ENA Virtual Symposium
Can you R.E.A.C.T to No Notice Events?

Daniel Nadworny DNP, RN
Required Disclosures

Learning Outcome:
• Able to recognize a selection of recent no notice events to understand how these events can impact your emergency department.
• To describe how pre-planning and training can mitigate some risks and improve outcomes
• Describe initial response steps for no notice events through a new pneumonic

Conflict of Interest: List conflicts or indicate none

The Emergency Nurses Association is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center’s Commission on Accreditation.

The Emergency Nurses Association is approved by the California Board of Registered Nursing, Provider 2322.
No Notice Events: Definition

- That there is no warning before they occur. These types of events do not allow time for people to gather even the most basic necessities. Therefore, pre-planning is critical. (OSHA, 2019)
Background

• A disaster is a substantial imbalance between the resources at hand and the demands for those same resources

• Between 1994 and 2013: **218 million** people were impacted by natural disasters
  (Centre for Research on the Epidemiology of Disease (CRED), 2015)

• **75%** of the world was affected by a natural disaster between 1980 and 2000
  (World Health Organization and International Council of Nurses, 2009)

• Only **39.4%** of emergency nurses felt comfortable with their hospitals level of preparedness
  Whetzel et al 2013
Events are going to happen

It’s important to be prepared for no-notice events. Know what could happen & how to take action. Visit NYC.gov/plannow. Be #ReadyNYC

Pulse nightclub shooting: Approximately 20 people dead inside the club.

Hawaii Missile Scare Sparks Questions About Hospital Preparedness
HVA - Risk Assessment for Metro Boston

- Snow storm
- Code Help
- IT Failure
- Transit Accident
- Hurricane
- MCI external
- Power failure
- External Hazmat
- Active shooter
- Terrorist event
- Pandemic

Likelihood of occurrence:
- Low
- High

Impacts to Operations:
- Low
- High
## Recent No-Notice Events

<table>
<thead>
<tr>
<th></th>
<th>Orlando Pulse Nightclub</th>
<th>Las Vegas Route 91</th>
<th>Boston Marathon</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of victims</strong></td>
<td>102</td>
<td>~900</td>
<td>267</td>
</tr>
<tr>
<td><strong>Time of day</strong></td>
<td>2am Sunday night</td>
<td>10pm</td>
<td>3pm (holiday)</td>
</tr>
<tr>
<td><strong>Proximity to Hospitals</strong></td>
<td>3 Blocks- ORMC 4 miles – Florida Hospital</td>
<td>4 – 6 miles</td>
<td>2-4 miles</td>
</tr>
<tr>
<td><strong>Patient Transport</strong></td>
<td>1/3 by non EMS transport (Buddy Care / Police)</td>
<td>50% by EMS UBER Police/ Private</td>
<td>&gt;95% by EMS</td>
</tr>
<tr>
<td><strong>Other factors</strong></td>
<td>Barricaded situation (1:57am- ~6am)</td>
<td>Numerous secondary calls</td>
<td>Medical tent Manhunt</td>
</tr>
</tbody>
</table>
How to respond:

• Recognition of an event
  • Establish casualty collection point
  • Activate additional resources
  • Clear the ED
  • Triage and treatment
Recognition of an event

Formal / Official

You are receiving this alert from the Boston Regional Intelligence Center (BRIC).

Alert detail:

Anti-Trump protest with several thousand peaceful protesters marching down Boylston St. in the area of Boston Common towards Copley. This is for situational awareness as traffic in the area will be affected.

Informal

Facebook

Twitter

1 new message received
Recognition: Scope and Scale of an Event

Pepper spray accident at Westwood store sends 18 people to hospital
The Boston Globe - Jun 16, 2013
A Level 1 hazardous material emergency was declared at Frugal Fannie's in Westwood Monday afternoon after a substance that turned out to...
Recognition:

What do you need to know or ask?
- What type of event?
- Scope and Scale of the event?
- Who is giving you the information?
Establish casualty collection point

- Where are the patients coming from
- How are they getting to there?
- Special circumstances
Establish casualty collection point

• Special Considerations
Activate additional resources

- Daily Operations
- Internal Resources
- HICS Structure
- External Resources

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Staff Augmentation

• Who can help and how?
• Buddy system
• Staff identification
Staff Augmentation

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Clear the ED

ED meets Code Help Alert Criteria.

Plastics On Hand all Weekend

Department Overview  WR=26 eRack=6

<table>
<thead>
<tr>
<th>TIDA/SRm</th>
<th>Name</th>
<th>Flags</th>
<th>Chief Complaint</th>
<th>Rad LabPOE</th>
<th>TmA</th>
<th>Res</th>
<th>Nur</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

Source: Nydailynews.net
Clear the ED

- Sort the ED
- Rapid admission of non event patients.
- Expand inpatient capacity (surge space and alternate care sites)
- Self triage and d/c of existing patients may occur
  - Be ok with this.
Triage and Treatment

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Disaster Triage

- START / SALT / Other?
- Shift from resource allocation to clinical severity.
- Based on objective measures
- May overlook high acuity medical concerns (AMI)
- Some systems making changes
Triage Protocol (SALT)

Step 1: Sort: Global Sorting
- Walk Assess 3rd
- Wave / Purposeful Movement Assess 2nd
- Still / Obvious Life Threat Assess 1st

Step 2: Assess: Individual Assessment

Lifesaving Interventions:
- Control major hemorrhage
- Open airway (if child consider 2 rescue breaths)
- Chest decompression
- Auto injector antidotes

Breathing?
- Yes
- No
  - Dead
  - Breathing?
    - Yes
    - Obey all commands or makes purposeful movements?
    - Has peripheral pulse?
    - Not in respiratory distress?
    - Major hemorrhage is controlled?
    - Likely to survive given current resources?
      - Yes Immediate
      - No Expectant
    - Minor injuries only?
      - Yes Minimal
      - No Delayed
  - Any No

All Yes

Minimal
Decon Triage

- Priority
- Process
- Protection
## Triage and Treatment

<table>
<thead>
<tr>
<th>TID</th>
<th>A/S</th>
<th>Rm</th>
<th>Name</th>
<th>Flags</th>
<th>Chief Complaint</th>
<th>Rad</th>
<th>Lab</th>
<th>PQ</th>
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<tbody>
<tr>
<td>5am</td>
<td>19</td>
<td>1</td>
<td>&lt;Occupied&gt;</td>
<td>Com</td>
<td>MCI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1h</td>
<td>28</td>
<td>2</td>
<td>&lt;Occupied&gt;</td>
<td>Com/Med Triage MCI</td>
<td>MCI</td>
<td>XC</td>
<td>L</td>
<td></td>
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<tr>
<td>1h</td>
<td>49</td>
<td>3</td>
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<td>MCI, Hip Pain Multiple</td>
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<td>L</td>
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<td>4</td>
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<td>5</td>
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<td>6</td>
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<td>1h</td>
<td>72</td>
<td>8</td>
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<td>i/o Ova</td>
<td>XC</td>
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<tr>
<td>1h</td>
<td>26</td>
<td>9</td>
<td>&lt;Occupied&gt;</td>
<td>Req Cleaning</td>
<td>Loc During Marathon</td>
<td>L</td>
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<td>10</td>
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<tr>
<td>11</td>
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<tr>
<td>12</td>
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<td>1h</td>
<td>31</td>
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<td>MCI</td>
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<td>X</td>
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<td>1h</td>
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<td>19</td>
<td>Hall 10</td>
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<tr>
<td>1h</td>
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<td>21</td>
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<td>MCI</td>
<td>X</td>
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<tr>
<td>1h</td>
<td>21</td>
<td>21</td>
<td>&lt;Occupied&gt;</td>
<td>Meds Triage Reg MCI</td>
<td>Head Inj</td>
<td>XC</td>
<td>L</td>
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</tr>
<tr>
<td>2h</td>
<td>43</td>
<td>1</td>
<td>&lt;Occupied&gt;</td>
<td>Meds MCI</td>
<td>Marathon - Muscle Cr</td>
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<tr>
<td>22a</td>
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<td>Marathon</td>
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<td>[Marathon]</td>
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<tr>
<td>1h</td>
<td>33</td>
<td>23b</td>
<td>&lt;Occupied&gt;</td>
<td>Meds Triage Reg MCI</td>
<td>Burn/Explosion</td>
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</tr>
</tbody>
</table>
## Crisis Standards of Care

<table>
<thead>
<tr>
<th>Normal Care</th>
<th>Contingency Care</th>
<th>Crisis Standards of Care</th>
</tr>
</thead>
</table>
| - Daily Process for triage  
- Trauma team response  
- No resource strain  
- Limited impact on operations | - Consideration of START/ SALT triage  
- Modified team response with staff extensions  
- Triage of resources needed  
- Conservation of supplies  
- Functionally equivalent care | - Disaster triage protocols  
- Adjusted staffing with outside resource/ use of buddy care  
- Scarce resource allocation  
- Adjusted protocols for care |

IOM, 2013
Crisis Standards of Care

- Crisis standards of care (CSCs) are a framework that was first developed at the request of the U.S. Department of Health and Human Services (HHS) (IOM, 2009).
- The major concerns for healthcare workers are expected to center around allocation of resources and triage of patients (Wagner et al., 2015).
- Priority to guide clinical decision-making during events when available resources may not meet the demands of the incident (IOM, 2007).
- To date there is no agreement to the type of training or frequency that should be in place to demonstrate competency (Gebbie, Hutton, & Plummer, 2012; Hodge, A. et al., 2017; Littleton-Kearney & Slepski, 2008).
ED Nursing Survey on CSC

• An online survey was distributed through social media and direct email to emergency nurses within the US over a two week period in January 2018.

• The survey tool was based on information from the IOM Crisis Standards publication. (IOM,2010)

• The survey consists of 43 questions including demographic, Likert scale, and open-ended items to measure respondents’ level of knowledge and preparation related to CSCs.

• 148 survey responses were recorded from all 10 FEMA regions in the US

• Four open-ended questions were based on a fictional disaster scenario and asked about barriers and education needed
Nurses with more drill and real world exposure or experience had higher total knowledge and preparation scores.

Training through didactic education, simulation, and drills were all noted to improve the readiness and self-perceived comfort to respond to events where CSCs may be needed.

Emergency nurses are not given adequate exposure to annual drills to prepare them for disaster events.

Fewer than half of participants were familiar with the term “Crisis Standards of Care.”

74% of nurses reported having experienced a supply or medication shortage in the last 6 months.

Emergency nurses with less than 5 years of experience have less overall knowledge and preparation despite having a high percent Bachelor’s degrees.
### CSC Survey

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am competent / comfortable working in the environment of a disaster or pandemic.</td>
<td>14%</td>
<td>27%</td>
<td>42%</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>I have received training and education to prepare me for working in situations requiring allocation of scarce resources or services.</td>
<td>7%</td>
<td>22%</td>
<td>16%</td>
<td>40%</td>
<td>16%</td>
</tr>
<tr>
<td>I am familiar with the term Crisis Standards of Care.</td>
<td>10%</td>
<td>24%</td>
<td>22%</td>
<td>29%</td>
<td>16%</td>
</tr>
<tr>
<td>I participate in disaster drills or exercises at my workplace (e.g., clinic, hospital, etc.) on a regular basis (every year or more frequently).</td>
<td>13%</td>
<td>37%</td>
<td>14%</td>
<td>25%</td>
<td>11%</td>
</tr>
</tbody>
</table>
Qualitative Results

- Fictional disaster scenario given to participants about a violent earthquake.
- Time is 12 hours post event and the hospital is caring not only for earthquake victims, but for patients with other serious health problems unrelated to the earthquake.
- Supply chain has stopped and resources are running out.

If you were placed into a situation like the scenario above, what type of challenges and barriers do you think may exist?

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Percent</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resources (non-human)</td>
<td>70%</td>
<td>64</td>
</tr>
<tr>
<td>Resources (staff)</td>
<td>52%</td>
<td>47</td>
</tr>
<tr>
<td>Psychologic care/support</td>
<td>47%</td>
<td>33</td>
</tr>
<tr>
<td>Triage decisions</td>
<td>36%</td>
<td>26</td>
</tr>
</tbody>
</table>
## Qualitative Results

What types of instructional courses, trainings or simulations have you taken that you think have made you prepared for scenarios like this that could be suggested for others?

<table>
<thead>
<tr>
<th>Type of training</th>
<th>Percent</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Drills</td>
<td>45%</td>
<td>33</td>
</tr>
<tr>
<td>Unspecified training</td>
<td>32%</td>
<td>23</td>
</tr>
<tr>
<td>FEMA sponsored ICS training</td>
<td>26%</td>
<td>19</td>
</tr>
<tr>
<td>Hazmat training</td>
<td>22%</td>
<td>16</td>
</tr>
<tr>
<td>ENA drills at national conference</td>
<td>16%</td>
<td>12</td>
</tr>
<tr>
<td>EMS/Fire experience</td>
<td>11%</td>
<td>8</td>
</tr>
<tr>
<td>Center for Domestic Preparedness</td>
<td>10%</td>
<td>7</td>
</tr>
</tbody>
</table>
Key questions to review at your Hospital

• How do you get notified about an event?
• Do you have a process to get supplies to your department?
• Who else is in the hospital at 3am that can help in the ED?
• Where do you go if you run out of space?
• Where it’s the hazmat equipment and can you practice?
• Can you limit access to your hospital?
• How long does it take to get help from fire/EMS for hazmat?
Sample 30 min Exercise _____ has just happened

- **R**ecognition of an event
  - **E**stablish casualty collection point
    - **A**ctivate additional resources
      - **C**lear the ED
        - **T**riage and treatment
Whatever we accomplish belongs to our entire group, a tribute to our combined effort.

Daniel Nadworny DNP, RN
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@Danny_rn
Questions
Thank you!
After the Regional Symposium Event…

You will receive two separate emails:

1. **ENA Regional Symposium Attendee Survey**

2. **Continuing Nurse Education (CNE) Evaluation**
   
a. Be sure to sign-in at the registration table
b. Complete evaluation based on event day(s) attended
c. Upon receipt of completed evaluation, your CNE certificate will be emailed to you.
d. All day attendance is required to claim CNE for the specific day.