

# OHCAO CARDIAC ARREST OVERVIEW IOWAS 2020

## Demographics

**289**

OHCA calls attended



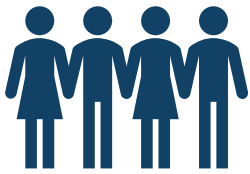
**114**

Patients treated  
by ambulance  
service clinicians



## OHCA incidence (per 100,000)

All cases  
(Age/gender adjusted)



**65.4**

Males  
(Age adjusted)



**97.2**

Females  
(Age adjusted)



**36.3**

## Age of cases

Median Age  
**70.1yrs**  
Mean Age  
**65.5yrs**

## Age Distribution



**2.6%**

<15yrs



**37.7%**

15-64yrs



**59.7%**

65+yrs

## Sex Distribution

**70.2%**

Median Age  
**68.5yrs**  
Mean Age  
**64.2yrs**



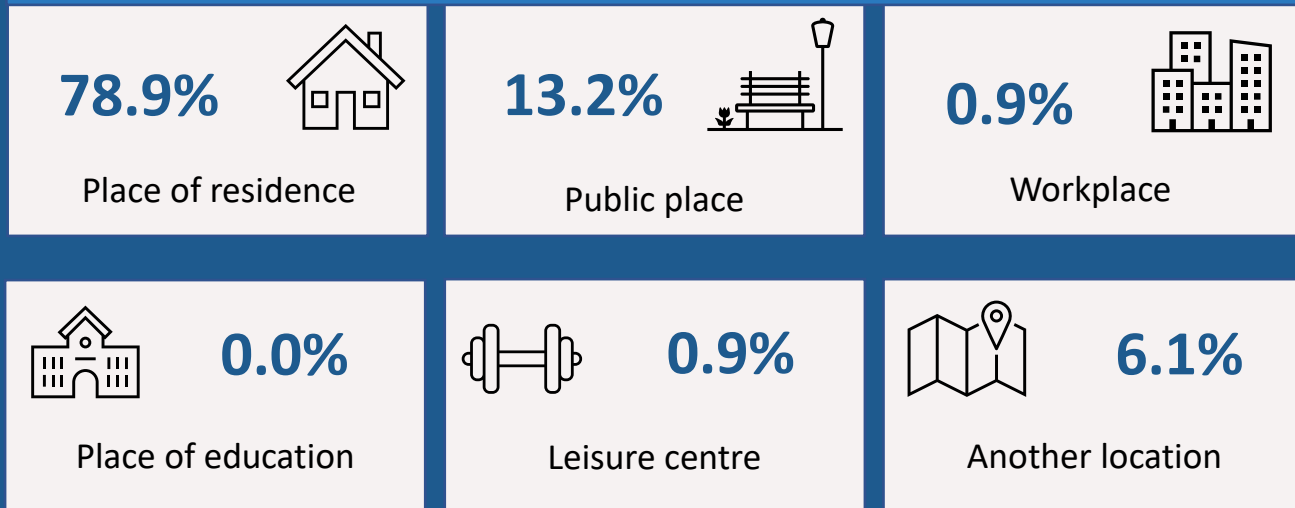
**29.8%**

Median Age  
**75.6yrs**  
Mean Age  
**68.6yrs**



# OHCAO CARDIAC ARREST OVERVIEW IOWAS 2020

## Where did people have a cardiac arrest?



## Time of Day



00:00 – 05:59

**9.7%**



06:00 – 11:59

**26.3%**



12:00 – 17:59

**34.2%**



18:00 – 23:59

**29.8%**



Day	SUN	MON	TUE	WED	THU	FRI	SAT
	11.4%	12.3%	13.1%	13.2%	14.0%	19.3%	16.7%

Median EMS  
Response time

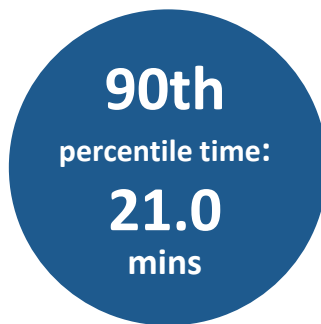
**9.1 mins**



**90th**

percentile time:

**21.0 mins**



Proportion of cases  
reached in 7 mins

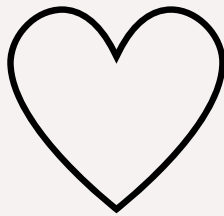
**33.3%**

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## Aetiology

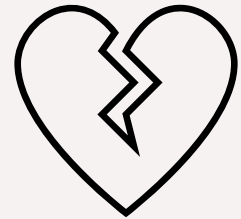
### Medical

87.7%



### Trauma

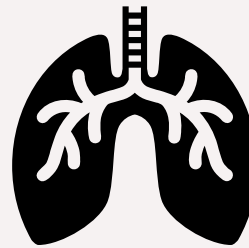
4.4%



### Overdose



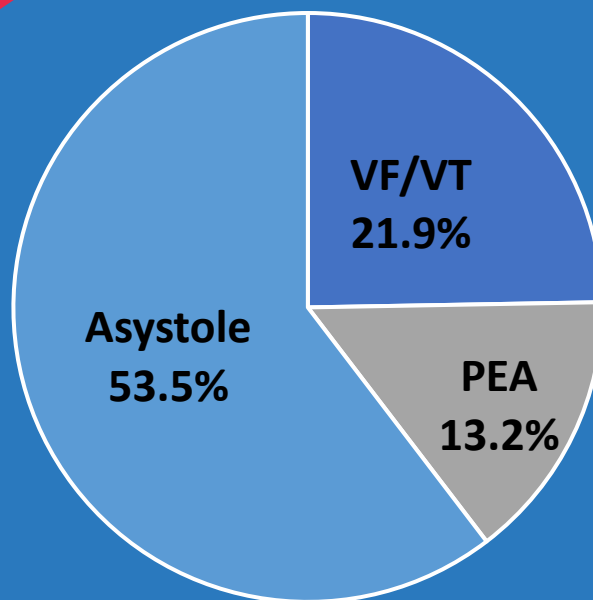
3.5%



### Asphyxia

3.5%

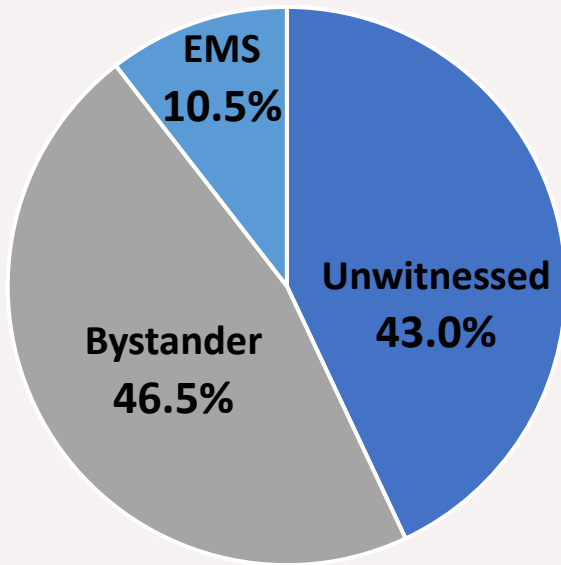
## Initial Rhythm



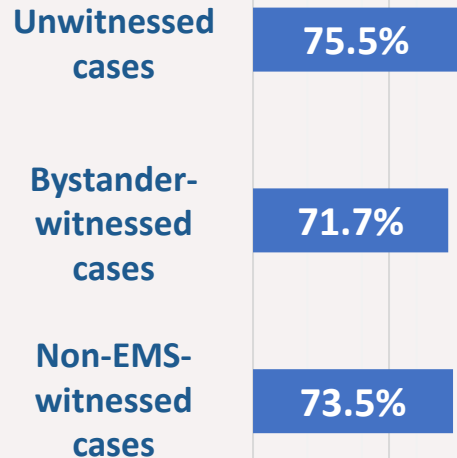
# OHCAO CARDIAC ARREST OVERVIEW IOWAS 2020

## Bystander Interventions

### Who witnessed cardiac arrest?



### Bystander CPR rates:



\*Non-EMS-witnessed cases is the combination of unwitnessed and bystander-witnessed cases

## Public Access Defibrillator use

All cases  
**8.8%**

Bystander witnessed cases  
**9.4%**

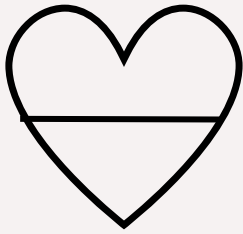


Unwitnessed cases  
**10.2%**

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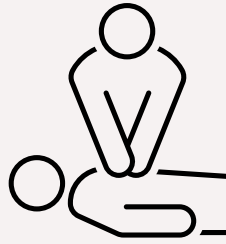
## Clinical Outcomes

Declared dead  
on scene



**60.5%**

Admitted with  
ongoing CPR



**18.4%**

Admitted  
with ROSC



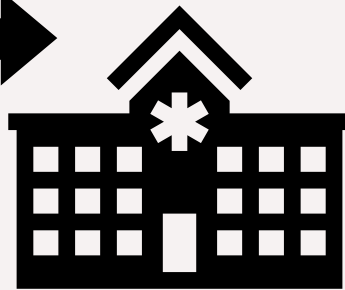
**21.1%**

Admitted to  
hospital with  
ROSC

**21.1%**

UCG<sup>x</sup>

**35.7%**



Survived to  
discharge

**10.7%**

UCG<sup>x</sup>

**23.1%**

Paramedics  
successful in  
restarting

**24**  
hearts

**12**

lives saved

<sup>x</sup>Utstein Comparator Group: bystander witnessed, shockable rhythm

# OHCAO CARDIAC ARREST OVERVIEW IOWAS 2020

## Utstein Comparator Group<sup>x</sup> Flow Chart

RESUSCITATION ATTEMPTED  
N = 114

NOT WITNESSED (INC.  
NOT RECORDED)  
N = 49 (43.0%)

BYSTANDER  
WITNESSED  
N = 53 (46.5%)

EMS WITNESSED  
N = 12 (10.5%)

INITIAL RHYTHM VF/VT  
N = 14 (27.5%)

OTHER RHYTHM  
N = 37 (72.5%)

BYSTANDER CPR  
N = 10 (71.4%)

BYSTANDER CPR  
N = 27 (75.0%)

ROSC NOT  
ACHIEVED  
N = 7 (50.0%)

ROSC AT ANY TIME  
N = 7 (50.0%)

ROSC AT HOSPITAL HANDOVER  
N = 5 (35.7%)

OUTCOME DATA  
N = 13 (92.9%)

NO OUTCOME DATA  
N = 1 (7.1%)

DIED IN HOSPITAL  
N = 6 (46.1%)

SURVIVED TO  
DISCHARGE  
N = 3 (23.1%)

EFFORTS STOPPED  
ON SCENE  
N = 4 (30.8%)

<sup>x</sup>Bystander witnessed, shockable rhythm