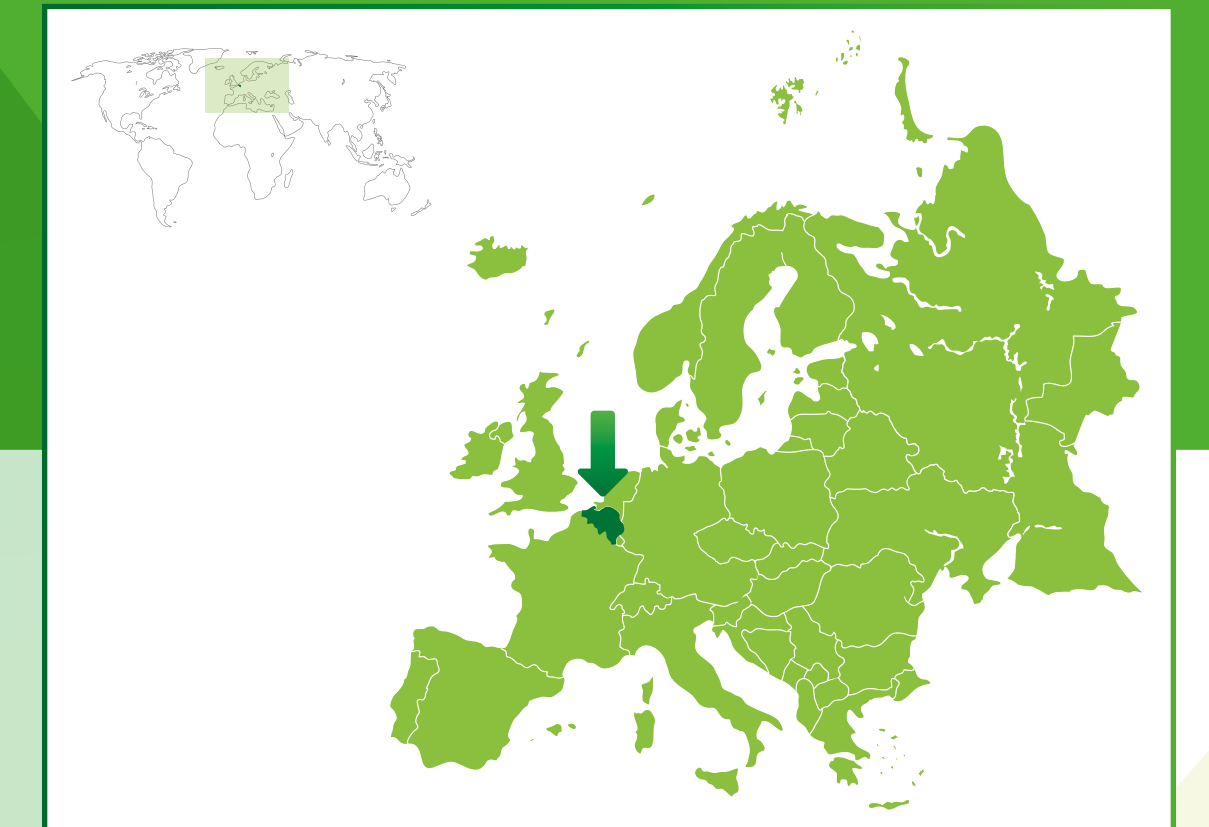


# AUTOMATED EXTERNAL DEFIBRILLATORS IN THE WORKPLACE: A VITAL NEED? A BELGIAN EVALUATION STUDY

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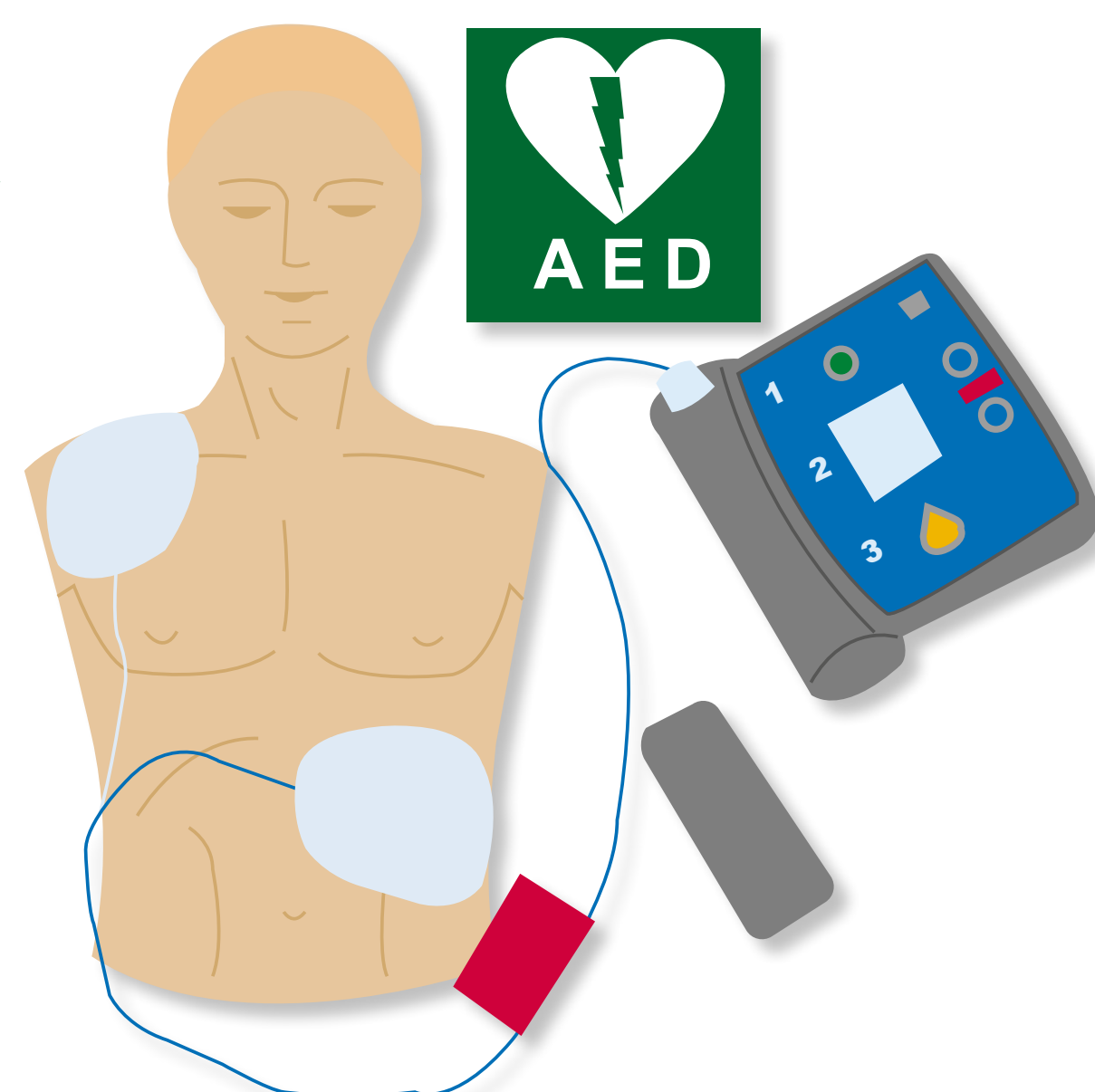


## INTRODUCTION

- Few studies exist on the presence and use of Automated External Defibrillators (AEDs) in workplaces
- Data collection on AED installation and use on a national level is needed

## AIM OF THE STUDY

To describe the **presence** (1) and **use** (2) of AEDs at Belgian workplaces from 01/01/2012 to 31/12/2014



## METHODS

### Questionnaire

- Self-constructed online 37-item questionnaire
- Consisting of:
  - General characteristics
  - Information about AED presence, characteristics and use
  - Information about the organization of first aid procedures
- Sent by associations of occupational physicians and prevention advisors to their members
- Completed by occupational physicians and prevention advisors in Belgian companies

### Data analysis

Descriptive statistics and logistic regression

## RESULTS

767 companies (52% industrial and 48% administrative activities) participated

### 1. Is an AED present in the company?

**YES 48.8% (n=374)**

**NO 51.2% (n=393)**

#### Presence depends on (significance level $p < .05$ ): OR (95% CI)

Number of persons present in a company	OR (95% CI)
0-49: reference category	
50-99	2.31 (1.44-3.71)
100-199	2.28 (1.44-3.63)
200-499	2.04 (1.28-3.25)
≥500	4.46 (2.82-7.55)

Specific risks in the company that may lead to heart problems (e.g. older employees, heavy physical activity) 1.4 (1.1-1.9)

#### Presence does not depend on ( $p = NS$ ): OR (95% CI)

Type of activity (industrial versus administrative)	1.1 (0.9-1.5)
Expected ambulance response time (median 10 min, interquartile range 8-15 min)	1.0 (0.9-1.1)

### 2. Was the AED used?

In how many companies was the AED used to shock?

**21/374**

How many times was the AED used to shock?

**49 times in 21 companies**

How many of the 49 victims survived?

**35/45 survived**  
(4 missing data)

What was the age of the youngest victim?

**39 years old**

## DISCUSSION

- > Companies with a higher number of persons present and companies with risks that may lead to heart problems have more often an AED on-site.
- > Six percent of the companies with an AED used it once or more during the period 01/01/2012 - 31/12/2014. The use of an AED in persons of ≥39 years old was reported to be successful in 78% of the cases.

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