

# OHCAO CARDIAC ARREST OVERVIEW NWAAS 2019

## Demographics



**9,432**

OHCA calls attended

**3252**

patients treated by paramedics



In 2018 3718 patients were treated

### OHCA incidence (per 100,000)

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



**Males**  
(Age adjusted)

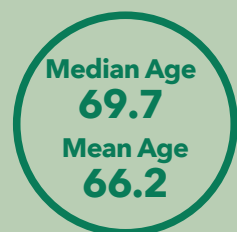


**Females**  
(Age adjusted)



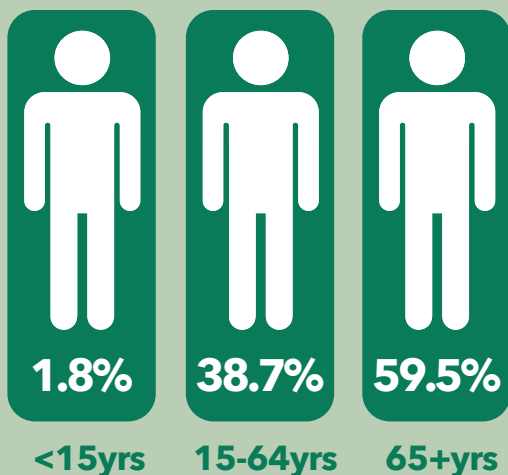
In 2018 incidence was 51.3  
(males: 72.2, females: 33.5)

### Age of cases



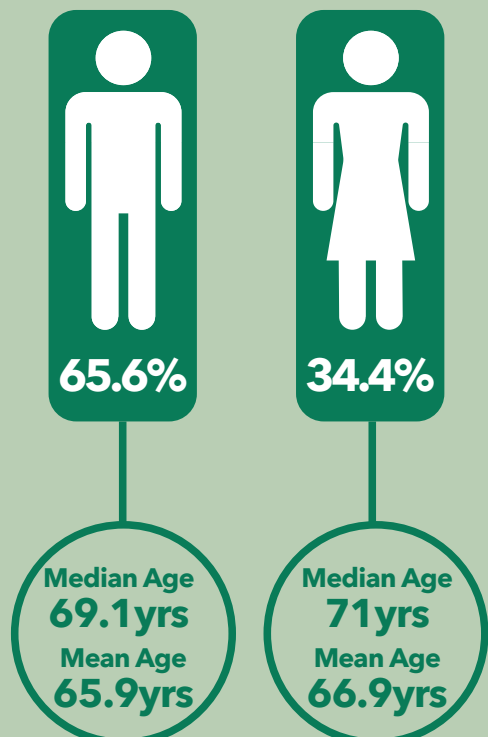
In 2018, median age was 70.2  
(mean: 66.3)

### Age Distribution



2018: ≤15y - 2.1%,  
15-64y - 36%,  
65+y - 61.9%

### Sex Distribution



# Event Details



**79.7%**

had a cardiac arrest at place of residence



**15.5%**

had a cardiac arrest in a public place



**1.2%**

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



**3.3%**

had a cardiac arrest in another location



00:00 - 05:59

**13.7%**



06:00 - 11:59

**29.9%**



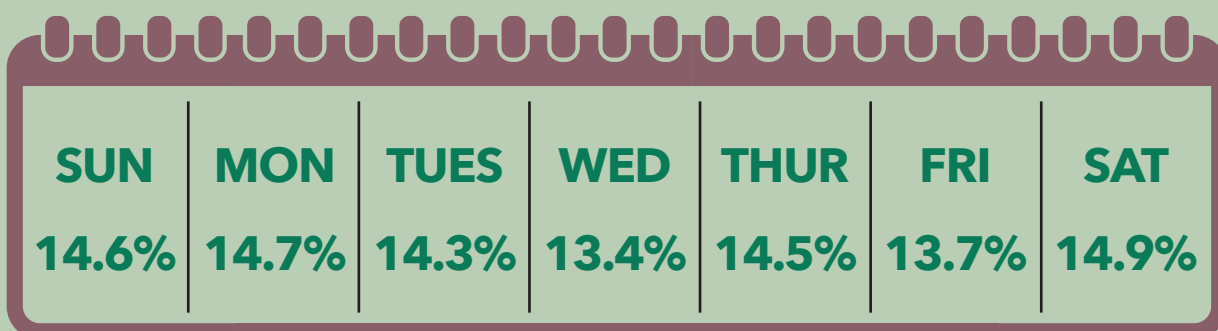
12:00 - 17:59

**30.4%**



18:00 - 23:59

**26.2%**



**Median EMS response time**



**90th percentile time: 18.4 mins**



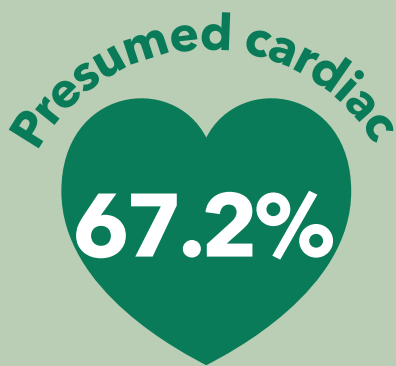
**Proportion of cases reached in 8 mins 46.6%**

In 2018, median response time was also 8 mins & 90th percentile time was 18 mins

In 2018, 50.8% of cases were reached in 8 mins

# Clinical Presentation

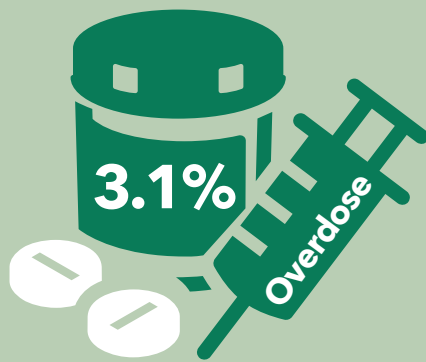
## AETIOLOGY



(2018: 71.1%)



(2018: 2.9%)



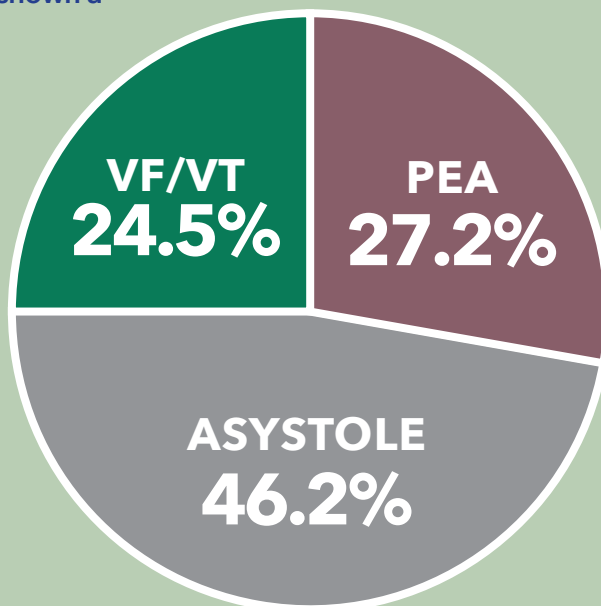
(2018: 2.9%)



(2018: 3.1%)

## INITIAL RHYTHM

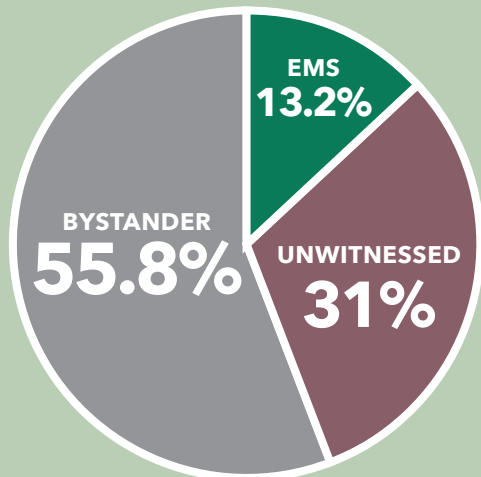
The proportion of cases presenting with a shockable rhythm has shown a year-on-year increase



2018:  
VF/VT - 22.4%  
Asystole - 48.8%  
PEA - 26.6%

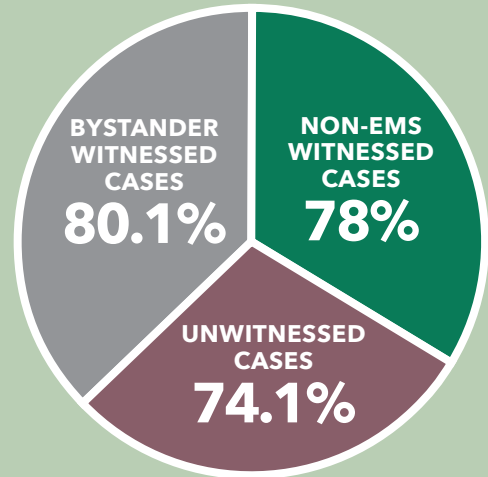
# Bystander Interventions

## Who witnessed cardiac arrest?



2018:  
Bystander - 55.6%  
EMS - 12.5%  
Unwitnessed - 31.9%

## Bystander CPR rate:



2018:  
Non-EMS witnessed - 78.1%  
Bystander witnessed - 80.3%

## Public Access Defibrillator use:



ALL CASES  
**8.9%**

BYSTANDER WITNESSED CASES  
**11.2%**

UNWITNESSED CASES  
**7.9%**

2018:  
Bystander witnessed - 9.6%  
Unwitnessed - 8.3%

### 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

**32.8%**

2018: 30.9%



Admitted with ongoing CPR

**34.4%**

2018: CPR - 35%



Admitted with ROSC

**32.8%**

2018: 34.1%

**32.8%**  
admitted to hospital with ROSC



**8.8%**  
survived to discharge

**53.4%**  
Utstein comparator group

2018:  
All cases - 34.1% UCG - 53%

**28.7%**  
Utstein comparator group\*

2018:  
All cases - 8.8% UCG - 27.9%

Paramedics successful in restarting

**1067**  
HEARTS

2018: 1267

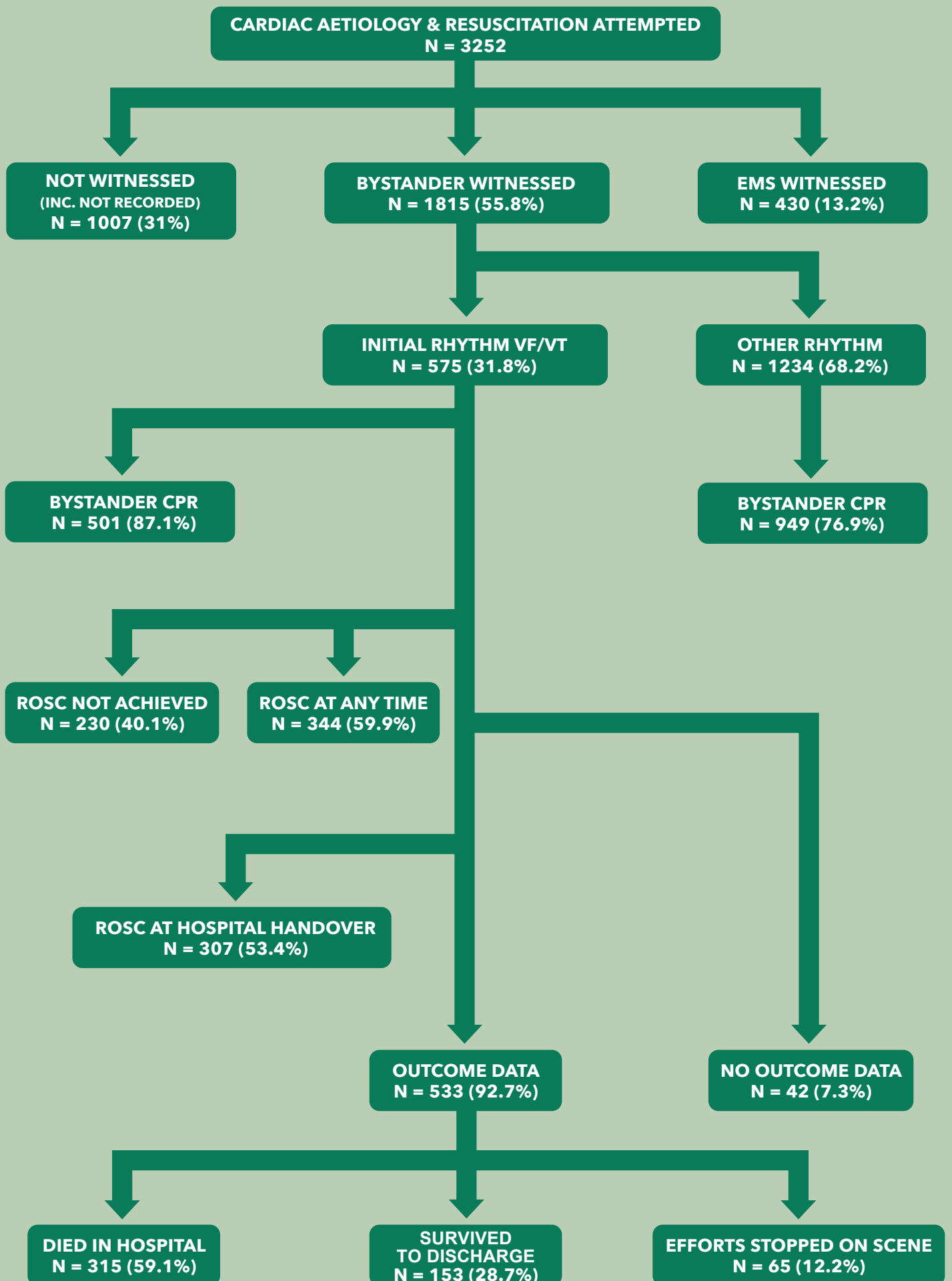
Number of lives saved

**276**

2018: 321

\*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