ROAD TRAUMA CYCLING POSITION PAPER

BACKGROUND

Helmet wearing

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 College of Surgeons 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[1]. 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 Royal Automobile Club of Victoria and the Australian Medical Association. 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.

During the 1980's, McDermott, Lane and Brazenor of the Committee undertook a prospective controlled trial of 1,710 bicyclists casualties wearing and not wearing helmets. This demonstrated that bicyclist casualties wearing Standards Australia Association-approved helmets had a 45% reduction in the frequency of head injury[2].

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[3].

Other Cyclists Safety Issues

In addition to vulnerability to head injury, the very nature of cycling makes riders extremely vulnerable to injury, either by falls or collisions with other cyclists and motor vehicles. The most common type of crash in which cyclists are fatally injured is when they are being hit from behind by a motor vehicle traveling in the same lane in the same direction, particularly on rural roads[4]. The next most common crash type was the cyclist riding from the footway into an intersection or onto a road and being hit by an oncoming motor vehicle. These common crash types indicate visibility may be an issue as well as inadequacies of cyclists and motor vehicles awareness of each other. Of cyclists seriously injured, 46% were aged under 16 years in 2000 and 2001[4].

Data on cycling activity is required in order to understand any trends in cyclist safety. It is unfortunate that currently there is little data available nationally which measures this. The popularity of cycling however, appears to be on the increase with sales data indicating that the number of bicycles imported into Australia is increasing[5].

Studies have shown that regular cycling is beneficial to health by reducing heart disease and obesity and that benefits gained are quite likely to outweigh the loss of life through accidents[6,7]. It seems logical to assume that encouraging cycling would lead to more deaths and serious injuries however studies have indicated that this may not be so in some European and Californian towns. These studies in fact showed a reduction in the rate of deaths and serious injuries[8]. This may indicate that cyclists and motorists in these areas have an increasing level of consideration for one another.

POSITION

The College supports the following:

1. Adequate law enforcement of legislation of mandatory wearing of nationally approved safety helmets with regular review of compliance.
2. Continued promotion of bicycle helmet wearing by national, state and local campaigns, through community road safety councils, municipal councils, school authorities and parents.
3. Expansion of bicycle path networks in cooperation with local government and other agencies, supporting those networks that separate motor vehicles, bicycles and pedestrians.
4. Mandatory use of approved tail lights, fixed reflectors, light-coloured clothing and reflectors on clothing and helmets particularly for night bicycling.
5. Support for initiatives which encourage all road users to 'share the road'.
6. The development of national primary school bicycle education programs for primary school aged children.

Approver Director or CEO
Authorizer Council

[1] McDermott FT & Klug GL (1982). *Differences in Head Injuries of Pedal and Motorcyclists casualties in Victoria.* Med J Aust 2:30-32
[2] McDermott FT, Lane J, Brazenor GA and Debney A (1993). *The effectiveness of bicycle helmets: The study of 1710 casualties.* J Trauma 34:834-845
[3] McDermott FT (1992). *Helmet Efficacy in the Prevention of Bicyclist Head Injuries: Royal Australasian College of Surgeons Initiatives in the Introduction of Compulsory Safety Helmet Wearing in Victoria, Australia.* World J. Surg. (16), 379-383
[4] Australian Transport Safety Bureau (ATSB). *Deaths of cyclists due to road crashes.* July 2006. ISBN 0 642 25540 7
[5] Australian Bicycle Council (2003). *Good News Stories;* August 2004
[6] British Medical Association (1997). *Road transport and health.* The Chameleon Press. London.
[7] British Medical Association (1992). *Cycling: Towards Health and Safety.* Oxford University Press, Oxford.
[8] Jacobsen P (2003). *Safety in numbers: more walkers and bicyclists, safer walking and bicycling.* Injury Prevention, Vol. 9, pp. 205-209.