

Miller, Diane M. (CDC/NIOSH/EID)

From: Ed Hartin [ed.hartin@cfbt-us.com]
Sent: Sunday, November 23, 2008 10:24 AM
To: NIOSH Docket Office (CDC)
Subject: Docket Number NIOSH-063-A
Attachments: Comments on Draft Strategic Plan.docx

My comments on Draft NIOSH FFFIPP Strategic Plan are attached.

Cheers,

Battalion Chief Ed Hartin, MS EFO, MIFireE, CFO

11/24/2008

Comments on Draft Strategic Plan for the National Institute for Occupational Safety and Health (NIOSH) Firefighter Fatality Investigation and Prevention Program (FFFIPP)

Docket Number NIOSH-063-A

This program is of significant importance to the nation's fire service and overall the strategic plan lays out a reasonable course of action for future activity. However, there are several areas of the plan that would benefit from addition or revision to provide increased clarity and focus on traumatic fatalities during offensive, interior structural firefighting operations.

Strategic Goal 2: Reduce deaths and injuries associated with structural firefighting operations by 2015.

This strategic goal focuses on structural firefighting operations in general. Analysis of National Fire Protection Association and United States Fire Administration data shows an increasing trend in traumatic fatalities while conducting offensive, interior structural firefighting operations. To address this trend, I would recommend the following:

Intermediate Goal 2.3: Standards setting agencies will modify standards that apply to the design, maintenance, operation, and training regarding fire fighter personal protective technology based on investigation findings.

Rationale for the Revision: Deficiencies in personal protective technology may be a contributory factor in a percentage of structural firefighting line-of-duty deaths. However, there are a number of other areas in which standards likely have a more proximate role. For example, in incidents involving extreme fire behavior or firefighters trapped while working above the fire, the training of the firefighters and officers involved (e.g., victims, supervisors, incident commander) likely had limited focus on fire dynamics, the impact of tactical operations on fire behavior, and crew resource management. Training and training materials are significantly influenced by professional qualifications standards. Broadening this intermediate goal extend the role of standard setting agencies beyond that of addressing personal protective technology.

Intermediate Goal 2.5 (New): Fire service agencies, labor organizations, and academics will conduct research to identify patterns and interrelationships between causal and contributing factors in traumatic fatalities occurring during offensive, interior structural firefighting operations.

Rationale for the Revision: This category of line-of-duty deaths is one of the few in which the fatality rate is increasing. Development of effective interventions depends on effective qualitative and quantitative research to identify patterns and interrelationships in causal and contributing factors. Some work has been done in this area, but additional research is needed.

Activity/Output Goal A: Conduct fatality investigations as the principal activity of the FFFIPP.

Performance Measure A.4: Input will be obtained from health communications experts and experienced end users to improve the design and format of fatality investigation reports to make them more user-friendly by Fiscal year 2010.

Rationale for the Revision: Experienced end users, while not having health communications expertise, have intimate knowledge of how death in the line of duty reports are used in the field. For example, these reports may be used as is, they may be reformatted to remove the recommendations (to preclude the learners in a training session from developing preconceptions), or they may be used as a resource for developing more detailed and focused case studies.

Performance Measure A.5 (New): Fatality investigations and resulting recommendations will focus on how the death could have been prevented, trapped or mitigated from a crew resource management perspective.

Rational for the Revision: Line of duty deaths are frequently a result of human error. It is essential to focus on this aspect of these incidents and recognize that improvements in technology while important, will not (alone) result in improved safety performance. Principles of crew resource management must be used to frame both the investigative process and resulting reports.

Activity/Output Goal C: Seek peer and stakeholder input to improve the quality of products and impact of the program.

Performance Measure C.1: 75% of fatality investigation reports will be reviewed by external experts prior to finalization and 100% of other publications will be reviewed by peer and/or stakeholder reviewers prior to finalization.

Comment: his performance measure is appropriate. However, it is important that the specific qualifications of the external experts be considered in relation to the type of incident involved. In incidents involving extreme fire behavior it is essential that the reviewer have a sound understanding of fire dynamics. Given the potential limitations in professional qualifications standards, this may not be evidenced simply by qualification as a fire officer or years of service. It is essential to ensure review by both experienced fireground practitioners and individuals with a solid understanding of the science underlying fire behavior phenomena.

Activity/Output Goal D: Increase fire service expertise of FFFIPP personnel.

Performance Measure D.1: Each fatality investigator will take at least one fire-service training course or attend a fire service conference specifically for training purposes annually.

Comment: This is a positive step. However, it lacks sufficient specificity. Training for investigators should focus on: Fire dynamics, fireground strategy and tactics (and the influence of tactical operations on fire behavior), building construction and performance under fire conditions (as a starting point).

Submitted by:

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