

Bicycle Network Mandatory Helmet Review

Opinion of Ceri Woolsgrove, Policy Officer, European Cyclists' Federation

1. Do you believe it should be mandatory to wear a helmet when riding a bicycle? (If you believe it should be mandatory at some times but not others please describe when.)

No

2. What's your reasons for your answer to question one?

Cycling is on average as dangerous/risky per distance or time travelled as walking¹, and in some countries being a driver In the UK, not a great cycling country by any means, there is approximately one cyclist death per 33 million km of cycling, it would take the average cyclist 21,000 years to cycle this distance, banning cycling unless appropriate clothing is worn is too high regulation given the risk.

However unlike other modes of transport, cycling is an active mode of transport, this means that there are not only risks like crashes involved, there are also benefits, particularly health benefits. This means that there are huge health benefits to be had from promoting and improving cycling². There is evidence that mandatory helmet laws act as a barrier to the growth of

Making bike riding easy for everyone

210 Collins Street Hobart TAS 7000

¹ Dept. of Transport, Reported Road Casualties Great Britain: 2013. Page 178 <u>https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/359311/rrcgb-2013.pdf</u>

² http://www.bmj.com/content/357/bmj.j1456

Hillman M, 1992. Cycling and the promotion of health. PTRC 20th Summer Annual Meeting Seminar B, pp 25-36

Cavill N & Davis A. "Cycling and health: a briefing paper for the Regional Cycling Development Team." ERCDT, 2003.

de Hartog JJ, Boogaard H, Nijland H, Hoek G, 2010. <u>Do the health benefits of cycling</u> <u>outweigh the risks?</u>. Environmental Health Perspectives doi: 10.1289/ehp.0901747 Woodcock J, Edwards P, Tonne C, Armstrong BG, Ashiru O, Banister D, Beevers S, Chalabi Z, et al, 2009. <u>Public health benefits of strategies to reduce greenhouse-gas emissions: urban</u> <u>land transport.</u> The Lancet 2009;374(9705):1930-1943



cycling³, therefore all the huge possible health benefits are lost if mandatory helmet legislation deters cycling. It has been estimated that if a road safety intervention like helmets caused only a very tiny reduction in the number of cyclists it would always bring about a public health dis-benefit even if that road safety measure were 100% successful against all fatalities!⁴ Of course this does not also account for the benefits brought about by the reduction in congestion, air pollution and contribution to livable cities. It has been estimated that an overall net cost to public health in the UK of a helmet law would be about £500m a year⁵

A major issue that is brought up is the effect of legislation on cycling numbers (much of the following information can be found here <u>http://www.cyclehelmets.org</u>)

- In Australian Capital Territory automatic counters on bicycle paths registered declines from 1991 (pre-law) to a similar period in 1992 (post-law) of about one third on weekdays and about half at weekends⁶
- In New South Wales in the first two years of the child law, the number of children cycling declined by 36% and 44% respectively compared with the year before the law. The largest reduction in cycling was among secondary female students in Sydney: 214 in 1991 down to 20 in 1993, a drop of 90.6%⁷. One estimate⁸ claims that repealing the law could be expected at least to double cycle use in Sydney
- In Queensland A survey, mainly of schoolchildren, showed a decline in cycling of 22% from 1990 to 1991, before the law was enforced⁹

⁸ Rissel C, Wen LM, 2011. <u>The possible effect on frequency of cycling if mandatory bicycle</u> <u>helmet legislation was repealed in Sydney, Australia: a cross sectional survey.</u> Health Promotion Journal of Australia 2011; 22: 178-83

Making bike riding easy for everyone

Level 4, 246 Bourke Street Melbourne VIC 3000

234 Crown Street Darlinghurst NSW 2010

210 Collins Street Hobart TAS 7000 Suite 5, 18-20 Cavenagh Street Darwin NT 0800

³ Cycling for Transport: ongoing New Zealand household travel survey 2003-2007.New Zealand Ministry of Transport. Nov 2008

Robinson D. Changes in cycle use in Australia. Bicycle Helmet Research Foundation 2007 Gillham C, Rissel C, 2012. Australian per capita cycling participation in 1985/6 and 2011. World Transport Policy & Practice

²⁰¹²⁽May);18(3):5-10

⁴ De Jong 2012, <u>https://www.ncbi.nlm.nih.gov/pubmed/22462680</u>

⁵ De Jong 2012, <u>https://www.ncbi.nlm.nih.gov/pubmed/22462680</u>

⁶ Ratcliffe P, 1993. Bicycling in the ACT - a survey of bicycle riding and helmet wearing in 1992. ACT Dept of Urban Services

⁷ Smith NC, Milthorpe MW, 1993. An Observational Survey of Law Compliance and Helmet Wearing by Bicyclists in New South Wales - 1993 (4th survey). NSW Roads & Traffic Authority ISBN 0-7305-9110-7.

⁹ Wikman J, Sims C, . Bicycle helmet wearing surveys 1990 and 1991. Royal Automobile Club of Queensland, Brisbane .



- In South Australia a 1994 study of school children showed a 38% decline in cycling from September 1988 to March 1994¹⁰
- In Victoria Bicycle use by children aged 5-17 decreased by 36% from May/June 1990 to May/June 1991¹¹. There were further falls to May/June 1992 in Melbourne, with teenage cycling showing by then a 46% decrease from pre-law levels¹². 3.4% of trips in Melbourne were by bicycle in 1985-6. In 2004 this had decreased to 2.0%¹³
- In Westren Australia Automatic counters installed on two key cyclist bridges over the Swan river in Perth recorded an average of 16,326 cycle movements weekly for the three months October to December 1991 (pre law). The same months in the post law years 1992-94 recorded 13067, 12470 and 10701 cyclist movements per week. Thus, on those bridges (which may not have been typical of cycling throughout WA), decline over the first 3 years, were: 20%, 24% and 35%. Over the following 3 years cycling was 30%, 14% and 12% below pre-law levels¹⁴

There has also been similar falls in cycling numbers in other countries that have helmet legislation, much if this information can be found here <u>http://www.cyclehelmets.org/1096.html</u>

There is, I think, reason enough above to be doubting the wisdom of mandatory helmet law, due to the reduction of cycling numbers the effects on health, etc.. There are also significant doubts concerning the efficacy of helmet law for road safety also. In Australia after the introduction of helmet legislation arm and torso injuries as a proportion of head injuries remained constant after introduction of legislation, i.e. no drop of head injury rates were commensurate i.e. no drop of head injuries through increased helmet use¹⁵. Pedestrian and cycling head injury rates were commensurate i.e. no drop of head injuries through increased helmet use, mould seem to be explained by better road conditions and more effective road safety, measures brought to Australian roads (such as random driver alcohol

http://www.bmj.com/content/332/7543/722.2

Making bike riding easy for everyone

210 Collins Street Hobart TAS 7000

¹⁰ Marshall J, White M, 1994. Evaluation of the compulsory helmet wearing legislation for bicyclists in South Australia. South Australia Dept of Transport Report 8/94.

 ¹¹ Cameron M, Heiman L, Neiger D, 1992. Evaluation of the Bicycle Helmet Wearing Law in <u>Victoria During its First 12 Months.</u> Monash University Accident Research Centre Report 32
¹² Finch C, Heiman L, Neiger D, 1993. <u>Bicycle Use and Helmet Wearing Rates in Melbourne.</u> <u>1987 to 1992: the influence of the helmet wearing law.</u> Monash University Accident Research Centre Report 45

¹³ Australia bicycle ownership and use. Australian Bicycle Council, 2004

¹⁴ Robinson DL, 1996. <u>Head injuries and bicycle helmet laws.</u> Accident Analysis & Prevention 1996 Jul;28(4):463-75

¹⁵ Robinson D. No clear evidence from countries that have enforced the wearing of helmets, BMJ 2006;332:722.2



breath-testing for example). This is also consistent with other countries with similar laws¹⁶. There does not seem to be any clear eveidence for the beneficial road safety public health benefit of helmet laws¹⁷

There are also issues concerning the reaction of drivers to cyclists wearing helmets, a study found that car drivers passed closer to those wearing helmets than those who did not.¹⁸ Risk compensatory behavior amongst cyclists themselves¹⁹ could also be an issue. Another problem that may have to be taken into account is the effect on Safety in Numbers with a reduction of cyclists on the roads. Reducing or increasing the numbers of cyclists has an inverse relationship to the safety of each individual cyclist²⁰

The bicycle helmet is not a major road safety tool let alone something in need of legislation. Good infrastructure, good vehicles, and sensible trained drivers and riders should be the focus of safer cycling. Unfortunately often doing these things are hard while passing a helmet law is easy. The safest countries to cycle in the world also have the highest numbers of cyclists, this is no coincidence, cycling road safety and promotion requires commitment and sensible measures rather than knee-jerk unsustainable easy to implement measures. I am glad that Australia is beginning to question the assumption that a helmet is a major regulatory road safety tool. Cyclists should be able to choose what they wear.

3. Do you provide consent for your opinion to be made public?

Yes

- 4. If no, are you happy if we say you provided an opinion but didn't want it made publicly available?
 - Yes No

Making bike riding easy for everyone

 ¹⁶ <u>http://injuryprevention.bmj.com/content/16/Suppl_1/A228.3</u>
<u>http://www.sciencedirect.com/science/article/pii/S0001457500000737</u>
¹⁷ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1410838/

¹⁸ http://www.ncbi.nim.nim.gov/pmc/anicles/PWU-1410838/

¹⁸ http://www.sciencedirect.com/science/article/pii/S0001457506001540

¹⁹ http://journals.sagepub.com/doi/abs/10.1177/0956797615620784

²⁰ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1731007/ http://www.cyclinguk.org/campaign/safety-in-numbers



Signed:

Date: 22/09/2017

Please send completed form to craigr@bicyclenetwork.com.au before 5pm, Friday 13 October, 2017.

Making bike riding easy for everyone

Level 4, 246 Bourke Street Melbourne VIC 3000 234 Crown Street Darlinghurst NSW 2010 210 Collins Street Hobart TAS 7000 Suite 5, 18-20 Cavenagh Street Darwin NT 0800

Freecall: 1800 639 634 bicyclenetwork.com.au