Pedal Cycle Helmet Position Paper

Background

There is strong evidence that bicycle helmets offer head protection to cyclists if they crash or fall off their bicycle. Findings from systematic reviews confirm that wearing a helmet can reduce the risk of head injury – including severe brain injury - in bicyclists of all ages by as much as 88%[1].

Cycling is an activity that is both enjoyable and is linked to direct and indirect health gains, and so, from a public health perspective, is an activity that should be encouraged. However, cycling can also be a dangerous activity for inexperienced riders, or for riders in unsupportive road environments.

The Australian Injury Prevention Network recognises that:

- It doesn't take a large force to cause serious injury to a human head. Even from a standing height head contact with a concrete footpath or road surface will cause serious injury.
- There is strong evidence that bicycle helmets prevent head injury in the event of a crash.[1]
- Multiple studies have documented the rise in helmet wearing rates with introduction of helmet legislation. [2-4]
- Bicycle helmet legislation is effective at increasing helmet wearing rates and decreasing bicycle-related head injuries.[5]
- Bicycle helmets must comply with a design and performance standard. It is illegal to sell bicycle helmets in Australia that are not certified to the Australian Standard (AS/NZS 2063). Most places that sell bicycles will also sell affordable bicycle helmets that fully comply with the Australian standards.
- There is evidence that children are more likely to wear helmets if their parents and adult role models do as well.[6]

The Australian Injury Prevention Network acknowledges that:

- There is public debate about whether cycling rates decrease when helmet legislation is introduced. There is little reliable evidence about the impact of helmet legislation on cycling rates; however several studies have suggested that it has no or little impact over the long term.[7-9] Cycling rates are increasing in capital cities across Australia.[7]

- There are factors other than helmet use that impact on cycling participation such as concerns about safety, overall decline in physical activity and increasing obesity rates, increased traffic and pollution, cycling infrastructure and urban planning, and more research is needed to understand what impact each of these factors have on cycling participation.
- There is an argument that helmet wearing increases risky riding behaviour but this is not supported by strong evidence.

The Australian Injury Prevention Network recommends:

- Given the effectiveness of bicycle helmets in reducing head injury in the event of a crash, they should be encouraged for all cyclists, both on and off road.
- Legislation requiring use of cycle helmets for all cyclists including children is effective at increasing helmet wearing rates and should be in place in all Australian jurisdictions.
- Appropriate educational programs, social marketing and police enforcement is necessary to support cycle helmet legislation and should be appropriately resourced.
- Resources should be made available for improved and supportive cycling environments, including cycle ways that take cyclist safety into account.

References

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4. Leblanc JC, Beattie TL, et al. (2002). "Effect of legislation on the use of bicycle helmets." CMAJ Canadian Medical Association Journal **166**(5): 592-595.
5. Macpherson A, Spinks A. Bicycle helmet legislation for the uptake of helmet use and prevention of head injuries. Cochrane Database of Systematic Reviews 2008, Issue 3. Art. No.: CD005401. DOI: 10.1002/14651858.CD005401.pub3.
6. Khambalia A, MacArthur C, Parkin PC. Peer and adult companion helmet use is associated with bicycle helmet use by children. Pediatrics 2005;116:939e42.
7. Haworth N, Schramm A, King M, Steinhardt D. 2010. Bicycle Helmet Research. (CARRS-Q Monograph 5). Brisbane, Australia: QUT, CARRS-Q.
8. Macpherson AK, Parkin PC, To TM. 2001. Mandatory helmet legislation and children's exposure to cycling. Inj. Prev., 7: 228-230.
9. Dennis J, Potter B, Ramsay T, Zarychanski R. 2010. The effects of provincial bicycle helmet legislation on helmet use and bicycle ridership in Canada. Inj. Prev., 16: 219-224.

Other useful references and resources:

- Berg P, Westerling R, Bicycle helmet use among school children – the influence of parental involvement and children's attitudes. Injury Prevention. 2001. 7(3): 218-22.
- De Rome L et al. The Pedal Study: Factors associated with bicycle crashes and severity in the ACT, Final Report. The George Institute for Global Health, University of Sydney Medical School, ANU. July 2011.