in young people, who tend to stay up late, sleep too little, and drive at night.
- 55% of all crashes in which the driver fell asleep involved drivers 25 year and younger. (Pack 1995)
- The National Highway Traffic Safety Administration estimates that at least 100,000 police-reported crashes each year are the direct result of driver fatigue. (NHTSA)
- Each year drowsy driving crashes result in at least 1,550 deaths, 71,000 injuries and \$12.5 billion in monetary losses. (NHTSA)
- Approximately 11 million drivers admit they have had a crash or near crash because they dozed off or were too tired to drive. (2005 *Sleep in America* poll)
- According to NSF surveys, half of Americans consistently report that they have driven drowsy and approximately 20% admit that they have actually fallen asleep at the wheel in the previous year.
- Drowsy driving among teens is common. More than half of teens (51%) admit to having driven drowsy in the past year, and 15% at least once per week. This proportion increases as teens get older: among drivers, 62% of 11th graders and 68% of 12th graders reported driving while drowsy within the last year. (NSF's 2006 *Sleep in America* poll)
- Many people do not realize how sleepy they are, but driving requires a set of skills that are significantly reduced when you are sleep deprived. Studies show that drowsiness can cause:
 - slower reaction time
 - impaired judgment and vision
 - decline in attention to important signs, road changes and the actions of other vehicles
 - decreased alertness, preventing you from seeing an obstacle and avoiding a crash
 - increased moodiness and aggressive behavior
 - problems with processing information and short-term memory
 - microsleeps—brief 2/3 second sleep episodes
- Like alcohol and drugs, sleep loss or fatigue impairs driving skills such as hand-eye coordination, reaction time, vision, awareness of surroundings, decision-making, judgment, and inhibition.

- Fatigue vs. alcohol:
 - 17 hours of sustained wakefulness produces performance impairment equal to 0.05% BAC; after 24 hours, impairment is equal to 0.10% BAC. A BAC of 0.08% is considered legally drunk in every state. (Dawson and Reid, 1997; Williamson and Feyer, 2000)
 - People with mild to moderate untreated sleep apnea performed worse than those with a 0.06% BAC (Powell 1999)
 - Just like drinking on an empty stomach, there is an interaction between sleep deprivation and alcohol and sedating medications. In fact, on 4 hours of sleep, 1 beer can have the impact of a six-pack (Roehrs et al. 1994)
- Characteristics of drowsy driving crashes
 - Most drowsy driving crashes happen between midnight and 6:00 a.m., when the body's need for sleep is greatest, and in the mid-afternoon (during the circadian dip).
 - The driver is alone and more likely to be male. Drivers who drive alone or have no one to help them watch for the signs of fatigue are at higher risk.
 - Sleep-related crashes tend to involve a single vehicle running off a high speed road to the right or to the left. Often a single vehicle drifts off the road and hits a stationary object.
 - Sleep related crashes look different from alcohol-related crashes, in that there is no evidence of the driver braking or making evasive maneuvers.
 - Many drowsy driving crashes involve serious injuries and/or fatalities.
- Warning signs of sleepiness or fatigue:
 - Turning up the radio or rolling down the window
 - Impaired reaction time and judgment
 - Decreased performance, vigilance and motivation
 - Trouble focusing, keeping your eyes open or your head up
 - Daydreaming and wandering thoughts
 - Yawning or rubbing your eyes repeatedly
 - Drifting from your lane, tailgating and missing signs or exits
 - Feeling restless, irritable or aggressive
- Are you at risk?
 - Special at-risk groups for drowsy driving include young people, shift workers, commercial drivers, people with undiagnosed or untreated sleep disorders, and business travelers. However, any driver can experience fatigue at one time or another. Your risk for drowsy driving increases if you are:
 - Sleep deprived or fatigued
 - Driving long distances without proper rest breaks
 - Driving through the night or mid-afternoon
 - Working more than 60 hours per week
 - Working more than 1 job and your main job involves shift work
 - Drinking even small amounts of alcohol
 - Driving alone or on a long, rural, dark or boring road
 - Taking sedating medications such as cold tablets, antihistamines or antidepressants
 - Experiencing jet lag or reduced sleep as a result of traveling across many time zones

- Before a trip, do the following to reduce your risk:
 - Get enough sleep—most adults need 7-9 hours, and most teens need 8.5-9.5 hours, to maintain proper alertness during the day.
 - Schedule proper breaks, about every 100 miles or 2 hours during long trips.
 - Arrange for a travel companion—someone to talk with and share the driving.
 - Avoid alcohol and sedating medications—check your labels or ask your doctor.
- Countermeasures to prevent a fall-asleep crash while driving
 - Watch for the warning signs of fatigue.
 - Stop driving—pull off at the next exit or rest area, or find a place to sleep for the night.
 - Take a nap—find a safe place to take a 15-20 minute nap (more than 20 minutes can make you groggy for 15 minutes or more after waking).
 - Consume caffeine--the equivalent of two cups of coffee can increase alertness for several hours, and usually takes about 30 minutes to enter the bloodstream. Caffeine is available in various forms (coffee, tea, soft drinks, energy drinks, chewing gum, tablets), and in various amounts. For example, the amount of caffeine in one cup of coffee (about 135 mg) is about the same as 2-3 cups of tea or 3-4 cans of regular or diet cola.
 - Try consuming caffeine before taking a short nap to get the benefits of both.
 - Let a passenger take over the driving.
- Safety is not an accident—you can take specific actions to be a safer driver and passenger.

Drowsy Driving Prevention Week

- Drowsy Driving Prevention Week is a far-reaching public awareness campaign developed to educate young drivers, their parents and others about drowsy driving and its prevention. The campaign aims to put drowsy driving in the headlights of parents, young people, teachers, school administrators, employers and the media.
- November 10-16, 2008, marks the National Sleep Foundation's second annual Drowsy Driving Prevention Week™, a national campaign to educate young drivers and the public about the dangers of driving while sleepy.
- Drowsy driving is a prevalent national public health and safety problem. Research has identified its principal causes, special at-risk populations, and effective countermeasures. It's time for broad collaborative action to reduce drowsy driving and its serious consequences. DDPW is the beginning of such an effort.
- The work you are doing to raise awareness about drowsy driving can save lives.

National Sleep Foundation

The National Sleep Foundation (NSF), established in 1990, is an independent nonprofit organization dedicated to improving public health and safety by achieving understanding of sleep and sleep disorders, and by supporting education, sleep-related research and advocacy. The Foundation comprises many of the nation's foremost sleep, circadian-rhythm, medical and transportation-safety experts who share a keen interest in protecting the public's health, safety and well-being. These experts volunteer their services and help ensure the quality and accuracy of NSF's publications and programs.

NSF serves as a conduit between sleep experts and other industries such as transportation, healthcare, law enforcement and media. Because NSF is dedicated to changing cultural attitudes about fatigue and alertness, it places a high value on building diverse partnerships, NSF has developed significant partnerships with major organizations and advisory bodies such as the National Drowsy Driving Coordinating Committee. NSF also holds conferences, symposia, training sessions and other public forums. NSF has been raising awareness about drowsy driving and fall-asleep crashes since 1993 through its Drive Alert...Arrive Alive® program.