



# Case Support for Compression-only CPR: St. John Ambulance

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In this issue the IJFAE introduced the Cochrane Corner, where a systematic review from a premier organization has been contextualized for first aid educators and training organizations. As corners have two views, the IJFAE solicited a training organization's perspective on the same review. Representatives of St. John Ambulance provide a response and a case of support of how diversifying first aid education can improve individual willingness and community readiness through compression only CPR. If individual readers or organizations would be interested in providing a Cochrane Corner response please contact [editor@firstaid-revolution.org](mailto:editor@firstaid-revolution.org).

The discussion of how to direct untrained bystanders to perform CPR has been a long-standing debate within the First Aid community. The discussion centers on whether to instruct them to perform breaths as a component of CPR. The issue in question is not about the effectiveness of combining breaths with compressions as, in general, The First Aid community would argue that the proper application of CPR either with or without breaths can increase the chance of survival. Further, the debate is not really about the proper application of breaths by the untrained bystander, which we know are unlikely to be as effective as a trained responder. The actual debate about whether to instruct the untrained bystander to use compression-only or full CPR is about a willingness to respond. Breaths are intimidating when performing CPR and by removing them from a recommended response, the willingness of an untrained bystander is likely to rise.

The Cochrane Corner (Laermans et al., 2021) has taken up the debate in assessing the effectiveness of continuous chest compressions versus conventional CPR within the untrained bystander population. A group of representatives from St. John Ambulance composed of medical directors

and First Aid training leads from Canada, England, Australia and New Zealand reviewed the study's methodology and its findings. Our conclusions were that the process was sound and that the results and evidence gaps were justified. This type of research and subsequent publication of the findings is invaluable to the discussion around messaging to the untrained bystander by First Aid authorities. In our discussion of the Cochrane Corner and its findings we will center on just that: what is the best messaging we (as an authority on First Aid) can provide to the untrained bystander in terms of both formal and informal instruction?

In order to have a fulsome conversation regarding compression-only CPR for the untrained bystander, we first need to define that term. St. John Ambulance groups the population into two distinct categories when it comes to First Aid: a trained first aider and an untrained bystander. A trained first aider is someone who has achieved a certification in either a first aid or CPR course. An untrained bystander is someone who has never taken a first aid/CPR course or has allowed their certification to expire.

Our position on the instruction of CPR relating to the combination of compressions and breaths differs on how that instruction is delivered. We continue to teach both breaths and compression within all of our first aid and CPR classes because we believe the combination provides a higher survival rate and it raises the willingness to act. Our instruction also discusses the proper use of personal protective equipment (PPE) and the concept of ‘something is better than nothing’ in terms of a response so that the responder can make choices in how they interact with the casualty. All of this combines to increase the responder’s willingness to take action in the face of an emergency, particularly one that is cardiac in nature.

This philosophy of providing training that increases the participant’s willingness to act is what has driven us to alter the message delivered to the population that does not take a certified first aid class but is still looking to consume information on how to respond during an emergency. Our messaging to untrained bystanders, whether a formal media campaign or messaging through social media channels, is one of taking action in a means that makes them feel safe. The core of the messaging regarding cardiac events involves three levels of taking action. The first, being at a minimum, is to call emergency services and get responders on the way. The second is to begin compression-only CPR. The thinking here is that the removal of breaths makes them more likely to take action. As noted in the Cochrane study, the application of continuous compressions did improve the rate of survival among those studied. Lastly, when performing CPR on family members we promote the use of compressions and breaths as the hesitation tied to contact with a stranger is removed. In sum, the purpose of promoting compression-only CPR is to create a population of untrained bystanders that are willing to act. The more that act, the more lives that will be saved as demonstrated in the findings from the Cochrane Review.

### **Case Study: England**

An example of the promotion of compression-only CPR was conducted in England by St. John

Ambulance in October 2020 (see supplementary material for further information on this). During the global COVID-19 pandemic St John Ambulance England took a targeted virtual approach to Restart a Heart Day which provides a focus for teaching CPR to the public. Research was undertaken (Brown et al., 2019) to identify the hotspots of high Out of Hospital Cardiac Arrest (OOHCA) and low Bystander CPR (BCPR), being mindful that we wanted to engage community networks and groups who do not normally access first aid and basic lifesaving skills. In the UK, Cardiovascular disease is disproportionately higher in South Asian and other Black and Minority Ethnic Groups (BAME) groups and so the campaign was focused on these communities.

Several virtual learning sessions were provided to Hindu Temple Community Groups throughout London and the Midlands and South Asian Women’s Group in London. We worked with intergenerational groups with the help of translation for elders and English subtitles provided in our videos. Creating interactive and engaging activities demonstrated that virtual sessions could provide value, engagement, and confidence in the same way that face-to-face learning can.

During this campaign in October 2020, 1700 people were reached with the virtual session with an age range of 4 to 85 years. Our social media reached 343,673 people. The people attending the session were asked before and after the session about their confidence in being able to give compression only CPR. This increased from 3% before the session to 98% after measured via an online quiz before and after the sessions. The work to reach those harder to reach populations continues.

### **Conclusion**

In conclusion, the Cochrane Corner review on this topic (and the evidence base it draws on) is critical to saving lives. It promotes discussion and potentially the changes in the way the first aid community approaches its instruction. Promotion of compression-only CPR for the untrained bystander by first aid training authorities is critical

as it will raise the likelihood of this population taking action which in turn will save lives. As representatives of St. John Ambulance from Canada, England, Australia and New Zealand, we support the finding and recommendations of this Cochrane study which validates our own effort to promote the use of compression-only CPR by untrained bystanders.

### **Conflict of Interests**

None Reported

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