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Committee Secretary
Senate Standing Committees on Rural and Regional Affairs and Transport
PO Box 6100
Parliament House
Canberra ACT 2600

Via email: rrat.sen@aph.gov.au

Submission to the Rural and Regional Affairs and Transport References Committee regarding the Australian Senate Inquiry into Road Safety

St John Ambulance Australia (St John) thanks the Rural and Regional Affairs and Transport References Committee for the opportunity to provide input into the *Australian Senate Inquiry into Road Safety*.

Accidents and emergencies are an unfortunate reality on Australian roads

Road traffic accidents are an important national public health issue that require prevention initiatives as well as sound post-crash management measures that include the actions of the whole of the Australian community.

Models of emergency care must be developed, based on two key assumptions:

1. accidents and emergencies *will* occur, no matter how many precautions or preventative practices are taken or put in place, and
2. medical intervention *must* occur as soon as possible following the incident if the impact is to be reduced.¹

The Golden Hour

Research suggests that there is a 'golden hour' following a road traffic accident whereby persons injured stand a greater chance of survival and injury reduction if first aid is applied while waiting for the emergency services to arrive.² **The first 3–5 minutes following a road traffic accident are crucial.**² For example, it is estimated to take only 4 minutes for a person injured in a road traffic accident to die from a blocked airway (anoxia) if no treatment is provided. Up to 85% of preventable pre-hospital deaths may be due to anoxia.³ If death is to be prevented, it is often bystanders or others involved in road traffic accidents taking a very simple action to ensure the person's airway is clear (such as by lifting the injured person's chin to tilt the head back, thereby ensuring an open airway), or assisting in preventing uncontrolled bleeding.⁴

St John takes the view that almost any person can provide assistance at a road traffic accident (research suggests that children as young as 6–7-years-old can save a life).⁵ However, the better skilled in first aid the bystander is, the more effective the intervention; and with more people trained in first aid in Australia, the greater the chance of intervention occurring.

Research has demonstrated that once a person has undergone first aid training, their willingness and confidence to assist at the scene of an accident increases.^{6,7,8} For example, research into enhancing emergency response to motorcyclists involved in crashes suggests that there is a high degree of willingness to provide first aid at an incident or emergency, with 29% of the sample reporting using their first aid training to render assistance.⁹ First aid training may also impact driver behaviour, with participants less likely to take risks.^{6,7,8}

The importance of bystanders providing first aid

St John believes that a contributing factor to morbidity and mortality for Australian road users following a serious road traffic accident is a lack of first aid provision by first aid trained bystanders. Research has concluded that bystander first aid is of benefit in the prevention of pre-hospital deaths, before medical attention or paramedics arrive.³ There is also evidence to suggest that many people have died needlessly when assistance has not been rendered—this is particularly so in cases of anoxia.³ The reality is that following a serious road traffic accident, some needs are time-limited and without speedy intervention, lives can be unnecessarily lost.²

With the Australian Institute of Health and Welfare reporting response times for an ambulance ranging between 14.8–22.5 minutes across the nation in 2014, bystander first aid may be the only hope for a person seriously injured in a road traffic accident, in preventing death or lessening the effect of serious injury.¹⁰

Further, the need for bystander first aid is especially pertinent for rural and remote areas that experience longer response times for emergency services, and where nearly a third of the Australian population is located.^{15,11} Research suggests that rural areas have higher morbidity and mortality rates than urban populations, with a larger proportion of persons injured in road traffic accidents dying at the scene.¹² These rates in rural and remote areas are often credited to the time taken to discover a road traffic accident, and longer response and transport times. For example, in a report by the Victorian Auditor-General on access to ambulance services, rural region responses in Victoria were 39% longer than in metropolitan areas.¹³ **Bystander first aid has been linked to ameliorating slower response times in rural and remote areas and impact crash outcomes.**¹⁴

With only a speculated 13–14% of the Australian population with a current first aid qualification, action must be taken by governments, organisations and community to address this important public health issue.

Rethinking Australia's approach to crash management

Humans do, and always will, make errors. Despite significant technological advances and a relatively high awareness of safety behaviours on our roads, accidents can and will continue to occur.

Australia must rethink its approach to post-crash management to incorporate members of the community as part of incident responses. First aid is a vital initial step in the provision of effective post-crash management care and is crucial for limiting the consequences of an accident to the injured person(s).¹⁵

St John is concerned, despite numerous representations made to governments to date, that **there is still no initiative to prevent the loss of life and serious injury between when an accident occurs and the arrival of emergency services.** Current road safety initiatives are targeted at changing behaviour, such as through education campaigns and penalties for

misconduct (e.g. compulsory seat belts, drink and drug driving campaigns, speeding and random breath testing), and have had a significant impact over time.

These road safety initiatives, however, do not prepare road users to act to save lives and reduce injury between when the incident occurs and professional help arrives—first aid does.

St John believes that Australia's response to road traffic accidents could be greatly improved by raising the level of first aid knowledge in the Australian community, particularly by educating the public on the importance of providing cardiopulmonary resuscitation (CPR).^{12,16}

St John has the solution

One such method of educating the public en-masse would be to mandate basic first aid training as part of the driver licensing system.^{14,17} Current systems of learner driver training and license renewal in Australia would require reform if lives are to be saved and the degree of injury lessened.

This concept is not new.

The European Union, through its Directive 2000/56/EC, required all member countries by 1 October 2003 to ensure applicants for learner driver licences had basic first aid knowledge.¹⁸ To date Austria, Bosnia and Herzegovina, Estonia, Germany, Hungary Latvia, Lithuania, Slovakia and Switzerland require the possession of a first aid certificate before a driver's licence is granted.¹⁹ Additionally, United Nations resolution adopted by the General Assembly on 10 April 2014, Improving Global Road Safety (A/Res/68/269) encourages Member States to implement comprehensive policies on post-crash care (and to consider enacting legislation to legally protect bystanders who in good faith provide care to those injured in a crash).²⁰ This initiative is part of the Decade of Action on Improving Global Road Safety. It is essential that Australia also act on this important resolution.

Basic first aid awareness in the Australian driver population could be easily achieved via online training. Such e-learning initiatives already exist, including the St John Ambulance (Western Australia) *Clicktosave* (www.clicktosave.com.au) and the St John Ambulance (Northern Territory) *First@Scene* (www.firstatscene.com.au) programs. These e-learning initiatives are:

- developed at relatively low cost
- simple to administer
- can be administered en-mass
- are specifically targeted to provide the basic first aid knowledge specific to injuries common to road traffic accidents, and
- have the potential to reduce injury and save lives, and lessen the degree of serious injury on Australian roads.

In the Northern Territory, the *First@Scene* program has already been adopted by Northern Territory Department of Transport under their *Drive Safe NT: Driver Education Program* as one pathway for individuals wishing to obtain a provisional drivers licence.

In 2009 and 2013, St John Ambulance Australia (WA) surveyed 5069 WA residents regarding what they thought about the introduction of mandatory first aid training for new drivers through an e-learning program like *Clicktosave*. The results were conclusive with 90% of respondents supporting the e-learning initiative. It is estimated that with the introduction of such a program, up to 28 lives on WA roads may be saved each year.²¹

Much more must be done by Australian governments to give the Australian public the knowledge and skills to render assistance at the scene of an accident to lessen the burden of injury and prevent fatalities.

A final word

During an emergency, basic first aid awareness can mean the difference between life and death and can be the one thing to lessen the degree of serious injury a person experiences.⁴ St John Ambulance Australia urges the Rural and Regional Affairs and Transport References Committee to consider mandatory basic first aid learning for the licensing of all road users as a measure for decreasing fatalities and serious injury on Australian roads.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Peter LeCornu', written in a cursive style.

Peter LeCornu
Chief Executive Officer
St John Ambulance Australia

References

- 1 Rural Doctors Association of Australia. *Emergency medicine in rural Australia*, paper presented at the national 9th National Rural Health Conference, October 2007. Canberra, Australia.
- 2 British Red Cross. *Anyone can save a life: Road accidents and first aid*, 2001. British Red Cross: London
- 3 Hussain L and Redmond A. Are pre-hospital deaths from accidental injury preventable? *British Medical Journal* 1994, 308, 1077–80.
- 4 World Health Organisation. *World report on road traffic injury prevention: summary*, 2004. World Health Organisation: Geneva.
- 5 Bollig G, Wahl H, and Svendsen M. (2009). Primary school children are able to perform basic life-saving first aid measures. *Resuscitation*, 80, 689-692. Retrieved 26 March, 2012 from Elsevier database.
- 6 Arbon P. 'The role of bystander first aid in road trauma'. *Journal of the Australasian College of Road Safety*, 2008, 19(3), 21–24.
- 7 Larsson E, Martensson N and Alexanderson K. 'First-aid training and bystander actions at traffic crashes: A population study'. *Prehospital and Disaster Medicine*. 2002, 17(3), 134–41.
- 8 Mauritz W, Pelinka L, Kaff A *et al.* 'First aid measures provided by bystanders at the accident site. A prospective epidemiological study in the area of Vienna'. *Weiner Klinische Wochenschrift*, 2003, 115, 698–704.
- 9 Boufous S, Gabbe B, Elkington J, *et al.* *Investigation of the potential to enhance emergency response to motorcyclists involved in crashes*, 2012. The George Institute for Global Health and Monash University, Victoria.
- 10 Australian Institute of Health and Welfare. *Australia's health 2014*. Australia's health series no. 14. Cat. no. AUS 178. Canberra: AIHW. Retrieved from <http://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=60129547783>
- 11 O'Connor T, Hanks H, Elcock M, *et al.* 'The medical and retrieval costs of road crashes in rural and remote northern Queensland, 2004–2007: Findings from the Rural and Remote Road Safety Study'. *Medical Journal of Australia*, 190(2), 54–6.
- 12 Bakke H, Hansen I, Bendixen A, *et al.* 'Fatal injury as a function of rurality: A tale of two Norwegian countries'. *Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine* 2013, 21(14).
- 13 Victorian Auditor-General. *Access to Ambulance Services* (PP No 384, Session 2006-2010), 2010. Victorian Auditor General (ISBN 978 1 921650 59 8).
- 14 Fatovich D, Phillips M, Jacobs I, *et al.* 'Major trauma patients transferred from rural and remote Western Australia by the Royal Flying Doctor Service, 2011'. *The Journal of Trauma*, 71(6), 1816–20
- 15 International Federation of Red Cross and Red Crescent Societies. *First aid for a safer future: Focus on Europe*, September 2009. Retrieved from <https://www.ifrc.org/PageFiles/53459/First%20aid%20for%20a%20safer%20future%20Focus%20on%20Europe%20%20Advocacy%20report%202009.pdf?epslanguage=en>
- 16 Ashour A, Cameron P, Bernard S, *et al.* 'Could bystander first-aid prevent trauma deaths at the scene of injury?' *Emergency Medicine Australasia*, 2007: 19, 163–8.
- 17 Tziotis M, Rooper P, Edmonston, C. *et al.* *Road safety in rural and remote areas of Australia*, paper presented at the 22nd ARRB Conference—Research into Practice, Canberra, Australia, 2006.
- 18 <http://www.grsproadsafety.org/our-knowledge/first-aid>
- 19 Adelborg K, Thim T, Secher N, *et al.* 'Benefits and shortcomings of mandatory first aid and basic life support courses for learner drivers'. *Resuscitation* 2011;81:614–17. Elsevier, UK.
- 20 http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/68/269&referer=http://www.un.org/en/ga/68/resolutions.shtml&Lang=E
- 21 St John Ambulance Australia (WA). *Clicktosave: the people speak*, 2013. St John Ambulance Australia (WA): Perth.