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# Resuscitation

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## Letter to the Editor

# Reply to: Singularities of AED implementation in occupational setting and COVID-19 pandemic



We would like to thank Descatha et al. for their interest in our manuscript "Use and Coverage of Automated External Defibrillators According to Location in Out-of-Hospital Cardiac Arrest".<sup>1</sup> As you have kindly noted, cardiac arrest occurring in occupational settings tend to affect younger, healthier individuals<sup>2</sup> with a presumed higher post-arrest life expectancy. The twenty-five out-of-hospital cardiac arrests (OHCAs) that occurred in "Companies/workplaces" in our study were likewise younger and had the second-most favorable outcome overall (17 out of 25 OHCAs alive at 30 days). However, as OHCAs in occupational settings are uncommon,<sup>3</sup> the trade-off between high survival rates among few occupational OHCAs and a wide AED dissemination at low-risk occupational sites with poor availability, as found in our study, is unknown. Perhaps the next step for opting AED use from occupational sites would be to encourage owners to place AEDs in visible out-door cabinets with 24/7 public accessibility. However, these cabinets also come with additional costs for electricity and maintenance as well as the risk of vandalism and theft.

As you mention in your letter, the settings concerning workplaces and companies may vary widely. In several studies, the definition of an "occupational setting"<sup>2-4</sup> and its distinction from a public place may also seem unclear, which further underlines the difficulties in evaluating this heterogeneous OHCA group.

The impact of the Covid-19 pandemic on cardiac arrest in occupational settings remains to be evaluated. We believe that many of these will be categorized as residential OHCAs, and given the demographic characteristics in the occupational group, this could lead to an upward shift towards better overall outcomes in the residential group. Similarly, due to closing of public gatherings and retail shops, the number of public OHCAs may also decrease in favor of residential OHCAs, further clouding the epidemiology of sudden cardiac arrest during the pandemic. The authors agree that the area will need further research in the future.

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## Conflict of interests

The authors have none to declare.

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