Response Ability

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"Protect your keys - Only touch them if you are fit to drive"

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SUBMISSION

To The House of Representatives Standing Committee on Communications, Transport and the Arts

Managing Fatigue in Transport

by Beatrice M Pullar B.A., B.Ed., M.A.Psychology

Terms of Reference

House of Representatives Standing Committee on Communications, Transport and the Arts has been asked by the Hon John Anderson MP, Minister for Transport and Regional Services to inquire into, and report on managing fatigue in transport under the following terms of reference.

- > Causes of, and contributing factors to, fatigue.
- > Consequences of fatigue in air, sea, road and rail transport.
- > Initiatives in transport addressing the causes and effects of fatigue.
- > Ways to achieving greater responsibility by individuals, companies, and governments to reduce the problems related to fatigue in transport.

The focus of this submission is on the fourth term of reference:

Ways to achieving greater responsibility by individuals, companies, and governments to reduce the problems related to fatigue in transport.

Introduction

This submission is presented to acquaint the committee with what I have developed as a Professional Speaker and author. The story of how and why I developed the program "Drive Alert For Life" was presented to the 3rd International Conference on Fatigue in Transportation in Freemantle in February 1998 and is attached with minor changes as Appendix A. In the programs I present a distillation of scientific facts and data which is continually up dated, and I challenge drivers to accept responsibility for dealing with or eliminating any habits or conditions that contribute to inattention or fatigue when they are behind the wheel.

The uniqueness of my contribution to the Inquiry into Management of Fatigue in Transport is best understood by learning the background to the program. It is my hope that my efforts to help drivers become more responsible will be supported, and indeed that I may be able to apply my knowledge and skills to developing similar programs which address the needs of specific types of drivers in the transport sector.

In October 1996 a news item which announced that doctors had discovered THE cause of driver fatigue stirred me into action. Although sleep apnea is a significant factor it is by no means the major factor for drivers in the transport industry or in the private sector. In the next few days I came to realise that I had an amazing and unique range of extremely relevant experience and knowledge that could be channelled into a set of books and tapes and seminars about driver fatigue. It appeared that there was a considerable amount of Government money being spent on countermeasures in the transport industry, but very little of that information was reaching the general public. So I decided to develop programs that really would make a difference. The goal was to teach drivers the causes and how to prevent driver fatigue and inattention, and how to maintain peak levels of driving performance. The program had to be user friendly and accessible to as many people as possible. Thus I threw my all my time, energy and resources into developing the *Drive Alert For Life* program.

Throughout my career I had been innovative, and had developed strategies which brought about change. For example, I had run a singing program at a Psychiatric Hospital in Adelaide in 1981 in a special ward for presenile dementia patients. The goal of the program was to reactivate speech patterns in several of the patients who had not spoken for up to four years. It had never been done before. The first breakthrough came after two months, and at the end of the year three other staff members and I presented our data and a comprehensive overview of program at a special Grand Round. The interest was so great that it had to be shifted to a larger venue. When I moved to work in community psychiatry on the Gold Coast, I set a goals of starting a Dementia Day Care within two years of arriving - it took 22 months for the program to reach the stage of having acquired a property and hiring two nurses. I also ran successful innovative programs for agoraphobics, chronic pain, and eating disorders.

In the field of education I had also created and implemented successful programs. One of these was when I was a Lecturer in Special Education in Adelaide. I was supposed to have up to 12 students - in fact 108 elected to take my course and when I lost my job as part of the amalgamation in 1982 over 300 students signed a petition. The program that I developed was designed to make the students confident of who

they were and how to meet challenges wherever they were placed as teachers. At a time when very few students obtained teaching positions, nearly all of my students were given appointments.

Thus, I had the skills to develop a program that would facilitate and maintain change. In addition I had a range of experiences and training in pertinent issues. Significantly, when I was working through the Overseas Service Bureau as a Psychologist in Zambia in 1966, my boss and I were asked for suggestions as to what could be done to prevent about 22 African drivers a month being killed bringing petrol into the country in petrol tankers. Of course, we knew practically nothing about driver fatigue in those days, but the need for solutions to the problem was firmly planted in my mind.

As a neuropsychologist I had learned a great deal about the processes of attention, and sleep-wake mechanisms, decision making, and a host of other factors that are of significance in driving. In 1980 in Psychiatry I was first asked for opinions about the competence of particular patients to drive. In some cases there was brain damage, in others, the effects of medications and other drugs including alcohol abuse, and in others it was a question of their ability to concentrate in view of their psychiatric condition - anxiety, depression, or psychosis. Gradually, my experience was leading to an awareness of many of the issues surrounding competence to drive.

At the end of 1997 I published three book and tape kits, dealing with inattention and fatigue, sharing the road, and road rage. The kits were designed to be user friendly. They were written at roughly Grade 6 reading level, and are interactive. The kits can be stored in the glove box, and used again and again so that the driver is able to maintain peak performance. Central to the program is that each driver must accept responsibility for being fit to drive. The kits were evaluated by bus, truck, taxi and limousine drivers for content and readability. Indeed, at the Freemantle conference, one truck driver asked TWU delegates why their manuals and forms were not written so that they were easy to read and fill out like my books.

Recently, I have noticed several sites on the Internet and in public education adverts that address the issues of inattention and the effects of medications, and other factors associated with driver fatigue, but at the time that I first published the "Drive Alert For Life" programs there was little information readily available to the public.

It is my intention to continue to present public seminars and to approach businesses, schools, and community groups for support for running seminars, and shortly I will have a Home Page. In addition, I would be willing to offer my services to the transport sector in order to develop programs that will be embraced by individual drivers and managers in order to reduce the problem of fatigue and inattention.

Relevance of *Drive Alert For Life* program for the managing fatigue in transport.

The *Drive Alert For Life* program was developed deliberately to address the issue of helping all drivers to accept responsibility for being fit to drive. Although there are many other ways or countermeasures already in place, including driver training, public education through the media etc., it seemed to me that many drivers were not heeding the messages. The program that I have developed is innovative and effective because it has been designed to address several critical factors in the process of changing people's attitudes and behaviour.

Drive Alert For Life is a comprehensive training program that provides individual road users with strategies for maintaining their levels of attention and performance. The program is available through seminars, and also in user friendly book and tape kits which can be stored in the glove box. In February 1998, I presented the key concepts behind the program at the 3rd International Conference in Fatigue in Transportation. (Appendix A)

Responsibility

Drive Alert For Life is an innovative training program specifically designed to help drivers accept personal responsibility for being fit to drive and being alert whenever they are in charge of a vehicle. Fundamental to the success of the program is that drivers accept responsibility for changing their attitudes and behaviour, as well as maintaining their physical and emotional health so that they are fit to drive on a continuing basis throughout their driving careers.

Format

Drive Alert For Life Seminars, and Keynotes, plus Tape and Book Kits etc. are available to individuals, and organisations, businesses, schools etc. All levels of Government are asked to embrace and support this innovative program. Sponsorship is continually being sought for corporate and public seminars.

What is unique about "Drive Alert For Life"? Easy to read:

Each booklet is very short, and in basic English (about Grade 6 reading level) since about 52% of the population has difficulty with reading.

Interactive:

Part of the process of facilitating change is to challenge false beliefs and to raise awareness of problems, and also to engage the person in making choices, and identifying and implementing appropriate solutions. It involves also involves challenging and changing driving culture.

Knowledge:

Complex scientific data and concepts are presented simply to provide sufficient information for the person to understand the causes of fatigue etc. As knowledge is not sufficient for people to change their habits and attitudes, the program presents appropriate strategies for change.

Dealing with Apathy:

Strategies incorporated in the program challenge the majority of drivers, including truck drivers, who think that they are "Good" or "safe" drivers. In fact, we all make mistakes all the time, including breaking the speed limit, driving aggressively, and losing concentration.

Adult Learning Strategies

The material is presented on tape as well as in booklets or workbooks because adults learn better if they hear the material several times. So, drivers are encouraged to use the kits again and again and to monitor their performance. The responsibility to make continuous efforts to maintain fitness to drive is fostered.

The terms of reference of the inquiry into the Management of Fatigue in Transport include:

Ways to achieving greater responsibility by individuals, companies, and governments to reduce the problems related to fatigue in transport.

My business name, Response Ability was carefully chosen to emphasise that my mission in Private Practice as a Psychologist, Speaker and Author is to facilitate the acceptance of responsibility by the individual, and that my role is to help people develop skills to make desired changes. Since my early retirement I have been committed to providing programs and services that help people be the best that they can be.

In October 1996 a news item prompted me to develop a program based on my professional background as a Psychologist and Educator addressing the problem of driver fatigue and other aspects of driver behaviour and responsibility. The theme of the program is "Drive Alert For Life", and is directed towards prompting individuals to acknowledge that every time they take control of a motor vehicle that they must be fit to drive, and must remain alert. This is a life long commitment. It is something that involves much more than merely attending a class. Each individual driver is challenged and equipped with strategies to use on an ongoing basis.

At present the *Drive Alert For Life* program is available through seminars and workbooks, and through book and tape kits which I published at the end of 1997. Several topics have been developed including a corporate program which can be adapted and tailored to meet the requirements of specific industries and classes of drivers. The kit "Keeping Your Cool" deals with Aggressive Driving and Road Rage, and "People Are Precious" addresses issues about courtesy and road safety with the theme "People are worth more than time or money.". Some of the other training programs which I have created are for: Over 55's, Under 25's, Women, and Backseat Drivers. More books and kits will be published shortly. In every application, the same basic principles have been applied. Each unit of the *Drive Alert For Life* program provides drivers with information and strategies which they can use again and again in order to ensure that they are not casual about driving, but accept responsibility for being in control whenever they pick up their keys and sit behind the wheel.

"Drive Alert For Life: Condoms For Keys" was published at the end of 1997 and is a user friendly kit which was designed to enable drivers to accept responsibility and to change their attitudes and eliminate bad driving habits, and reinforce good driving behaviours. It is focused on the issues of inattention and driver fatigue. The kit was designed specifically for ordinary motorists, because it was my impression that the transport industry was being well catered for by the various regulatory bodies etc. However, after a few enquiries it was apparent that the Transport sector is not yet fully covered, but even more importantly, that truck and bus drivers can not read or cope with the complexity of the Government and industry forms and manuals etc. This was particularly brought home to me at the Third International Conference on Fatigue in Transportation in Freemantle in February 1998. Not only did I get feed back from a wide range of people from truck drivers, to owners, to union representatives, and others to my paper, Keys To "Drive Alert For Life" From **Responsibility to Response Ability,** (Appendix A) but also from people who saw and read the three booklets. One trucker asked the TWU representative at the table why their manuals were not written as simply as my books. I expressed willingness to rewrite the current fatigue management manuals.

Basically, what I have done is take the principles that I have successfully applied as a Psychologist to a variety of problems in the past, and crafted a program which facilitates change - specifically towards drivers individually accepting responsibility for their fitness behind the wheel. A key component is that one has to monitor one's performance and ensure that this fitness is maintained.

In creating the program I read many reports and papers. Included were many surveys and research papers on driver fatigue and counter measures that have been published on the Internet. However, I was acutely aware that the focus was on hours of driving or hours of service. Recently, the need for adequate sleep before each trip has been emphasised.

Other topics pertinent to driver fatigue which were fairly well covered included:

- > effects of alcohol and drugs
- > sleep apnea, and other sleep disorders
- > circadian rhythms and
- > shift work

However, as a Psychologist I was very well aware of a whole range of other factors which impinge on driver fatigue and the problem of remaining alert behind the wheel. Drivers can be fatigued because of illnesses and medical conditions, including:insomnia, headaches and migraines, flu, asthma, hay fever, pregnancy, chronic fatigue syndrome, arthritis, acute and chronic pain.

Drivers often suffer strain and fatigue due to a number of emotional or mental problems:

- anxiety
- > depression
- grief or loss
- > relationship hassles or breakdown

Others may be preoccupied by:

- > unemployment, and threat of job loss, redundancy or retirement
- > financial worries
- > stress at work or home, relationship hassles
- > frustration and impatience on the road

Drivers are also likely to be impaired by medications - whether prescribed, over the counter, herbal remedies etc. e.g.: antihistamines, sleeping tablets, analgesics etc.

There seemed to be almost no end to what could be on the list. The point is that the majority of drivers do not even think about the possibility of their concentration being impaired and therefore that they may be unfit to drive for health problems such as these.

Driver fatigue is clearly much more than just falling asleep, or becoming drowsy due to hours of driving or hours of working. One critical factor that my programs has addressed is that each driver has the responsibility for ensuring that he or she is fit to drive- not just at the start of the journey but for the duration.

Lapses of concentration are more likely to occur if one is stressed and preoccupied. Thus, a range of factors that make it difficult to concentrate must also be addressed. These can include every day concerns, e.g. preoccupation about work or relationships. Modern 24 Hour society is run on "just-in-time" deliveries, and often unrealistic demands and expectations. These factors contribute to driver inattention - which is said to be the main cause of rear end collisions and over 50% of insurance claims. The costs to business and to the community are enormous.

In the program I present a simple diagram showing a continuum from being fully alert and concentrating through lapses of attention to drowsiness and falling asleep at the wheel. Being fully alert is a precursor to concentrating on driving. It is not possible to remain vigilant for very long, but one can learn strategies to actively focus attention, and to monitor your behaviour. Recent research has lead to devices to enhance detection of lapses of concentration and nodding off, but the bottom line is that the individual driver must accept responsibility for being mentally and physically fit whenever he or she takes control of a motor vehicle.

Two areas of my special areas of expertise as a Neuropsychologist relate to perceptual distortions and attentional problems. Many people have difficulty sustaining attention and become inattentive and fatigued unless these disorders are treated appropriately. Processing visual information contributes substantially to driving decisions and so if any driver who has a problem with staying focused on driving, must address that problem. I have included some brief handouts dealing with synchronising signals in the brain, and with adults with Attentional Deficit Disorder, and also a paper on the high incidence of crashes with drivers with ADD in Appendices C-E. It should be noted that Russell Barkley also found that knowledge alone was not sufficient to change the attitudes and habits of drivers.

CONCLUSION

In summary, I have developed an innovative program specifically focused on fostering responsibility of individual drivers for being fit to drive. In the program I have addressed several important factors that contribute to Inattention and Driver Fatigue, that have been overlooked by most other programs for the management of fatigue in the transport sector.

Drive Alert For Life is in very simple English and can easily be understood by many people who have difficulties reading and filling out standard government forms. Responsibility for eliminating bad attitudes and habits is placed on the individual, however, the program is based on strategies of adult learning and psychological change in situations where knowledge alone is not enough.

A key factor in *Drive Alert For Life* is that in order to maintain fitness to drive retraining is a continuous process to be repeated throughout one's driving career. In the transport sector in Australia several excellent fatigue management programs have been introduced. However, every driver I have spoken to has complained about the complexity of the procedures, and so there is a need for a user friendly program. In addition, it must be recognised that as more than 80% of workers travel part or all of the way to work in private cars, there is a need for drivers to have a program that applies in when they are not driving a transport vehicle. Having already developed kits and courses to suit several specific target groups, I would welcome the opportunity to develop a similar program to suit each of the transport sectors.

Beatrice M Pullar 22 June 1999

Appendix A

KEYS TO "DRIVE ALERT FOR LIFE" - FROM RESPONSIBILITY TO RESPONSE ABILITY

Author: Ms Bea Pullar, Response Ability, Gold Coast

Paper presented at the 3rd International Conference on Fatigue in Transportation in Freemantle February 1999

KEYS TO "DRIVE ALERT FOR LIFE" - FROM RESPONSIBILITY TO **RESPONSE ABILITY**

Author: Ms Bea Pullar, Response Ability, Gold Coast

INTRODUCTION

This paper outlines the strategies adopted in the creation of an innovative approach to empowering drivers to overcome driver fatigue. Clearly, drivers fail to heed most of the messages about safe driving, whether they are road signs, or media campaigns. So it has been exciting and challenging to develop a program that is already receiving wide acclaim. Special strategies were needed to convert drivers from either being irresponsible, or being overwhelmed by an onerous sense of responsibility to the confidence of having Response Ability. That means, acquiring the skills, knowledge and becoming motivated to conduct self-paced training on an on-going basis. The package had to be user friendly, readily accessible, and suit the needs of individual drivers in the private and corporate sectors. Several packages have been planned, each addressing particular problems including driver fatigue, fitness to drive and road rage. The program can be readily customised to suit drivers in different industries and in different organisations and corporations. e.g. Couriers, real estate agents, postal, and fast food delivery drivers all face different problems in driving. As this paper is addressing the process of designing the program, details of the content will not be presented.

BACKGROUND TO THE PROGRAM

The media continually remind us of the road toll, and some drivers take advanced driving courses, but most of us only take driving lessons when we first learn to drive. The need for the motoring public to be re-educated has been approached mainly through media campaigns. For some years it has been recognised that driver fatigue is a major contributor to accidents, but very few people know very much about it. Research has shown that prescriptive hours of service address only one facet of the problem, and yet it is the most widely accepted cause of driver fatigue. Sleep apnea is receiving some attention as a cause, especially in long haul truck drivers.

Late in 1996 I realised that I have a unique set of skills and knowledge as a neuropsychologist that has equipped me to develop a much needed program about driver fatigue and road rage.

My background is that I have degrees in Psychology and Education and have been a Teacher and a Lecturer. My repertoire covers a wide range of pertinent subjects, as I have also acquired considerable clinical expertise in treating conditions including anxiety, depression, alcohol abuse, agoraphobia, dementia, chronic pain, learning difficulties, attention deficit disorder, dyslexia, post traumatic stress disorder, and the Irlen Syndrome. I was also aware that I had practical experience of the effects of some of these conditions on my own driving performance.

More specifically, neuropsychology has provided me with particular insights into brain functions including the way that the brain processes information and the mechanisms of sleep and attention. The first conference I ever attended on brain

injuries due to road trauma was in 1979, and so I have been collecting papers for nearly twenty years.

Treating adults for Attention Deficit Disorders (ADD Coaching and TeleClasses) and visual perceptual distortions (Irlen Syndrome) has formed a large part of my Private Practice for the last few years.

As part of the assessment of each client I routinely ask questions about their driving behaviour. People suffering from attention disorders are by highly distractible and inattentive - not just in classrooms but also on the job and on the road. Those with visual perceptual difficulties have trouble sustaining focus, judging distances and also suffer from strain and fatigue, and so I always ask, "Do you doze off at the wheel?" In addition, many patients suffer fatigue because of mental or physical illnesses, and they may be taking medications that cause drowsiness. I realised that many people "struggle on regardless" when they are mentally or physically unwell, and that they obviously are a great liability on the road.

On the other hand, a person who requires medication in order to pay attention whilst working or studying also needs stimulant medication if he or she is to be able to pay attention when driving.

In 1995 I undertook training in neurofeedback and so caught up to date with brain wave research including attention and sleep disorders. Soon afterwards I used neurofeedback to prove that when the correct Irlen Tinted Lenses are applied that the visual signals are synchronised and the person can see print clearly and judge distances. Demonstrating the "Irlen Switch" reinforced the knowledge that without the precisely tinted lenses an Irlen sufferer becomes fatigued not only when reading, but also when driving on the road. They have poor depth perception, and they also suffer from the glare of headlights as well as the sun.

Thus, my professional background has clearly given me insights into many aspects of problems that contribute to our understanding of driver fatigue and inattention.

Even as an undergraduate I learnt that "fatigue" sets in after a very short time. In industry, robots were introduced to take over dangerous, and demanding tasks because workers were unable to remain focused and keep up with the speed of the conveyor belts, and equipment. Vigilance and sustained attention are critical to the task of driving a motor vehicle and other forms of transport, and we are still looking for alternative countermeasures.

Along with about half of the population I have suffered from driver fatigue on various occasions. Sometimes it was quite understandable because I was over tired or driving long distances, and other times it was perplexing. So I began to research the causes and solutions for driver fatigue.

Early in 1997 I was hit from behind on two occasions once when I was stopped at traffic lights, and the other while waiting for a surge of traffic to pass before attempting to merge. Each time the other driver said, "I'm sorry I didn't see you". Clearly neither was paying attention - both were under 25 year olds, one was a taxi driver, and the other worked for a motor body repairer. These incidents really

underscored the need for a low cost, user friendly training program that would teach drivers about the causes of driver fatigue and inattention, and what they can do about it. Indeed it would challenge them to accept responsibility for being alert behind the wheel. Road rage incidents are being reported more frequently, and I had also been a victim of three road rage incidents I recognised it as another stressor and contributor to driver fatigue.

DEVELOPING A PROGRAM FOR CHANGE

The process of developing the program began with reviewing various strategies and selecting pertinent facts. I asked myself a question that I modified from my Special Education lectures.

"What do I have to do to enable drivers to learn about driver fatigue, and change so that they can accept responsibility for being able to concentrate on driving?"

Key Purposes of the "Drive Alert For Life" Program

- To provide ordinary drivers in both the private and corporate sectors with information and skills to avoid and deal with driver fatigue.
- To make the material truly accessible by presenting it in a booklet together with a tape (or tapes) in a package that was small enough to be stored conveniently in the glove compartment so that drivers could use the program again and again.
- To make the program "user friendly" by being in Plain English, and easy to read.
- The program would be interactive with checklists and charts to be completed by the driver.
- To facilitate change so that drivers accept responsibility for being alert and in control whenever they are in charge of a vehicle.
- > To present pertinent information on driver fatigue, inattention and on road rage that would interest and engage the driver.

Selection of Material and Strategies

Today most people are familiar with the strategies used in sports and peak performance training. So, drivers understand goal setting, positive thinking, repetition, mental and physical fitness. The program had to be interactive and allow drivers to set their own pace, since these are features of effective adult training programs.

At the beginning of the program drivers fill out a specially developed "Sleepiness" questionnaire, and throughout the booklet they have other checklists, and charts to complete. Drivers who have used the program find that it is easy to read, informative and easy to follow. It was written at about Grade 6 reading level, and I have personally observed drivers who "never read" pick up the booklet and read it from cover to cover.

The mystery of making people change is a persistent challenge to modern society. Advertising, whether it is crass commercialism, blatant politicking or information regarding compliance with driving rules and regulations employs a number of conventional strategies:-

- > Threats: Fines, disqualification, gaol, losing your job
- **Emotions:** Fear pictures of horrific crashes and injuries in the media
- Monetary gains: No claim bonuses, and savings on income losses, repairs etc
- ➤ **Altruism**: Community benefits of reducing the road toll

What I needed to achieve was for drivers to acknowledge that they are very likely to be the cause of an accident, and then to accept responsibility behind the wheel. Furthermore, I wanted them to know that they can do a number of things to reduce the risks of being involved in a crash through learning about the causes of fatigue and inattention. They need to recognise their driving errors and be willing to change.

Instead of flooding them with statistics, I decided that a set of simple statements would be most effective.

For example,

"Accidents don't just happen.

Drivers don't have accidents.

Drivers cause crashes."

This message has to be processed not just in the cognitive domain as facts, but also in the emotional domain - in terms of responsibility. The corollary is: A driver who is not fully attentive and alert is responsible for every accident. This leads to questions that a driver may ask: "What causes drivers like me to not be fully alert?" and, "What can I do about it?

"Thus the driver is engaged in the program - reading, listening, and actively learning. This is a major step forward because many drivers will have bad memories of school and will have done little reading, or training. In this program they are called on to set SMART goals, and priorities. By providing charts for planning trips, each driver is able to identify the particular factors that would cause him or her to suffer from driver fatigue, The booklet features lists, and brief points that can be learned by repetition. Throughout the program important themes are repeated both in the book and on audio- tape:

"Drive Alert For Life",

"Don't Touch Your Keys Unless You're FIT to Drive!"

The Challenge To Change Drivers' Attitudes

Armed with information about one's own sleepiness and recognising one's drowsy

driving behaviours, the driver now needs to know what to do about treatable causes of fatigue. Most of us prefer to ignore problems especially if they seem to be unimportant, or because the might cost us something - time, money, and self image. In the program I point out that "responsibility" has three "I"s in it, and then link this with my business name - Response Ability. By making the program user friendly and breaking down the steps towards ensuring that you are fit to drive and seem quite easy to apply, drivers are empowered to take action.

As with most programs for personal change, it is important to understand that different people will respond to different parts of a presentation. For the message to be received and accepted the driver has to feel comfortable with admitting to culpability. So, I included the fact that many drivers admit to having driven when drowsy, and that we all make a lot of driving errors. Most of us already know that young people, and males are more likely to have crashes. So, what I did with this information was to pair it with the fact that no one can ignore driving errors. We all have to attend to the way we drive, and work on correcting our faults. By filling in the charts, drivers can monitor their progress.

Women and older people have fewer fatal crashes, however, this is not popular thinking, so I coupled it with information about differences in distractibility, and on tape I added the benefits of peace of mind from ensuring that children are in child restraints or wearing seat belts.

Speeding is the most common driving error, and so one chart is for writing down when and why you were speeding. By recording their excuses it is hoped that drivers will identify their habits e.g. not leaving early enough, or not allowing for bad weather, or traffic delays. The messages about speed are also interwoven with information about the fact that stopping high speed vehicles causes more severe injuries. This seems very obvious, but, by turning a bar graph on its side, and showing the distances travelled in one to three seconds, at different speeds, a much greater impact was achieved. Drivers can see that the extra distance travelled has to be absorbed when the vehicle stops. This is also linked with the danger of nodding off for a few seconds. Throughout the development of the program I road tested various concepts and strategies. The rotation of that graph had a significant effect on a number of people - they suddenly could see and understand, and several drivers have told me that they are less inclined to speed now.

Speed, alcohol and aggression were elements in the death of Princess Diana, and so I noted that we had to learn from this tragedy, not to combine any one of those factors with driving.

Continual Need For Training

By using the charts to monitor reduction in driving errors, and by listening to the tape, and reading the booklet again drivers can continue to monitor their performance as drivers, and their awareness of driver fatigue. There is no industry, and no sector of the community that can be considered free from driver fatigue, inattention and victims or perpetrators of road rage. "Drive Alert For Life" Programs are available as seminars, workshops and keynotes. In addition, "Wake Up" and icebreaker programs, and other formats have been developed. "Thank God Dame Edna Doesn't *Drive*" conveys the essence of my message with humour. The message is very serious, but is often more memorable if delivered with a touch of comedy.

Cost Benefits

The cost benefits of the program for ordinary motorists, transport workers, corporate drivers, and fleet managers etc. include not only the savings by reduction of major and minor crashes. The program goes beyond driver fatigue, to peak performance and other areas of life, and provides training and tools for monitoring behavioural changes over time. A high percentage of perpetrators of road rage have prior records of domestic violence and aggression in the workplace. The chief message in the section on road rage is that anger is a choice. Drivers are told that the information that we see and hear is processed in our very own brains, and is filtered according to the frames of reference that we have acquired from childhood. Each driver decides whether to speak, swear, gesture, drive recklessly, tailgate or cut off the other driver. Alternatively, you decide to keep you eye on the road and avoid eye contact, and concentrate on driving your own vehicle safely. It is quite a simple decision and you can only drive one vehicle at a time.

Tension on the Road

Driving motor cars and other forms of transport has elements of the classic love hate situation. We flirt with danger, and we gamble on the roads. We love to be free to drive ourselves around, and enjoy our independence, freedom and flexibility. We love powerful cars, and we love the sense of power we have over the world at large. We speak of our pride and joy, but we use vehicles as weapons of destruction. Most of us drive aggressively at one time or another. We love our freedom but intrude on the space of others, and become territorial in car parks.

We always want to exercise our rights, but we show little consideration for others, and we hate authorities. We resent the police using speed traps to collect revenue, but we expect them to be available when we are being harassed or when we have an accident. Speed limits have been around since Roman times, and we still have not learnt to put the value of life above urgency, self importance and power. The first person to travel a long distance in a motor vehicle was Berta Benz. In 1888 she took the children out in the middle of the night because the burgermeister had refused Karl Benz permission to take his invention on the roads. This also means that Berta also was the first person to defy the authorities in a motor vehicle!

In psychological terms, when we simultaneously have positive and negative thoughts, we are in a state of anxiety or stress. It can be good stress that keeps us alert and focused. However, if it becomes bad stress or distress, then our minds and bodies are no longer operating in balance and the system can become unstable and unpredictable, we need to be in control and focused behind the wheel. Obviously we need to eliminate potential sources of distraction and preoccupation. We need to learn to monitor our tendency to drift off and daydream and we certainly should not allow ourselves to become embroiled in a silly game resembling sibling rivalry when we are behind the wheel.

"Drive Alert For Life" - An Innovative Alternative Countermeasure

The program, *Drive Alert For Life* addresses the problem of driver fatigue and inattention and provides an alternative countermeasure that promises to be very effective. It has been designed to be "user friendly". The tape and book kit can be stored and readily available in the glove compartment. The program provides information about the causes and prevention of driver fatigue, and is interactive for optimal adult learning.

The popular edition, "Drive Alert For Life: Condoms For Keys" has been well accepted. The first TV channel that saw it did a story on the local news the next day. The first bookstore that saw it asked for 20 copies on the spot. The first young person who saw it said that by putting his coloured balloon on his key over the Festive Season he was continually reminded not to drink too much. A limousine driver who reads only one or two books a year picked up the booklet and read it before his wife had even told him it was there. Clearly he was attracted to it, and was impressed. A teacher in Literacy and Life Skills wants to see the program included in the course materials.

Every driver who hears the message of "Drive Alert For Life" will be challenged to check out his or her mental state and physical fitness before touching their keys. Every corporate and private vehicle that has the book and tape kit in the glove compartment has a perpetual reminder of the message to "Drive Alert For Life".

The message is universal, and the strategies have been designed to place a low cost program in the glove compartments of as many vehicles as possible. The cost benefits for fleet managers and corporate vehicles will be very significant. There are several titles planned focusing on different aspects of the problem, and for different groups of drivers.

The keys to "Drive Alert For Life" reviews an innovative approach to dealing with driver fatigue and road rage. It incorporates adult learning strategies, and was designed to be extremely user friendly. Drivers can use the charts again and again and so continue their own driver education, and maintain a higher level of driving performance.

Appendix B

Sleeve of Drive Alert For Life: Condoms For Keys book and tape kit

Appendix C

Handout on the "Irlen Switch"

The Irlen syndrome is a form of visual perceptual dyslexia which is reduced or eliminated by the application of precise tinted lenses. The Irlen syndrome also causes poor depth perception, and poor sustained attention and strain and fatigue which effects sufferers when driving - unless they are wearing their correctly tinted lenses.

Appendix D

A hand out "ADD is Not an Excuse"

Appendix E

A copy of a paper which addresses the issue that drivers with Attention Deficit Disorder (ADD) have a higher incidence of crashes than normal drivers.