Out-of-Hospital Cardiac Arrest Overview: England 2020

Analysis based on 10 of 11 English Ambulance Services, unless indicated otherwise by **

Demographics

93,920**
OHCA calls attended

31,698**
Patients treated by ambulance service clinicians

OHCA incidence (per 100,000)

All cases
(Age/gender adjusted)

53.4

Males
(Age adjusted)

74.9

Females
(Age adjusted)

33.9

Age of cases

Median Age 69.5yrs
Mean Age 65.9yrs

Age Distribution

1.6%
<15yrs

39.5%
15-64yrs

58.9%
65+yrs

Sex Distribution

66.0%

34.0%

Median Age
68.4yrs
Mean Age
65.2yrs

Median Age
71.6yrs
Mean Age
67.4yrs

**inclusive of data from all 11 English Ambulance Services
Out-of-Hospital Cardiac Arrest Overview: England 2020

Analysis based on 10 of 11 English Ambulance Services, unless indicated otherwise by **

Where did people have a cardiac arrest?

<table>
<thead>
<tr>
<th>Location</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Place of residence</td>
<td>82.3%</td>
</tr>
<tr>
<td>Public place</td>
<td>11.0%</td>
</tr>
<tr>
<td>Workplace</td>
<td>1.0%</td>
</tr>
<tr>
<td>Place of education</td>
<td>0.1%</td>
</tr>
<tr>
<td>Leisure centre</td>
<td>0.4%</td>
</tr>
<tr>
<td>Another location</td>
<td>5.2%</td>
</tr>
</tbody>
</table>

Time of Day

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>00:00 – 05:59</td>
<td>14.2%</td>
</tr>
<tr>
<td>06:00 – 11:59</td>
<td>31.0%</td>
</tr>
<tr>
<td>12:00 – 17:59</td>
<td>29.8%</td>
</tr>
<tr>
<td>18:00 – 23:59</td>
<td>25.0%</td>
</tr>
</tbody>
</table>

Day

<table>
<thead>
<tr>
<th>Day</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUN</td>
<td>14.6%</td>
</tr>
<tr>
<td>MON</td>
<td>14.7%</td>
</tr>
<tr>
<td>TUE</td>
<td>13.7%</td>
</tr>
<tr>
<td>WED</td>
<td>14.2%</td>
</tr>
<tr>
<td>THU</td>
<td>14.1%</td>
</tr>
<tr>
<td>FRI</td>
<td>14.2%</td>
</tr>
<tr>
<td>SAT</td>
<td>14.5%</td>
</tr>
</tbody>
</table>

Median EMS Response time

- **6.6 mins**

90th percentile time:

- **15.3 mins**

Proportion of cases reached in 7 mins

- **53.8%**
Out-of-Hospital Cardiac Arrest Overview: England 2020

Analysis based on 10 of 11 English Ambulance Services, unless indicated otherwise by **

### Aetiology

- **Medical / presumed cardiac**: 84.9%
- **Trauma**: 3.5%
- **Overdose**: 2.0%
- **Asphyxia**: 3.4%

### Initial Rhythm

- **Asystole**: 50.9%
- **VF/VT**: 23.0%
- **PEA**: 22.8%
Out-of-Hospital Cardiac Arrest Overview: England 2020

Analysis based on 10 of 11 English Ambulance Services, unless indicated otherwise by **

**Bystander Interventions**

Who witnessed cardiac arrest?

- EMS: 13.0%
- Unwitnessed: 36.8%
- Bystander: 50.2%

Bystander CPR rates:

- Unwitnessed cases: 64.5%
- Bystander-witnessed cases: 74.1%
- Non-EMS-witnessed cases: 70.0%

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

**Public Access Defibrillator use**

- All cases: 4.4%
- Bystander witnessed cases: 5.4%
- Unwitnessed cases: 4.6%
Out-of-Hospital Cardiac Arrest Overview: England 2020

Analysis based on 10 of 11 English Ambulance Services, unless indicated otherwise by **

Clinical Outcomes

Declared dead on scene: 54.7%
Admitted with ongoing CPR: 19.4%
Admitted with ROSC: 25.9%
Admitted to hospital with ROSC: 25.9%
UCG*: 47.9%
Survived to discharge: 8.3%
UCG*: 25.3%

**inclusive of data from all 11 English Ambulance Services

*Utstein Comparator Group: bystander witnessed, shockable rhythm

Paramedics successful in restarting: **8,185** hearts
2,497** lives saved

**Association of Ambulance Chief Executives
Out-of-Hospital Cardiac Arrest Overview: England 2020

Analysis based on 10 of 11 English Ambulance Services, unless indicated otherwise by **

**Utstein Comparator Group** Flow Chart

RESUSCITATION ATTEMPTED
N = 29,573

- NOT WITNESSED (INC. NOT RECORDED)
  N = 10,881 (36.8%)

- BYSTANDER WITNESSED
  N = 14,850 (50.2%)

- EMS WITNESSED
  N = 3,842 (13.0%)

INITIAL RHYTHM VF/VT
N = 4,426 (30.5%)

- BYSTANDER CPR
  N = 3,572 (80.7%)

- OTHER RHYTHM
  N = 10,099 (69.5%)

  - BYSTANDER CPR
    N = 7,209 (71.4%)

ROSC NOT ACHIEVED
N = 1,866 (42.2%)

- ROSC AT ANY TIME
  N = 2,558 (57.8%)

  - ROSC AT HOSPITAL HANDOVER
    N = 2,117 (47.9%)

  - OUTCOME DATA
    N = 4,201 (94.9%)

    - DIED IN HOSPITAL
      N = 1,772 (42.2%)

    - SURVIVED TO DISCHARGE
      N = 1,062 (25.3%)

    - EFFORTS STOPPED ON SCENE
      N = 1,367 (32.5%)

- NO OUTCOME DATA
  N = 225 (5.1%)

*Bystander witnessed, shockable rhythm