

OHCAO CARDIAC ARREST OVERVIEW NEAS 2019

Demographics



3259

OHCA calls attended

2035

patients treated by paramedics



In 2018 1989 patients were treated

OHCA incidence (per 100,000)

Age of cases

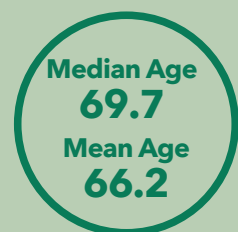
All cases
(Age/gender adjusted):



Males
(Age adjusted)



Females
(Age adjusted)

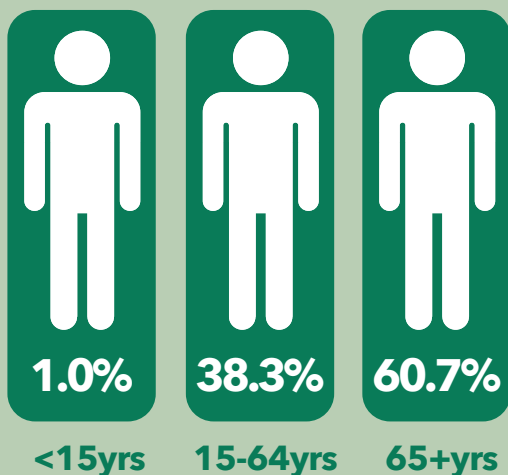


In 2018, median age was 70 (mean: 66)

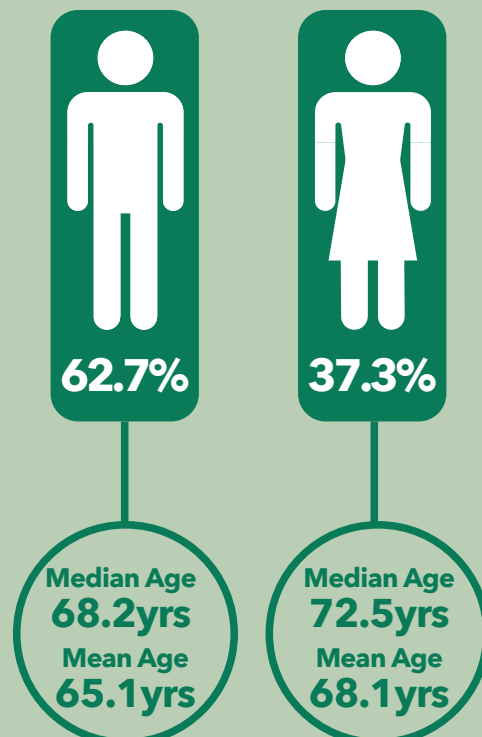
In 2018 incidence was 75 (males: 102.5, females: 51.1)

Age Distribution

Sex Distribution



2018: ≤15y - 1.6%,
15-64y - 38.2%,
65+y - 60.2%



Event Details



79.1%

had a cardiac arrest at place of residence



9.1%

had a cardiac arrest in a public place



0.9%

had a cardiac arrest in the workplace



0.1%

had a cardiac arrest in a place of education



0.3%

had a cardiac arrest in a leisure centre



10.4%

had a cardiac arrest in another location



00:00 - 05:59

14.9%



06:00 - 11:59

30.6%



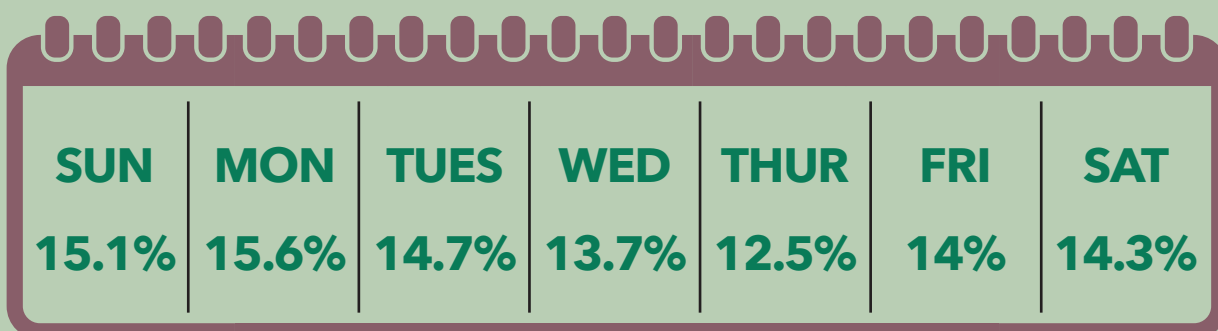
12:00 - 17:59

28.6%



18:00 - 23:59

25.9%



Median EMS response time



90th percentile time: 15.6 mins



Proportion of cases reached in 8 mins 60.1%

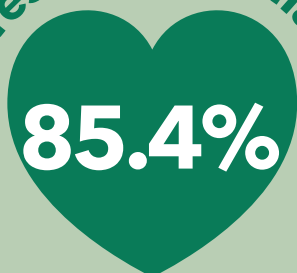
In 2018, median response time was also 6.7 mins & 90th percentile time was 15.4 mins

In 2018, 58.2% of cases were reached in 8 mins

Clinical Presentation

AETIOLOGY

Presumed cardiac

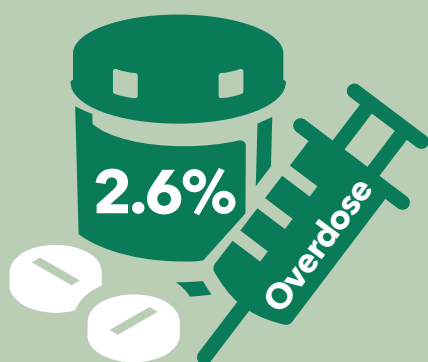


(2018: 86.1%)

Trauma



(2018: 2.4%)



(2018: 3.3%)

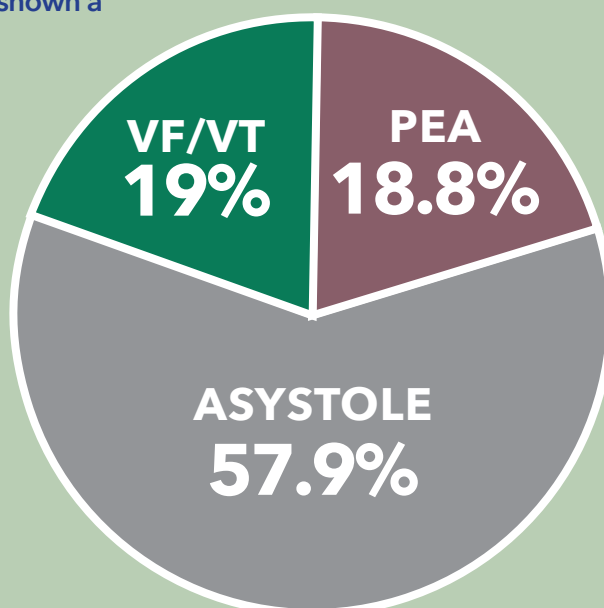
Asphyxia



(2018: 4.6%)

INITIAL RHYTHM

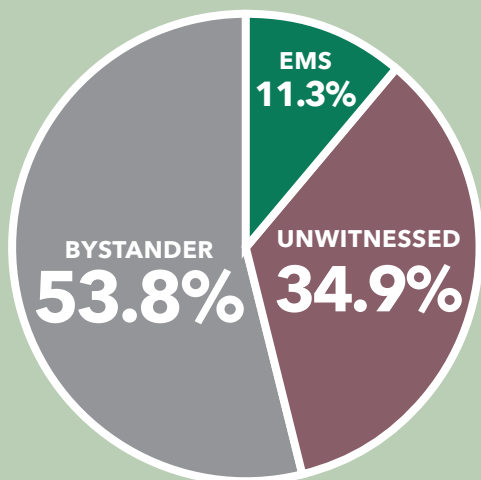
The proportion of cases presenting with a shockable rhythm has shown a year-on-year increase



2018:
VF/VT - 19.9%
Asystole - 55.2%
PEA - 18.3%

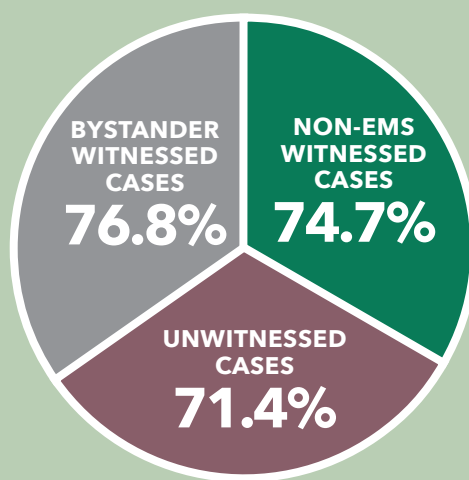
Bystander Interventions

Who witnessed cardiac arrest?



2018:
Bystander - 48.2%
EMS - 12.5%
Unwitnessed - 39.3%

Bystander CPR rate:



2018:
Non-EMS witnessed - 73.3%
Bystander witnessed - 77.7%

Public Access Defibrillator use:



ALL CASES
4%

BYSTANDER WITNESSED CASES
5%

UNWITNESSED CASES
3.5%

2018:
Bystander witnessed - 2.5%
Unwitnessed - 1.5%

Comments:

- Over time, the proportion of cases that were witnessed by a bystander continues to be around 51%
- Bystander CPR rate of non-EMS witnessed cases has increased over time
- Bystander CPR rate in bystander witnessed cases has also increased significantly over time
- Use of a PAD continues to increase substantially

Clinical Outcomes



Declared dead on scene

56.9%

2018: 57.7%



Admitted with ongoing CPR

10.4%

2018: CPR - 14.9%



Admitted with ROSC

32.7%

2018: 27.4%

32.7%
admitted to hospital with ROSC



7.7%
survived to discharge

57%
Utstein comparator group

2018:
All cases - 27.8% UCG - 56.9%

27.9%
Utstein comparator group*

2018:
All cases - 10.6% UCG - 36.2%

Paramedics successful in restarting

666
HEARTS

2018: 545

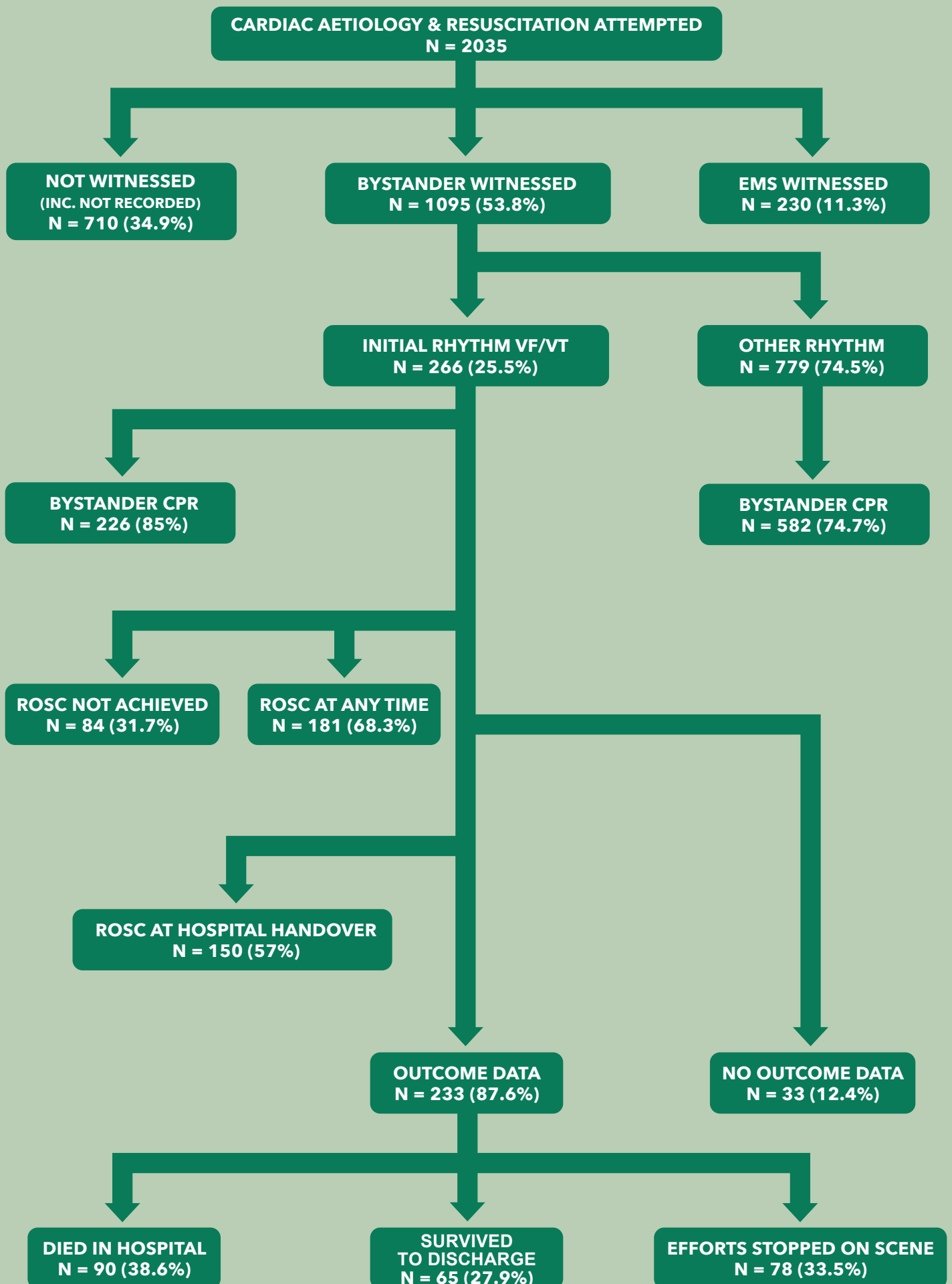
Number of lives saved

151

2018: 192

*Bystander witnessed, shockable rhythm

Utstein Comparator Group* Flow Chart



*Allows some adjustment for case-mix to facilitate comparisons between ambulance services in UK and rest of world