

Professional Leadership and Advocacy in the Reduction of Road Trauma

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Introduction

The many activities of the RACS Trauma Committee are an excellent example of the value of professional leadership and advocacy in reducing road trauma.

"It is the profession which sees the aftermath of a road accident, the aftermath of the split second in which it happened, the horrible and irreversible mutilation, the griefs, the brave attempts to repair, the heartbreaking rehabilitation. And it is the profession which must help find a solution to this problem, a cure for a disease of the community that has reached a significant magnitude." ESR Hughes, first Chairman of the Royal Australasian College of Surgeons' (RACS) standing committee on Road Trauma quoted in the Medical Journal of Australia in 1975 (Hughes, 1975).

Over 30 years later, the RACS Trauma Committee not only advise on preventative measures but also on improvement in the management and care of the injured. The number of organisations with valuable road safety expertise has escalated since the early 1970s, when road deaths per 100,000 of population peaked in Australia (Figure 1). Today the College of Surgeons is just one of a number of concerned lobby groups, striving to achieve prevention of fatality and serious injury due to road crashes. Figure 1 summarises the significant activities of the College, and the gains made as a result of campaigns by the College and others in reducing the road toll in Australia and New Zealand.

Both the national Road Trauma Advisory Subcommittee and the Victorian Road Trauma Committee (VRTC) are free of pressures from insurers, employers, politicians or financial groups and therefore their opinions are free of vested interest. This is evident in the way in which the College deals with all road safety issues.

Getting the message across

As a peak body within the medical profession the RACS Trauma Committee has credibility, respect and success, earned by presenting recommendations based on evidence to the public and legislators in a timely manner. The RACS Trauma Committee does not seek to work alone but seeks, where possible, to coordinate and make more effective the work of several key organisations.

Influencing legislators is common to many of the issues which the RACS Trauma Committee have been involved with. An evidence-based position outlining concerns and potential solutions is first developed, followed by lobbying and public education including the release of media statements and letters to the press and politicians, outlining concerns. The RACS Trauma Committee has actively sought membership of external committees and organisations and made submissions to official parliamentary inquiries. It organises workshops and seminars to which stakeholders have been invited and convenes international conferences such as the 6th International Conference of the International Association for Accident and Traffic Medicine in 1977. It has attended and presented at such conferences teaming up with and providing support to other stakeholders. The successful use of these methods is illustrated in each issue below.

Seatbelts – a quantum leap for road safety

Just prior to the introduction of compulsory seatbelt wearing in Victoria in December 1970, the number of road deaths peaked at over 30 per 100,000 people (ATSB: Road Safety in Australia, 2004). Legislation for the compulsory wearing of seatbelts had spread Australia-wide by the end of 1972 and resulted in a staggering reduction in the vehicle occupant fatality rate by greater than one-third (McDermott, 1978 & 1985). The RACS Road Trauma Committee, later known as the RACS Trauma Committee, featured significantly in the campaign to achieve legislation. Following the failure of government to implement the

September 1969 recommendation of the Victorian State Parliament Select Committee on Road Safety for compulsory seatbelt wearing, the Committee sprang into action by seeking support for legislation in the media, concentrating not on images of the crushed and mangled vehicles but on the horrific injuries. It seemed almost every radio and television station featured the call for seat belts. Police heroes on Australian drama television were depicted wearing seat belts and the Police Force in Victoria announced their support and wore them. On December 22, 1970, the government announced its decision to introduce legislation for compulsory seatbelt wearing in cars fitted with seat belts. While delighted with the result, the Committee did not rest on its laurels. An overwhelming majority of College Fellows endorsed action to extend seat belt wearing to cover all cars registered since 1964. The Victorian Government announced such legislation in April 1973 (Hughes, 1975). The Committee's actions were in this instance, appropriate and timely. The College did not claim to be the first group to recommend seat belt laws but it accelerated the introduction of the law and continued to fight for improvements in restraint designs and in extension of the law.

Alcohol and Drug Driving – sustained pressure the key

Alcohol

The RACS Trauma Committee promoted the need for compulsory blood alcohol testing of all road crash victims (Hughes, 1975) and later strongly supported Random Breath Testing legislation (McDermott, 1978 & 1985; ATSB, 2004). In 1972, the RACS Trauma Committee set up a working party based in South Australia; with Donald Beard, Fellow of the College as Chair, and membership including a neurosurgeon, a forensic pathologist, the State President of the AMA, the police, the Crown Solicitor, a representative of the Law Society and the Minister of Roads and Transport with close associations with the medical superintendent of the Royal Adelaide Hospital. The working party concluded that there should be compulsory blood alcohol testing of all vehicle occupants injured in road accidents. This became College policy in October 1972 (Hughes, 1975) and law in South Australia in August, 1973 and Victoria in April 1974. In this case, linkages with and efforts of contributors such as Hartwell "Chick" Lander, Chief Inspector Jack Thomas and police surgeon Allan Beech to gain support from the police, forensic scientists and hospitals with minimal resistance from civil libertarians were paramount (Trinca, 1991).

The compulsory blood alcohol testing of road casualties showing that probationary drivers were grossly over-represented in drink driver crashes and that first year probationary drivers even without alcohol impairment had 2-3 times the adult risk (McDermott & Hughes, 1983), led the Victorian Road Trauma Committee in 1984 to seek and obtain legislation for zero blood alcohol levels for learner and probationary drivers and motorcyclists.

Drugs other than alcohol

The resultant reduction in the incidence of alcohol-related road crashes in Victoria encouraged investigation of the involvement of other drugs in crashes. The development of drug driving legislation for Victoria began in the mid-1990s. At this time, the Victorian branch of the RACS Trauma Committee convened a joint meeting with representatives from the Victorian Law Institute's Road Trauma Committee, VicRoads, the Pharmaceutical Association of Victoria, the Victorian Institute of Forensic Medicine (VIFM) and the Department of Health and Community Services to discuss the use and misuse of drugs other than alcohol and their influence on the driving task.

In March 1995, an opportunity to voice the group's opinions arose with the opening of The Inquiry into the Effects of Drugs (Other than Alcohol) on Road Safety in Victoria by the Parliamentary Road Safety Committee. In its submission, the Committee: raised concerns about the lack of appropriate countermeasures; raised concerns about the potentiating effects of alcohol and drugs; and supported the introduction of legislation that would allow police to obtain blood/urine samples from those who fail the approved behaviour tests of impairment (in line with other states). In Victoria the Road Safety Act 1986 forbid the driving of motor vehicles while under the influence of drugs and gave Victoria Police the authority to remove incapable drivers from the road (Inquiry into the Effects of Drugs (Other than Alcohol) on Road Safety in Victoria 1996).

One of the recommendations of the Parliamentary Road Safety Committee sought co-operation between the States, particularly in the study of fatal crashes, as it found during the course of its Inquiry that in Australia each State was focusing on its own drug-driving problems rather than aiming to develop a national program. The Committee supported the Australian forensic laboratories in a series of studies on fatally injured drivers over 10 years, particularly in Victoria, New South Wales and Western Australia (Drummer et al, 2004). Also in 1996, the Committee was invited to participate in the VicRoads Road Safety Reference Group and a drug-driving Task Force with other key participants in road safety, including the Victoria Police. Legislation was found to be ineffective unless coupled with scientifically based, acceptable sobriety and behavioural assessments, followed up with blood/urine screening. The Task Force advised a standard impairment test which was validated as being equivalent to a blood alcohol level of 0.1%. The Victorian Government thus passed the Road Safety (Amendment) Act 2000 which specified the accepted procedure to identify impaired drivers and the power of the police to take samples. This achieved an improvement in the number of prosecutions for drug driving.

Unfortunately however, the incidence of illicit drugs, particularly THC and methamphetamine, in drivers killed in road crashes continued to increase (Swann et al, 2004). As with the alcohol story, reductions in drug-related crashes could not be achieved until *per se* general deterrence legislation was passed, targeting drug driving using random roadside screening. In December 2003, the Road Safety (Drug Driving) Act 2003 was passed in Victoria. Suitable roadside drug screening procedures using a saliva test to detect the presence of methamphetamine and delta-9-THC were simultaneously developed which should help to achieve deterrence (Swann et al, 2004). A review of this legislation is ongoing.

Following Victoria's lead were Tasmania in 2005, and New South Wales, South Australia and Queensland in 2006. Amendments to the Road Traffic Amendment (Drugs) Bill 2006 in Western Australia are yet to be passed.

By working with key stakeholders, gaining membership on advisory boards and task forces, the RACS Trauma Committees have played a significant role in strengthening the drug driving legislation which will hopefully see a reduction in crashes involving impairment from drugs.

Bicycle Helmets – Gaining public awareness and demand

The world first introduction of bicycle helmet legislation Australia-wide in the early 1990's was the culmination of almost a decade in which the Committee played a leading role in gaining public awareness, acceptance and demand for bicycle head injury countermeasures. The Committee had shown that bicyclist casualties sustained head injuries three times more frequently than motorcyclists casualties (FT McDermott & Klug, 1982). The first standard-approved helmet was produced in 1981. The Committee convened a meeting with organisations with potential interests in promoting safety helmet wearing by bicyclists, ranging from schools, bicycle groups and the media.

The Victorian Government was subsequently asked to publicize helmet wearing and help with bulk purchase schemes for schools. Further meetings and submissions to the parliamentary inquiries into road safety in 1982 and 1983 recommending mandatory legislation were met with comments that helmets were expensive and that their degree of acceptance was low. The Committee therefore promoted helmet rebate schemes and worked to gain support from the RACV and the AMA. In 1984, the Road Traffic Authority (RTA) established the Helmet Promotion Taskforce to further increase voluntary safety helmet wearing. The first rebate scheme exceeded expectations.

In 1987, the Social Development Committee of the Victorian Parliament finally recommended that helmet wearing be made compulsory. In 1990, world first legislation was introduced by the Victorian Government. Soon after all other Australian states followed (McDermott, 1992). McDermott, Lane and Brazenor of the Committee undertook a prospective controlled trial of 1,710 bicyclist casualties wearing and not wearing helmets. This demonstrated that bicyclist casualties wearing SAA-approved helmets had a 45% reduction in the frequency of head injury (McDermott, 1993 et al).

Older Drivers

It is well known that the 'ageing' population is contributing significantly to social and economic change in Australia and the world (Kippen, 1999, Rowland 2003). Driving is no exception. We are now seeing the post-war generation, used to driving and owning cars through most of their adult lives. In the elderly, diminishing eyesight, reflexes and cognitive function is common thus complicating the task of driving. In event of a crash, frailty increases the likelihood of more serious injuries and death (Beck et al, 2007; Oxley et al, 2004).

In February 1995, the RACS Trauma Committee members developed a position that drivers over the age of 70 years be given a less than 10-year licence. In their policy on road trauma, they recommended a 2-year licence for drivers over 70 years and yearly licences for those over 80 years. Licence renewal would be applied for in person with the licensing authority, including a short visual acuity test, possibly a short cognitive test and a completed questionnaire (subject to Common Law Claims and loss of Comprehensive Insurance). High risk drivers or drivers of concern would be required to undergo appropriate evaluation procedures. The Committee recognised that a requirement for all older drivers to undergo a driving licence test at the time of renewal would not be cost effective and that some driving impairments might not be evident in such tests. In August 1995, A "Letter to the Editor" by the Chair of the Committee to The Age newspaper in Melbourne outlined these views and a deputation from the RACS Trauma Committee presented a proposal to the Hon. Bill Baxter, Minister for Roads and Ports. As a result, the Minister requested that VicRoads establish a working party to develop filtering systems required to identify impaired drivers.

The issue became one of national importance and in 1998, Austroads commissioned the Monash University Accident Research Centre (MUARC) to develop and trial a model license re-assessment program for older drivers in Australasia. Report on Stage 2 was released in 2004 (Austroads, AP-R259/04, 2004). The RACS National Road Trauma Advisory Subcommittee supported MUARC and keenly awaits the imminent release of the next stage containing results of a trial.

In 1999 the Committee gained further support for changing the 10-year license for older drivers from the Victorian branch of the AMA and the RACV, and in July of that year the Committee met with the Minister for Transport and the Shadow Minister to further discuss licence renewals.

The Victorian Parliamentary Road Safety Committee (RSC) in 2002 called an Inquiry entitled *Improving Safety for Older Road Users*. A submission was made, and later that year, the Chairman of the VRTC was asked to appear as a witness. Frank McDermott and Garry Grossbard presented before the RSC. As well as the issue of licence renewal, the RSC heard the Committee's desire to see voluntary cessation and self-regulation and the improvement in alternative transport infrastructure. The Committee's other views were that the issue should be about 'impaired' drivers as opposed to 'older' drivers and thus would pertain to all age groups.

In April 2004, the Victorian Government responded to the RSC's report on the Inquiry agreeing in principle to phase out 10-year licenses and subsequently on 1 August 2005, the first 3-year licences for those aged over 75 were issued. Regular testing proposals were not supported, although the Committee was pleased that the Victorian Government is considering the adoption of the Austroads model licensing procedure if trials are successful (Government Response to the Report of the Road Safety Committee of the Parliament on Road Safety for Older Road Users, 2004).

Young Drivers

Between 2001 and 2005, US media highlighted research published by the *National Institutes of Health* that provided evidence that the part of the brain that assesses risks and controls impulsive behaviour is not fully developed until about age 25 (23 years in females) (NIHM Press Releases 2001 & 2004, Gogtay et al, 2004; Eshela et al, 2007). In October 2005, the Victorian Branch of the RACS Trauma Committee made a submission to the Victorian

Government's *Discussion Paper on Young Driver Safety and Graduated Licensing*. The submission emphasised that the significant increases in crashes involving young drivers can be related to brain immaturity rather than inexperience.

The Committee recommended that probationary drivers should be subjected to passenger restrictions and night time curfews, particularly in their first year of licensure (Lin & Fearn, 2003). Nighttime curfews have been initially promoted by the Committee in 1993 (McDermott, 1993). In June 2006, changes to the P-plate system were announced by the Government. While our desired changes were not accepted it was hinted that ongoing public education on the dangers of multiple passengers and night time driving would continue and our desired legislative changes would not be unrealistic in the medium future.

The media statement *Courage to Stop the Carnage* was released nationally by RACS Trauma Committee on Sunday, 7 November 2006. A number of crashes involving several young drivers and their passengers had occurred and it was thought timely to release a statement to express the views of the College. Following the media release, Danny Cass, along with Harold Scruby of the Pedestrian Council of Australia, a parent of one of the boys killed in a recent accident, Bicycle NSW and The George Institute formed a "Coalition for P-plate reform" in NSW to lobby the Transport Minister's P-Plate Advisory Panel in NSW, to seriously consider passenger restrictions, night-time curfews and minimum P-plate age of 18 years as in Victoria. Since July 2007, in NSW, drivers in their first year of licensure have been subject to peer passenger restrictions between the hours of 11pm and 5am.

In South Australia, letters to the Minister for Road Safety from the Committee preceded an announcement in April 2007 that the Road Safety Advisory Council will recruit for a Youth Road Safety Taskforce. A South Australian College contingent will be directly involved in the Taskforce, attempting to move the states licensing laws closer to best practice.

Child Restraints

During the 70's and early 80's the College successfully lobbied for the mandatory use of suitable child restraints. Since then, research groups on the subject have proliferated and in recent times the Committee has collected evidence and information on world's best practice in child restraints. The media statement *Our Children Aren't Safe* was released by RACS in November 2006, coinciding with RACS Trauma Week, an annual gathering of surgeons with an interest in trauma. World's best practice recommended rear-facing child restraints for young babies and older toddlers (Turchi et al, 2004; Emam et al, 2005; Carlsson et al, 1991), dedicated child restraints and belt-positioning booster seats for older children possibly up to the age of 8 to 10 years according to height (Durbin et al, 2003; Reeve et al, 2007). State jurisdictions in Australia typically mandate dedicated child restraints for children only up to 12 months of age, while only recommending age-appropriate child restraints for older babies/children. By current legislation therefore, so long as a child is wearing a seatbelt it is deemed satisfactory. Several articles on the subject, some quoting the College press release and representatives directly, were published in the months to follow. It seemed that our statement and position has struck a chord with the public and legislators. While there is some disagreement, responders are overwhelmingly in favour of age-appropriate child restraints well beyond the age of the toddler. In May 2007, the National Transport Commission released draft new laws to provide a safer pathway from rear child seats to boosters and adult seatbelts. Comments by the Committee were submitted and the outcome is eagerly awaited. Future activity will be focussed on ensuring all jurisdictions adopt the model legislation.

Vehicle Safety

With the advent of safety technologies in new cars such as ABS, Electronic Stability Control, Airbags etc, the safety of drivers and their passengers has considerably improved in the last 10 years. The RACS Trauma Committee was concerned that cars manufactured in Australia did not contain most of these features as standard and that imported vehicles did not contain safety features that were standard in the country of origin. The Committee had written to vehicle manufacturers and The Departments of Transport, and released a media statement, urging that such safety technologies be made more widely available. Changing the Australian

Design Rules, however, is a slow and time consuming process. The Committee recognised this and supported initiatives such as ANCAP to increase consumer demand for such safety features.

The Victorian branch of the Committee was invited to become a member of the Automotive Safety Awareness Program (ASAP) made up of representatives of the Transport Accident Commission, Royal Automobile Club of Victoria, Victorian Automotive Chamber of Commerce and VicRoads. Their first initiative was to increase awareness of tyre maintenance as a safety issue. Working together, it is hoped that the safety message will be more significant.

Trauma Systems – Improving care for the injured from roadside to rehabilitation

Surgeons' involvement in road trauma and road safety does not stop at prevention. The RACS Trauma Committee wanted to see improvement nationwide in the care of the injured, many of which were road trauma victims, from the accident site through to rehabilitation thereby effectively reducing the road toll by improving survival rates. Again, Fellows and the Committee played a major role in working with stakeholders to make this happen. In July 1993, the National Road Trauma Advisory Council (NRTAC), of which the College was a member, established a working party to produce guidelines for trauma systems in Australia. Recommendations such as improved evaluation processes and data collection, quality assurance activities and education and training were made to the Federal Government. Each College State-based Trauma Committee was instrumental in the development of State Trauma plans. A major trauma study in Victoria showed deficiencies in trauma care and a high preventable death rate (Danne et al, 1998). In 1992, Frank McDermott as Chair of the VRTC, met with Professor Stephen Cordner, Director of the Victorian Institute of Forensic Medicine and together they established the Consultative Committee on Road Traffic Fatalities in Victorian (CCRTF) (McDermott et al, 1996, 1999, 2000 & 2001). It comprised two 12 member multidisciplinary panels from Melbourne teaching hospitals and using complete ambulance, hospital and autopsy records identified deficiencies and frequent potentially preventable and preventable deaths in consecutive road trauma fatalities who had received medical treatment (McDermott et al, 1996). There was a lack of improvement between 1992-1997, despite notifying hospitals of scientific findings and of the significantly better outcomes at Victoria's then only major trauma service, the Alfred. This led the CCRTF to develop in association with the Learned Colleges and specialist societies, recommendations for a new trauma care system. The Committee presented its findings to the then Minister for Health, The Hon Mr R Knowles, who as a result agreed to establish a Ministerial Taskforce to implement a new trauma care system (RoTES Report 1999, McDermott & Cordner 1999).

A recent "before (1997-1998) and after (2002-2004) study" by the CCRTF has shown significant reduction in deficiencies including those contributing to death, and a 22% risk reduction in preventable/potentially preventable deaths (McDermott et al, 2007 – J Trauma – in Press). The improvement is attributable to the doubling of admissions to expanded major trauma services. Subsequently, in association with the major metropolitan and rural trauma services, and Victorian ambulance services the Committee has developed targeted recommendations to improve quality of care within each service (McDermott et al, 2006).

The RACS Queensland Regional Trauma Committee were significant members of the Trauma Plan Working Group which produced a trauma plan for Queensland was recently presented to Cabinet in Queensland.

Under the guidance of surgeon Dr Cliff Pollard, the Systems Performance Improvement and Registries subcommittee began work on a 'Bi-National Trauma Registry' in 2001, culminating in the formation of the National Trauma Registry Consortium (NTRC), a collaborative initiative of the Royal Australasian College of Surgeons, the Centre of National Research on Disability and Rehabilitation Medicine (CONROD), the Australasian Trauma Society (ATS) and the NSW Institute of Trauma and Injury Management (ITIM). NTRC has produced three Bi-National Trauma Registry reports (2002, 2003 & 2004).

Based on the highly successful US trauma verification program (Erlich et al, 2002; Holly et al, 2001), the Australasian Trauma Verification Program was introduced in Australia in 2000 to

benchmark trauma care. Assoc. Prof. Peter Danne was instrumental in seeing this Quality Assurance program established in Australia. The program, while led by RACS again highlights the importance of collaborations in the reduction of the incidence, morbidity and mortality from trauma because it also includes involvement from the Australia & New Zealand College of Anaesthetists (ANZCA) including Arthas Flabouris, the current Chair of the program, the Joint Faculty of Intensive Care Medicine (JFICM), the Australasian College for Emergency Medicine (ACEM), the Australasian Trauma Society (ATS), the Australian College of Critical Care Nurses (ACCCN) and the Emergency Nursing Association (ENA). Verification began in the Northern Territory and has now been carried out or being carried out in every Australian state and territory and New Zealand.

The College and its Trauma Committee began education and training in trauma by developing the first Early Management of Severe Trauma (EMST) course in 1988 (Trinca, 1995), a course now compulsory for all surgical trainees in Australia and New Zealand also undertaken by some other medical practitioners. In 1996, the first Definitive Surgical Trauma Care course was run in association with the International Association for Trauma Surgery and Intensive Care (IATSIC). The RACS Trauma Committee was instrumental in helping to develop the course which is now being taken beyond Australia and New Zealand and the world.

Again, working with other key stakeholders was instrumental to achieving the aims of the RACS Trauma Committee in improving the care of the injured.

Road Safety in the NT – A grass roots approach

The College's Trauma Committee had set its sights on road fatalities in the Northern Territory, vowing to persuade the Northern Territory Government into finally attempting to reduce its appalling road safety record.

Considering most states in Australia have an enviable road safety record, comparable to some of the best in Europe, it amazes most who learn that the Northern Territory has one of the worst records in all of the OECD countries (Road Safety in Australia, 2004). It is not difficult to see why though, considering that until now the NT had no meaningful rural speed limits, no demerit point system and no systematic traffic law enforcement.

Paddy Bade, a Darwin surgeon, was instrumental in bringing this dreadful situation to the attention of the NT Government and the College. Too many people were losing their lives on Territory roads, not to mention the countless crashes that have led to serious injuries and lifetime disabilities. The College's Road Trauma Subcommittee Chairman, Robert Atkinson, and the Pedestrian Council of Australia's Chairman, Harold Scruby, also lobbied the NT Government in 2007, requesting an urgent rethink of their road laws. They had asked Claire Martin, Chief Minister for the NT, and Chris Burns, Minister for Transport for the NT, to follow other states and legislate for speed limits, penalties and enforcement measures. In October 2006, the NT Government, to its credit, bowed to public pressure with the Chief Minister announcing that a wide-ranging package of laws and penalties would be introduced to the Northern Territory (Northern Territory Government Media Release, 2 November 2006).

Conclusions

Surgeons deal with horrific injuries and soul destroying rehabilitation of road trauma victims. Over more than three decades the Trauma Committee of the Royal Australasian College of Surgeons identified problems, gathered information and evidence for world's best practice. This evidence was used to build a case to present to the public and legislators.

Surgeons' independence from the restraint of finances and membership together with their record in issues of road safety, have credibility which enhances the work of other stakeholders with whom they are involved. The success of this 'formula' is evident in their activities with the issues of seat belts, drug driving, child restraints, young and older drivers, bicycle helmets and improved systems of trauma care. The Committee recognises the number of stakeholders and interested parties in road safety has increased and has worked with these organisations to achieve a goal. Stakeholders recognise the surgeons'

independence and have sought their input knowing that their opinions are given freely with authority and without bias.

The many activities of the RACS Trauma Committees described here illustrate the value of professional leadership and advocacy in reducing road trauma.

Year		Deaths per 100,000 pop.
1969	RACS Trauma Committee, The Sun Newspaper & Victoria Police 'began' their seatbelt campaign	28.6
1970	Road fatalities peaked at 30 per 100,000 population Victoria first to introduce compulsory seat belt wearing legislation	30.4
1972	RACS Working party on Drink Driving set up forming the policy of compulsory blood alcohol testing of all injured vehicle occupants.	26.0
1973	Australia-wide compulsory seat belt wearing Blood alcohol testing legislation passed in SA.	27.5
1974	Blood alcohol testing legislation passed in Victoria.	26.3
1976	Victorian legislation for child restraints introduced	25.5
1981	First SAA-approved bicycle helmet produced	22.3
1982	RACS promoted voluntary bicyclist helmet wearing submitted recommendation for mandatory bicycle helmet wearing to the Victorian Parliamentary inquiries.	21.4
1984	Zero BAC for all learner & probationary drivers introduced in Victoria. The Helmet Promotion Taskforce formed in Victoria.	18.1
1987	First helmet rebate scheme established through RACS promotion.	17.0
1988	First EMST courses run	17.5
1990	World-First Victorian legislation for mandatory bicycle helmet wearing	13.7
1992	Consultative Committee on Road Traffic Fatalities formed with the Victorian Institute of Forensic Medicine	11.3
1993	NRTAC document outlining guidelines for Trauma Systems in Australia released	11.1
1995	VRTC published views of some regular testing of drivers over 70 years	11.2
1996	VRTC invited to be a member of the Vicroads Road Safety Reference Group & Drug Driving Taskforce; First DSTC course run in Australia	10.8
1998	CCRT findings and recommendations led to Ministerial Taskforce sd (1999!!!!)_Victorian RoTES Report released followed by a new trauma plan for Victoria. Austroads commission MUARC to develop & trial Model License Reassessment Program for Older Drivers	9.4
2000	Australian Trauma Verification Program introduced	9.5
2001	US research highlighted the physical maturation of the human brain Bi-national Trauma Registry concept was formed	8.9
2002	VRTC submission to Inquiry into Improving Safety for Older Road Users	8.7
2003	Victorian Government passed Road Safety (Drug Driving) Act 2003.	8.2
2005	VRTC submission to Victorian Government's discussion paper on Young Driver Safety and Graduated Licensing	8.0
2006	RACS releases national statement urging for youth road safety priority & best practice in child restraints; RACS lobby NT Government for stronger road laws, including penalties; A Trauma Plan for Queensland created.	7.8
2007	CCRTF reports 22% risk reduction in preventable deaths following Victoria's new trauma care system. NSW's "Coalition for P-Plate Reform" established and passenger and night restrictions legislation passed.; RACS involvement with new Youth Road Safety Taskforce in SA; RACS submitted comments to NTC's new draft legislation for child restraints	

Figure 1: The RACS Trauma Committee's significant activities. Road deaths per 100,000 population Australia-wide by year since 1969 shows the steady decline achieved by RACS' and others' initiatives (Source: ATSB Statistical Data Series: www.atsb.gov.au).

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