



National Ambulance Service

Out of Hospital Cardiac Arrest Register

16th Annual Report 2023

Out-of-Hospital Cardiac Arrest Register



Key Data 2023

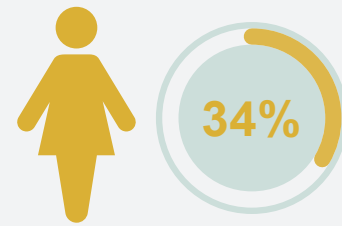
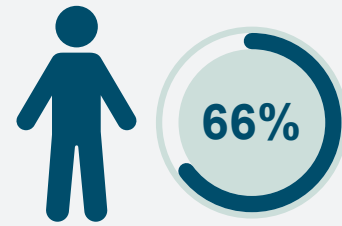
OHCAR Annual Report Summary

DEMOGRAPHICS



2,857

out of hospital
arrest incidents were
recorded as attended
by the EMS



Private Setting*

*Includes home,
farm or residential institution



**Occurred in
the home**



Public Setting

COMMUNITY INVOLVEMENT



Since 2012, Bystander CPR has
increased from 60% to 85%

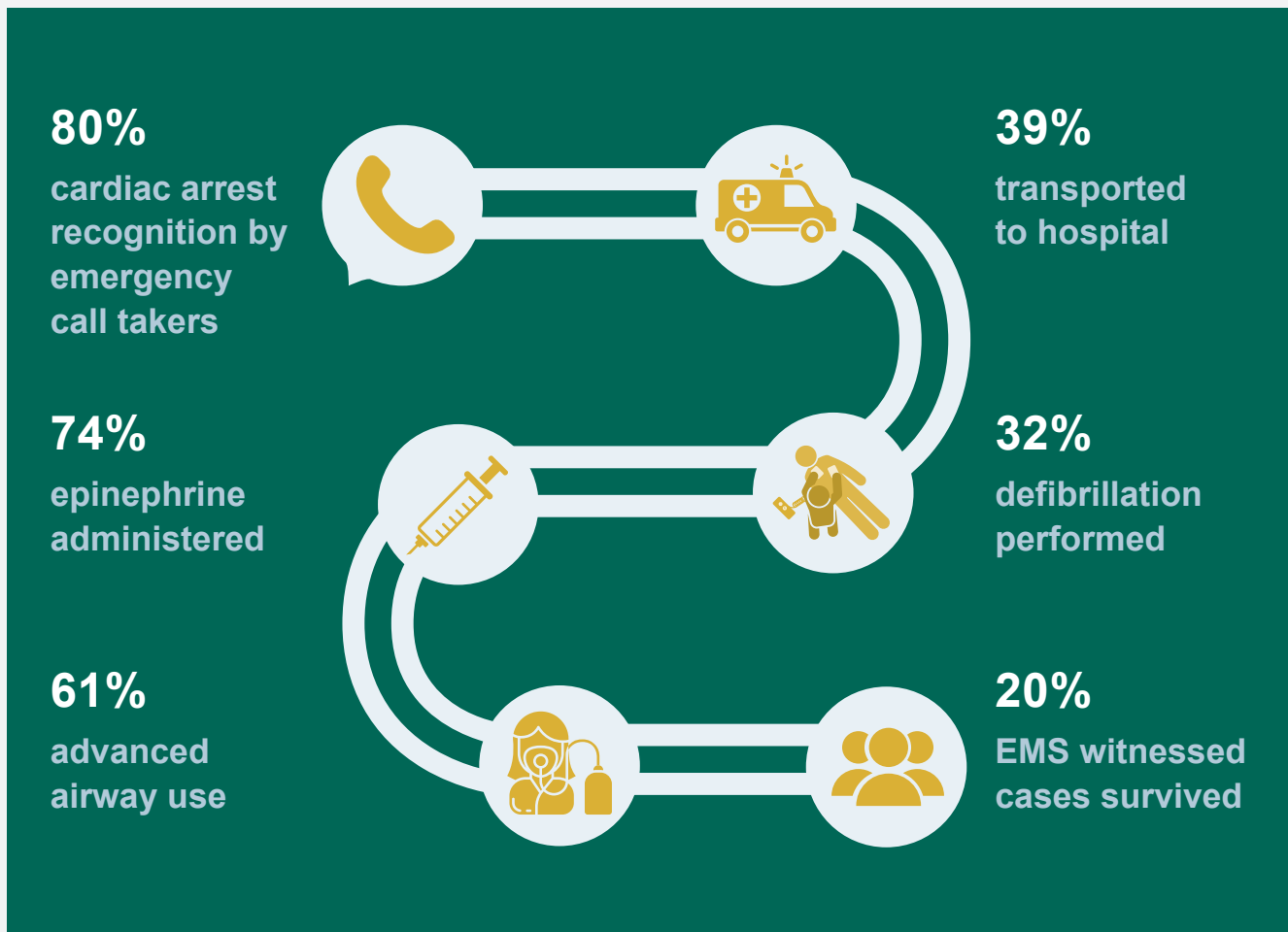


11%

defibrillated before EMS arrival
(n=304/2,857)

29% of cases defibrillated
before EMS arrival survived
(n=89/304)

EMERGENCY MEDICAL SERVICES



POST CARDIAC ARREST OUTCOME

240 PEOPLE



Returned to their communities

98%



98% of survivors were recorded as having a good neurological outcome

29%



29% of patients in the Utstein comparator group survived to hospital discharge

Overall Patient and Event Characteristics

- 2,857 out-of-hospital cardiac arrest incidents recorded on OHCAR (55 per 100,000 population in 2023)
 - 63% occurred in an urban area^a
 - 66% Male
 - Median age 68 years (interquartile range 54 – 79)
 - 81% presumed medical cause
 - 68% happened in the home
 - 85% Bystander CPR attempted
 - 53% Bystander witnessed
 - 11% of patients had defibrillation attempted pre EMS arrival
 - 20% had sustained ROSC to Hospital arrival

Non EMS Defibrillation

- In 2023, of all cases where an initial shockable rhythm was found, non-EMS defibrillation occurred in 11% of cases
- Non-EMS responders defibrillated 304 patients, of whom 89 survived (29%)
 - Of all survivors of OHCA in 2023, 37% resulted from non-EMS defibrillation (n=89/240)

Survivors - Patient and Event Characteristics

240 patients survived

- 8.4% Discharged alive
 - 207 had good to moderate neurological function on discharge

Utstein Group

- 15% of patients were in the Utstein Group^b
 - 52% ROSC pre-hospital
 - 41% ROSC on arrival at hospital
 - 29% were discharged alive

^aDefinition of urban is matched with the CSO definition of a settlement i.e. defined as having a minimum of 50 occupied dwellings, with a maximum distance between any dwelling and the building closest to it of 100 metres, and where there is evidence of an urban centre.

^bThe Utstein subgroup includes patients who are >17 years, with presumed medical aetiology, bystander witnessed event and an initial shockable rhythm.

OHCAR Key Messages 2023

The Out of Hospital Cardiac Arrest Register (OHCAR) aims to improve outcomes in Ireland by continuous performance measurement and feedback to service providers and the broader community

The Chain of Survival has 4 steps and can be implemented by any member of the public, supported over the phone by the HSE National Ambulance Service (NAS) 112/999 team

The Register in Ireland is funded by the National Ambulance Service as a means of quality assuring and quality improving the care provided in this extreme emergency by ambulance services in Ireland

Last year 240 patients survived their out-of-hospital cardiac arrest to leave hospital alive, 98% with moderate to good neurological outcome

Responders, who are not members of the Emergency Medical Services, can make all the difference when an out of hospital cardiac arrest occurs

Responders include a wide range of trained volunteers (both lay and health care professionals), off-duty Emergency Medical Service (EMS) staff and members of the public who encounter an emergency and are prepared to provide care

Community First Responders are an integral part of dealing with an emergency in the community in that they provide vital lifesaving CPR and defibrillator treatment to patients while an ambulance is on route

Anyone interested in becoming a Community First Responder can [visit www.becomeacfr.ie](http://www.becomeacfr.ie) and get in touch. There is currently a need for additional Community First Responders right around the country and you will be given the essential training required



Out-of-Hospital Cardiac Arrest Register

OHCAR ^{Ireland}



At the heart of evidence

