# Submission to the 'Personal choice and community impacts' Senate Enquiry.

This submission is primarily related to point 'd' in the Inquiry terms of reference, although the arguments also touch more broadly on point 'f' (see below).

The economic and social impact of legislation, policies or Commonwealth guidelines, with particular reference to:
d) bicycle helmet laws, including any impact on the health, enjoyment and finances of cyclists and non-cyclists;

f) any other measures introduced to restrict personal choice 'for the individual's own good'.

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# Introduction

Commentators frequently express the notion that because something is a 'good idea' or 'recommended' it should be made a legal obligation.

The train of thinking goes like this:

- X is an activity that carries some risks
- It is therefore a good idea to also do Y when doing that activity, to make it safer
- Doing X without also doing Y should therefore be illegal

The last point in this argument is a complete logical non-sequitur, and yet it is strangely prevalent; examples abound, for example in discussions of lifejackets when fishing<sup>1</sup>. Such discussions rarely undertake any rational analysis of the actual risk of X, or the specific benefit of Y; rather there is a rush to propose legislation simply because it seems like 'common sense'.

Yet absent of any specific measures for both the risk of X and the benefit of Y, the whole thing quickly becomes ludicrous. Using a BBQ carries some risk of burned fingers, and using long handled tongs is no doubt a good idea - but does that mean it should be illegal to turn the snags with your fingers?

The irrationality of this argument is stark when applied to bicycle helmets. Riding a bicycle without a helmet Is a low-risk activity, similar in risk profile to other common activities<sup>2</sup>. It is also good for you; riding a bicycle brings a lot of health benefits<sup>3</sup>.

Some of the risk of head injury may well we reduced when wearing a helmet. So it may be that wearing one is a good idea (although it perhaps should be noted that some scientific research indicates that they can actually increase the risk of some types of serious brain injury<sup>4</sup>).

But to then suggest that it should be a criminal offense to ride without a helmet makes no sense at all. Making it a crime to do something that carries a low risk of injury, but is beneficial to health does not seem like good policy.

This paper presents a suggested framework for evaluating this type of legislation (colloquially referred to as 'nanny state' laws), with a view to ensuring that any such legislation is worthwhile and justified. It also then specifically evaluates bicycle helmet legislation against this framework.

It also discuss some of the issues faced by cyclists and society more generally due to mandatory helmet legislation, including law enforcement, enjoyment and individual financial implications.

# A definition of 'nanny state' laws

Governments and administrations sometimes pass legislation which has the purpose of 'saving people from themselves'. That is to say, some behaviour, activity or pursuit is considered so be so dangerous to the individual that the state is justified in preventing individuals from undertaking the activity.

It is important, in the context of a discussion about 'nanny state' laws, to distinguish between cases where the law is solely or primarily concerned with preventing harm to the individual undertaking the activity and cases where the law is primarily or solely concerned with preventing harm to third parties.

An example of the latter would be the prohibition of smoking in some public places. The intent and justification of the legislation was to ensure the comfort and good health of others were not impinged on by those who choose to smoke. As an activity, smoking remains legal despite the harm it causes the smoker.

Laws that make it illegal to ride a bicycle whilst wearing only a sun hat are clearly of the former type. The justification of the law is wholly based on the apparent risk to the individual posed by cycling, and the reduction in that risk afforded by a bicycle helmet.

Commentators and indeed legislators sometimes confuse these two things; most typically by recourse to an argument that the healthcare costs of treating those injured or rendered ill by a given activity is a burden that is borne by society, and as such constitutes third-party harm. Such arguments are spurious, and should not warrant serious consideration. Heathcare costs in the Australian health system are by definition shared. Any such argument requires a completely different approach to healthcare provision whereby an individual's access to treatment is dependent on the lifestyle choices they made prior to becoming sick or injured. We do not restrict healthcare access for those who choose to drink alcohol, or who are obese. Neither do we restrict healthcare access for those who were injured as a result of their own criminal activity. Thus any parties making this type of argument, absent of an overall call for the entire system of healthcare provision in Australia to be radically reformed and restricted, are demonstrably partisan and should be rejected.

Notwithstanding the above, even if this spurious approach is taken to justify the criminalisation of bare-headed bicycle riding, it should be noted that the argument in any case fails. Several studies have demonstrated that riding a bicycle, even without a helmet, has significant health benefits. These benefits include a reduction in diseases such as diabetes and heart disease, as well as improvements in mental health; these benefits have been shown to outweigh the risks of cycling by a factor of 9:1.<sup>5</sup> It also yields other benefits, for example reduced road maintenance costs and traffic congestion (vs other transport choices). Federal government figures show that that cyclists benefit the economy by more than \$21 for every twenty minutes ridden<sup>6</sup>, benefits that accrue even if the rider is unhelmeted. As such, the cost of treating injuries to unhelmeted cyclists that could have been prevented or ameliorated by a helmet is smaller than the benefit accrued to society by those same cyclists.

# A proposed evaluation framework for 'nanny state' laws

Almost by definition, 'nanny state' laws involve some reduction in freedom; an activity that could previously be freely enjoyed in a certain way becomes a criminal offense. Such curtailment of liberties should not be undertaken lightly. For the state to step in and override an individual's own decision on how much risk to take with their own physical or mental health runs counter to the civil liberties and rights of autonomy that we expect and demand in a liberal democracy. As such, any such legislation should pass strict scrutiny before being passed into law. That scrutiny should cover five key principles:

- 1. Is the activity or pursuit significantly or markedly more dangerous to the individual than other comparable activities that remain unregulated?
- 2. Is the activity one in which a normally functioning person might be unable to properly assess the risk to themselves posed by the activity?
- 3. Does the activity incur a significant and unreasonable burden on the rest of society?
- 4. Does the limitation of such activity have negative side-effects, and do such effects cancel out some or all of the proposed benefit?
- 5. Has the introduction of such a law been subject to appropriate sceptical scrutiny, and will reviews of its effectiveness be undertaken post implementation?

Each of these principles is discussed in more detail below, along with specific analysis of how it applies to bicycle helmet legislation.

## Principle 1: The test of comparison

The first test of a 'nanny state' law is the test of comparison – is the activity that is to be regulated significantly more dangerous than other activities which remain unregulated?

This is an important test, as legislation that fails this test cannot be fair and equitable. To arbitrarily restrict an individual's freedom to undertake one activity, whilst other, similarly dangerous activities remain unregulated cannot be justified. To allow such an approach invites partisanship and lobbying by special interest groups.

There are two useful comparisons that can be made with respect to cycling. It can be compared to other modes of transport, and it can be compared to other sports.

a) Cycling as transport

Cycling is a form of transportation; it allows a person to get from one place to another. Of course, someone might choose instead to walk, or drive. So how does the risk of head injury compare between the three different modes?

This has been examined in research<sup>7</sup>, and the findings are as follows:

Risk of head injury per million hours travelled		
Unhelmeted cyclist	0.41	
Pedestrian	0.80	
Motor vehicle occupant	0.46	

As can be clearly seen, cycling does not present a larger risk of head injury than either of the other modes. Indeed, from these results one would imagine that mandating helmets for pedestrians would be of more benefit!

b) Cycling as a sport

Cycling is also a sport, of course, and many people choose to cycle for fitness, social and competitive reasons. So how dangerous is cycling compared to other similar sports?

This too has been answered by research<sup>8</sup>, based on government statistics. The results are as follows

Activity	Hospitalisation per 100,000 participants
Roller Sports	738.6
Australian Rules Football	734.3
Horse Riding	692.7
Rugby League Football	677.9
Netball	150.2
Cricket	121.3
Cycling	97
Running	18.2

It can be seen that, compared to other sports, cycling has a rather low rate of overall injury. It is also worth noting that the percentage of head injuries sustained by cyclists is about the same (head injured in ~30% of hospitalised people) as it is for football and cricket.

As can be seen, cycling is actually a much lower risk activity than other popular sports, and the head injury rate is also not especially high.

Both of these comparisons serve to show that criminalising riding a bicycle without a helmet cannot be justified on comparative risk grounds. There is no evidence that cycling is an unusually risky activity, nor that head injuries are especially prevalent. To curtail the freedom of people to ride a bicycle without a helmet because of the risk of head injury, whilst not imposing similar restrictions on other similar activities that have similar risks and injury levels is inequitable and unjustified.

As such, mandatory helmet laws fail the first test laid out for 'nanny state' legislation.

## Principle 2: The individual assessment risk

The second test for any 'nanny state' law is whether an individual is able to make an adequate assessment of the risks associated with an activity. If, for some reason, people are not able to make an informed, rational judgement about their choices there may be an argument that society has a role to play to make those choices on behalf of the individual, in the form of legislation.

An example of this would be activities that are both harmful, and addictive. Those individuals who become addicted to for example alcohol or gambling might be unable to make any kind of rational or adequate assessment of the harm they may cause to themselves by undertaking the activity.

Even in such cases, however, legislation should be approached with caution, and it still needs to meet the other tests for 'nanny state' laws. In particular, lawmakers need to be aware of the risk that those individuals who are able to make such an assessment do not have their freedoms negatively impacted by being 'caught up' in such legislation. Legislation is a blunt instrument, and it needs to be recognised in such circumstances that more targeted interventions aimed at those at risk of harm may be of more benefit.

It is hard to see that riding a bicycle without a helmet would fall into this category. Indeed, by looking around the world we can see that riders are actually quite good at assessing the risks, and modifying their behaviour to suit.

In the UK, for example, where helmet wearing is not mandatory for cyclists, about a third of cyclists choose to wear a helmet<sup>9</sup>. It has been observed that cyclists riding at low speeds on paths in the UK tend not to wear helmets, whilst those riding at speed on roads choose to<sup>10</sup>. However, injury rates for cyclists are lower than in Australia<sup>11</sup>. Hence it seems these choices are rational and deliver good outcomes.

Another comparison closer to home is the Northern Territory. The NT has the most relaxed bicycle helmet rules in Australia, and helmets are not required unless the rider is riding on a roadway shared with cars. As a result, the rate of helmet wearing in the Northern Territory is lower than most other places in Australia. However, the NT also enjoys one of the lowest rates of cyclist injury<sup>12</sup>, despite on most measures having the most dangerous roads<sup>13</sup>.

It therefore seems that cyclists are quite capable of making sensible and rational decisions about helmet wearing; in jurisdictions where helmet wearing is not compulsory there is no evidence that cyclists are placing themselves at undue risk, and we can see them making rational decisions about when to wear helmets.

As such, mandatory helmet laws fail the second test laid out for 'nanny state' legislation.

## Principle 3: The 'burden to society' test

Activities which create some form of burden or hazard to society arguably need to be restricted or controlled in order to manage to remove that burden or hazard. It is this that forms the third test; Does the activity incur a significant and unreasonable burden on the rest of society?

It has already been discussed in section 2 that this argument cannot be extended to the health costs associated with treating injury from any given activity, and in any case even when this argument is made for bicycle helmets it fails.

More generally, it might also be said that a burden that consists purely of a monetary one borne by the taxpayer would not qualify under this test; otherwise we might argue that the provision of roads is an expensive burden on society for the benefit of those that choose to drive, or the provision of schools a burden for those with no children. This is not how the Australian democratic system works; taxes are paid into general revenues, and then spent according to the policies of elected governments. Anyone attempting such an argument would need to do so by the established political processes – that is to create a party that had such a proposed change to funding in its manifesto, and then garnering enough support to be elected into government.

Rather, this test is intended to address activities that might create a moral or structural hazard to society. An example of this would be the control of hate speech. On one level this runs counter to the freedom of speech we expect to exercise; and it can be argued (and is by many) that speech alone cannot do 'harm', and such controls are therefore unfounded. However, it is also often suggested that it is restricted because of the overall negative effect it can have on society – public expressions of bigotry tend to reinforce and promulgate such attitudes, and by corollary removing such expressions from the public sphere dilutes and ameliorates such attitudes. (Note the above is intended to illuminate the kind of issues that this test might usefully capture, and is not intended to give any particular credence to any views on the issues surrounding hate speech.)

Even a cursory examination of bicycle helmet usage quickly leads to this test being dismissed. Riding a bicycle without a helmet imposes no burden or inconvenience on society; indeed it makes absolutely no difference to anyone other than those who are forced to wear a helmet. Australian society did not change in any measurable or appreciable way since 1991, when it became illegal to ride a bicycle wearing a baseball cap.

As such, mandatory helmet laws fail the third test laid out for 'nanny state' legislation.

## Principle 4: The 'side effect' test

The forth test for 'Nanny State' legislation requires that there are no side effects from limiting any activity that may service to cancel out or reduce any proposed benefit from the legislation. Banning a dangerous activity is of no use if all the participants simply take up an alternative, equally dangerous activity.

More realistically, it may be that 'Nanny State' type interventions have unexpected and unintended consequences that are even less desirable than the original activity.

This is certainly the case for mandatory bicycle helmets. The most obvious side-effect of the legislation was to significantly reduce cyclist numbers. Numbers vary, but data from various Australian locations puts the figure between 21% and 42%<sup>14</sup>. It should also be noted that cycling was actually on an increasing trend in Australia in the decade prior to mandatory helmet laws being introduced, so these declines in absolute terms are even worse when considered in trend terms.

Australian cycling participation has never recovered from the introduction of mandatory helmet laws. Whilst increases in cycling participation have since been recorded in absolute terms in many states, the growth in cycling remains below population growth – so in percentage terms there are fewer and fewer people riding bicycles<sup>15</sup>.

The net effect of this is to worsen health outcomes. The health benefits of cycling have already been discussed in section 2. Analysis of the health benefits accrued by the protective effects of helmets compared to the reduction in cycling seen when riding bareheaded was criminalised show that at a net level, the legislation has led to a worsening of public health<sup>16</sup>.

Further, the reduction in cyclist numbers has also had the unfortunate effect of making cycling in Australia more dangerous. It has been established that the 'safety in numbers' effect means that as more people cycle, the risk of injury, per cyclist, tends to drop<sup>17</sup>. Research has shown that the individual risk to cyclists has actually worsened since the introduction of mandatory helmet wearing<sup>18</sup>.

The intent of the bicycle helmet law was to make cycling safer, and deliver better health outcomes. As can clearly be seen, the law has failed to achieve this; because of unforeseen side effects the actual outcomes have been the reverse of what was intended, with decreased safety for cyclists, and a lowering of overall health outcomes.

As such, mandatory helmet laws fail the forth test laid out for 'nanny state' legislation.

## Principle 5: The scrutiny test

The final test that should be applied to any 'nanny state' legislation is to ensure the introduction of such a law been subject to appropriate sceptical scrutiny. This is important, as such legislation is perhaps more likely than most to attract partisan lobbying and special interests – whether from those who harbour a values-based opposition to a particular activity, or from commercial or political interests that stand to gain from the advancement of such legislation.

It should be a starting point for any scrutiny of proposed legislation of this type that such regulations are best avoided; that is to say the neutral position is to do nothing. Only if there is significant, even overwhelming evidence that such legislation is needed should it be considered; this is crucial in ensuring freedom of choice is not trampled.

Such scrutiny should also then be undertaken in a non-partisan way, with effective and wide consultation. Care should be taken to ensure ulterior motives or political and commercial interests do not unduly influence the outcomes of such consultation.

If it is decided that such legislation is warranted, the expected benefits to flow from the legislation should be outlined, using concrete, quantitate measures. It is only by the development of such measures can both the problem the legislation is seeking to address and the improvement on outcomes that is desired be properly defined and understood.

Finally, such legislation should be subject to post-implementation review to see if the benefits that were hoped for materialise. This ideally requires an independent examination, and a proper study with 'before and after' measures in place. It should go without saying that if the expected benefits of the legislation do not materialise, or there are significant unforeseen negative side effects, then the legislation should be deemed a failure and repealed, otherwise it simply sits as an arbitrary and unnecessary curtailment of civil liberties. Even better would be a sunset clause on such legislation whereby it automatically lapses after a set period (eg 1-2 years) unless it can be shown that it is delivering the required benefits as expected.

It is instructive to review the processes that led to the introduction of mandatory bicycle helmet legislation in Australia compared to the ideal processes outlined above.

The first calls for bicycle helmets to me made mandatory came in 1978, from the Royal Australasian College of Surgeons (RACS). At that time, there was no scientific evidence that bicycle helmets were effective in reducing injury, but nonetheless the House of Representatives Standing Committee on Road Safety looked at the issue of bicycle helmets. They did not hear any evidence into the effectiveness of helmets, nor undertake any significant consultation or analysis. However, the Committee nonetheless recommended that "cyclists be advised of the safety benefits of protective helmets and the possibility of requiring cyclists to wear helmets be kept under review".

The matter was kept under review, and in 1985 a final report was issued<sup>19</sup>.

The only review of helmet effectiveness that the committee considered prior to issuing its report was a paper by Dorsch et al <sup>20</sup> that suggested that helmets reduce injury rates by 90%. Despite the weight placed on this paper by the committee, the author told an the committee that the conclusions of the study should be treated with care. She said, "That was a hypothetical procedure based largely on an adult group of cyclists".<sup>21</sup> The paper made no evaluation of injury statistics, and relied only on cyclists own observations of their injuries. No subsequent more detailed analysis of the effectiveness of bicycle helmets has ever supported the 90% claim.

The report recommended states and territories 'review the benefits of bicycle helmet wearing ... and unless there are persuasive arguments to the contrary introduce compulsory wearing of helmets by cyclists on roads and other public places'. The wording of this conclusion is important, as legislation relating to bicycle helmets, as a road transport related issue, was a state and territory matter; the federal government had no direct power to issue such legislation. This approach – of recommending an unproven intervention unless evidence can be found to the contrary – runs counter to all accepted practises of critical enquiry and due process.

In 1989, the Hawke government announced federal funding would be made available for a 'black spot' programme aimed at improving roads at and around common accident sites. In order to qualify for the funding, states and territories had to enact a range of legislation aimed at improving road safety. Included in that list of legislation was the requirement for all cyclists to wear a helmet.<sup>22</sup>

This brought even more pressure to bear on the states and territories, and effectively represented the federal government coercing the state and territory governments into passing bicycle helmet legislation, which they did with a bare minimum of consultation. No state or territory made any verification of the efficacy of helmets before imposing legislation.<sup>23</sup>

The first state to introduce legislation was Victoria in 1990, followed by the other states and territories over the next 2-3 years.

At the time of those introductions, no efforts were made to establish any kind of baseline for cyclist injury rates or cyclist numbers, meaning that comparisons of the benefits brought about by the law are difficult, as they rely on incomplete or low quality data sets. Even today there is much debate as to whether the introduction of bicycle helmet laws has had any positive effect on cycling safety, with research ranging from a ~20% net positive in injury reductions<sup>24</sup> to some showing a small disbenefit<sup>25</sup>. Note that even the most optimistic studies show that the law has failed to achieve anything like the 90% reduction in cyclist head injuries that was used as the original justification.

As can be seen from the above, the process of the introduction of laws to make riding a bike without a helmet a criminal offense in Australia, far from being conducted in a proper and sceptical manner, pretty much serves as a case study of how *not* to evaluate and introduce laws that impinge on civil liberties. The law was introduced with almost no critical scrutiny or evaluation, there was no consideration of any possible side-effects (such as a drop in cycling participation), very little scientific evidence was heard, public consultation was at best limited and there was no mechanism for reviewing the effectiveness of the law post-implementation.

As such, mandatory helmet laws fail the fifth and final test laid out for 'nanny state' legislation.

### Assessment summary of mandatory bicycle helmet laws

When evaluated against a proposed framework for 'nanny state' legislation, it can be seen that mandatory bicycle helmets laws comprehensively fail. Mandatory bicycle helmet laws were introduced without proper scrutiny, have not met any of the targets outlined for them at their inception, have had significant and negative unintended consequences and have not been properly or systematically evaluated. As such, they represent bad legislation that should be immediately repealed.

It is worth noting that this assessment is not unique. When helmet laws were examined by a state parliamentary committee in Queensland, it was recommended that they be significantly relaxed<sup>26</sup>. (That recommendation was overruled by the then State Transport Minister, who declared that 'Personally I'm a big believer in the benefits of helmets'<sup>27</sup>. Unfortunately the Minister seemed to be running into the 'good idea' fallacy described in the introduction to this paper.)

Others have come to the same conclusion. In the twenty years since mandatory bicycle helmet legislation was introduced in Australia, only three countries have followed suit – New Zealand, Israel and Mexico. Two of those countries (Israel<sup>28</sup> and Mexico<sup>29</sup>) have since repealed the laws due to public opposition and ineffectiveness. Indeed, on the global transport safety stage, Australia's mandatory helmet laws are held up as an example of what *not* to do<sup>30</sup>.

# Enforcement and policing

When laws are passed, an obligation falls to the police to enforce that law. This of course requires resources, and comes with costs.

Police resources are finite. This can mean that the enforcement of trivial laws takes focus and resource away from other more serious matters. Alternatively, the law is not enforced, which has implications for the respect for authority; if laws are only selectively applied then this tends to undermine the whole basis of the rule of law.

Laws such as those making it illegal to ride a bicycle without a helmet are undoubtedly trivial, but consume a lot of police resources. In one operation on one day alone, NSW police issued 121 infringements to cyclists who were helmetless<sup>31</sup>. Assuming an average thirty minutes spend on issuing each ticket (including collecting the cyclists details at the scene, and then entering those details into a computer to issue the ticket later), this represents 60 man hours of work that could have been deployed on other duties.

The police officers working on the street issuing such tickets in some cases recognise that this is not a good use of their time. In one example, an officer emailed from his official police email, noting that he thought the bicycle helmet law should be repealed for adults<sup>32</sup>.

Where cyclists who receive fines have challenged them in court, they have often had the charges set aside or dismissed<sup>33</sup>. In one notable case, an appeals court judge made an on-the-record statement that bicycle helmet laws were unnecessary and helmet wearing should be a matter of choice<sup>34</sup>. A magistrate in a different case made the observation that helmet laws were 'not helpful'<sup>35</sup>.

Where laws do not have the support of either the police or the judicial system, we should really ask whether they are good laws, or should be repealed.

# Individual impacts

'Nanny state' legislation almost by definition imposes some burden on individuals who wish to undertake an activity so regulated. For some, perhaps many participants, the burden may be slight or non-existent, as they would in any case voluntarily comply with the provisions of the law, even if the law was not in force.

For other, however, the burden is real, and falls into two main categories; monetary, and experiential.

The monetary aspect is perhaps obvious. A regulation that requires certain safety equipment means the participant will have to purchase that equipment. Depending on the cost of the equipment and the wealth of the individual, this might even lead to the participant having to stop participating in the activity (or choose to break the law).

It is also worth noting that nanny state legislation may also impose an indirect monetary burden on those who would in any case choose to follow the legislation. This is because in the case where safety equipment is mandated, it becomes necessary to specify some sort of standard that the

equipment must adhere to in order to be compliant with the law. Typically in Australia these are ANZ standards, and manufacturers then need to gain 'type approval' for their products in Australia – even where they may already have similar approvals in other parts of the world. Gaining such approvals costs the manufacturer money, which then has to be recouped from the consumer by increased prices.

This can be seen very clearly with bicycle helmets. A helmet costing \$100AUD in Australia<sup>36</sup> can be purchased for \$70USD<sup>37</sup> in the US. The two models are identical, but the one purchased from the US does not have an ANZ compliance sticker on it, which makes it illegal to use in Australia. Hence if there was no mandatory helmet law, someone wishing to buy that helmet could do so from overseas, whereas today it is necessary to buy locally at significantly greater expense.

The experiential burden imposed by such laws are harder to assess in quantitate terms, but in general represent a lessening of pleasure or increased inconvenience. Thus such legislation decreases the individual enjoyment of an activity.

Many people consider bicycle helmets to be hot and uncomfortable<sup>38</sup>. The inconvenience of a helmet stands in the way of cycling participation, with one in five people saying they would ride more if they did not have to wear a helmet<sup>39</sup>. 'Riding with the wind in your hair' is a well-known metaphor for a pleasurable activity, and one that can be literally achieved on a bicycle – except in Australia, where to do so is a criminal offence.

## Conclusion

'Nanny state' laws need to be introduced with care, to ensure that the associated curtailment in freedom they bring about is justified.

A suitable framework for assessing the value of such legislation would ensure consideration of a range of issues:

- A comparison with similar activities to ensure one activity is not being unfairly singled out for regulatory attention
- That people undertaking the activity are reasonably able to make their own risk assessment of the activity
- That the activity does not impose a (non-financial) burden on others or the wider society
- That the regulation of the activity will not cause unforeseen side-effects
- That any regulation is properly reviewed for effectiveness, and repealed if it is found to be ineffective

When compared against such a framework, mandatory bicycle helmet legislation fails on every single point. It has singularly failed to produce any of the health benefits that were predicted when it was introduced.

Mandatory bicycle helmet legislation does not enjoy the support of the police and judicial system, with courts regularly dismissing helmet-related charges against cyclists, and police officers calling for the law to be reformed.

Finally, mandatory helmet laws make cycling a less pleasurable activity. An activity that should epitomise the very notion of freedom – riding along with the wind in your hair – not has to take place under a legally-proscribed, hot and itchy polystyrene hat.

It is time to free Australian society from the blight of this ill-considered 'nanny state' legislation. Mandatory helmet laws for cyclists should be repealed.

## References

Note for convenience where available internet references have been given for scientific publications rather than the original journal citation. The full publication details are available by following the links.

<sup>1</sup> https://www.facebook.com/nswpoliceforce/posts/10151709419966185

<sup>2</sup> http://www.freestylecyclists.org/how-safe-is-cycling-in-australia/

<sup>3</sup> http://www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/Cycling\_health\_benefits?open

<sup>4</sup> http://www.cyclehelmets.org/papers/p787.pdf

<sup>5</sup> Do the health benefits of cycling outweigh the risks? de Hartog JJ, Boogaard H, Nijland H, Hoek G.

Environmental Health Perspectives, doi: 10.1289/ehp.0901747. 2010.

<sup>6</sup> http://www.smh.com.au/national/bike-riders-save-economy-21-on-each-commute-20130730-2qxdg.html

<sup>7</sup> http://www.sciencedirect.com/science/article/pii/0001457596000164

<sup>8</sup> http://www.nisu.flinders.edu.au/pubs/reports/2006/injcat79.php

<sup>9</sup> http://www.trl.co.uk/online\_store/reports\_publications/trl\_reports/cat\_road\_user\_safety/

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<sup>10</sup> https://chillikebab.wordpress.com/2012/04/22/riding-in-the-uk/

<sup>11</sup> http://www.cycle-helmets.com/cycling-blind-spot.pdf

<sup>12</sup> http://www.parliament.qld.gov.au/documents/committees/THLGC/2013/INQ-CYC/tp-

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<sup>13</sup> https://bitre.gov.au/publications/ongoing/road\_deaths\_australia\_annual\_summaries.aspx

<sup>14</sup> http://www.cycle-helmets.com/helmets-uk-dec-2012.pdf

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<sup>16</sup> http://www.cyclehelmets.org/1249.html

<sup>17</sup> http://www.cycle-helmets.com/safety\_in\_numbers.pdf

<sup>18</sup> http://www.ncbi.nlm.nih.gov/pubmed/8870773

<sup>19</sup> www.aphref.aph.gov.au-house-committee-reports-1985\_1985\_pp360.pdf

<sup>20</sup> DO BICYCLE SAFETY HELMETS REDUCE SEVERITY OF HEAD INJURY IN REAL CRASHES?, Dorsch et al. Accident Analysis and Prevention: 1987 Jun;19(3):183-90

<sup>21</sup> http://www.cycle-helmets.com/clarke-helmet-policy.pdf

<sup>22</sup> http://crag.asn.au/brief-history-of-helmet-law-in-australia/

<sup>23</sup> http://crag.asn.au/history-of-helmet-law-in-australia/#3

<sup>24</sup> http://www.sciencedirect.com/science/article/pii/S0001457511001485

<sup>25</sup> Curnow WJ. Health Promotion Journal of Australia, 2008 Apr;19(1):10-15.. 2008.

<sup>26</sup> http://www.parliament.qld.gov.au/documents/committees/THLGC/2013/INQ-CYC/rp-39-29Nov13.pdf

<sup>27</sup> http://www.scottemerson.com.au/media/media-releases.html

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