| 17-4-1 | Review of the Process of Standards Council Decision Making by Sally Everett, Vice President and General Counsel. No Attachment |
| 17-4-2 | Act on the issuance of proposed Tentative Interim Amendment (TIA) to Article 590.4(G) of the 2017 edition of NFPA 70, *National Electrical Code®* (TIA No. 1244). |
| 17-4-2-a | Text of proposed TIA No. 1244 See Attachment 17-4-2-a |
| 17-4-2-b | Ballot results of TIA No. 1244. **PASSED CC** ballot on both correlation and emergency nature (11 agree on correlation issues and 10 agree on emergency nature/1 disagree) and **PASSED Panel** ballot on both technical merit and emergency nature (11 agree on technical merit/2 disagree and 11 agree on emergency nature/2 disagree). See Attachment 17-4-2-b |
| 17-4-2-c | One comment was received. See Attachment 17-4-2-c |
| 17-4-3 | The following 2016 Fall Revision Cycle Standards passed letter ballot of the Council as Consent Standards with the following issuance dates and effective dates:  

**NFPA 288**, *Standard Methods of Fire Tests of Horizontal Fire Door Assemblies Installed in Horizontal Fire Resistance-Rated Assemblies*  
**Issuance date of:** August 7, 2016 and an **effective date of August 27, 2016**  

**NFPA 408**, *Standard for Aircraft Hand Portable Fire Extinguishers*  
**Issuance date of:** July 19, 2016 and an **effective date of August 8, 2016**  

**NFPA 1000**, *Standard for Fire Service Professional Qualifications Accreditation and Certification Systems*  
**Issuance date of:** July 19, 2016 and an **effective date of August 8, 2016**  

**NFPA 501A**, *Standard for Fire Safety Criteria for Manufactured Home Installations, Sites, and Communities*  
**Issuance date of:** June 7, 2016 and an **effective date of June 22, 2016**  

The following 2017 Annual Revision Cycle Standards passed letter ballot of the Council as Consent Standards with the following issuance dates and effective dates:  

**NFPA 402**, *Guide for Aircraft Rescue and Fire-Fighting Operations*  
**Issuance date of:** November 11, 2016 and an **effective date of December 1, 2016** |
**17-4-4** Consider requests from NFPA Committees to change revision cycles for the following documents:

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>75</td>
<td>2017 F2019</td>
<td>A2020 to F2019</td>
<td></td>
<td>One time move</td>
<td>4 yr rev to 3 ½ yr rev</td>
</tr>
<tr>
<td>1951</td>
<td>ADMINISTRATIVELY WITHDRAWN</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

See Attachment 17-4-4

**17-4-5** Consider the request of Chief Otto Drozd, Orange County Fire Rescue Department to develop a standard for preparedness and response to active shooter scenarios and incidents.

NFPA reached out to a number of Organizations and published an article in NFPA News which resulted in receiving eighty-six comments regarding the development of this project. Seventy-three comments are in support of the development of a project and eleven comments did not support the development of a project and we received two general comments. Sixty-eight people have submitted applications to participate on a Committee if developed.

See Attachment 17-4-5 See related agenda item 17-4-11-c

**17-4-6** Consider the development of a project on electrical inspector professional qualifications. NFPA reached out to a number of organizations and published an article in NFPA News which resulted in receiving twenty-seven comments regarding the development of this project. Twenty-three comments are in support of the development of a project and four comments did not support the development of a project. Fourteen people have submitted applications to participate on a Committee if developed.

See Attachment 17-4-6 See related agenda item17-4-11-b

**17-4-7** Consider the request of the Technical Committee on Building Fire and Life Safety Directors to enter new document, NFPA 1082, *Standard for Facilities Safety Director Professional Qualifications*, into the A2019 revision cycle, with a special public input closing date of 7/28/2017. The Council approved the establishment of this proposed document in April 2015.

See Attachment 17-4-7


**17-4-9** Review the proposed 2017 edition of the NFPA Manual of Style. No Attachment

**17-4-10** Report of the Policy and Procedures Task Group (D. O’Connor, Chair) No Attachment

**17-4-11** Report of the Committee Membership Task Group (M. Snyder, Chair).

**17-4-11-a** Act on pending applications for Committee Members. No Attachment

**17-4-11-b** Proposed Start-up roster for proposed project on electrical inspector professional qualifications. No Attachment
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>17-4-11-c</strong></td>
<td>Proposed Start-up roster for new project on active shooter scenarios and incidents. No Attachment</td>
</tr>
<tr>
<td><strong>17-4-11-d</strong></td>
<td>Administratively removed from the Agenda</td>
</tr>
<tr>
<td><strong>17-4-11-e</strong></td>
<td>Proposed roster for Panel 4 due to the re-organization of articles in Panel 4. No Attachment</td>
</tr>
<tr>
<td><strong>17-4-11-f</strong></td>
<td>Proposed roster for Panel 6 due to the combination of Panels 6 and 7. No Attachment</td>
</tr>
<tr>
<td><strong>17-4-11-g</strong></td>
<td>Proposed roster for Panel 10 due to the re-organization of articles in Panel 10. No Attachment</td>
</tr>
</tbody>
</table>
| **17-4-12** | Review the proposed dates and locations of upcoming Council meetings, as follows:  
August 15-17, 2017  
Quincy, MA  
December 5-6, 2017  
Galveston, TX |
| **17-4-13** | Presentation on the Product Development Process from Amanda Welsh, Director, Creative Services / Marketing Communications. |
| **17-4-14** | Update from Tracy Vecchiarelli on the process used for the development of proposed NFP 277, i.e., two separate task groups. |
1. Revise 590.4(G) to read as follows:

590.4(G) Splices. A box, conduit body, or other enclosure, with a cover installed, shall be required for all splices, except where:

Exception: On construction sites, a box, conduit body, or other enclosure shall not be required for either of the following conditions:

(1) The circuit conductors being spliced are all from nonmetallic multiconductor cord or cable assemblies, provided that the equipment grounding continuity is maintained with or without the box.
(2) The circuit conductors being spliced are all from metal sheathed cable assemblies terminated in listed fittings that mechanically secure the cable sheath to maintain effective electrical continuity.

Substantiation. The new allowance to the 2017 version of 590.4(G) allows for open splices for any temporary installation. This allowance used to apply only to construction sites when certain criteria was met. As written for the new edition, an open splice is permitted for any temporary installation, provided that similar criteria to the construction site rule is met. This means that areas such as Christmas tree sales lots, for example, can have open splices where the public would have access to them. This is obviously an unsafe installation, as 300.15 makes perfectly clear. Unfortunately, 300.15 doesn’t apply here as this rule specifically modifies it, as permitted by 90.3. This leaves the AHJ no authority to reject an installation that is obviously a safety hazard and a fire hazard.

Emergency Nature. The standard contains an error or an omission that was overlooked during the regular revision process. The proposed TIA intends to offer to the public a benefit that would lessen a recognized (known) hazard or ameliorate a continuing dangerous condition or situation.
MEMORANDUM

TO: National Electrical Code® Correlating Committee

FROM: Sarah Caldwell, Project Administrator

DATE: March 6, 2017

SUBJECT: NFPA 70 Proposed TIA No. 1244 FINAL CC BALLOT RESULTS

The public comment circulation date of March 2, 2017 has passed, therefore, according to 5.6(b) in the NFPA Regs, the final results show this TIA HAS achieved the ¾ majority vote needed on both Question No. 1 (Correlation Issues) and Question No. 2 (Emergency Nature).

12 Eligible to Vote
1 Not Returned (Manche)

<table>
<thead>
<tr>
<th>Correlation Issues:</th>
<th>Emergency Nature:</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 Abstentions</td>
<td>0 Abstentions</td>
</tr>
<tr>
<td>11 Agree</td>
<td>10 Agree (w/ comment: Pierce)</td>
</tr>
<tr>
<td>0 Disagree</td>
<td>1 Disagree (Hittinger)</td>
</tr>
</tbody>
</table>

There are two criteria necessary to pass ballot [(1) simple majority (2) affirmative ¾ vote]. Both questions must pass ballot in order to recommend that the Standards Council issue this TIA.

(1) In all cases, an affirmative vote of at least a simple majority of the total membership eligible to vote is required.

\[ 12 \text{ eligible} \div 2 = 6 + 1 = (7) \]

(2) The number of affirmative votes needed to satisfy the ¾ requirement is 9.

\( (12 \text{ eligible to vote} - 1 \text{ not returned} - 0 \text{ abstentions} = 11 \times 0.75 = 8.25) \)

Ballot comments are attached for your review.

The Regs at 1.6.2.(c) state: An appeal relating to a proposed Tentative Interim Amendment that has been submitted for processing pursuant to Section 5.2 shall be filed no later than 5 days after the notice of the TIA final ballot results are published in accordance with 4.2.6.

**Appeal Closing Date** for this TIA is **March 11, 2017**.

Attachment
Ballot Item No. 1:
I agree there are no CORRELATION ISSUES in accordance with 3.4.2 and 3.4.3 of the NFPA Regs.

_____XX______ AGREE ____________ DISAGREE* ____________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a “disagree” or “abstain” vote. If disagreeing, cite relevant section(s)/paragraph(s) of the correlation issue and describe.

____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

Ballot Item No. 2:
I agree the subject of this TIA is of an EMERGENCY NATURE.

_____X______ AGREE ____________ DISAGREE* ____________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a “disagree” or “abstain” vote.
__I agree, we certainly don’t want a Christmas Tree lot (public access) to have this!_

________________________
Signature

________________________
Jim Pierce

________________________
Name (Please Print)

________________________
Feb. 3, 2017

Date

Please return the ballot on or before Wednesday, February 8, 2017.

PLEASE RETURN TO:
Sarah Caldwell, Project Administrator
NFPA
1 Batterymarch Park
Quincy, MA 02169

FAX: (617) 984-7110 E-mail: scaldwell@nfpa.org
Ballot Item No. 1:
I agree there are no **CORRELATION ISSUES** in accordance with 3.4.2 and 3.4.3 of the NFPA Regs.

[ ] AGREE  [ ] DISAGREE*  [ ] ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a “disagree” or “abstain” vote. If disagreeing, cite relevant section(s)/paragraph(s) of the correlation issue and describe.

_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

Ballot Item No. 2:
I agree the subject of this TIA is of an **EMERGENCY NATURE**.

[ ] AGREE  [ ] DISAGREE*  [ ] ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a “disagree” or “abstain” vote.

_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

THE TIA IS NOT OF EMERGENCY NATURE AS DESCRIBED IN THE REGS.

[Signature]

David Hettinger

[Name (Please Print)]

[Date]

2/7/17

Please return the ballot on or before **Wednesday, February 8, 2017**.

**PLEASE RETURN TO:**
Sarah Caldwell, *Project Administrator*
NFPA
MEMORANDUM

TO: Code-Making Panel 3
FROM: Sarah Caldwell, Project Administrator
DATE: March 6, 2017
SUBJECT: NFPA 70 Proposed TIA No. 1244 FINAL TC BALLOT RESULTS

The public comment circulation date of March 2, 2017 has passed, therefore, according to 5.6(a) in the NFPA Regs, the final results show this TIA HAS achieved the ¾ majority vote needed on both Question No. 1 (Correlation Issues) and Question No. 2 (Emergency Nature).

14 Eligible to Vote
1 Not Returned (Mills)

<table>
<thead>
<tr>
<th>Technical Merit:</th>
<th>Emergency Nature:</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 Abstentions</td>
<td>0 Abstentions</td>
</tr>
<tr>
<td>11 Agree (w/comment: Sleights)</td>
<td>11 Agree (w/comment: Sleights)</td>
</tr>
<tr>
<td>2 Disagree (Brunner, Corbin)</td>
<td>2 Disagree (Brunner, Corbin)</td>
</tr>
</tbody>
</table>

There are two criteria necessary to pass ballot [(1) simple majority (2) affirmative ¾ vote]. Both questions must pass ballot in order to recommend that the Standards Council issue this TIA.

(1) In all cases, an affirmative vote of at least a simple majority of the total membership eligible to vote is required.

\[
[14 \text{ eligible} \div 2 = 7 + 1 = (8)]
\]

(2) The number of affirmative votes needed to satisfy the ¾ requirement is 10.

\[
(14 \text{ eligible to vote} - 1 \text{ not returned} - 0 \text{ abstentions} = 13 \times 0.75 = 9.75)
\]

Ballot comments are attached for your review.

The Regs at 1.6.2.(c) state: An appeal relating to a proposed Tentative Interim Amendment that has been submitted for processing pursuant to Section 5.2 shall be filed no later than 5 days after the notice of the TIA final ballot results are published in accordance with 4.2.6.

Appeal Closing Date for this TIA is March 11, 2017.

Attachment
Ballot Item No. 1:
I agree with the TECHNICAL MERITS of the Proposed TIA to revise Section 590.4(G).

X AGREE ___________ DISAGREE* ___________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation shall accompany a "disagree" or "abstain" vote.

I would support a "disagree" if the section wording included something to the effect of "or other cable splicing devices listed for the purpose and location."

Ballot Item No. 2:
I agree that the subject is of an EMERGENCY NATURE.

X AGREE ___________ DISAGREE* ___________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation shall accompany a "disagree" or "abstain" vote.

I would support a "disagree" if the section wording included something to the effect of "or other cable splicing devices listed for the purpose and location."

Signature
John E. Sleights

Name (Please Print)
John E. Sleights

Date
01/20/17

Please return the ballot on or before Wednesday, January 18, 2017 by 11:59PM (ET).

PLEASE RETURN TO:
Sarah Caldwell, Project Administrator
NFPA
1 Batterymarch Park
Quincy, MA 02169

FAX: (617) 984-7110    E-mail: scaldwell@nfpa.org
CODE-MAKING PANEL 3 LETTER BALLOT  
PROPOSED TENTATIVE INTERIM AMENDMENT LOG NO. 1244  
To Revise Section 590.4(G) of the 2017 Edition of the NFPA 70,  
National Electrical Code®

Ballot Item No. 1:  
I agree with the TECHNICAL MERITS of the Proposed TIA to revise Section 590.4(G).

_________ AGREE  __________ DISAGREE*  __________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation shall accompany a “disagree” or “abstain” vote.

_____ This should not be limited to construction sites. There are products on the market that are listed for cable splices. If used properly there should be no public safety concerns.


Ballot Item No. 2:  
I agree that the subject is of an EMERGENCY NATURE.

_________ AGREE  _____x____ DISAGREE*  __________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation shall accompany a “disagree” or “abstain” vote.

_____ If proper equipment is used no public hazard will exist.


Signature  
William A. Brunner

Name (Please Print)  
William A. Brunner

Date  
1/9/17

Please return the ballot on or before Wednesday, January 18, 2017 by 11:59PM (ET).

PLEASE RETURN TO:  
Sarah Caldwell, Project Administrator  
NFPA  
1 Batterymarch Park  
Quincy, MA 02169  
FAX: (617) 984-7110  
E-mail: scaldwell@nfpa.org

March 31, 2017  
Supplemental Agenda -SC Meeting April 4-5, 2017  
Page 11 of 283
Ballot Item No. 1:  
I agree with the TECHNICAL MERITS of the Proposed TIA to revise Section 590.4(G).

__________ AGREE  _______ X _______ DISAGREE*  _________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation shall accompany a “disagree” or “abstain” vote.

The panel statement was clear to indicate that “constructions sites” was purposefully removed as the panel wanted the splice requirement to apply universally for temporary installations. I also do not agree with the substantiation provided for the change. The AHJ still has the authority to disapprove of the installation in accordance with 90.4 making the TIA unnecessary.

Ballot Item No. 2:  
I agree that the subject is of an EMERGENCY NATURE.

__________ AGREE  _______ X _______ DISAGREE*  _________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation shall accompany a “disagree” or “abstain” vote.

As I disagree with the TIA, I disagree that the subject is of an emergency nature. I do not agree with the proposed change.

______________________________
Signature

______________________________
Adam Corbin
Name (Please Print)

__________ 1/5/17 _______________________
Date

Please return the ballot on or before Wednesday, January 18, 2017 by 11:59PM (ET).

PLEASE RETURN TO:
Sarah Caldwell, Project Administrator
NFPA
1 Batterymarch Park
Quincy, MA 02169   FAX: (617) 984-7110   E-mail: scaldwell@nfpa.org
Observations on TIA 1244 NEC 590.4(G) by Scott Cline (NECA, CMP 6 and 12)

While it does appear that the 2017 rewrite caused a serious (and apparently unjustified) drop in requirements, I think that the proposed rewrite is unnecessarily complicated, and reintroduces an "Exception" construction.

I believe that simply inserting "on construction sites" between "except" and "where" in the existing 2017 text would make the basic requirements match the 2014 basic requirements.

Also, I believe that the list format as worded in the 2017 text is ambiguous without language which makes the items either logical "and" or "or" in application of the rules. So I suggest deleting the ambiguous "where" and inserting "for either of the following wiring methods". The 2017 text is ambiguous in any practical interpretation, but technically requires the construction to match BOTH items in order to be granted the allowance.

Suggested corrected wording as below (strikeout of "where" not shown):

590.4(G) Splices. A box, conduit body, or other enclosure, with a cover installed, shall be required for all splices except on construction sites for either of the following wiring methods:
(1) The circuit conductors being spliced are all from nonmetallic multiconductor cord or cable assemblies, provided that the equipment grounding continuity is maintained with or without the box.
(2) The circuit conductors being spliced are all from metal sheathed cable assemblies terminated in listed fittings that mechanically secure the cable sheath to maintain effective electrical continuity.

If there indeed was no justification presented during the 2017 editing process to broaden the allowance to all temporary installations, then this or some effective editing must be done.

Scott Cline
Item 17-4-4
Hi Linda,

In order to keep NFPA 75 and NFPA 76 together in the same cycle, Lee Kaiser our Chairman for NFPA 75, and myself would like to request of the Standards Council a one-time move of NFPA 75 from a 4 year cycle in A2020 to a 3 ½ year cycle into F2019.

I know it has been posted as accepting Input for the A2020 cycle, but hopefully with SC approval and enough public notice of the change this is something that can be done to accommodate the two technical committees working together in partnership.

Please let me know if you need anything else from me or have any questions or comments on it.

Thanks,

Jon

Jonathan R. Hart, PE
Senior Fire Protection Engineer
NFPA
1 Batterymarch Park
Quincy, MA 02169-7471
jhart@nfpa.org
+1 617 984-7470

National Fire Protection Association
The leading information and knowledge resource on fire, electrical and related hazards.
www.nfpa.org

The Technical Committee would like to request the Council to allow NFPA 1951 to report in the Fall 2019 Revision Cycle and not to open up for new public inputs. [see Regulations 4.4.11.6 (c)]

>

>
Item 17-4-5
**New Project Initiation Form**
(To be completed by proponent of new project/document)

*Additional pages may be attached if necessary.*

<table>
<thead>
<tr>
<th>a.</th>
<th>Explain the Scope of the new project/document:</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>The scope of the new project/document would include the development of a Fire &amp; Emergency Service Operational Standard for the response to Active Shooter events and incidents. This standard would provide for recommend levels of training, appropriate personal protective equipment, response protocol/procedures, and measurable operational objectives.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>b.</th>
<th>Provide an explanation and any evidence of the need for the new project/document:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Between 2000-2013 over 160 active shooter events have occurred within the United States killing 468 and injuring over 550. According to the FBI in 2016 alone, 232 incidents involving an active shooter have occurred. In each case a Fire and Emergency Service response has been an integral portion of the response and mitigation of these types' incidents. So much so, that leading Fire and Emergency Service organization have published position papers and operational guidance materials.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>c.</th>
<th>Identify intended users of the new project/document:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All Fire and Emergency Medical Service providers at the Administrative, Command and Control, and Operational levels of organizations. This project/document would also provide training institutions, personnel protective clothing and equipment manufacturers, and partnering response agencies with guidance.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>d.</th>
<th>Identify individuals, groups and organizations that should review and provide input on the need for the proposed new project/document; and provide contact information for these groups:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fire Fighters, First Responders, Emergency Medical Technicians, Fire and EMS organizations, Medical groups, and Law enforcement agencies, Educators, PPE manufacturers. The International Association of Fire Chiefs, the International Association of Fire Fighters and the Metropolitan Fire Chiefs Association have signed a letter supporting the development of this document and the United States Fire Administration is expected to soon join these groups in supporting the development of this standard.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>e.</th>
<th>Identify individuals, groups and organizations that will be or could be affected, either directly or indirectly, by the proposed new project/document, and what benefit they will receive by having this new document available:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stakeholders include, Fire Fighters, Emergency Medical Technicians, Fire Officers, Chief Officers, Incident Commanders, Law Enforcement, Educators, and Manufacturers of PPE, as well as Local, State and Federal agencies involved in the preparation, response, and mitigation of Active Shooter incidents. The benefit would be a document that will provide for consistent training, response, and equipment standards that will facilitate single, multijurisdictional, and multidiscipline approaches to active shooter incidents. This consistent approach will provide for high levels of on scene, command and control, communications, safety, and lifesaving.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>f.</th>
<th>Identify other related documents and projects on the subject both within NFPA and external to NFPA:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IAFC Position:</td>
</tr>
</tbody>
</table>

March 31, 2017

Supplemental Agenda -SC Meeting April 4-5, 2017

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g. Identify the technical expertise and interest necessary to develop the project/document, and if the committee membership currently contains this expertise and interest:  

A broad based coalition of labor, management, educators, law enforcement, manufactures and operational personnel would be necessary to account for all stakeholder groups. Given the existing body of knowledge developed over the 15 plus years there are sufficient existing subject matter experts and interested parties in order to develop the program/document.

h. Provide an estimate on the amount of time needed to develop the new project/document: 24-36 months.

i. Comment on the availability of data and other information that exists or would be needed to substantiate the technical requirements and other provisions of the proposed new project/document:

There is a significant existing body of knowledge and recommended guidelines that can be used to develop a new standard that will provide for consistent training, equipment, response protocol/procedures, and measurable operational objectives.

Please send your request to:
NFPA
Codes and Standards Administration
1 Batterymarch Park
Quincy, MA 02169
Std_admin@nfpa.org
Rev. 10/09

Signature: [Signature]

Name: Otto Drozd, Fire

Affiliation: Orange County Fire Rescue Department

(please print)
The NFPA Standards Council is in receipt of a New Project Initiation Request for the development of an ANSI Accredited Standard addressing preparedness and response to active shooter scenarios and incidents. The request seeks an NFPA standard to address appropriate training, responder interagency coordination protocol, and the identification of minimal personal protective equipment appropriate for responders to active shooter incidents.
If the New Project Initiation is ultimately approved by the Standards Council, a new Technical Committee may be established and charged with the development of appropriate requirements related to active shooter incident preparedness and response. Activities within the scope of the Technical Committee are anticipated to focus on:

- active shooter incident training for responders;
- personal protective equipment appropriate for responding to active shooter scenarios;
- response protocol and procedures across multiple responder segments; and
- measurable operational objectives.

NFPA is currently soliciting comments from interested organizations and individuals to gauge whether support exists for standards development addressing preparedness and response to active shooter incidents. NFPA specifically seeks input on the following:

- Are you, or your organization, in favor of the development of an NFPA Standard pertaining to active shooter incident response and preparedness?
- Please state your reason(s) for supporting or opposing such standards development.
- Are you or your organization interested in applying for membership on the Technical Committee if established by the Standards Council? If yes, please submit an application* in addition to your comments in support of the project.

Please submit all comments, in support or opposition to active shooter incident response and preparedness standards development to NFPA by the deadline below.

**Submit public comments**

**Deadline: January 17, 2017**

*Applications being accepted for purposes of documenting applicant interest in committee participation. Acceptance of applications by NFPA does not guaranty or imply the Standards Council will ultimately approve standards development activity on this subject matter.*

---

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This is a slippery slope. The only relationships to an incident like this that already exists is NFPA 72 and some in the 470 series. I don’t believe this has any place in NFPA codes. The problem lies in the fact that there are other agencies that may be involved that don’t have a direct connection to the Fire Service. This multiple agency interaction puts the Fire Service under another agency in NIMS. That other agency may have no experience in roles and responsibilities of the Fire Service. The NFPA codes have always dealt with issues pertaining to definitive circumstances. Introduction of one or more variable criminally active perpetrators is too expansive and unpredictable and would yield a volume that is too cumbersome.

Sent from Mail for Windows 10
I am not in favor the NFPA establishing a standard for this issue. My response is not because I don’t think the issue is important. My reason is that there are several national organizations and federal agencies that have developed and shared information on this issue. In Oregon we have a statewide work group that we have formed that includes 9-1-1, fire, EMS, and law enforcement. Our work group is using these documents as a guide for our discussions and work. We are also using NIMS as a vehicle through which we are working on this as an all-hazards/all risks issue for management. I simply don’t see this as an issue that the NFPA needs to be involved in.

If I can be of assistance please let me know.

Eriks Gabliks
Director
Department of Public Safety Standards and Training
Maynard, Mary

From: Josh Brown <josh.brown@TFB.bank>
Sent: Friday, November 4, 2016 4:22 PM
To: stds_admin
Subject: Preparedness and Response to Active Shooter Scenarios and Incidents

No, the NFPA should not be involved in the creation or promulgation of recommendations or guidelines pertaining to “Preparedness and Response to Active Shooter Scenarios and Incidents.”

As a member of the technical committees for 730 AND 731 I distinctly remember how both were thought to be a stretch for the NFPA. Since they both related to the building itself, and facility security impacts and is impacted by fire safety, I strongly supported the work of the committees. As a retired police officer though, I see this differently. Law enforcement agencies are already heavily regulated and are responsible to accrediting agencies at most state and the national level. How law enforcement responds to an active shooter, except in how they may need to coordinate with responding firefighters and rescue workers, has almost nothing to do with fire safety.

As active shooters, and related life-safety threats posed by aggressors, change methods of operation, I do not see an NFPA committee being able to keep up with the changes and respond accordingly. Even generalities often found in guidelines would likely miss the mark and recommend equipment not generally available or procedures not appropriate to some environments. In understanding CPTED and Response Enhanced Design we realize that the design of the built environment grounds may have quite a bit to do with how a response plays out. Decisions on how, when and in what manner to respond to an active situation threatening lives due to an aggressor are best left up to those better prepared to communicate with and train law enforcement.

I do not wish to participate on any such committee created by the NFPA.

Tks, Josh

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“Excellence Is: The result of caring more than others think wise, risking more than others think safe, dreaming more than others think practical, and expecting more than others think possible.”
(Plaque found at Childrens National Medical Center, Washington, DC - 1986)

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Maynard, Mary

From: Fred Hoegler <fhoegler@firesafetyfsci.com>
Sent: Friday, November 4, 2016 3:59 PM
To: stds_admin
Subject: Preparedness and Response to Active Shooter Scenarios and Incidents

Please accept my personal opinion that Law Enforcement should take the lead in developing standards/protocols for Preparedness and Response to Active Shooter Scenarios and Incidents. Knowing that Fire and EMS are involved when these incidents occur, I would prefer NFPA to represent the Fire Service (along with other Fire and EMS organizations) in the development of such standards/protocols, but NFPA should not be the lead organization.

Thank you.

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From: Robert West <rdubbia@gmail.com>
Sent: Friday, November 4, 2016 3:57 PM
To: stds_admin
Subject: Preparedness and Response to Active Shooter Scenarios and Incidents

Please stay in your lane when it comes to active shooter/threat response. Fire has nothing to do with the tactical approach and only gets involved when the scene is clear for emergency triaging.

What NFPA should focus on is clarifying evacuation space and muster zones for occupancy rates. It's fairly easy now a days to get people out of buildings but the hard part is keeping them at a safe distance from the building and to provide medical treatment and transportation space.
Proposing a standard for active shootings seems noteworthy, but is this truly within the scope of NFPA? The Department of Homeland Security has already developed valuable information on this topic. Having training available on the topic for the general public and specifically for first responders is prudent, but I question the need for a standard under the auspices of NFPA.

Thanks for asking for input.

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First Responder Guide for Improving Survivability in Improvised Explosive Device and/or Active Shooter Incidents
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Executive Summary

Recent improvised explosive device (IED) and active shooter incidents reveal that some traditional practices of first responders need to be realigned and enhanced to improve survivability of victims and the safety of first responders caring for them. This Federal, multi-disciplinary first responder guidance translates evidence-based response strategies from the U.S. military’s vast experience in responding to and managing casualties from IED and/or active shooter incidents and from its significant investment in combat casualty care research into the civilian first responder environment. Additionally, civilian best practices and lessons learned from similar incidents, both in the United States and abroad, are incorporated into this guidance. Recommendations developed in this paper fall into three general categories: hemorrhage control, protective equipment (which includes, but is not limited to, ballistic vests, helmets, and eyewear), and response and incident management.

Hemorrhage Control

1. First responders should incorporate tourniquets and hemostatic agents as part of treatment for severe bleeding (if allowed by protocol). Tourniquets and hemostatic agents have been demonstrated to be quick and effective methods for preventing exsanguination from extremity wounds (tourniquets) and other severe external bleeding (hemostatic agents).

2. First responders should develop and adopt evidence-based standardized training that addresses the basic, civilianized tenets of Tactical Combat Casualty Care (TCCC). Training should be conducted in conjunction with fire, emergency medical services (EMS), and medical community personnel to improve interoperability during IED and/or active shooter incidents.

Protective Equipment

1. First responders should develop inter-domain (EMS, fire, and law enforcement) Tactics, Techniques, and Procedures (TTPs)—including use of ballistic vests, better situational awareness, and application of concealment and cover concepts—and train first responders on them.

2. As technology improves, first responders should adopt proven protective measures (e.g., body armor) that have been demonstrated to reliably shield personnel from IED fragments and shock waves.

3. First responders, when dealing with either IED or active shooter incidents, must remain vigilant and aware of the potential risk posed by secondary IEDs or additional shooters.

Response and Incident Management

1. Local and state law enforcement and emergency services should institutionalize National Incident Management System (NIMS)-based command and control language through plans and exercises and during ongoing education and training.

2. Local and state emergency management, EMS, fire, and law enforcement personnel and receiving medical facilities should have interoperable radio and communications equipment.

3. Local, state and federal partners should consider expansion of Public Safety Answering/Access Point (PSAP) intake procedures to include information gathering vital to the initial response.

4. Training to improve first responder triaging precision is essential for dealing with IED and/or active shooter incidents.

5. There should be greater coordination among EMS, fire services, and law enforcement to work more effectively during IED and/or active shooter incidents. The dialogue should focus on potential improvements or changes to the TTPs which have historically been used during law enforcement
situations that involve a medical emergency (e.g., EMS waits until law enforcement secures the zone before they enter to render emergency care).

The recommendations presented—early, aggressive hemorrhage control; use of body armor and a more integrated response; and greater first responder interoperability—will help to save lives by mitigating first responder risk and by improving the emergent and immediate medical management of casualties encountered during IED and/or active shooter incidents.
Purpose

Recent improvised explosive device (IED) and active shooter incidents reveal that some traditional practices of first responders need to be realigned and enhanced—with an emphasis on early hemorrhage control and a more integrated response by first responders (i.e., emergency medical services [EMS], fire, law enforcement, and rescue personnel)—to improve survivability of victims and the safety of first responders caring for them. At the request of first responders and first receivers (e.g., medical technicians, nurses, and physicians) who have encountered mass casualties from IEDs and/or active shooter incidents, this document was developed to provide guidance on how to better approach these incidents.

Responders should also consider the combination of both IEDs and active shooter incidents in an organized, complex attack (such as the Mumbai attacks in 2008) that requires both treatment and extraction of the injured from a still-hostile environment. The conditions during such tactical assaults in a civilian setting speak to the need for first responders and first receivers to adopt evidence-based hemorrhage control, risk evaluation, and casualty management measures in a potentially dangerous environment.

As a result of these developments, the Department of Homeland Security, in coordination with the Department of Defense (DoD), Department of Health and Human Services, Department of Justice, Department of Transportation, White House Office of Science and Technology Policy, and the National Security Staff, has developed recommendations for individuals who provide emergent and immediate medical management of casualties resulting from IEDs and/or active shooter incidents. Based on best practices and lessons learned, this document focuses on the medical response to IEDs and/or active shooter incidents with recommendations for hemorrhage control, protective equipment (which includes ballistic vests, helmets, and eyewear), and response and incident management.
A. Defining First Responders

In this guidance, the term “first responder” refers to a diverse set of persons who, from the earliest stages of an incident, are critical to managing and caring for people who are injured by an IED and/or active shooter incident. The term “first responder” does not imply a formal credential, certification, limitation, or capacity. First responders may include bystanders, law enforcement, and EMS and fire personnel. EMS and fire personnel typically encompass the traditional scopes of practice as identified in the National Highway Traffic Safety Administration’s National Scope of Practice Model (2007). Levels of medical credentialing and quantity of resources for EMS and fire personnel can vary greatly depending on the EMS delivery model. Bystanders, who likely will be on scene prior to EMS, fire, or law enforcement arrival, may or may not have some form of medical training, and those volunteering at the site of an attack may be poorly equipped and at risk for additional explosions, ballistic threats, and hazardous environments. In some areas, the jurisdiction involved may benefit from volunteer services such as Community Emergency Response Teams (CERTs), the Emergency System for Advance Registration of Volunteer Health Professionals, or the Medical Reserve Corps (MRC). These volunteers are organized and trained to provide community support to natural disasters, accidents, and attacks. In the United States, the role of first receivers is frequently associated with “brick and mortar” medical facilities that often do not have the protective equipment necessary to face potential hostile conditions or hazardous environments.

B. Defining the Threat

Single or multiple IED events targeting civilians and/or first responders represent an ongoing and growing threat from domestic and foreign individuals or groups. In the United States between 1970 and 2011, excluding the 9/11 attacks, four of six attacks with more than 50 injuries, and 22 of 45 attacks with more than five injuries, involved IEDs. IED “types” likely to cause mass casualties include “leave behind” parcels, backpacks, or luggage placed in crowded environments; “suicide vests” or “suicide belts”; and especially vehicle bombs. Traumatic injuries may result from IEDs in many ways: from penetration or blunt force trauma caused by the fragmentation and high-velocity projection of pieces of its immediate container (e.g., a metal pipe, box, or pressure cooker); from items intentionally added to compound the number of projectiles (e.g., ball bearing, nails, etc.); from incidental fragmentation and projection of material or debris from a larger container or vessel the IED is placed within (e.g., a vehicle trunk or trash bin); by collateral fragmentation and/or projection of material affected by blast, such as windows, walls, or other objects in the vicinity; and by blast overpressure itself, without any projectiles at all. Where an IED is placed—indoors or out, near or far from other objects—will influence its blast effects. Understanding the numerous ways in which IEDs can cause injuries and how the environment plays a role in exacerbating or mitigating their blast effects is critical to increasing survivability when unexploded IEDs are present or secondary IEDs are suspected. In addition to causing life and limb threatening injuries, these events generate confusion, uncertainty, and fear at the scene that ripple throughout the receiving medical system.

Active shooter incidents represent a similar, and increasing, threat to responders. Like IED events, active shooter incidents require extraordinary efforts on the part of first responders. Though these incidents typically end within a short period of time, some may involve large, complex locations and require many hours to clear suspected hazards after the initial event.
C. Military Lessons Learned and Civilian Adaptation

Experience in combat casualty care gained by the U.S. military during the wars in Iraq and Afghanistan, augmented by the DoD’s investment in trauma care and surgical research, has resulted in a vast amount of knowledge pertaining to the management of explosive injury and gunshot wounds, with a particular focus on life-threatening external hemorrhage control.

Tactical Combat Casualty Care

Information on wounds suffered by U.S. Army soldiers in Vietnam between July 1967 and June 1979 found that of those killed in action, 9 percent died from extremity hemorrhage, 5 percent died from tension pneumothorax, and 1 percent died from airway obstruction. These findings, that one-sixth of combat casualties result from three types of wounds that are easily treated in the field, led to the development in the late 1990s of Tactical Combat Casualty Care (TCCC)—a set ofprehospital trauma care guidelines for battlefield use that focus on the most common causes of treatable exsanguination deaths in combat.

Tactical Emergency Casualty Care

Recognizing how this military experience could apply to civilian high-threat medical operations, an independent group of civilian first responders in 2011 founded the Committee for Tactical Emergency Casualty Care (C-TECC) to develop guidelines that translate military medical lessons learned from the battlefield to civilian crisis response. The resulting Tactical Emergency Casualty Care (TECC) guidelines are a set of evidence-based best practice recommendations for casualty management during high-threat civilian tactical and rescue operations that are based on military TCCC principles but account for differences in the civilian environment, resources allocation, patient population, and scope of practice. It is important to emphasize that C-TECC is an independent civilian entity and not necessarily endorsed by the DoD. TECC is the civilian evolution of TCCC, written to address the subtle differences in the civilian operational environment.

A collaborative group of public safety organizations—including fire, law enforcement, pre-hospital care, trauma care, and the military—convened in Hartford, Connecticut, in the spring of 2013 to develop consensus regarding strategies to increase survivability in mass-casualty shootings (commonly referred as the Hartford Consensus). The group states that “no one should die from uncontrolled bleeding” and developed the acronym THREAT to address these situations:

- Threat suppression,
- Hemorrhage control,
- Rapid Extrication to safety,
- Assessment by medical providers, and
- Transport to definitive care.

In its “Call to Action,” this group of experts advocates that uninjured or minimally injured victims can act as rescuers; law enforcement should utilize external hemorrhage control as a core skill; EMS, fire, and rescue response must be more fully integrated and their traditional role limitations revised; and existing trauma systems should be used to optimize seamless care.

Concerned international and national first responder associations, such as the International Association of Chiefs of Police, International Association of Fire Fighters, International Association of Fire Chiefs, National Association of Emergency Medical Technicians, and the National Tactical Officers Associations, have shown great interest in this topic, and many have published position statements. The fire associations state...
that “common tactics, common communications capabilities and a common lexicon for seamless, effective operations” are required and “integrated and coordinated planning, policies, training and team building prior to the incident will ensure effective and successful response.” Additionally, the National Tactical Officers Association (NTOA) states that there is a need for all police officers to have basic Tactical Emergency Medical Support (TEMS) medical training in order to potentially save the lives of victims, bystanders, police officers, and suspects in the event they are wounded.

NTOA has also stated that there is no single model for providing care during law enforcement operations and that TEMS basic principles should be considered core law enforcement skills relevant to all police operations, as NTOA “supports the efforts of the Committee for Tactical Emergency Casualty Care (C-TECC) and others to foster the development of standardized taxonomy and evidence based clinical practice guidelines tailored to the law enforcement mission.”

The following is a list of select TCCC/TECC interventions that have potential applicability in civilian trauma care systems following an IED and/or active shooter event:

1. The use of tourniquets to control extremity hemorrhage.
2. The use of hemostatic gauze to control bleeding from sites not amenable to tourniquet.
3. The use of a nasopharyngeal airway for patients without maxillofacial or neck trauma.
4. Positioning of a casualty in a recovery posture if feasible for conscious patients with maxillofacial trauma and bleeding into the airway.
5. Spinal precautions when feasible for patients with blunt but not penetrating trauma.
6. Intravenous (IV) access is not routinely required in the initial phase of treatment but can be performed by those with appropriate training and oversight.

The following additional interventions may be performed by those with advanced life support (ALS) training and capabilities:

7. Surgical airway if “sit up and lean forward” posture not possible in those with face/neck trauma.
8. Intraosseous (IO) access for medications or fluids when IV not successful or possible IO access is not routinely required in the initial phase of treatment.
9. IV morphine, oral transmucosal fentanyl citrate lozenges, and ketamine for analgesia.

Lessons learned from the military’s recent combat experiences, and their civilian C-TECC counterparts, are incorporated within this guidance.

En Route Care

It is important to emphasize that emergency medical care activities should not stop as a casualty is evacuated. In fact, the military’s experience demonstrates that continuation or escalation of these measures is critical in

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reducing mortality during prehospital care. While there is a need to understand how lessons learned from experiences in prehospital patient care can be leveraged to decrease morbidity (illness or injury) and mortality (death) in the civilian setting, the ability to translate the military’s findings related to on-site and en route care to the civilian setting has not been fully demonstrated.

**Hospital-Based Measures**

The military’s combat casualty care research on hospital-based management of patients with severe explosion-related injuries is documented in a Balad Air Base Report from 2008 and on the Joint Trauma System Clinical Practice Guidelines website.iv

One particularly successful strategy is damage control resuscitation (DCR), which demonstrated decreased mortality associated with the use of a blood component-based volume replacement compared to the use of crystalloid fluids for patients in shock. DCR is based on the balanced administration of thawed plasma, pRBCs, and platelets in severely injured patients instead of solutions such as normal saline and lactated ringers. DCR also includes avoidance of hypothermia and pursuit of other measures to maximize oxygenation and reduce injurious factors in the blast-injured patient.

**D. Improvised Explosive Device Incidents**

**Morbidity and Mortality Prevention**

There are three broad concepts related to the prevention or reduction of morbidity and mortality associated with an explosive event:

1. **Prevention:** Avoiding or thwarting the detonation is obviously the best way to avert IED-related injury, suffering, and death. Primary preventive measures, including improvements in preemptive mental health capabilities, an aware public who is able and willing to report suspicious pre-attack behaviors, tactical operations employed to render the device safe, and law enforcement intelligence gathering and threat-analysis capabilities, are beyond the scope of this paper. Preventing injuries of first responders and the public is of great importance. Safe distance from suspicious packages aids in preventing injuries from IEDs (see Figure 1).

2. **Mitigation:** This concept refers to actions taken to reduce the impact of an explosive event once an explosion has occurred, such as use of protective equipment and the placement of physical blast mitigation barriers or windows, and are sometimes referred to as secondary preventive measures. Some of the more sophisticated military protective equipment—including vests with ceramic plates, helmets, and protective undergarments—have been designed for and tested against mechanisms of injury resulting from explosive devices and ballistic threats. Most of the protective equipment available to civilian first responders, however, has been designed for protection from ballistic threats and was not designed, manufactured, or intended to provide protection from IEDs. It should also be noted that most protective equipment is focused on ballistic protection and may have unproven or limited value for mitigating fragmentation or blast overpressure, particularly for devices with larger net explosive weights, such as vehicle bombs. For protective equipment and barriers to be effective, they must be implemented proactively; they are of little use when the explosive event is random and enacted on an unsuspecting, unprotected group of individuals.

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3. **Response**: This encompasses the initial treatment activities taken by first responders at the scene of injury and care provided while en route to the medical facility to prevent or reduce morbidity and mortality of individuals who have been injured by an explosive event.

![Bomb Threat Stand-Off Card](image)

**Figure 1**

**Published Civilian Experience**

Civilian reports on the response to explosive incidents are primarily from non-U.S. centers and include those in Madrid, London, and Tel Aviv. These, and a limited number of other reports, have provided valuable lessons learned regarding emergency response, triage, and surge requirements for an explosive incident. However, these studies provide little detail on prehospital, blood bank, operating room, health care provider, and hospital ward resource requirements following these events and are of limited applicability to emergency planning for similar events within the U.S. civilian sector.

Civilian response in the United States will vary depending on the geographic location, resources, and demographics of the incident. In most areas, the civilian response will be led by local law enforcement and emergency services. Routinely, requests for emergency assistance are obtained through Public Safety Answering/Access Points (PSAP). The PSAP functions as the initial information collection point and can prove invaluable in coordinating the public sector response. Conversely, poor incident reporting and improperly dispatched response assets can lead to a delay in patient care.

*DHS/DOJ, Bomb Threat Stand-Off Card, Washington DC, 2014.*
Responders to active shooter incidents at Virginia Tech and in Aurora and Columbine in Colorado encountered various access denial schemes in the form of chemical munitions, fire, secondary IEDs, and mechanical obstructions. International IED and concerted attacks have utilized fire, smoke, chemical (chlorine), and security elements to challenge first responders and increase the damage and effectiveness of the attack.

CDC guidelines provide general strategies for the U.S. health care system in the event of a civilian terrorist bombing. These CDC guidelines also include next steps such as forecasting necessary blood bank, operating room, and other associated hospital infrastructure resources. The CDC has also developed and disseminated courses and guidelines that address both the patient care and health care system challenges of medical response to civilian terrorist bombings. These materials were informed by U.S. civilian experts in prehospital and hospital care relating to mass casualty response, the DoD military medical experience, and those who led medical responses to terrorist bombings in Israel, Pakistan, London, Madrid, Mumbai, and Delhi. This material, designated the Terrorism Injuries: Information, Dissemination and Exchange (TIIDE) project, is available through the TIIDE Project website.

E. Active Shooter Incidents

Morbidity and Mortality Prevention

There are three broad concepts related to the prevention or reduction of morbidity and mortality associated with an active shooter incident:

1. **Prevention:** Avoiding or thwarting the active shooter incident is obviously the best way to avert active shooter-related injury, suffering, and death. Primary preventive measures, including improvements in preemptive mental health capabilities, an aware public who is able and willing to report suspicious pre-attack behaviors, and law enforcement active shooter intelligence gathering and threat-analysis capabilities, are beyond the scope of this paper.

2. **Mitigation:** This concept refers to actions taken to reduce the impact of an active shooter incident: evaluation of acceptable risk to facilitate provision of medical care for victims as soon as possible; use of protective equipment, such as ballistic vests, appropriate to the threat; and development of first responder TTPs that focus on active shooter scenarios. Other mitigation actions, such as a public trained in active shooter response or victim initiated mitigation measures, are outside of the scope of this paper.

3. **Response:** This encompasses the initial treatment activities taken by first responders at the scene of injury and care provided while en route to the medical facility to prevent or reduce morbidity and mortality of individuals who have been injured in an active shooter incident. Rapid first responder access to victims in an active shooter incident can make the difference between life and death, as the survival rate diminishes rapidly for seriously injured trauma victims the longer they must wait to receive definitive hospital care.

Published Civilian Experience

Civilian reports on the response to active shooter incidents draw primarily from watershed domestic events such as the 1999 Columbine High School, 2007 Virginia Tech, and 2009 Fort Hood shootings, as well as the 2008 Mumbai terrorist attacks. Studies from these and other primarily domestic events have provided valuable lessons regarding active shooter incident response policy, victim treatment, and first responder protective...
equipment recommendations. Lessons learned include concepts originally developed in the military during the conflicts in Iraq and Afghanistan that challenge some long-standing EMS principles of practice. Evaluation of these concepts seeks a balance between providing expeditious medical response for victims and ensuring effective risk management for first responder safety.

The current standard EMS response for an active shooter incident is to stage in a secure location until police mitigate the threat and secure the area. This can lead to a significant delay in providing medical care to the victims. Empirical evidence demonstrates that in an active shooter scenario, expeditious medical intervention, more than capability/capacity, was key to preventing loss of life. Emerging alternatives to the “standby” policy suggest a level of first responder collaboration that allows EMS with appropriate protective equipment to quickly enter the incident scene with law enforcement officers in order to stabilize patients and reduce fatalities from readily treatable injuries. Variability exists in the training and deployment of law enforcement officers to rescue and care for victims. Law enforcement planners should employ strategies that enable all law enforcement officers to provide lifesaving care until additional resources can be moved forward.

Studies examining the weapons used during active shooter incidents, and the patterns of morbidity and mortality of these incidents, indicate that civilian active shooter scenarios present similar injuries and conditions to those seen in combat (in decreasing order of mortality): extremity hemorrhage, tension pneumothorax, or airway obstruction. Each of these wounds is readily treatable with minimal supplies, but they are very time sensitive, and delay in treatment increases the risk of mortality. Because victims in an active shooter incident are more likely to suffer exsanguinating extremity wounds than airway injury, and because a person can bleed to death from a large arterial wound in 2-3 minutes while it may take 4-5 minutes to die from a compromised airway, C-TECC guidelines place control of external hemorrhage ahead of airway control—replacing the traditional ABC mnemonic (for airway, breathing, circulation) with MARCH (Massive hemorrhage control/Airway support/Respiratory threats/Circulation [prevent shock]/Hypothermia).

F. Hemorrhage Control

Control of External Hemorrhage in the Prehospital Setting

Tourniquet use on the battlefield has been demonstrated to be effective in decreasing the number of treatable exsanguination deaths due to extremity hemorrhage. There are a variety of tourniquets in use at present by the U.S. military. A recent comprehensive study of U.S. combat fatalities from 2001 to 2011 noted that the incidence of treatable exsanguination deaths related to extremity hemorrhage dropped from 7.8 percent in a previous study to 2.6 percent by 2011, a decrease attributed to the implementation of tourniquet use by U.S. forces. The number of U.S. lives saved in combat through the use of tourniquets alone is estimated to be between 1,000 and 2,000. To be most effective, the tourniquet must be applied before the victim has lost enough blood to suffer hemorrhagic shock. Despite previous warnings about limb ischemia, there was no preventable loss of limbs resulting from tourniquet ischemia in a case study of 232 patients with tourniquets on 309 extremities.

Anatomic areas such as the neck, the groin, and the axilla contain large vascular structures and are not amenable to tourniquet placement. Studies at military medical research laboratories have evaluated the efficacy of
hemostatic agents and found an advantage in the use of “packing hemostatic gauze” vs. granulated hemostatics. Junctional hemorrhage control devices such as the Combat Ready Clamp, the Abdominal Aortic Tourniquet, and the Junctional Emergency Treatment Tool may also be used to control hemorrhage from the groin area.

Direct pressure can also be used to control external bleeding, a technique that can work even with bleeding from major vessels such as the carotid or femoral arteries. Direct pressure must be applied consistently and with significant force to stop the bleeding and is best employed with the patient on a firm surface so that effective counterpressure is present. To control severe bleeding, direct pressure must be sustained until the casualty reaches an operating room, where surgical repair of the vessel can be performed.

Current guidelines and best practice recommendations for control of external hemorrhage and casualty management during civilian tactical and rescue operations are published on the C-TECC website. The TCCC guidelines, which are the genesis for the TECC guidelines, were designed for military use and can be found on the National Association of Emergency Medical Technicians website.


![Figure 2](https://www-naemt.org/education/TCCC/guidelines_curriculum).

G. Protective Equipment

Protective equipment (which includes ballistic vests, helmets, and eyewear) for both civilian first responders and the military is designed and tested according to anticipated threats, injury patterns, and existing technology. Historically, first responders have been primarily concerned with protective equipment to counter firearm and, to a certain extent, chemical, biological, radiological, and nuclear threats—not IEDs.

First Responders

The development of standards and the manufacturing of this protective equipment for first responders have only been available since the 1970s. The 126 percent increase in police officer fatalities from 1966 to 1971 prompted the Department of Justice to develop and evaluate concealable soft body armor for daily use that would protect against ballistic threats while minimizing blunt trauma. Handguns have historically been the most common threat to police officers, but National Institute of Justice (NIJ) ballistic vest testing parameters follow trends in threats, and updated testing parameters are added based on new knowledge of vest performance and necessary test conditions.

Currently there are five types of ballistic vests based on NIJ body armor standards. However, statistics from the Bulletproof Vest Partnership/Body Armor Safety Initiative suggest that the majority of vests used by first responders are Type II and IIIA. Descriptions of the body armor standards are listed below, ordered by the level of protection.

- Type II provides protection against Type II and Type II A threats, whereas Type III vests provide protection for Type IIA, Type II, and Type IIIA threats. All of the vests listed, with the exception of Types III and IV, are considered concealable body armor and designed to fit under a normal uniform shirt. Some manufacturers also produce soft armor vests that accommodate “trauma packs”, which are ballistic inserts added to a vest to provide added protection. These inserts are referred to as “in conjunction” designs and are similar to military ballistic inserts. These “in conjunction” designs must be threat level tested and labeled appropriately.

In other words, if a Type III vest provides Type III protection only in conjunction with a trauma pack, then the system’s label must be marked accordingly. It is important to note that none of the five armor types have requirements to defeat IED fragments and therefore may not provide meaningful protection against either fragmentation or blast overpressure effects from IEDs. While other standards exist for protective suits used by public safety bomb technicians, the suits’ weight, bulk, and limited numbers make them impractical for general use by first responders. The degree of protection civilian soft and rigid armors will provide against the complex shock and impact profiles that IEDs present is unknown. While available armor may provide some degree of protection from IED fragmentation, the fact it is unlikely to mitigate blast overpressure effects should be carefully considered by responders when involved in confirmed or suspected IED incidents, especially those in which larger net-explosive-weight IEDs such as vehicle bombs are confirmed or suspected.

First responder adoption of inter-domain tactics, techniques, and procedures that include the use of ballistic vests, better situational awareness, and the application of concealment and cover concepts ultimately increases first responder safety and allows quicker access to victims resulting in improved patient outcomes.

x http://www.ojp.usdoj.gov/bvpbasi.
NIJ Standard-0101.06 establishes five formal armor classification types:

- **Type IIA** protects against 9 mm; .40 S&W
- **Type II** protects against 9 mm; .357 Magnum
- **Type IIIA** protects against .357 SIG; .44 Magnum
- **Type III** protects against Rifles; 7.62mm FMJ
- **Type IV** protects against Armor Piercing Rifles; .30 caliber AP

**Army Testing of Personal Protective Equipment**

Over the last several years, the U.S. Army Test and Evaluation Command (ATEC) has conducted thousands of ballistic tests of protective equipment, including individual pieces of equipment traditionally thought of as “body armor” (softer material vests containing hard armor plates), helmets, bomb suits, eye and face protection, extremity and pelvic protection, and concealable body armor. In a majority of these tests, the threats evaluated include 7.62mm to 9mm bullets, metallic fragments of various sizes and shapes, stab tests using both blade and pick threats, blast tests, and blunt trauma tests. Other types of testing are also conducted, such as durability, reliability, wearability, and suitability. Permission to review reports must be obtained from the test sponsor, since ATEC was contracted to conduct the assessment and is thus not the owner of the subsequent test data. All reports can be requested through the ATEC website.

**H. Response and Incident Management**

The National Response Framework (NRF), which is built upon NIMS, describes the Nation’s principles, roles and responsibilities, and coordinating structures for managing serious or large-scale incidents. Implementation of these elements, through training and education, helps mitigate risk by reinforcing the importance of unified command, interoperability, a standardized lexicon, and consideration of lessons learned from exercises and operations. Training and education on these elements also enable responders to adapt efficiently to evolving risks and allow for effective integration across all missions using a standards-based approach.

Greater collaboration and interoperability among EMS, fire services, and law enforcement during IED and/or active shooter events can save lives.

NIMS promotes the use of a common operating picture, interoperability of communications, and information management as essential principles in incident management. The ability of first responders to communicate with voice and/or data across disciplines and jurisdictions is central to improving the efficiency and effectiveness of incident response and emergency management activities. During initial response, the PSAP plays a particularly important role as the initial information link between those at the incident scene and EMS, fire responders, and law enforcement.

The United States Fire Administration (USFA) advocates that EMS, fire, and law enforcement personnel quickly establish unified command at scenes of IED and active shooter incidents. EMS and fire personnel should be aware that law enforcement will aggressively and hastily send first arriving law enforcement personnel into the affected area of active shooter incidents to engage and neutralize the threat, to secure the perimeter to

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ensure the perpetrator does not escape, and to prevent inappropriate entry into the scene. The first arriving law enforcement personnel focused on neutralizing active shooter threats will typically not stop to render aid to injured bystanders, as the top priority is to stop further harm by addressing the threat. EMS and fire personnel, upon arrival to the scene, should move to the law enforcement command post, establish unified command as previously planned and exercised with law enforcement personnel, and anticipate active involvement in warm zone operations. A warm zone is an area of indirect threat, where law enforcement has either cleared or isolated the threat to a level of minimal or mitigated risk. This area can be considered clear but not secure.

The USFA also advocates that EMS, fire, and law enforcement personnel must ensure that there are common tactics, communication capabilities, protocols, and procedures that are well practiced, exercised and known by all emergency services personnel before an IED and/or active shooter event occurs. The protocols and procedures should also address non-traditional roles of EMS and fire personnel. These roles include the use of properly trained, armored (not armed) medical personnel who are accompanied by law enforcement into areas of mitigated risk (warm zones). In these roles, life-saving care (i.e., hemorrhage control and airway management) and evacuation of the injured from the warm zone may help improve survivability of victims.

Incorporation of EMS and fire into warm zones, where it is practiced, is at the discretion of the jurisdiction and is dependent on resources and relationships between all involved parties. There are various models and approaches for introducing EMS and fire personnel into warm zones, including the Rescue Task Force (RTF) model. RTFs, under the protection of law enforcement officers, render emergent and life-saving treatment at the basic life support level, stabilization, and removal of the injured victims of IED and/or active shooter incidents while wearing recommended ballistic protective equipment. Some RTF models include the use of one ALS provider per RTF, and other non-RTF models include the exclusive use of law enforcement for rapid patient removal of injured victims to awaiting EMS personnel in areas more distant from the threat, but still within the warm zone. Whichever model is used, the treatment rendered in the warm zone is limited to basic, urgent life-saving care focused on severe hemorrhage control and airway management.

Law enforcement agencies should train personnel to provide casualty care to establish a lifesaving bridge to victims at an active shooter incident. Based on the immediacy of the threat and the geographic location of victims, law enforcement officers providing casualty care may offer the best chance for victim survival. Law enforcement programs that have robust rescue capabilities should train with supporting EMS programs and develop patient transfer measures that optimize patient survivability. A select few models have EMS and/or fire personnel accompanying the law enforcement personnel into active (hot) zones. Regardless of the model adopted, the calculated and early incorporation of properly trained personnel (EMS, fire, and/or law enforcement) into warm zones allows critically injured victims to receive life-saving care in a more-timely manner.

Rendering life-saving care in warm zones (by EMS, fire, and/or law enforcement) is a relatively new paradigm that is supported by data. Historically, when EMS and fire personnel waited up to several hours before being permitted to enter scenes and render life-saving care, very few critical victims survived. The passage of that time resulted in the likely preventable loss of life for victims. The Wound Data and Munitions Effectiveness Team showed that 90 percent of Vietnam deaths occurred prior to definitive care, with 42 percent occurring within 5 to 19 hours.
30 minutes of injury.\textsuperscript{xvii} Although the combat setting is not a direct translation into the civilian setting, the fact that most of the 42 percent of deaths were related to exsanguination from extremity wounds should be considered when deciding to incorporate trained personnel (EMS, fire, and/or law enforcement) into the scene to render life-saving hemorrhage control and airway management sooner rather than later.

Greater interoperability and collaborative education and training among EMS, fire services, and law enforcement during IED and/or active shooter events will enable first responders to conduct well-integrated and effective incident response and emergency management that can ultimately save more lives.

\textsuperscript{xvii} Wound Data and Munitions Effectiveness Team. \textit{The WDMET Study, Bethesda; Uniformed Services University of the Health Sciences}; 1970.
Responder Guidelines

The following guidelines for addressing hemorrhage control, protective equipment, and response and incident management were developed by the Federal Government through a collaborative evaluation of lessons learned from both military and civilian experience in reducing morbidity and mortality following an IED and/or active shooter incident.

A. Hemorrhage Control

1. First responders should incorporate tourniquets and hemostatic agents as part of treatment for severe bleeding (if allowed by protocol).

Tourniquets and hemostatic agents have been demonstrated to be quick and effective methods for preventing exsanguination from extremity wounds (tourniquets) and other severe external bleeding (hemostatic agents). First responders should update training and educational content on tourniquets and hemostatic agents into a consistent standard within EMS, fire, and law enforcement domains.

2. First responders should adopt, develop training for, and operationalize the evidence-based guidelines of TECC. Training should be conducted in conjunction with EMS, fire, law enforcement, and medical community personnel to improve interoperability during IED and/or active shooter events.

In order for the training to be most effective, it should be conducted from a systems perspective, involving EMS, fire, and law enforcement. This practice promotes better interoperability between EMS, fire, and law enforcement during IED and/or active shooter incidents, with the ultimate goal of saving lives.\textsuperscript{45}

B. Protective Equipment

1. First responders should develop inter-domain (EMS, fire, and law enforcement) TTPs—including use of ballistic vests, better situational awareness, and application of concealment and cover concepts—and train first responders on proper use of the TTPs.

The incorporation of ballistic vests and the concepts of concealment and cover into the EMS and fire professions, when active shooter threats and situations warrant, will better protect first responders. Additionally, the TTPs will facilitate improved interoperability between EMS and fire personnel and law enforcement during active shooter incidents.

2. As technology improves, first responders should adopt protective measures (e.g., body armor) proven to shield personnel from IED fragments and shock waves.

At the time of this publication, the body armor currently used by most civilian personnel may not protect against fragmentation or blast overpressure effects from IEDs. Further research on the effectiveness of protective equipment in IED incidents is, and should remain, on-going. The first responder community should adopt recommendations for improved protection as they become available.

3. First responders must remain vigilant and aware of secondary devices or additional shooters when dealing with either IED or active shooter incidents.

First responders should routinely conduct collaborative training and exercises on response to IED and/or active shooter events and take into consideration the possible presence of secondary devices and additional shooters. In addition to continual situational awareness of the scene, appropriate protective equipment, including ballistic vests, should be considered by all responders on the scene. EMS, fire, and law enforcement personnel
should employ standardized TTPs and consistent training to promote interoperability during IED and/or active shooter events, with the understanding that there is not yet evidence to support the effectiveness of protective equipment for IED hazards.

C. Response and Incident Management

1. Local and state law enforcement and emergency services, should institutionalize NIMS-based command and control language and plans and exercises through ongoing education and training.

Civilian response programs should develop joint policies, training, tactics, and communications that enhance the interoperability of all of the emergency services team (EMS, fire, emergency management, law enforcement, and others). Further information regarding NIMS and the NRF is available on the FEMA website.xix xx

2. Local and state emergency management, EMS, fire, law enforcement and receiving medical facilities should have interoperable radio and communications equipment.

Clear, concise communications and scene coordination between law enforcement and emergency services should be regularly tested through collaborative training and exercises. First responders should have the ability to talk across disciplines and jurisdictions via radio communications systems, exchanging voice and/or data with one another on demand, in real time, when needed, and as authorized. Law enforcement and emergency services leadership should explore when, where, and how to set up incident command posts, emergency operations centers, and briefing locations that are safe and secure from attempts to disrupt communications.

3. Local, state and federal partners need to consider expansion of PSAP intake procedures to include information gathering vital to the initial response.

The PSAP is the initial information link between those at the incident scene and EMS and law enforcement responders. Development of joint PSAP, intake, dispatch, and communications plans, along with a common lexicon, will enhance first responder interoperability throughout all phases of these incidents.

4. Training to improve first responder triaging precision and decrease unnecessary transport delays is essential for dealing with IED and/or active shooter incidents.

Patients should be triaged for both priority of transport and for the destination. Under-triage can result in potentially life threatening conditions going unrecognized, resulting in delayed transport or transport to an inappropriate facility, while over-triaging risks having lower acuity patients overwhelm limited resources in higher-level medical facilities that could be better utilized treating more severely injured patients. With proper triage, the right patient will get to the right facility in the right time. First responders should routinely practice triage with a consideration for both medical priority of transport and capabilities of the destination treatment facility to maintain competency with the skill and knowledge.

5. There should be greater coordination among EMS, fire services, and law enforcement to work more effectively during IED and/or active shooter incidents. The dialogue should focus on potential improvements or changes to the TTPs that have historically been used during law enforcement situations that involve a medical emergency (i.e., EMS waits until law enforcement secures the scene before they enter to render emergency care).

The dialogue should focus on a mutual understanding of how the various first responder components approach IED and/or active shooter response operations, where areas of improvements and synergy might be found, and how evidence based clinical data and outcomes can be incorporated into future standards, education, and training. This may result in significant cultural and operational changes that contradict current practices.

EMS, fire, and law enforcement personnel must ensure that common tactics, communication capabilities, protocols, and procedures are well practiced, exercised, and known by all emergency services personnel before an IED and/or active shooter event occurs. The protocols and procedures should also address non-traditional roles of EMS and fire personnel, including in warm zone operations, as previously described.

There are various models and approaches for introducing EMS and fire personnel into warm zones, as detailed earlier in this document. Regardless of the model adopted by the local jurisdiction, the calculated and early incorporation of properly trained EMS, fire, and law enforcement personnel into warm zones allows critically injured victims to receive life-saving care in a more timely manner.
This multi-disciplinary first responder guidance is the first of its kind to link the categories of prevention against IEDs and/or active shooter incidents to tangible, evidence-based response strategies designed to mitigate morbidity and mortality. This document builds on the U.S. military’s vast experience in responding to and managing casualties from IEDs and/or active shooter incidents and on its significant investment in combat casualty care research, then filters it through civilian peer review literature and consensus-based best practices to distill practical, proven guidelines for effectively responding to these devastating events.

Current military practice and experience emphasize early and definitive control of external hemorrhage and have been estimated to have saved up to 2,000 American lives in Iraq and Afghanistan. Although the significance of life-threatening hemorrhage in civilian mass casualty has not been as clearly defined as it has in the military combat setting, until further data shows the need for a different medical emphasis, hemorrhage control should remain a priority. As such, aspects of this military experience have been translated to a number of civilian medical systems around the Nation. However, permeation of military and international lessons learned in the arena of medical response to explosive injury and/or active shooter incidents is incomplete. In most cases, the research conducted on protective equipment by the U.S. military can be translated to the civilian setting to assist in better protecting the workforce of first responders who are called upon to respond to IED and/or active shooter incidents. The focus on interoperability improvements between emergency services domains (EMS, fire, and law enforcement) will aid in saving lives impacted by IED and/or active shooter incidents.

To prepare for and reduce death and suffering following an IED detonation and/or active shooter event in a civilian environment, it is imperative that more widespread dissemination and adoption of lessons learned from these incidents, as well as the DoD’s continuing combat medicine experience, occur within the U.S. civilian first responder and first receiver communities.
This section includes a list of scenarios and recommended medical and planning considerations. As the end-users of these scenarios, first responders are encouraged to incorporate details relevant to their local landmarks, response procedures, and practices. The purpose of the following scenarios is to guide first responder education and training efforts toward incorporation and institutionalization of the previous responder guidelines in a variety of likely IED and/or active shooter situations. These scenarios can be used individually as stand-alone resources, or they can be used in conjunction with the other scenarios provided. They are intended to be used for collaborative planning, training, and exercises with EMS, fire, and law enforcement resources together. Ideally, role playing should be done to help first responders better understand each other’s processes and roles and the importance of unified command and interoperability.

Scenario 1: Large-Scale Terrorist/Insurgency Attack
Scenario 2: Medium-Scale Terrorist/Insurgency Attack
Scenario 3: Medium-Scale Terrorist/Insurgency Attack
Scenario 4: Small Scale Attack
Scenario 5: Unwitting Suicide Bomber
Scenario 6: Discovery/Recovery of Homemade Explosives (Not an Attack)
Scenario 7: Active Shooter with Access Denial to First Responders
Scenario 8: Active Shooter in a Public Commercial Facility
Scenario 9: Active Shooter in an Open, Outdoor, Unbounded Location
Scenario 10: Active Shooter in a Public Sports Complex
Scenario 1: Large-Scale Terrorist/Insurgency Attack

Large-scale attack using an IED with over 100 pounds net explosive weight, producing mass casualties with the likelihood of overwhelming the response and receiving infrastructure. This scenario may include vehicle-borne improvised explosive devices (VBIEDs).

EXAMPLE: You are called to the scene of a reported explosion at a train station (or other public location). Initial reports indicate that a truck drove around barriers and into the entrance of the facility and then detonated. 911 callers indicate that there are several dead and many others with multiple injuries—some extremely serious. You are the first arriving unit on the scene...

Expected Injury Patterns

For those who survive this event, injuries can include multiple amputees with pelvic/perineal components, penetrating thoraco-abdominal injuries, pulmonary contusions from closed space blasts, burns, TBI, including penetrating head injury, and neck trauma. While primary blast injuries can occur from both open space (e.g., roadside IED) and closed space (e.g., buildings, trains, and buses) bombings, it is especially common after closed space bombings.

Protective Equipment and Barriers

Secondary preventive measures include activities to prevent injuries once an explosion has occurred. Such measures may include barrier or structural walls that may protect or reduce injuries to bystanders and responders from blast and fragmentation injuries. Secondary preventive measures also include use of ballistic protective equipment, although soft body armor and ceramic plate body armor may not protect against fragmentation or blast overpressure effects from IEDs. Most protective equipment is focused on ballistic protection and may have unproven or limited value for mitigating fragmentation or blast overpressure, particularly for devices with larger net explosive weights, such as vehicle bombs. For protective equipment and barriers to be effective, they must be implemented proactively; they are of little use when the explosive event is random and enacted on an unsuspecting, unprotected group of individuals. Ballistic protective equipment will also give some level of protection should an IED attack be combined with an active shooter event. Experience indicates attackers may plan to detonate secondary or subsequent IEDs that target first responders or receiving hospitals.

First responders should consider wearing some level of ballistic protective equipment. Considerations for first responder ballistic protective equipment should include what type of equipment is best suited for EMS and fire responders and when it should be worn (every shift, during times of high risk [e.g., on duty at a sports stadium], or just in response to IED events). It is critical that incident commanders base protective equipment and tactical movement guidance at the incident scene on a situational assessment of the IED risk, particularly when IEDs with significant net explosive weight are suspected or confirmed to be present. These types of IEDs, including vehicle bombs, may produce blast overpressure effects that would not be mitigated by typical protective equipment or available cover. A false sense of security among first responders could result if net explosive weight...

*Blast injuries are the result of the rapid chemical conversion of a solid or liquid into highly pressurized gasses that expand rapidly and compress the surrounding air. This generates a pressure pulse, which spreads as a blast wave in all directions. The effects of the blast wave are more intense in a confined space like a building or bus. The shock wave is amplified as it is reflected off walls, floors, and the ceiling. If the blast occurs outside, the blast wave will dissipate rapidly. It is understood that over-pressure phenomena may enhance the lethality of blast effect for explosions that occur in confined spaces.*
Protective Equipment Commonly Worn

Most law enforcement officers responding to the incident will be wearing Type II or IIIA bullet resistant vests, designed to stop bullets from most handguns, and shotgun pellets. Given the expected injuries, this level of protective equipment may not provide protection from blast overpressure and fragmentation, and extremities will be vulnerable. First responders other than law enforcement typically do not wear ballistic protective equipment. Civilians at public places will not be wearing any form of ballistic protective equipment.

Protective Equipment Risk Mitigation Considerations

The NIJ body armor standard specifies the ballistic threats that body armor must reliably protect against. This standard does not specify a requirement for ballistic resistant vests to protect against fragmentation threats. The Type II or IIIA ballistic resistant vests that law enforcement officers are most commonly issued will likely not protect against fragmentation and blast overpressure effects from an IED threat. Use of Type IV body armor may increase the probability of protection against fragmentation and blast overpressure. However, further research and development is required to validate the performance of NIJ-approved body armor against fragmentation threats and to provide guidance on what level of protection should be worn to respond to this type of IED event.

Response and Incident Management Considerations

Maximize interoperability through existing MOUs/MOAs/SOPs, as well as through frequent exercises, planning, and training. These efforts will ultimately aid in reducing time from injury to treatment. During response, and while on the scene of the incident, use unified command with a mutual understanding of each responder’s role (EMS, fire, and law enforcement). Strive to communicate on common frequencies and use standardized terminology. Ensure all responders (regardless of discipline—EMS, fire, and law enforcement) are trained and equipped to provide early, aggressive hemorrhage control; use protective equipment (which includes ballistic vests, helmets, and eyewear); and use integrated response and incident management.

Medical Response System

An IED detonation has the potential of instantly producing hundreds of casualties (there were over 700 casualties after the Oklahoma City bombing) with injuries that range across the entire spectrum of severity. A system-wide medical response to this event should be well-coordinated, incorporating the lessons learned from the military (both system and individual patient care) and experiences from domestic and international bombings. Unlike the management of routine emergencies, the response to IED incidents will be extraordinary for the Nation’s trauma and EMS systems.

System-wide efforts should include activities ranging from self-care, buddy-care, and bystander care to proper and effective prehospital triaging and patient transport to get the right patients to the appropriate medical facilities in a swift and orderly manner, regardless of proximity. The efforts include prehospital emergency medical services, ground ambulances, rotary and fixed wing aircraft patient transport, designated trauma centers, hospitals, and rehabilitation facilities.

Prehospital Emergency Medical Services Considerations

Patient-Based Considerations: The last decade of war has seen significant advances in the ability of prehospital care to impact the mortality of combat wounds. The ability to stop life-threatening bleeding from extremity
wounds has been demonstrated to reduce the number of treatable exsanguination deaths.

As IEDs have become a common source of wounding in the wars in Iraq and Afghanistan, and as the use of IEDs in the United States (the Boston Marathon bombing on April 15, 2013) has become a reality, civilian adoption of some military clinical practices that are a significant departure from traditional prehospital care should be considered:

- Aggressive hemorrhage control—including use of tourniquets and, where appropriate, hemostatic agents
- Aggressive airway management, including “sit up and lean forward” airway positioning
- Training all first responders in self-care, buddy care, and bystander care

System-Wide Implications

Experience from bombings occurring in other countries demonstrates common prehospital care system challenges, including multiple simultaneous attacks that cause an enormous number of casualties that exceed the available resources of EMS responders. The adoption of techniques that are suitable for use in self-care, buddy-care, bystander care, and care delivered by first responders is essential to extend the depth of responders available to provide immediate life-saving care.

EMS must rapidly and accurately triage casualties at the incident site and expeditiously transport those identified for “immediate care” into an appropriate hospital setting. It is imperative that pre-hospital triaging of wounded patients be as efficient and accurate as possible. Over-triage of patients over-taxes specialty centers that are designed to care for more significantly injured patients, while under-triaging of patients puts critically wounded patients into facilities that may not be able to provide the life-saving care needed. In addition to proper triage, care must be taken to regulate the transportation of casualties in order to direct victims to the hospital best suited for providing the necessary level of care for the type and severity of injuries they have sustained. Often the closest hospital is quickly overwhelmed by injured transported by ambulances, police cars, and privately owned vehicles, as well as the “walking wounded”. Because the influx of patients to the nearest hospital is dictated by human behavior outside control of the system, the EMS system must recognize this likelihood and plan for redistribution of injured patients such that the closest hospital can return to maximum functionality as soon as possible. Incident managers should also anticipate the need to provide for safety and security with the arrival of injured persons’ family members, the “psychologically shocked,” and the media.

EMS providers must also be cognizant of patients who appear otherwise well (uninjured), but may have traumatic brain injuries, tympanic membrane damage, and/or internal hollow organ damage due to the blast effects of the explosion. These considerations should be reinforced through exercise, planning, protocols, and training.

Hospital-Based Trauma System Considerations

Hospital challenges experienced in foreign and domestic bombings include:

- Difficulty in acquiring information from the scene
- Maldistribution of patients (e.g., two of 15 hospitals receiving approximately 60 percent of casualties from the scene in one large-scale event)
- A requirement for large numbers of hospital medical personnel to adequately treat the wounded
- The need to implement mass casualty contingency plans at every point of care (e.g., radiology postponing imaging an ankle sprain to rule out a fracture)
Concern that the hospital may be a target
- Activation of Mass Transfusion Protocols, based on scope of injuries
- Activation of staff augmentation/call back plans, based on scope of injuries
- Initiation of patient movement/transfer plans, based on scope of injuries

Medical leaders of responses to bombings have noted that in many cases the majority of the injured and dead from large events present at the hospital closest to the scene. Patients able to leave the scene may forego EMS triage and present at hospitals before more severely injured patients arrive. The large influx of patients may exceed the hospital's capability to provide care, resulting in a “functional collapse” from inability to meet the demand spike. When this occurs, there is a compelling need to redistribute patients.

Distribution of patients among hospitals, so that no one hospital exceeds its resources, is a key principle in addressing medical surge capacity following bombing attacks that result in significant casualties.

To address the large number of patients arriving at local facilities, local hospitals will need the swift assistance of incoming health care providers to assist with re-triage of the arriving casualties and the provision of appropriate services to patients. This influx will include additional doctors, nurses, medical specialists, such as blood bank technologists and respiratory therapists, mental health providers, and chaplains. In addition, there will likely be the need for law enforcement personnel to maintain order and security. In the hours immediately after the blast, these additional personnel will likely come from surrounding communities and may include health care professionals from beyond the local area. While pre-event planning for cross-town (local) hospital credentialing and privileging of responding health care professionals can be arranged with relative ease, the issue of expeditious out-of-state credentialing and privileging of medical professionals responding to natural or man-made disasters can be more challenging.

Patient Movement/Transfer Considerations

As the patient load builds at local hospitals, some of the critically injured patients should be moved to other medical care facilities to optimize patient care. This will include movement to Level-1 trauma centers and other hospitals to better balance inpatient bed, operating room, intensive care unit, and rehabilitation bed utilization. Depending on the locality of the blast, this may include moving patients to other communities or across state lines. Long-distance transport of acutely injured patients will likely require aeromedical evacuation capabilities.
Scenario 2: Medium-Scale Terrorist/Insurgency Attack

Medium-scale attack using an IED with between 5 and 100 pounds net explosive weight, producing a significant number of mass casualties with the potential of overwhelming the response and receiving infrastructure. This scenario may include vehicle-borne improvised explosive devices (VBIEDs).

EXAMPLE: You are called to respond to an explosion inside a large house of worship in your response area. The 911 center received multiple calls, and there are many reported deaths and significant injuries. Your unit is the first arriving unit to the scene...

Expected Injury Patterns

For those who survive this event, injuries can include single and double amputees, extremity vascular injuries, penetrating foreign body thoraco-abdominal injuries, potential TBI and penetrating head trauma, neck trauma, and pulmonary contusions from closed space blasts.

Protective Equipment and Barriers

Secondary preventive measures include activities to prevent injuries once an explosion has occurred. Such measures may include barrier or structural walls that may protect or reduce injuries to bystanders and responders from blast and fragmentation injuries. Secondary preventive measures also include use of ballistic protective equipment, although soft body armor and ceramic plate body armor may not protect against fragmentation or blast overpressure effects from IEDs. Most protective equipment is focused on ballistic protection and may have unproven or limited value for mitigating fragmentation or blast overpressure, particularly for devices with larger net explosive weights, such as vehicle bombs. For protective equipment and barriers to be effective, they must be implemented proactively; they are of little use when the explosive event is random and enacted on an unsuspecting, unprotected group of individuals. Ballistic protective equipment will also give some level of protection should an IED attack be combined with an active shooter event. Experience indicates attackers may plan to detonate secondary or subsequent IEDs that target first responders or receiving hospitals.

First responders should consider wearing some level of ballistic protective equipment. Considerations for first responder ballistic protective equipment should include what type of equipment is best suited for EMS and fire responders and when it should be worn (every shift, during times of high risk [e.g., on duty at a sports stadium], or just in response to IED events). It is critical that incident commanders base protective equipment and tactical movement guidance at the incident scene on a situational assessment of the IED risk, particularly when IEDs with significant net explosive weight are suspected or confirmed to be present. These types of IEDs, including vehicle bombs, may produce blast overpressure effects that would not be mitigated by typical protective equipment or available cover. A false sense of security among first responders could result if net explosive weight is not considered when determining protective equipment or tactical movement guidance to responders.

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xxii Blast injuries are the result of the rapid chemical conversion of a solid or liquid into highly pressurized gases that expand rapidly and compress the surrounding air. This generates a pressure pulse, which spreads as a blast wave in all directions. The effects of the blast wave are more intense in a confined space like a building or bus. The shock wave is amplified as it is reflected off walls, floors, and the ceiling. If the blast occurs outside, the blast wave will dissipate rapidly. It is understood that over-pressure phenomena may enhance the lethality of blast effect for explosions that occur in confined spaces.
Protective Equipment Commonly Worn

Most law enforcement officers responding to the incident will be wearing Type II or IIIA bullet resistant vests, designed to stop bullets from most handguns, and shotgun pellets. Given the expected injuries, this level of protective equipment may not provide protection from blast overpressure and fragmentation, and extremities will be vulnerable. First responders other than law enforcement typically do not wear ballistic protective equipment. Civilians at public places will not be wearing any form of ballistic protective equipment.

Protective Equipment Risk Mitigation Considerations

The NIJ body armor standard specifies the ballistic threats that body armor must reliably protect against. This standard does not specify a requirement for ballistic resistant vests to protect against fragmentation threats. The Type II or IIIA ballistic resistant vests that law enforcement officers are most commonly issued will likely not protect against fragmentation and blast overpressure effects from an IED threat. Use of Type IV body armor may increase the probability of protection against fragmentation and blast overpressure. However, further research and development is required to validate the performance of NIJ-approved body armor against fragmentation threats and to provide guidance on what level of protection should be worn to respond to this type of IED event.

Response and Incident Management Considerations

Maximize interoperability through existing MOUs/MOAs/SOPs, as well as through frequent exercises, planning, and training. These efforts will ultimately aid in reducing time from injury to treatment. During response, and while on the scene of the incident, use unified command with a mutual understanding of each responder’s role (EMS, fire, and law enforcement). Strive to communicate on common frequencies and use standardized terminology. Ensure all responders (regardless of discipline—EMS, fire, law enforcement) are trained and equipped to provide early, aggressive hemorrhage control; use protective equipment (which includes ballistic vests, helmets, and eyewear); and use integrated response and incident management.

Medical Response System

An IED detonation has the potential of instantly producing hundreds of casualties (there were over 700 casualties after the Oklahoma City bombing) with injuries that range across the entire spectrum of severity. A system-wide medical response to this event should be well-coordinated, incorporating the lessons learned from the military (both system and individual patient care) and experiences from domestic and international bombings. Unlike the management of routine emergencies, the response to IED incidents will be extraordinary for the Nation’s trauma and EMS systems.

System-wide efforts should include activities ranging from self-care, buddy-care, and bystander care to proper and effective prehospital triaging and patient transport to get the right patients to the appropriate medical facilities in a swift and orderly manner, regardless of proximity. The efforts include prehospital emergency medical services, ground ambulances, rotary and fixed wing aircraft patient transport, designated trauma centers, hospitals, and rehabilitation facilities.

Prehospital Emergency Medical Services Considerations

Patient-Based Considerations: The last decade of war has seen significant advances in the ability of prehospital care to impact the mortality of combat wounds. The ability to stop life-threatening bleeding from extremity wounds has been demonstrated to reduce the number of treatable exsanguination deaths.
As IEDs have become a common source of wounding in the wars in Iraq and Afghanistan, and in the United States (the Boston Marathon bombing on April 15, 2013) has become a reality, civilian adoption of some military clinical practices that are a significant departure from traditional prehospital care should be considered:

- Aggressive hemorrhage control—including use of tourniquets and, where appropriate, hemostatic agents
- Aggressive airway management, including "sit up and lean forward" airway positioning
- Training all first responders in self-care, buddy care, and bystander care

System-Wide Implications

Experience from bombings occurring in other countries demonstrates common prehospital care system challenges, including multiple simultaneous attacks that cause an enormous number of casualties that exceed the available resources of EMS responders. The adoption of techniques that are suitable for use in self-care, buddy-care, bystander care, and care delivered by first responders is essential to extend the depth of responders available to provide immediate life-saving care.

EMS must rapidly and accurately triage casualties at the incident site and expeditiously transport those identified for “immediate care” into an appropriate hospital setting. It is imperative that pre-hospital triaging of wounded patients be as efficient and accurate as possible. Over-triage of patients over-taxes specialty centers that are designed to care for more significantly injured patients, while under-triaging of patients puts critically wounded patients into facilities that may not be able to provide the life-saving care needed. In addition to proper triage, care must be taken to regulate the transportation of casualties in order to direct victims to the hospital best suited for providing the necessary level of care for the type and severity of injuries they have sustained. Often the closest hospital is quickly overwhelmed by injured transported by ambulances, police cars, and privately owned vehicles, as well as the “walking wounded”. Because the influx of patients to the nearest hospital is dictated by human behavior outside control of the system, the EMS system must recognize this likelihood and plan for redistribution of injured patients such that the closest hospital can return to maximum functionality as soon as possible. Incident managers should also anticipate the need to provide for safety and security with the arrival of injured persons’ family members, the “psychologically shocked,” and the media.

EMS providers must also be cognizant of patients who appear otherwise well (uninjured), but may have traumatic brain injuries, tympanic membrane damage, and/or internal hollow organ damage due to the blast effects of the explosion. These considerations should be reinforced through exercise, planning, protocols, and training.

Hospital-Based Trauma System Considerations

Hospital challenges experienced in foreign and domestic bombings include:

- Difficulty in acquiring information from the scene
- Maldistribution of patients (e.g., two of 15 hospitals receiving approximately 60 percent of casualties from the scene in one large-scale event)
- A requirement for large numbers of hospital medical personnel to adequately treat the wounded
- The need to implement mass casualty contingency plans at every point of care (e.g., radiology postponing imaging an ankle sprain to rule out a fracture)
- Concern that the hospital may be a target
- Activation of Mass Transfusion Protocols, based on scope of injuries
• Activation of staff augmentation/call back plans, based on scope of injuries
• Initiation of patient movement/transfer plans, based on scope of injuries

Medical leaders of responses to bombings have noted that in many cases the majority of the injured and dead from large events present at the hospital closest to the scene. Patients able to leave the scene may forgo EMS triage and present at hospitals before more severely injured patients arrive. The large influx of patients may exceed the hospital’s capability to provide care, resulting in a “functional collapse” from inability to meet the demand spike. When this occurs, there is a compelling need to redistribute patients.

Distribution of patients among hospitals so that no one hospital exceeds its resources is a key principle in addressing medical surge capacity following terrorist bombings.

To address the large number of patients arriving at local facilities, local hospitals will need the swift assistance of incoming health care providers to assist with re-triage of the arriving casualties and the provision of appropriate services to patients. This influx will include additional doctors, nurses, medical specialists, such as blood bank technologists and respiratory therapists, mental health providers, and chaplains. In addition, there will likely be the need for law enforcement personnel to maintain order and security. In the hours immediately after the blast, these additional personnel will likely to come from surrounding communities and may require health care professionals from beyond the local area. While pre-event planning for cross-town (local) hospital credentialing and privileging of responding health care professionals can be arranged with relative ease, the issue of expeditious out-of-state credentialing and privileging of medical professionals responding to natural or man-made disasters can be more challenging.

**Patient Movement/Transfer Considerations**

As the patient load builds at local hospitals, some of the critically injured patients should be moved to other medical care facilities to optimize patient care. This will include movement to Level-1 trauma centers and other hospitals to better balance inpatient bed, operating room, intensive care unit, and rehabilitation bed utilization. Depending on the locality of the blast, this may include moving patients to other communities or across state lines. Long-distance transport of acutely injured patients will likely require aeromedical evacuation capabilities.
Scenario 3: Medium-Scale Terrorist/Insurgency Attack

Medium-scale attack using an IED with between 5 and 25 pounds net explosive weight. IEDs of this size frequently are placed in backpacks, suitcases, or buried and used to attack targets such as transportation infrastructure or specific locations to cause mass casualties with a potential of overwhelming the response and receiving infrastructure. This scenario includes suicide vest type devices that may be masked through clothing. Targets range from assassinations to mass casualties.

EXAMPLE: You are called to the scene of an explosion on a bus in your town center. A city bus full of passengers pulled into a crowded stop before exploding. You are the first arriving unit onto the scene...

Expected Injury Patterns

For those who survive this event, the injuries can include single and double amputees, extremity vascular injuries, penetrating foreign body thoraco-abdominal injuries, potential TBI and penetrating head trauma, neck trauma, and pulmonary contusions from closed space blasts.

Protective Equipment and Barriers

Secondary preventive measures include activities to prevent injuries once an explosion has occurred. Such measures may include barrier or structural walls that may protect or reduce injuries to bystanders and responders from blast and fragmentation injuries. Secondary preventive measures also include use of ballistic protective equipment, although soft body armor and ceramic plate body armor may not protect against fragmentation or blast overpressure effects from IEDs. Most protective equipment is focused on ballistic protection and may have unproven or limited value for mitigating fragmentation or blast overpressure, particularly for devices with larger net explosive weights, such as vehicle bombs. For protective equipment and barriers to be effective, they must be implemented proactively; they are of little use when the explosive event is random and enacted on an unsuspecting, unprotected group of individuals. Ballistic protective equipment will also give some level of protection should an IED attack be combined with an active shooter event. Experience indicates attackers may plan to detonate secondary or subsequent IEDs that target first responders or receiving hospitals.

First responders should consider wearing some level of ballistic protective equipment. Considerations for first responder ballistic protective equipment should include what type of equipment is best suited for EMS and fire responders and when it should be worn (every shift, during times of high risk [e.g., on duty at a sports stadium], or just in response to IED events). It is critical that incident commanders base protective equipment and tactical movement guidance at the incident scene on a situational assessment of the IED risk, particularly when IEDs with significant net explosive weight are suspected or confirmed to be present. These types of IEDs, including vehicle bombs, may produce blast overpressure effects that would not be mitigated by typical protective equipment or available cover. A false sense of security among first responders could result if net explosive weight is not considered when determining protective equipment or tactical movement guidance to responders.

Blast injuries are the result of the rapid chemical conversion of a solid or liquid into highly pressurized gasses that expand rapidly and compress the surrounding air. This generates a pressure pulse, which spreads as a blast wave in all directions. The effects of the blast wave are more intense in a confined space like a building or bus. The shock wave is amplified as it is reflected off walls, floors, and the ceiling. If the blast occurs outside, the blast wave will dissipate rapidly. It is understood that over-pressure phenomena may enhance the lethality of blast effect for explosions that occur in confined spaces.
Protective Equipment Commonly Worn

Most law enforcement officers responding to the incident will be wearing Type II or IIIA bullet resistant vests, designed to stop bullets from most handguns, and shotgun pellets. Given the expected injuries, this level of protective equipment may not provide protection from blast overpressure and fragmentation, and extremities will be vulnerable. First responders other than law enforcement typically do not wear ballistic protective equipment. Civilians at public places will not be wearing any form of ballistic protective equipment.

Protective Equipment Risk Mitigation Considerations

The NIJ body armor standard specifies the ballistic threats that body armor must reliably protect against. This standard does not specify a requirement for ballistic resistant vests to protect against fragmentation threats. The Type II or IIIA ballistic resistant vests that law enforcement officers are most commonly issued will likely not protect against fragmentation and blast overpressure effects from an IED threat. Use of Type IV body armor may increase the probability of protection against fragmentation and blast overpressure. However, further research and development is required to validate the performance of NIJ-approved body armor against fragmentation threats and to provide guidance on what level of protection should be worn to respond to this type of IED event.

Response and Incident Management Considerations

Maximize interoperability through existing MOUs/MOAs/SOPs, as well as through frequent exercises, planning, and training. These efforts will ultimately aid in reducing time from injury to treatment. During response, and while on the scene of the incident, use unified command with a mutual understanding of each responder’s role (EMS, fire, and law enforcement). Strive to communicate on common frequencies and use standardized terminology. Ensure all responders (regardless of discipline—EMS, fire, law enforcement) are trained and equipped to provide early, aggressive hemorrhage control; use protective equipment (which includes ballistic vests, helmets, and eyewear); and use integrated response and incident management.

Medical Response System

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**System-Wide Implications**

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**Hospital-Based Trauma System Considerations**

Hospital challenges experienced in foreign and domestic bombings include:

- Difficulty in acquiring information from the scene
- Maldistribution of patients (e.g., two of 15 hospitals receiving approximately 60 percent of casualties from the scene in one large-scale event)
- A requirement for large numbers of hospital medical personnel to adequately treat the wounded
- The need to implement mass casualty contingency plans at every point of care (e.g., radiology postponing imaging an ankle sprain to rule out a fracture)
- Concern that the hospital may be a target
- Activation of Mass Transfusion Protocols, based on scope of injuries
- Activation of staff augmentation/call back plans, based on scope of injuries
- Initiation of patient movement/transfer plans, based on scope of injuries

Medical leaders of responses to bombings have noted that in many cases the majority of the injured and dead from large events present at the hospital closest to the scene. Patients able to leave the scene may forego EMS
triage and present at hospitals before more severely injured patients arrive. The large influx of patients may exceed the hospital’s capability to provide care, resulting in a “functional collapse” from inability to meet the demand spike. When this occurs, there is a compelling need to redistribute patients.

Distribution of patients among hospitals so that no one hospital exceeds its resources is a key principle in addressing medical surge capacity following bombing attacks that result in a significant number of casualties.

To address the large number of patients arriving at local facilities, local hospitals will need the swift assistance of incoming health care providers to assist with re-triage of the arriving casualties and the provision of appropriate services to patients. This influx will include additional doctors, nurses, medical specialists, such as blood bank technologists and respiratory therapists, mental health providers, and chaplains. In addition, there will likely be the need for law enforcement personnel to maintain order and security. In the hours immediately after the blast, these additional personnel will likely come from surrounding communities and may require health care professionals from beyond the local area. While pre-event planning for cross-town (local) hospital credentialing and privileging of responding health care professionals can be arranged with relative ease, the issue of expeditious out-of-state credentialing and privileging of medical professionals responding to natural or man-made disasters can be more challenging.

**Patient Movement/Transfer Considerations**

As the patient load builds at local hospitals, some of the critically injured patients should be moved to other medical care facilities to optimize patient care. This will include movement to Level-1 trauma centers and other hospitals to better balance inpatient bed, operating room, intensive care unit, and rehabilitation bed utilization. Depending on the locality of the blast, this may include moving patients to other communities or across state lines. Long-distance transport of acutely injured patients will likely require aeromedical evacuation capabilities.
Scenario 4: Small Scale Terrorist/Insurgency Attack

Small-scale attack using an IED with less than 5 pounds net explosive weight. Assumed victim distance is 5 feet or less from center of the explosion. Use of high-energy explosives such as C-4 will cause smaller fragments traveling at higher velocity. Low-energy explosives, such as black powder filler in a pipe bomb, will generally result in larger fragments, which do not travel as far or fast. Oftentimes these small-scale attacks are targeted one-on-one events, and detonation occurs prior to first responder arrival.

EXAMPLE: You are called to the private residence for a reported explosion. One occupant of the house said his mother received and opened a package which detonated. There are two reported victims whose conditions are unknown. The caller was on the other side of the house when the explosion occurred...

Expected Injury Patterns

For those who survive this event, injuries can include digit and single amputees, soft tissue injuries, burns, ocular and tympanic injuries.

Protective Equipment and Barriers

Secondary preventive measures include activities to prevent injuries once an explosion has occurred. Such measures may include barrier or structural walls that may protect or reduce injuries to bystanders and responders from blast and fragmentation injuries. Secondary preventive measures also include use of ballistic protective equipment, although soft body armor and ceramic plate body armor may not protect against fragmentation or blast overpressure effects from IEDs. Most protective equipment is focused on ballistic protection and may have unproven or limited value for mitigating fragmentation or blast overpressure, particularly for devices with larger net explosive weights, such as vehicle bombs. For protective equipment and barriers to be effective, they must be implemented proactively; they are of little use when the explosive event is random and enacted on an unsuspecting, unprotected group of individuals. Ballistic protective equipment will also give some level of protection should an IED attack be combined with an active shooter event. Experience indicates attackers may plan to detonate secondary or subsequent IEDs that target first responders or receiving hospitals.

First responders should consider wearing some level of ballistic protective equipment. Considerations for first responder ballistic protective equipment should include what type of equipment is best suited for EMS and fire responders and when it should be worn (every shift, during times of high risk [e.g., on duty at a sports stadium], or just in response to IED events). It is critical that incident commanders base protective equipment and tactical movement guidance at the incident scene on a situational assessment of the IED risk, particularly when IEDs with significant net explosive weight are suspected or confirmed to be present. These types of IEDs, including vehicle bombs, may produce blast overpressure effects that would not be mitigated by typical protective equipment or available cover. A false sense of security among first responders could result if net explosive weight is not considered when determining protective equipment or tactical movement guidance to responders.

Blast injuries are the result of the rapid chemical conversion of a solid or liquid into highly pressurized gasses that expand rapidly and compress the surrounding air. This generates a pressure pulse, which spreads as a blast wave in all directions. The effects of the blast wave are more intense in a confined space like a building or bus. The shock wave is amplified as it is reflected off walls, floors, and the ceiling. If the blast occurs outside, the blast wave will dissipate rapidly. It is understood that over-pressure phenomena may enhance the lethality of blast effect for explosions that occur in confined spaces.
Protective Equipment Commonly Worn

Most law enforcement officers responding to the incident will be wearing Type II or IIIA bullet resistant vests, designed to stop bullets from most handguns, and shotgun pellets. Given the expected injuries, this level of protective equipment may not provide protection from blast overpressure and fragmentation, and extremities will be vulnerable. First responders other than law enforcement typically do not wear ballistic protective equipment. Civilians at public places will not be wearing any form of ballistic protective equipment.

Protective Equipment Risk Mitigation Considerations

The NIJ body armor standard specifies the ballistic threats that body armor must reliably protect against. This standard does not specify a requirement for ballistic resistant vests to protect against fragmentation threats. The Type II or IIIA ballistic resistant vests that law enforcement officers are most commonly issued will likely not protect against fragmentation and blast overpressure effects from an IED threat. Use of Type IV body armor may increase the probability of protection against fragmentation and blast overpressure. However, further research and development is required to validate the performance of NIJ-approved body armor against fragmentation threats and to provide guidance on what level of protection should be worn to respond to this type of IED event.

Response and Incident Management Considerations

Maximize interoperability through existing MOUs/MOAs/SOPs, as well as through frequent exercises, planning, and training. These efforts will ultimately aid in reducing time from injury to treatment. During response, and while on the scene of the incident, use unified command with a mutual understanding of each responder’s role (EMS, fire, and law enforcement). Strive to communicate on common frequencies and use standardized terminology. Ensure all responders (regardless of discipline—EMS, fire, law enforcement) are trained and equipped to provide early, aggressive hemorrhage control; use protective equipment (which includes ballistic vests, helmets, and eyewear); and use integrated response and incident management.

Medical Response System

Smaller explosives, such as with this scenario, present with response challenges and resource demands, but are not as taxing to the medical system as a larger IED. Response to this event would be well-coordinated, incorporating the lessons learned from the military (both system and individual patient care) and experiences from domestic and international bombings. Unlike the management of routine emergencies, the response to IED incidents will be extraordinary for the Nation’s trauma and EMS systems.

System-wide efforts should include activities ranging from self-care, buddy-care, and bystander care to proper and effective prehospital triaging and patient transport to get the right patients to the appropriate medical facilities in a swift and orderly manner. The efforts include prehospital emergency medical services, ground ambulances, rotary and fixed wing aircraft patient transport, designated trauma centers, hospitals, and rehabilitation facilities.

Prehospital Emergency Medical Services Considerations

Patient-Based Considerations: The last decade of war has seen significant advances in the ability of prehospital care to impact the mortality of combat wounds. The ability to stop life-threatening bleeding from extremity wounds has been demonstrated to reduce the number of treatable exsanguination deaths.
As IEDs have become a common source of wounding in the wars in Iraq and Afghanistan, as well as in the United States (the Boston Marathon bombing on April 15, 2013) has become a reality, civilian adoption of some military clinical practices that are a significant departure from traditional prehospital care is appropriate:

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**System-Wide Implications**

Experience from bombings occurring in other countries demonstrates common prehospital care system challenges, including multiple simultaneous attacks that cause an enormous number of casualties that exceed the available resources of EMS responders. The adoption of techniques that are suitable for use in self-care, buddy-care, bystander care, and care delivered by first responders is essential to extend the range of persons providing immediate life-saving care.

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**Hospital-Based Trauma System Considerations**

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- Maldistribution of patients (e.g., two of 15 hospitals receiving approximately 60 percent of casualties from the scene in one large-scale event)
- A requirement for large numbers of hospital medical personnel to adequately treat the wounded
- The need to implement mass casualty contingency plans at every point of care (e.g., radiology postponing imaging an ankle sprain to rule out a fracture)
- Concern that the hospital may be a target
- Activation of Mass Transfusion Protocols, based on scope of injuries
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To address the large number of patients arriving at local facilities, local hospitals will need the swift assistance of incoming health care providers to assist with re-triage of the arriving casualties and the provision of appropriate services to patients. This influx will include additional doctors, nurses, medical specialists, such as blood bank technologists and respiratory therapists, mental health providers, and chaplains. In addition, there will likely be the need for law enforcement personnel to maintain order and security. In the hours immediately after the blast, these additional personnel will likely come from surrounding communities and may require health care professionals from beyond the local area. While pre-event planning for cross-town (local) hospital credentialing and privileging of responding health care professionals can be arranged with relative ease, the issue of expeditious out-of-state credentialing and privileging of medical professionals responding to natural or man-made disasters can been more has challenging.

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Scenario 5: Involuntary Suicide Bomber

This category of IED attack involves a subject who is forced to wear a suicide vest or carry an explosive device with between 5 and 25 pounds net explosive weight to attack targets such as critical infrastructure, mass gatherings or specific individuals. This scenario includes suicide vest type devices that may be masked through clothing. Targets range from assassinations to mass casualties. Assumed target victim distance is 5-10 feet from center of the explosion. Victims (targets and/or unwitting suicide bomber) will not likely have protective equipment.

EXAMPLE: You are called to a packed movie theater for a distressed subject. Upon arrival, you are met by a terrified looking individual standing in the theater lobby who has a locked suicide vest on his chest. He says that if the demands on the piece of paper he has are not met, the vest that is secured to his chest will be detonated by the men who wrote the letter. He starts approaching you and begs you to help him... The movie theater is packed and the patrons inside are unaware that the man has a suicide vest on him...

Expected Injury Patterns

For those who survive this event, single and double amputees, extremity vascular injuries, penetrating foreign body thoraco-abdominal injuries, potential TBI and penetrating head trauma, neck trauma, and pulmonary contusions from closed space blasts.

Protective Equipment and Barriers

Secondary preventive measures include activities to prevent injuries once an explosion has occurred. Such measures may include barrier or structural walls that may protect or reduce injuries to bystanders and responders from blast and fragmentation injuries. Secondary preventive measures also include use of ballistic protective equipment, although soft body armor and ceramic plate body armor may not protect against fragmentation or blast overpressure effects from IEDs. Most protective equipment is focused on ballistic protection and may have unproven or limited value for mitigating fragmentation or blast overpressure, particularly for devices with larger net explosive weights, such as vehicle bombs. For protective equipment and barriers to be effective, they must be implemented proactively; they are of little use when the explosive event is random and enacted on an unsuspecting, unprotected group of individuals. Ballistic protective equipment will also give some level of protection should an IED attack be combined with an active shooter event. Experience indicates attackers may plan to detonate secondary or subsequent IEDs that target first responders or receiving hospitals.

First responders should consider wearing some level of ballistic protective equipment. Considerations for first responder ballistic protective equipment should include what type of equipment is best suited for EMS and fire responders and when it should be worn (every shift, during times of high risk [e.g., on duty at a sports stadium], or just in response to IED events). It is critical that incident commanders base protective equipment and tactical movement guidance at the incident scene on a situational assessment of the IED risk, particularly when IEDs with significant net explosive weight are suspected or confirmed to be present. These types of IEDs, including

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**Protective Equipment Commonly Worn**

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**Response and Incident Management Considerations**

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**Medical Response System**

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- Training all first responders in self-care, buddy care, and bystander care

System-Wide Implications

Experience from bombing attacks occurring in other countries demonstrates common prehospital care system challenges, including multiple simultaneous attacks that cause an enormous number of casualties that exceed the available resources of EMS responders. The adoption of techniques that are suitable for use in self-care, buddy-care, bystander care, and care delivered by first responders is essential to extend the depth of responders available to provide immediate life-saving care.

EMS must rapidly and accurately triage casualties at the incident site and expeditiously transport those identified for “immediate care” into an appropriate hospital setting. It is imperative that pre-hospital triaging of wounded patients be as efficient and accurate as possible. Over-triage of patients over-taxes specialty centers that are designed to care for more significantly injured patients, while under-triaging of patients puts critically wounded patients into facilities that may not be able to provide the life-saving care needed. In addition to proper triage, care must be taken to regulate the transportation of casualties in order to direct victims to the hospital best suited for providing the necessary level of care for the type and severity of injuries they have sustained. Often the closest hospital is quickly overwhelmed by injured transported by ambulances, police cars, and privately owned vehicles, as well as the “walking wounded”. Because the influx of patients to the nearest hospital is dictated by human behavior outside control of the system, the EMS system must recognize this likelihood and plan for redistribution of injured patients such that the closest hospital can return to maximum functionality as soon as possible. Incident managers should also anticipate the need to provide for safety and security with the arrival of injured persons’ family members, the “psychologically shocked,” and the media.

EMS providers must also be cognizant of patients who appear otherwise well (uninjured), but may have traumatic brain injuries, tympanic membrane damage, and/or internal hollow organ damage due to the blast effects of the explosion. These considerations should be reinforced through exercise, planning, protocols, and training.

Hospital-Based Trauma System Considerations

Hospital challenges experienced in foreign and domestic terrorist bombings include:

- Difficulty in acquiring information from the scene
- Maldistribution of patients (e.g., two of 15 hospitals receiving approximately 60 percent of casualties from the scene in one large-scale event)
• A requirement for large numbers of hospital medical personnel to adequately treat the wounded
• The need to implement mass casualty contingency plans at every point of care (e.g., radiology postponing imaging an ankle sprain to rule out a fracture)
• Concern that the hospital may be a target
• Activation of Mass Transfusion Protocols, based on scope of injuries
• Activation of staff augmentation/call back plans, based on scope of injuries
• Initiation of patient movement/transfer plans, based on scope of injuries

Medical leaders of responses to bombings have noted that in many cases the majority of the injured and dead from large events present at the hospital closest to the scene. Patients able to leave the scene may forego EMS triage and present at hospitals before more severely injured patients arrive. The large influx of patients may exceed the hospital’s capability to provide care, resulting in a “functional collapse” from inability to meet the demand spike. When this occurs, there is a compelling need to redistribute patients.

Distribution of patients among hospitals, so that no one hospital exceeds its resources, is a key principle in addressing medical surge capacity following bombing attacks that result in a significant number of casualties.

To address the large number of patients arriving at local facilities, local hospitals will need the swift assistance of incoming health care providers to assist with re-triage of the arriving casualties and the provision of appropriate services to patients. This influx will include additional doctors, nurses, medical specialists, such as blood bank technologists and respiratory therapists, mental health providers, and chaplains. In addition, there will likely be the need for law enforcement personnel to maintain order and security. In the hours immediately after the blast, these additional personnel will likely come from surrounding communities and may include health care professionals from beyond the local area. While pre-event planning for cross-town (local) hospital credentialing and privileging of responding health care professionals can be arranged with relative ease, the issue of expeditious out-of-state credentialing and privileging of medical professionals responding to natural or man-made disasters can be more challenging.
Scenario 6: Discovery/Recovery of Homemade Explosives (Not an Attack)

Many who seek explosives try to avoid detection by making their own explosives, often using ingredients and techniques found in on-line instructions. These “homemade” explosives are particularly dangerous, as they are made by inexperienced individuals outside of a formal manufacturing environment and without adequate quality control procedures. The homemade manufacture of primary explosives such as Hexamethlene Triperoxide Diamine (HMTD), Triacetone-Triperoxide (TATP), and Lead Azide are of greatest concern due to their unpredictable nature as well as sensitivity to heat, friction, and shock. First responders including fire/HAZMAT, paramedics, and law enforcement are particularly vulnerable as clandestine labs encountered may look similar to illicit drug labs. In this type of scenario, the victim—either manufacturer or first responder—is often in direct contact with the explosive materials.

EXAMPLE: You are on the scene of a basement fire where firefighters have removed a victim who is unresponsive, but alive. The victim has blast injuries and amputation of his right hand and several fingers from his left hand. The firefighters indicate that the fire is contained, but that there are several containers of unknown materials adjacent to where the fire and reported explosion occurred...

Expected Injury Patterns

For those who survive this event, injuries are often burns and/or traumatic amputation of fingers or limbs, soft tissue injuries, ocular injuries, and ruptured eardrums, depending on the quantity and type of homemade explosive encountered.

Protective Equipment and Barriers

In the absence of further patients requiring care, the scene should be isolated, and only entered by first responders with the appropriate level of protective equipment. A determination will need to be made on scene as to whether flash, hazmat or EOD (bomb suit) protection is indicated. It is critical that incident commanders base protective equipment and tactical movement guidance at the incident scene on a situation assessment of the IED risk, particularly when IEDs with significant net explosive weight are suspected or confirmed to be present. These types of IEDs, including vehicle bombs, may produce overpressure blast effects regardless of fragmentation that would not be mitigated by typical protective equipment or available cover. A false sense of security among first responders could result if net explosive weight is not considered when determining protective equipment or tactical movement guidance to responders.

Protective Equipment Commonly Worn

Law enforcement officers will wear Type II or IIIA bullet resistant vests, designed to stop bullets from most handguns, shotgun pellets, and blunt shrapnel. First responders other than law enforcement typically do not wear ballistic protective equipment. Fire responders wear fire resistant jackets/pants with helmets, which provide thermal protection. Explosive Ordnance Disposal/bomb technicians wear either a full bomb suit or, in some circumstances, less restrictive protective equipment to improve maneuverability.

Response and Incident Management Considerations

Maximize interoperability through existing MOUs/MOAs/SOPs, as well as through frequent exercises, planning, and training. These efforts will ultimately aid in reducing time from injury to treatment. During response, and while on the scene of the incident, use unified command with a mutual understanding of each responder’s role (EMS, fire, and law enforcement). Strive to communicate on common frequencies and use standardized
terminology. Ensure all responders (regardless of discipline—EMS, fire, law enforcement) are trained and equipped to provide early, aggressive hemorrhage control; use protective equipment (which includes ballistic vests, helmets, and eyewear); and use integrated response and incident management.

**Prehospital Emergency Medical Services Considerations**

Patient-Based Considerations: The last decade of war has seen significant advances in the ability of prehospital care to impact the mortality of combat wounds. The ability to stop life-threatening bleeding from extremity wounds has been demonstrated to reduce the number of treatable exsanguination deaths.

As IEDs have become a common source of wounding in the wars in Iraq and Afghanistan, and as the use of IEDs in the United States (the Boston Marathon bombing on April 15, 2013) has become a reality, civilian adoption of some military clinical practices that are a significant departure from traditional prehospital care should be considered:

- Aggressive hemorrhage control—including use of tourniquets and, where appropriate, hemostatic agents
- Aggressive airway management, including “sit up and lean forward” airway positioning
- Training all first responders in self-care, buddy care, and bystander care
- In this scenario, the need for decontamination of patients and responders must be considered
Scenario 7: Active Shooter with Access Denial to First Responders

Two shooters attack an indoor public building using firearms, and disperse potentially lethal chemicals in an effort to deny first responder access to the scene. The shooters placed buckets of chemicals adjacent to two primary entry/exit points, creating toxic clouds to block first responders, and then opened fire with semi-automatic weapons, handguns, and shotguns within the center of the building, where approximately 300 people were gathered.

EXAMPLE: You are called to the scene of an indoor shopping mall on a busy day. As the first arriving unit, you see people running from the facility and several victims on the ground immediately outside the exit door in front of you. Several of the people who escaped are in apparent distress and are having trouble breathing. There are three victims who are bleeding and are being cared for by bystanders. You also see a white cloud coming out of the door and hear gunfire from what appears to be several different sources...

Expected Injury Patterns

Multiple gunshot wounds from various caliber weapons; wide-spread casualties from gunshot wounds, chemical exposure, and care delay; and non-firearm-related injuries associated with attempts to escape (lacerations, fractures). The chemicals produce hazardous to potentially lethal effects and a barrier that will significantly delay access by all first responders not prepared to enter into a hazardous materials environment. Traditional HAZ/MAT response results in delays that will promote wide-spread hemorrhage.

Protective Equipment and Barriers

First responders should consider wearing protective equipment to mitigate ballistic, respiratory and mucous membrane, and dermal hazards. Utilizing available barriers or structural walls can also provide protective cover and/or concealment for first responders within the shooter’s field of fire. Preventive measures also include use of ballistic protective equipment, although soft body armor and ceramic plate body armor may not protect against fragmentation or blast overpressure effects from IEDs. Most protective equipment is focused on ballistic protection and may have unproven or limited value for mitigating fragmentation or blast overpressure, particularly for devices with larger net explosive weights, such as vehicle bombs. For protective equipment and barriers to be effective, they must be implemented proactively; they are of little use when the explosive event is random and enacted on an unsuspecting, unprotected group of individuals. Ballistic protective equipment will also give some level of protection should an IED attack be combined with an active shooter event. Experience indicates attackers may plan to detonate secondary or subsequent IEDs that target first responders or receiving hospitals.

Protective Equipment Commonly Worn

Most law enforcement officers responding to the incident will be wearing Type II or IIIA bullet resistant vests, designed to stop bullets from most handguns, and shotgun pellets. First responders other than law enforcement typically do not wear ballistic protective equipment. Civilians at public places such will not be wearing any form of ballistic protective equipment.

Protective Equipment Risk Mitigation Considerations

Responders should utilize the highest level of protective equipment available to them—ideally Type IV ballistic vests and helmets when responding to active shooter incidents. The NIJ body armor standard specifies ballistic threats that body armor must reliably protect against.
Protection against common industrial hazardous chemicals—with a focus on respiratory, eyes, mucous membranes and skin protection—can be provided by first responder turnout gear, SCBA (Self-Contained Breathing Apparatus), gas masks, and Victim Rescue Units or Tyvek® suits.

Response and Incident Management Considerations

Maximize interoperability through existing MOUs/MOAs/SOPs, as well as through frequent exercises, planning, and training. These efforts will ultimately aid in reducing time from injury to treatment. During response, and while on the scene of the incident, use unified command with a mutual understanding of each responder’s role (EMS, fire, and law enforcement). Strive to communicate on common frequencies and use standardized terminology. Ensure all responders (regardless of discipline—EMS, fire, law enforcement) are trained and equipped to provide early, aggressive hemorrhage control; use protective equipment (which includes ballistic vests, helmets, and eyewear); and use integrated response and incident management.

Medical Response System

An active shooter incident complicated by a hazardous materials release has the potential to produce large numbers of casualties with injuries that range across the entire spectrum of severity. In addition to mass casualty trauma care, high consideration of decontamination requirements must be taken. A system-wide medical response to this event should be well-coordinated, incorporating the lessons learned from the military (both system and individual patient care) and experiences from domestic and international incidents. Unlike the management of routine emergencies, the response to active shooter incidents will be extraordinary for the Nation’s trauma and EMS systems.

System-wide efforts should include activities ranging from self-care, buddy-care, and bystander care to proper and effective prehospital triaging and patient transport to get the right patients to the appropriate medical facilities in a swift and orderly manner. The efforts include prehospital emergency medical services, ground ambulances, rotary and fixed wing aircraft patient transport, designated trauma centers, hospitals, and rehabilitation facilities.

Prehospital Emergency Medical Services Considerations

Patient-Based Considerations: The last decade of war has seen significant advances in the ability of prehospital care to impact the mortality of combat wounds. The ability to stop life-threatening bleeding from extremity wounds has been demonstrated to reduce the number of treatable exsanguination deaths.

As active shooter incidents have become a common source of wounding in the United States, civilian adoption of some military clinical practices that are a significant departure from traditional prehospital care should be considered:

- Aggressive hemorrhage control—including use of tourniquets and, where appropriate, hemostatic agents
- Aggressive airway management, including “sit up and lean forward” airway positioning
- Training all first responders in self-care, buddy care, and bystander care
- In this scenario, the need for decontamination of patients and responders must be considered

System-Wide Implications

Experience from attacks (active shooter incidents) occurring in other countries demonstrates common prehospital care system challenges, including multiple simultaneous attacks that cause an enormous number of
casualties that exceed the available resources of EMS responders. The adoption of techniques that are suitable for use in self-care, buddy-care, bystander care, and care delivered by first responders is essential to extend the depth of responders available to provide immediate life-saving care.

EMS must rapidly and accurately triage casualties at the incident site and expeditiously transport those identified for “immediate care” into an appropriate hospital setting. It is imperative that pre-hospital triaging of wounded patients be as efficient and accurate as possible. Over-triage of patients over-taxes specialty centers that are designed to care for more significantly injured patients, while under-triaging of patients puts critically wounded patients into facilities that may not be able to provide the life-saving care needed. In addition to proper triage, care must be taken to regulate the transportation of casualties in order to direct victims to the hospital best suited for providing the necessary level of care for the type and severity of injuries they have sustained. Often the closest hospital is quickly overwhelmed by injured transported by ambulances, police cars, and privately owned vehicles, as well as the “walking wounded”. Because the influx of patients to the nearest hospital is dictated by human behavior outside control of the system, the EMS system must recognize this likelihood and plan for redistribution of injured patients such that the closest hospital can return to maximum functionality as soon as possible. Incident managers should also anticipate the need to provide for safety and security with the arrival of injured persons’ family members, the “psychologically shocked,” and the media.

From a law enforcement perspective, the following should be considered:

- Law enforcement units should be trained in active shooter response, to include deployment of a contact team and a follow-on rescue team, depending on local resources and system configuration.
- All first responders (EMS, fire, and law enforcement) should be trained and practiced to work together in active shooter scenarios.
- Active shooter first response should focus on traditional Care Under Fire injuries with immediate “Extraction” from the site of the attack as a priority. All casualties should be directed or moved to a “Safe Point” (a secure location near the attack) by extraction teams where the casualties will be re-triaged and treated for transfer.
- Interoperability between EMS, fire and law enforcement personnel must be exercised and an understanding of the responsibilities and actions of all parties is essential. This is achieved through mutual trainings, well-developed policies, and tabletop exercises.
- State and local officials should promote CERTs to deliver civilian training in conjunction with non-governmental organizations.

Experience from active shooter incidents and bombing attacks demonstrates common prehospital care system challenges, including multiple simultaneous attacks that cause an enormous number of casualties that exceed the available resources of EMS responders. The adoption of techniques that are suitable for use in self-care, buddy-care, bystander care, and care delivered by first responders is essential to extend the range of persons providing immediate life-saving care. First responders should develop plans for working on “contaminated casualties”.

EMS providers must also be cognizant of patients who appear otherwise well (uninjured), but may have hidden injuries and exposure to hazardous materials. These considerations should be reinforced through exercise, planning, protocols, and training.
Hospital-Based Trauma System Considerations

Hospital challenges experienced in foreign and domestic active shooter incidents include:

- Difficulty in acquiring information from the scene
- Maldistribution of patients (e.g., two of 15 hospitals receiving approximately 60 percent of casualties from the scene in one large-scale event)
- A requirement for large numbers of hospital medical personnel to adequately treat the wounded
- The need to implement mass casualty contingency plans at every point of care (e.g., radiology postponing imaging an ankle sprain to rule out a fracture)
- Concern that the hospital may be a target
- Activation of Mass Transfusion Protocols, based on scope of injuries
- Activation of staff augmentation/call back plans, based on scope of injuries
- Initiation of patient movement/transfer plans, based on scope of injuries

Medical leaders of responses to attacks have noted that in many cases the majority of the injured and dead from large events present at the hospital closest to the scene. Patients able to leave the scene may forego EMS triage and present at hospitals before more severely injured patients arrive. The large influx of patients may exceed the hospital's capability to provide care, resulting in a “functional collapse” from inability to meet the demand spike. When this occurs, there is a compelling need to redistribute patients.

Distribution of patients among hospitals, so that no one hospital exceeds its resources, is a key principle in addressing medical surge capacity following bombing attacks that result in a significant number of casualties.

To address the large number of patients arriving at local facilities, local hospitals will need the swift assistance of incoming health care providers to assist with re-triage of the arriving casualties and the provision of appropriate services to patients. This influx will include additional doctors, nurses, medical specialists, such as blood bank technologists and respiratory therapists, mental health providers, and chaplains. In addition, there will likely be the need for law enforcement personnel to maintain order and security. In the hours immediately after the incident, these additional personnel will likely come from surrounding communities and may include health care professionals from beyond the local area. While pre-event planning for cross-town (local) hospital credentialing and privileging of responding health care professionals can be arranged with relative ease, the issue of expeditious out-of-state credentialing and privileging of medical professionals responding to natural or man-made disasters can be more challenging.

Patient Movement/Transfer Considerations

As the patient load builds at local hospitals, some of the critically injured patients should be moved to other medical care facilities to optimize patient care. This will include movement to Level-1 trauma centers and other hospitals to better balance inpatient bed, operating room, intensive care unit, and rehabilitation bed utilization. Depending on the locality of the incident, this may include moving patients to other communities or across state lines. Long-distance transport of acutely injured patients will likely require aeromedical evacuation capabilities.
Scenario 8: Active Shooter in a Public Commercial Facility

A lone gunman enters a public commercial facility and starts methodically moving through the building, shooting everyone he encounters. The gunman is armed with two handguns, a shotgun and a semi-automatic rifle. According to a witness who escaped, there are approximately 60 individuals in the facility. The gunmen used bike locks to immobilize exit doors.

EXAMPLE: You are the first arriving unit to a supermarket where terrified people are running from side doors and are seeking cover in the parking lot and surrounding area. You see four people with obvious gunshot wounds, one of whom is obviously deceased. You hear continued gunfire from your location...

Expected Injury Patterns

Multiple gunshot wounds from various caliber weapons, wide-spread casualties from gunshot wounds and care delay, and non-firearm-related injuries associated with attempts to escape (lacerations, fractures).

Protective Equipment and Barriers

First responders should consider wearing some level of ballistic protective equipment. Utilizing available barriers or structural walls can also provide protective cover and/or concealment for first responders within the shooter's field of fire. Preventive measures also include use of ballistic protective equipment, although soft body armor and ceramic plate body armor may not protect against fragmentation or blast overpressure effects from IEDs. Most protective equipment is focused on ballistic protection and may have unproven or limited value for mitigating fragmentation or blast overpressure, particularly for devices with larger net explosive weights, such as vehicle bombs. For protective equipment and barriers to be effective, they must be implemented proactively; they are of little use when the explosive event is random and enacted on an unsuspecting, unprotected group of individuals. Ballistic protective equipment will also give some level of protection should an IED attack be combined with an active shooter event. Experience indicates attackers may plan to detonate secondary or subsequent IEDs that target first responders or receiving hospitals.

Protective Equipment Commonly Worn

Most law enforcement officers responding to the incident will be wearing Type II or IIIA bullet resistant vests, designed to stop bullets from most handguns, and shotgun pellets. First responders other than law enforcement typically do not wear ballistic protective equipment. Civilians at public places such will not be wearing any form of ballistic protective equipment.

Protective Equipment Risk Mitigation Considerations

Responders should utilize the highest level of protective equipment available to them—ideally Type IV ballistic vests and helmets when responding to active shooter incidents. The NIJ body armor standard specifies ballistic threats that body armor must reliably protect against.$^{44,45}$

Response and Incident Management Considerations

Maximize interoperability through existing MOUs/MOAs/SOPs, as well as through frequent exercises, planning, and training. These efforts will ultimately aid in reducing time from injury to treatment. During response, and while on the scene of the incident, use unified command with a mutual understanding of each responder’s role (EMS, fire, and law enforcement). Strive to communicate on common frequencies and use standardized terminology. Ensure all responders (regardless of discipline—EMS, fire, law enforcement) are trained and
equipped to provide early, aggressive hemorrhage control; use protective equipment (which includes ballistic vests, helmets, and eyewear); and use integrated response and incident management.

**Medical Response System**

A system-wide medical response to this event should be well-coordinated, incorporating the lessons learned from the military (both system and individual patient care) and experiences from domestic and international active shooter incidents. Unlike the management of routine emergencies, the response to active shooter incidents will be extraordinary for the Nation’s trauma and EMS systems.

System-wide efforts should include activities ranging from self-care, buddy-care, and bystander care to proper and effectiveprehospital triaging and patient transport to get the right patients to the appropriate medical facilities in a swift and orderly manner. The efforts include prehospital emergency medical services, ground ambulances, rotary and fixed wing aircraft patient transport, designated trauma centers, hospitals, and rehabilitation facilities.

**Prehospital Emergency Medical Services Considerations**

Patient-Based Considerations: The last decade of war has seen significant advances in the ability of prehospital care to impact the mortality of combat wounds. The ability to stop life-threatening bleeding from extremity wounds has been demonstrated to reduce the number of treatable exsanguination deaths.

As active shooter incidents have become a common source of wounding in the United States, civilian adoption of some military clinical practices that are a significant departure from traditional prehospital care should be considered:

- Aggressive hemorrhage control—including use of tourniquets and, where appropriate, hemostatic agents
- Aggressive airway management, including “sit up and lean forward” airway positioning
- Training all first responders in self-care, buddy care, and bystander care

**System-Wide Implications**

Experience from terrorist attacks (active shooter incidents) occurring in other countries demonstrates common prehospital care system challenges, including multiple simultaneous attacks that cause an enormous number of casualties that exceed the available resources of EMS responders. The adoption of techniques that are suitable for use in self-care, buddy-care, bystander care, and care delivered by first responders is essential to extend the depth of responders available to provide immediate life-saving care.

EMS must rapidly and accurately triage casualties at the incident site and expeditiously transport those identified for “immediate care” into an appropriate hospital setting. It is imperative that pre-hospital triaging of wounded patients be as efficient and accurate as possible. Over-triage of patients over-taxes specialty centers that are designed to care for more significantly injured patients, while under-triaging of patients puts critically wounded patients into facilities that may not be able to provide the life-saving care needed. In addition to proper triage, care must be taken to regulate the transportation of casualties in order to direct victims to the hospital best suited for providing the necessary level of care for the type and severity of injuries they have sustained. Often the closest hospital is quickly overwhelmed by injured transported by ambulances, police cars, and privately owned vehicles, as well as the “walking wounded”. Because the influx of patients to the nearest hospital is dictated by human behavior outside control of the system, the EMS system must recognize this likelihood and plan for redistribution of injured patients such that the closest hospital can return to maximum functionality as soon as
possible. Incident managers should also anticipate the need to provide for safety and security during the arrival of injured persons’ family members, the “psychologically shocked,” and the media.

**From a law enforcement perspective, the following should be considered:**

- Law enforcement units should be trained in active shooter response, to include deployment of a contact team and a follow-on rescue team, depending on local resources and system configuration.
- All first responders (EMS, fire, and law enforcement) should be trained and practiced to work together in active shooter scenarios.
- Active shooter first response should focus on traditional Care Under Fire injuries with immediate “Extraction” from the site of the attack as a priority. All casualties should be directed or moved to a “Safe Point” (a secure location near the attack) by extraction teams where the casualties will be re-triaged and treated for transfer.
- Interoperability between EMS, fire and law enforcement personnel must be exercised, and an understanding of the responsibilities and actions of all parties is essential. This is achieved through mutual trainings, well-developed policies, and tabletop exercises.
- State and local officials should promote CERTs to deliver civilian training in conjunction with non-governmental organizations.

Experience from active shooter incidents and bombing attacks demonstrates common prehospital care system challenges, including multiple simultaneous attacks that cause an enormous number of casualties that exceed the available resources of EMS responders. The adoption of techniques that are suitable for use in self-care, buddy-care, bystander care, and care delivered by first responders is essential to extend the range of persons providing immediate life-saving care.

**Hospital-Based Trauma System Considerations**

Hospital challenges experienced in foreign and domestic active shooter incidents include:

- Difficulty in acquiring information from the scene
- Maldistribution of patients (e.g., two of 15 hospitals receiving approximately 60 percent of casualties from the scene in one large-scale event)
- A requirement for large numbers of hospital medical personnel to adequately treat the wounded
- The need to implement mass casualty contingency plans at every point of care (e.g., radiology postponing imaging an ankle sprain to rule out a fracture)
- Concern that the hospital may be a target
- Activation of Mass Transfusion Protocols, based on scope of injuries
- Activation of staff augmentation/call back plans, based on scope of injuries
- Initiation of patient movement/transfer plans, based on scope of injuries

Medical leaders of responses to attacks have noted that in many cases the majority of the injured and dead from large events present at the hospital closest to the scene. Patients able to leave the scene may forego EMS triage and present at hospitals before more severely injured patients arrive. The large influx of patients may exceed the hospital’s capability to provide care, resulting in a “functional collapse” from inability to meet the demand spike. When this occurs, there is a compelling need to redistribute patients.
Distribution of patients among hospitals, so that no one hospital exceeds its resources, is a key principle in addressing medical surge capacity following bombing attacks that result in a significant number of casualties.

To address the large number of patients arriving at local facilities, local hospitals will need the swift assistance of incoming health care providers to assist with re-triage of the arriving casualties and the provision of appropriate services to patients. This influx will include additional doctors, nurses, medical specialists, such as blood bank technologists and respiratory therapists, mental health providers, and chaplains. In addition, there will likely be the need for law enforcement personnel to maintain order and security. In the hours immediately after the blast, these additional personnel will likely come from surrounding communities and may include health care professionals from beyond the local area. While pre-event planning for cross-town (local) hospital credentialing and privileging of responding health care professionals can be arranged with relative ease, the issue of expeditious out-of-state credentialing and privileging of medical professionals responding to natural or man-made disasters can be more challenging.

Patient Movement/Transfer Considerations

As the patient load builds at local hospitals, some of the critically injured patients should be moved to other medical care facilities to optimize patient care. This will include movement to Level-1 trauma centers and other hospitals to better balance inpatient bed, operating room, intensive care unit, and rehabilitation bed utilization. Depending on the locality of the incident, this may include moving patients to other communities or across state lines. Long-distance transport of acutely injured patients will likely require aeromedical evacuation capabilities.

Distribution of patients among hospitals, so that no one hospital exceeds its resources, is a key principle in addressing medical surge capacity following bombing attacks that result in a significant number of casualties.

To address the large number of patients arriving at local facilities, local hospitals will need the swift assistance of incoming health care providers to assist with re-triage of the arriving casualties and the provision of appropriate services to patients. This influx will include additional doctors, nurses, medical specialists, such as blood bank technologists and respiratory therapists, mental health providers, and chaplains. In addition, there will likely be the need for law enforcement personnel to maintain order and security. In the hours immediately after the incident, these additional personnel will likely come from surrounding communities and may include health care professionals from beyond the local area. While pre-event planning for cross-town (local) hospital credentialing and privileging of responding health care professionals can be arranged with relative ease, the issue of expeditious out-of-state credentialing and privileging of medical professionals responding to natural or man-made disasters can be more challenging.
Scenario 9: Active Shooter in an Open, Outdoor, Unbounded Location

A single gunman enters a building and takes and elevated position, overlooking a crowded courtyard. The gunman is armed with handguns and a scoped hunting rifle. There are approximately 165 people currently in the courtyard as the gunman commences firing into the crowd.

EXAMPLE: You are the first arriving unit to a reported active shooter incident at an open courtyard at an academic institution. As you approach, there are many people running away from the facility. You notice several injured people with bystanders rendering care, as well as several victims who are obviously deceased. The crowd egressing is panic-stricken and seeking cover as you hear continued gunfire.

Expected Injury Patterns

Multiple gunshot wounds from mostly high-caliber weapons, wide-spread casualties from gunshot wounds and care delay, and non-firearm-related injuries associated with attempts to escape (lacerations, fractures).

Protective Equipment and Barriers

First responders should consider wearing protective equipment to mitigate ballistic, respiratory and mucous membrane, and dermal hazards. Utilizing available barriers or structural walls can also provide protective cover and/or concealment for first responders within the shooter’s field of fire. Ballistic protective equipment includes soft body armor and ceramic plate body armor, and may also provide some level of protection should the active shooter event be combined with a secondary or subsequent IED attack. Experience indicates attackers may plan to detonate secondary or subsequent IEDs that target first responders or receiving hospitals.

Considerations for first responder ballistic protective equipment should include what type of equipment is best suited for EMS responders and when it should be worn (every shift, during times of high risk [e.g., on duty at a sports stadium], or just in response to IED events).

Protective Equipment Commonly Worn

Most law enforcement officers responding to the incident will be wearing Type II or IIIA bullet resistant vests, designed to stop bullets from most handguns, and shotgun pellets. First responders other than law enforcement typically do not wear ballistic protective equipment. Civilians at public places such will not be wearing any form of ballistic protective equipment.

Protective Equipment Risk Mitigation Considerations

Responders should utilize the highest level of protective equipment available to them—ideally Type IV ballistic vests and helmets. The NIJ body armor standard specifies ballistic threats that body armor must reliably protect against.

Response and Incident Management Considerations

Maximize interoperability to the extent possible (through prior MOUs/MOAs/SOPs) to reduce time from injury to treatment. Strive to communicate on common frequencies and use standardized terminology. Ensure all responders (regardless of discipline—EMS, fire, law enforcement) are trained and equipped to provide early, aggressive hemorrhage control; use body armor; use a more integrated response and incident management.
Flexibility is key in how effectively aid is delivered to the injured—a single solution may not work best in all scenarios (e.g., law enforcement brings the injured out to safety, law enforcement escorts EMS/fire into transitional zones, law enforcement provides care).

**Medical Response System**

System-wide efforts should include activities ranging from self-care, buddy-care, and bystander care to regional and multi-state trauma responses. The efforts include prehospital emergency medical services, ground ambulances, rotary and fixed wing aircraft patient transport, designated trauma centers, hospitals, and rehabilitation facilities. Unlike the management of routine emergencies, the response to active shooter incidents will be extraordinary for the Nation’s trauma and EMS systems.

**Prehospital Emergency Medical Services Considerations**

Patient-Based Considerations: The last decade of war has seen significant advances in the ability of prehospital care to impact the mortality of combat wounds. The ability to stop life-threatening bleeding from extremity wounds has been demonstrated to reduce the number of treatable exsanguination deaths. Civilian adoption of some military clinical practices that are a significant departure from traditional prehospital care is appropriate:

- Aggressive hemorrhage control—including use of tourniquets and, where appropriate, hemostatic agents
- Aggressive airway management, including "sit up and lean forward" airway positioning
- Training all first responders in self-care, buddy care, and bystander care

**System-Wide Implications**

Experience from terrorist attacks (active shooter incidents) occurring in other countries demonstrates common prehospital care system challenges, including multiple simultaneous attacks that cause an enormous number of casualties that exceed the available resources of EMS responders. The adoption of techniques that are suitable for use in self-care, buddy-care, bystander care, and care delivered by first responders is essential to extend the depth of responders available to provide immediate life-saving care.

EMS must rapidly and accurately triage casualties at the incident site and expeditiously transport those identified for “immediate care” into an appropriate hospital setting. It is imperative that pre-hospital triaging of wounded patients be as efficient and accurate as possible. Over-triage of patients over-taxes specialty centers that are designed to care for more significantly injured patients, while under-triaging of patients puts critically wounded patients into facilities that may not be able to provide the life-saving care needed. In addition to proper triage, care must be taken to regulate the transportation of casualties in order to direct victims to the hospital best suited for providing the necessary level of care for the type and severity of injuries they have sustained. Often the closest hospital is quickly overwhelmed by injured transported by ambulances, police cars, and privately owned vehicles, as well as the “walking wounded”. Because the influx of patients to the nearest hospital is dictated by human behavior outside control of the system, the EMS system must recognize this likelihood and plan for redistribution of injured patients such that the closest hospital can return to maximum functionality as soon as possible. Incident managers should also anticipate the need to provide for safety and security with the arrival of injured persons’ family members, the “psychologically shocked,” and the media.
From a law enforcement perspective, the following should be considered:

- Law enforcement units should be trained in active shooter response, to include deployment of a contact team and a follow-on rescue team, depending on local resources and system configuration.
- All first responders (EMS, fire, and law enforcement) should be trained and practiced to work together in active shooter scenarios.
- Active shooter first response should focus on traditional Care Under Fire injuries with immediate “Extraction” from the site of the attack as a priority. All casualties should be directed or moved to a “Safe Point” (a secure location near the attack) by extraction teams where the casualties will be re-triaged and treated for transfer.
- Interoperability between EMS, fire, and law enforcement personnel must be exercised, and an understanding of the responsibilities and actions of all parties is essential. This is achieved through mutual trainings, well-developed policies, and tabletop exercises.

State and local officials should promote CERTs to deliver civilian training in conjunction with non-governmental organizations.

Hospital-Based Trauma System Considerations

Hospital challenges experienced in foreign and domestic active shooter incidents include:

- Difficulty in acquiring information from the scene
- Maldistribution of patients (e.g., two of 15 hospitals receiving approximately 60 percent of casualties from the scene in one large-scale event)
- A requirement for large numbers of hospital medical personnel to adequately treat the wounded
- The need to implement mass casualty contingency plans at every point of care (e.g., radiology postponing imaging an ankle sprain to rule out a fracture)
- Concern that the hospital may be a target
- Activation of Mass Transfusion Protocols, based on scope of injuries
- Activation of staff augmentation/call back plans, based on scope of injuries
- Initiation of patient movement/transfer plans, based on scope of injuries

Medical leaders of responses to attacks have noted that in many cases the majority of the injured and dead from large events present at the hospital closest to the scene. Patients able to leave the scene may forego EMS triage and present at hospitals before more severely injured patients arrive. The large influx of patients may exceed the hospital’s capability to provide care, resulting in a “functional collapse” from inability to meet the demand spike. When this occurs, there is a compelling need to redistribute patients.

Distribution of patients among hospitals, so that no one hospital exceeds its resources, is a key principle in addressing medical surge capacity following bombing attacks that result in a significant number of casualties.

To address the large number of patients arriving at local facilities, local hospitals will need the swift assistance of incoming health care providers to assist with re-triage of the arriving casualties and the provision of appropriate services to patients. This influx will include additional doctors, nurses, medical specialists, such as blood bank technologists and respiratory therapists, mental health providers, and chaplains. In addition, there will likely be the need for law enforcement personnel to maintain order and security. In the hours immediately
after the blast, these additional personnel will likely come from surrounding communities or from outside the local area. While pre-event planning for cross-town (local) hospital credentialing and privileging of responding health care professionals can be arranged with relative ease, the issue of expeditious out-of-state credentialing and privileging of medical professionals responding to natural or man-made disasters can be more challenging.

**Patient Movement/Transfer Considerations**

As the patient load builds at local hospitals, some of the critically injured patients should be moved to other medical care facilities to optimize patient care. This will include movement to Level-1 trauma centers and other hospitals to better balance inpatient bed, operating room, intensive care unit, and rehabilitation bed utilization. Depending on the locality of the incident, this may include moving patients to other communities or across state lines. Long-distance transport of acutely injured patients will likely require aeromedical evacuation capabilities.
Scenario 10: Active Shooter in a Public Sports Complex

Three gunmen enter a sporting complex that is filled with spectators. One gunman is located at an exit gate and the other two are positioned in the stadium and they all commence firing randomly at spectators. They are armed with handguns, shotguns and semi-automatic rifles. The facility currently has approximately 24,000 people in attendance.

EXAMPLE: You are the first arriving unit to a reported active shooter incident at a sport complex. As you approach, there are many people running away from the facility. Several security personnel and law enforcement officers working the event are seen on the outside perimeter of the complex...

Expected Injury Patterns

Multiple victims with gunshot wounds from various caliber weapons, wide-spread casualties from gunshot wounds and care delay, and non-firearm-related injuries associated with attempts to escape (lacerations, fractures).

Protective Equipment and Barriers

First responders should consider wearing protective equipment to mitigate ballistic, respiratory and mucous membrane, and dermal hazards. Utilizing available barriers or structural walls can also provide protective cover and/or concealment for first responders within the shooter’s field of fire. Ballistic protective equipment includes soft body armor and ceramic plate body armor, and may also provide some level of protection should the active shooter event be combined with a secondary or subsequent IED attack. Experience indicates attackers may plan to detonate secondary or subsequent IEDs that target first responders or receiving hospitals.

Considerations for first responder ballistic protective equipment should include what type of equipment is best suited for EMS responders and when it should be worn (every shift, during times of high risk [e.g., on duty at a sports stadium], or just in response to IED events).

Protective Equipment Commonly Worn

Most law enforcement officers responding to the incident will be wearing Type II or IIIA bullet resistant vests, designed to stop bullets from most handguns, and shotgun pellets. First responders other than law enforcement typically do not wear ballistic protective equipment. Civilians at public places such will not be wearing any form of ballistic protective equipment.

Protective Equipment Risk Mitigation Considerations

Responders should utilize the highest level of protective equipment available to them—ideally Type IV ballistic vests and helmets. The NIJ body armor standard specifies ballistic threats that body armor must reliably protect against.44 45

Response and Incident Management Considerations

Maximize interoperability to the extent possible (through prior MOUs/MOAs/SOPs) to reduce time from injury to treatment. Strive to communicate on common frequencies and use standardized terminology. Ensure all responders (regardless of discipline—EMS, fire, law enforcement) are trained and equipped to provide early, aggressive hemorrhage control; use body armor; and use more integrated response and incident management. Flexibility is key in how effectively aid is delivered to the injured—a single solution may not work best in
all scenarios (i.e., law enforcement brings the injured out to safety, law enforcement escorts EMS/fire into transitional zones, law enforcement provides care).

Medical Response System

System-wide efforts should include activities ranging from self-care, buddy-care, and bystander care to regional and multi-state trauma responses. The efforts include prehospital emergency medical services, ground ambulances, rotary and fixed wing aircraft patient transport, designated trauma centers, hospitals, and rehabilitation facilities. Unlike the management of routine emergencies, the response to active shooter incidents will be extraordinary for the Nation’s trauma and EMS systems.

Prehospital Emergency Medical Services Considerations

Patient-Based Considerations: The last decade of war has seen significant advances in the ability of prehospital care to impact the mortality of combat wounds. The ability to stop life-threatening bleeding from extremity wounds has been demonstrated to reduce the number of treatable exsanguination deaths. Civilian adoption of some military clinical practices that are a significant departure from traditional prehospital care is appropriate:

- Aggressive hemorrhage control—including use of tourniquets and, where appropriate, hemostatic agents
- Aggressive airway management, including “sit up and lean forward” airway positioning
- Training all first responders in self-care, buddy care, and bystander care

System-Wide Implications

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<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>ALS</td>
<td>Advanced Life Support</td>
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<td>AP</td>
<td>Armor Piercing</td>
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<tr>
<td>ATEC</td>
<td>U.S. Army Test and Evaluation Command</td>
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<tr>
<td>C-TECC</td>
<td>Committee for Tactical Emergency Casualty Care</td>
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<td>CDC</td>
<td>Centers for Disease Control and Prevention</td>
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<tr>
<td>CERT</td>
<td>Community Emergency Response Team</td>
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<tr>
<td>DCR</td>
<td>Damage Control Resuscitation</td>
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<td>DoD</td>
<td>Department of Defense</td>
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<tr>
<td>EMS</td>
<td>Emergency Medical Services</td>
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<td>EOD</td>
<td>Explosive Ordnance Disposal</td>
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<td>FEMA</td>
<td>Federal Emergency Management Agency</td>
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<td>FMJ</td>
<td>Full Metal Jacket</td>
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<td>IED</td>
<td>Improvised Explosive Device</td>
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<td>LE</td>
<td>Law Enforcement</td>
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<td>MRC</td>
<td>Medical Reserve Corps</td>
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<tr>
<td>MOA</td>
<td>Memorandum of Agreement</td>
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<td>MOU</td>
<td>Memorandum of Understanding</td>
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<td>NIJ</td>
<td>National Institute of Justice</td>
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<td>NIMS</td>
<td>National Incident Management System</td>
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<td>NRF</td>
<td>National Response Framework</td>
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<td>NTOA</td>
<td>National Tactical Officers Association</td>
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<td>PSAP</td>
<td>Public Safety Answering/Access Points (9-1-1 dispatch centers)</td>
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<td>RTF</td>
<td>Rescue Task Force</td>
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<td>SCBA</td>
<td>Self-Contained Breathing Apparatus</td>
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<tr>
<td>SOP</td>
<td>Standard Operating Procedure</td>
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<tr>
<td>TBI</td>
<td>Traumatic Brain Injury</td>
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<tr>
<td>TCCC</td>
<td>Tactical Combat Casualty Care</td>
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<tr>
<td>TECC</td>
<td>Tactical Emergency Casualty Care</td>
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<tr>
<td>TIIDE</td>
<td>Terrorism Injuries: Information, Dissemination, and Exchange Project</td>
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<td>TTP</td>
<td>Tactics, Techniques, and Procedures</td>
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<tr>
<td>USFA</td>
<td>U.S. Fire Administration</td>
</tr>
<tr>
<td>VBID</td>
<td>Vehicle-Borne Improvised Explosive Device</td>
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</tbody>
</table>
37. Frykberg ER. Medical management of disasters and mass casualties from terrorist bombings: how can we cope? *J Trauma* 2002; 53:201-212.
Clinical and Practice Management Resources

- “EMS and Disaster Preparedness,” available at http://www.acep.org/disaster/

Guidance, Planning and Data Collection Tools

- “Medical Record Abstraction Form for Domestic Bombing Events,” available at http://www.acep.org/uploadedFiles/ACEP/Practice_Resources/disaster_and_EMS/Medical%20Record%20Abstraction%20Form.pdf
- “Hospital Disaster Preparedness Self-Assessment Tool,” available at http://www.acep.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=91205


Proposing a standard for active shootings seems noteworthy, but is this truly within the scope of NFPA? The Department of Homeland Security has already developed valuable information on this topic. Having training available on the topic for the general public and specifically for first responders is prudent, but I question the need for a standard under the auspices of NFPA.

Thanks for asking for input.

Bud Bucci

Emergency Management Readiness Assurance

**Mission Support Alliance, LLC**

Post Office Box 650
MSIN A3-05
Richland, Washington 99352
PH: (509) 376-1735
Fax: (509) 376-2071
"NFPA is currently soliciting comments from interested organizations and individuals to gauge whether support exists for standards development addressing preparedness and response to active shooter incidents. NFPA specifically seeks input on the following:

- Are you, or your organization, in favor of the development of an NFPA Standard pertaining to active shooter incident response and preparedness?
- Please state your reason(s) for supporting or opposing such standards development.
- Are you or your organization interested in applying for membership on the Technical Committee if established by the Standards Council? If yes, please submit an application* in addition to your comments in support of the project."

I see too much room to make this an indictment in favor of more gun control. Once politicized, commonsense is replaced with the anti-2nd Amendment crowd’s ridiculous views usually resulting in more idiotic worthless gun legislation, especially here in CA. Whereas, I believe that safety training for first responders is a good thing, shooting scenarios are very difficult to replicate because each one is different. Large government bureaucracies have a tendency to outgrow their original intent, thus doing more harm than good.

Retired LAFD,
Robert Duncan
To Whom It May Concern,

Please do not take these comments the wrong way. As a past certified 4-H shooting instructor I have the utmost respect for firearms of all kinds, their proper and legal use and for those men and women who may be called upon to use them every day in their particular line of duty. As a former instructor safety was taught first and foremost before the actual use and firing of any firearm. However, my interpretation of the question is-----Should NFPA become involved in the law enforcement business? My answer is an emphatic--NO!!!!!!! I believe the current training available to ALL law enforcement personnel is more than adequate. This is not to say that all who should, take advantage of the available training. We, as a nation, currently have way too many "overlapping authorities" along with all their individual rules and regulations. If we, as a nation, would "only enforce" the laws, rules and regulations currently on the books we might be surprised as to the difference it would make in our nation and our neighborhoods. I can appreciate the concern(s) of the individual(s) and the NFPA, but if "we" cannot make what we now have on the books work-----why, oh why, do we wish to keep adding more twists and turns to an already dysfunctional system. 

Thank you allowing me to reply. To all, have a nice day.

Respectfully,

Mike Yates
Facilities Electrical Technician
Hitachi Automotive Systems Americas, Inc. (HK)
Phone: 859.734.6545
Fax: 859.734.6533
mike.yates@hitachi-automotive.us
NFPA needs to get its nose out of things that are none of its business.

Lou Bruneau

Sent from Mail for Windows 10
As described, I am opposed. This is a complex and necessarily flexible set of processes and procedures and seems outside the scope of the NFPA. I would be concerned that the standard would be so vague as to be misleading or limit choices if too narrow (like in the case of PPE). There are already numerous resources available to address multidisciplinary response protocols that many local jurisdictions are already implementing and training too. I am concerned that this would set those efforts back. It also seems there should be a better place for this than the NFPA. If the goal is to remove barriers for Fire/EMS to more readily participate in LE training and drills (making them appropriate for multiple responder segments) for Active Shooter response and scene management, I would be more supportive.

What I would really like to see in the NFPA is requirements for large capacity / high occupancy spaces (my particular interest is in classrooms and campus venues) to be properly designed and equipped for active shooter response while not creating an evacuation hazard. That seems like a more appropriate inclusion in NFPA, is proactive, and will likely save more lives.

Brian Gard, 865-974-3061
August 15, 2016

Ms. Dawn Bellis  
Standards Secretary  
National Fire Protection Association  
1 Batterymarch Park  
Quincy, MA 02269

Ms. Bellis:

On June 12, 2016 Orlando, Florida experienced the worst mass shooting in the history of the United States when 49 innocent victims were killed and 53 others were injured in an act of terrorism. Since 2000 over 160 active shooter events have occurred killing 468 people and injuring over 550. In each incident Fire and EMS response played a critical role and as an industry we have sought to learn how to better prepare and respond in order to afford lifesaving care while providing for the safety of our firefighters.

As these events have proliferated many organizations have contributed to the existing body of knowledge in fire and emergency services responses to active shooter incidents. These include position papers from the International Association of Fire Chiefs, International Association of Firefighters, and the NFPA’s Metropolitan Fire Chief’s Association. Additionally, FEMA’s U.S. Fire Administration published the Fire/Emergency Medical Services Department Operational Considerations and Guide for Active Shooter and Mass Casualty Incidents in 2013.

While the aforementioned body of knowledge continues to grow with each unfortunate tragedy, there is no consensus standard that provides guidance to the fire and emergencies industry as a whole.

Therefore, the Florida Fire Chiefs’ Association supports and encourages the development of an NFPA Standard that would serve to provide a consistent set of guidelines in the fire and emergency services response to active shooter incidents. Furthermore, we believe that the NFPA’s process of including various stakeholder groups and industry experts in the development and review process of said standards would allow for a unified approach to formulate and maintain a standard reflective of the best practices available to our communities, industry, and response personnel, including our firefighters.

As Always, thank you for supporting the Florida Fire Chiefs’ Association and the continued devotion to the fire service and it’s needs.

Sincerely,

Daniel Azzariti, Fire Chief – Plant City Fire Rescue  
President, Florida Fire Chiefs’ Association  
880 Airport Road, Suite 1100 | Ormond Beach, FL 32174
Re: Proposed NFPA Standard on Active Shooter Response

On behalf of the Florida Fire Chiefs Association and its over 2200 members, I am writing to express support of the proposed NFPA standard on active shooter response.

As an organization that represents the chief fire officers of the third largest state in the country, we know firsthand the importance of creating unified standards as they relate to this very important topic. On June 12th, 2016 the tragic incident that occurred at the Pulse Nightclub in Orlando Florida forever changed our world. On that night, 49 people were killed and another 53 were wounded. During after action briefings, it became clear that despite the great work of the responders involved, we as a State needed to push for a standard. For many of those injured that horrific night, the proximity of a nearby fire station, and a world class hospital just down the street are the reason that more did not perish. A strong mutual aid system with well-trained Firefighter EMTs and Paramedics also contributed to the reduction of life loss.

After we read the reports, many of us wondered how our own communities would have been able to handle such an incident. We are all very well versed in fire suppression and EMS activities, but as an industry and profession, the fire service is not adequately prepared for an active shooter response.

It is for that reason, we request that NFPA move forward with the proposed standard on active shooter response.

Dan Azzariti
Fire Chief
Plant City Fire Rescue
604 East Alexander Street
Plant City, Fl. 33563
Office 813-757-9131
Fax 813-757-9133

Please note: Florida has a very broad public records law. Most written communications to or from government officials regarding government business are public records available to the public and media upon request. Your e-mail communications may be subject to public disclosure. (Chapter 119, Florida Statutes) We welcome your comments about our services. Please let us know at Plant City, Fl - Official Website www.plantcitygov.com
Hello

As the Director of Operations for a large performing arts centre we would very much be interested in the development of first shooter standards.

Wes Jenkins  
Director of Facility Operations  
ARTS Commons  
205 8th Av S E  
Calgary, Alberta, Canada  
403 294 7469
I'm curious how this fits into NFPA's scope versus ASIS or FEMA? It seems a bit specific given the wide range of venues and situations that are possible shooting sites.

Irwin Moyna
Loss Control Director
Insurance & Risk Management Services
tel 734-343-0897 cell 248-921-4119
moynai@trinity-health.org
Trinity Health | 20555 Victor Parkway | Livonia, MI 48152

trinity-health.org

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I support researching and developing a standard addressing active shooter scenarios and incidents. I further express interest in participating in process.

Thank you,

Nick Brandt
Sent from my iPhone
Standards Council,

I strongly believe the new NFPA standard should address active shooter/assailant exercises along with training of responders and the whole community.

I currently server on the NFPA 1600 Technical Committee and this will follow a cohesive and comprehensive approach to successful preparedness and response.

I will be submitting an application to serve on the Technical Committee.

Lee

Lee Newsome, CEM, MEP, CHS-V
CEO/Training and Exercise Manager
EREC, Inc.
233 NE 58th Avenue, Suite 101
Ocala, Florida 34470
(352) 236-5348 Office
(352) 572-2656 Cell
(352) 236-5428 Fax
lee.newsome@att.net
www.erecinc.com
Are you, or your organization, in favor of the development of an NFPA Standard pertaining to active shooter incident response and preparedness? YES

• Please state your reason(s) for supporting or opposing such standards development.

Standards provide management with the tools and justification for budgetary requests, including grants. Additionally, standards provide a basic framework upon which local needs and considerations can be built. No sense re-inventing the wheel if a team of experts provides a legitimate framework upon which to build our own Tactical Operations Guidelines. Standards allows others to respond into a scene and be reasonably certain that operations are in similar protocol. As a general rule, fire chiefs are novices when it comes to law enforcement tactics and other considerations. Not all of us has a cooperative law enforcement department to guide us (fortunately I am blessed with a great one).

Protection levels are also a consideration, i.e. IIIA vests, plate carriers, and other means of protection. Vests and ballistic helmets are an entirely different world from what fire chiefs typically need to know. If a standard is published, we have a one-stop shop for reference.

• Are you or your organization interested in applying for membership on the Technical Committee if established by the Standards Council? If yes, please submit an application* in addition to your comments in support of the project.

Yes, we are. I forwarded this message to one of our battalion chief that is actively training our folks in Swift Assisted Victim Extraction. Hopefully he will have time to give to this.

Dave Dyal
Fire Chief
Stuart Fire Rescue
800 S.E. Martin Luther King Jr. Blvd
Stuart, FL 34994
Office: 772-600-1287
Mobile: 561-662-9714
email: ddyal@ci.stuart.fl.us

*Under Florida Law, email addresses are public records. If you do not want your email address released in response to a public records request, do not send electronic email to this entity.
I am in support of the establishment of a standard that addresses the training, equipment, and most especially the interagency coordination necessary to effectively respond to and manage an active shooter incident. Currently there are extremes in the varying opinions on how this issue should be managed and it is critical that the fire service take a position through the established of a standard that will provide the framework for emergency responders to follow.

I have submitted my application to be considered for the Technical Committee.

Sincerely,

Dave Downey, MPA, CFO
Fire Chief
Miami - Dade Fire Rescue
(305) 984-0124
As a retired member of the fire service, I believe in standards for this type of response. No matter what, Fire Fighters will be involved. We have all responded to police actions and usually stage out until requested. Sitting back is just not in our DNA. In reality we want to help, especially our brothers in blue. To have national standards will enable all fire departments to be trained to the same level and allow for a seamless operation when crossing those imaginary boundaries. As always, we want to do it 100% right:

Sent from my iPhone
To Whom it May Concern,

I am writing to express my opinion in regards to national standards for response to active shooter incidents. Before I give my opinion, I want to make it clear that I am writing as an individual, not as a representative of my organization. I am an engineer/paramedic (soon to be a captain) with the San Diego Fire-Rescue Department, and I have been a tactical paramedic for four years. I have completed the San Diego Police Department’s SWAT academy, as well as a 40 hour Peace Officer Standards and Training (POST) and California EMS Authority 40 hour course in tactical medicine. I do believe there should be a national standard on fire department response to active shooter incidents. There may be many departments throughout the country that do not have the time or resources to dedicate to developing policies for this type of response, and a national standard or guideline would allow those departments to develop policies based on that standard without having to devote countless hours to research. Other departments may have done some of the groundwork, but have not developed PPE recommendations or allocated funding for active shooter kits. A standard set by NFPA would give those departments some guidelines for what equipment to purchase such as body armor or trauma kits. It might also provide some impetus to purchase body armor for those departments that do not intend to buy any.

There are some negative aspects to a national standard for an active shooter incident. Many departments serve rural areas, or otherwise have staffing challenges, and their staffing simply may not allow them to meet whatever standard may be set. A national standard would potentially expose those departments to liability if they did not respond to these incidents in the "right" way. In addition, the actions taken by fire and EMS personnel is going to be based heavily on the response by law enforcement. Setting a standard for fire departments that is inconsistent with the capabilities of the respective local law enforcement agencies would be setting our brothers and sisters up for failure. While I am in favor of standards, these factors must be taken into consideration when deciding what those standards will be, and it may be appropriate to call them "Standard Guidelines," with an emphasis on "guidelines."

Thank you for allowing me and other professionals throughout the country the opportunity to comment on this unfortunate topic. I hope you found my thoughts useful, and I respectfully ask that you consider my application for membership on the Technical Committee should one be established.

Sincerely,

Aaron Bothwell
Engineer/Paramedic
City of San Diego
Fire-Rescue Department

(T) 858-636-4881
Greetings –

I fully support the standardization for Active Shooter incidents. Our agency is one of several in Riverside County California who has actively been preparing our department for this terrible new threat. Having a clear and identified set of standards and guidelines to help us form our departments program would greatly improve our program delivery. We would also greatly benefit as a fire service in general if agencies throughout the U.S were using the same standard language, equipment and training.

Respectfully,

Silvio Lanzas
DIVISION CHIEF
CAL FIRE - RIVERSIDE
NORTHWEST DIVISION
951-270-5615 Office
951-236-4500 Cell

~Proudly serving the Cities of Norco, Eastvale, Jurupa Valley, Rubidoux Community Services District, the Temescal Valley and Highgrove~
To whom it may concern at the Standards Committee, my response to the questions posed by Metro Chief Drozd are listed below:

* Are you, or your organization in favor of development of the standard

The Broward County Sheriffs Office Department of Fire Rescue is in favor and full support of the development of a standard

* Reasons for support or opposition

The probability of active shooter scenarios has grown in the last decade for Americas firefighters. What was once a limited threat to the fire service occasionally limited to civil unrest events or other issue specific events has now become a real and ever present issue. FF’s must be able to be properly equipped and capable of operation in warm zone operations with LE elements. It is a fact of life and one that cannot be ignored. To not prepare and train is tantamount to placing our members at higher risk because in the final analysis it is the firefighters inclination to engage and participate in active threat events to our community.

* Individuals or parties interested in participating on the Technical Committee if established

* 

As Fire Chief of BSOFR and the founding UASI administrator for one of South FL's original UASI cities I am willing to participate in the technical committee or assign SME’s from my agency to support positions as well. BSOFR has Tactical Medic operations and has trained all personnel in Rescue Task Force operations in conjunction with our LE agency.

Sincerely,

JRF

Joseph R. Fernandez, BPS, CFO
Fire Chief
Broward Sheriff Fire Rescue & Emergency Services Dept.
2601 West Broward Blvd<tel:954.321.4592><x-apple-data-detectors://1/0>
Fort Lauderdale, Florida 33312<tel:954.673.3901><x-apple-data-detectors://1/0>
Tel: 954.321.4592<tel:954.321.4592><x-apple-data-detectors://1/0>
Cell: 954.673.3901<tel:954.673.3901><x-apple-data-detectors://1/0>
Fax: 954.831.8257<tel:954.831.8257><x-apple-data-detectors://1/0>
The largest dual accredited public safety agency in America
[Description: C:\Documents and Settings\bs13111\Local Settings\Temporary Internet Files\Content.Word\CAAS logo.jpg][Description: C:\Documents and Settings\bs13111\Local Settings\Temporary Internet Files\Content.Word\CPSE logo.jpg]

Please note that Florida has a broad public records law, and that all correspondence sent to me via email may be subject to disclosure.
Ms. Maynard,

The Kansas City bi-state metro area has a general policy to address multi-jurisdictional response to these incidents. Additionally, we (KCFD) in conjunction with Kansas City Missouri Police Department have a specific response and patient retrieval procedure. We are however still struggling with the PPE issue due to costs. We are beginning our second round of joint training next week.

If NFPA is interested, I can request SMEs on the law enforcement side to participate. Please let me know.

Sincerely,

Paul Berardi

---

Thank you for your comment; it will be forwarded to the NFPA Standards Council for review and consideration.

You will be notified of the Council’s action when it becomes available.

Sincerely,

Mary J. Maynard Davy
Codes and Standards Administration

---

I support a standard for active shooter only if it is mutually developed with full participation by law enforcement.

Sincerely,
Are you, or your organization, in favor of the development of an NFPA Standard pertaining to active shooter incident response and preparedness?

We are actively engaged with local law enforcement and staff of potential targets (i.e. we are home of Facebook). To that end we would be in support of a NFPA standard to review as a source document for development of our operational policies.

• Please state your reason(s) for supporting or opposing such standards development.

The Fire Service has been well served by the consensus and research process utilized by the NFPA to develop standards. For that reason, we would be in strong support for the NFPA to pursue development of a Active Shooter standard.

• Are you or your organization interested in applying for membership on the Technical Committee if established by the Standards Council? If yes, please submit an application* in addition to your comments in support of the project.

I will have to take this issue to our general staff meetings and solicit interest. Since we currently have active engagement with local authorities and target facilities, I believe there will be interest.

Manuel Navarro
Division Chief Operations
Menlo Park Fire Protection District
As a member of the Central Florida Safety Collaborative and on the Seminole County Training group, I feel that this is something that would be extremely beneficial to the fire service as a whole. I have been involved in numerous training events and drills in the Central Florida region and feel that by having a commingling of different approaches, it has hampered the events outcomes.

I would be happy to help with the establishment of a standard on this topic

Nichlaus Dorey

Division Chief Training & EMS, City of Oviedo Fire-Rescue
Chairman, Oviedo Fire Pension Board
ndorey@cityofoviedo.net
Office: (407) 971-5614
Cell: (407) 342-1623

- "Best Places to Raise Your Kids" - Business Week Magazine, 2013
- "Top 25 Suburbs to Live in Florida" - Coldwell Banker, 2012
- "Top 10 Best Towns in America for Families" - Family Circle Magazine, 2011
- "Top 100 City" - Relocate America, 2009, 2010, 2011
- "Top 100 City" - CNN / Money Magazine, 2009
- "101 Best of Orlando" - Orlando Sentinel, 2008
- Oviedo - Winter Springs Best Places to Live in Central Florida

PLEASE NOTE: Florida has a very broad public records law. Most written communication to or from city officials regarding city business are public records available to the public and media upon request. Your e-mail communications may be subject to public disclosure

www.cityofoviedo.net
Yes, St Johns County Fire Rescue is in favor of an NFPA Standard to active shooter incident response and preparedness. As a public service agency responsible for the welfare of both the public and our responders, a National Standard would provide the gauge to assure we are adequately prepared to respond and safely – as can be expected – participate in the mitigation of these events. In addition, a National Standard would assist us in achieving the required funding to outfit and train our emergency responders.

Respectfully,

Joel Sneed
St Johns County Fire Rescue
Deputy Chief
3657 Gaines Road
Saint Augustine, Fl. 32084
Office (904) 209 1770
Cell (904) 669 4364

PLEASE NOTE: Florida has a very broad public records law. Most written communications to or from the St. Johns County Board of Commissioners and employees regarding public business are public records available to the public and media through a request. Your e-mail communications may be subject to public disclosure.
My organization is in support of this initiative.

We support this initiative because we have seen jurisdictions preparing in a wide variety of ways. Since my organization has the potential to respond to 11 different law enforcement jurisdictions, it is important that we respond safely, act appropriately, and achieve the best possible outcome. This can only be accomplished if we train and respond in a manner that meets everyone’s expectations. A common standard will help us to accomplish those goals.

If established, the Austin Fire Department would be interested in participating on the Technical Committee.

Thank you,

Doug Fowler, MPA, CFO, EFO
Assistant Chief, Austin Fire Department
4201 Ed Bluestein Blvd, Austin, TX 78721
Cell - (512) 789-8679
Office - (512) 974-0136
fax - (512) 974-0141

A working smoke alarm is the cheapest life insurance money can buy. If you or someone you know needs one, call us at (512) 974-0299.
Yes, I am in favor of developing the standard.

Reason: Our country is ever-changing. One of the new realities is the constant and ever-presence of mass shootings and terrorism. The fire service has always been the leader in providing life-saving services to the public we serve. Just as the fire service has added other specialized services such as EMS, Haz-Mat, and USAR, it is time for us to add preparedness and response to active shooters and terrorism to our repertoire of services we provide to save lives. No one knows more about this need than the first responders here in Orlando, Florida. They responded to the worst mass shooting in our country’s history. Firefighters must be trained to meet the extraordinary demands of such a mass casualty situation. FF’s will need to attend the injured victims and their lives might be in jeopardy with the presence of an active shooter still on the scene. Our FF’s must be properly trained and equipped to meet this challenge. We must all be trained by one standard in order to support each other across jurisdictional lines.

Regards

Stephen Chancey
Managing Director
Valencia College
School of Public Safety
Fire Rescue
8600 Valencia College Lane
Orlando, Florida 32825
Mail Code: 3-9
schancey@valenciacollege.edu
407 582-8075
Cell: 407 286-8406

School of Public Safety
Maynard, Mary

From: TULEY, MICHAEL E GS-11 USAF AFMC 72 ABW/CEF <michael.tuley@us.af.mil>
Sent: Tuesday, November 15, 2016 12:51 PM
To: Maynard, Mary
Subject: RE: Technical Committee question

Good morning,

I'm completely in support of this new standard and really hope to have the opportunity to serve on this committee.

Thanks for the follow up.

Very Respectfully,

//SIGNED//
Michael E. Tuley
Assistant Chief of Training
Tinker Fire and Emergency Services
72 ABW/CEF
3680 "A" Avenue
Tinker A.F.B., Ok 73145
(405) 734-3970
Cell (580) 399-3676

"You can provide a fish and feed someone for the day or teach them how to fish and feed them forever".

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-----Original Message-----
From: Maynard, Mary [mailto:mmaynard@NFPA.org]
Sent: Tuesday, November 15, 2016 11:08 AM
To: TULEY, MICHAEL E GS-11 USAF AFMC 72 ABW/CEF <michael.tuley@us.af.mil>
Subject: RE: Technical Committee question

Hello Mr. Tuley,

For clarification purposes, are you in support of a new standard on this subject?

We are accepting applications on the proposed standard by going to NFPA News at the following link.
http://www.nfpa.org/activeshooterresponse

Thank you.

Sincerely,
Good morning,

I'm interested in serving on the new Preparedness and Response to Active Shooter Scenarios and Incidents Technical Committee.

Please let me know what is required for this application.

Thank you!

Very Respectfully,

//SIGNED//
Michael E. Tuley
Assistant Chief of Training
Tinker Fire and Emergency Services
72 ABW/CEF
3680 "A" Avenue
Tinker A.F.B., Ok 73145
(405) 734-3970
Cell (580) 399-3676

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I do support the development

David E. Motes
Deputy Chief of Operations

2519 State Road 16 West, Green Cove Springs, FL 32043
Mail: P.O. Box 1366 Green Cove Springs, FL 32043
Office: (904)284-7703
1(877)CLAY-EOC
Cell: (904)449-5807

http://www.facebook.com/ClayCtyEm

https://twitter.com/ClayCounty_EM

Deputy Chief Motes, thank you for your email. For clarification purposes, please indicate whether you support or do not support development of the proposed project on Preparedness and Response to Active Shooter Scenarios and Incidents. Your comment and attached material will be forwarded to the NFPA Standards Council for review and consideration.

You will be notified of the Council’s action when it becomes available.

Sincerely,

Mary J. Maynard Davy
Codes and Standards Administration
Our department policy is attached.

D. E. Motes
Deputy Chief of Operations

Clay County Fire Rescue / Department of Public Safety
Office (904)284-7703 or 1(800)CLAY-EOC
2519 State Road 16 West
Green Cove Springs, FL 32043
1. PURPOSE

1.1 To establish a systematic procedure for the response to an Active Shooter Incident.

1.2 To establish a multi-agency Incident Command Post and use of the ICS system.

1.3 To establish a dispatch response plan for various size active shooter incidents.

1.4 To understand differences in terminology between law enforcement and fire department personnel.

1.5 To work in conjunction with the Mass Casualty Incident (MCI) Policy.

2. BACKGROUND

2.1 More than 250 people have been killed in the United States during what has been classified as active shooter and mass casualty incidents (AS/MCIs) since the Columbine High School shooting in 1999. AS/MCIs involve one or more suspects who participate in an ongoing, random or systematic shooting spree, demonstrating the intent to harm others with the objective of mass murder. Response targets may include: schools, malls, theaters, large business complexes, government facilities, churches, industrial plants, agricultural complexes and increased property value areas.

2.2 These events may take place in any community, impacting fire and police departments, regardless of their size or capacity. Local fire/EMS and Law enforcement must use common tactics, communications and common terminology to have seamless, effective operations.

2.3 These situations are dynamic and evolve rapidly, demanding immediate deployment of law enforcement resources to neutralize the threat, and limit harm or loss of life to victims.

3. DEFINITIONS

3.1 **Active Shooter** - one or more subjects who participate in a random or systemic shooting spree, demonstrating their intent to harm others with the objective of mass murder.
3.2 **Casualty Collection Point (CCP)** - a secured location within a jurisdiction that is used for assembly, triage, medical stabilization and subsequent evacuation of casualties.

3.3 **Active Shooter Hot Zone** - the area where a direct immediate threat exists. A direct and immediate threat is very dynamic and is determined by complexity and circumstances of the incident. May also be classified as the “inner perimeter” by law enforcement.

3.4 **Active Shooter Warm Zone** - where a potential threat exists, but the threat is not direct or immediate. An example of this is at large suspects in a given area already cleared.

3.5 **Active Shooter Cold Zone** - where no significant danger or threat can be reasonably anticipated. May also be classified as the “outer perimeter” by law enforcement.

3.6 **Concealment** - anything that hides you from suspect observation and can be natural or manmade. Does not protect you from suspect gunfire.

3.7 **Cover** gives protection from bullets, fragments of exploding rounds, flame, nuclear effects, and biological and chemical agents.

3.8 **Contact Team** - a group of two or more law enforcement officers that enter to mitigate a threat.

3.9 **Defensive Apparatus Posture** - positioning the vehicle to allow for protection of crews and patients during the incident.

3.10 **Entry Team** - Crew responsible to enter the warm zone / CCP to start treatment and removal of injured people. This team will enter after the “defensive posture” has been established. This team may be label by geographical location, (ie: food court entry, gym entry, etc).

3.11 **Force Protection** - actions taken by law enforcement to prevent or mitigate hostile actions against personnel, resources, facilities, and critical infrastructure. These actions conserve the operational ability of fire and EMS resources so they can be applied as needed.

3.12 **Law Enforcement Officer (LEO)** is the primary agency / officer in charge of the jurisdictional response.

3.13 **Reverse Triage Effect** - a condition where the least injured enter the medical system first, and can greatly impede response operations both on-scene and in nearby hospitals.

3.14 **Tactical Emergency Casualty Care (TECC)** - a set of best practice treatment guidelines for trauma in the high-threat pre-hospital environment.

---

4. **DISPATCH RESPONSE PLAN**

4.1 The response of units to an active shooter incident will be similar to a MCI incident. Units will be dispatched in accordance with the number of possible injured people at the incident. Response will be dynamic as the incident progresses. Responding units will be assigned according to information gathered by dispatchers as well as information confirmed by units on scene. If no other information is available, a level 1 response will be sent.

4.2 **Active Shooter Level 1 Response (6 to 10 victims)**
Initial Response:
4 ALS Transports
2 Engine Companies
Battalion Chief
Safety Officer
1 Tender as designated Staging Officer

Initial Notification:
Chief Officer Notification per SOP 540.00.8
Emergency Manager Notification
Notification of the Medical Director
Special Operations Team members for standby

Notification of the 3 county hospitals and both Trauma Centers and determine status and number of patients they have the ability to receive.

4.3 **Active Shooter Level 2 Response (11 to 21 victims)**

**Additional Response to Level 1 Response:**
6 Additional ALS Transports (Total of 10 ALS Transports).
1 Additional Engine Company (Total of 3 Engine Companies).
1 Additional Battalion Chief (Total of 2 Battalion Chiefs)
MCI Unit
Safety Officer (Total of 2 Safety Officers).
Jacksonville MCI Bus

Notification of Fire Chief per SOP 540.00.8 (*If not already notified*).

Notification of the 3 county hospitals and both Trauma Centers and determine status and number of patients they each have the ability to receive.

4.4 **Active Shooter Level 3 Response (Over 21 victims)**

**Additional Response to Level 2 Response:**
6 Additional ALS Transports (Total of 16 ALS Transports)
1 Additional Engine Company (Total of 4 Engine Companies)
MCI Unit (Total of 2 MCI Units)
Total of 2 Battalion Chiefs
Total of 2 Safety Officers
Notification of Fire Chief per SOP 540.00.8 (*If not already notified*)

Notification of local hospitals as stated in 4.3 (*If not already notified*)

5. **RESPONSE**

5.1 Fire Rescue units will respond as the response policy states and wait for an “all clear” from law enforcement to proceed to the scene. Do not arrive on scene running lights and siren as this may draw attention to the units. Once the units arrive on the scene, the first arriving units will place their units in a defensive posture (see page 7).

5.2 Stage in a cold zone safe from harm’s way. Understand that these situations are dynamic and zones can require extension. Situational awareness is a must.
5.3 As soon as a warm zone has been established and Fire Rescue units arrive, initial units will establish a defensive posture. The lead officer of the initial response that has the responsibility of patient extraction has a radio designation of “Entry”.

5.4 Entry into a warm zone will only occur by Fire Rescue Entry Crews once the Chief Officer or IC and the Primary LEO deem the area is secure for entry. Fire Rescue units will still have law enforcement present in this zone and law enforcement is not to abandon the crews in this zone. This is known as force protection.

5.4 Under NO circumstances will any Fire Rescue personnel enter the hot zone other than the SWAT tactical medics assigned to the SWAT team.

6. RESPONSIBILITIES AND DUTIES

6.1 SWAT TACTICAL MEDICS

It is understood that the medics assigned to the SWAT team are primarily in these positions to stay attached to the SWAT entry team and security team for law enforcement treatment. Tactical medics do not leave the team for triage or treatment purposes unless SWAT members dictate that time allows for simple interventions or treat-in-place tactics are required.

6.2 INCIDENT COMMAND SYSTEM

6.3 Once first units arrive, the primary goal is to set up the ICS system if not already accomplished by the first arriving law enforcement officer. If command has been established, assure contact is made with the IC to establish Fire Rescue support in the unified command.

6.4 The next arriving tender/officer will establish accountability and staging jointly in a safe location within the cold zone in a defensive posture out of the engaged area by the next arriving officer or tender. Assure that this area is large enough to accommodate a large scale MCI event.

6.5 The Fire Rescue Command Liaison will designate an area for treatment, triage, and transport as the MCI level dictates.

6.6 A Rapid Intervention Team (RIT) shall be put in place for the safety of the warm zone entry teams.

6.7 Unified Command will designate a Casualty Collection Point (CCP), where Fire Rescue personnel can relocate victims with cover by law enforcement. Basic supplies should be taken in with these crews for immediate treatment needed utilizing the risk/benefit analysis in Section 7.5. Extraction to the triage/treatment area will be accomplished by the CCSO’s Bear Cat in most cases.

6.8 If personnel are attacked or threatened verbally or physically, they will take cover immediately at a safe location.

6.9 TREATMENT

6.10 All members of CCFR will treat patients in accordance with current medical Standard Operating Procedures.
7. SPECIAL CIRCUMSTANCES

7.1 In a hostile situation, where fire exists, with a threat still at large, the Fire Rescue division is to maintain a defensive posture attack if deemed safe by the Fire Rescue Command Staff. A “hit and go” attack should be used to control the fire and protect the Fire Rescue personnel.

7.2 To minimize threat hazards, modified fire tactics will be followed:
- No fire rescue personnel on roofs.
- No laddering buildings.
- No overhauling.
- No interior fire attacks.
- No positioning where SCBA use is required due to lower awareness level until the threat has been neutralized.

7.3 If a threat of IED, chemicals, gases, etc., the HAZMAT units should be deployed to staging on standby.

7.4 Active Shooter incidents may require a modified treatment plan under the normal MCI triage/treatment protocol. It is a balance of the number of victims requiring emergent treatment that takes little time. If there are numerous victims then traditional MCI protocols should be practiced.

7.5 Simple treatment to correct life threatening injuries can make a difference in casualties or number of victims in active assailant events.
- Injury treatments that make life saving differences in minimal times prior to leaving a warm zone are as follows:
  BATH (Bleeding, Airway, Tension Pneumo, Hypothermia)
- Treatment includes quick assessment, tourniquets, packing open wounds, airway device / repositioning, needle decompression, occlusive dressings and warming.

8. RECOVERY

8.1 Remember the Active Shooter incident is a crime scene and everything is evidence.

8.2 Document all that you see, hear, and do. This is crucial and reports are to be as informative as possible for the investigation.

8.3 Document patient information including: where the patient was removed from the warm zone, and any information that would help in identification of the patient if not determined during treatment and/or transport.

8.4 Document and report any damaged equipment, as required by policy, during the call for accountability purposes.

8.5 Document/treat responder injuries or exposures.

8.5 Consider the need for Critical Incident Stress Debriefing and After Action Review.
Information obtained from Broward County Sheriff’s Office Active Shooter SOG, Broward County Fire Chief’s Association, Clay County Sheriff’s Office Tactical Operations Planning Manual, and USFA Fire / Emergency Medical Services Department Operational Considerations and Guide for Active Shooter and mass Casualty Incidents. Original policy written by Capt. Zike.
As LEO enters the building, areas will be cleared and determined to be the warm zone. CCFR personnel known as the “Entry Team” will enter the warm zone under protection of LEO and remove victims to the Casualty Collection Point.

Patients will be taken to this area by the Entry Team once removed from the warm zone. This area should be protected by LEO.

Prepared and Submitted:
Staff

Approved:
Lorin Mock, Fire Chief
This program is going to be a national need. As the times of our country have been indicating, if we do not proceed with these initiatives we will be leaving our response personnel without the needed training and programs to support sufficient response. Through research we have seen that EMS and Fire responses will tend to wait until the scene is 100% secured, causing more and more people to suffer and die while we wait. To build a nation wide response guide we can show that the NFPA is able to support these efforts.

Thank you
Benjamin Stone
EMS Division Chief
Los Alamos Fire Department

Benjamin_stone@lacnm.us
505-709-0728
I am writing in support of a stand-alone NFPA standard that addresses the life safety and security conflicts that occur between the codes and best practices. I was fortunate enough to be part of the NFPA/ASIS Active Shooter Crosswalk exercise and through that process as fire protection professional it is imperative that we make sure we are maintaining life safety requirements in accordance to NFPA standards and not having security practices or products affect that but marry it. Today, we are seeing the threats around us and reacting not being proactive. I would be interested in participating on a committee that establishes a standard that is holistic in providing life safety vs what we see today as purely a response and reactive approach.

Thanks
Todd Haines
Planning Chief/Fire Protection Engineer - Dallas/Ft. Worth International Airport
Principal - Critical Risk Group, LLC

**Public Comment in support of an Active Shooter Incident Response Technical Committee**

- **Are you, or your organization in favor of development of the standard**

Yes, Standardization will assist with fast tracking the training and justification for the program. We currently have a Bi-County policy with the County Fire and Police Chiefs Associations.

- **Reasons for supporting preparedness standards development.**

1) Standardization will bring "Best Practices" to the committee from departments that have committed years of training and experience to this program.

2) Standardization will assist with "Buy In" of the program with an established set of guidelines.

3) Standardization will assist with funding of the Ballistic Personal Protective Equipment, Trauma Equipment and training the personnel how to use it.

4) Standardization and sharing resources will help bridge the gap between our partners in Law Enforcement.

5) Standardization will provide departments a framework to support each other during mutual aid situations.

6) Training and preparedness will serve as a deterrent against Active Violent Events and strengthen the unified response.

- **Individuals or parties interested in participating on the Technical Committee if established**

Captain Brad Havrilla is the lead for the Active Shooter Response training for Palm Beach County Fire Rescue. Corporal Ray Ruby is the Lead for the Active Shooter Response Training for the Palm Beach County Sheriffs Office.

The Palm Beach County Sheriff's Office and Fire Rescue has entered into a cooperative training program since 2013. To date have trained over 1200 Fire/Rescue personnel and over 3000 Law Enforcement from their own department and many in South Florida. Recently were invited to "train the trainer" at the Tennessee Fire Academy. The State Fire Instructors and Police instructors will in turn train the Fire Department and Law Enforcement personnel in their territory.

If I can be of any assistance please don’t hesitate to contact me.

V/R

Captain Brad Havrilla
Training Division/Special Operations Group
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Maynard, Mary

Subject: FW: Preparedness and Response to Active Shooter Scenarios and Incidents

-----Original Message-----
From: SMITH, KEVIN B CIV USAF AFMC 72 ABW/CEFT [mailto:kevin.smith.34@us.af.mil]
Sent: Wednesday, November 9, 2016 10:19 AM
To: stds_admin <stds_admin@NFPA.org>
Subject: Preparedness and Response to Active Shooter Scenarios and Incidents

To whom it may concern,

I fully support the creation of a technical committee on this subject. The fire service needs a single place to find resources to help develop this capability.

Kevin B. Smith
Major, Fire Protection Specialist
Unit Training Manager
Tinker AFB Fire Emergency Services
3680 "A" Ave. Bldg. 117
Tinker AFB, OK 73170
405-734-3970 Office
405-640-7886 Cell

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John,

Reply below from Tim Merinar from NIOSH Division of Safety Research (DSR) who is a team leader on the NIOSH Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) Team and link to related fatality investigation.

Bill H.

Bill

We had a short discussion about your email. Are you coordinating a response from NIOSH to the NFPA on this subject? At the Branch level, we (SFIB and the FFFIPP) support NFPA’s efforts to develop a new standard to address active shooter issues.
The FFFIPP has investigated one active shooter incident involving a fire fighter/EMT LODD. That report can be found at https://www.cdc.gov/niosh/fire/reports/face200411.html

Let me know if you need anything else.

Tim
I personally support the development of active shooter standards for EMS responders by the NFPA. Although I work for a third-service EMS organization and not a fire department, we still utilize NFPA standards to convince decision-makers of the importance of topics such as response times and staffing. Municipalities are often reluctant to spend money on new projects or training, no matter how great the benefit. Establishing standards will help all organizations that provide EMS lobby for the increased training, equipment, and planning that is necessary to better manage active shooter incidents.

As someone who has worked developing protocols within an organization, I understand all too well the paradox of trying to compose a document that conveys the essential points but is not too specific. That said, there are a few key points that I believe are critical to any active shooter standards:

1. **Agencies shall provide training to all members who may be expected to actively participate in an active shooter response.** At a minimum, the training shall be at least 4 hours long, and consist of both classroom/lectures, and hands-on or scenario-based exercises. **Refresher training shall also be provided at least every 4 years.** In my experience, many local agencies are quick to purchase body armor and implement an active shooter policy, but often fail to conduct training to complement these purchases. Just as we require all responders to undergo a 4 hour CPR class that includes both lecture and hands-on practice, so too should we require all those expected to respond to an active shooter event to undergo training that teaches them how to adapt to a dangerous tactical environment.

2. **Instructors providing the active shooter training shall have received training in an accredited tactical medicine course such as TECC, TCCC, or other TEMS program.** Many local EMS agencies turn to their local Law Enforcement Agencies to provide active shooter response training. While local law enforcement is likely to be very knowledgeable about police tactics, their knowledge of combat medicine will likely vary greatly. This standard will help promote competent and standardized training across jurisdictions and increases interoperability.

3. **All responders expected to respond to an active shooter event should receive the chance to participate in a drill in conjunction with Law Enforcement officers at least every 4 years.** In many local departments, only designated tactical medics and SWAT officers conduct joint training. This is problematic, because SWAT teams and Tactical medics may take 30-60 minutes to arrive at an active shooter scene. It is critical that all initial responders to an active shooter scene, including regular EMS units, firefighters, and police patrol officers, have the opportunity to practice an active shooter response prior to the real event.

4. **Agencies shall annually review their EMS equipment to ensure that responders are properly equipped to respond to an active shooter event.** One recent study detailed how civilian active shooter incidents had a much higher incidence of torso injury than experienced in military conflicts. As such, it is no longer the best practice to provide medics tourniquets and a ballistic vest and proclaim them ready for an active shooter event. As tactical medicine evolves, EMS agencies should periodically review scientific studies, industry best practices, and new equipment, to ensure that medics are equipped to provide the current standard of care.

Timothy Sommerfelt  
Paramedic, Cleveland (Ohio) EMS, Assistant EMS instructor, ITLS, TCCC, BLS instructor, Wilderness EMT.  
tsommerfelt@gmail.com
Greetings,
This is an issue that needs the attention of everyone i.e. EMS, Fire and Law Enforcement. Everyone needs to be on the same page when it comes to an incident of this magnitude. I’m looking forward to being part of this committee, and assisting in developing new guidelines for active shooters and MCI’s.

Juan M. Atan, MS, EMT-P
Orange County Fire Rescue
Battalion 6 C Shift
407-249-4559 (Office)
407-383-9084 (Cell)
Juan.Atan@ocfl.net

"The way you train today is the way you will perform tomorrow"

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Good day...the National Fallen Firefighters Foundation in 2004 developed the 16 Firefighter Life Safety Initiatives, the tool used in the development of all our training and educational materials and programs. Initiative number 12 reads “National protocols for response to violent incidents should be developed and championed.” Based on our beliefs and practices the National Fallen Firefighters Foundation whole-heartedly supports the development of this code, standard or guide and stands ready to support its development.

We will be submitting a candidate for the technical committee forthwith.

Thanks, Rick Mason
Richard A. Mason, CFO, FIFireE
Training & Education Coordinator
National Fallen Firefighters Foundation
3 Suzanne Drive
Portsmouth, NH 03801-5910

603/396-8604
rmason@firehero.org

Online training: www.fireherolearningnetwork.com
Subject: FW: Posted: New Project on Preparedness and Response to Active Shooter Scenarios and Incidents

-----Original Message-----
From: SMITH, KEVIN B CIV USAF AFMC 72 ABW/CEFT [mailto:kevin.smith.34@us.af.mil]
Sent: Wednesday, November 9, 2016 10:34 AM
To: Montes, John <JMontes@nfpa.org>
Subject: FW: Posted: New Project on Preparedness and Response to Active Shooter Scenarios and Incidents

Mr. Montes,

I am writing to let you know I would be interested in serving on a working group or technical committee on this subject. Our department has been successful in working with our security forces and creating a joint Rescue Task Force. We have developed training and equipment for our team to be successful when this need arises. Thanks in advance for your consideration.

Kevin B. Smith
Major, Fire Protection Specialist
Unit Training Manager
Tinker AFB Fire Emergency Services
3680 "A" Ave. Bldg. 117
Tinker AFB, OK 73170
405-734-3970 Office
405-640-7886 Cell

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To whom it may concern,

I am not supportive no opposed to this concept but have some questions as I was not familiar with this initiative:

1. Why is this being promoted by a "Fire" organization when it is geared towards a law enforcement response. I understand that it is a dual response but am confused as to why this doesnt come from a law enforcement source.

2. I believe that many University Police and Public Safety Departments across the nation are conducting regular drills and receiving a great deal of training on this topic. I am cautious about adding another unfunded mandate or training requirement to the plethora of all others when we already are working on this initiative anyway. I fear, like many other mandates, that there will be punitive sanctions and/or liability when the "standards" are not able to be met.

3. We know that these type of situations are very fluid and will never be a "one size fits all" response. My hope is that this initiative would be a "best practice" guideline rather than (what I see) a standard that everyone will be able to do. Police Departments come in all shapes and sizes and some of the "standards" might not always be achievable and yet they would still be able to adequately and efficiently respond to an active shooter situation.

Sincerely,
Scott Austin (Interim Chief)

--
Captain Scott Austin
Operations Division Commander
Christopher Newport University Police Department
1 Avenue of the Arts
Newport News, VA 23606
OFFICE (757) 594-8842
FAX (757) 594-7610
Greetings John,

My name is Tim Dorsey and I and the state and local equipment sub group co chair of the IAB with Bill Haskel from NIOSH. He spoke to me about this last week at a meeting in Tampa and I told him I would be willing to assist in any way I can. I am Fire/Rescue/EMS based in St Louis with also a Law enforcement training / operations background previously and currently serve with our FBI SWAT team as a tactical paramedic. Please let me know if I may be of assistance in any way.

Thanks,
Tim Dorsey
636-346-6026

Sent from my mobile device
From: Hart, Andrew <Andrew.Hart@memphistn.gov>
Sent: Monday, November 28, 2016 9:05 AM
To: stds_admin
Subject: Preparedness and Response to Active Shooter Scenarios and Incidents

I am in favor of a standard for responses to violent calls (including active shooter). I feel that the standard should include more than just active shooter events, since we respond to violent calls every day and active shooter calls are rare.

Thanks,

Division Chief Andrew Hart
Memphis Fire Department
2714 Union Extended, Suite 350
Memphis, TN 38112
(901)636-7560 office
(901)496-2468 cell
I am in favor of the development of an NFPA Standard pertaining to active shooter incident response and preparedness.

- I feel that guidance is needed for the type and use of ballistic garments. At present there are several different thoughts on type and use of this PPE.

- I believe that the standard needs to be expanded to include all complex events.

- I feel that the standard should include a preparation guide for local special events held by a community.

- Training should include guidance for the deployment of a Fire Department's SWAT Medic team.

- I am interested in participation.

Daniel R. Hanes
Fire Chief
City of West Palm Beach Fire Rescue Department
500 North Dixie Highway
West Palm Beach, FL. 33401
Office: (561) 804-4705
E-mail: dhanes@wpb.org

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Regarding the request for comments on an Active Shooter/Assailant Standard:

- Our organization is in favor of the development of an NFPA standard regarding active shooter response.

- Our reason for supporting the standard is to be able to bring some sort of standardization to such a plan. As it stands currently there is a great difference between agencies in how we respond or prepare for such an incident.

- I have applied for membership on the Technical Committee.

Thank you!

Joe Mera  
Deputy Fire Chief  
Leesburg Fire Department  
201 South Canal Street  
Leesburg, Florida 34748  
(352) 728-9780 ext. 2612  
joseph.mera@leesburgflorida.gov

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Think before you print.
I believe an NFPA standard on active shooting is warranted. Due to the fact that these scenes will most likely involve multiple jurisdictions, creating a standardized approach to scene mitigation and the associated training is something which is needed for the fire service.

John Williamson II
Fire Chief
Orlando International Airport
Fire/Rescue
One Jeff Fuqua Boulevard
Orlando, FL 32827
Office 407-825-3010
John.williamson@goaa.org

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November 11, 2016

National Fire Protection Association
Standards Council
1 Batterymarch Park
Quincy, MA 02269

Re: New Project Initiation Request – Active Shooter Response

The Central Florida Fire Chief’s Association (CFFCA) formally moved during its regular public meeting held on Thursday, November 10, 2016 to support the development of an ANSI Accredited Standard addressing preparedness and response to active shooter scenarios and incidents for responders by the National Fire Protection Association.

First incorporated in 1964, the CFFCA includes 210 chief officers representing 28 agencies located throughout our membership area of Orange, Seminole, Osceola, and Lake counties in central Florida.

Unfortunately, our community personally experienced the worst of these types events this past June 12th when 49 lives were lost in the Pulse nightclub tragedy here in Orlando. While we train and prepare our responders for these types of events our personal experience with the Pulse event moved us to formally support the NFPA moving forward with the initiation of a project that would ultimately create a specific standard for responders to these events. We anticipate this standard would include guidelines for active shooter incident training for responders, appropriate personal protective equipment for those responding to active shooter scenarios, response protocol and procedures across multiple responder segments, and measurable operational objectives.

We appreciate the NFPA stepping forward to investigate the possibility of creating this new standard. Our members stand ready to assist the committee with our experiences where they will assist in the creation of this standard.

Sincerely,

James E. White, EFO, CFO, MiFireE
President, Central Florida Fire Chiefs Association
As a fire chief in a jurisdiction that recently encountered an “active shooter” incident, a very small jurisdiction I might add, it is imperative that NFPA produce and maintain a standard for training, equipment, operations and interoperability of this type of incident to ensure the safety of our firefighters. This incident type is unfamiliar to most fire departments, with the recent phenomenon of such incidents. As the fire chief it is my responsibility to ensure the safety of my firefighters along with our community, at this time there is little direction regarding these incidents. I would fully support all efforts by NFPA to establish a standard for these types of incidents, and would also offer my support as a committee member.

Matt Scott  
Fire Chief  
Sanibel Fire Rescue District  
Vice-President/Lee County Fire Chiefs Association

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Support!

In the wake of the largest mass shooting in U.S. history at the Pulse Night Club and the proliferation of active shooter events, I believe it is critical that a new NFPA Standard that provides for consistent guidance in response to Active Shooter/MCI events be instituted. The body of knowledge since the foundational active shooter incidents has grown to the point that an NFPA Standard is needed to synthesize best practices. The IAFC, IAFF, and Metro have all published position statements and many other organizations have weighed in on fire and emergency services response to these types of events. It is understood that the Standards process may be lengthy; however, every day of delay puts us further away from providing our service with a Standard that is sorely needed to appropriately guide our responses and keep our Fire Fighters safe. To this end, I am in support of a new Active Shooter Standard.

Otto Drozd III, EFO, CFO
Fire Chief
Orange County Fire Rescue Department
Office (407)836-9112
Cell (407)637-7559
Otto.Drozd@ocfl.net

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I am in favor of the development of an NFPA Standard pertaining to active shooter incident response and preparedness. Safety of our fire and EMS responder is now critical. No longer are we considered the good guys. A cooperative standard that works with law enforcement is key.

I am interested in applying for membership on the Technical Committee if established by the Standards Council.
To whom it may concern,

Collier County Emergency Medical Services supports the initiative for the development of a standard that provides guidance in the selection of PPE for mass violence events, in addition to multi-disciplinary response protocols with common objectives.

The desire to support the initiative derives from first-hand experience of the challenges inherent to the development of a multi-agency and multi-disciplinary policies and procedures. Our process lasted approximately 4 four years of development and training. The result are a county wide policy with clear and concise roles and responsibilities, common response protocols (medical and tactical) and PPE specs.

Mass violence events are fast breaking and highly unpredictable in nature. Lack of a well throughout plan may result in a higher morbidity and increased liability for the agencies involved.

Conventional response plans are inadequate and fail to address the tactical and operational demands of the problem.

Respectfully

**Tony Camps**

Deputy Chief of Special Operations

Collier County EMS

8075 Lely Cultural Parkway, Suite# 267

Naples, FL, 34113

239-272-6705 (Cell)

239-252-3758 (Office)

239-252-3298 (Fax)

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December 1, 2016

NFPA Standards Council:

The South Trail Fire Protection and Rescue Service District, located in Lee County, FL is in favor of the development of an NFPA Standard pertaining to active shooter incident response and preparedness.

It is unfortunate, but active shooter incidents are becoming more prevalent, even in rural and suburban communities. With these incidents, comes response from fire based EMS agencies with limited knowledge on active shooter situations and limited safety equipment geared toward protecting responders. We are beginning to see organizations purchase ballistic vests and helmets for their personnel responding to such emergencies, but the guidance for fire agencies in proper usage, storage, and limitations of the equipment, is lacking. To my knowledge, there is no national standard for the fire service. Additionally, I am not aware of any national standard for minimum training of responding personnel. With the development of a standard addressing active shooter training, personal protective equipment, response procedures, and operational objectives, we will begin to see the fire service in the U.S. better educated and equipped to respond to such events. Ultimately it will lead to a higher degree of safety for responders, and a better chance of survival for victims in active shooter situations.

Thank-you and please contact me should you require any additional information.

Yours in Service,

[Signature]

William B. Lombardo
Fire Chief
I fully support the investigation of interest and potential promulgation of standards for first responders in the preparation and response to active shooter scenarios and other hostile events.

Very Respectfully,

Paul Brooks
EMS Program Manager
U.S. Department of Homeland Security
Office of Health Affairs
To Whom it May Concern,

I recently retired from Hillsborough County Fire Rescue in Tampa, FL after 33 years and many positions up to an including Special Operations Chief and Fire Chief. I am very interested in this process. In my new role with my current employer, we are preparing to launch new Active Shooter/Hostile Event (ASHE) training programs in the first quarter of 2017. I strongly believe in the need to protect our responders and prepare the public for these events. I believe a standard is appropriate and needed. My personal experience causes me to have great concern about the ability of most organizations to respond to these types of events.

I am applying to be on the committee and would be happy to assist in any role.

Ron Rogers  
Division Director, Public Safety Specialists  
 rrogers@2ndresponder.com  
Office: (800) 971-7252  
Direct: (813) 676-1019
As a long term fire rescue service member and a fire chief for five years I am in absolute support of the NFPA addressing this emerging topic with some standardization across agencies, and I would like to participate as a technical committee member on the discussions.

As a young fire rescue service member I was intimately involved in one of the very first mass shootings in the United States.

On April 23, 1987, in Palm Bay, Florida a man went on a shooting spree before the term active shooter was universally used. By the end of his senseless act of terror he had killed 2 police officers (Johnson & Grogan) and several civilians, while injuring approximately 14 others that still live with the horror of this event. Many things were learned during this event for the agencies involved which are still evolving after all these years. Thank you for your consideration in this very important arena.

James R. Stables, CFO, Fire Chief
Palm Bay Fire-Rescue
(321) 409-6300 ext. 4665
Are you, or your organization, in favor of the development of an NFPA Standard pertaining to active shooter incident response and preparedness?

Yes strongly support any effort to ensure the safety of our members and a coordinated effective response to meet the community needs. This standard should address active threat events not just active shooter. Standard should address training, personal equipment as well as response procedures and include our law enforcement partners.

Respectfully
Joe Accetta, Fire Chief
City of Safety Harbor
700 Main St
Safety Harbor, Florida
727-724-1573 (w)
727-724-1569 (f)
727-423-9063 (c)
jaccetta@cityofsafetyharbor.com
Hello,

The Fire Service can develop whatever they wish, however the law enforcement agencies are the driving force in these incidents. Without the full cooperation of those law enforcement agencies, these new standards/plans will not work.

**Thomas R. Wood, CFO, MiFireE**

**Fire Chief**

Boca Raton Fire Rescue Services
6500 Congress Avenue, Suite 200
Boca Raton FL 33487-2808

Telephone: 561-982-4040
FAX: 561-982-4063
E-Mail: twood@ci.boca-raton.fl.us
Web Site: [www.ci.boca-raton.fl.us/fire](http://www.ci.boca-raton.fl.us/fire)

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The City of Boca Raton scanned this outbound message for viruses, vandals and malicious content and found this message to be free of such content.
Gainesville Fire Rescue is in support of the development of an active shooter standard. We currently work closely with our Law Enforcement partners to ensure a coordinated effort during an active shooter event and utilize the updated Active Shooter/Hostile (ASHE) Guide as compiled by the Interagency Board July 2016.

JoAnne E. Rice
JoAnne E. Rice MPA, CFO
Deputy Fire Chief
Gainesville Fire Rescue
O:352.393.8462
M:352.317.5977

R esponsible, A ccountable, P rofessional, I nnovative, D edicated
The DC Fire and EMS supports development of this standard for the following reasons:

1. Standardization of terminology and concepts, across the nation we have observed differences in terminology regarding response concepts and terms. These terms are especially stark between law enforcement and fire service descriptions of safe areas and dangerous areas. A standard would assist in eliminating this issue, making response less complicated and therefore more safe for responders.

2. Ballistic protection descriptions are different than the PPE descriptions and standards that fire service personnel are familiar with, a standard could serve as a bridge between the manufacturers and the end user to assure our members our getting the protection they need during one of these events.

3. The bulk of the work being done in the active shooter policy environment relates to medical treatment. The development of a standard that addressed fire scenarios with an active shooter, similar to the Mumbai attacks, would be beneficial.

4. Command and Control of Active Shooter Incidents is not a standard operation for most fire departments. It is one of the few situations where we have a dangerous operating environment but are not the overall commander, usually a subordinate commander to a law enforcement official. While unified command is addressed in many other standards, the development of a standard may offer the opportunity to explore this in more detail and develop better solutions for our training.

We will also be submitting a member for consideration on the panel.

Thanks
John Donnelly, Sr.
Deputy Fire Chief
District of Columbia Fire & EMS
202-345-6850

Come to EdFEST, DC’s citywide school fair, on Sat, Dec 10 from 11am to 3pm at DC Armory. Explore 200+ public school options for your child. Bring the whole family!

Come to EdFEST, DC’s citywide school fair, on Sat, Dec 10 from 11am to 3pm at DC Armory. Explore 200+ public school options for your child. Bring the whole family!
1. Yes, Pinellas Suncoast Fire & Rescue District supports the development of an NFPA Standard pertaining to active shooter incident response and preparedness.

2. The reason is simple - we must remain vigilant and pro-active in our training/preparedness with respect to said incidents. Working through the process in this fashion provides a model/framework for our first responders to learn from, and train in accordance with a national standard.

3. We currently do not have additional personnel to backfill for my Assistant Chief who is highly qualified to sit on such a Technical Committee (he possesses the work experience as a SWAT Paramedic) - otherwise, I would fill out the application...

Best,
Chief Sal A. D'Angelo III, Ph.D.

Sal A. D'Angelo III
Fire Chief

304 1st Street
Indian Rocks Beach, FL 33785
sdangelo@psfrd.org
727-595-1117
The following is being provided on behalf of Joseph D. Steadman, Chief, Bureau of Fire and Arson Investigations, Division of investigative and Forensic Services:

- Are you, or your organization, in favor of the development of an NFPA Standard pertaining to active shooter incident response and preparedness:
  The Bureau of Fire and Arson Investigation (BFAI) is in support of any effort to protect first responders, especially during an active shooter response. The BFAI has been involved with previous incidents of an active shooter and understand the dynamics involved with response. As a law enforcement agency that investigates fires in the State of Florida, the importance of scene response and scene safety is important.
- Please state your reason(s) for supporting or opposing such standards development.
  The reasons for supporting the development of a standard or a guide would be to establish a universal position for the fire, emergency medical, law enforcement, and other agency (state, local and tribal) agency/responders to establish:
    1. Policy and procedures
    2. Training for responders
    3. Equipment for responders
    4. Interoperability with responding agency criteria and suggested procedures.
- Are you or your organization interested in applying for membership on the Technical Committee if established by the Standards Council? If yes, please submit an application* in addition to your comments in support of the project.
  Application to follow

Karl A. Morgan, Captain MSCJ
Division of Investigative and Forensic Services,
Operational Support Services, Special Operations
200 E. Gaines Street, Tallahassee, Florida 32399
850-413-3663 Office
850-251-5979 Cellular
karl.morgan@myfloridacfo.com
Maynard, Mary

Subject: FW: Support from NFFF for Active Shooted Response Technical Committee
Attachments: John Oates Active Shooter committee support.pdf; ATT00001.htm

From: Rick Mason <rmason@firehero.org>
Date: November 23, 2016 at 10:51:16 AM EST
To: "kmcwalter@nfpa.org" <kmcwalter@nfpa.org>
Cc: Victor Stagnaro <vstagnaro@firehero.org>, "Joates@easthartfordct.gov" <Joates@easthartfordct.gov>, "jmontes@nfpa.org" <jmontes@nfpa.org>
Subject: Support from NFFF for Active Shooted Response Technical Committee

Good day Ms. McWalter:

Please see the attached letter of endorsement by the National Fallen Firefighters Foundation for Chief John Oates to be appointed to the Active Shooter Response Technical Committee. Thanks and any questions, please let me know.

Happy Thanksgiving, Rick Mason

Richard A. Mason, CFO, FIFireE
Training & Education Coordinator
National Fallen Firefighters Foundation
3 Suzanne Drive
Portsmouth, NH 03801-5910

603/396-8604
rmason@firehero.org

Online training: www.fireherolearningnetwork.com
June 2, 2016

Kayla McWalter
Membership Coordinator
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169-7471

Dear Ms. McWalter:

Fire Chief John Oates of the East Hartford, Connecticut Fire Department is the individual the National Fallen Firefighters Foundation has asked to apply for the NFPA Active Shooter Response Technical Committee. The Foundation to the extent possible will support Chief Oates' committee activities and expenses.

I would gladly answer any questions you may have.

Thank you for your consideration.

Respectfully,

Richard A. Mason
NFFF Training & Education Coordinator

CC: John Montes (Committee Liaison)
    Victor Stagnaro
    John Oates
-----Original Message-----
From: Timothy Dorsey [mailto:tdorsey@bcfdmo.com]
Sent: Monday, November 14, 2016 3:06 PM
To: Montes, John <JMontes@nfpa.org>
Subject: NFPA Active Shooter project

Greetings John,
My name is Tim Dorsey and I and the state and local equipment sub group co chair of the IAB with Bill Haskel from NIOSH. He spoke to me about this last week at a meeting in Tampa and I told him I would be willing to assist in any way I can. I am Fire/Rescue/EMS based in St Louis with also a Law enforcement training / operations background previously and currently serve with our FBI SWAT team as a tactical paramedic. Please let me know if I may be of assistance in any way.

Thanks,
Tim Dorsey
636-346-6026

Sent from my mobile device
Subject: FW: Metro Request for Assistance - Proposed NFPA Standard on Active Shooter Response

Attachments: image001.jpg; image002.gif; image003.jpg; image004.jpg

-----Original Message-----
From: Lane, John [mailto:JLane@winnipeg.ca]
Sent: Saturday, November 12, 2016 10:22 AM
To: Otto.Drozd@ocfl.net
Cc: Sanders, Russ <RSanders@NFPA.org>; Montes, John <JMontes@nfpa.org>
Subject: Re: Metro Request for Assistance - Proposed NFPA Standard on Active Shooter Response

Thanks everyone.

John A. Lane, BSc
Chief
Winnipeg Fire Paramedic Service

On Nov 12, 2016, at 06:02, "Otto.Drozd@ocfl.net<mailto:Otto.Drozd@ocfl.net>"
<Otto.Drozd@ocfl.net<mailto:Otto.Drozd@ocfl.net>> wrote:

John,

I’m not sure about the issue you are experiencing, but I am certain that membership on a Technical Committee is not contingent on being a member of the NFPA according to the http://www.nfpa.org/CodesStandardsBrochure. I am copying John Montes who is facilitating this process for NFPA. Hopefully he can assist with the issue or put us together with someone that can.

Regards,

Otto

From: Lane, John [mailto:JLane@winnipeg.ca]
Sent: Friday, November 11, 2016 4:44 PM
To: Sanders, Russ; Drozd, Otto
Subject: RE: Metro Request for Assistance - Proposed NFPA Standard on Active Shooter Response

I started the application process, but I need a bit of help. It doesn’t seem to give me the option of signing up someone from my service instead of me. The ideal person for the TC is our lead Medical Supervisor, Dave Johnston. Do we need to make him a member in order to sign him up? Or is there another way to do it?

John

<image001.jpg><http://www.winnipeg.ca/>
Good Evening Ken,
Hope all is well.

Great to meet you at the NFPA Responder Forum.

The link below is soliciting members for the NFPA Active Shooter Committee.

Captain Dave Laub and I have worked on multiple Active Shooter projects on creating policies and procedures with Los Angeles County and the State of California.

-Captain Dave Laub who works with me in the Homeland Security Section and I have worked on the creation of the POST Active Shooter curriculum and video which has gone out to 600 police agencies with the state.

-State TEMS committee members.

-Work closely with the Los Angeles Sheriff Dept, (LASD) SEB (SWAT) on policy and procedures.

-Regional Training Group committee member developing procedures for 31 different fire department in the Los Angeles County Area.

In closing,
Captain Dave Laub, myself and a representative from the Los Angeles County Sheriffs Department (SWAT) would like to be added to this NFPA committee.

http://multibriefs.com/briefs/csfa/csfastandard1112.htm

Thanks so much and looking forward to hearing from you.

Take care,
Stan

Battalion Chief Stan Brawer
Los Angeles County Fire Department
Homeland Security Section
Office 323-881-3041
Cell 213-505-1990
stan.brawer@fire.lacounty.gov
Sent from my iPad
To whom it may concern

I believe the initiative: Preparedness and response to active shooter scenarios and incidents is a very worthy one and support it fully.

Thank you

Gregory Ciottone, MD, FACEP
Founder and Director, BIDMC Fellowship in Disaster Medicine
Founder and Director, Counter-Terrorism Medicine Program
www.DisasterFellowship.org
Associate Professor of Emergency Medicine
Harvard Medical School
Editor-in-Chief, Ciottone’s Disaster Medicine, 2nd ed., Elsevier
"The leading textbook in Disaster Medicine"- Annals of Emergency Medicine
https://www.amazon.com/Ciottones-Disaster-Medicine-Gregory-Ciottone/dp/0323286658

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To whom it may concern,

As a career fire-fighter with a Masters degree in emergency management, I applaud the NFPA on changing the conversation about how first responders deal with active shooter events.

I look forward to this initiative becoming a reality.

Best,

David Dales
North Vancouver, BC, Canada

David Dales, MA
daviddales@me.com
East West Protection, LLC and Red Ball Drills® are pleased to present our comments in support of the Proposed Standard around Active Shooter Scenarios and Incidents.

Please see the attached document which has been copied below as well.

Sincerely -

Melissa Sanders
Director of Program Management
East West Protection, LLC
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www.eastwestprotection.com
Statement from East West Protection (EWP), LLC and Red Ball Drills®

In Support of the Development of

ANSI Accredited Standard Addressing Preparedness and Response to Active Shooter Scenarios and Incidents

1. Are you, or your organization, in favor of the development of an NFPA Standard pertaining to active shooter incident response and preparedness? **YES**

2. Please state your reason(s) for supporting or opposing such standards development.

East West Protection (EWP) and Red Ball Drills have a vested interest in seeing a standard developed around active shooter scenarios and incidents. For years, healthcare facilities have received and treated victims of shootings. It has long been thought, and theorized, that at some point healthcare facilities themselves could become targets for gun violence. And in fact, the number of active shooter incidents in U.S. hospitals has increased over the last decade to a frequency of more than one a month.

Statistics bear out that bleak notion. In the year leading up to the murder of cardiothoracic surgeon Dr. Michael Davidson at Brigham and Women’s Hospital in Boston, there were 14 other active shooter incidents at hospitals around the country that left 15 people dead. According to a 2012 study in the Annals of Emergency Medicine, that more-than-monthly frequency is not new. By examining news accounts, researchers found that while hospitals faced about nine active shooter incidents a year between 2000 and 2005, the rate had climbed to 16.7 a year between 2006 and 2011. This resulted in a total of 161 deaths in this period.

The issues that arise at healthcare faces differ from that of schools which differ from other commercial facilities. Creating a standard which leaves room for the specific needs of each type of facility is critical to allow healthcare and others to properly prepare for these types of incidents. Standards for preparation, management, and recovery for active shooter events will unify the culture in its approach, while addressing the specific needs of each industry.

EWP and Red Ball Drills® are in full support of the development of a standard and seriously urge the inclusion of healthcare providers on the Technical Committee.
NFPA Standards Council
Via Email stds_admin@nfpa.org

Dear Standards Council Members,

The IAFF supports the development of a NFPA standard to address preparedness and response to active shooter events.

The proposed standard should at a minimum consist of training objectives and regimes, response protocol and standard operating procedures (SOPs) including coordination with local law enforcement, and the identification of minimal personal protective equipment (PPE) appropriate for responders to active shooter incidents.

The IAFF realizes that active shooter, and like events, are inevitable in the world today. Likewise, it is inevitable that IAFF members will be responding to such events. Therefore, it is in the best interest of the fire service that NFPA develop, promote, and support an industry standard for response to this type event.

If the proposed active shooter response standard project is ultimately approved by the Standards Council, the IAFF will submit applications for seats on the associated Technical Committee to develop the new standard with a focus on the following.

- Training for responders
- Personal protective equipment
- Response and on-scene protocols coordinated with local law enforcement
- Measurable operational objectives
- Coordination with related NFPA standards (i.e. 1582, 1710, etc…)

We look forward to future interaction in this regard.

Sincerely,

Dr. Lori Moore-Merrell
Assistant to the General President,
Technical Assistance & Information Resources
International Association of Fire Fighters
Lmoore@iaff.org
202-824-1594
1. Are you, or your organization, in favor of the development of an NFPA Standard pertaining to active shooter incident response and preparedness?

I am in favor of the NFPA developing a standard.

2. Please state your reason(s) for supporting or opposing such standards development.

The amount of incidents of “active shooter” are increasing. The mission of the fire service in most areas has evolved. In the event of an active shooter (regardless of whether EMS is a core function) the fire service will be called upon to assist. There are a multitude of documents being produced locally, on a state level, and federally which guide agencies in a unified response. However, none of the current documents are binding. Many have consistent themes but it is not a “1 stop shopping” to be able to obtain good guidance for the fire service. NFPA standards are consensus documents and while not binding, carry more weight with the fire service than the other guidance documents. There are a wide range of response capabilities/methodologies across the country regarding active shooter incidents. I believe that an NFPA document will produce standardized communication as well as reasonable benchmarks for fire service agencies while leaving open the ability of a jurisdiction to craft a local response solution.

3. Are you or your organization interested in applying for membership on the Technical Committee if established by the Standards Council? If yes, please submit an application* in addition to your comments in support of the project.

I have submitted an application.

Respectfully,
Greg H. Priest, PM, EMS-I, TP-C
Interim Fire Chief
University of Connecticut Fire Department
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I respectfully submit comments on behalf of my organization. My organization is The Depository Trust and Clearing Corporation (DTCC) a component of the financial sector.

We believe in developing an Active Shooter Preparedness and Response Standard as an established guideline for first responders and other organizations, public and private sector, to follow in preparing and responding to active shooter incidents. Now that I am with DTCC following my fire rescue career, 29 years with Tampa Fire Rescue, I found that many organizations are hesitant to share information related to active shooter due to the fear it may cause fear to the general workforce. By establishing an Active Shooter Standard, many organizations will be able to utilize it to further their own programs in order to enhance preparedness and response procedures for the workforce.

We have taken a forward leaning posture to educate our workforce and provide them with tools and protective measures to utilize if involved in an active shooter incident. Our employees have provided positive feedback and were thankful for the information with many of them applying the protective measures at home.

Thank you,
Emilio F. Salabarria, MS. CIM.
Global Life Safety Manager
Global Security Management
DTCC Tampa
esalabarria@dtcc.com
M. 917-921-9659
O. 813-470-2518

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Are you, or your organization, in favor of the development of an NFPA Standard pertaining to active shooter incident response and preparedness?

Yes I am in favor of the development of an NFPA Standard pertaining to active shooter incident response and preparedness.

Please state your reason(s) for supporting or opposing such standards development.

I am in favor of the development of an NFPA Standard pertaining to active shooter incident response and preparedness. I believe one of the most important things in this standard will be to regiment all the language used by first responders. It will also be important to standardize the response approaches across all agencies so that if multiple agencies are responding, they will all be able to work together without confusion. Every department should train the same way so they can respond the same way.

Another important thing to include in the standard would be a training and exercise plan. The standard could state how often exercises should be held to test the preparedness and response for an active shooter event.

Are you or your organization interested in applying for membership on the Technical Committee if established by the Standards Council? If yes, please submit an application in addition to your comments in support of the project.

Justin J. Comeau
Asst. Emergency Manager
Office of Emergency Management
University of Massachusetts Boston
100 Morrissey Boulevard
Boston, MA 02125
617-287-5104
The Milwaukee Fire Department is in favor of a NFPA Standard pertaining to Active Shooter Incidents and Preparedness.

The Milwaukee Fire Department has an up to date Active Shooter policy and we have done extensive training with the Milwaukee Police Department as well with some of our neighboring fire departments. Through our Active shooter policy development and training we worked very hard to create a county wide policy that was scalable for smaller communities. Unfortunately in our area, where we routinely work with each other, we failed to get all the fire and law enforcement agencies to agree on the same policy. We currently have at least 4 different plans in the county and several communities that have not adopted a plan. We know that if we are going to be successful and safe at an active shooter event all the public safety entities responding need to be operating under the same general guidelines / SOP’s and need to have trained on that active shooter policy. Without a NFPA Standard we will not reach a policy consensus. We will continue to under different policies, we will not be fully preparedness and we will not have standardized equipment. This will led to active shooter scenes that are uncoordinated and managed at the moment of crisis and certainly do not offer our citizens with the best protection and / or lifesaving services.

Sincerely,

Mark Rohlfing

Fire Chief

Milwaukee Fire Department

office: 414-286-8947

cell: 414-308-9135

mrohlf@milwaukee.gov

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NFPA –

This is my personal statement, and does not necessarily reflect the view of my employers (which include my capacities in emergency management, business continuity, and law enforcement), nor my affiliation as a Principal Member on the NFPA 1600 Technical Committee.

I am in favor of *guidance* for active shooter preparedness and responses, but not a standard.

1) Every law enforcement department has different capabilities, in terms of personnel, resources, training, and leadership, and every venue, area, and surrounding/supporting jurisdictions/agencies are different, therefore departments/organizations cannot train or respond the same way despite what a standard “shall” mandate.

2) I’m unclear why a law enforcement-based hazard would be included as an NFPA-based standard. NFPA Standards have primarily focused on various systems and capabilities related to fire hazards, however tangentially. If NFPA wishes to expand out to other hazards, a name change might be in order. What about a mass casualty knife attack response standard? Tornado sheltering and response standard? Cybersecurity? Flooding? If NFPA wishes to branch out this far, a deliberate mission expansion should be outlined and embraced by the NFPA membership.

3) Some guidance for responses to active shooters exists, but it doesn’t seem to connect with its intended audience, either through format, language, or content, or any combination of the above. A standard will not solve this, but it’s understandable why this issue has been raised as a potential standard. The most appropriate avenue for correction of this missing guidance is for the various law enforcement authorities to either revise the existing nationwide guidance or develop new guidance.

4) Active shooter incidents last an average of 8 minutes according to FBI data. The majority of the response is actually recovery. So “preparedness and response” may either be a misnomer or inadequate.

5) Many other complications can arise from just talking about active shooters... a Standard on just this topic may not cover knife attacks (Ohio State Univ recently), person with a gun threats (IUPUI, 2015), hostage situations, a combo active shooter/hazmat situation... the list goes on. In emergency management or crisis planning, we guard against hazard-specific planning because there are so many potential complications (incident within an incident). There can be hazard-specific procedures, but again, those are customized to the agency, and thus should be guidance and not a standard. All-hazard planning already has an NFPA standard (1600) and CPG 101 guidance from USDHS.

However, if this Standard for active shooter preparedness and responses is created, I hope it will be inclusive of all responders and participants, not just law enforcement. An incident management system must be utilized, which includes personnel from many other disciplines, as well as the facility affected, and Federal/state/local agencies. The media onslaught should be included. Family
Assistance Centers should be included. Recovery should be addressed, as well as the cascading consequences from such an incident, and compounding factors (incident within an incident, as I listed above). This Standard should be tied in closely to NFPA 1600 to reflect the need for broader planning requirements.

Thank you for the opportunity to comment.
Diane

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Diane K. Mack, CEM, CSSP, CHPP
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Follow us:  www.facebook.com/IUEMC and on Twitter @IUEMC

“The only thing harder than extensive planning for a disaster is explaining why you didn’t.”
Hello,

- Are you, or your organization, in favor of the development of an NFPA Standard pertaining to active shooter incident response and preparedness?
  - Yes

- Please state your reason(s) for supporting or opposing such standards development.
  - There are many competing philosophies at play and everyone seems to be recreating the wheel and it gets confusing. If the NFPA 1600 standard for emergency management is a good judge of bringing consistency, having the NFPA create a recognized standard cannot help but bring clarity and consistency to a very politically and stovepipe laden subject, especially given the cross discipline nature and impact of this threat.

- Are you or your organization interested in applying for membership on the Technical Committee if established by the Standards Council? If yes, please submit an application* in addition to your comments in support of the project.
  - I will fill out an application.

Sincerely,

Marc Burdiss CEM, Director
NAU Office of Emergency Management
Phone: 928-606-7075 or 928-523-6249
Marc.Burdiss@nau.edu
www.marcburdiss.com

Arizona is currently aligned with Mountain Standard Time
We support the development of an NFPA standard for “The Preparedness and Response to Active Shooter Scenarios and Incidents.”

Thank you,

William E. Sturgeon
Fire Chief
St. Cloud Fire Rescue
W: (407) 957-8481
C: (407) 709-7196
Hello NFPA Standards Administration:

My name is Cathy Stashak and I am an engineer with the Office of the Illinois State Fire Marshal as well as a member of NFPA, volunteering on several technical committees. I don’t have any profound statement to say related to the need for a standard related to response by fire and EMS to an intruder or active shooter event in a building. I have participated on task groups since December 2014 related to this topic (College Park, MD and the combined ASIS/NFPA task group) and I support such a standard. There is so much to think about, so much information that FDs can use in dealing with these scenarios and working side-by-side with law enforcement. There has long been a conflict in items such as locking hardware and evacuation drills and the NFPA has been very forward thinking in opening up the discussions to experts and interested parties. So much information has been developed from those meetings from designing of campuses, to life safety issues, support, and prevention. I remember that the publishing of a standard or a guideline was one of the items on the wish list.

I would love to continue to participate on such a committee and as always, if there is any way I can help, please let me know.

Cathy Stashak, Section Chief
OSFM Technical Services Division
312-814-2425

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Good afternoon,
As a tactical paramedic and the program director of my departments Tactical Casualty Care course, I think that it would be very helpful to have a standard from the NFPA. This would help provide direction from "the fire standard" to supplement information that is out there from state and federal agencies who's sole mission isn't firefighting. I think that this standard would also help push the need for better planning and execution during a active shooter or other hostile events. For these operations to work effectively it needs Fire/EMS and Law Enforcement to be on the page in all areas, the a large factor is that the fire/ems group is out of their element in many ways. Just my two cents. Thanks.
Noah Toft
El Dorado County Fire (California)
Dear NFPA Standards Council,

My name is Michael Kienzle and, as an employee of W.L. Gore & Associates, Inc, I am currently an active member of the National Fire & Protection Association as well as a Technical Committee Member on two NFPA projects.

2. Emergency Medical Services Personnel & Equipment (NFPA 1999)

I am writing to express support in the establishment of an ANSI Accredited Standard addressing preparedness and response to active shooter scenarios and incidents.

My reasons for supporting this are listed below:

- Active shooter incidents / scenarios are on the rise (frequency and severity) in the past fifteen years. Reference: http://abcnews.go.com/US/active-shooter-incidents-continue-rise-fbi-data-shows/story?id=39876178

- Thousands of first responders have undertaken active shooter training in recent years. Reference: https://www.fbi.gov/about/partnerships/office-of-partner-engagement/active-shooter-resources

- The establishment of an NFPA standard to address training, appropriate PPE, and response procedures & protocol should have a positive impact on future active shooter incident response. As a response community, we should build upon the lessons of past events and incorporate those learnings into future response capabilities.

- Emergency response end users and PPE manufacturers depend on many standards developed by NFPA to help define the appropriate PPE for a given response (e.g. Hazmat, CBRN, EMS). In some cases, these standards have become the benchmarks for establishing protective clothing and equipment minimum design and performance requirements.

- Regarding Personal Protective Equipment, (PPE) for active shooter incidents, the benefit of an NFPA standard includes

  1. uniform product testing
  2. criteria based on specific end user needs
  3. minimum requirements for design, performance, documentation & labelling; and
  4. required third party certification for initial product qualification and continued review of manufacturer compliance and quality.

Please feel free to contact me directly if you have any questions.

Best Regards,

Mike
NFPA, I’d like to submit our department tactical response policy for consideration.

Rancho Cucamonga Fire Protection District has been developing our policy and training on this subject for over twelve years. I also represent Fire Agencies (South) on the CA State Tactical EMS committee which has adopted most of the principles we use for the CA state guidelines. As a note, we prefer the term “tactical response” over “active shooter” because our response model isn’t limited to just an active shooter.

Thank you for your consideration and please feel free to reach out to us for a further information.

Patrick Lewis
Fire Captain/ TLO
Rancho Cucamonga Fire Protection District
909 856-7344
I. POLICY STATEMENT

A. PURPOSE

When the lives of multiple people are at stake, as in an active shooter environment, barricaded suspect, hostage situation or terrorist attack, the need to enter a relative safe scene under force protection may come to pass with the primary objective of providing point of wound care to victims that otherwise would have died from preventable death injuries.

B. SCOPE

This policy shall apply to all Rancho Cucamonga Fire Protection District personnel at Tactical Response incidents.

II. DEFINITIONS

1. **Active Shooter:** One or more individuals actively engaged in killing or attempting to kill people in a confined and populated area.

2. **Unified Command:** A unified team effort which allows all agencies with responsibility for the incident, either geographical or functional, to manage an incident by establishing a common set of incident objectives and strategies. Initial Law Enforcement, UCP, RTF’s will utilize compatible maps/Block plans/GIS technology. This is accomplished without
3. **Dynamic Risk Assessment**: A continuous process of gathering and evaluating information throughout the entire incident in an effort to properly determine risk (i.e. a Green vs Red light condition). Considerations: A strong Unified Command, Number/location of shooters, determine whether shooter is engaged/ barricaded or eliminated, known rescue, known IED’s, availability of force protection, Properly trained Fire personnel, identified access points/travel routes, proper PPE, etc. It is important to remember that when determining threat zones, do not get fixated on concentric circles surrounding the scene; zones might be discontinues/dynamic depending on the threat locations.

4. **Green Light Condition**: No direct or immediate threat to RTF and area of operation will be relatively safe. This is an information sufficient environment (reasonable considerations in the Dynamic Risk Assessment have been met). This is a “GO” condition authorized by the Fire IC.

5. **Red Light Condition**: Direct and immediate threat to RTF exists. This is a very information poor environment (critical considerations in the Dynamic Risk Assessment have not been met). This is a “NO GO” condition.

6. **Stop Point**: This is a term used to describe anytime a RTF has changed its objective, or has a change of condition from Green light to Red light for any reason. This could be from running out of supplies, encountering an IED, Loss of communication, Lack of “LACES” or no more patients. *** When using this term it should be immediately communicated to the UCP with “Why Stop”
7. **Hot Zone:** Area where there is known hazard or life threat that is direct and immediate. An example of this would be any uncontrolled area where the active shooter could directly engage an RTF team or a location with a complex IED. RTF teams will not be deployed into a Hot Zone.

8. **Warm Zone:** Areas that Law Enforcement have cleared where there is minimal or mitigated threat. This area can be considered clear but not secure; this is where Rescue Task Forces deploy to treat and extract victims.

9. **Cold Zone:** Areas where there is little or no threat, due to distance, shielding and or secured by law enforcement (i.e. Casualty Collection Points). Areas where RCFD and mutual aid resources will stage, triage, treat, and transport victims once removed from the warm zone.

10. **Casualty Collection Point (CCP):** An area that ideally has both cover and concealment and will function as the casualty drop off point between the warm and cold zone. When needed, the CCP will be used as a safe temporary location until victims can be moved into a treatment area well into the cold zone. The RTF assigned to the CCP will continually reevaluate and treat the casualties using TECC guidelines as well as coordinate the transitions of victims from the CCP to the Cold zone Treatment areas. The RTF assigned to the CCP should request the CCP bag located on the Captain.
11. **Clear of threats:** An area that during an initial sweep revealed no immediate or direct threat to life.

12. **Clear of casualties:** A term used to describe an area free of patients.

13. **Secure:** An area that has been actively maintained free of any immediate or direct life threats by Law Enforcement.

14. **Safety Corridor:** An area Law Enforcement has contained and secured in the warm zone to allow RTF’s to move in relative safety. This area doesn’t forgo the need of RTF force protection.

15. **Safe Refuge area:** An area identified within the Warm zone where RTF’s or individuals can seek temporary refuge. These areas may be identified by the RTF’s as they progress through the warm zone.

16. **Cover:** Provides protection from bullets, fragments. Could be a large tree, fire engine, or concrete wall etc.

17. **Concealment:** A position that provides little to no view from certain vantage point. Does not provide protection from bullets, fragments or fire.

18. **Law Enforcement Officer:** Standard uniformed or plane clothes police officers assigned specified geographic areas or functions. May engage/ contact the shooter(s) as a single resource or as part of a Contact Team.

19. **Qualified Law Enforcement personnel for RTF:** Law enforcement personnel that have been through basic RTF training with RCFD.
20. **Force protection:** Law enforcement component of a RTF that provides protection for the Fire Rescue personnel. The security element for RCFD, will only be done by qualified LE personnel.

21. **Contact Team:** Initial Law enforcement teams of up to 4 officers who form immediately on arrival to scene and deploy into building moving rapidly with objective of initiating contact to contain / eliminate the active shooter to prevent further injury or loss of life.
22. **Contact Team Group Supervisor (CGS):** Law enforcement person who assumes overhead position early into the incident to direct and coordinate the operations of the contact teams. The CGS position will likely be filled by one of the responding law enforcement sergeants or senior officers and will serve as the communication point between law enforcement dispatch / UCP and the Contact Teams.

23. **Rescue Task Force (RTF):** Three to four RCFD personnel to include a Captain, a Paramedic and a minimum of three law enforcement personnel. The Rescue Task Force (RTF) will deploy in the Warm Zone to provide point of wound care to victims or other specific tactical objectives where there is an on-going ballistic or explosive potential. The RTF may also be given specific tactical objectives. Based on the dynamic risk assessment and needs of the incident, unified command has the option of modifying the number of qualified law enforcement personnel per RTF. The RTF may be deployed to work an active shooter event or any other scene that is or has the possibility of an ongoing ballistic or explosive potential.
24. **Rescue Group Supervisor (RGS):** A RCFD suppression member will be assigned to the RGS. The RGS will coordinate with the UCP on security element and resources for the formation of the RTF’s. The RGS will direct / coordinate RTF(s) and the rescue operation for rapid treatment and extraction of victims. The RGS will monitor conditions and confirm Warm / Hot Zones; determine RTF staging, entry points, and the CCP(s). The RGS will be the point of contact between the UCP and the RTF’s. The RGS will communicate/coordinate with the incident Medical Group Supervisor for the relocation of victims from the CCP to MCI Treatment Areas.
25. **RGS Assistant**: A RCFD suppression member assigned to the RGS that will assist with; accountability / PAR, movement of patients between the CCP and Cold zone / treatment areas, communications etc.

26. **Rescue Task Force staging area (RTF Staging)**: An area “On Deck”, which has been determined by the RGS to have both cover and concealment and will function as the staging area of the RTF(s). This will be the area where RCFD personnel in tactical PPE and law enforcement assigned to the RTF report for deployment into the Warm Zone.

27. **Rendezvous Point**: Location where Fire personnel meet law enforcement to form a RTF, after which they are referred to as an “RTF”.

28. **Improvised Explosive Device (IED)**: A device placed or fabricated in an improvised manner incorporating destructive, lethal, noxious, pyrotechnic, incendiary or chemicals designed to destroy incapacitate, harass or distract.

29. **Tactical PPE**: All ballistic protective equipment worn by the RTF. See appendices.
30. Tactical Emergency Casualty Care (TECC): (These are RCFD medical treatment guidelines and can be viewed as Warm Zone Tactical EMS) The TECC guidelines are a set of best-practice recommendations for casualty management during high-threat civilian tactical and rescue operations. The guidelines are based on the principles of Tactical Combat Casualty Care (TCCC), but account for differences in the civilian environment such as allocation and availability of resources, variances in patient populations, and scopes of practice. The goals of Tactical Emergency Casualty Care are to: Balance the threat, civilian scope of practice, differences in civilian populations, medical equipment limits, and variable resources for responses to atypical emergencies. Establish frameworks that balance risk - benefit ratios for all civilian operational medical response elements. Provide guidance on medical management of preventable deaths at or near the point of wounding. Minimize providers’ risks while maximizing patients’ benefits.

31. **Tactical EMS Gear:** Tactical Medical and evacuation gear carried on RTF teams. See Appendices section.
Subject:
Tactical Response Scenario
Fire and Law Enforcement Staging Considerations:

1. Consider last tactical option and do not over commit
2. Centralized staging
3. Monitor appropriate command and tactical frequencies
4. Report to command post for assignment
III. RESPONSIBILITY

A. It shall be the responsibility of the Incident Commander at a Tactical Response Scenario incident to assure that all the applicable elements of this policy are complied with.

B. All Fire District suppression personnel shall complete the RCFD Tactical Response Scenario Operations class.

C. All Fire District personnel shall complete at least one annual Tactical Response Scenario training drill or class.
IV. PROCEDURE

A. Pre-Incident Preparation

1. It is the responsibility of the Engineer to ensure all Tactical Response Gear is maintained and accounted for on their unit at the beginning of each shift. For list of equipment see Appendices.

B. Dispatch and Response to Reported Active shooter, bombing or terrorist attack incident.

1. Dispatch shall provide responding resources with detailed information and the circumstances of the reported incident.

2. As information is coming in consider early on to request additional resources as the need for resources in the incident will grow rapidly. Responding units shall monitor appropriate Law Enforcement radio channels. Maintain radio discipline.

C. Initial actions of first arriving unit.

1. Identify a level II staging area for all initial units to assemble. Consider an area out of line of sight of incident, in line of approach to location or possible predetermined area from pre plans.

2. May assume MCI positions in the “Cold Zone” though not recommended due to limited amount of trained RTF personnel.

3. If encountered with large amounts of patients with life threatening injuries the first units on scene may establish a temporary CCP and begin TECC treatment until other units arrive to whom he may turn over care.

4. Notify and/or request any additional resources.

D. First arriving Chief Officer.

1. Establish Unified Command with SBSO.
Subject: Tactical Response Scenario

2. Will identify and establish operating zones with SBSO and begin a DRA to determine RED vs GREEN light condition for Tactical Response Scenario operations.

3. Will assign a RGS and Assistant from available RCFD units and assign them RCFD crews as needed to form and deploy RTF’S.

4. May assign mutual aid resources to fill MCI positions or fire suppression that only involve working in the COLD zone.

E. Rescue Group Supervisor

1. Will coordinate with SBSO/UCP to have security detail for RTF teams

2. Will coordinate rescue operations.

3. Will set up RTF staging area.

4. Will assign a RTF to the CCP and coordinate the movement of patients from the CCP to the cold zone treatment area.

5. Confirm Warm zones/Hot zones and entry point(s)

6. Relay Hazards

F. Security Element

1. The role of the security element in the RTF will be that of security and movement of the RTF only. They should avoid assisting with patient care or movement of patients.

2. The security element of the RTF will provide 360 degree coverage at all times.

3. At no time will the security detail assigned to RTF leave the team further then close direct line of sight or verbal contact.

4. The security detail must be able to provide effective defensive fire cover for the RTF at all times.

G. Incident Objectives
Primary Objective

- Perform only lifesaving treatment in accordance to the TECC guidelines. See APPENDIXES for treatment protocols.
- Perform “START” triage in the warm zone using colored tape. See APPENDIXES for START Triage guidelines.
- Provide updated information to RGS and directions to incoming RTF’s (“CAN” report)
- Advance until they reach a stop point. If they do exit they will extract with them the furthest immediate patients.

Extraction Objection

- Reassess the victims and perform only life saving treatment in accordance with TECC guidelines.
- Extract/Evacuate the first critical patient they encounter identified by red triage tape to the established CCP.
- RTF teams will re-enter the warm zone after they extract the patients(s) to the CCP.

Mission Specific Objective

- A specific task which may or may not be directly associated with patient care
- The task is assigned as required by the immediate needs of the incident.
- Examples include, but not limited to: Breaching/Forced Entry, Fire Control, Hazardous Material Mitigation or Law Enforcement Officer (contact team) rescue/extraction.

Casualty Collection Point Objective

- Manage the CCP and coordinate the treatment and transfer of victims
- Patient’s will be treated utilizing TECC guidelines
- Patient’s will be transferred to cold zone treatment areas
- Security elements will maintain perimeter security of the CCP.

H. Considerations for all RTF teams.

1. RCFD Company Officer (C.O.) will lead the RTF and maintain constant communication
Subject: Tactical Response Scenario

Page 16

with security detail and RGS. It is critical for the RTF leader to maintain situational awareness and not become task oriented.

2. All RTF’s will move in and out of the warm zone only through entrances and corridors cleared by law enforcement.

3. All other RTF members will be flexible in the roles and be able to switch objectives as the environment dictates. There may be a time such as in a classroom or CCP where all RTF team members are engaged in life saving treatment.

4. Crews may be combined to form a single large RTF. Doing this provides more personnel for the assigned objective. This can be particularly beneficial for the initial “Primary” objective in anticipation for a saturation of victims

5. RTF members will use constant tactical situational awareness and immediately advise their security detail if they encounter or see a weapon or IED.

6. As the RTF moves throughout the warm zone the C.O. in conjunction with the security detail will identify areas of safe refuge.

7. If the zone in which the RTF is operating in changes from Warm to Hot due to a direct or immediate threat, immediate evacuation of the RTF to appropriate cover will occur and the CO will declare a RED light condition.

8. Print block plans.

9. Consider bringing unit trauma bag to the RTF staging and drop it off.

10. Use of glow sticks: Use multiple red glow sticks to mark an area with a hazards such as an IED. Use a green glow stick to mark dead victims by placing it in their mouth. Use a white glow sticks as “bread crumbs” to mark the route you have taken, place them every 30’-50’ at every change of direction.

11. If responding to a bombing other considerations may apply including the use of shields by the security element and limiting the number of RTFs.

12. The RTF designators will be in accordance with the unit number of that crew (i.e. ME 171 is RTF1, ME175 is RTF5, MT174 is RTF44 and ME138 is RTF138)
13. The captain that is in charge of the RTF will be distinguished by having a solid gray paint stripe from front to back on his helmet. The battalion chief helmet will have similar stripe bronze in color.
V. APPENDIXES

1. Equipment

A. Inventory of Personnel Protective Equipment

1. Level 2+ concealable personal body armor
2. PASGT style ballistic helmet
3. Molle style tactical plate carrier
4. Front and back Level 3 rifle plates
5. Tactical EMS gloves (black) one box of each size in bag

B. Accessories on or in the plate carrier vest

1. 3 rolls of triage tape: Black/white, Red and yellow
2. Radio pouch
3. SCBA mask pouch
4. Extra gear pouch
5. Trauma sheers with a pouch and retractable gear keeper
6. Large Velcro identified as RESCUE/RCFD on back of plate carrier vest
7. Glow sticks (6” lasting 12 hours): 4 red, 4 green and 4 white
8. Streamlight PolyTac 90 LED compact right angle flash light
9. Anti-fog wipes for mask
10. MSA Advantage GME-P100 Combination cartridge respirator
11. MSA tear gas cartridge respirator
12. 4 Visipad red, 4 Visipad blue

C. Inventory of Tactical EMS bag

1. 4 tourniquets
2. 4 3.25” Needle thoracostomy kits
3. 4 large compression bandages
4. 4 Occlusive dressings (vented)
5. 4 OPA’s
6. 4 Triangular Bandages
7. 2 Flexible field litter
8. 2 combat gauze rolled 4’
9. 4 Swat T tourniquets
APPENDIXES

2. Medical Guidelines (Tactical Response medical guidelines will be based on current TECC guidelines)

A. Situational Awareness:
1. Be aware of your surroundings and always consider cover vs concealment.
2. Ambulatory patients should be told to evacuate towards the Cold Zone.
3. Assess patients using START triage.

B. Circulation (Hemorrhage control):
1. Identify and treat major neck or extremity bleeding.
2. Immediately apply direct pressure by kneeling with your body weight on the proximal brachial or femoral artery. This will free up your hands.
3. Apply Tourniquets ASAP for the following extremity wounds:
   a. Total or near total amputations
   b. Large vessel arterial bleeding
   c. Large venous bleeding
   d. Any wound that cannot be controlled with a pressure dressing
   1. Place tourniquets initially as proximal on the limb as possible.
   2. Hemostatic agent by way of wound packing and pressure dressings may be used when a tourniquet would not work or is not indicated. This can include areas of the neck, shoulders, armpits and groin.

C. Airway:
1. Basic airway management is emphasized in the “Warm Zone”.
2. Any occluded airway or unresponsive patient will have a NPA or OPA placed.
3. Allow the casualty to assume the best position for them that protects there airway, this can include sitting up.

D. Breathing:
1. Identify and treat aggressively any open or sucking chest wounds, and tension pneumothorax.
2. Apply chest seal dressing to all trunk wounds anterior or posterior from the umbilicus to the trapezius muscles.
3. Any patient with a thoracic injury and respiratory distress will receive a needle decompression utilizing a department approved NT device and in the approved
landmarks per ICEMA.

E. Evaluate, Evacuate and Environment:
1. Reassess interventions and prepare for evacuation.
2. Evaluate the effectiveness of applied pressure dressings, tourniquets, chest seals and needle thoracotomies.
3. Perform a blood sweep and assess for unrecognized hemorrhage.
4. Place conscious PT’s in position of comfort and unconscious PT’s in recovery position while awaiting evacuation.
5. Evacuate all immediate patients prior to the Delayed patients.
6. Once the patient is in the CCP insure you are preventing hypothermia.

F. START TRIAGE and Tagging patients:
1. All patients that are ambulatory are considered MINOR and will not be marked in the warm zone. These patients should be told to evacuate towards the Cold Zone.
2. All patients that are DELAYED should be marked with YELLOW TAPE and not be evacuated until all the IMMIDIATES have been evacuated first.
3. All patients that are IMMEDIATE should be marked with RED TAPE and be the first to be evacuated by the RTF’s.
4. All victims that have been determined DEAD will be tagged with BLACK & WHITE striped TAPE and in low light setting will have a GREEN GLOW STICK placed in their mouth.
Subject: Tactical Response Scenario
To Whom It May Concern,

IBEW Local 46 would like to express our support for developing an Active Shooter Response Standard. These types of incidences are going to continue for numerous reasons and we believe the public and law enforcement should be knowledgeable on how to respond to these threats to lives. The most important part of the standard should be public education since law enforcement is already training for these scenarios. Thank you for the opportunity to express our opinion.

Respectfully,

James Tosh, Business Manager
IBEW Local 46
Alternate for 730 and 731
The International Association of EMS Chiefs supports the NFPA in empaneling a committee to develop a standard for the response to active shooters but feel the committee should not focus solely on a shooting event. The standard should be broad-based - active shooter/hostile event/complex coordinated attack.

A standard must be focused on all the issues involved in these types of incidents, but must be flexible enough to incorporate a multi-discipline approach that includes EMS, fire, law enforcement, local governments, public works, hospitals, emergency management, private resources, and the overall community.

Additionally, the guidance needs to be general enough to make sense for all types of communities across the nation, both urban and rural but also needs to ensure that there is an all-inclusive approach that takes into account the various types of agencies that will be responding to these incidents inclusive of career, volunteer, fire / non-fire based, municipal, private, etc.

We further support the development of this technical committee if the focus is not on tactics but instead to develop standards pertaining to equipment, training, communication, developing partnerships and documentation and stress pre-planning, interoperability, use of incident command, EMS operations in the Warm Zone, incorporation of Hartford Consensus recommendations, rapid triage and rapid transport.

The standard should address the basic tenets Emergency Management – Mitigation, Preparedness, Response and Recovery. Other areas the TC need to give attention to include the mental health community, NGOs who are tasked with reunification, trauma system stakeholders, and should include the military to share trauma lessons about saving lives in these types of events.

Peter I. Dworsky, MPH, EMT-P, CEM
President-Elect
International Association of EMS Chiefs
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Suite 705
Washington, D.C. 20036
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peter.dworsky@iaemsc.org
January 16, 2017

National Fire Protection Association  
1 Batterymarch Park  
Quincy, MA  02169

RE: Comments on NFPA Active Shooter ANSI Accreditation Standard

The American College of Emergency Physicians (ACEP) is pleased to submit the following comments regarding the NFPA proposal to explore developing ANSI Accreditation Standard for active shooter events. We believe this to be an important topic and one that is emerging rapidly.

- ACEP supports the concept of establishing standards to support a system of care that can be applied across the entire response community for active shooter events.

- We believe this should be a collaborative effect with appropriate representation from all the stakeholders including the fire service, law enforcement, EMS, emergency physicians, and surgeons.

- The public should also be included due to national efforts to train citizen bystanders in severe hemorrhage control through projects like the White House "Stop The Bleed" campaign and the Hartford Consensus. Other training programs are currently in development such as ACEP’s “First Responder On-Scene Training (FROST)” and FEMA’s “Until Help Arrives.”

- Programs like the TECC guidelines have important data and knowledge that should be included.

Sincerely,

Rebecca B. Parker, MD, FACEP
President
- While standards can provide useful guidance and uniformity across jurisdictions and disciplines, they must be scalable in order to avoid adversely affecting small and medium-size agencies, including campus public safety agencies, many of which are non-sworn. Further, some sworn campus public safety agencies are not armed.

- The U.S. Departments of Justice and Homeland Security have invested significant resources in research and development to support robust training programs for emergency responders dealing with active shooter events. This includes guidelines and training for EMTs and fire fighters. Absent compelling reasons to do otherwise, any NFPA standard should comport with these federal guidelines.

- Any standard for dealing with active shooter/attacker events should be sufficiently flexible to address the evolving nature of these threats, e.g., complex attacks involving multiple assailants, targets and weapons.

Chief Randy A. Burba
Chapman University Department of Public Safety
President, IACLEA
E-Mail: burba@chapman.edu
(714) 997-6763 – (714) 289-2014
www.chapman.edu/publicsafety
Good morning, I am trying to see if a determination has been made for the committee on active shooter. I am very interested in being a part of this committee. Thank you

MICHAEL MCNALLY, CFO, CTO
Deputy Fire Chief
Coral Springs - Parkland Fire Department
MMcNally@coralsprings.org • Phone 754-264-2251 or Office • Fax 954-344-5933
City of Coral Springs, Florida • 2801 Coral Springs Drive • Coral Springs, Florida 33065

ISO Class 1 Department

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I submitted an email on this and just received an undeliverable message.

It makes sense to develop the standard and I fully support it.

Chris Hertig

Chris A. Hertig, CPP, CPOI 1350 Ruxton Road York, PA 17403 (717)845-4579/(717)818-4793
ASSERT NPN is a Texas nonprofit corporation providing on site active shooter training through a network of local off duty law enforcement. This keeps the funding local and low cost to businesses in the community. ASSERT bridges the gap when first responders become the trainers at the location they may potentially respond to.

We bring awareness not only to the active shooter issue but also the need to standardize training and protocol for all responding agencies. We feel that this is paramount to allow law enforcement to better coordinate and control the situation.

ASSERT NPN has initiated the conversion to Texas Nonprofit in order to better serve the community with a more cost effective training solution. We feel this will increase adoption of standards, and ultimately bring awareness and preparedness. All Texas instructors are ALERRT certified.

Our entire team is strongly committed to promoting standardized training and response protocols. This is my personal passion and hope to see legislation adopted in Texas that will require this training in all of our schools. I believe that working with the NFPA to produce these standards is the best way to accomplish adoption on a national level.

We will be submitting an application for the Technical Committee. ASSERT's team of experts is a diverse collection of knowledge and experience. I have no doubt they will be a value if selected.

Please don't hesitate to contact me with any questions. Thank you for your consideration.

Jason Turk
ASSERT NPN
Active Shooter Awareness/Counter Active Shooter Technology
512-333-1714
Jturk@assertnow.com
ASSERTNOW.COM
Item 17-4-6
Should NFPA Create New Standards for Personnel Performing Electrical Inspections?

The National Fire Protection Association (NFPA) is considering the development of ANSI Accredited Standards in support of the electrical inspection community. Standards to address requisite skills and knowledge, including the establishment of minimum job performance requirements (“JPR”) for those who conduct electrical inspections and electrical plan reviews are envisioned. Additionally, a stand-alone document to address and establish recommended practices for electrical inspections is being explored.

If either or both of the New Project Initiations are ultimately approved by the Standards Council after consideration of public comments, a new Technical Committee may be established for electrical inspection related standards. Activities of the Technical Committee are anticipated to focus on:

- Job performance requirements for personnel performing electrical inspections;
- General skills, knowledge and experience to perform electrical inspections;
- Job performance requirements for electrical plan review;
- General skills, knowledge and experience to perform electrical plan reviews;
- Recommended practices for conducting electrical inspections (residential and commercial)

NFPA is seeking comments from all interested organizations and individuals to gauge whether support exists for standards development to support the electrical inspection community. Specifically, please submit your comments to the following:

1. Are you, or your organization, in favor of the development of an NFPA Standard pertaining to job performance requirements of personnel performing electrical inspections and electrical plan review?
2. Please state your reason(s) for supporting or opposing such standards development.

3. Are you, or your organization, in favor of the development of an NFPA Standard to establish recommended practices for electrical inspections?

4. Are you or your organization interested in applying for membership on the Technical Committee if established by the Standards Council? If yes, please submit an application, in addition to your comments in support of the project, online at: *submit online application*

*Note: Applications being accepted for purposes of documenting applicant interest in committee participation. Acceptance of applications by NFPA does not guaranty or imply the Standards Council will ultimately approve standards development activity on this subject matter.

Please submit all comments, in support or opposition, by February 24, 2017 to standards development related to electrical plan review and inspections at: stds_admin@nfpa.org.

(1) The circuit conductors being spliced are all from nonmetallic multiconductor cord or cable assemblies, provided that the equipment grounding continuity is maintained with or without the box.

(2) The circuit conductors being spliced are all from metal sheathed cable assemblies terminated in listed fittings that mechanically secure the cable sheath to maintain effective electrical continuity.

**Substantiation.** The new allowance to the 2017 version of 590.4(G) allows for open splices for any temporary installation. This allowance used to apply only to construction sites when certain criteria was met. As written for the new edition, an open splice is permitted for any temporary installation, provided that similar criteria to the construction site rule is met. This means that areas such as Christmas tree sales lots, for example, can have open splices where the public would have access to them. This is obviously an unsafe
Maynard, Mary

From: Phillips, Pete <Pete.Phillips@bwpmlp.com>
Sent: Thursday, January 12, 2017 8:31 AM
To: stds_admin
Subject: Electrical Inspections and Electrical Plan Reviews

Dear Sirs:
Let the NFPA take care of the NFPA, there’s plenty there to keep it busy, leave the NEC to NEC they are more than capable of governing themselves without any help from the NFPA or regulation place upon them by the NFPA. NEC has been around a whole lot longer than the NFPA, if anything NFPA could take consulting from the NEC.

Sincerely,
Master Electrical Licenses Holder
I don’t believe this is a good idea. The electrical profession is already heavily regulated by the states. You cannot perform the listed considerations for this standard unless you have a Master Electricians license and that takes at least 8 years to acquire. Why reinvent the wheel? Who would this serve? If you branch out to far, there is going to be too much maintenance on standards to keep up with.
Sent from Mail for Windows 10
There are many pitfalls to this type of standard. First there is the fact that it is overlapping the exam standard that are in place by the International Association of Electrical Inspector. Second, they tend to conflict with state professional standards and encroach on those thing where a professional engineer skilled in electrical is qualified by law. Routinely as a professional engineer I do plan review and even third party inspections. I’m not sure if this was deliberate or not, but you left out any reference to industrial inspections.

I would certainly be interested in applying for the committee. I am a member of NFPA, IAEI (associate member) and I am on two UL Standards Technical Panels. I am well versed in the NEC and interpretations related to the code.

William R Jennings, Jr. PE
President

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Consulting Engineering, PC
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www.jenningspe.com
To All,

I have almost forty years hands-on experience as an apprentice, journeyman and master electrician. You will notice that I came up through the ranks with most of my education/experience being OJT (I had some great teachers). The remainder was self initiative to take classes, etc on my own to further my understanding and knowledge of my trade. I spent many of those years as a hands-on field supervisor overseeing electrical projects up to $8-9 million. Currently I am the chief electrician at my place of employment. I have mentioned the above not as self acclaim but so you would understand the bases of my thoughts.

I am all for supporting the inspection community. However, at face value, I feel very strongly that what you are proposing could very well turn out to be a double-edged sword if not approached correctly. No one that I know wishes for an inspector that is all book knowledge and no field experience. Nor, do they wish for one that is all field experience with no understanding of how electrical systems work. It is my experience that the best inspectors, engineers and contractors are well-schooled in both these areas. As a basis and food for thought, one might start with a minimum of ten years hands-on field experience along with a two to four year electrical degree. This does not mean the individual has to be an engineer. The field(s) of electricity / electronics are multi-faceted and ever-changing—no one will ever know it all. But, we can hope the "inspector" has the experience, schooling and attitude to work with those of us who try our best everyday to get it right the first time. Plus, may he/she be "smart enough" to realize when their own knowledge and experience is lacking. Thank you for allowing me the opportunity to express my opinion. To all, have a really nice day.

On another matter—could we possibly one day do away with the "Code Book" which I feel has always leaned toward the legaleze and, replace it with the "Handbook" which seems better written in laymen's terms? Plus, for most, a picture is worth a thousand words and the "code" is well incorporated within the Handbook.

Regards,

Mike Yates
Facilities Electrical Technician
Hitachi Automotive Systems Americas, Inc. (HK)
Phone: 859.734.6545
Fax: 859.734.6533
mike.yates@hitachi-automotive.us
Thank you for the opportunity to respond.

Both myself and my organization would be in support of standard for electrical inspections and electrical plan review. I have spent 15 years conducting electrical inspections in a jurisdiction that does not perform any plan review for electrical system installations. I feel that if there were a standard for plan review an inspections it would decrease the number and severity of errors that were encountered in the field, usually during final inspections. There should be a uniform method for conducting plan reviews and inspections and the development of a standard would be the first step in achieving that. I consider this the same as there is a fire code and a standard for fire marshals and inspectors but as there has been the National Electrical Code for many years there is no guidance or standard for those persons conducting electrical plan review, if at all, or the inspection of electrical systems. With the dangers inherent to electrical equipment and installations it just makes good sense to have a standard for the protection of all involved. Myself and my organization would be more than interested in participating in the development of such a standard and willing to serve on a technical committee to this end.

Thanks

Matt Ruhrer

Matt Ruhrer, CFI-I, CEI
Fire Protection Engineer

HDR
8404 Indian Hills Drive
Omaha, NE 68114
D 402.399.4803
Matt.Ruhrer@hdrinc.com

hdrinc.com/follow-us
As an Electrical Maintenance planner for Kaiser Aluminum it is my personal view that standards and performance requirements are needed. Electrical inspections are a big part of maintenance electrician and electrical planner duties. With the turnover in the workforce and fewer experienced workers available to train and work with the younger workers I see the necessity for clearer standards. Much has changed in electrical safety and I believe standards could help both the older and younger electrical workers as it pertains to inspections. In addition, constraints on the workforce requires people to do more and more things beyond their customary work.

Thanks,

Ron Allen – Kaiser Aluminum
Electrical Planner
Office: 509-927-6471

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(KA-OM-1)
Maynard, Mary

From: blu.owen@bdpower.us
Sent: Wednesday, January 11, 2017 4:20 PM
To: stds_admin
Subject: Electrical Inspections and Electrical Plan Reviews

Sir,

I believe there is a need for a Certified Electrical Inspection training provided by NFPA. Although, I believe a program that is broken down into fields of expertise would be much better due to the complexity of the electrical industry. This is what I would suggest: Electrical Inspector for Residential; Electrical Inspector for Commercial; Electrical Inspector for Emergency Power Systems; and and Master Electrical Inspector. There may be others that could be added to my list.

This would break the certification system down into the specific parts of the electrical industry and would require the inspector to be familiar with not only NFPA 70, but also other NFPA Code that applies to their specific industry.

There could also be courses developed for actual workers in the industry that various States could adopt as part of their Certified Electrician Programs.

Thank you in advance for considering my input,

G. W. "Blu" Owen
Owner, BD Power
Emergency Power Systems
Sales and Service
Maynard, Mary

From: Preston McKee <pmckee@ravenelectric.com>
Sent: Thursday, January 12, 2017 11:34 AM
To: stds_admin
Subject: Electrical Inspections and Electrical Plan Reviews

All, the International Association of Electrical Inspectors already has a certification program. It would seem to me that if the NFPA institutes a program it should be in consideration of and working with the IAEI. I am in favor of the development of the standard. I believe that the NFPA has more resources to provide a more complete program and training to go along with, but it serves no good purpose to have two programs providing the same function. I hope that the NFPA would work in cooperation with the IAEI to combine resources.

Respectfully,

Preston McKee, E.A.
Technical Services Manager

Raven Electric Inc.
8015 Schoon Street
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Subject: Want to build a new electrical industry standard?

From: Warren Wing [mailto:warren.wing@dbs.idaho.gov]
Sent: Friday, January 13, 2017 4:33 PM
To: New Project Comments <newprojectcomments@nfpa.org>
Subject: RE: Want to build a new electrical industry standard?

1. Are you, or your organization, in favor of the development of an NFPA Standard pertaining to job performance requirements of personnel performing electrical inspections and electrical plan review? Yes, highly in favor of both.
2. Please state your reason(s) for supporting or opposing such standards development. As a state we often contract for other jurisdictions. It would be useful to have standards for contracts. It would also assist in being able to know that inspectors with past experience have performed previous jobs to a certain standard. It would be a useful tool for performance evaluations and being able to identify areas of improvement needed by inspectors.
3. Are you, or your organization, in favor of the development of an NFPA Standard to establish recommended practices for electrical inspections? Yes
4. Are you or your organization interested in applying for membership on the Technical Committee if established by the Standards Council? If yes, please submit an application, in addition to your comments in support of the project, online at: submit online application

Thanks,

Warren Wing
Electrical Program Manager
State of Idaho Division of Building Safety
1090 E. Watertower St, ste 150
Meridian, Idaho 83642
Office (208) 332-7147

Warren.wing@dbs.idaho.gov
1. Are you, or your organization, in favor of the development of an NFPA Standard pertaining to job performance requirements of personnel performing electrical inspections and electrical plan review? YES

2. Please state your reason(s) for supporting or opposing such standards development. Having a standard may provide inspectors the benchmark necessary for more consistent code enforcement.

3. Are you, or your organization, in favor of the development of an NFPA Standard to establish recommended practices for electrical inspections? YES

4. Are you or your organization interested in applying for membership on the Technical Committee if established by the Standards Council? Yes

David Hittinger
Director of Codes and Standards
Executive Director
Independent Electrical Contractors of Greater Cincinnati
586 Kings Run Drive
Cincinnati, OH 45232
(513) 542-0400
Hello,

My answers to the questions are listed below:

1. Yes.
2. Supporting reasons include:
   a. As someone who performs electrical inspections on a weekly basis, I get to see many qualified and
      unqualified individuals perform inspections.
   b. I also get to observe inspectors making mistakes during electrical inspections and missing key
      information to determine root cause failures.
   c. I observe inspectors mislabeling wires or inputting incorrect settings into logic controllers that
      potentially could have saved lives if the data was entered correctly.
   d. I have observed spoliation of evidence on site due to the negligence of inspectors.
   e. I have observed inspectors fixated on one possible outcome and they neglect the evidence in front of
      them that points to the root cause. These inspectors have forgotten to follow the guidelines set forth by
      NFPA 921 and other standards.
   f. A standard would help unify the job responsibilities and recommended practice when performing
      electrical inspections and synergize the industry for the better with less mistakes.
3. Yes.
4. Yes and I submitted an application for membership.

Thanks,
Jay

Jay Prigmore, Ph.D., P.E.
Senior Engineer

Exponent Failure Analysis Associates
4580 Weaver Parkway, Suite 100
Warrenville, Illinois 60555
(Office) 630-658-7557
(Cell) 630-453-4234
(Fax) 630-658-7599

www.exponent.com/jay_prigmore
NFPA Standards Council,

As the Building Official for the City of Altamonte Springs Florida, I encourage the NFPA Standards Council to pursue a professional qualifications standard with JPRs for both electrical inspectors and electrical plans examiners.

The availability of professional qualification standards for Fire Marshals (1037) and Fire Inspectors/Fire Plans Examiners (1031) has been immensely valuable to ensure certifications match the necessary job performance requirements and to create consistency in determining competency of prospective applicants. This has, in turn, encourage greater competency across the entire profession. There is no reason the similar returns could not be expected from a professional qualifications standard for electrical inspectors and electrical plans examiners.

Thank you for your consideration,

Anthony C. Apfelbeck
MPA, CFPS, CBO, CFO, FM, FIFireE
Fire Marshal/Building Official
http://www.altamonte.org
ACApfelbeck@Altamonte.org
W: 407-571-8433
A professional qualifications standard for electrical inspectors and plans examiners and a recommended practice for performance of electrical inspections and plan review are both well overdue.

Both documents would provide value to enforcers, designers, installers, and consumers.

Both documents would enhance uniformity and quality of a critical component (enforcement) of the electrical installation.

I fully support this effort. I would be willing to participate in the development of the documents.

Donny Cook
Chief Electrical Inspector
Shelby County Development Services – Inspection Services
Shelby County, Alabama
1123 County Services Drive
Pelham, AL 35124
205-966-7928 (C)
205-620-6655 (F)
dcook@shelbyal.com
The NEC is a very extensive and at times complex/difficult document to understand.

My opinion would be to start off with single family dwellings and go through load calculations, wire sizing, bends, services, generators and accessory structures since this is the majority of the construction.

I find a lot of issues on the proper bonding and grounding of accessory structures, gas and water piping and the elusive concrete encased electrodes in footings.

Then next would be assisted living and health care institutions.

Joseph J Summers, CBO
Building Official /
Zoning Enforcement Officer

Sent from my Verizon Wireless 4G LTE Droid
I think a standard parallel to NFPA 790 for NEC-related inspection and plan review would be approaching from, I'd hope, a different angle what IAEI certification procedures seek to achieve. While there's benefit to adding competition, I also think that the risk of weakening both would be greater.

Adding a standard parallel to but more extensive than 791, to guide the work, could be difficult to do meaningfully. I think, though, that it could be well worth doing.

David Shapiro
Hello,
I currently work at Chalk River Nuclear Laboratories. I would be interested in committee participation as currently I am working on an initiative to create training to perform IR analysis on electrical panels and equipment. This is to address the Gap for educating the workers to remove panel covers safely (what PPE to use) and perform the Infrared scan.
I am a Level III certified IR Analyst (20 years experience)
Master Electrician

Peter McCauley,
Technical Engineering Specialist
Operations Programs & Standards

613-584-8811 Ext. 43390
B432 Rm 202P
Although the new standard would insure the individual performing the inspections has the skill and knowledge needed, it won’t make the job safer. Professional electricians are the first ones short cutting procedures. Technology has advanced as well, so a standard related to performing electrical inspections should include the use of latest technologies (EMSDS) as acceptable protocols which I believe is not the currently included.

Portions of this message may be confidential under an exemption to Ohio's public records law or under a legal privilege. If you have received this message in error or due to an unauthorized transmission or interception, please delete all copies from your system without disclosing, copying, or transmitting this message.
Subject: Want to build a new electrical industry standard?  

From: Jerry L. Daniel [mailto:Jerry.Daniel@tdlr.texas.gov]  
Sent: Tuesday, January 24, 2017 8:21 AM  
To: New Project Comments <newprojectcomments@nfpa.org>  
Cc: Larry F. Reichle <Larry.Reichle@tdlr.texas.gov>; David Gonzales <David.Gonzales@tdlr.texas.gov>; Beth Clare <Beth.Clare@tdlr.texas.gov>  
Subject: RE: Want to build a new electrical industry standard?  

Please see answer below in red.

1. Are you, or your organization, in favor of the development of an NFPA Standard pertaining to job performance requirements of personnel performing electrical inspections and electrical plan review? **YES**
2. Please state your reason(s) for supporting or opposing such standards development. **There are too many unqualified person(s) inspecting electrical work and passing bad installations and it gives a real electrical inspectors a bad name.**
3. Are you, or your organization, in favor of the development of an NFPA Standard to establish recommended practices for electrical inspections? **YES**
4. Are you or your organization interested in applying for membership on the Technical Committee if established by the Standards Council? If yes, please submit an application, in addition to your comments in support of the project, online at: submit online application **YES**, submitted application on 01/24/2017.
I am in favor of developing standards. As a regional contractor, we work in many jurisdictions. Wherever we work, we hope to get inspections from knowledgeable, professional inspectors. Our only objective is to provide a quality, code compliant installation for our clients. Too many times we encounter inspectors that look at our work from the “I want” viewpoint instead of “the code requires” viewpoint.

If the standard are developed within the next couple of years, it will still take many years to get jurisdictions on board to use them to vet their inspectors. We have to start somewhere.

Carmon Colvin

Carmon Colvin
Vice President
Bright Future Electric, LLC
3420 Richard Arrington Jr. Blvd North
Birmingham, Alabama 35234
Office Direct: (205) 747-1898
Mobile: (205) 999-4211
www.brightfutureelectric.com

Member: NFPA 70, National Electrical Code Committee, Panel 15

This email and any attached files are confidential and intended solely for the intended recipient(s). If you are not the named recipient you should not read, distribute, copy or alter this email. Any views or opinions expressed in this email are those of the author and do not represent those of the NFPA, NFPA Staff, individual committee members, nor the owners of Bright Future Electric, LLC. Warning: Although precautions have been taken to make sure no viruses are present in this email, the company cannot accept responsibility for any loss or damage that arise from the use of this email or attachments.
I am In Favor of a Standard for Personnel Performing Electrical Inspections

I am an Electrical Inspector and as an Inspector it is more than a job it is a Calling. The NEC has in 90.1 its Purpose: The Purpose of this Code is the Practical Safeguarding of persons and property from hazards arising from the use of electricity. How is this process accomplished? What is the check and balance necessary to ensure that an electrical installation meets this minimum condition of being Safe? A qualified person installing an electrical system to the minimum requirement of the Code and product specifications is the first line to a safe installation. The second line in safeguarding and is the Keystone of the process is a Qualified Electrical Inspector. Our electrical systems are so intricate and have become an essential for day to day convenience and operation that having someone that is competent in the industry is very important. The value of having the privilege of being an Electrical Inspector is an intangible and a necessary benefit to society. People not only expect the electrical wiring to work, they expect it to never fail, and they definitely expect it to be safe.

An Electrical Inspector is often viewed as a necessary evil but there are significant benefits of a quality inspection program. One of those benefits is connecting the industry together. The Electrical Inspector has the privilege and responsibility to bring continuity to the Electrical Industry. A Qualified Inspector accomplishes:

- Safeguarding
- Protection of the customers property and personnel
- The manufacture’s liability with the installation of products
- The industries integrity
- Bringing in Qualified Testing Laboratories and Field Evaluation Bodies to ensure the proper product adherence to standards and Code minimums
- And the jurisdictions interests and infrastructure.

These are important values and the business of electrical code enforcement provides other monetary values. It might not be viewed as an economic value or advantage, but in the bigger scheme of business, a good electrical inspection and building safety program can result in significant value for consumers. So where are we in today’s market of the Value of an Electrical Inspector and the impact of his role. Some of us have been questioning what is the future of the Electrical Industry? I would add where are the leaders, future leaders and backbone of the industry? Labor has not been able to lead the industry, since labor has not been able to maintain a work force that is mature and educated. Manufacturing is not providing leadership. I was given a comment by a manufacturer’s representative at a meeting that was to this basic statement” we have the money to push our products and lobby for changes to sell our products”. Manufacturing’s objectives are to produce to sell more. The customer is the sacrificial lamb. He is ignorant of safety and function as long as its “value engineered” to save money. After there is a failure, then “oh woe is me, who can I blame”. Jurisdictions and Cities are then stuck with the consequences of a poor installation that more times
is not meeting minimum installation practices because of unqualified labor and unqualified Inspectors.  

The Electrical Inspector is the best connection within the industry to ensure a quality installation. When the Electrical Inspector understands his role and responsibility, the industry has balance and integrity. It is most interesting that there has not been more attention and support actively taken in supporting the Electrical Inspectors role in educating, leading, enhancing and protecting the Industry. Thank you for attention in this matter, you may reach me at the follow information should you have any questions.

Sincerely,

James Hathorn | Chief Electrical Inspector  
City of Irving | Inspections Department  
825 W. Irving Blvd., 2nd Floor, Irving, TX 75060  
P: (972) 721-4889 | Main: (972) 721-2371  
jhathorn@cityofirving.org  
Please take a quick survey: http://www.cityofirving.org/permisurvey
To whom it may concern,

Please find my answers to the questions posed regarding a standard in support of the electrical inspection community.

1. Yes.

2. Supporting reasons include:
   a. As someone who performs electrical inspections and forensic investigations, I see the results of prior inspections that were completed by both qualified and unqualified individuals.
   b. I have observed potentially hazardous installations that an inspector should have observed but did not likely because they were focused on a very small portion of the installation or did not have the knowledge to identify the hazardous condition.
   c. I have observed that inspectors have certain items that they focus on and then they do not look for other potentially hazardous installation issues.
   d. A standard would help unify the job responsibilities and provided a recommended practice when performing electrical inspections and this could decrease the mistakes made by inspectors and as such decrease the potential for an accident to occur because an inspector did not catch a potentially hazardous condition.

3. Yes.

4. Yes and I submitted an application for membership.

Regards,
Justin
Justin Bishop, Ph.D., P.E., CFEI, CVFI
Exponent
4580 Weaver Parkway, Suite 100
Warrenville, IL 60555
(Office) 630-658-7522
(Cell) 801-699-1128
(Fax) 630-658-7599
I am writing with regard to a recent article I read on the subject standard. I wanted to voice my thoughts that I believe this is a great idea and am willing to do anything I can to help. There are so many ideas that go beyond the standard itself and even into adoption across the country for a standard like this.

Thanks for the opportunity to provide feedback.

TD

Thomas Domitrovich P.E., LEED AP
Vice President, Technical Sales
Bussmann Division
Eaton
114 Old State Road
Ellisville, MO 63021
mobile: 412-716-1475
thomasadomitrovich@eaton.com
www.eaton.com/bussmannseries

---

From: ThomasADomitrovich@Eaton.com
To: stds_admin
Subject: New Standards for Personnel Performing Electrical Inspections
Date: Thursday, February 16, 2017 3:56:23 PM
Attachments: image001.jpg

I am writing with regard to a recent article I read on the subject standard. I wanted to voice my thoughts that I believe this is a great idea and am willing to do anything I can to help. There are so many ideas that go beyond the standard itself and even into adoption across the country for a standard like this.

Thanks for the opportunity to provide feedback.

TD

Thomas Domitrovich P.E., LEED AP
Vice President, Technical Sales
Bussmann Division
Eaton
114 Old State Road
Ellisville, MO 63021
mobile: 412-716-1475
thomasadomitrovich@eaton.com
www.eaton.com/bussmannseries

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February 24, 2017

National Fire Protection Association
Standards Administration
Stds_admin@nfpa.org

Re: Standards Development Related to Electrical Plan Review and Inspection

The National Electrical Manufacturers Association (NEMA) supports strong electrical enforcement to drive public safety as well as the proper use and installation of the electrical equipment that NEMA members manufacture. NEMA supports the NFPA initiative to develop standards pertaining to job performance requirements of personnel performing electrical inspections and electrical plan review.

Thousands of jurisdictions across the country have departments responsible for conducting inspections and hiring professionals to support public safety for their community. Having common criteria for professional credentials supports those jurisdictions that may not have a grasp on the needed responsibilities. The enforcement arm of the electrical industry must also be efficient to support the building industry with timely plan reviews and inspections. Time is critical to the construction industry, so it is important that plan reviewers and electrical inspectors be skilled in their craft to support demands on efficiency with a firm hand on identifying compliance issues that must be addressed to be compliant with electrical code.

NEMA also supports NFPA in their proposed development of a standard that establish recommended practices for electrical inspections. Establishing common expectations for the enforcer can benefit not only the enforcer but also the contractor and manufacturer to support an enforcement protocol. A set of recommended practices will raise the professionalism of the electrical enforcer in the construction industry with the potential to enhance efficiency of inspections as well as establish guidance where public safety may be overlooked.

Once again, NEMA supports NFPA in their endeavor to develop standards that will enhance the electrical enforcement community and establish the professional criteria for public safety alongside efficiency opportunities for the jurisdiction and building industry.

Best Regards,

Vince Baclawski
Senior Technical Director
Codes and Standards
Vin_baclawski@nema.org
Tel: 703-841-3236
The management team within the Department of Development Services in Shelby County, Alabama have reviewed information regarding the NFPA plans to develop a standard for the professional qualifications of electrical inspectors and a recommended practice for those electrical inspections. Shelby County generally supports programs and policies that enhance efficiency and effectiveness of our service to taxpayers. While we believe our current staff is qualified and our current process is effective, we also believe benchmark standards can provide value for local government across the United States and across the world.

Current requirements are in place to insure that the property owners receive a safe, compliant structure when they occupy it after construction that has an electrical service built by a qualified, credentialed electrician. It would only make sense that the person reviewing and inspecting the electrical service has a minimum standard of general skills and knowledge to review both the plans and the installation. Additionally, it is beneficial to have jurisdictions providing inspections with personnel with the same baseline of credentials in order to facilitate an opportunity for the contractors and builders to receive a more uniform inspection. We believe a minimum standard of requirements of the inspectors can assist in providing this opportunity.

Based on our understanding of the open, inclusive, and consensus process used by NFPA to develop standards which allow feedback, both positive and negative, the management team here at the Shelby County Department of Development Services support this effort by the NFPA to provide a baseline standard for electrical inspectors and plan review personnel to address requisite skills and knowledge.

Should you have any questions for me, please let me know.

Thank you for this opportunity to comment.

Chad Scroggins
Manager
Shelby County Development Services
Shelby County, Alabama
1123 County Services Drive
County Services Building
Pelham, AL 35124
(205) 620-6653 (Office)
(205) 620-6655 (Facsimile)
cscroggins@shelbyal.com
NFPA Standards Council,
I am in favor of the development of both a NFPA Standard pertaining to job performance requirements of personnel performing electrical inspections and electrical plan review, and to establish recommended practices for electrical inspections. I see a need for the documents due to:
1- The requirements for certification and/or licensure for electrical inspector and electrical plans examiner are inconsistent. States that require certification and/or licensure require varying degrees of knowledge and experience, while other states do not require certification and/or licensure
2- A recommended practice for electrical inspectors would assist in uniform enforcement of NFPA 70 National Electrical Code. A very common concern for electrical contractors and installers who perform work in more than one municipality or jurisdiction is inconsistencies in the inspection process
3- Building officials, government managers, risk management personnel, and others would be provided with additional options on how to better protect their clients and constituents from the hazards that arise from the use of electricity by employing adequately trained inspectors and plans examiners

Vince Della Croce
Resident Compliance Specialist
11000 Metro Parkway, Suite 30 | Ft. Myers, FL 33966
eti Conformity Services
T 239-693-7100 | M 562-321-0965 | F 772-621-4336
vincent.dellacroce@emerson.com
Dear Standard Council Members,

Please accept my apology for being a day late with this email response. I have been traveling the last few days and had limited access to the internet.

I have been an electrical inspector for over 30 years and have both field and supervisory experience in the electrical inspection industry. I have served as the Chief Electrical Inspector for the State of NH and am currently the Deputy Electrical Authority Having Jurisdiction at two Department of Energy (DOE) sites. I am in strong support of both a standard regarding the minimum job performance requirements for electrical inspectors, including plans reviewers, and a recommended practice for electrical inspections. As we speak I am currently involved in establishing the minimum requirements for performing electrical inspections and for qualifying the electrical inspectors at the Portsmouth DOE site in Piketon, OH.

Currently there is no national standard establishing the minimum requirements or job performance so I strongly support the development of this document and the recommended practice for performing electrical inspections. For many years I have been certain there is need for these documents in our industry. I only wish they were available now as they would be extremely useful in establishing the base line and qualifying requirements for our inspectors at the Portsmouth DOE site.

I was unable to find a link for submitting an application to this Technical Committee if one is established but wanted to make you aware that I am very interested in serving on this Technical Committee if one is established. If you can forward me a link to the application I would be happy to fill it out and return it.

Please do not hesitate to contact me if I can be of further assistance or if you have any questions.

Sincerely,

Mark R. Hilbert
Senior Inspector/Trainer
MR Hilbert Electrical Inspections and Training
The National Fire Protection Association (NFPA) is considering the development of ANSI Accredited Standards in support of the electrical inspection community. Standards to address requisite skills and knowledge, including the establishment of minimum job performance requirements (“JPR”) for those who conduct electrical inspections and electrical plan reviews are envisioned. Additionally, a stand-alone document to address and establish recommended practices for electrical inspections is being explored.

If either or both of the New Project Initiations are ultimately approved by the Standards Council after consideration of public comments, a new Technical Committee may be established for electrical inspection related standards. Activities of the Technical Committee are anticipated to focus on:

- Job performance requirements for personnel performing electrical inspections;
- General skills, knowledge and experience to perform electrical inspections;
- Job performance requirements for electrical plan review;
- General skills, knowledge and experience to perform electrical plan reviews;
- Recommended practices for conducting electrical inspections (residential and commercial).

NFPA is seeking comments from all interested organizations and individuals to gauge whether support exists for standards development to support the electrical inspection community. Specifically, please submit your comments to the following:

1. Are you, or your organization, in favor of the development of an NFPA Standard pertaining to job performance requirements of personnel performing electrical inspections and electrical plan review?

Comment for 1: I am in favor of a standard for the performance requirements of personnel performing electrical inspections and electrical plan reviews. The IAEI, International Association of Electrical Inspectors should be a key component of the creation of this standard if not a joint effort with NFPA.

2. Please state your reason(s) for supporting or opposing such standards development.

Comment for 2: I have been an electrical inspector for nearly 30 years and feel that there is a need for a standard for electrical inspectors and for the performance of electrical inspections. Over the years I have witness a wide range of the quality of electrical inspections. A standard will assist the electrical industry and the inspection industry to have a document that will provide guidance, recommended practices and qualification for electrical inspectors and inspections.

3. Are you, or your organization, in favor of the development of an NFPA Standard to establish recommended practices for electrical inspections?
Comment for 3: I am in support of the development of a standard to establish recommended practices for electrical inspections and inspectors.

4. Are you or your organization interested in applying for membership on the Technical Committee if established by the Standards Council?

Comment for 4: I am interested in being involved in the development of this Standard. The IAEI should be a partner with NFPA in developing this standard.

If yes, please submit an application, in addition to your comments in support of the project, online at: submit online application

*Note: Applications being accepted for purposes of documenting applicant interest in committee participation. Acceptance of applications by NFPA does not guaranty or imply the Standards Council will ultimately approve standards development activity on this subject matter.

Please submit all comments, in support or opposition, by February 24, 2017 to standards development related to electrical plan review and inspections at: newprojectcomments@nfpa.org.

David Williams
1422 Lindy Drive
Lansing, Michigan 48917
Cell: 517-719-3186
Daw1422@gmail.com
MEMORANDUM

TO: Kerry Bell, Chair, NFPA Standards Council

FROM: Allan B. Fraser, Senior Building Code Specialist

CC: R. Solomon

DATE: 3-1-17

SUBJECT: NFPA 1082 - Standard for Facilities Safety Director Professional Qualifications

Dear Mr. Bell,

I respectfully request that the attached draft of NFPA 1082- Standard for Facilities Safety Director Professional Qualifications be placed on the April, 2017 Standards Council Agenda to be released into the Annual 2019 cycle.

In the spring of 2015, the NFPA Standards Council approved the formation of the technical committee on Building Fire and Life Safety Directors with its scope stating that this committee shall have primary responsibility for documents related to the duties, requirements, competencies and professional qualifications required of Building Fire and Life Safety Directors.

This committee shall also have primary responsibility for the establishment of minimum requirements for emergency action plans addressing all-hazard emergencies within occupied structures having an occupant load of greater than 500. This committee shall not have responsibility of such qualifications, roles, responsibilities, or emergency action plans within industrial occupancies.

The committee membership was officially approved by the Council in August of 2015 whereupon it began its work to develop a document to cover the first part of its scope. NFPA 1082 is that document. It has been approved by both the TC and Professional Qualifications Correlating Committee and the committee now requests that the Council release the draft into the Annual 2019 cycle.

Respectfully submitted,

Allan B. Fraser, Staff Liaison to the Technical Committee.
MEMORANDUM

TO: Technical Committee on Building Fire and Life Safety Directors (BLF-AAA)

FROM: Diane Matthews, Project Administrator

DATE: February 22, 2017

SUBJECT: NFPA 1082 Preliminary Draft ReleaseTechnical Committee FINAL Ballot Results (A2019)

According to the final ballot results, all ballot items received the necessary affirmative votes to pass ballot.

23 Members Eligible to Vote
5 Members Not Returned (Brown, Cole, Faber, Groner and Hospelhorn)

The two (2) affirmative with comment votes are attached for your review. No negatives were received.

To pass, the ballot requires: (1) a simple majority of those eligible to vote. See Section 4.3.2.1(b) of the Regulations Governing the Development of NFPA Standards.
TECHNICAL COMMITTEE ON BUILDING FIRE AND LIFE
SAFETY DIRECTORS (BLF-AAA)
LETTER BALLOT
Release NFPA 1082 Preliminary Draft,
Standard for Facilities Safety Director
Professional Qualifications

Please record my vote as:

☑️ YES  I agree to Release the NFPA 1082 Preliminary Draft and assignment to the A2019 Revision Cycle.

☐ NO  I do NOT agree to Release the NFPA 1082 Preliminary Draft and assignment to the A2019 Revision Cycle.

☐ ABSTAIN*  
*Reason(s) must accompany these votes. If more space is needed, please submit your reason via email in a Word Document.

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a negative or abstaining vote.

Agree of concept, not the new Safety Director

[Signature]
Jack J. Mullan, Jr.

Name (Please Print)  2/18/2017

Date

Please return the ballot on or before Tuesday, February 21, 2017.

PLEASE RETURN TO:
Diane Matthews, Project Administrator
NFPA
1 Batterymarch Park
Quincy, MA 02169
FAX: (617) 984-7110
E-mail: dmatthews@nfpa.org
TECHNICAL COMMITTEE ON BUILDING FIRE AND LIFE SAFETY DIRECTORS (BLF-AAA)

LETTER BALLOT

Release NFPA 1082 Preliminary Draft, 

Standard for Facilities Safety Director Professional Qualifications

Please record my vote as:

__X_ YES I agree to Release the NFPA 1082 Preliminary Draft and assignment to the A2019 Revision Cycle.

___ NO* I do NOT agree to Release the NFPA 1082 Preliminary Draft and assignment to the A2019 Revision Cycle.

__ ABSTAIN*

*Reason(s) must accompany these votes. If more space is needed, please submit your reason via email in a Word Document.

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a negative or abstaining vote.

I am voting yes, with reservations. Although this document, is vitally important and necessary to be placed into code, however it does require, further inclusive information to make it complete. Some of the missing verbiage necessary to make this a whole document is; a formal definition of a BFLSD, as well as, further details of how the AHJ, themselves, will be qualified to instruct and certify a BFLSD. As compiled, this document places to much unnecessary burden on the AHJ. Some of which are only temporarily assigned to their respective divisions.

Signature
Vincent Quinterno
Name (Please Print)
February 18, 2017
Date

Please return the ballot on or before Tuesday, February 21, 2017.

PLEASE RETURN TO:
Diane Matthews, Project Administrator
NFPA
1 Batterymarch Park
Quincy, MA 02169
FAX: (617) 984-7110
Email: dmatthews@nfpa.org
Chapter 1 Administration

1.1 Scope.
The purpose of this standard is to specify the minimum JPRs for service as a facilities safety director.

1.2 Purpose.
The purpose of this standard is to specify the minimum JPRs for service as a facilities safety director.

1.2.1 This standard shall define a facilities safety director.

1.2.2 The intent of this standard shall be to ensure that personnel serving as a facilities safety director are qualified.

1.2.3 This standard shall not address organization or management responsibility.

1.2.4 It is not the intent of this standard to restrict any jurisdiction from exceeding or combining these minimum requirements.

1.2.5 JPRs for each level and position are the tasks personnel shall be able to perform to carry out the job duties.

1.2.6 A facilities safety director shall remain current with the general knowledge and skills and JPRs addressed for each level or position of qualification.

1.3 Application.
The purpose of this standard is to specify which requirements within the document shall apply to a facilities safety director.

1.3.1 The JPRs shall be accomplished in accordance with the requirements of the authority having jurisdiction (AHJ) and all applicable NFPA standards.
1.3.2
It shall not be required that the JPRs be mastered in the order in which they appear. The AHJ shall establish instructional priority and the training program content to prepare personnel to meet the JPRs of this standard.

1.3.3*
Performance of each requirement of this standard shall be evaluated by personnel approved by the AHJ.

1.3.4
The JPRs for each level or position shall be completed in accordance with recognized practices and procedures or as defined by law or by the AHJ.

1.3.5
Personnel assigned the duties of facilities safety director shall meet all the requirements defined in Chapter 4 prior to being qualified.

1.3.6
The AHJ shall provide personal protective clothing and the equipment necessary to conduct assignments.

1.3.7
JPRs involving exposure to products of combustion shall be performed in approved personal protective equipment (PPE).

1.3.8
Prior to training to meet the requirements of this standard, personnel shall meet the following requirements:
(1) Educational requirements established by the AHJ
(2) Age requirements established by the AHJ
(3) Medical requirements established by the AHJ
(4) Job-related physical performance requirements established by the AHJ

1.3.9
Wherever in this standard the terms rules, regulations, policies, procedures, supplies, apparatus, or equipment are referred to, it is implied that they are those of the AHJ.

1.4 Units.
In this standard, equivalent values in SI units shall not be considered as the requirement, as these values can be approximate. (See Table 1.4.)

Table 1.4 U.S.-to-SI Conversions
<table>
<thead>
<tr>
<th>Quantity</th>
<th>U.S. Unit/Symbol</th>
<th>SI Unit/Symbol</th>
<th>Conversion Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>inch (in.)</td>
<td>millimeter (mm)</td>
<td>1 in. = 25.4 mm</td>
</tr>
<tr>
<td></td>
<td>foot (ft)</td>
<td>meter (m)</td>
<td>1 ft = 0.305 m</td>
</tr>
<tr>
<td>Area</td>
<td>square foot (ft²)</td>
<td>square meter (m²)</td>
<td>1 ft² = 0.0929 m²</td>
</tr>
</tbody>
</table>

Chapter 2 Referenced Publications

2.1 General. The documents or portions thereof listed in this chapter are referenced within this standard and shall be considered part of the requirements of this document.

2.2 NFPA Publications. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471.


2.4 References for Extracts in Mandatory Sections.


Chapter 3 Definitions

3.1* General. The definitions contained in this chapter shall apply to the terms used in this standard. Where terms are not defined in this chapter or within another chapter, they shall be defined using their ordinarily accepted meanings within the context in which they are used. Merriam-Webster’s Collegiate Dictionary, 11th edition, shall be the source for the ordinarily accepted meaning.

3.2 NFPA Official Definitions.

3.2.1* Approved. Acceptable to the authority having jurisdiction.
3.2.2 Authority Having Jurisdiction (AHJ). An organization, office, or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, an installation, or a procedure.

3.2.3 Labeled. Equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization that is acceptable to the authority having jurisdiction and concerned with product evaluation, that maintains periodic inspection of production of labeled equipment or materials, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

3.2.4 Listed. Equipment, materials, or services included in a list published by an organization that is acceptable to the authority having jurisdiction and concerned with evaluation of products or services, that maintains periodic inspection of production of listed equipment or materials or periodic evaluation of services, and whose listing states that either the equipment, material, or service meets appropriate designated standards or has been tested and found suitable for a specified purpose.

3.2.5 Shall. Indicates a mandatory requirement.

3.2.6 Should. Indicates a recommendation or that which is advised but not required.

3.2.7 Standard. An NFPA Standard, the main text of which contains only mandatory provisions using the word “shall” to indicate requirements and that is in a form generally suitable for mandatory reference by another standard or code or for adoption into law. Non-mandatory provisions are not to be considered a part of the requirements of a standard and shall be located in an appendix, annex, footnote, informational note, or other means as permitted in the NFPA Manuals of Style. When used in a generic sense, such as in the phrase “standards development process” or “standards development activities,” the term “standards” includes all NFPA Standards, including Codes, Standards, Recommended Practices, and Guides.

3.3 General Definitions.

3.3.1 Asset Protection System. A method to prevent theft, damage, or other degradation of valued or critical people or property.

3.3.2 Fire Protection Program. The integrated effort involving components, procedures, and personnel utilized in carrying out all activities of fire protection. It includes system and facility design and analyses, fire prevention, fire detection, annunciation, confinement, suppression, administrative controls, fire brigade organization, inspection and maintenance, training, quality assurance, and testing. [806, 2015]

3.3.3 Training. The process of achieving proficiency through instruction and hands-on practice in the operation of equipment and systems that are expected to be used in the performance of assigned response duties. [600, 2015]
Chapter 4 Facilities Safety Director

4.1 General. The job performance requirements (JPRs) defined in Sections 4.2 through 4.6 shall be met prior to being qualified as a facilities safety director.

4.1.1 General Prerequisite Knowledge. The organizational structure of the department; configuration and characteristics of the building and its occupancy(s); general operating procedures for administration, emergency operations, incident management system, and safety; fundamentals of leadership; generic budget process; information management and recordkeeping; building codes and adopted governmental laws and regulations applicable to buildings in the jurisdiction; current trends, technologies, and socioeconomic and political factors that affect building safety; cultural diversity; methods used by supervisors to obtain cooperation within a group of subordinates; the rights of management and members; agreements in force between the organization and employees; generally accepted ethical practices, including a professional code of ethics; and policies and procedures regarding the operation of the department as they involve supervisors and employees.

4.1.2 General Prerequisite Skills. The ability to communicate in an effective manner using verbal and written skills; give instructions; transmit information; write reports, correspondence, and memos utilizing computers and typical office software, including word processing, spreadsheets, and databases; operate in an information management system; and operate in an effective manner at all levels within the corporate structure and with management and staff of the building’s tenants.

4.2 Administration.

4.2.1 Maintain records of the building, occupancy(s), building’s systems and components, and human resources systems given a description of the building, occupancy(s), building’s systems and components, and human resources systems, and adopted governmental laws and regulations so that adopted governmental laws and regulations are complied with and a compliance report is generated and documentation is maintained current.

(A) Requisite Knowledge. Human resources record keeping system(s); the adopted governmental laws and regulations for the building, its occupancy(s), the building’s systems and components; records retention requirements, policies, and procedures; and record keeping systems.

(B) Requisite Skills. Entering and retrieving information from the systems; generating management reports; and report analysis.

4.2.2 Delegate responsibility for communications given communications equipment and approved policies and procedures for communicating information so that delegated personnel are monitored for use of designated communication equipment and compliance is achieved with policies and procedures for communicating information to stakeholders.
(A) **Requisite Knowledge.** Use of communication equipment, and policies and procedures for communication information and methodologies.

(B) **Requisite Skills.** The ability to delegate responsibility for communication; relay information; evaluate, prioritize, and deliver information; use effective communication skills based on policies and procedures.

4.2.3 Supervise staff given staff assignments; schedules; staffing numbers; daily operational needs; an emergency action plan (EAP) schedule; and staffing positions per daily operations, EAP assignments, and available personnel, so that readiness of the personnel is assured for daily operations and EAP requirements are met.

(A) **Requisite Knowledge.** Roles and responsibilities of daily operations, staff assignments and schedules, supervisory and delegation skills and techniques, recognition of staffing and assignment gaps, and duties and responsibilities required by EAP.

(B) **Requisite Skills.** The ability to assign staff to daily operations and coordinate EAP assignments, identify and adjust gaps in coverage, and disseminate assignments and schedules to staff.

4.2.4 Develop policies and procedures for safe, effective, and efficient facilities operations given a risk assessment report and adopted governmental laws and regulations so that policies and procedures address the risk assessment findings and corrective actions are prioritized.

(A) **Requisite Knowledge.** The probability of occurrence for potential incidents, magnitude of those incidents, adopted governmental laws and regulations, policies and procedures, and risk assessment process.

(B) **Requisite Skills.** The ability to analyze the findings of the risk assessment and technical writing skills.

4.2.5 Analyze and prioritize corrective actions based on a risk assessment report given a risk assessment report, adopted governmental laws and regulations, an evaluation instrument, and management goals and objectives so that the gaps in the risk assessment report are determined and corrective actions are developed.

(A) **Requisite Knowledge.** The probability of occurrence for potential incidents; magnitude of those incidents; adopted governmental laws and regulations; policies and procedures; risk assessment; and an evaluation instrument for determining gaps, management goals, and objectives.

(B) **Requisite Skills.** The ability to determine gaps based on the findings of the risk assessment, utilize the evaluation instrument, develop corrective actions using technical writing skills, and prioritize corrective actions.
4.2.6 Facilitate and document required training for staff given policies and procedures; adopted governmental laws and regulations; staffing schedules; training record keeping systems; a daily operations plan; an EAP; and a personal training packet so that compliance with policies for training and adopted governmental laws and regulations are met.

(A) **Requisite Knowledge.** Staff roles and responsibilities for daily operations and EAP, staff assignments and schedules, supervisory and delegation skills and techniques, staffing and training needs, adopted governmental laws and regulations, and the time frames for training curricula.

(B) **Requisite Skills.** The ability to delegate that documentation of the training has been recorded.

4.2.7 Develop and administer operating and capital budgets given financial needs, budget systems, financial policies and procedures, and available funds so that all components of all-hazards administration, planning, training, and response and recovery operations are funded based on operating and EAP needs, risk management goals, and the probability of a specific all-hazard incident(s).

(A) **Requisite Knowledge.** Daily operations, the EAP, budget-related items, staffing needs, equipment needs, adopted governmental laws and regulations, policies and procedures, capital and operational budgeting process, financial systems, accounting principles, financial reporting systems.

(B) **Requisite Skills.** The ability to create, generate, and analyze reports from financial systems.

4.2.8 Manage preventive maintenance and emergency repair schedules given equipment maintenance requirements, a list of contractors, and building systems and components so that building systems and components are functional, operational, and compliant with management policies and adopted governmental laws and regulations.

(A) **Requisite Knowledge.** Equipment maintenance requirements, equipment maintenance resources and references, contracted services and contractor capabilities, building systems and components, adopted governmental laws and regulations, and management policies related to the equipment.

(B) **Requisite Skills.** The ability to manage contractors and staff that maintain building systems and components using the equipment maintenance requirements and documenting the preventive maintenance and emergency repairs conducted.

4.3 Planning.

4.3.1 Develop and administer an inspection, testing, and maintenance (IMT) program for the building, occupancy(s), and systems and components in the building given a building; occupancy(s), and building systems and components in the occupancy(s); IMT program criteria;
and resources for conducting an IMT program so that the program ensures readiness, functionality, and compliance with adopted governmental laws and regulations.

(A) **Requisite Knowledge.** Adopted governmental laws and regulations, the building’s systems and components, testing methods and procedures, inspection methods and procedures, maintenance procedures, record keeping systems.

(B) **Requisite Skills.** The ability to develop and administer an IMT program using resources; and analyze and generate reports.

4.3.2 Organize, develop, and maintain staffing assignments and resources for a specific all-hazard incident(s) given an organizational chart, the number of staff, resources, an EAP, a risk assessment report, and an incident management system so that there is an organized and expandable response structure for managing incidents.

(A) **Requisite Knowledge.** Incident management system (IMS)/national incident management (NIMS), staff qualifications and capabilities, organizational chart benefits, EAP, risk assessment process, resources, and record keeping systems.

(B) **Requisite Skills.** The ability to use the organizational chart and an EAP to monitor staffing and resources, coordinate staffing assignments, and manage resources.

4.3.3 Develop and maintain a communication plan given assigned or available staff, resources, an organizational chart, an EAP, a risk assessments report, designated communication equipment and methods, identified communication policies and procedures, a designated record keeping system, and identified stakeholders so that effective communication at all-hazard incidents between staff and stakeholders meets policies and procedures.

(A) **Requisite Knowledge.** Communication equipment and methods, communication policies and procedures, staff qualifications and capabilities, an organizational chart, an EAP, a risk assessment process and report, and record keeping systems.

(B) **Requisite Skills.** The ability to use the organizational chart and EAP to monitor staffing and resources for communicating with stakeholders during all-hazard incidents.

4.3.4 Develop and maintain an all-hazard EAP given a risk assessment process and report, a building and building as-built plans, building systems and components in the building, an organizational chart, available staffing, building operations procedures, occupancy stakeholders, and an identified record keeping system(s) so that the EAP can be utilized to manage all-hazard incidents.

(A) **Requisite Knowledge.** EAP planning; risk assessment process; staffing and organizational chart; building, occupancy(s), and building as-built plans; building systems and building components, and record keeping systems process.
(B) **Requisite Skills.** The ability to use the organizational chart and the EAP to direct staffing, coordinate with stakeholders, and manage resources for all-hazard incidents.

4.3.5 Conduct a risk assessment given a building, occupancy(s), the building’s as-built plans, and a list of the building’s systems and components; and a risk assessment process with an evaluation instrument.

(A) **Requisite Knowledge.** Risk assessment processes; the building, occupancy(s), and building as-built plans; the building’s systems and components; number of staff; an organizational chart; and an evaluation instrument for ranking risks.

(B) **Requisite Skills.** The ability to rank and prioritize risks using a risk assessment process, including an evaluation instrument to generate the risk assessment.

4.3.6 Write a risk assessment report given a risk assessment, a building, occupancy(s), a building’s as-built plans, and a list of the building’s systems and components; available staffing; occupancy(s) stakeholders; a risk assessment process with an evaluation instrument so that a risk assessment report that includes a prioritized list of risks is generated and distributed to specific staff and specific stakeholders.

(A) **Requisite Knowledge.** Risk assessment processes and reporting; the building, occupancy(s), and the building’s as-built plans; the building’s systems and components; number of staff; an organizational chart; and an evaluation instrument for ranking and prioritizing risks.

(B) **Requisite Skills.** The ability to rank and prioritize risks using a risk assessment process, including an evaluation instrument to generate and distribute a report to be given to specific staff and specific stakeholders.

4.4 Training.

4.4.1 Direct occupant training for the occupant’s role and responsibilities for an all-hazard incident given the EAP, the building occupants, the building, qualified trainer(s), an EAP-supported curricula and lesson plans, and a specific all-hazard incident so that occupants are trained in specific roles and responsibilities based on the EAP.

(A) **Requisite Knowledge.** The EAP; occupant roles and responsibilities based on the EAP; types of all-hazard incidents; training programs; building occupants limitations and capabilities, including those with mobility issues, blind or low vision, deaf or hard of hearing, or speech or cognitive disabilities; and the building.

(B) **Requisite Skills.** The ability to identify and communicate training requirements to instructors, and identify and communicate EAP requirements to instructors.
4.4.2 Evaluate the effectiveness of the training for the occupant’s role and responsibilities for an all-hazard incident given the EAP, the building occupants, the building, qualified trainer(s), an EAP-supported curricula and lesson plans, and a specific all-hazard incident so that any gaps in the occupants’ response to the training based on the EAP goals and objectives for the specific incident are documented and corrected.

(A) **Requisite Knowledge.** The EAP; occupant roles and responsibilities based on the EAP; types of all-hazard incidents; training programs; building occupants’ limitations and capabilities, including those with mobility issues, blind or low vision, deaf or hard of hearing, or speech or cognitive disabilities; and the building.

(B) **Requisite Skills.** The ability to identify and document gaps in training and generate a report where training needs to be improved.

4.4.3 Direct staff training for staff roles and responsibilities for an all-hazard incident given the EAP, the building’s facilities staff, the building, a specific all-hazard incident, adopted governmental laws and regulations, qualified trainers, an EAP-supported curricula and training programs, emergency procedures and occupant movement plans, the building’s systems and components, and staff roles and responsibilities so that the building’s facilities staff can be evaluated for adeptness at responding to an all-hazard incident.

(A) **Requisite Knowledge.** The adopted governmental laws and regulations, the AHJ’s policies and procedures, the EAP-supported curricula and training programs, emergency procedures and occupant movement systems, the building, the building’s systems and components, staff roles and responsibilities, and desired training goals and outcomes.

(B) **Requisite Skills.** The ability to identify adopted governmental laws and regulations and the AHJ’s policies and procedures, deliver training requirements, manage records and reports, and evaluate training outcomes.

4.4.4 Manage personnel and resources to develop training curricula given an EAP, adopted governmental laws and regulations, required training personnel and training resources so that training programs can be created.

(A) **Requisite Knowledge.** Adopted governmental laws and regulations, EAP-supported curricula and training programs, emergency procedures and occupant movement systems, the building, the building’s systems and components, staff roles and responsibilities, desired training goals and outcomes.

(B) **Requisite Skills.** The ability to identify programs that need to be developed relative to the adopted governmental laws and regulations; communicate EAP-supported curricula and training programs; recognize and select training programs, techniques, and methods; and manage records and reports.

4.4.5 Manage personnel and resources to implement the training curricula given an EAP and training curricula so that resources are available and personnel can deliver a training program.
(A) **Requisite Knowledge.** Adopted governmental laws and regulations, qualified trainers, EAP-supported curricula and training programs, and the desired training goals and outcomes.

(B) **Requisite Skills.** The ability to identify appropriate resources and personnel necessary to deliver the training programs; identify and select training programs, techniques, and methods; manage records and reports; and evaluate training outcomes.

4.5 **Response.**

4.5.1 Assess the actions taken by staff and occupants for a specific all-hazard incident given the information received (i.e., by occupants, stakeholders, fire protection systems, security signal initiation, and so on), staff verification, and AHJ notification to staff and occupants so that staff and building occupants can be directed based on procedure(s), including occupant movement.

(A) **Requisite Knowledge.** Policies and procedures of all-hazard incidents as information is received, types of verification methods and techniques, characteristics of the incident(s), communication channels for staff and occupants, procedure(s) for occupant movement.

(B) **Requisite Skills.** The ability to determine the credibility of the incident information received, select the method(s) of communication, and evaluate the incident and select the procedure for occupant movement and required equipment.

4.5.2 Implement staff and occupant movement provisions of the EAP for a specific all-hazard incident given verification and assessment of the incident, AHJ notification of an incident, communication method(s), and AHJ policies and procedures, so that information can be provided to staff and occupants about the desired EAP response and movement of staff and occupants.

(A) **Requisite Knowledge.** The EAP, the type of incident, types of communication responses, NIMS public information officer role, characteristics of the incident(s), communication channels for staff and occupants, the building, occupancy(s), the building’s systems and components, and procedure(s) for staff and occupant movement.

(B) **Requisite Skills.** The ability to select the method(s) of communication with staff and each occupant stakeholder group, select the procedure(s) for staff and occupant movement, and select the required equipment.

4.5.3 Disseminate information to the media and the public given an all-hazard incident, policies and procedures, public information officer (PIO) worksheet, news release or media advisory, and methods available to reach external contacts so that relevant incident information can be provided to external contacts and the public to protect the public and preserve organizational credibility.

(A) **Requisite Knowledge.** Crisis management policies and procedures, NIMS public information officer role, the type of incident, characteristics of the incident(s), communication network, and contacts for the media.
(A) **Requisite Skills.** The ability to evaluate what information should be released to the public, specific written and verbal communication skills for communicating with the media, produce concise information for the media, and develop and use PIO worksheets.

4.5.5 Manage the EAP process of an all-hazard incident given the type of incident, the EAP, occupants, and staff so that all occupants receive information on the incident, occupant and staff roles and responsibilities are assigned, and emergency procedures and occupant movement plans are implemented to protect occupants.

(A) **Requisite Knowledge.** The EAP, roles and responsibilities of occupants and staff, the type of incident, communication network for occupants, the building, the building’s systems and components, the building’s as-built plans, and procedure(s) for occupant movement.

(B) **Requisite Skills.** The ability to select the method(s) of communication with each occupant group and the procedure(s) for occupant movement.

4.5.6 Initiate EAP protocols for critical occupancy use and building operations (i.e., emergency department, intensive care unit, and cardiac care unit at hospitals; power generating plant; telephone switching station) for an all-hazard incident given a building, type of incident, critical operations, an EAP, and emergency supplies so that occupants are protected and cared for when they cannot be moved, and alternate methods of delivering critical services are not available.

(A) **Requisite Knowledge.** The EAP; the type of incident; communication network; the building; occupancy use; and the building’s operations, systems, and components; the building’s as-built plans; and location of supplies.

(B) **Requisite Skills.** The ability to manage the care of occupants during an incident and develop a movement plan for occupants to a safer location(s) based on the incident.

4.6 Recovery.

4.6.1 Assess and document the condition of the building, the building’s systems and components given a damage assessment report(s) of the building, and building operations so that use of the building can be determined and its impact on occupancy use and business operations is documented.

(A) **Requisite Knowledge.** The EAP; characteristics of the damage to the building and critical infrastructure, including all protection systems; adopted governmental laws and regulations; the building; the building’s systems and components; the building’s as-built plans; record keeping system(s); and procedure(s) for documenting damage.

(B) **Requisite Skills.** The ability to analyze building damage report(s).

4.6.2 Conduct a postincident analysis given the EAP, damage assessment report, and a restoration plan so that the effectiveness of the postincident report is measured and the lessons learned are communicated to staff and the EAP is adjusted for gaps.
4.6.3 Develop a restoration plan given the results from damage assessment and business impact reports and available staff so that there is a specific and documented process to restore the building to a condition that will be approved by the AHJ.

(A) **Requisite Knowledge.** The original building plans, the building’s systems and components, adopted governmental laws and regulations, building operations, building services, available resources, and recovery techniques and methods.

(B) **Requisite Skills.** The ability to analyze damage assessment report(s), identify and prioritize techniques and procedures to facilitate restoration, and recommission building systems in accordance with the adopted governmental laws and regulations.

4.6.4 Implement and terminate the restoration plan given results from the damage assessment, available staff, and financial resources, and the progress of the restoration plan so that the completion point of the restoration plan is calculated and a determination is made whether the building can be approved by the AHJ and the building reoccupied.

(A) **Requisite Knowledge.** The restoration plan, the building, the building’s systems and components, adopted governmental laws and regulations, building operations, building services, available financial resources, available staffing and services to operate the building and restore business operations, and the local AHJ approval process.

(B) **Requisite Skills.** The ability to analyze damage restoration report(s), recommission building systems, and determine the point when the restored condition is able to be approved by the AHJ to be reoccupied.

4.6.5 Isolate occupants and property from further damage given the damage assessment report(s), available finances, staffing, and contracted resources so that effects of cascading incidents are limited to prevent further damage.

(A) **Requisite Knowledge.** The restoration plan, the building, the building’s systems and components, building operations, building services, available staffing and contracted resources, and the local AHJ approval process.

(B) **Requisite Skills.** The ability to analyze damage report(s), develop an overall strategy for mitigation, and prioritize mitigation activities for maximum effectiveness.
Annex A  Explanatory Material

Annex A is not a part of the requirements of this NFPA document but is included for informational purposes only. This annex contains explanatory material, numbered to correspond with the applicable text paragraphs.

A.1.2.3
Organization and management responsibilities should be addressed by the agency that personnel represent. The authority having jurisdiction should define the agency requirements for progression to positions of management responsibility.

A.1.2.6
The committee recognizes the importance of formal and continuing education and training programs to ensure that personnel have maintained and updated the necessary skills and knowledge for the level or position of qualification. Continuing education and training programs can be developed or administered by local, state, provincial, or federal agencies as well as by professional associations and accredited institutions of higher education. The methods of learning would include areas of technology, refresher training, skills practices, and knowledge application to standards. The subject matter should directly relate to the requirements of this standard.

A.1.3.3
It is recommended, where practical, that evaluators be individuals who were not directly involved as instructors for the requirement being evaluated.

A.3.2.1 Approved.
The National Fire Protection Association does not approve, inspect, or certify any installations, procedures, equipment, or materials; nor does it approve or evaluate testing laboratories. In determining the acceptability of installations, procedures, equipment, or materials, the authority having jurisdiction may base acceptance on compliance with NFPA or other appropriate standards. In the absence of such standards, said authority may require evidence of proper installation, procedure, or use. The authority having jurisdiction may also refer to the listings or labeling practices of an organization that is concerned with product evaluations and is thus in a position to determine compliance with appropriate standards for the current production of listed items.

A.3.2.2 Authority Having Jurisdiction (AHJ).
The phrase “authority having jurisdiction,” or its acronym AHJ, is used in NFPA documents in a broad manner, since jurisdictions and approval agencies vary, as do their responsibilities. Where public safety is primary, the authority having jurisdiction may be a federal, state, local, or other regional department or individual such as a fire chief; fire marshal; chief of a fire prevention bureau, labor department, or health department; building official; electrical inspector; or others having statutory authority. For insurance purposes, an insurance inspection department, rating bureau, or other insurance company representative may be the authority having jurisdiction. In many circumstances, the property owner or his or her designated agent assumes the role of the authority having jurisdiction; at government installations, the commanding officer or departmental official may be the authority having jurisdiction.
A.3.2.4 Listed.
The means for identifying listed equipment may vary for each organization concerned with product
evaluation; some organizations do not recognize equipment as listed unless it is also labeled. The
authority having jurisdiction should utilize the system employed by the listing organization to identify a
listed product.

Annex B Explanation of the Professional Qualifications Standards and Concepts of JPRs
This annex is not a part of the requirements of this NFPA document but is included for informational
purposes only.

B.1 Explanation of the Professional Qualifications Standards and Concepts of Job Performance
Requirements (JPRs).
The primary benefit of establishing national professional qualifications standards is to provide both public
and private sectors with a framework of the job requirements for emergency services personnel. Other
benefits include enhancement of the profession, individual as well as organizational growth and
development, and standardization of practices.

NFPA professional qualifications standards identify the minimum job performance requirements (JPRs)
for specific emergency services levels and positions. The standards can be used for training design and
evaluation; certification; measuring and critiquing on-the-job performance; defining hiring practices; job
descriptions; and setting organizational policies, procedures, and goals.

Professional qualifications standards for specific jobs are organized by major areas of responsibility
defined as “duties”. For example, the fire fighter's duties might include fire department communications,
fireground operations, and preparedness and maintenance, whereas the fire and life safety educator's
duties might include education and implementation, planning and development, and evaluation. Duties
are major functional areas of responsibility within a specific job.

The professional qualifications standards are written as JPRs. JPRs describe the performance required
for a specific job and are grouped according to the duties of the job. The complete list of JPRs for each
duty defines what an individual must be able to do in order to perform and achieve that duty.

B.2 The Parts of a JPR.

B.2.1 Critical Components.
The JPR comprises three critical components, which are as follows:
(1) Task to be performed, partial description using an action verb
(2) Tools, equipment, or materials that are to be provided to complete the task
(3) Evaluation parameters and performance outcomes

Table B.2.1 gives an example of the critical components of a JPR.

Table B.2.1 Example of a JPR
### B.2.1.1 The Task to Be Performed.

The first component is a concise statement of what the person is required to do. A significant aspect of that phrase is the use of an action verb, which sets the expectation for what is to be accomplished.

### B.2.1.2 Tools, Equipment, or Materials That Must Be Provided for Successful Completion of the Task.

This component ensures that all individuals completing the task are given the same tools, equipment, or materials when they are being evaluated. Both the individual and the evaluator will know what will be provided in order for the individual to complete the task.

### B.2.1.3 Evaluation Parameters and Performance Outcomes.

This component defines — for both the performer and the evaluator — how well the individual should perform each task. The JPR guides performance toward successful completion by identifying evaluation parameters and performance outcomes. This portion of the JPR promotes consistency in evaluation by reducing the variables used to gauge performance.

### B.2.2 Requisite Knowledge and Skills.

In addition to these three components, the JPR describes requisite knowledge and skills. As the term requisite suggests, these are the necessary knowledge and skills the individual should have prior to being able to perform the task. Requisite knowledge and skills are the foundation for task performance.

### B.2.3 Examples.

With the components and requisites combined, a JPR might read similar to the following two examples.

#### B.2.3.1 Example: Fire Fighter I.

Perform overhaul at a fire scene, given approved PPE, attack line, hand tools, flashlight, and an assignment, so that structural integrity is not compromised, all hidden fires are discovered, fire cause evidence is preserved, and the fire is extinguished.

(A) **Requisite Knowledge.** Knowledge of types of fire attack lines and water application devices for overhaul, water application methods for extinguishment that limit water damage, types of tools and methods used to expose hidden fire, dangers associated with overhaul, signs of area of origin or signs of arson, and reasons for protection of fire scene.
(B) **Requisite Skills.** The ability to deploy and operate an attack line; remove flooring, ceiling, and wall components to expose void spaces without compromising structural integrity; apply water for maximum effectiveness; expose and extinguish hidden fires in walls, ceilings, and subfloor spaces; recognize and preserve signs of area of origin and arson; and evaluate for complete extinguishment.

B.2.3.2 **Example: Fire and Life Safety Educator II.**
Prepare a written budget proposal for a specific program or activity, given budgetary guidelines, program needs, and delivery expense projections, so that all guidelines are followed and the budget identifies all program needs.

(A) **Requisite Knowledge.** Knowledge of budgetary process; governmental accounting procedures; federal, tribal, state, and local laws; organizational bidding process; and organization purchase requests.

(B) **Requisite Skills.** The ability to estimate project costs; complete budget forms; requisition/purchase orders; collect, organize, and format budgetary information; complete program budget proposal; and complete purchase requests.

**B.3 Potential Uses for JPRs.**

**B.3.1 Certification.** JPRs can be used to establish the evaluation criteria for certification at a specific job level. When used for certification, evaluation should be based on the successful completion of the JPRs. The evaluator would verify the attainment of requisite knowledge and skills prior to JPR evaluation. Verification could be through documentation review or testing.

The individual seeking certification would be evaluated on completion of the JPRs. The individual would perform the task and be evaluated based on the evaluation parameters and performance outcomes. This performance-based evaluation is based on practical exercises for psychomotor skills and written examinations for cognitive skills.

Psychomotor skills are those physical skills that can be demonstrated or observed. Cognitive skills cannot be observed but rather are evaluated on how an individual completes the task (process-oriented) or on the task outcome (product-oriented).

Performance evaluation requires that individuals be given the tools, equipment, or materials listed in the JPR in order to complete the task.

**B.3.2 Curriculum Development and Training Design and Evaluation.**
The statements contained in this document that refer to job performance were designed and written as JPRs. Although a resemblance to instructional objectives might be present, these statements should not be used in a teaching situation until after they have been modified for instructional use.

JPRs state the behaviors required to perform specific skills on the job, as opposed to a learning situation. These statements should be converted into instructional objectives with behaviors, conditions, and degree to be measured within the educational environment.
While the differences between JPRs and instructional objectives are subtle in appearance, their purposes differ. JPRs state what is necessary to perform the job in practical and actual experience. Instructional objectives, on the other hand, are used to identify what students must do at the end of a training session and are stated in behavioral terms that are measurable in the training environment.

By converting JPRs into instructional objectives, instructors would be able to clarify performance expectations and avoid confusion caused by the use of statements designed for purposes other than teaching. Instructors would be able to add jurisdictional elements of performance into the learning objectives as intended by the developers.

Requisite skills and knowledge could be converted into enabling objectives, which would help to define the course content. The course content would include each item of the requisite knowledge and skills ensuring that the course content supports the terminal objective.

**B.3.2.1 Example: Converting a Fire Fighter I JPR into an Instructional Objective.**
The instructional objectives are just two of several instructional objectives that would be written to support the terminal objective based on the JPR.

*JPR:* Perform overhaul at a fire scene, given approved PPE, attack line, hand tools, flashlight, and an assignment, so that structural integrity is not compromised, all hidden fires are discovered, fire cause evidence is preserved, and the fire is extinguished.

*Instructional Objective (Cognitive):* The Fire Fighter I will identify and describe five safety considerations associated with structural integrity compromise during overhaul as part of a written examination.

*Instructional Objective (Psychomotor):* The Fire Fighter I will demonstrate the designed use of tools and equipment during overhaul to locate and extinguish hidden fires without compromising structural integrity.

**B.3.2.2 Example: Converting a Fire and Life Safety Educator II JPR into an Instructional Objective.**
The instructional objectives are just two of several instructional objectives that would be written to support the terminal objective based on the JPR.

*JPR:* Prepare a written budget proposal for a specific program or activity, given budgetary guidelines, program needs, and delivery expense projections, so that all guidelines are followed and the budget identifies all program needs.

*Instructional Objective (Cognitive):* The Fire and Life Safety Educator II will list and describe the bidding process for the purchase of a published program using budgetary guidelines, program needs, and the guidelines established by local organizational procedures as part of a written examination.

*Instructional Objective (Psychomotor):* The Fire and Life Safety Educator II will lead in the purchase of a specific fire and life safety educational program by following the bidding process to completion, using local organizational guidelines, including budgetary procedures, program needs, and delivery expense projections.
B.4 Other Uses for JPRs.
While the professional qualifications standards are used to establish minimum JPRs for qualification, they have been recognized as guides for the development of training and certification programs, as well as a number of other potential uses. These areas might include the following:

(1) **Employee Evaluation/Performance Critiquing.** The professional qualifications standards can be used as a guide by both the supervisor and the employee during an evaluation. The JPRs for a specific job define tasks that are essential to perform on the job, as well as the evaluation criteria to measure completion of the tasks.

(2) **Establishing Hiring Criteria.** The professional qualifications standards can be helpful in a number of ways to further the establishment of hiring criteria. The authority having jurisdiction (AHJ) could simply require certification at a specific job level, for example, Fire Fighter I. The JPRs could also be used as the basis for pre-employment screening to establish essential minimal tasks and the related evaluation criteria. An added benefit is that individuals interested in employment can work toward the minimal hiring criteria at local colleges.

(3) **Employee Development.** The professional qualifications standards can be practical for both the employee and the employer in developing a plan for the employee’s growth within the organization. The JPRs and the associated requisite knowledge and skills can be used as a guide to determine additional training and education required for the employee to master the job or profession.

(4) **Succession Planning.** Succession planning addresses the efficient placement of individuals into jobs in response to current needs and anticipated future needs. A career development path can be established for targeted employees to prepare them for growth within the organization. The JPRs and requisite knowledge and skills could then be used to develop an educational path to aid in the employee’s advancement within the organization or profession.

(5) **Establishing Organizational Policies, Procedures, and Goals.** The professional qualifications standards can be functional for incorporating policies, procedures, and goals into the organization or agency.

B.5 Bibliography.


**Annex C  Informational References**

**C.1  Referenced Publications.**
The documents or portions thereof listed in this annex are referenced within the informational sections of this standard and are not part of the requirements of this document unless also listed in Chapter 2 for other reasons.

C.1.1 NFPA Publications. (Reserved)

C.1.2 Other Publications. (Reserved)

C.2 Informational References.
The following documents or portions thereof are listed here as informational resources only. They are not a part of the requirements of this document.

C.2.1
The following is the bibliography from Annex B.


C.3 References for Extracts in Informational Sections. (Reserved)