

# OHCAO CARDIAC ARREST OVERVIEW SWAST 2019

## Demographics



**8,989**

OHCA calls attended

**3691**

patients treated by paramedics



In 2018 3797 patients were treated

### OHCA incidence (per 100,000)

**All cases**  
(Age/gender adjusted):



**60.2**

**Males**  
(Age adjusted)



**87.2**

**Females**  
(Age adjusted)



**36**

In 2018 incidence was 62.1  
(males: 89.7, females: 38.2)

### Age of cases

Median Age  
**71.4**  
Mean Age  
**67.4**

In 2018,  
median age was 71.5  
(mean: 67.8)

### Age Distribution



**<15yrs**



**15-64yrs**



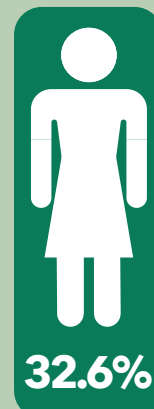
**65+yrs**

2018: ≤15y - 1.6%,  
15-64y - 34.4%,  
65+y - 64%

### Sex Distribution



Median Age  
**70.1yrs**  
Mean Age  
**66.3yrs**



Median Age  
**73.4yrs**  
Mean Age  
**69.7yrs**

# Event Details



**72.8%**

had a cardiac arrest at place of residence



**19.7%**

had a cardiac arrest in a public place



**0.3%**

had a cardiac arrest in the workplace



**0.1%**

had a cardiac arrest in a place of education



**0.2%**

had a cardiac arrest in a leisure centre



**6.9%**

had a cardiac arrest in another location



00:00 - 05:59

**13.3%**



06:00 - 11:59

**31.3%**



12:00 - 17:59

**30%**



18:00 - 23:59

**25.4%**

**SUN**

**15%**

**MON**

**14.4%**

**TUES**

**13.7%**

**WED**

**15.4%**

**THUR**

**12.8%**

**FRI**

**14.1%**

**SAT**

**14.6%**

**Median EMS response time**



**90th**  
percentile time:  
**17**  
mins



**Proportion of cases reached in 8 mins**  
**61%**

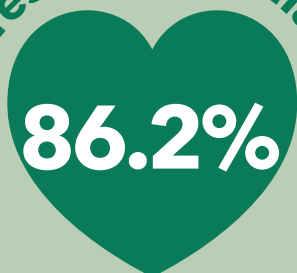
In 2018, median response time was also 6.7 mins & 90th percentile time was 17.6 mins

In 2018, 58.6% of cases were reached in 8 mins

# Clinical Presentation

## AETIOLOGY

Presumed cardiac



(2018: 87.6%)

Trauma



(2018: 3.9%)



(2018: 2.7%)

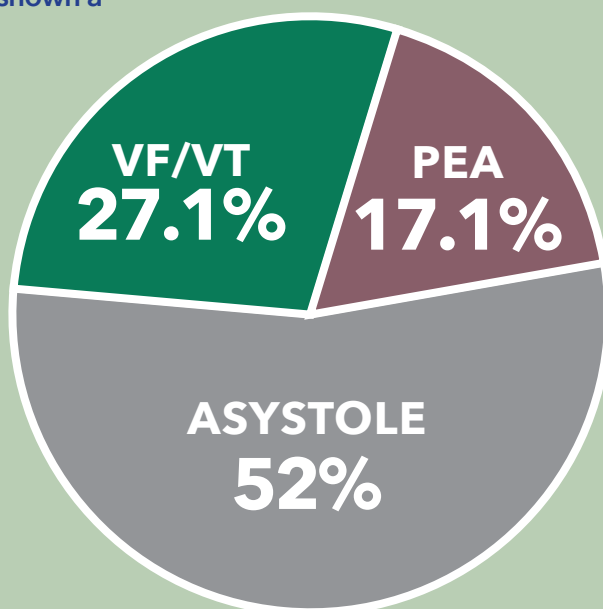
Asphyxia



(2018: 3.1%)

## INITIAL RHYTHM

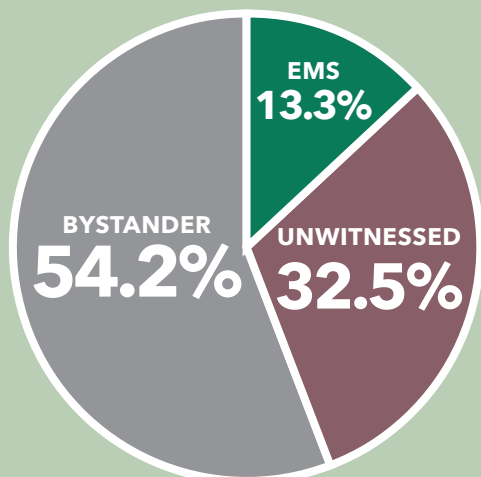
The proportion of cases presenting with a shockable rhythm has shown a year-on-year increase



2018:  
VF/VT - 24.8%  
Asystole - 52.3%  
PEA - 17.1%

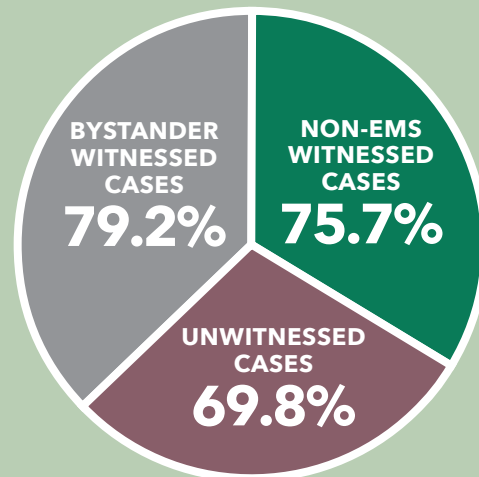
# Bystander Interventions

## Who witnessed cardiac arrest?



2018:  
Bystander - 53.9%  
EMS - 13%  
Unwitnessed - 33.1%

## Bystander CPR rate:



2018:  
Non-EMS witnessed - 76.2%  
Bystander witnessed - 77.4%

## Public Access Defibrillator use:



2018:  
Bystander witnessed - 5.8%  
Unwitnessed - 5.1%

### 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

**38.4%**

2018: 58.4%



Admitted with ongoing CPR

**28.9%**

2018: CPR - 13.1%



Admitted with ROSC

**32.7%**

2018: 28.5%

**32.7%**  
admitted to hospital with ROSC



**10.7%**  
survived to discharge

**52.1%**  
Utstein comparator group

2018:  
All cases - 28.5% UCG - 47.1%

**28.6%**  
Utstein comparator group\*

2018:  
All cases - 9.6% UCG - 23.6%

Paramedics successful in restarting

**1205**  
HEARTS

2018: 1084

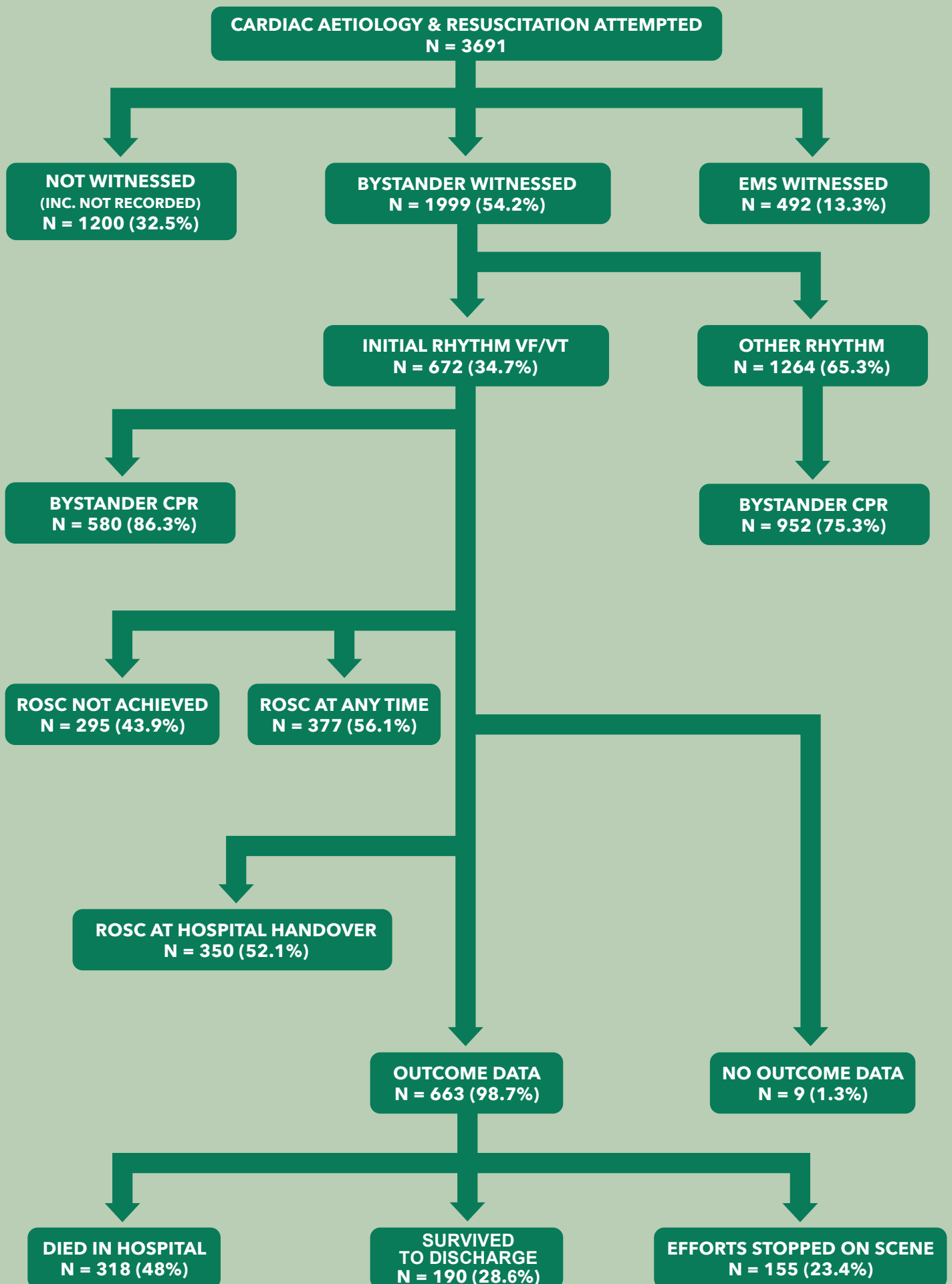
Number of lives saved

**390**

2018: 357

\*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