

The article below by John Wren was published on the BHSI web site. The article was originally submitted for publication in *ChainLinks* and was going to appear side-by-side with a response. Unfortunately publication did not occur and no response was produced at the time, finally here is one... Let's hope not too many bicyclists have been killed/injured in the meantime.

Two Sides

The paper on the left below argues that the New Zealand bicycle helmet legislation is essentially a good thing, and that people should stop arguing over it and instead unite to move forward in promoting cycling.

It comes across as very reasonable and will undoubtedly invoke much sympathy for its position.

Unfortunately it contains misleading information and ignores the very real question: has the *law* worked? For this reason it is a very dangerous paper, as it could easily mislead people into accepting a law which actually decreases health and safety. There is certainly research which shows the law has failed to reduce injury rates and has cost a huge amount of money for little or no benefit.

The following is a draft response to some of the issues raised, pointing out what is misleading. Hopefully on reading this people will be encouraged to actually examine seriously the effects of the law, to the benefit of all.

Bicycle 'Helmet Wars': Fact, Fiction and Moving Forward

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As a recent reader of *ChainLinks*, I have been surprised by the apparent on-going war against the wearing of bicycle helmets within the newsletter, as illustrated in the January/February issue (pg 20; 25-26; 27-29). As a Safekids advocate for child safety, and because preventing bicycle injuries is a theme for next years KidSafe week, the topic is of interest and concern to me. Safekids is a service of Starship Children's Health, which works to keep children aged 0-14 years safe from preventable injury.

In the following paragraphs I would like to firstly outline the case for the use of bicycle helmets, which some readers may not be aware of if they just read the articles in *ChainLinks*. Secondly, I would like to make a plea for moving beyond the "helmet wars" by suggesting that our

Bicycle Helmet Legislation: Fact, Fiction and Moving Forward

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The use of the word "apparent" is a good choice as a "war" against the wearing of bicycle helmets has never in fact been waged in the pages of *ChainLinks*, as the former Editor I can state that categorically. The Cycle Advocates' Network (CAN) of New Zealand, the publisher of *ChainLinks*, does have a policy that the bicycle helmet legislation should be reviewed, but that is not a "war" on helmet wearing. As advocates for bicycle riders preventing injuries to bicyclists is of course very important to CAN. If a review of the bicycle helmet legislation were to confirm the reports that it was failing to meet its objectives of improving bicyclist safety then something should clearly be done to address that.

CAN is certainly a concerned advocate for the safety of cyclists, as am I also.

The author presents the issue as one over whether bicycle helmets should be worn or not. This is not the issue at all and is very misleading.

energies would be better spent advocating for cycle use that is safe and healthy through promoting environmental and engineering changes that have the potential to benefit both cyclists and pedestrians.

Any professional safety expert, statistician, etc. knows that when proposing to implement any measure its effect across a population and not in individual cases is of key importance. A proposed safety measure may well be seen to work in certain individual cases but fail in others. Across a population these successes and failures may sum to an overall benefit or and overall loss.

Sadly in the case of bicycle helmet legislation the across the population effect has often been a loss, despite the apparent benefit in the cases of some individuals.

To be clear: whether an individual should wear a bicycle helmet and whether a law should mandate their wearing for all are different questions.

To "move beyond" the issue of the success or failure of the law, without knowing the law is in fact a health and safety win, would be irresponsible in the extreme.

'Helmet Wars': Fact and Fiction

The latest skirmish in the 'helmet war' has just occurred in two eminent academic journals: British Medical Journal(1) and the Injury Prevention journal.(2) At the core of the debate is the opinion on one side that helmets are effective and thus should be worn, and that compulsory use through legislation is the best method of achieving use(2, 3). The counter argument is that helmets are not that effective, compulsory use is an unnecessary imposition upon cyclists, and the focus upon cycle injuries deters people from seeing the positive aspects of cycling such as improved health through exercise(4, 5). Both sides claim support from research and use rhetoric to buttress their arguments.

Before making my plea for a ceasefire, the following summarises the main points made by the protagonists: The text in italics summarises some of the more common and negative assertions about the efficacy of bicycle helmets, followed by my response.

Cycle injuries are not a major problem in New Zealand.

Response: The burden of unintentional injury and bicycle injuries in New Zealand is significant

Fiction from Fact...

Using facts to create misdirection and so produce a false impression without actually lying is a tactic sometimes used by politicians. This should have no place in a well-balanced and scientific presentation, unfortunately it is about to rear its ugly head...

The summary of the "core" of the debate here is clearly an opinion that can be challenged, however that will be addressed below and need not be covered here.

The key point is not the efficacy of bicycle helmets at all, but whether the bicycle helmet legislation should exist or not. Of course if helmets provide no benefit then the legislation is unjustified, to say the least! However if they provide some benefit, and clearly to argue they can provide none at all would not stand up to scrutiny, would not imply they should be compulsory. We need to show that compulsion itself provides a benefit, and sadly in New Zealand that has not proved to be the case.

Unintentional injury is a significant health issue in New Zealand. For ages 1 to 34 unintentional injury is the leading cause of death in New Zealand, and it is the third leading cause of death for those aged 35-54 years. Unintentional injuries are also the leading cause of hospitalisation for children aged 10-14 years, and they are the second leading cause of hospitalisation for those aged 5-9, and 15-34.(6) This premature loss of life represents very significant levels of lost! productivity. It is estimated that of the potential years of life lost in 1996, 21% were due to injuries.(7)

For the period 1992-1996 bicycle deaths accounted for 1.1% of all injury related deaths, and 2.3% of all injury related hospitalisations.(8)

For all age groups, male cyclists are 2.9 times more likely than females to be seriously injured.(9)

In period 1989 to 1998 there was a decrease of 43% in cycle deaths involving a motor vehicle on a public road, and a decrease of 47% in hospitalisations for the same period. (9)

This reduction in the bicycle related injury toll, and the relatively small numbers of cycle injuries in the context of the overall injury picture does not reflect the scale of such incidents. For example between 1989 and 1998 there were a total (all ages) of 195 cyclist deaths, the vast majority (91%) of which involved a collision with a motor vehicle on a public road. In the same period, 12,103 cyclists (all ages) were hospitalised due to injuries while riding, of which one-fifth (21%) resulted from a collision with a motor vehicle.(9)

Of those children (those aged under 15 years) who were injured in New Zealand resulting in death or hospitalisation during 1990-1998, 55 (4.9%) died and 6436 (5.8%) were hospitalised due to injuries suffered while riding a bicycle. The vast majority of deaths occurred as the result of a collision with a motor vehicle (particularly for 10-14 year olds). In contrast, the majority (83%) of hospitalisations did not involve a motor vehicle.(10)

In the period 1989-1998, the highest rates of bicycle death and hospitalisation (26%) were to children aged 10-14 years. The Injury Prevention Research Unit at the University of Otago suggests that the high rates of serious injury suffered by children in this age group is "probably attributable to the longer number of kilometres cycled."(9) Those in the 35-39 year old age group, also had similar high rates of serious injury.(9)

Unintentional injury may or may not be a significant health issue in New Zealand, but it is only relevant to the topic if bicyclist injuries form a significant preventable percentage. Do they?

Also note that the chances of "death from natural causes" increase as people get older, so stating that unintentional injuries are the leading cause of death for ages 1-34 while true is misleading. The biggest cause of death is in fact being born, but that is a pretty useless statistic!

What percentage, say, was the deaths of motor vehicle occupants? Without context this tells us little.

And for male drivers?

These percentages are meaningless without being placed into context. We need to ask many more questions, e.g. did the total number of hours people spent bicycling change? (Answer: Yes.)

For example: If for every 100 million hours of bicycling 100 bicyclists die then, all other things being equal, if only 57 million hours of bicycling occur only 57 deaths would be expected - a decrease of 43%. However the death rate in both cases is the same, at 0.0001%, and unless you also know that in the 43 million hours people were no longer bicycling they were doing something with a lower death rate you cannot say whether this is a win or a loss.

The cause of death is often "collision with a motor vehicle", this is very important, and misleading in this context...

According to the Government the bicycle helmet legislation was passed due to the danger bicyclists are to *themselves*. There are important legal, moral, and scientific reasons for this.

As an example of the first two: do we pass laws requiring potential mugging victims to take actions to avoid being mugged, or laws which act against the muggers? This is a complex issue we will not cover further here.

The science side is relatively easier to deal with: bicycle helmets are not, and using currently known materials cannot be, made to protect against impacts from motor vehicles.

Land Transport Safety Authority traffic crash data for 1995-1999 for child cyclist injuries resulting from coming into contact with a motor vehicle shows that an overwhelming 90% of injuries occurred in a 50kph speed zone, 83% on a flat road, 49% at an intersection, and 27% at a driveway.(11)

While there is a need for effective injury prevention at all stages of the lifespan, there is a strong argument for children receiving "first call" on available resources. Children, unlike adults, receive only one chance at development and are rarely able to speak directly to decision-makers about their needs. This principle is enshrined in "First Call for Children" originating from the World Summit for Children (September 1990).

In summary, injury is a significant issue in New Zealand, and New Zealand's overall rate of unintentional injury is poor compared to other countries, particularly for children. While cycle injuries can be seen as not a major problem in the context of the whole injury scene, this should not blind us to the fact that numbers of cyclists are being killed and injured on New Zealand roads, and our children are particularly vulnerable.

Helmets are not effective except in minor crashes.

Response: Helmets are effective

There is plenty of evidence for the effectiveness of helmet in reducing the risk by 63-88% for cyclists of all ages, in the event of a crash, of suffering a head, brain, and severe brain injury.(12-14) While bicycle and motorcycle helmets are tested in impacts at 22 kilometres per hour (kph), they usually protect the wearer well where the initial speed is higher, because the severity of the force is normally determined by the closing speed of the head and paving, not by the wearer's forward motion. Research on crashed bicycle helmets shows that most people hit the ground at a relative speed of about 14 kph. If a rider is hit by a car or hits a brick wall at 50 kph and the head takes a direct blow at that speed, no helmet will prevent injury or death. Fortunately, this scenario is not common.(3)

This does not mean that in individual cases a helmet may not provide some benefit, just that across the population the benefit will not be worthwhile. What of course needs to be done to address this is to reduce the car-bike collisions in the first place, and helmets do not address that at all.

Children take risks, just like adults. However children may well be less aware of the level of the actual danger than adults. Across a population an effect known as "risk compensation" occurs with any safety measure, that is the perceived level of protection offered by the measure encourages people to compensate and take even greater risks.

Telling a child that the roads are dangerous because of the levels and behaviour of the motor traffic on them, and then giving the a bicycle helmet to "protect them" when it is not designed to do so, is a questionable act at best. In other words the very act of talking up first the dangers of cycling; it is in fact far safer and healthier than most people in NZ today realise; and then talking up the protection offered by bicycle helmets, is doing our children no favours at all.

A fair summary, but says nothing about the efficacy of bicycle helmet legislation. The implication that "there is a problem" and "bicycle helmets are a solution" do not combine to say "bicycle helmet legislation is (part of) the solution to this problem". Life jackets might save you from drowning, kevlar vests from being shot, use the other way around and a lot of people would die.

This is misleading as it is totally one-sided.

The work of Rivera et al (12, 14) has been shown to be flawed (22), why is it still being quoted?

In New Zealand both pre-law (23) and post-law (24) it has been shown that the increase in bicycle helmet wearing has produced **no** corresponding decrease in head injury rates.

The issue of under what circumstances a bicycle helmet might provide meaningful protection, as opposed to having no effect or actually increasing the risk of injury/death, is a complex one. We know for instance that brain

This view on the effectiveness of helmets is questioned by some cycling advocates, and a very few researchers most notably Adams & Hillman, and others.(4, 15-18) Adams and associates argue that the effectiveness of helmets is overstated because cyclists who wear helmets are less cautious and thus more likely to be injured than those who do not wear helmets ("risk homeostasis" theory). Or, that there are other factors that explain the apparent effectiveness of bicycle helmets, such as changes in the patterns of risk exposure, which better explain changes in injury.

The views of Adams et al are rejected as largely unsubstantiated by experienced injury prevention researchers and practitioners. The debates have recently been well-rehearsed in recent issues of the [Injury Prevention Journal](#) and the [British Medical Journal](#).

Safekids is committed to the promoting the use of bicycle helmets as one effective way to help reduce New Zealand's child injury burden.

Nobody uses helmets in the Netherlands.

Response: The situation in New Zealand and Holland are not the same

Some people do use helmets in Holland, and increasingly parents are helmeting their children there. Holland also benefits from unique bicycle facilities and drivers who are expecting them on the roads. When compared to New Zealand, there are also other significant differences such as, road design, road surfaces, trails, traffic, signalisation,

damage can occur before a bicyclist's (or pedestrian's) head is actually struck by anything - including a car or the road.

So what do we do? We look at the across population injury rates and see what has happened. Sadly the answer in New Zealand, and in other areas with bicycle helmet legislation, the answer is injury rates have usually not dropped. Indeed in some cases they have increased, a fact acknowledged by the New Zealand Government.

This is very misleading.

First, risk compensation is a well known and documented phenomenon, as the old adage goes "give someone a safer ladder and they will climb higher."

Second, while some researchers and practitioners debate whether risk compensation is an issue in this case and in general argue that bicycle helmet legislation is a good thing, there are at least as many who are strongly opposed to legislation as they see it as a health and safety cost. The best that can be argued is that overall, across the globe, there is no consensus and so no conclusion is possible.

The statement made by the author here is totally misleading.

In light of all the above it is very worrying that Safekids are committed to promoting bicycle helmets, which in New Zealand means promoting the law. There is plenty of evidence in New Zealand that shows the law has failed as a health and safety measure, and has cost a huge amount of money (25, 26) which could otherwise have been spent on actually improving safety. Why does Safekids not address this? Why don't they see if the law can be altered so it does work? To simply ignore any evidence which disagrees with your preconception is irresponsible. New Zealanders deserve more than this.

Who ever claimed that nobody in Holland wears a bicycle helmet? That would be silly. The truth is that very few people in Holland wear helmets, and some safety professionals there are concerned that Dutch politicians might catch the "helmet disease" (35) and as a

motorists' attitudes, cyclists' attitudes, the bicycles themselves, car lighting, bike lighting and accessories, and climate.

consequence destroy Holland's enviable safety record.

Claiming that Holland and New Zealand are not the same is stating an obvious fact which has little or no relevance, but has the effect of misleading people into thinking it is significant.

Recall that the Government's argument for bicycle helmet legislation in New Zealand was that the danger posed to bicyclists by *themselves* was sufficient to require legislation. If that were the case then those same dangers would be present for the Dutch - gravity, friction, air resistance, etc. are all much the same, and there is no evidence that the Dutch have inherently better balance than New Zealanders.

This is all "smoke and mirrors," what New Zealand safety professionals need to be asking is how the Dutch achieve lower injury rates, and why their safety professionals are scared of increased reliance on bicycle helmets.

Mandatory helmet laws have discouraged cycling, increased safety fears, resulting in increased health care costs because people are less active.

Response: Safety fears are real and have little to do with helmet laws

Safekids works extensively with community coalitions on preventing child unintentional injury, one of the messages we hear repeatedly from them is that parents have a very real fear for the safety of their children as cyclists and pedestrians. These fears originate in concerns about the transport environment, such as high traffic density and speed in urban areas, and unsuitable traffic routes for cyclists and pedestrians because of 'stranger danger', graffiti, poor lighting, and a lack of safe crossing points etc. A recent Bikewise survey has found that when children were asked to state the dangers they faced when riding on the road, the most common answers given involved cars (55%, unspecified) and "cars hitting me" (42%).(19) Safety helmets are not seen as a "threat" or a source of fear, a nuisance and expense maybe; rather they are welcomed as a means to alleviate some of their fears. It is simplistic to blame the decline in cycle use and the rise in sedentary behaviour upon mandatory helmet use. Even the British Medical Association policy paper on cycle helmets, which argues for increased cycle use for health reasons and does not support compulsory helmet use laws, acknowledges the effectiveness of cycle helmets and *"strongly recommends that all cyclists, especially children, wear proper fitting helmets"*.(20) (emphasis added)

Parents usually are concerned over the safety of their children, and this is as it should be.

However whether their fears are always "real" is certainly debatable, as a race we tend to be illogical when it comes to our children!

That of course doesn't mean that there are not real dangers out there, but we have to place them in context and apply meaningful and effective strategies to counter them. The argument here is not about whether dangers exist, but whether bicycle helmet legislation has been shown to be an effective measure at addressing them - and that case is at best unproven, and the weight of evidence is certainly against them.

As to helmet promotion and legislation increasing the perception of the danger of cycling this is inevitable. In New Zealand the negative effect of the helmet legislation campaign has been acknowledged by the LTSA (34). How many adults in New Zealand know that the head injury risk per hour of car travel is rather similar to that of bicycling? Or that

wearing a helmet in a car makes as much sense, according to the theory espoused by bicycle helmet legislation advocates, as it does on a bicycle?

In New Zealand it cannot be shown that the bicycle helmet legislation has discouraged cycling, but it cannot be shown that it hasn't either - the problem is the lack of data. In other situations, particularly in Australia, sufficient data has been available to show that in some cases bicycling did decrease.

Again the section ends up with confusing bicycle helmet wearing and the effects across a population of legislation.

Some riders resent helmet laws as unnecessary government interference and argue New Zealand is over regulated.

Response: Environmental and engineering changes are more effective than behaviour change: regulation tends to be only introduced when there is widespread support for it

Safekids believes that one of the most effective ways of reducing the New Zealand injury toll is to advocate for engineering and environmental changes that reduce reliance upon individual behaviour to promote safety.

This approach is consistent with current developments in the field of injury prevention.

We agree that some may resent helmet laws. However, safety regulation in New Zealand generally only happens when there is there is popular consensus for the regulation, we believe this is the case for bicycle helmets and other laws such as requiring the use of motor cycle helmets, seat belts and child car seats

Environmental and engineering changes are certainly to be recommended, behavioural change is harder but has also worked in many cases.

The campaign to promote bicycle helmet legislation in New Zealand was officially launched in 1986 (28) and a huge amount of effort was put into presenting bicycling as dangerous and bicycle helmets as the answer without any mention of the problems. It is not surprising that by 1994 when the law was introduced the population generally accepted it.

However the population are not generally bicyclists. When looking at the people who were wearing bicycle helmets prior to the legislation the picture was not one of voluntary agreement. The highest wearing rates were among children, many of whom had been compelled to wear helmets by school rules or parents - rules imposed in the large by non-bicyclists. Among the adult bicycling population, who were free to make their own choices, the wearing rate was much lower.

So yet again the information present will correct in one sense is misleading.

*More pedestrians are killed annually than cyclists.
Shouldn't they be wearing helmets too? Most head injury admissions to hospital (75%) result from car-accidents.
Shouldn't car occupants wear helmets too?*

Response: These questions are misleading, as they have nothing to do with the efficacy of helmets or the need for them. The case for helmets is about the fact that there is a need for them and that they work, not about preventing injury events in other situations.

Cycle helmet advocates have never suggested that pedestrians and car occupants should wear helmets, these questions are part of the rhetoric that I have referred to earlier. Safety advocates have focused upon cycle helmets simply because:

- 1) It is an issue of risk exposure, cyclists on the road are at far higher risk than pedestrians.
- 2) The probability of a serious head injury is higher for a cyclist than a pedestrian, simply because they are travelling faster than a pedestrian when a crash occurs. It is a simple law of physics that the faster the speed the higher the risk of an injury occurring, which is why bringing the urban speed limit down is so important.

1 & 2 mean that there is a much more urgent need for cyclists to wear helmets than for pedestrians.

The epidemiology of car occupant injuries is very detailed and overwhelming in pointing to the need to protect vehicle occupants in a holistic way. This has meant that attention has focused upon seat belts and vehicle safety rules that are aimed at preventing injury full stop - not just head injury. Vehicles already have safety measures built into them to help prevent head injuries, such as collapsible steering columns and steering wheels, and more recently airbags. These sorts of measures are more effective, in this situation, than wearing helmets in a vehicle.

First we are told that "more pedestrians are killed annually than cyclists" and then cyclists are "at far higher risk". Does this add up? Well what is presented here certainly doesn't answer that question.

As to that simple law of physics, it is actually the closing speed which is important. If a car travelling at 50kph bumps into the rear of a car travelling at 48kph the difference is only 2kph, meet head on and they collide at 98kph... If a cyclist travelling at 16kph is rear-ended by a motorist travelling at 50kph the speed difference is actually lower than if the same motorist collides with a pedestrian... Nothing is ever as simple as it sounds.

However that is not to suggest that pedestrians should wear helmets, though some have done so and it has been tried. In Japan an experiment was run in one town which required children walking to school to wear helmets. The result? The same failure as bicycle helmet legislation, but one wonders what psychological effect it had on the children.

Talking about helmets for car occupants has long been taboo among bicycle helmet promoters. However Australian Government researchers (29) have broken the silence and argued that A\$500 Million would be saved annually if seatbelted car occupants also wore helmets, and concluded this was the most cost effective method of protecting them (if all cars were fitted with full airbags, at a huge cost, the savings from helmets fell to a mere A\$350 Million).

Here in New Zealand the LTSA has acknowledged that car occupants would benefit from wearing helmets. Do Safekids not consider children that travel in cars?

A real issue here is one of credibility: the theory states that both car occupants and bicyclists would benefit from wearing helmets.

Yet most bicycle helmet legislation promoters pick'n'choose from this theory - they themselves *choose* not to wear ! helmets in their cars, while calling for bicyclists to be *forced* by law to wear them. If they really believed the theory would they not choose to protect their own heads? Some do (30), but they are a rare breed.

What does such blatant double standards teach our children? Don't we teach them to practice what they preach?

Does wearing a helmet make me feel safer?

Response: Yes and no

Wearing a helmet makes me feel safer in that I am more confident that I will not suffer a severe head injury in the event of a crash. It does not make me feel safer in the sense that I feel that I think I am less likely to have a crash. This is an important distinction that needs to be better understood.

Injury prevention researchers, and advocates such as myself, have never argued that wearing a helmet will reduce the risk of a crash, or that they will necessarily make people feel safer although they may do so. All we have argued is that bicycle related head injuries are preventable and wearing a bicycle helmet is one effective way of achieving this, which should be adopted by all bicycle riders.

The real problem is the car. Debating the merits of bicycle helmets takes attention away from the effort to improve other forms of bicycling safety.

Response: Agreed

Without question, the real problem facing cyclists (and pedestrians) is our love affair with the car and the reliance upon it for transportation, and the commensurate priority given to enhancing the roading network by government over alternative forms of transportation. The debate for a change in priorities is not new, it has been raging in Auckland since the early 1970s. The European Transport Safety Council in a recent review of pedestrian and cycle safety in urban areas has commented that the safety problems "result from a complex mix of factors, but underlying all other problems is the fact that the modern traffic system is designed largely from a car user perspective".(21) Furthermore, the British Medical Association (BMA) has observed that the European Commission has noted that in terms of road casualties, "it is important to ensure that an increase in road safety is brought about through making it safer for people to move around — not by curtailing that movement".(20)

Yes and no is of course right, and who would dispute it?

Post seatbelt legislation the number of accidents typically went up; cars with ABS brakes and airbags are known by insurance companies to experience more crashes. Risk compensation is a fact, but not everyone takes greater risks.

Bicycle helmets obviously do not reduce the likelihood of a crash, which is a major problem with them! Bicycle helmet legislation has proved ineffective at reducing injury rates, while other methods adopted in other countries have proved effective at reducing the crashes themselves.

It is worth noting that many Dutch safety professionals are concerned that an emphasis on bicycle helmets would work against their existing, successful, strategies at improving road safety. Why? As that is what they believe has happened elsewhere.

A plea to move beyond warring over bicycle helmets

On-going litigation by opponents of bicycle helmets is not conducive to removing the fears of many people who would cycle if the roading environment were safer. Safekids would rather join with cycling advocates to promote a safer roading environment and cycle use through environmental and engineering change, than to spend scarce resources relitigating the merits of bicycle helmets.

I would like to suggest that a more cooperative approach would be better, which would see cycling and safety advocates adopt an approach that sees cycle helmets as only one part of a complex picture. I suggest that it would be more profitable for cycle and safety advocates if we were to adopt a policy, which acknowledges that:

Cycle helmet wearing is an important part of a broader strategy to promote cycling as a healthy, physically active mode of transport. Central and local Government should urgently provide adequate resources to improve the conditions for cyclists with more dedicated cycle paths, road traffic reduction and calming measures, together with the provision of secure cycle parking facilities at bus and rail stations, and promoting programmes such as Safe Cycle Routes to School. Driver training and the Driving Test should specifically include and test driver awareness of cyclists and other vulnerable road users such as pedestrians.

The fact remains that helmets will still be necessary even if we can achieve the safest of cycling environments, simply because there will still be off and on road crashes, and without helmets it is likely that there will be an unacceptably high rate of head injuries. Consequently, wear your helmet, in the rare event of a crash there is a high probability that the helmet will help to save your life or protect you from a severe head injury.

People oppose bicycle helmet legislation for a very good reason: there is plenty of evidence it has not worked and has been a waste of those "scarce resources".

Why would anybody seriously concerned with, and knowledgeable about, safety call on people to ignore failure and instead build upon it? Remember the parable of the man who built his house upon the sand?

While all this *sounds* very reasonable it clearly is not!

From the evidence available so far it cannot be said that bicycle helmet legislation is an important part of any safety strategy.

Indeed when safety strategies for bicyclists are being considered elsewhere in world it is more likely for New Zealand and Australia to be used as examples of what not to do than heralded by the pro-helmet legislation groups as examples of the success of their theories.

Why after a decade of the bicycle helmet legislation in New Zealand hasn't the world rushed to follow suit? Why does the debate still continue?

This is simply not a fact and is misleading.

Risks are all around us, some we protect against, others we do not. Should all children always wear knee guards in case they fall, scrape their knee, and get tetanus?

There already is an unacceptably high level of head injuries to motor vehicle occupants, it could be reduced by wearing helmets, yet does the author wear one when travelling in a car? Probably not. Why?

Today in some other countries, and not just in Holland (31), bicyclists enjoy much lower injury rates than in New Zealand, do they really need helmets?

Human beings seek risk, trying to remove it all is inevitably doomed as simply new ways will be found to create it (32).

While none of this suggests that safety measures should not be taken, we certainly cannot argue that bicycle helmets will always be necessary - we cannot even argue they are necessary now. Why? Because we cannot say the bicycle helmet legislation has worked, indeed the weight of evidence in New Zealand is that they have been costly health and safety disaster.

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