PARAMEDICS

AUSTRALASIA

Submission to the 2018 Review of the Model WHS Laws

April 2018

Introduction

Paramedics Australasia welcomes this opportunity to make a submission to assist Ms Marie Boland's review of how the model WHS laws are operating in practice, whether they are achieving the objects stated in the model WHS Act or if they have resulted in unintended consequences.

Paramedics Australasia is the peak membership organisation for paramedics in Australia and New Zealand, representing over 4,500 paramedics and other ancillary workers in paramedicine. It is our view that AEDs are vital to the 'chain of survival' and we support the Australian Hearts campaign. Along with the community, doctors, AED manufacturers and suppliers, marketers, and other emergency service providers, Paramedics Australasia commits to making AEDs easily accessible to all Australians and in particular to improve access to AEDs in the workplace and community.

This submission, supports the submission made by Australian Hearts campaign and references evidence shared with us. It focuses only on the issue of cardiac arrests which occur in the workplace, irrespective of whether or not the arrest has been caused by the workplace activity.

Workplaces have become safer through the activities of all stakeholders including mandating access to First Aid kits and trained First Aiders who must be able to undertake CPR.

This submission outlines the nature and size of the issue, the many significant benefits that come with addressing the issue and the required changes to the model WHS regime needed to address the issue.

Background - Sudden Cardiac Arrest

Sudden cardiac arrest (SCA) is a sudden loss of blood flow resulting from the failure of the heart to effectively pump. Some 20,000 Australians die from SCA each year, making it Australia's biggest killer. Survival of SCA in Australia is estimated to be 12%, or 25% if the SCA is witnessed by a by-stander. Survival in other parts of the world is as high as 65% for witnessed SCA.

SCA can occur in any circumstance, from sleeping to working to playing sport. There are many contributing factors to SCA. These include but are not limited to diet, weight, exercise or lack of exercise, stress, genetic factors, though it is important to note that many SCA occur to young and otherwise healthy Australians.

The McKell Institute's 2013 Report, *AEDs on Australian worksites: A low cost proposal to save lives* articulates the case for improving access to AEDs in Australian workplaces.

SCA deaths are occurring in Australian workplaces. Unfortunately, data is not available to quantify how many, though it is likely to be a larger number than all other causes of workplace death put together.

Is SCA a workplace health and safety issue?

A SCA can happen at anytime and anywhere and do routinely occur in Australian workplaces.

NSW data from 2012 shows that for cardiac arrest calls to Ambulance NSW some 59% were deceased when the ambulance arrived. [1] Approximately a third of calls occurring during working

[1] NSW Health *Epidemiology of out-of-hospital cardiac arrests, NSW, 2012: Time, place and person* Table 2, pg.5. This study was done specifically to inform AED policy.

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hours and 25% were from a workplace [2] (where location was recorded or assigned based on land use of census cell for address).

Work-related traumatic injury fatalities from injuries caused by work-related activity have commendably continued to decline year on year over the last decade[3]. The definition of work-related fatalities includes those that result from an injury sustained during a work activity (worker fatality) and because of someone else's work activity (bystander fatality). The definition excludes certain fatalities which might occur in the workplace because they are due to:

- iatrogenic injuries—the worker died due to medical intervention;
- natural causes such as heart attacks and strokes, except where a work-related injury was the direct cause of the heart attack or stroke;
- diseases, such as cancers; or
- self-inflicted injuries (suicide).

In other words, fatalities from cardiac arrest that take place in a workplace are not recorded as workplace fatalities by Safe Work Australia. But as the Ambulance NSW data discussed above outlines, workplaces across Australia see a significant number of treatable cardiac arrests. Whilst the workplace may indeed have contributed to the timing of the event (due to activities undertaken in the workplace), the absence of reporting these deaths as workplace fatalities is indeed failing to identify a need for improvement under the model Act, Regulations and Codes present structure

Is death from Sudden Cardiac Arrest preventable?

If you have a cardiac arrest and it is not witnessed or you are not found shortly after the event, then you will not receive lifesaving treatment and you will die.

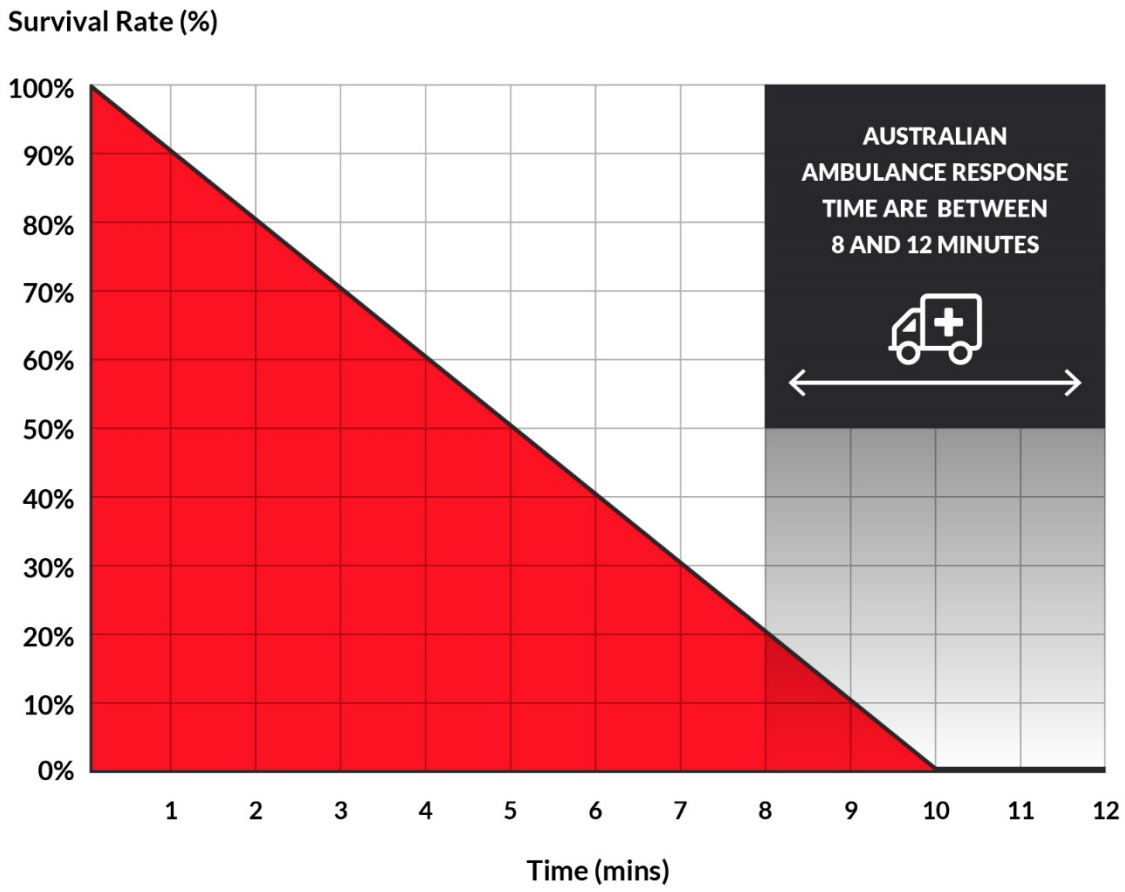
Fortunately for many, SCA occur in various locations where the victim is surrounded by other people. This includes public spaces, sporting facilities and workplaces to name a few. To focus on workplaces specifically, for a victim to have the best chance of survival three things need to happen. Firstly someone needs to call 000, secondly someone needs to start CPR and thirdly the victim needs defibrillation, if clinically indicated.

Australian ambulance response times are between 8-12 minutes in metropolitan areas. The sooner a heart receives a clinically indicated shock from a defibrillator the higher the chance that the victim will survive – this can be achieved prior to the arrival of an ambulance with ready access is to automatic defibrillation.

[2] Ibid. Table 3, pg.6

[3] Safe Work Australia *Work-related Fatalities* https://www.safeworkaustralia.gov.au/statistics-and-research/statistics/fatalities/fatality-statistics visited 2 April 2018.

Figure One: Survival from a SCA is time dependent



In Australia, recent Ambulance data shows witnessed SCA survival is around 27%. This translates into only 1 in 4 SCA's in Australian workplaces having a positive outcome.

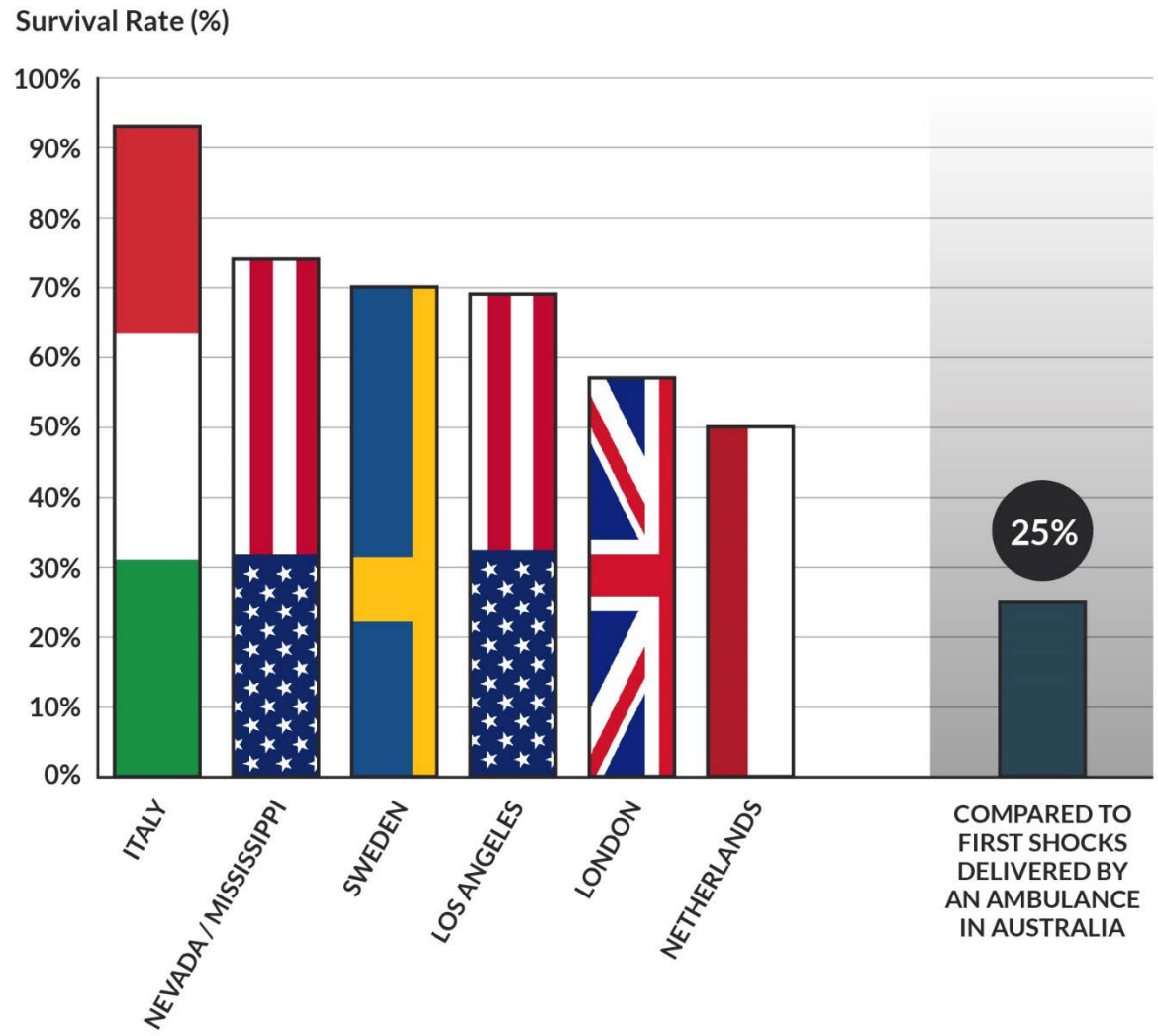
What will save more workplace SCA victims?

Ambulance Victoria have demonstrated that Victorian SCA victims that receive their first shock from an by-stander who utilises an AED have a 1.96x higher change of surviving the event (55%) than those that wait for a Victorian ambulance (28%).

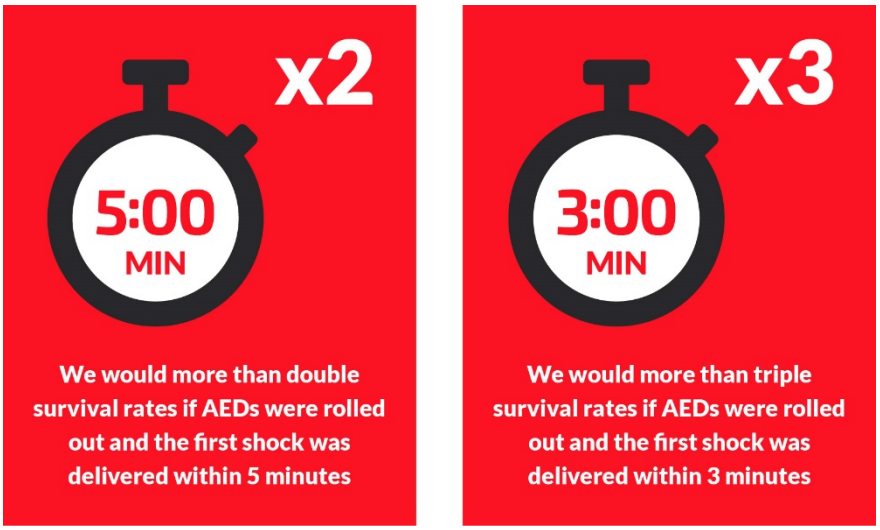
Global studies over the past 20 years have provided similar outcomes. These studies have repeatedly demonstrated the link between AEDs and surviving a SCA. In addition these studies have demonstrated that higher survival outcomes are achieved when the first shock is delivered within 3 mins.

The chart below demonstrates a small number of these studies and focuses on studies that published data on first shock being delivered within 3 – 4 minutes.

Figure Two: Australian survival rates compare badly with global rates

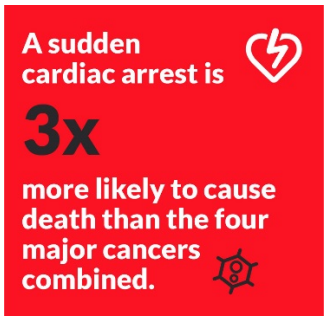


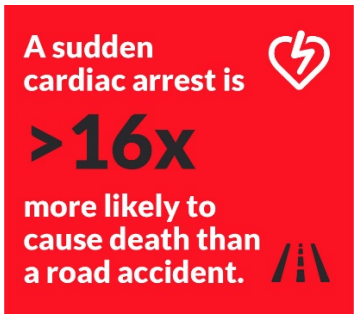
If Australian workplaces made AEDs available to their workforces, either within 5 mins through a shared AED, or within 3 minutes through an onsite AED the evidence suggests Australian workers would be protected from death in the workplace either twice or three times as effectively as today.

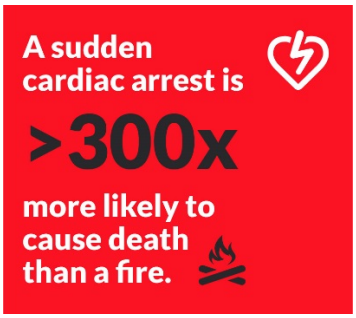


Size of the issue v. other causes of death

There is a lack of data around exactly where SCA occurs. Considering the time we spend at home, either sleeping or recovering from work, it is not surprising that most SCAs occur at home. In terms of time, second to home for most people is work. On average Australians spend about 20% of their time at work (7.5 hours per day, 5 days per week, 48 weeks per year). It is reasonable to assume that 1000's of SCA deaths are occurring in workplaces just based on time people spend at work.







It is estimated that **56** people die annually from fire related events. Whilst still too high, Australia should be applauded for a huge focus on early identification of fire (smoke alarms) and empowering Australian's to deal with fire by making fire extinguishers mandatory.

In 2015 the national road toll was a horrible **1209**. Between 2006 and 2015, Australia's road toll declined 33.4 per cent. [4] Mandatory changes to road safety, driver education and other factors have all come together to save lives.

In 2018 there will be more than **19,800** deaths from SCA.

SCA is the single largest health issue facing Australian workplaces.

Current Protection in the Act or available to workplace victims of SCA

The current model *Code of Practice for First Aid in the Workplace* [5] reflecting Regulation 42 states that businesses must provide access to sufficient number of people trained to administer first aid. The Code continues:

> *First aiders should hold nationally recognised Statement/s of Attainment issued by a Registered Training Organisation (RTO) for the nationally endorsed first aid unit/s of competency. Provide First Aid - provides competencies required to recognise and respond to common life-threatening injuries or illnesses, including life-support using cardiopulmonary resuscitation (CPR), and to manage the casualty and incident until the arrival of medical or other assistance.*
>
> *In low risk workplaces, first aiders are sufficiently trained if they can perform CPR and treat minor illnesses and injuries.*

[4] International Road Safety Comparisons—Annual https://bitre.gov.au/publications/ongoing/international_road_safety_comparisons.aspx visited 10 April 2018

[5] Available at https://www.safeworkaustralia.gov.au/doc/model-code-practice-first-aid-workplace

In other words, every workplace must provide access to a person trained in CPR. In fact, during the accredited first aid training, each student is exposed to the importance and use of an AED in responding to a cardiac arrest. AEDs are recognised as a key part of delivering first aid and yet are not mandatory. This would be akin to training fire wardens on how to use fire extinguishers but then not having fire extinguishers in the workplace. To be clear, workplace First Aid is ineffective in protecting Australian workplaces from SCA because accredited personal are not provided the equipment to treat the most common and most serious health event that occurs and is in part caused by the workplace.

A first-aider with an AED is literally the best protection possible for a workplace SCA victim.

Automatic External Defibrillators are not mandatory in Australian Workplaces

The government authority *Safe Work Australia* leads the development of national policies to improve Workplace Health and Safety (WHS) arrangements across Australia including since 2011, a single set of model WHS laws.

In 2017 the State, Territory and Federal Government Ministers responsible for WHS agreed to review the content and operation of the model WHS laws. Led by Marie Boland, the review will be evidence-based and propose actions that may be taken by WHS Ministers to improve the model WHS laws or identify areas of the model WHS laws that require further assessment and analysis following the review.

The inquiry commenced in February 2018 and is due to report by year end.

The model WHS Act, model WHS Regulations and Model Codes of Practice, which have been implemented across Australia set the rules for safe workplaces and the training, kit and technology that must be available such as a First Aid Kit.

The model WHS Act currently states that its object, among other things, is:

> "*protecting workers and other persons against harm to their health, safety and welfare through the elimination or minimisation of risks arising from work*".

Further, the model Act states in achieving the object that the principle must be:

> "*that workers and other persons should be given the highest level of protection…as is reasonably practicable."*[6]

But without AEDs and the required training being mandated in the Codes of Practice, Paramedics Australasia, submits that this worthy objective is not being met in many workplaces. Both the object and principle is not being met, as AED's aid to minimise the risk of death from SCA in the workplace, and mandating their presence in the workplace is absolutely reasonably practicable to do so, however they are not presently mandated and therefore the risk is not being treated.

The current model *Code of Practice for First Aid in the Workplace*[7] states only that businesses:

> "*should consider whether any other first aid equipment is necessary to treat the injuries or illnesses that could occur as a result of a hazard at your workplace*,"

[6] 2018 Review of the model WHS laws: Discussion Paper pg.45
[7] Available at https://www.safeworkaustralia.gov.au/doc/model-code-practice-first-aid-workplace

This includes AEDs, meaning they are currently not mandated. The Code only mandates First Aid Kits and trained First Aiders. It is argued that workplaces do not possess sufficient skills to identify if their workplace and cohort of employees are indeed statistically more susceptible to sudden cardiac arrest, and from that determine if they should have an AED. Stronger leadership from the model Act, Regulations and Codes design is required to assist workplaces with this decision and move to protect all working Australians at risk of SCA.

Specifically, regarding AEDs the Code states that:

> "p*roviding an automated external defibrillator can reduce the risk of fatality from cardiac arrest. It is a* ***useful addition*** *for workplaces where there is a risk of electrocution or where there are large numbers of members of the public."* (emphasis added).

As AEDs are not mandated, only some forward-thinking employers and organisations have made them available in their workplaces. The above Code reference does in fact go so far as to potentially misguide workplaces that they should only be considering AED's under the two stated conditions (electrocution and large numbers of members of public). In order for survival rates to materially increase relating to SCA in the workplace, the AED needs to become mandatory and easily accessible by Australian workers in any work environment.

According to St John NSW research, just one in five workplaces in NSW have an AED installed, with less than 30% of employees having received training in how to use one[8].

Stakeholders in the area agree that

> *"A number of stakeholders believed that survival rates from sudden cardiac arrest could be improved by saturation of AEDs in public areas. These stakeholders believed that the installation of AEDs should become part of a standard duty of care for public liability and workplace safety for larger organisations, and other developments such as regulation and incentive schemes were identified as important drivers of a shift to non-government funded PAD.*
>
> *The quantitative findings confirmed that government guidelines for safety in the workplace would be a greater driver for organisations to purchase AEDs, compared to concern for the general health and safety of the public." [9]*

AED training needs to be incorporated into standard first aid training.

The ad hoc approach to AED regulation and provision across the country prevents them from being rolled out in a methodical and comprehensive way, resulting in inequitable access to this life saving technology.

We all agree that First Aid Kits and fire extinguishers plus training in their use must be mandatory in workplaces because they save lives. AEDs do the same, however much like a fire extinguisher or first aid kit, if they are not there when required the consequences are disastrous and Australian worker lives will be lost.

Currently, the model WHS Code does not go far enough and that must change.

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[8] St John NSW, *St John hammers home workplace safety* (4 October 2017) http://www.stjohnnsw.com.au/st-john-nsw-hammers-home-workplace-safety/ visited 2 April 2018.
[9] Department of Health. 2008 p.10

W. www.australianhearts.com E. [redacted]

This is a critical opportunity to reform the WHS laws, regulations and codes to remove the inequitable access to AEDs and training; and reduce the number of avoidable deaths from 41 per day.

Would mandating AEDs be an unreasonable cost on business?

No. AED's have become very affordable over the past decade. Published prices before negotiation for single units range between $1999 and $2999. We are aware of large volume AED purchases being made for less than $1500 a device though suspect that prices are even lower than that in many situations.

AED's last for approximately 8 years, and often require a battery and electrode pad replacement at the 4-year mark. This replacement costs a further one off $150 - $300.

Considering that Australian workplaces are a contributor to SCA in Australia, and these SCA's are occurring in workplaces it seems reasonable to ask employers to invest between $1999 and $2999 in providing protection for workers.

Response to Question 3: Have you any comments on whether the model WHS Codes adequately support the object of the model WHS Act?

Paramedics Australasia Supports the view of Australian Hearts, that the current model *Code of Practice for First Aid in the Workplace* does not adequately support the object of the model WHS Act.

It fails to do this by not mandating AEDs nor requiring training in their use by persons trained in first aid, to support the mandatory requirement of CPR training and thereby enhance the chances of survival from a cardiac arrest which might occur in the workplace.

In no circumstance are AEDs mandatory under the model *Code of Practice for First Aid in the Workplace*, even if there is a risk of electrocution or large numbers of the public present in a particular workplace. In such circumstances it is advisory only, and this therefore becomes misleading to all other workplace environments when considering AED's. This could not be said to represent the model WHS Code adequately supporting the objectives of the Act.

AEDs are now so reasonably and practically available for all circumstances and in all workplaces that mandating them in the Code would ensure compliance with the objectives of the model Act in ensuring the highest level of protection.

W. www.australianhearts.com E. [redacted]