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## Letter to the Editor

# Public access defibrillators: The stark reality



Dear Sir,

Defibrillation is unequivocally the cornerstone of early resuscitation for out-of-hospital cardiac arrest (OHCA).<sup>1</sup> Over the past decades, millions of automated external defibrillators (AEDs) have been deployed in public-access settings, enabling bystanders to promptly deliver life-saving defibrillation.<sup>2,3</sup> This strategy has been further enhanced by the advent of smartphone applications designed to mobilize citizen responders, which have proliferated in recent years.<sup>4</sup> Nevertheless, several critical challenges persist. First, the AEDs must be operational, which is not always the case.<sup>5</sup> Second, the devices must be geolocated so their position can be reliably communicated to rescuers. Finally, they must be accessible when needed. In this study, we focused on evaluating the latter two aspects using data from the French national AED registry, Géo'DAE, established in 2018. As of today, the French AED network is estimated to include approximately 500,000 devices.

We analyzed the number of registered AEDs, their location (indoor vs. outdoor), and their actual accessibility, including 24/7 availability.

As of today, five years after the registry's implementation, a total of 138,608 AEDs have been registered, representing approximately 28% of the national inventory. Among these, 27,614 (20%) are located outdoors, while 110,994 (80%) are indoors. Of the total, 90,714 (65%) AEDs are freely accessible; 27,759 (20%) are available 24/7, and 35,102 (25%) are accessible 7 days a week. Overall, 26,833 (19%) AEDs are accessible 24/7 and 7 days a week, including 20,227 (73%) of outdoor AEDs and 6,606 (6%) of indoor AEDs ( $p < 0.0001$ ) (Fig. 1).

The accessibility of AEDs was notably insufficient (19%), particularly for the 80% of AEDs located indoors (6%). The Géo'DAE database was underreported (28%), and its completeness was a

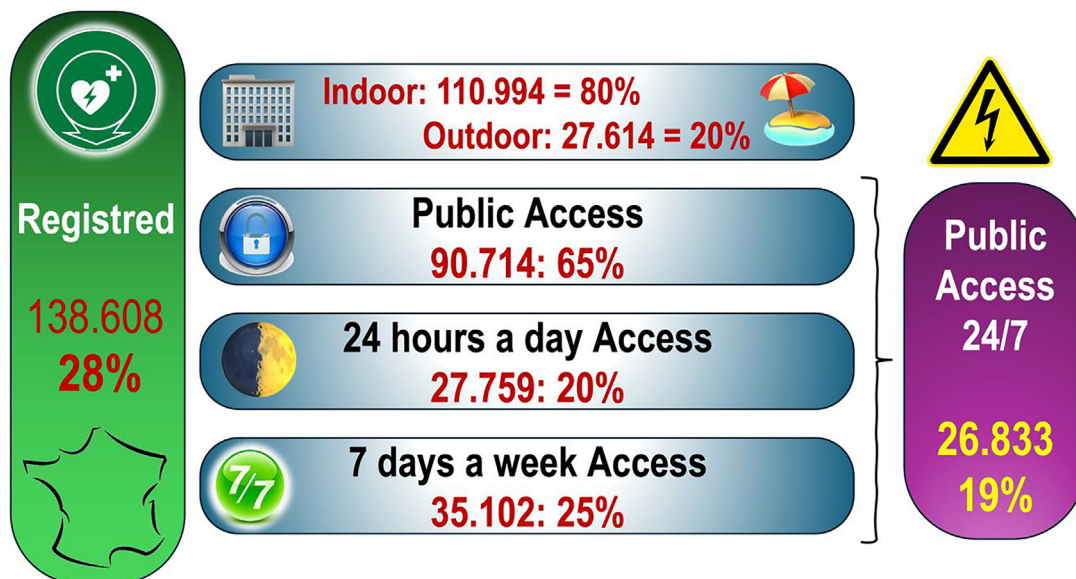


Fig. 1 – Accessibility of the 138,608 AED recorder in the French registry.

prerequisite for ensuring rapid access to defibrillation for the population. Finally, only 6% of the AEDs were both available and registered, making them ready for use.

## CRedit authorship contribution statement

**Bruno Thomas-Lamotte:** Formal analysis, Investigation, Writing – review & editing. **Nordine Benameur:** Formal analysis, Writing – review & editing. **Louis Soulat:** Validation, Writing – review & editing. **Tomislav Petrovic:** Validation, Writing – original draft, Writing – review & editing. **Frédéric Lapostolle:** Conceptualization, Formal analysis, Supervision, Writing – original draft, Writing – review & editing.

## Disclosure

Frédéric Lapostolle: Boehringer-Ingelheim, Mundipharma, Serb, Teleflex.

Nordine Benameur: Zoll Medical France.

Bruno Thomas-Lamotte, Tomislav Petrovic, Louis Soulat: none.

## Declaration of competing interest

The 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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Bruno Thomas-Lamotte

ARLoD, 75 rue St Charles 75015 Paris, France

Nordine Benameur

ARLoD, 75 rue St Charles 75015 Paris, France

CHU Lille, 5 Avenue Oscar LAMBRET 59037 Lille Cedex, France

Fédération Française de Cardiologie, 5 rue des Colonnes du Trône

75012 Paris, France

Centre d'expertise de la mort subite Nord de France

Louis Soulat

SAMU 35, SMUR, Urgences Centre Hospitalier Universitaire, 2 rue Henri le Guilloux 35000 Rennes, France

Tomislav Petrovic

ARLoD, 75 rue St Charles 75015 Paris, France

SAMU 93 - UF Recherche-Enseignement-Qualité Université Paris 13,

Sorbonne Paris Cité, Inserm U942 Hôpital Avicenne, 125, rue de

Stalingrad 93009 Bobigny, France

Frédéric Lapostolle\*

SAMU 93 - UF Recherche-Enseignement-Qualité Université Paris 13,

Sorbonne Paris Cité, Inserm U942 Hôpital Avicenne, 125, rue de

Stalingrad 93009 Bobigny, France

\* Corresponding author.

E-mail addresses: [frederic.lapostolle@aphp.fr](mailto:frederic.lapostolle@aphp.fr).

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