

SUBMISSION TO:

**PARLIAMENT OF THE
COMMONWEALTH OF
AUSTRALIA**

HOUSE OF REPRESENTATIVES

STANDING COMMITTEE

**ON COMMUNICATIONS,
TRANSPORT AND THE ARTS.**

MANAGING

FATIGUE

IN

TRANSPORT

Presented by SLEEP DISORDERS AUSTRALIA ACN 075 427 459

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SLEEP DISORDERS AUSTRALIA

History of National body.

Sleep Disorders Australia is a voluntary group offering assistance and support to those persons and their families who are living with some form of Sleep Disorder. It provides assistance to and education of, its members, the public at large and the medical fraternity, in all areas of Sleep Disorders. It undertakes awareness programmes within the Community to heighten the care, treatment and support of persons with Sleep Disorders. It raises funds to carry out the above objectives

Following extensive research by Professor Colin Sullivan of the Royal Prince Alfred Hospital, Sydney during the 1970's Australia lead the way in research and treatment of the disorder come to be known as SLEEP APNEA. A Sleep Study Unit was set up at the Hospital and patients were being treated for the disorder. Sleep Apnea is a disorder whereby the sufferer's sleep is fragmented by periods of breathlessness and deep sleep is never reached thereby making the sufferer sleepy and drowsy during the day and often falling asleep at work, in the home and at the wheel of a motor vehicle. In those early days all patients had to travel to Sydney for their Sleep Studies. As the numbers of patients increased, in 1980 the SLEEP APNEA RESEARCH ASSOCIATION was formed in NSW as a support group for these people.

As training and awareness of the disorder grew in the Community and more Sleep Units were being opened up throughout the Country, various off-shoots of this organisation were formed in the early to mid 90's and these were set up in Queensland, ACT, Victoria and South Australia.

On 29th August 1996, A Limited Liability Company was formed under the title of SLEEP DISORDERS AUSTRALIA. Incorporating all of the above bodies.

OUR SUBMISSION

The facts and research related to in this submission are into ROAD TRANSPORT ONLY, but can relate to all forms of other transport and may be of benefit to the Committee when deliberating on other transport areas.

OBJECTS OF SLEEP DISORDERS AUSTRALIA

- a. To promote awareness of sleep disorders.
- b. To provide up to date information about sleep disorders to the general public, to continually seek out those persons and have them diagnosed by the medical profession.
- c. To raise funds to support research into the causes and effects of sleep disorders.
- d. To provide emotional support to sufferers and their families, as well as financial support to sufferers for treatment and equipment.

PREVIOUS INQUIRY BY NSW PARLIAMENT

In 1994 a report to the NSW joint standing Committee on Road Safety stated that between 5 – 40% of all crashes in NSW were due to driver fatigue (See appendix 1). One of the prevention measures to be activated by the National Road Transport Commission was “the detection and treatment of sleep disorders, including sleep apnea” to reduce driver fatigue. As sleep disorders were detectable, measurable and capable of treatment some 12% of fatigue related accidents could be averted. (See appendix 1).

WHAT IS SLEEP APNEA

Normally, during sleep, the muscles which control the tongue and soft palate hold the airway open. If these muscles relax the airway become narrower, which causes snoring and breathing difficulties.

If these muscles relax too much the airway can become completely blocked preventing breathing.

After a period of time, which may be from ten seconds to two minutes, the brain realises there is a lack of oxygen and alters the body to wake up. Though the sufferer is not aware of it, this cycle can happen several hundred times during the night, severely disrupting sleep.

Up to 24% of males and 9% of females over the age of 30 years suffer from some degree of sleep apnea.

Some symptoms and side effects in adults are:

Restless sleep.

Morning headaches.

Memory lapses.

Irritability.

General Lethargy.

EXCESSIVE DAYTIME SLEEPINESS (FALLING ASLEEP IN FRONT OF T.V, AT MEETINGS OR AT THE WHEEL OF A CAR.

(See appendix 2 & 3)

THE OCCURRENCE OF SLEEP DISORDERED BREATHING AMONG MIDDLE AGED ADULTS.

A study was carried out by the Wisconsin Sleep Study Unit in 1993, that proved the percentage figures given above.

(See appendix 4)

FATIGUE, ALCOHOL AND PERFORMANCE IMPAIRMENT.

As reported in the Magazine NATURE, in July 1997, not just Sleep Apnea can cause problems, but so can lack of sleep. If a person has not slept for a period between 25 - 28 hours his driving ability is measured to be the same as a driver with a BLOOD ALCOHOL READING OF 0.10%.

(See appendix 5)

DRIVE SAFE - HOW TO AVOID FATIGUE

The Road Trauma Trust fund is currently promoting this campaign in Western Australia. (See appendix 6)

Sleep Disorders Australia, Tasmania Branch, with the co-operation of the Motor Accident Insurance Board, Injury Prevention and Management Foundation and other sponsors, are currently promoting a Driver fatigue awareness programme and this is now in its second year.

(See appendix 7).

SELF REPORTED VEHICLE ACCIDENTS

In May 1996, the University of California at Los Angeles did a study on 253 patients to evaluate whether those diagnosed with Sleep Apnea have a higher ratio of self reported vehicular accidents. 31% of patients compared to 15% of patients without sleep apnea reported at least one accident in the previous year.

PEOPLE WITH UNTREATED SLEEP APNEA HAVE WORSE DRIVING SKILLS THAN A DRUNK DRIVER.

This statement was made in New York in July 1996 by Dr. Charles F. P. George following a study he published in the American Journal of Respiratory and Critical Care Medicine publication of the American Lung Foundation. (See appendix 9).

In summary, the study of 21 men with severe untreated sleep apnea and 21 men without apnea, found that more than half of the men with sleep apnea performed more poorly than the worst driver without apnea. And further, more than half of those with untreated sleep apnea demonstrated driving skills even worse than those men without sleep apnea who were impaired by alcohol when they took the driving test.

Another study of 800 subjects found that one in 50 drivers are chronically sleepy while driving. More than 90% of the chronically sleepy drivers were found to have a treatable sleep disorder.

COMMERCIAL MOTOR VEHICLE DRIVER FATIGUE AND ALERTNESS STUDY.

This study was the largest and most comprehensive study carried out on driver fatigue in America and was reported in October 1996 (See appendix 10).

The conclusion of this study was that there was no quick fix or one single solution to the fatigue problem. ALL DRIVERS NEED TO ENSURE THEY OBTAIN ADEQUATE SLEEP.

DRIVING WITH SLEEP APNEA

A comprehensive report has been prepared for the New England Journal of Medicine and published on 18th March 1999 (See appendix 11).

A number of conclusions were reached, but the significant one was THE RATE OF TRAFFIC ACCIDENTS AMONG PERSONS WITH SLEEP APNEA IS THREE TO FOUR TIMES THE RATE AMONG PERSONS WITHOUT SLEEP APNEA.

The study further stated sleep apnea is a common but undiagnosed problem, with an estimated 80% OF CASES UNDIAGNOSED.

THEREFORE IN NATIONAL, TERMS THAT RELATES TO APPROX. 1,200,000 PERSONS IN AUSTRALIA UNDIAGNOSED SUFFERERS. MOST OF WHO ARE USING OUR ROADS.

CRUISING AND SNOOZING

The Ashe Memorial Hospital in Jefferson, USA, in October 1998, quotes that sleepy drivers cause approximately 100,000 crashes in the USA every year, WITH MOST OF THE VEHICLES DRIVING OFF THE ROAD AND ABOUT 75% INVOLVE JUST ONE VEHICLE. (See appendix 12).

DROWSY DRIVING IN THE USA.

A number of fatigue related subjects are raised in the Article (See Appendix 13).

The matters raised are :

**SLEEP DEPRIVATION EFFECTS DRIVERS, THE SAME AS BEING DRUNK
SHIFT WORKERS
COMMERCIAL DRIVERS
UNDIAGNOSED SLEEP APNEA SUFFERERS ETC.**

EFFECTS OF PARTIAL AND TOTAL SLEEP DEPRIVATION ON DRIVING PERFORMANCE .

The USA Federal Highway Administration, Research and Development, provides an in depth study on this matter (See appendix 14).

INTERNATIONAL FATIGUE CONFERENCE.

This conference will take place in Fremantle, Western Australia in March 2000 and a copy of the Agenda is attached (See appendix 15).

CONCLUSION

AS FAR AS SDA IS CONCERNED FEDERAL GOVERNMENT FUNDS AND ASSISTANCE SHOULD BE MADE AVAILABLE TO THE ORGANISATION TO CARRY OUT ITS WORK IN THE AREAS LISTED ABOVE.

TO DATE, ALL MONIES USED IN FATIGUE CAMPAIGNS HAVE COME FROM SDA FUNDS RAISED THROUGH MEMBERSHIP AND SOME SMALL SPONSORSHIPS.

THIS MATTER IS OF VITAL CONCERN TO ROAD TRANSPORT SAFETY IN THIS COUNTRY AND A CONCERTED CAMPAIGN IS REQUIRED TO BRING TO THE NOTICE OF PEOPLE THE PROBLEMS RELATED TO UNDIAGNOSED SLEEP APNEA AND ROAD ACCIDENTS.

WE SUGGEST A CAMPAIGN SIMILAR TO THAT BEING UNDERTAKEN IN TASMANIA BE IMPLEMENTED NATION-WIDE.

WE WOULD LIKE TO HAVE THE OPPORTUNITY TO PUT OUR CASE BEFORE THE COMMITTEE IN PERSON.

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