Chicago CARES about OHCA!

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Chicago EMS

- Illinois EMS Region XI (EMS System for City of Chicago)
- EMS Medical Directors Consortium (4 Hospitals/Offices)
- 33 acute care participating hospitals
- Chicago population of 2.8 million
- Fire based multi-tiered system
- 60 ALS Ambulances
- 15 BLS Ambulances
- 71 ALS Fire companies
- 86 BLS Fire companies
- 1,200 Paramedics
- 2,200 EMT’s
- 237,662 transports (CFD)
- 1800 OHCA annually
“So if you are going to have a cardiac arrest, where should you try not to be? The obvious choices would be …………………

**Chicago.**”
Outline of CPR in a Large Metropolitan Area — Where are the Survivors?

- 2% overall survival
- 3% for shockable rhythms
- Outlined strategies for improving survival
We think we can........

2011
Cardiac Arrest
Working Group

Jan 2012
New protocol
didactic training begins

Dec 2012
Simulation based training begins

Jan 2013
EMS MD over dispatch
January 2013
September 1st 2013

Welcome To:

Cardiac Arrest Registry to Enhance Survival (CARES)

Sponsored by:
Overall Survival

<table>
<thead>
<tr>
<th>Month</th>
<th>Survivors</th>
<th>Total Calls</th>
<th>% Survival</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARES (2005-2010)</td>
<td>31,689</td>
<td>9.6%</td>
<td></td>
</tr>
<tr>
<td>September</td>
<td>6/117</td>
<td>5.1%</td>
<td></td>
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<tr>
<td>October</td>
<td>6/146</td>
<td>4.1%</td>
<td></td>
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<tr>
<td>November</td>
<td>18/147</td>
<td>12.3%</td>
<td></td>
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Utstein Survival

- **CARES (2005-2010)**: 1,278/4,224 (30%)
- **September (1/12)**: 8.3%
- **October (1/6)**: 16%
- **November (4/17)**: 23.5%
Bystander CPR

<table>
<thead>
<tr>
<th>Category</th>
<th>% Bystander CPR</th>
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</thead>
<tbody>
<tr>
<td>CARES (2005-2010)</td>
<td>33.3%</td>
</tr>
<tr>
<td>September</td>
<td>8.6%</td>
</tr>
<tr>
<td>October</td>
<td>7.5%</td>
</tr>
<tr>
<td>November</td>
<td>9.7%</td>
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</table>
Lessons learned

• Must measure in order to improve.
• We are really just at the beginning.
• Help is out there.
Thank you

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**Incident Command For Cardiac Arrest**

- Incident command language
- Team approach to cardiac arrest
- Pre-defined roles
- On scene resuscitation
- Continuous chest compressions
- Early defibrillation
Shockable 1st Rhythm

- CARES (2005-2010): 23.7%
- September (22/117) 18%
- October (18/146) 12.3%
- November (30/146) 20%
Future Directions

• Cardiac Arrest Centers: Jan 2014
• Dispatch simulation training
• Formal structured QA and feedback on every arrest.
  – Monitor downloads March 2014