



Trauma Prevention

INTRODUCTION

The Royal Australasian College of Surgeons has a proud history with regard to trauma prevention. The Road Trauma Committee of the College was established in 1970 in response to the escalating road toll and the recognition that death and disability from road crashes represented a public health issue which needed urgent attention. The College Trauma Committee is based on a tradition of research, the application of fact to a defined problem, inter-disciplinary organisation, and an integrated cooperative approach with other organisations and the community to achieve successful outcomes in reducing the tragic effects from injury.

The College has been influential with policy makers and legislators and was a major contributor in the 1960s and 70s towards mandatory seat-belt wearing, drink driving countermeasures and the compulsory wearing of helmets by pedal cyclists.

Since the mid-1980s the College saw that it would need to widen its role in trauma prevention and management beyond those injuries which resulted from road crashes. In July 1991, the College Trauma Committee was formed which continued the College's double commitment: prevention and mitigation of injuries, and management of injuries, encompassing injuries resulting from all sources.

The College continues to play an active role in trauma prevention with the College Trauma Committee hosting annual trauma workshops, regular meetings, engaging with media, hosting international speakers at the annual scientific congress, supporting research, preparing submissions to inquiries and promoting and participating in trauma training such as EMST (Early Management of Severe Trauma and DSTC (Definitive Surgical Trauma Care) courses. It also plays an important advocacy role regarding issues that affect the community - such as quad bikes, alcohol-related violence and dog bites.

The College supports all evidence-based initiatives that assist in the prevention of trauma and the reduction of the devastating effects of injury. The College regularly revises and updates its positions in accordance with safety measures that are being constantly researched and developed by a growing industry. The College recommends and supports the following positions

CHAIN SAWS

Endorsing Standards Australia AS 2727 Chainsaw – Guide to safe working practices, the College recommends that:

- All persons intending to use a chainsaw be required to receive instruction and certification from an accredited instructor
- The use of appropriate protective equipment [i.e. approved safety helmets with visor or goggles, earmuffs, protective leggings, steel capped safety boots and gloves] be advocated at the point of sale or hire.
- Regulations into the safe use of chainsaws be developed and published by appropriate authorities in each state and territory.
- Suitable information and videos be made available to intending users of chainsaws and be advertised at the point of sale or hire

FARM INJURY

There are alarming statistics highlighting that deaths and injury are a significant problem on Australian farms. The College supports the following safety measures:

Tractor safety

- Roll over protective structures (ROPS) and effective occupant restraints be installed on all

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tractors. Retrofitting of a safe tractor access platform be encouraged and the design specifications available from the Australian Centre for Agricultural Health and Safety be promoted

- Guards must be used on power-take-off assemblies, including retrofitting of a masterguard if necessary and replacement of damaged or missing PTO shaft guards.
- Passengers should not be carried on tractors, except for training purposes.

Tetanus

- The farming community needs to be regularly alerted to the importance of maintaining immunity to tetanus and following the immunization schedules within their jurisdiction.

Machinery/tool design

- Encouragement and support be offered to the National Farmsafe Farm Machinery Safety Reference Group established to examine and improve safety design in farm machinery and equipment, to review impediments to safety design, to gather relevant data and to liaise with manufacturers and suppliers.

Child Injury on Farms

- Farmers be made aware of the dangers of farming activities to children and be encouraged to put Farmsafe Australia age-appropriate injury prevention measures in place.

Farm Rescue

- The Australian Manual of Farm Rescue be made available to rural rescue personnel and the farming community.

Emergency Care

- Improved access to acute/emergency care management courses be provided for rural health-care professionals.

Medical Education-Specific Injuries

- Manuals outlining the principles of treatment of specific farm injuries be made available, with training support, to rural medical practitioners.

Rehabilitation Services for those injured on farms

- Manuals on injury rehabilitation, specific to returning workers to farming activities, be made available to rural physiotherapists with training support.

Counselling Services

- Counselling services be made available for families and others affected by farm injury and debriefing and counselling services be made available for rural health and emergency care workers.

Developing Safety Skills and Resources in the Farming Community

- The farming community continue to be targeted in farm safety programs.
- An emergency card with emergency telephone numbers, instructions to the site of accidents/emergency, nature and cause of the injury/emergency and initial assessment, be available to all farming communities.
- Improved access to relevant first aid training be facilitated for farming communities.

Farm Injury Data

- Data on farm injury be standardised, using the National Farm Injury Optimal Dataset as guidance, so that useful preventative and management strategies can be developed.

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- Effective coordinating mechanisms be established.
- Rural general practitioners and surgeons be encouraged to participated in farm injury data collection.

Trauma Communication Systems

- The National Road Trauma Advisory Council of Australia (NRTAC) Report of the Working Party on Trauma Systems 1993, be implemented.
- A suitable identification system of farm location be adopted by emergency services in all states and territories of Australia and New Zealand.
- Direct communication systems between ambulances and treating doctors be established.
- Communication technology be exploited to improve emergency communication in rural areas, and the digital/CDMA system be extended to cover all areas.

Ongoing Collaboration for Improving Farm safety

- The College continues its involvement with the Australian Centre for Agricultural Health and Safety, Farmsafe Australia (and the equivalent organisation in New Zealand) on Farm Safety Reference Groups, to oversee progress on resolutions and to collaborate on key programs in the farm safety area

QUAD BIKES

Recognising the seriousness and frequency of injuries and fatalities caused by Quad Bikes, the College recommends that public awareness of the problems associated with the use of Quad Bikes be raised, with particular reference to:

- Instability of Quad Bikes
- Dangers associated with children using Quad Bikes
- Recommendation of banning of their use by the under-16 age group
- Severity of injury of the head, spine, chest and pelvis associated with their use.
- Limitation of speed to less than 55 km / hr
- Restriction to use to be off public roads.
- Use only in situations where risk of collision with another vehicle is removed
- Strong recommendation of wearing of helmets for riders. Until an appropriate helmet specific to the use of Quad Bikes is developed, the use of AS NZS 3838 (2006) helmets for horse riding and horse related activities is suggested.
- Promotion of research regarding the design of an appropriate helmet for Quad Bike use.
- Recommendation that information on the safe use and dangers of Quad Bikes be available at point of sale or hire
- Encouragement of research into the design and development of Quad Bikes which allow for roll over protection.
- Consideration of mandatory provision of speed limiters
- Recommendation for the requirement for training of workers who operate Quad Bikes to ensure competency and knowledge of safety measures.
- Provision of information to users of Quad Bikes, as to the most appropriate form of transport for particular tasks.
- Removal from sale 3-wheel ATVs [all-terrain vehicles/trikes]

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BURNS

Burns are very common and affect approximately 1% of the population each year. Recognising the seriousness of burn injuries and the preventative measures available in domestic and workplace settings, the College supports the following:

Prevention

- Safe practices and support prevention programs
- Safe handling of flammable liquids, away from naked flames, is paramount.
- Properly fitted and functional smoke alarms
- Temperature regulators for domestic hot water supply should be obligatory - special precautions need to be made for children and the elderly.

First Aid

The College recommends the Australian & New Zealand Burn Association's (ANZBA) guidelines on first aid for Burns.

Treatment

The College strongly supports the Australian & New Zealand Burn Association's (ANZBA) guidelines on the prevention and treatment of Burns.

It is recommended that doctors who encounter burns patients in their practice should refer to the ANZBA website (www.anzba.org.au) which contains information on:

- criteria for specialized burns treatment
- clinical guidelines
- prevention
- first aid

It is recommended that doctors who are likely to encounter burn patients in their practice should attend an Emergency Management of Severe Burns (EMSB) course. The EMSB course is designed for workers in the healthcare industry that would come into contact with burns victims. This course is run by the Australian and New Zealand Burn Association (ANZBA), PO Box 550, Albany Creek, QLD 4035; Telephone: 61 7 3325 1030 or email info@anzba.org.au

GUNS

Recognizing the seriousness and frequency of trauma associated with firearms in our two countries the College recommends:

- Strict gun control including the compulsory national register of all firearms, the banning and prohibition of importation by individuals of semi-automatic and pump-action rifles and shotguns.
- Compulsory training, education and licensing measures in Australia that have been in place since 1996 should continue.
- A mechanism for regular review of firearms control measures.
- That New Zealand toughen its gun control laws and review licensing and prohibition aspects of gun ownership including high powered air guns that should be registered in the same way as other fire-arms.

ALCOHOL AND DRUGS

Alcohol

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Because of the continuing major influence of the misuse of alcohol in road crash causation, assault and violence, the College supports the following countermeasures aimed at drinking drivers and riders and the general community:

- The law of 0.05g/100mls blood alcohol concentration (BAC) for fully licensed drivers and riders should remain in place or be implemented where it is not already legislated
- Learner and probationary licence holders not be permitted to have any alcohol in their blood whilst in charge of a motor vehicle or motor cycle.
- Drivers of commercial vehicles such as trucks, passenger coaches and buses, taxis, trams and trains as well as operators and/or drivers of machinery (eg. Farm machinery), not be permitted to have any alcohol in their blood whilst driving or in charge of such a vehicle
- That alcohol ignition interlocks be fitted to commercial vehicles such as trucks, passenger coaches and buses, taxis, trams and trains as well as operators and/or drivers of machinery.
- Investigation and research into the potential for the lowering of the 0.05 general BAC limit be explored.
- Intensification of random breath testing of drivers and riders.
- Compulsory breath testing of all drivers, riders and pedestrians involved in an injury-producing crash or charged with a moving traffic offence, and that police be empowered to perform such breath tests regardless of whether or not a traffic law infringement has been committed.
- All road casualties of 16 years or older who attend hospital for treatment be tested for blood alcohol for both evidentiary purposes and for data collection for further research to inform future policy.
- Improved drink driving education programs dealing with the effects of alcohol on driving skills and the incidence of road crashes. Further programs educating drinkers on the amount of alcohol consumption which will lead to the legal limit being exceeded.
- That driver's and rider's licence tests include testing of knowledge of the effects of alcohol on driving skills, the role of alcohol in road crashes and the amount of alcohol consumption which will lead to the legal limit being exceeded.
- Relicensing of a driver or rider disqualified for having a BAC above 0.15g/100mls, or for a second or subsequent drink driving offence, be restricted to drive only vehicles fitted with an alcohol ignition interlock for a specified time as recommended by further research – and rehabilitation be encouraged for such recidivists.
- Special attention be paid to the problem of aberrant behaviour by alcohol impaired pedestrians.
- Corporations be encouraged to develop responsible drink driving programs including driver education and the fitting of alcohol ignition interlocks to their vehicle fleet.
- Strategies to reduce the rate of reoffending in regards to drink driving.
- Documentation of blood alcohol level in all patients who present to hospital with an injury
- Strategies be formulated and implemented to reduce the problem of alcohol abuse and/or misuse throughout the community such as:
 - Regulating the availability of alcohol such as restricting the hours and days of sale of alcohol, the density of outlets.
 - Clear labelling of alcohol strength, and mandatory and enforced server liability programs.
 - Effective alcohol taxation and pricing policies

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- Readily accessible early treatment and intervention programs particularly in the primary health setting and the workplace to reduce the hazards of excessive alcohol consumption
- Proactive policing of licensed venues
- That suitable breath alcohol testing devices (hand-held, coin-in-slot machines) be installed in hotels, restaurants and clubs
- Restriction of Alcohol Advertising particularly restricting advertising to young people, with effective enforcement of the Alcohol Beverages Advertising Code (ABAC) Scheme.
- General support for both Government and broader community action to acknowledge the problem of alcohol misuse, to introduce legislation and regulation to protect the community, encourage appropriate alcohol use and support, embrace and model ways of responsible drinking; and respond with compassion to people who drink excessively and consequently cause harm to themselves and others. For example supporting the Recommendations from the NSW Summit on Alcohol 2003 and Victoria's Alcohol Action Plan 2008-2013.

Drugs Other Than Alcohol

Recognising that other drugs taken alone or in combination with alcohol may seriously impair driving and riding ability, the College suggests that the following measures be supported:

- Continued research and improved data collection through the testing of all road traffic casualties whereby the effect on driving performance of drugs, whether prescribed, sold without prescription or illegal, when taken with or without alcohol, may be measured.
- Support for improved methods of detection of any medications or drugs which result in impairment of judgment and such tests be performed on all road casualties.
- Support for improved methods of detection at the roadside, of medications or drugs which result in impairment of judgment,
- Support for the intensification of the random drug testing of drivers and riders and that the results for initial roadside tests be confirmed via analysis of urine or blood samples.
- Guidelines for doctors and pharmacists to enable them to properly warn patients concerning any likely impairment of driving or riding skills which may result from the taking of a particular drug or other substance, separately or in combination, and all such drugs that may diminish or impair driving performance be labelled by the manufacturers and pharmacists with appropriate warning.
- Programs to educate that a person using prescription drugs that may cause impairment with or without the addition of alcohol should not consume any alcohol then drive or ride, and should maintain safe pedestrian practices.

DOG BITES

Recognising the widespread effects of dog bites in the community resulting in devastating and sometimes fatal injuries the College recommends the following

- Support for the updating of data and further research into the epidemiology of dog-bite related injury.
- The development of education programs for dog owners and potential owners with particular emphasis on breed suitability, dog obedience training, dog socialisation programs, awareness and respect for public safety and safety programs particularly relating to dog and child interactions

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- Dog management programs, such as those which restrict the number of dogs per household,
- Requirement for registration and encouragement for de-sexing of dogs.
- The onus of responsibility for dogs is clearly placed upon the owner of the animal.
 - For bites on the face or hand, or if the wound is more than superficial and cannot be cleaned appropriately at home, that medical attention be sought

NEUROLOGICAL (HEAD AND SPINE) INJURES IN SPORT

RACS supports the Neurosurgical Society of Australasia's Policy on Sport: Prevention and Management of Head and Spine injuries in Sport [2013] which includes reference to Boxing, Spine Injury in Sport, Helmets, Head Injury and Concussion in contact sport.

ASSOCIATED DOCUMENTS

Neurosurgical Society of Australasia's Policy on Sport: Prevention and Management of Head and Spine injuries in Sport [2013]

KEY WORDS

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