INQUIRY INTO YOUNG DRIVER SAFETY AND EDUCATION PROGRAMS

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Submission to

STAYSAFE

(Joint Standing Committee on Road Safety)

Young Driver Safety & Education Program

November 2007
Young Driver Safety & Education Program

St John Ambulance Australia (NSW) welcomes the opportunity to present this submission to The Staysafe (Joint Standing Committee on Road Safety).

St John is a self funding charitable humanitarian organisation dedicated to helping people in sickness, distress, suffering or danger. These goals of St John are congruent with the Terms of Reference for The Staysafe (Joint Standing Committee on Road Safety).

St John Ambulance Australia is Australia’s largest first aid training provider, teaching practical life-saving skills to 350,000 people in 2006. In NSW 76,000 people were trained in first aid.

We provide volunteer first aid care at public events, both large and small, throughout Australia, and volunteer support to vulnerable members of the community through our community care programs.

In Western Australia and the Northern Territory, we run the public ambulance service. Paid and volunteer ambulance officers provide critical response and non-emergency patient transport in these states/territories.

We have been active in Australia for over one hundred and twenty years, and are part of the international St John organisation, which has a long and honourable history. There are thousands of examples where St John trained people have provided first aid that has been essential to saving lives.

This very important initiative, to save young drivers’ lives, is in line with the St John ethos and mission. We would like to offer our services to implement a life saving program as outlined in the following submission.

Yours sincerely,

Sean Gavin
Chief Executive Officer
SUMMARY

St John Ambulance Australia (NSW) advocates and supports:

- An education program which includes basic first aid training.

  This training should be made mandatory for all learner drivers prior to obtaining a motor vehicle or motor bike driver’s licence.

- That this training be extended to, and made mandatory for, repeat traffic offenders.

  This recommendation is supported by international and Australian research in harm minimisation for victims of road trauma.

  The European Union, through the Directive 2000/56/EC, required all member countries by 1 October 2003 to ensure applicants for driver licences know how to behave in the event of an accident, and the measures that they can take to assist road accident victims, including emergency action such as evacuation of passengers and basic knowledge of first aid.

- Compulsory first aid training is required prior to qualifying for a licence in Austria, Bosnia, Herzegovina, Estonia, Germany, Hungary, Latvia, Slovakia and Switzerland.

The research clearly indicates that:

1. many deaths from road accidents are preventable with immediate treatment by people trained in first aid.

2. provision of first aid at the scene of an accident has been proven to be a determining factor in the ultimate survival and long term recovery of casualties of road trauma.

3. reducing preventable deaths from road trauma requires widespread knowledge of first aid.

4. new and inexperienced drivers are two and a half times more likely to be involved in an accident than other road users.

Statistics by the Council of Ambulance Authorities (2006) show a gradual increase in the response time for an ambulance to arrive at the scene of a road trauma across Australia.

Response time for a Code 1 Emergency in the ACT is 7.5 minutes in 50% of cases, and 13.5 minutes in 90% of the balance of cases.

This delay can often mean the difference between life and death, without immediate first aid assistance.
St John Ambulance Australia (NSW) can provide basic first aid training for new drivers in a variety of formats and at minimal cost, as described in this document.

As the largest first aid training provider in Australia, we have the resources necessary to implement such a Program throughout NSW.

We have demonstrated this capacity for training when, in 2006, 2,475 high school students in 150 schools were trained in CPR by St John Ambulance Australia (NSW). The project, funded by the Sony Foundation, was called ‘Project Rainbow’.

We commend the Staysafe (Road Safety) Committee for conducting this enquiry into ‘Young Driver Safety and Education Program’.

It is a wonderful initiative and one where St John Ambulance Australia (NSW) would welcome the opportunity to assist in any way possible.
PREAMBLE

Road traffic injuries are a major community health problem. Worldwide, an estimated 1.2 million people are killed in road crashes and as many as 50 million injured. [Pedan et al WHO (2004)]

It is also estimated that the economic cost of road crashes and injuries is 1.5% of gross national product (GNP) in middle income countries and 2% in high income countries. [Pedan et al WHO (2004)]

The number of deaths in Australia from road crashes per 100,000 persons rose from 7.9 in 2004 to 8.1 in 2005. [Australian Bureau of Statistics 2007 Transport Accident Deaths]

Mabbott & Swadling (1998) reviewed accident costing in Australia and averaged costs (1997 dollar terms) for fatal and hospitalisation injuries. The average cost of a fatality was $823,694, while the cost of hospitalisation was $15,951. Thus, for each fatality that could be reduced to a hospitalisation injury the community would save approximately $672,000, and the loss of a loved one.

In addition, the social cost in human life, suffering, disability, and poverty caused by the loss of breadwinners, is immeasurable.

AVOIDABLE DEATHS

Khangure (1998) examined 1,151 deaths from motor vehicle accidents in Western Australia over a five year period (1990 – 1994). The pathologists specifically noted that airway obstruction was a contributory cause, if not the cause of death in 5% of cases.

They concluded that simple first aid has the potential to save lives.

Hussain and Redmond (1994) concluded that 33.5% of deaths could be avoided. They recommended that first aid training be compulsory in schools, that every driver being tested to drive also be tested for first aid skills, and each car should have a first aid kit.

Rann, Clark & Assoc (1985) found that 13% of road deaths examined in South Australia were probably survivable, including 7% who asphyxiated.

In summary, the authors state the life saving measures that could be performed with little or no equipment by lay persons are:

- Maintenance of the airway in unconscious patients, ie. correct positioning, clearing obstructions in the mouth, etc
- Resuscitation
- Control of bleeding
Gilroy (1985) states that in cases whereby the victim dies of less severe head injuries, improvement may have been achieved with maintenance of a clear airway.

Hossack (1972) concluded that 7% of deaths occurred due to asphyxia without other injuries.

Christie (1983) reviewed research on pre-hospital deaths caused by traffic accidents and concluded that between 7% and 15% of fatalities could be avoided by immediate first aid from lay persons or otherwise.

**Summary of reviewed research findings:**

<table>
<thead>
<tr>
<th>Author/s</th>
<th>Year</th>
<th>% Avoidable deaths</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hossack</td>
<td>1972</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Christie</td>
<td>1983</td>
<td>7 – 15%</td>
<td>Review of research papers</td>
</tr>
<tr>
<td>Gilroy</td>
<td>1985</td>
<td>7.6</td>
<td></td>
</tr>
<tr>
<td>RARU, Clark &amp; Associates</td>
<td>1985</td>
<td>13</td>
<td>7% asphyxiated</td>
</tr>
<tr>
<td>Hussain &amp; Redmond</td>
<td>1994</td>
<td>33.5</td>
<td>Included deaths due to all emergencies</td>
</tr>
<tr>
<td>Khangure</td>
<td>1998</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

[Cited Mabbott, N (2001)]

The research noted above clearly indicates that approximately 7% of lives could be saved by early intervention.

**IMPROVEMENTS TO ROAD SAFETY**

Motor vehicle accidents were described by Haddon as the interaction of three factors – human; vehicle, and environment – during the pre-crash, crash, and post crash phases. [Cited in World Report on Road Traffic Injury Prevention, WHO 2004]

The human factor can be addressed by the dissemination of adequate information in the pre-crash phase, and life sustaining first aid skills and access to medics in the post-crash phase.

The Global Road Safety Partnership (2007) attributes road crashes to:

- **Vehicle:** 5% – 10%
- **Road infrastructure:** 10% – 20%
- **Road user behaviour:** 80% – 90%

This document states “the main challenge of road safety is to bring about a change in road user behaviour”.

MOST AT RISK

The following table clearly identifies road traffic deaths by gender and age group as: Males between 15 and 29 years of age the most at risk.

Road traffic deaths by gender and age group:

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Number of Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 4</td>
<td>50,000</td>
</tr>
<tr>
<td>5 - 14</td>
<td>100,000</td>
</tr>
<tr>
<td>15 - 29</td>
<td>150,000</td>
</tr>
<tr>
<td>30 - 44</td>
<td>200,000</td>
</tr>
<tr>
<td>45 - 59</td>
<td>250,000</td>
</tr>
<tr>
<td>≥60</td>
<td>0</td>
</tr>
</tbody>
</table>


There is not one solution to the tragedy of deaths and injury due to motor vehicle accidents. It depends on a collaborative effort as depicted in the following diagram:

The key organisations influencing policy development:

[Source: Pedan, et al, WHO (2004)]
What Can St John Do?

St John Ambulance Australia can assist to:

- Increase human awareness
- Provide information
- Reduce the number of deaths and disability through first aid training

FIRST AID TRAINING

First aid training for young drivers, prior to issuing a driver’s licence, is common in many overseas countries


“All EU countries were required by 1 October 2003 to have taken the necessary measures to ensure that applicants for driving licences must know how to behave in the event of an accident, and the measures that they can take to assist road accident victims, including emergency action such as evacuation of passengers and basic knowledge of first aid.”

The Directive also requires first aid training and refresher courses for professional drivers.

“In April 2001, the Economic & Social Council of the United Nations adopted a resolution highlighting the role and importance of first aid training and equipment for road users through specific recommendations, applicable in United Nations member states from 2003.”

[Source: Global Road Safety Partnership]

The European Transport Safety Council has stated that:

“… effective first aid is one of the activities in the management of the casualty which is a crucial determinant of the severity of injury eventually received and the chance of survival.”

[Source: A Strategic Road Safety Plan for the European Union (EU), Brussels 1997]

What First Aid Training is Required?

The literature identifies that a basic first aid course of 4 – 8 hours would be sufficient to learn the basics of assisting and managing trauma at the scene of a motor vehicle accident.
First Aid Training should include:

1. Road Safety Practices
   a. Helmets
   b. Seat belts,
   c. Speed limits
   d. Drinking & Driving

2. Making the scene of an accident safe to prevent further injuries

3. Calling for assistance and giving relevant information to Emergency Services

4. Removing casualties from the crash where necessary and if possible

5. Attending to life threatening injuries, ie.
   a. Checking vital functions
   b. Unconsciousness – maintaining an airway
   c. Positioning
   d. Bleeding
   e. Shock
   f. Resuscitation – no breathing or pulse
   g. Fractures
   h. Burns
   i. Reassurance and support of the injured person

6. Infection Control

7. Legal Protection of person giving first aid – Refer to attached extract from ‘Civil Liability Amendment (Personal Responsibility) Bill 2002 – Part 8 Good Samaritan’

8. Debriefing of person giving first aid.

Global Road Safety Partnership 2007; Oxer (1999); Mauritz (2003); Mabbott, N (2001), and Arbon P, et al (2007) identified that bystanders may be reluctant to give first aid due to risk of infection or being sued.

Therefore, Topics 6 and 7 should be included to allay any fears and decrease reluctance to give first aid. Topic 8 should be included for the ongoing well being of the first aider.

The National Highway Transport Safety Authority (NHTSA) developed the National Standard Curriculum for Bystander Care, based on the principles:

- Nearly everyone can and should learn basic life saving skills;
• Teaching lay persons to overcome fear and uncertainty is at least as important as teach them specific life saving skills;

• Lay persons do not need to know why victims exhibit certain symptoms in order to provide appropriate care; and

• Lay persons should not be expected to perform non-essential skills that are not critical to saving life.

[Cited in Mabbott, N (2001)]

St John Ambulance Australia (NSW) believes that these principles should and must be followed in any first aid driver safety program.

Delivery of Training

Lack of time is often quoted as a reason for not doing a first aid course.

St John Ambulance Australia (NSW) can provide basic first aid flexible training by a number of options:

• Theoretical component delivered:
  o Online, or by
  o CD Rom, or
  o Workbook, for persons without a computer

• Practical component

  As first aid is a practical hands-on skill, some face-to-face practical supervision and assessment would be required. Traffic accident scenarios would need to be practiced for persons to gain confidence in using their skills.

It is envisaged that the practical component could take between 2 – 4 hours, with an additional 2 hours at home completing the theoretical component.

An example of a St John online first aid course is the St John Ambulance Western Australia Crash Course, which can be accessed via http://www.stjohnambulance.com.au/onlinecourse/index.html
REFERENCES


Australian Bureau of Statistics 2007 Transport Accident Deaths


St John Ambulance Australia, 2006, ‘First aid for road users and online first aid crash course, WA Ambulance Service Inc.’