Submission No 19

RELIGIOUS EXEMPTIONS FOR THE WEARING OF HELMETS

Organisation: Transport for NSW

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NSW Government

Inquiry into religious exemptions for the wearing of helmets

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Executive Summary

The NSW Government welcomes the opportunity to provide a submission to the inquiry into religious exemptions for the wearing of helmets. This submission focuses primarily on this issue in relation to the Sikh headdress. The NSW Government acknowledges there may be community members of other religions that also wear headdresses as a matter of custom.

The NSW Government recognises the importance of the turban to people of Sikh faith as a fundamental part of their religious observance, and notes that in many situations, the wearing of currently approved helmets is incompatible with traditional Sikh turbans.

There are sound road safety grounds to require helmet use by riders, which is based on a significant body of research evidence. Motorcyclists, cyclists (including riders of e-bikes), and electric scooter (e-scooter) riders are highly vulnerable to road trauma due to the relative lack of crash protection compared to that afforded to occupants of motor vehicles like cars, buses and trucks.

In this context of vulnerability, helmets are critical safety equipment for riders. They significantly reduce the incidence and severity of head and brain injuries and potential death in the event of a crash or fall while riding.

Research from across Australia, and internationally, has consistently identified that helmet non-use is a significant factor in the severity of all rider injuries. Research and testing, has also found that turbans provide no significant head protection in the event of a crash.

Innovations in helmet technologies continue to present opportunities to develop helmets that are compatible with the wearing of religious headdress.

Significantly, recent technology changes and modification to Australian consumer standards and changes to the Road Rules 2014 (NSW), supported by the NSW Government, mean that new bicycle helmets compatible with some types of Sikh turbans, particularly for younger Sikh riders, are now approved for purchase and use on NSW roads.

Jurisdictions across Australia, and internationally, take different approaches to helmet wearing exemptions. In Australia the situation is mixed, with most providing helmet exemptions for riding bicycles and e-scooters. No Australian state or territory provides religious or cultural exemptions from helmet use requirements for motorcycle riders. Internationally, exemptions from helmet use requirements for riders are provided in some countries and jurisdictions that have relatively high Sikh populations.

Any serious road crash involving a rider has a cost and a profound effect that extends beyond the individual to family, friends, first responders and health and other support services. The NSW Government remains committed to reducing road trauma, consistent with the long-term goal of eliminating deaths and serious injuries on the road network by 2050.

This submission had been prepared by Transport for NSW on behalf of the NSW Government in consultation with NSW Health, NSW Police, SafeWork NSW, State Insurance Regulatory Authority and Multicultural NSW.

Context

Helmet rules in NSW

Riders of bicycles, e-scooters and motorcycles are required to wear helmets under the provisions of the Road Rules 2014 (NSW), a regulation established under the *Road Transport Act 2013 (NSW)*. Transport for NSW is the responsible agency for both legal instruments.

Under the Road Rules 2014 (NSW), the rider of a bicycle (road rule 256(1)) and an e-scooter (road rule 262-9) must wear an approved bicycle helmet securely fitted and fastened on the rider's head. It should be noted that e-scooters can only be legally ridden on NSW roads in select locations as part of approved shared scheme trials.

The rider of a motorcycle must wear an approved motorcycle helmet (rule 270(1)(a)). The NSW Road Rules also require passengers on bicycles (rule256(2)) and motorcycles (rule 270(2)) to wear approved helmets.

There is also an obligation on a motorcycle and bicycle riders to ensure any passenger is wearing an approved helmet. There are currently no passenger helmet rules for e-scooters as the vehicles are designed for one person and it is illegal for riders to carry other people.

There are currently no exemptions to these rules in NSW.

Transport for NSW, through the Centre for Road Safety, monitors the incidence of death and injury affecting road users (including on roads, footpaths and other paths) and develops strategies and solutions to improve the safe mobility of all road users.

2026 Road Safety Action Plan

The 2026 Road Safety Action Plan¹ is NSW's foundational strategy for improving road user safety. The Plan sets targets to reduce trauma on the NSW road network.

The Plan is centred on the Safe System approach which NSW has adopted to improve safety outcomes for road users. The Safe System approach is based on the principle that life and health should not be compromised by the need to travel. It envisages integrated measures that improve safety through the categories of Safe Roads, Safe Speeds, Safe Vehicles and Safe People. More information on the Safe Systems approach can be accessed in the 2026 Road Safety Action Plan.

The Plan includes specific priority areas that focus on improving safety outcomes for vulnerable road users, including bicycle and motorcycle riders. Increasing helmet usage and their correct use aligns with the Plan's goal of halving deaths and reducing serious injuries by 30 per cent on NSW roads by 2030.

Regional NSW

When considering road casualty data generally, it should be noted that a significant proportion of Sikhs in NSW live in Greater Sydney, however there are notable Sikh communities in regional NSW, including Woolgoolga, Griffith and Albury-Wodonga. Road trauma rates are higher in

¹ https://towardszero.nsw.gov.au/roadsafetyplan

country NSW and many regional and rural roads are high risk for vulnerable road users, such as motorcycle, bicycle and e-scooter riders, particularly high-speed roads and areas without offroad bicycling infrastructure.

Data used in this submission

Crash and casualty data included in this submission is sourced by Transport for NSW from reports on crashes recorded by NSW Police Force, and matched with NSW Health data, in which at least one person was killed or injured, or in which at least one motor vehicle was towed away.

'Wearing a helmet' data refers to killed and serious injury numbers matched to police records only and does not include all hospitalisations.

Motorcyclist casualty and crash data includes e-scooter riders.

(a) Road safety and crash research relevant to different road users, including bicycle riders, motorcycle riders and electric scooter riders

Motorcycle, bicycle and e-scooter riders are especially vulnerable to risks of death or severe injury while using the road, when compared with other road users. These riders travel at speed, with less protection than other vehicles that they are interacting with, increasing their potential for involvement in casualty crashes.

Helmets are critically important to prevent against serious head and facial injury as a result of a crash, and there is extensive and conclusive research showing their effectiveness.

Bicycle riders

The mandatory helmet requirement was introduced in NSW in 1991. The introduction of this requirement was based on evidence that bicycle riders wearing approved helmets were less exposed to the risk of serious injury, in particular traumatic brain injury, following a crash or fall.

Transport for NSW casualty and crash data from 2005 to 2022 shows 181 bicycle rider fatalities and 31,164 seriously injuries on NSW roads. Of these fatalities, 100 occurred on Metropolitan roads, and 81 occurred on regional roads.

Bicycle riders represent about 2.7 per cent of NSW road deaths and 17 per cent of serious injuries. In 2022, bicycle riders were the third-largest road user group for hospitalisations, representing 18 per cent of all hospitalisations, with 1,700 bicycle riders seriously injured.

In 2022, approximately 12 per cent of bicycle riders killed or seriously injured on NSW roads were not wearing a helmet. In Metropolitan NSW this was nine per cent, and in regional NSW it was 18 per cent.

Bicycle helmets prevent head injuries

Research demonstrates that wearing a bicycle helmet significantly reduces both the likelihood and severity of bicycle-related head and facial injuries incurred by riders. This includes:

- An analysis in 2019² that showed that, immediately following bicycle helmet legislation in Australia, the rate of bicycle fatalities per 1,000,000 population reduced by 46 per cent relative to the pre-legislation trend.
- Research by the University of Sydney in 2013 suggested that bicycle riders not wearing a helmet are almost six times more likely to suffer severe head injury in a crash³.
- A meta-analysis study in 2017 by the University of NSW included data from over 64,000 injured cyclists, reported the effect of helmet use on various types of injuries⁴. The study found that wearing a helmet reduced the risk of head injury for bicycle riders by 51 per cent, serious head injuries by 69 per cent, fatal head injuries by 65 per cent and facial injuries by 33 per cent.
- A further meta-analysis study conducted by Høye in 2018 also supported the findings of the 2017 study. A systematic review of 55 studies found the wearing of helmets by riders reduced head injury by 48 per cent, serious head injury by 60 per cent, traumatic brain injury by 53 per cent, face injury by 23 per cent, and the total number of killed or seriously injured cyclists by 34 per cent⁵.

E-scooter riders

E-scooters are currently only legal to use on NSW roads as part of approved shared scheme trials conducted in select locations across the state.

As is the case for bicycles, research conducted in Australia and internationally has consistently determined that e-scooter riders are susceptible to head injuries and non-use of helmets is a significant factor in the severity of rider head injuries. This research includes:

- An international study completed in 2023⁶ assessed "head impact conditions, the risk of head injury and the effect of crash conditions on injury risks" due to an e-scooter collision against a curb. The study used software widely used to simulate pedestrian, bicycle and e-scooter accidents to model 162 fall scenarios involving a collision with a curb. The study found that the head was particularly at risk of injury, and in almost all cases, there was a risk of concussion where there was an impact of the head on the ground. Although simulated riders did not wear helmets, the "study strongly suggests the importance of wearing a helmet to reduce the risk of head injuries".
- Another international study aimed to characterise head-ground impact biomechanics and evaluate bicycle helmet protection in typical e-scooter falls. The study used software to simulate 27 fall scenarios and was validated by physical tests using a dummy, with and without head protection. The study found that e-scooter falls resulted in an oblique (sloping) head-ground impact, with 78 per cent on the forehead. The study concluded that typical e-scooter falls might cause severe head injuries, and that the bicycle helmet was efficient to reduce head injury metrics but not to prevent severe head injuries⁷.

² The impact of bicycle helmet legislation on cycling fatalities in Australia - Jake Oliver, Sofiane Boufous , Raphael Grzebieta - 2019

³ The effectiveness of helmets in reducing head injuries and hospital treatment costs: a multicentre study - Michael M Dinh, Kate Curtis, Rebecca Ivers – May 2013

⁴ Bicycle injuries and helmet use: a systematic review and meta-analysis - Jake Oliver and Prudence Creighton - 2017

^{5 &}quot;Bicycle helmets – To wear or not to wear? A meta-analyses of the effects of bicycle helmets on injuries - ScienceDirect" - Alena Høye, 2018

⁶ Head impact kinematics and injury risks during E-scooter collisions against a curb - Marion Fournier, Nicolas Bailly, Andreas Schäuble, Yvan Petit – August 2023

⁷ Head-ground impact conditions and helmet performance in E-scooter falls - Wei Wei, Yvan Petit, Pierre-Jean Arnoux, Nicolas Bailly, March 2023

Motorcycle riders

Motorcycle riders can travel at higher speeds than bicycle riders and therefore experience substantially higher risks of death and injury. Even low speed crashes can result in fatal head injuries for motorcycle riders who do not use a helmet.

Transport for NSW casualty and crash data from 2005 to 2022 shows that 1,097 motorcyclists were killed and 42,209 were seriously injured on NSW roads. Of these fatalities, 402 occurred on Metropolitan roads and 695 on regional roads.

Motorcyclists are over-represented in trauma, making up about 16 per cent of NSW road deaths and 23 per cent of serious injuries across the State. In 2022, motorcyclists were the second-largest road user group for hospitalisations, representing about 25 per cent of all hospitalisations, with 2,426 motorcyclists seriously injured. In 2022 about four per cent of motorcyclists killed or seriously injured on NSW roads were not wearing a helmet.

Like bicycle and e-scooters, research repeatedly shows that wearing a helmet by motorcycle riders significantly reduces both the likelihood and severity of head injuries, and likelihood of death, including:

- An estimate by the National Highway Traffic Safety Administration⁸ of the US Department of Transportation that that motorcycle helmets were 37 per cent effective for riders and 41 per cent effective for passengers in preventing deaths. The research also found that motorcycle helmets were 65 per cent effective in preventing brain injuries in the event of a crash for riders.
- In 2008 an international review of studies that investigated motorcycle riders who had crashed, examining helmet use as an intervention concluded that helmets are effective in reducing head injuries in motorcyclists who crash by 69 per cent and death by 42 per cent⁹.
- A 2024 US study of 315,258 patients found non-helmeted motorcycle riders were more than
 twice as likely to suffer severe traumatic brain injury and concluded that helmet use is protective
 for severe head injuries and associated with decreased mortality¹⁰.
- A 2008 study found that the head-injury related death rate per 10,000 motorcycle registrations rose by 36.9 per cent in the US state of Pennsylvania, following the repeal of mandatory helmet use requirements there in September 2003¹¹.
- A Taiwanese study demonstrated a 41 per cent rise in trauma-induced brain haemorrhage for non-helmeted motorcycle riders relative to helmeted riders following a collision¹².

⁸ National Highway Traffic Safety Administration of the US Department of Transportation Traffic Safety Facts - 2005

⁹ Helmets for preventing injury in motorcycle riders - Liu BC, Ivers R, Norton R, Boufous S, Blows S, Lo SK, 2008

¹⁰ Injury patterns and outcomes in motorcycle driver crashes in the United States: The effect of helmet use – Lara A. Brockhus, Panagiotis Liasidis, Meghan Lewis, Dominik A. Jakob, Demetrios Demetriades - 2024

¹¹ Changes in motorcycle-related head injury deaths, hospitalizations, and hospital charges following repeal of Pennsylvania's mandatory motorcycle helmet law – Mertz KJ, Weiss HB.

¹² Lin JW, Tsai SH, Tsai WC, et al. Survey of traumatic intracranial hemorrhage in Taiwan. Surg Neurol. 2006;66:S20–S25

Protection offered by turbans

There is no evidence that a Sikh turban or other helmet alternatives can offer protection to adult bicycle, motorcycle or e-scooter riders in the event of a crash.

In 2016, Transport for NSW's Centre for Road Safety carried out standard bicycle helmet tests on the Sikh turban. The study found the Sikh turban offers no impact protection. The test concluded the turban wearer will suffer serious to severe head injury and/or skull fracture in the event of a crash if their head hits a solid object such as a road surface or the edge of a kerb.

Overseas studies, although limited, have investigated the protection performance of turbans when compared to other types of helmets, such as industrial safety helmets. The results indicate that the impact to the head is significant when wearing only a turban. These studies include:

- A 1987 UK study¹³ compared the impact protection properties of the common Punjabi Sikh turbans compared with the impact protection properties of industrial safety helmets. The study was undertaken by modifying an impact test used for general purpose industrial safety helmets. "The results indicate that the forces transmitted to the head at comparable impact energies, when wearing a Sikh turban are almost five times greater than when wearing a helmet, for the major part of the head area".
- A 1979 Canadian study¹⁴ investigated both the inherent protective capacity of the turban (or lack thereof) and the degree to which it conforms to the formal requirements of the Canadian Standards Association Standard for Industrial Protective Headwear. The results showed that:
 - o The conventional Sikh turban does not conform to the impact requirements of the standard.
 - The turban offers its maximum protection where the fabric is heavily bunched at the front and back of the head. This region accounts for only a small portion of the head.
 - o The regions of least protection provided by the turban are the crown and side, with the exception of the hair knot location.
 - At rear locations, the Sikh turban affords more protection than a certified industrial safety cap.

(b) Opportunities for, and obstacles to the uptake of active transport by members of the Sikh community and/or other religious groups that customarily wear a headdress that prevents effective use of a helmet.

Opportunities exist to expand access to active transport options through increased uptake and further development of approved helmet designs that are compatible with the wearing of turbans by members of the Sikh faith. This could potentially extend to adherents of other religions with customary headdresses.

Additionally, in recent years, there have been developments of turbans made with impactresistant materials that could provide increased protection for Sikh riders over turbans made with traditional materials. This is area of ongoing development, as demonstrated through recent innovations in bicycle helmet design and technology for Sikh children and youth.

¹³ Comparison of the impact protection properties of Sikh turbans and industrial safety helmets. Journal of Occupational Accidents, 9: 47-57 - Rowland, F.J., 1987,

¹⁴ An Evaluation of the Protective Capabilities of Sikh Headwear - Biokinetics and Associates Ltd, Ontario Canada - 1979

Special helmets designed Sikh children and youth

As of June 2024, NSW became one of the first jurisdictions in Australia to adopt a new Australian Government mandatory product safety standard (announced March 2024) for bicycle helmets into road rules. Helmets that meet at least one of six Australian and overseas standards are now recognised as an approved bicycle helmet type under the NSW Road Rules.

This change enables young bicyclists who wear a small size turban (a *Patka*) to safely ride, compliant with the law, with a specialised helmet that fits over a child's turban. A similar product is not currently available for most adults who wear a larger/full size turban.

Transport for NSW also plans to include this type of helmet in the next round of testing under the newly established Helmet STAR rating program¹⁵ (Safety, Testing and Assessment Ratings), where helmets are rated on factors that indicate how well they protect the wearer's head in a crash.

The first of these to be sold commercially in NSW is the Bold Helmet, designed for use by male Sikh youth between the ages of 5 and 12 years (45 to 56 centimetres head circumference) who wear a smaller turban. An example of this helmet is shown in Figure 1. This helmet meets safety standards (CPSC, EN1078:2012, ASTM F1492-22) which are recognised by both the Australian Competition and Consumer Commission and Transport for NSW.



Figure 1 - Bold Helmet

The Brave Helmet (shown in Figure 2) has also been approved for sale and use in NSW. The Brave Helmet, developed by a company based in the US, is designed for Sikh youths to fit comfortably over a small size turban. The helmet complies with US Consumer Product Safety Commission (CPSC) standards and comes with a size that can accommodate a wearer with head circumference ranged between 55 to 62 cm.



Figure 2 - Brave Helmet

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¹⁵ https://www.transport.nsw.gov.au/roadsafety/bicycle-riders/helmet-star

The approval of these helmets eliminates a key barrier that had previously prevented young Sikh males in NSW from safely riding a bicycle while observing the requirements of their faith.

Hardened and other impact-resistant turbans

Internationally, organisations have developed turbans made from multiple layers of hardened and impact-resistant materials to provide additional head protection to bicycle and motorcycle riders from the Sikh community as alternative to conventional helmets. One such example is the "Tough Turban" developed in Canada. However, no research appears to have been conducted, or is available, that has evaluated the effectiveness of "Tough Turban" or similar alternatives in protecting the head of a bicycle, e-scooter or motorcycle rider in the event of a crash.

(c) Exemption approaches in other Australian jurisdictions and internationally, including scope and conditions of any exemptions

Varying approaches are taken across Australian and international jurisdictions in providing exemptions to helmet use requirements while riding on motorcycles, bicycles and e-scooters for persons of Sikh faith wearing turbans.

NSW, like many jurisdictions, do not provide exemptions from helmet use requirements for religious or cultural reasons. Where exemptions are provided, they are more common for riders of bicycles and e-scooters and less common in the case of motorcycle riders.

There are also different approaches to how widely the scope of exemptions from helmet use requirements could apply across the population. Some jurisdictions limit the availability of exemptions to people who wear turbans and adhere to the Sikh faith, while others could potentially apply (and in some cases have been applied) more broadly, setting out that anyone who wears a headdress for cultural and/or religious reasons that interferes with helmet use, is exempted from helmet use requirements.

The health impacts of head injuries on victims, their families, and the health system should be considered in determining exemptions from mandatory helmet requirements in road transport law.

Australian Road Rules (national model law)

The Australian Road Rules are a national model law that form the basis of the road rules for each Australian state and territory. They do not provide exemptions for religious or cultural reasons from helmet use requirements for either motorcycle, bicycle or e-scooter riders.

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¹⁶ https://toughturban.com/

Australian jurisdictions

Motorcycles

No Australian jurisdiction has in place a religious or cultural exemption from helmet use requirements for motorcycle riders.

This likely reflects the increased safety risks faced by motorcycle riders relative to bicycle and e-scooter riders as they travel at higher speeds and have a greater degree of interaction with other motor vehicles while using the roads.

Bicycles and e-scooters

Bicycle and e-scooter helmet exemptions are available in other jurisdictions for riders who customarily wear a religious headdress, if wearing a helmet is impractical.

The ACT¹⁷, Queensland¹⁸, South Australia¹⁹, Victoria²⁰ and Western Australia²¹ provide exemptions to bicycle riders from helmet use requirements that apply to people of Sikh faith who wear turbans.

For these jurisdictions, excluding South Australia, the exemption is phrased in general terms that could be used by any rider wearing a headdress for religious or cultural reasons that makes it impractical to wear a helmet. South Australia's exemption is more restricted, only providing an exemption to "a person of the Sikh religion who is wearing a turban...".22

The ACT²³, Queensland²⁴, Victoria and Western Australia provide exemptions to e-scooter riders who wear religious headdress from helmet use requirements. South Australia, however, does not provide a helmet exemption to people of Sikh faith who ride an e-scooter.

Like NSW, neither the Northern Territory nor Tasmania provide exemptions to bicycle riders or e-scooter riders who wear religious headdress from helmet use requirements.

International jurisdictions

Religious exemptions for helmet use are typically found in jurisdictions with higher Sikh populations. Proper examination of the legal situation regarding helmet use requirements and religious exemptions is complicated by the lack of general helmet use requirements for many vehicle types in international jurisdictions.

New Zealand

Religious exemptions exist from helmet use requirements for both motorcycle²⁵ and bicycle riders²⁶. Motorcycle riders eligible for the exemption can only ride their motorcycles up to

Rule 256, Road Transport (Road Rules) Regulation 2017 (ACT)

Rule 256, Transport Operations (Road Use Management—Road Rules) Regulation 2009 (Qld)

Clause 26, Road Traffic (Road Rules – Ancillary and Miscellaneous Provisions) Regulations 1999 (SA)

Rule 256 (7), Road Safety Rules 2017

²¹ Rule 222 (3) (a), Road Traffic Code 2000 (WA)

²² Clause 26, Road Traffic (Road Rules – Ancillary and Miscellaneous Provisions) Regulations 1999 (SA)

²³ Rule 244H, Road Transport (Road Rules) Regulation 2017 (ACT)

²⁴ Rule 256A, Transport Operations (Road Use Management—Road Rules) Regulation 2009 (Qld)

Section 11.8 (7), Land Transport (Road User) Rule 2004 (New Zealand)

²⁶ Section 7.12 (8), Land Transport (Road User) Rule 2004 (New Zealand)

50km/h. There is no general legal requirement for e-scooter riders to wear helmets in New Zealand.

United Kingdom

A specific exemption exists for motorcycle riders of the Sikh religion from the requirement to wear a helmet²⁷. There is no general requirement in the United Kingdom for riders of either bicycles or e-scooters to wear a helmet.

Canada (Ontario)

Riders and passengers of motorcycles on roads aged 18 years and over in the Canadian province of Ontario are exempt from helmet use requirements if they practice the Sikh religion and habitually wear a turban²⁸.

A general requirement for bicycle riders to wear a helmet only applies to those under 18 years. No general requirement to wear a helmet while riding applies to e-scooter riders in Ontario.

In Canada, conflicting viewpoints on maintaining safety standards and protecting freedom of religion have become known in a workplace setting. It was recently decided by the Quebec Superior Court that turban wearing Sikh truck drivers must wear protective helmets in the workplace when safety standards require them, despite the existence of Quebec and Canadian charter rights protecting freedom of religion. The decision was made on the basis that:

- Helmets protect workers against head injuries.
- The injury risk is not lower because a turban is worn.
- The safety obligations of the employer (Port of Montreal) are no less stringent towards Sikh employees than towards other employees.

Germany

In 2019, in Leipzig, Germany, the Federal Administrative Court found that wearing a turban on religious grounds cannot be a reason to exempt a person from the obligation to wear a helmet when motorcycling.

The Court also recognised that the obligation to wear a helmet is intended to protect not only the motorcyclist, but also the 'physical and psychological integrity of third parties' involved in an accident. This includes emergency services and medical workers, who may be traumatised by seeing serious head injuries of a person not secured by a protective helmet²⁹.

The Court also noted that, "as a result of the obligation to wear a suitable protective helmet when motorcycling, motorcyclists are more likely to be in a position to (take action to) protect others against the threats of loss of life or physical integrity after an accident if they can provide first aid themselves or call an emergency doctor. They can also contribute indirectly to preventing further injury by taking measures to secure the accident site, for example, putting up warning triangles or drawing attention to the accident site in some other way and removing obstructions from the road".

Rule 83, Highway Code (UK).
 Clause 6, R.R.O. 1990, Reg. 610: SAFETY HELMETS.

India

Riders of two-wheeled motorised vehicles (both motorcycles and e-scooters) are legally required to wear helmets while riding on private roads in India³⁰. The Motor Vehicles Act 1988 provides an exemption from this requirement for riders of the Sikh religion who are wearing helmets at the time of riding. There is no general requirement to wear a helmet while riding a bicycle in India.

(d) Helmet technology and alternative helmet design

Challenges to designing a helmet to accommodate a turban

A helmet is a form of personal protective equipment intended to protect the head in the event of a crash and reduce injury risks. For a helmet to have any effect during a crash, it must reduce the impact to minimise injury to the head resulting from impacts with different types of objects.

To achieve this, the helmet must:

- Cover the appropriate areas of the head especially the frontal and temporal areas
- Not disintegrate from the impact
- Be able to minimise injury to the head from impacts with different types of objects
- Remain in place during the entire crash sequence

Unfortunately, within current helmet technology, head impact forces and accelerations cannot be reduced to zero. Therefore, an ideal helmet will reduce these elements as low as reasonably possible relative to current technology.

Designing helmets for motorcycles, bicycles and e-scooter riders that can accommodate a Sikh adult with a full-size turban is challenging as turbans may vary according to regional styles, and can differ considerably in size, shape, density and other characteristics.

However, industry is continuing to find solutions for helmets for some Sikh riders to wear, if consistent with their personal faith obligations, as technology and design develops (see response to terms of reference (b) above).

(e) Perspectives of first responders and health services that provide post-crash care to riders.

All road trauma following crashes have profound effects that extend beyond persons injured or killed, including financial, material and emotional costs borne by friends, family and the first responders at crash scenes and professionals in hospital, medical and allied health services.

An exemption may result in further first responder resources being required to attend to any increases in road-related trauma and/or fatalities.

Regarding post-crash care, NSW Health's Agency for Clinical Innovation data indicates that, on average, each year 120 people who had a bicycle, motorbike, or other pedestrian conveyance crash are treated by a NSW Brain Injury Rehabilitation Health Service.

 $^{{\}color{red}^{30}} \, \underline{\text{https://www.bajajallianz.com/blog/motor-insurance-articles/helmet-regulations-and-laws-in-india.html}$

Recovery following severe traumatic brain injury is long and complex, often resulting in lifelong reduced functional capability, need for care and an inability to return to work. Lifelong disability may be physical, cognitive, behavioural and/or psychological.

In 2022, the average length of stay in an inpatient setting for adults seen in the NSW Brain Injury Rehabilitation Program following severe to very severe traumatic brain injury was 86 days. This is generally followed by a community-based rehabilitation program with a median duration of 222 days. During this time patients receive comprehensive, multi-disciplinary services to promote recovery, adjustment and family support.

At the end of their rehabilitation program, 58 per cent of patients continue to experience some degree of limitation in participation, adjustment and abilities. About 16 per cent are accepted as National Disability Insurance Scheme (NDIS) participants at the time of their discharge.

(f) Work health and safety and insurance implications, including for food delivery riders of Sikh faith

Insurance

Any changes which would exempt the rider of a motorcycle, bicycle or e-scooter from wearing a helmet may significantly increase the risk of a severe injury in the event of a crash.

Motorcycle riders are vulnerable road users whose risk of injury is high. A cohort of motorcycle riders not wearing helmets may again increase this risk and severity of injury.

Compulsory Third-Party (CTP) insurance, which motorcycles require, is priced on risk. Currently, some cohorts, such as motorcycle riders and young drivers, have such a high-risk factor that including the full cost of that risk in their CTP premium is unaffordable. As such, some of these cohorts have their premiums cross subsidised by other road users. Any increase to the existing risk without a corresponding increase to their premium may result in increased CTP insurance premiums for all road users and a further increase in subsidisation from other road users.

The NSW CTP scheme requires individuals to mitigate their loss arising from an injury. An element of this is contributory negligence, where an individual does, or fails to do, something which contributes to the crash or injury severity. The *Motor Accident Injuries Act 2017* (NSW) prescribes specific circumstances where a finding of contributory negligence must be made, including where a protective helmet is not worn when required by law. A finding of contributory negligence may result in the award of damages and benefits being reduced.

An increased risk of severe injuries may also have implications for the Lifetime Care and Support Authority (LCSA) which administers both CTP Care in the CTP scheme and the Lifetime Care and Support Scheme (LCSS).

People who have been injured in a motor crash in NSW from 1 December 2017 who require treatment and care for five years or longer after their motor crash will transition to CTP Care for the payment of treatment and care benefits.

Parallel to the CTP scheme, the LCSS is a no-fault scheme established under the *Motor Accidents (Lifetime Care and Support) Act 2006* (NSW) which provides payment for treatment, rehabilitation and care for people who have been severely injured in a motor crash in NSW. Given both LCCS and CTP Care are funded by a levy on NSW CTP insurance, an increase in LCSS or CTP Care participants may impact CTP insurance premiums.

Work Health and Safety

Helmets in the Work Health and Safety context

From a work health and safety (WHS) perspective, the primary WHS duty under the NSW WHS legislation sits with a 'person conducting a business or undertaking'31 (PCBU). Under WHS laws, the use of suitable personal protective equipment (PPE) is a control measure to minimise risk to health and safety in relation to work at a workplace.

There is no specific provision under WHS laws that requires the use of helmets as PPE. It should be noted that WHS laws are applicable in the context of a workplace or where work is being undertaken and does not extend beyond this, such as to the private use of a helmet.

However, if a PCBU, in consultation with its workers, determines a helmet is to be used as PPE to minimise a risk to health and safety in relation to work at a workplace, the PCBU must provide the PPE to workers and ensure the equipment is worn or used by the worker. Further, the PCBU must provide the worker with information, training and instruction in the proper use, storage and maintenance of the PPE.

The PCBU must also ensure the PPE is suitable having regard to the nature of the work and any hazard associated with the work, and that it is a suitable size and fit and reasonably comfortable for the worker to use or wear. The PCBU must maintain the PPE, including ensuing it is in good working order.

The worker must, so far as they are reasonably able, use or wear the equipment in accordance with any information, training or reasonable instruction by the PCBU. This information may also include rules found in other legislation.

Food delivery riders, who use either bicycles or motorcycles for work, are required to comply with helmet laws. SafeWork NSW, with support from Transport for NSW, has delivered a range of communication materials to support both delivery riders and food delivery platforms that includes clear messaging around safety equipment and the requirement to use approved helmets. Key messages have been provided in community languages, including Punjabi.³²

(g) Any other related matters

The Multicultural Principles

The Multicultural NSW Act 2000 (NSW) ('the MNSW Act') enshrines the Multicultural Principles as the policy of the State. NSW was among the first jurisdictions in the world to entrench Multicultural Principles in legislation, and for more than 40 years, the MNSW Act has enjoyed bipartisan support in the NSW Parliament. The Multicultural Principles lay the foundations for an inclusive, cohesive multicultural society, and relevantly set out that:

The people of New South Wales are free to profess, practise and maintain their own religious heritage³³, and

³¹https://www.safework.nsw.gov.au/about-us/glossary/glossary-acordion/pcbu#;~:text=Definition%20of%20a%20PCBU%3A%20a,commonly%20refer%20to%20as%20businesses 22 https://www.safework.nsw.gov.au/your-industry/transport,-postal-and-warehousing/food-delivery-industry

³³ Multicultural NSW Act 2000 (NSW) ss 3(1)(c).

 All individuals and institutions should respect and make provision for the religion of others within an Australian legal and institutional framework where English is the common language³⁴

The Multicultural Principles represent a deliberate policy and commitment by the NSW Government that recognises the value of cultural, linguistic and religious diversity in NSW. This extends to the recognition of the rich diversity and value of all the cultural and religious customs practiced in NSW.

In accordance with the Multicultural Principles, it is important that any recommendations made by this inquiry allow for the practice of all cultural and religious customs, in a manner consistent with relevant legislation and other policy considerations and noting the broader context.

NSW is one of the most successful culturally, linguistically and religiously diverse jurisdictions in the world. The Sikh community has, and continues to make, an enormous contribution to NSW.

Sikhism is the twelfth largest religion in NSW, with 47,165 followers as reported in the 2021 Census.

³⁴ Multicultural NSW Act 2000 (NSW) ss 3(1)(d).

Appendix A

Religious and cultural exemptions from helmet use requirements within Australia

State/Territory	Bicycles	Motorcycles	E-scooters
Australian Road Rules	No religious/cultural exemption.	No religious/cultural exemption.	Not applicable.
Victoria	Yes. Exemption for riders of a religious group wearing a headdress customarily worn by that group that makes it impracticable to wear a bicycle helmet.	No religious exemption.	Yes. Exemption for riders of a religious group wearing a headdress customarily worn by that group that makes it impracticable to wear a bicycle helmet.
Queensland	Yes. Same exemption to that provided in Victoria.	No religious/cultural exemption.	Yes. Same exemption to that provided in Victoria.
South Australia	Yes. Specific exemption for Sikh riders wearing a turban.	No religious/cultural exemption.	No religious/cultural exemption.
Western Australia	Yes. Same exemption to that provided in Victoria.	No religious/cultural exemption.	Yes. Same exemption to that provided in Victoria.
Tasmania	No religious/cultural exemption.	No religious/cultural exemption.	No religious/cultural exemption.
Northern Territory	No religious/cultural exemption.	No religious/cultural exemption.	No religious/cultural exemption.
Australian Capital Territory	Yes. Same exemption to that provided in Victoria.	No religious/cultural exemption.	Yes. Same exemption to that provided in Victoria.

Religious and cultural exemptions from helmet use requirements in select international jurisdictions

Country/Province	Bicycles	Motorcycles	E-scooters
New Zealand	Yes. Specific exemption for adherents of the Sikh religion.	Yes. Specific exemption for adherents of the Sikh religion.	No general requirement to wear a helmet.
United Kingdom	No general requirement to wear a helmet.	Yes. Specific exemption for adherents of the Sikh religion.	No general requirement to wear a helmet.
Ontario (Canada)	No religious/cultural exemption.	Yes. Riders are exempt from helmet use requirements if they: • are 18 years or older • practice the Sikh religion • have unshorn hair • were habitually wearing a turban at the time of riding.	No general requirement to wear a helmet.
India	No general requirement to wear a helmet.	Yes. Riders who adhere to the Sikh religion are exempt while wearing a turban.	Yes. Riders who adhere to the Sikh religion are exempt while wearing a turban.