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Letter to the Editor

Proposal to increase safety of first responders dispatched to cardiac arrest

To the editor,

Dispatch of first responders to out-of-hospital cardiac arrest is associated with higher rates of survival and is recommended by the guidelines of the European Resuscitation Council and American Heart Association.^{1–3} While efforts should be made to establish first responder systems to increase survival, safety of first responders should be of utmost importance. This is particularly true for systems, that deploy potentially vulnerable first responders such as off-duty medical personnel and medical laypersons.⁴

It came to our attention, that in some first responder systems, safety of first responders might be recurrently compromised. We are concerned that not all schemes insist on appropriate training or have means of contacting and standing down responders when safety concerns arise. Even if dispatchers become aware of potential threats during the mission, they cannot cancel it. Thus, in these systems first responders are in risk of attending cardiac arrests related to criminal offences and potential homicides.

Currently, first responder systems are organised quite differently; oftentimes even within one country.⁵ This diversity enables systems to be tailored to regional demands. However, some safety standards should be implemented in each system.

We propose five measures, which might help to mitigate the risks and increase safety of first responders (Fig. 1).

1. First responders should verify themselves by registering with their names, addresses and medical qualifications to enable debriefing. Minimum age and minimum qualification requirements (e.g. certified Basic Life Support Course) might help reduce psychological distress.^{6,7}
2. An (online) introductory first responder training ascertains that each first responder knows how to perform basic life support, operate the alerting app and understands the importance of evaluating safety of the emergency site.
3. First responders should be made aware, that they can decline or cancel a mission at all times and for any reason. Because they are dispatched in addition to the regular emergency medical service, standard emergency medical service care is provided, regardless of the first responder attending the mission.

4. To increase safety, emergency dispatch centres should lead the whole first responder mission. In many first responder systems they already play an integral role.^{8–10} Although there is always an element of dispatch into some unknowns, dispatchers can perform a proficient risk assessment.^{10,11} Many first responder systems systematically do not dispatch to potentially hazardous situations, e.g. emergencies involving crime, weapons, violence, fire or traffic accidents.¹²
5. During the mission dispatchers should know contact details of first responders. In many systems, dispatchers are provided with information on the current location of those first responders, who accepted the mission. It should be mandatory, that dispatchers are able to update mission data, issue warnings or cancel missions, if situations unexpectedly turn out to be hazardous. A continuous link between dispatch centre and first responder is thus proposed.⁸

Each first responder system should issue a risk management strategy. Standardised incident reporting, regional risk profiles and registers as well as continuous mission audits could help to identify and mitigate risks and improve safety for first responders.

We encourage all first responder systems to take safety precautions and to put the safety of first responders first.

Declaration of Competing Interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: 'DF is co-founder and operations manager of the Hearrunner Citizen Responder System, Sweden and member of the tech&ops committee of EENA (European Emergency Number Association). CM is Guest Editor special issue "Impact of First Responders in Resuscitation" in Resuscitation Plus. MPM is chair of Region of Lifesavers, shareholder of SmartResQ ApS, and received speaker honoraria from Stryker. TS is the Social Media Editor of Resuscitation and Resuscitation Plus journals. All other authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper'.

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Fig. 1 – Recommended measures to increase safety of first responders.

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