

Submission to the Joint Select Committee on Road Safety

The National Rural Health Alliance (the Alliance) welcomes the opportunity to present a submission to the Parliament of Australia Joint Select Committee on Road Safety.

The Alliance

The Alliance comprises 43 national members (see [Appendix 1](#)) and is focused on improving the health and wellbeing of the 7 million people residing outside our major cities. Our members include health consumers, healthcare professionals, service providers, health educators, students and the Indigenous health sector. Well-rounded representation of the rural health sector enables us to work toward our vision of 'healthy and sustainable rural, regional and remote communities'.

We advocate for local solutions to local issues, recognising that metropolitan solutions do not necessarily work in rural, regional and remote (hereafter, rural) communities.

In this submission, we seek to continue to highlight the importance of road safety in rural Australia due to the disproportionate risk that drivers face on country roads.

Road safety in rural Australia

The Alliance has had a long-standing interest in road safety due to the disproportionate rate of serious road injuries and deaths that occur on rural roads. In May 2021, we participated in the Ministerial Road Safety Roundtable for Regional and Remote Road Users, hosted by the Hon Scott Buchholz MP, Assistant Minister for Road Safety and Freight Transport. The Alliance gave evidence in 2015 at the Senate Rural and Regional Affairs and Transport References Committee Inquiry into Aspects of Road Safety in Australia¹, following its submission² and supplementary submission³. Prior to this, we highlighted the disparities in serious injuries and deaths on rural roads through a media release⁴, infographic⁵, and through the 13th National Rural Health Conference showcasing the 'Road Safety All Stars'.^{6,i}

We note that the current Inquiry arose from a recommendation of the previous Joint Select Standing Committee on Road Safety⁷, which tabled its final report in October 2020.⁸ We also note that the previous Joint Select Standing Committee on Road Safety originated from an independent 2018 Inquiry into the National Road Safety Strategy.^{9,10} Presently, the Senate's Rural and Regional Affairs and Transport References Committee is undertaking an Inquiry into the importance of a viable, safe, sustainable and efficient road transport industry.¹¹ It is clear that a significant amount of research into road safety has taken place in recent years, and that the purpose of this work is to attempt to

ⁱ In 2014, the 'Road Safety All Stars' band was established by talented Indigenous musicians in the Northern Territory to promote the importance of road safety through their music. This was an example of an innovative way to promote road safety, avoidance of alcohol and other drugs while driving, and compliance with road rules.

build safer roads for all users. This work is vital in order for the limited road network to have the capacity to support an ongoing growth in traffic volume.

Road safety outcomes in rural Australia

In 2017–18, there were 1,428 deaths and 62,387 hospitalisations across Australia due to transport crashes.¹² For each hospitalisation, patients are hospitalised for an average of 3.4 days, resulting in a total of over 200,000 bed days due to transport crashes. Promisingly, over the ten years 2017–18, road fatalities have decreased.¹³ Victorian data also shows that road crashes accounted for roughly 770 deaths in the state in 1989. This number declined, by almost three-quarters, to 213 deaths in 2018 – which was also the year with the fewest fatalities on record in the state.¹⁴

Research shows that there is a marked increase in hospitalisations and deaths due to transport crashes in line with increasing residential remoteness. Table 1 shows an analysis of the published preliminary data on the number of deaths on Australia's roads in 2020–21 from the Australian Government Bureau of Infrastructure and Transport Research Economics.¹⁵

Table 1: Rates of road crash deaths by remoteness, 2020–21

Remoteness	Number of deaths*	Deaths per 100,000 (crude)^	Rate of fatalities compared to major cities
Major city	309	1.7	1.0
Inner regional	348	7.6	4.6
Outer regional	231	11.2	6.7
Remote	39	13.4	8.1
Very remote	45	22.4	13.5

* Figures are preliminary only and subject to revision.

^ Deaths per 100,000 by remoteness category were calculated by NRHA using ABS population data.

The table above suggests that, in 2020–21, the rate of road crash fatalities was much higher outside major cities, and that this rate increased with remoteness. Although it is preliminary, it is relatively consistent with less recent data reported by the Australian Institute of Health and Welfare (AIHW) (see Table 2).

Table 2: Rates of hospitalisation and death by remoteness, 2017–18

Usual place of residence	Hospitalisations per 100,000 (age-standardised) ¹⁶	Deaths per 100,000 (age-standardised) ¹⁷
Major city	214	3.7
Inner regional	322	8.7
Outer regional	363	11.3
Remote	453	15.0
Very remote	478	17.5

Exploring this further, between 2015 and 2019, land transport accidents were the seventh leading cause of death in very remote Australia (responsible for almost 4 per cent of all deaths), whereas it was the ninth and 18th leading cause of death in remote and outer regional Australia, respectively. During the same period, it did not feature among the top 20 causes of death in either inner regional areas or major cities.¹⁸ In several remote and very remote communities, it was among the top three leading causes of death – for example, it was the third-leading cause, responsible for approximately 10 per cent of all deaths in the Northern Territory’s Coomalie and Roper Gulf local government areas.¹⁹

The rates of fatal road injuries and pedestrian injuries are also higher for Aboriginal and Torres Strait Islander peoples.²⁰ Outside major cities, however, total non-fatal serious road injuries are higher in non-Indigenous Australians.

As Table 3 shows, the trend in increasing hospitalisations with increasing remoteness is generally consistent for both males and females of all age groups.²¹ The age groups with the highest rate of transport injury hospitalisations are 15–24 years, followed by 25–44 years.

Table 3: Crude rates of hospitalised transport injury cases by remoteness of residence, age group and sex, 2017–18

Remoteness region	Sex	Age group (years)						Total
		0–4	5–14 ^a	15–24	25–44	45–64	65+	
Major cities	Males	46.3	179.2	394.1	330.1	311.7	232.2	283.5
	Females	29.8	78.9	215.8	146.3	151.1	190.2	148.1
	Persons	38.3	130.5	306.7	237.9	229.3	209.4	215.1
Inner regional	Males	86.1	329.8	736.6	525.0	375.2	255.4	407.0
	Females	54.7	176.7	390.6	227.4	186.3	162.2	205.2
	Persons	70.8	255.3	569.2	374.0	278.4	206.8	305.1
Outer regional	Males	74.2	442.6	991.6	561.6	408.1	250.9	468.5
	Females	55.3	203.3	426.6	214.8	193.2	157.1	210.3
	Persons	65.0	325.9	722.6	387.3	301.3	203.9	340.7
Remote	Males	123.7	631.0	1,325.2	563.7	441.3	341.3	557.7
	Females	n.p.	270.3	747.3	283.3	201.6	154.1	275.5
	Persons	100.4	455.8	1,050.9	426.3	328.1	252.7	422.1
Very remote	Males	n.p.	504.7	1,247.8	588.0	451.3	397.6	566.5
	Females	n.p.	298.3	702.6	429.8	237.4	171.0	347.6
	Persons	76.8	403.3	984.7	516.9	355.6	295.7	465.4

n.p: Not publishable. Source: www.aihw.gov.au/reports/injury/injury-in-australia/data

The rates of transport injury deaths are much higher for men than women across known remoteness areas. The age-standardised rate of transport injury deaths is over three times higher for men than women in major cities, inner and outer regional areas, with too little publishable data for analysis in remote and very remote areas.

Recommendations

Much can be done to improve road safety in rural areas. By improving the physical features of country roads, such as roadside hazards and road markings, expanding public and community transport options, and delivering education programs tailored to the needs of rural people, travelling on rural roads can be made safer.²²

Driving behaviour change

Ultimately, many accidents on the road involve unsafe driving (including drink driving) and lapses of driver behaviour due to distractions and fatigue. Feedback from members of the Alliance points to the need for safe driver education programs on the unique risks of rural roads, particularly in remote and very remote areas. To complement the mechanical education that drivers receive across the country, it is important that they receive adequate training on how to drive safely and appropriately to conditions on rural roads, including poor lighting, wildlife, winding roads, narrow lane shoulders and other characteristics. A safe driver, who is driving to road conditions, should identify unsafe conditions and take actions to ensure appropriate speeds and vehicle positioning on the road.

The current COVID-19-related travel restrictions are likely to be leading to behaviour that could have an impact on the number of road injuries and fatalities in rural Australia, including for visitors from the city. This is because, firstly, international travel restrictions are resulting in more Australians travelling for recreation on rural roads, with record sales of recreational vehicles.²³ Many of these travellers are unfamiliar with how to safely drive these vehicles prior to long-haul driving.²⁴ Secondly, the pandemic-induced interstate border travel restrictions and permit systems are potentially resulting in many travellers driving for dangerously long periods, with unfamiliar roads and conditions, to avoid the requirement to isolate or quarantine. Exacerbating the risk of this driving behaviour is the heightened state of anxiety that many travellers are experiencing.

To address the higher risk of crashes in rural areas, including in the context of the COVID-19 pandemic, it is recommended that a road safety education program for young drivers (learner and provisionally licensed drivers) be trialled in rural locations. This would ideally be a requirement for progressing through the licence levels. If successful, the program could expand nationally and older drivers could also be required to undertake the program, possibly in connection with demerit point systems.

The Alliance recognises that a goal of the former Inquiry into the National Road Safety Strategy is to achieve a 'vision zero' target of zero fatal road injuries by 2050, consistent with the Swedish model.¹⁰ In order to realise this vision, the Alliance puts forward the following recommendations.

Improving road quality to reduce the risk to rural road users

All levels of government should prioritise improving the quality of roads in rural areas to support a reduction in vehicle accidents. This is particularly important for vulnerable road users including inexperienced drivers, the elderly and people with impaired vision. Rural roads are often loose, unsealed and potholed, and poorly engineered, with inadequate lighting and few safety barriers. These challenging conditions combine to contribute to the unacceptable level of road safety hospitalisations and deaths of rural road users. Upgrading, sealing and regularly maintaining the quality of roads will play a significant role in reducing people's risk of injury.

It is recommended that improving rural roads continues to be a priority for the Australian, state, territory and local governments – including appropriate funding support – acknowledging that local government is responsible for the upgrade and maintenance of local roads in Australia. The overall goal should be to achieve better road quality each year through more grading, sealing, signage and safety elements built into the roads.

Promoting prevention through tailored campaigns

Examples of targeted messaging campaigns could include those based on advice (such as that from the Australian Government²⁵) promoting simple safety tips in acknowledgement of the unique dangers present on Australia's outback road network. Very remote areas have few towns and facilities, often with large distances between them, so it is vital that occupational drivers, tourists and residents heed safety advice. Yet from crocodile hunters²⁶ to astronomers^{27,28} and rural residents^{29,30} to city occupants^{31,32}, fatal accidents occur frequently on remote stretches of road. With the COVID-19 pandemic and ongoing international travel restrictions, the use of remote roads throughout outback communities has increased.³³ This shows that there is now an even greater need to deliver more targeted messaging to people who are currently (or plan to) travel in remote areas.³⁴

Given the higher risk of people of Aboriginal and Torres Strait Islander descent being involved in a road injury or fatality, there is also a need to invest in community-led road safety campaigns targeting this group. Innovative social media campaigns could be used featuring high profile Aboriginal and Torres Strait Islander personalities.³⁵ We also recommend that the new National Road Safety Strategy, which is currently being developed³⁶, includes a priority focused on the specific needs of Aboriginal and Torres Strait Islander communities, aligning with the National Agreement on Closing the Gap.

Investing in regional emergency workers and post-accident services to speed up acute care on the roads

It is recognised that one of the key risks in relation to crashes on rural roads is the often-lengthy delay in post-crash emergency response.^{37,38} Post-crash responders such as paramedics and emergency medical specialists need to be employed in community settings, in addition to their presence in the acute hospital system, so that they are closer to road accidents when they occur. This already takes place to a degree in remote areas, with many paramedics being employed in mining and other industry settings. Wherever black spots and high-risk roads have been identified, paramedics and emergency specialists should be nearby to quickly attend to potential life-or-death situations. It is the period from when the accident occurs to when the first responder is at the scene that is most critical in saving the life of crash victims. Community paramedicine needs to be regarded more fully as an option for underserved rural communities in efforts to reduce the harm caused by road accidents.³⁹

Oftentimes, for injuries of serious or unknown severity, the bypassing of smaller regional hospitals by road or air ambulance in favour of large tertiary hospitals delivers better patient outcomes for trauma patients and, in particular, those with head injuries. Having a well-developed emergency air and road transport system is crucial for the safety of remote road accident victims. It is also important that more critical care paramedics are appointed and deployed in regional areas to treat patients initially before transfer.

One model of a structured community-driven emergency response is South Australia's Rural Emergency Responders Network (RERN). The RERN is a specially trained network of rural general practitioners who attend life-threatening incidents in rural parts of the state, including serious road injuries. In partnership with the South Australian Ambulance Service and retrieval services, they provide advanced clinical support for trauma patients.⁴⁰ This is an example of the way in which services can be effectively provided to address road events as soon as possible after they occur and it has been recommended that this model be rolled out on a national scale.^{41,42}

For Aboriginal and Torres Strait Islanders, acute post-crash health services are available through Aboriginal Community Controlled Health Organisations (ACCHOs). Furthermore, many ACCHOs, particularly in remote areas, provide their own post-accident care to locals and visiting tourists. Given the distances involved in relation to accident events in remote locations, and the scope of

post-accident care that they provide to both Indigenous and non-Indigenous patients, this is a vital and underfunded service. There is a need for increased funding for ACCHOS in relation to post-accident services, including staff training, medicines and equipment.

Addressing sleep deprivation and fatigue in heavy vehicle users

It has been acknowledged for decades that sleep deprivation and fatigue are among the most frequent causes of fatal road accidents in rural Australia.^{43,44} This is particularly the case for long-haul truck drivers and other heavy vehicle users, who must often deal with the pressure of tight deadlines to deliver both perishable and non-perishable goods to wholesalers, retailers and other distributors across the country.⁴⁵ We recommend that long-haul truck drivers be supported through a more widespread rollout of technology-assisted monitoring of sleep deprivation warning signs, to alert them to the need to 'stop, revive, survive'.

Improving data on road accidents and services

The Australian Government compiles data on traffic incidents on a month-by-month basis, incorporating a wide range of information on road fatalities, including the location of crash incidents by remoteness and local government area.⁴⁶ However, the AIHW reports crash injuries and deaths by residential remoteness. The Alliance suggests that future reporting by the Australian Government include both the crash location and place of residence of the victim. This would ensure greater consistency across data sources, making it more translatable to real-world solutions.

There is an appreciable amount of work that could be undertaken to determine risk factors for crash deaths and hospitalisations, including drink driving and drug use, and information about the victim's existing health conditions and sociodemographics. This information would be considerably helpful in enabling more effective monitoring of trends in accidents, hospitalisation and death on Australia's roads.

Conclusion

Australians in rural areas have shorter lives, higher rates of injury and disease, and poorer access to health services compared to people living in metropolitan areas. The significant disparities they face in injury rates and health outcomes are persistent in that the gap is not closing.

From the Alliance's perspective, there are six pressing health issues relating to protecting road users and ensuring safer roads in rural Australia:

1. Targeting safer driving to prevent injuries and fatalities through the introduction of more education and training on the unique risks to rural road users.
2. Continuing strong investments to improve road quality.
3. Promoting prevention through tailored campaigns. This includes campaigns to address high-risk road behaviour in Aboriginal communities, and effective targeting of long-haul recreational vehicle drivers.
4. Expanding the role of regional critical care paramedics and post-accident services to speed up acute care on the roads. It is recommended that the ambulance and paramedic workforce be employed closer to blackspots and high-risk roads through outreach models. Surveillance monitoring of high-risk roads should also be performed by emergency workers to enable the most rapid response to road emergencies. It is also critical that hospitals are appropriately staffed by other health professionals to minimise shortages across all divisions of care.
5. Addressing sleep deprivation and fatigue in heavy vehicle users. The Alliance recommends that sleep deprivation in long-haul truck drivers be targeted by technology-assisted monitoring and

other approaches that look at overall health and wellbeing. Options for encouraging the use of rail as an alternative to road transport where commercially and environmentally beneficial should also be explored.

6. Improving reporting and publication of data on road accidents, including risk factors for fatality and injury.

We believe that these measures will help to support the safety of travellers on our country roads. Additionally, one of the most important sources of information to support further efforts to improve road safety is the Austroads report, *National View on Regional and Remote Road Safety* (2019).³⁷ The Alliance recommends that the Austroads report be given considerable attention with regard to ongoing work to improve road safety in rural Australia, particularly in remote and very remote areas.

Lastly, at the time of writing, the final report is still pending from the Senate Standing Committee on Rural and Regional Affairs and Transport Inquiry into the importance of a viable, safe, sustainable and efficient road transport industry.¹¹ The Alliance hopes that the findings of this report will be considered in the deliberations of the current Inquiry.

Appendix 1: National Rural Health Alliance members

43 organisations with an interest in rural health and representing service providers and consumers

Allied Health Professions Australia (Rural and Remote Committee)	Federation of Rural Australian Medical Educators
Australasian College for Emergency Medicine (Rural, Regional and Remote Committee)	Isolated Children's Parents' Association
Australasian College of Health Service Management (Regional, Rural and Remote Special Interest Group)	National Aboriginal Community Controlled Health Organisation
Australasian College of Paramedicine	National Association of Aboriginal and Torres Strait Islander Health Workers and Practitioners
Australian and New Zealand College of Anaesthetists and Faculty of Pain Medicine	National Rural Health Student Network
Australian Chiropractors Association (Aboriginal and Torres Strait Islander Rural and Remote Practitioner Network)	Optometry Australia (Rural Optometry Group)
Australian College of Midwives (Rural and Remote Advisory Committee)	Pharmaceutical Society of Australia (Rural Special Interest Group)
Australian College of Nursing (Rural Nursing and Midwifery Community of Interest)	Regional Medical Specialists Association
Australian College of Rural and Remote Medicine	Royal Australasian College of Medical Administrators
Australian Dental Association (Rural Dentists' Network)	Royal Australasian College of Surgeons (Rural Surgery Section)
Australian General Practice Accreditation Limited	Royal Australian and New Zealand College of Obstetricians and Gynaecologists
Australian Healthcare and Hospitals Association	Royal Australian and New Zealand College of Psychiatrists
Australian Indigenous Doctors' Association	Royal Australian College of General Practitioners (Rural Faculty)
Australian Nursing and Midwifery Federation (rural members)	Royal Far West
Australian Paediatric Society	Royal Flying Doctor Service
Australian Physiotherapy Association (Rural Advisory Council)	Rural Doctors Association of Australia
Australian Psychological Society (Rural and Remote Psychology Interest Group)	Rural Health Workforce Australia
Australian Rural Health Education Network	Rural Pharmacists Australia
Congress of Aboriginal and Torres Strait Islander Nurses and Midwives	Services for Australian Rural and Remote Allied Health
Council of Ambulance Authorities	Society of Hospital Pharmacists of Australia
CRANaplus	Speech Pathology Australia (Rural and Remote Member Community)
Exercise and Sports Science Australia	

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