

# A National Sleep Foundation's Conference Summary: The National Summit to Prevent Drowsy Driving and a New Call to Action

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**Abstract:** On November 20–21, 2002, the National Sleep Foundation (NSF), a U.S.-based non-profit organization, and a coalition of other organizations, federal agencies and corporations convened a National Summit to Prevent Drowsy Driving at the National Academy of Sciences in Washington, DC. The Summit brought together experts in the fields of transportation, safety and health, sleep research, and communications as well as advocates to assist in the creation of a comprehensive national agenda to increase awareness about the dangers of drowsy driving. Recommendations from the Summit formed the basis of post-summit activities, including the development of a new Web site ([www.drowsydriving.org](http://www.drowsydriving.org)) dedicated to the prevention of driver fatigue and a report, the *National Action Plan to Prevent Drowsy Driving*, which describes a series of action items for national, state and local initiatives in the areas of research, public policy, and educational programs.

**Key words:** National summit, Sleep, Drowsy driving, Fatigue, Action plan, Traffic safety

## The 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.

NSF serves as a conduit between sleep experts and other industries such as transportation, healthcare, law enforcement and media. As a result of its unique mission and stature, NSF has developed significant partnerships with major organizations through advisory bodies such as the National Drowsy Driving Coordinating Committee and other networking opportunities to help promote its messages and programs. Because NSF is dedicated to changing cultural attitudes about fatigue and alertness, it places a high value on building diverse partnerships. NSF has considerable

experience in utilizing partnerships to hold successful 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*<sup>®</sup> program.

## The Scope of the Drowsy Driving Problem

Approximately 50 million Americans suffer from chronic sleep disorders and another 20 to 30 million suffer intermittent sleep-related problems<sup>1)</sup>. Thirty-seven million Americans report suffering excessive daytime sleepiness at levels that interfere with their day-to-day activities<sup>2)</sup>. Evidence tells us that America's sleep debt is on the rise. It is estimated that by the middle of the 21st century more than 100 million Americans will have difficulty falling asleep<sup>3)</sup>. However, it is generally believed that the general public, policy makers and primary-care physicians still lack basic knowledge about sleep. More importantly, the vast majority of sleep disorders

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remain undiagnosed and untreated. As a result, the toll on human health, productivity and safety is enormous. Perhaps the most tragic and common outcome of this chronic and pervasive sleep deprivation is drowsy driving and fall-asleep motor-vehicle crashes.

According to the National Highway Traffic Safety Administration, more than 1,500 people die every year as the result of drowsy-driving crashes and an additional 71,000 people are injured, resulting in a \$12.5 billion economic loss<sup>4, 5)</sup>. Most experts believe that these statistics greatly underestimate the true extent of the drowsy driving problem and have looked to other sources, such as population surveys and international studies, to further elucidate the issue.

According to polls of randomly sampled adults in the U.S. conducted by the National Sleep Foundation over the last seven years, about one-half of adult drivers—51% or about 100 million people—report they have driven a vehicle while feeling drowsy in the past year, and almost two in 10, (17% or 32 million people), have actually fallen asleep at the wheel. One percent—approximately two million drivers—admit they have had an automobile crash because they dozed off or were too tired to drive<sup>6–12)</sup>.

Nearly three-quarters of adults in America (71%) drive a car to and from work, and many are drowsy drivers, according to NSF's 2001 *Sleep in America* poll. More than one-fourth of these respondents (27%) said they have driven drowsy to or from work at least a few days a month, 12 percent drove drowsy a few days a week, and four percent said they drove drowsy every day or almost every day<sup>9)</sup>.

Similarly, according to data from Australia, England, Finland, and other nations—all of which have more consistent crash reporting procedures than the U.S.—drowsy driving represents at least 10–20 percent of all crashes<sup>13–19)</sup>.

This data shows that we have only begun to scratch the surface in determining the real extent of the problem of driver fatigue and has led some to term drowsy driving “the silent killer”.

## **The National Summit to Prevent Drowsy Driving**

On November 20 and 21, 2002, NSF and a coalition of federal agencies, organizations and corporations convened the National Summit to Prevent Drowsy Driving at the National Academy of Sciences in Washington, DC, to address the issue of drowsy driving, to develop a national action plan, and to coalesce partnerships to champion identified needs.

Chaired by James Hall, former Chairman of the National Transportation Safety Board, the meeting included

representatives from the federal government, academia, medicine and the business community, as well as advocates. The three primary goals of the Summit were:

1. Bring together experts in the fields of transportation, safety, health, engineering, sleep research, and public policy as well as advocates and others to raise the profile of drowsy driving and its underlying causes on the nation's health and safety agendas.
2. Create a comprehensive action plan for federal, state, and local drowsy-driving activities in the areas of research, public policy, and education programs.
3. Facilitate the building of public and private partnerships to implement recommendations resulting from the Summit.

Expert speakers and panelists were asked to provide a brief overview of their subject and focus the majority of their presentations on the implications their topic had on future research, public policy, and educational or injury prevention initiatives. Each speaker finished their presentation with recommendations to address existing research gaps, public policy initiatives, and major issues that should be addressed through educational or training programs. The speaker's recommendations and those of the panel served as starting points for general discussions led by a facilitator.

The Summit was unique in that each expert panel was followed by speakers that provided personal perspectives about the tragedy of drowsy driving and fall-asleep crashes. Each advocate provided a short description of the drowsy driving crash that affected them or a loved one and put forward recommendations that represented lessons learned from the incident.

Two primary outcomes from the Summit were the realization that instituting a national campaign to raise awareness of the consequences of drowsy driving is of paramount importance and the understanding that organizing a grassroots movement of dedicated advocates will be essential to see that recommendations coming out of the Summit are funded and implemented. It was generally agreed that though we may not have all of the research questions answered, the time to act is now. The general public is woefully unaware of the dangers of driving while drowsy.

Two specific products that were produced as a result of the Summit was the creation of a new Web site, [www.drowsydriving.org](http://www.drowsydriving.org), dedicated exclusively to the prevention of drowsy driving and the creation of a National Action Plan to Prevent Drowsy Driving.

## The National Action Plan to Prevent Drowsy Driving

Following the National Summit, NSF formed a task force of national experts to draft the *National Action Plan to Prevent Drowsy Driving*. The Plan details eight broad goals and 53 specific action items that include timeframes and potential partners for implementation and are designed to guide national, state, regional, and local efforts to reduce traffic-related injuries and fatalities related to sleep deprivation and drowsiness. The goals cited in the Plan are:

- Goal I: Expand the existing research and knowledge base of the nature and scope of drowsy driving among the general driving population and at-risk groups.
- Goal II: Develop a widely accepted definition of *drowsy driving* and practical ways to measure the effects of fatigue on motor-vehicle crashes.
- Goal III: Improve statewide systems and create new surveillance systems for the collection of traffic crash and injury data in order to better quantify the problem.
- Goal IV: Develop a comprehensive national public-awareness and education campaign that promotes the benefits of sleep and the prevention of drowsy driving crashes.
- Goal V: Improve existing drowsy-driving education programs and materials.
- Goal VI: Expand the existing research and disseminate knowledge regarding behavioral, technological, and highway-engineering countermeasures to prevent drowsy driving crashes.
- Goal VII: Establish sound public and private policies that promote an increased understanding of sleep and alertness issues and reduce the incidence of drowsy driving.
- Goal VIII: Establish sound legislation that sanctions drivers who cause a crash, injury, or fatality as the result of driving impaired by fatigue.

## A New Call to Action

*The National Action Plan to Prevent Drowsy Driving* is a call to action for policy makers, industry, sleep researchers and clinicians, organizations, associations, education and healthcare communities, and others concerned about the nation's health and safety. Preventing injuries and fatalities that result from drowsy driving crashes must be viewed as a public health problem—similar to alcohol and drug use—and solved through a comprehensive coordinated approach.

This can be accomplished by identifying and treating the underlying causes of sleep deprivation (e.g., lifestyle choices, lengthy work hours, shift work and untreated sleep disorders) and by employing traditional methodologies used in addressing other traffic-safety concerns—education, engineering, enforcement and evaluation.

The solution will require collaboration between disciplines such as transportation, education, traffic safety, public health, sleep science and medicine, business and injury-control, and an established organizational structure that can maintain linkages and organize groups to implement prevention and education activities. It will also require the commitment and dedication of advocacy organizations and individual drowsy driving advocates, such as those who participated in the Summit.

For more information on the National Sleep Foundation and future programs, initiatives and events, visit [www.sleepfoundation.org](http://www.sleepfoundation.org).

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