

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

From: Patrick.Mahoney [Patrick.Mahoney@baytown.org]
Sent: Tuesday, February 10, 2009 4:17 PM
To: NIOSH Docket Office (CDC)
Subject: 141 - Draft NIOSH Alert: Preventing Deaths and Injuries of Fire Fighters When Fighting Fires in Unoccupied Structures
Attachments: NIOSH Vacant building public comment.doc

Patrick S. Mahoney
Lieutenant
Training & Safety Office
Baytown Fire Department
281-420-5339

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*Draft NIOSH Alert: Preventing Deaths and Injuries
of Fire Fighters When Fighting Fires in Unoccupied Structures*

To whom it may concern:

I have reviewed the aforementioned document and respectfully offer suggestions as to concept and style and usage. I will address the former first.

First, a note of skepticism: It appears that NIOSH is recommending a blanket directive to make only defensive attacks in unoccupied structures (7). This is so far out of the mainstream of the American fire service that it will likely be dismissed out-of-hand. A more profitable approach would be to concede that the vast majority of American firefighters and officers consider interior operations in vacant buildings perfectly legitimate, to a point, and offer recommendations for identifying that point.

Now, as for structure: The centerpiece of this document appears to be the case studies. Unfortunately, no logical connection is made from the case studies to the purported lessons of the report. By this I mean that three of these four case studies neglect to include information about the what arriving firefighters found before they made an initial attack, i.e., size-up *as perceived by those on scene*. In the lone exception there is a cursory mention of "fire venting through the roof," but no further details about size-up *as perceived by those on scene*.

Case 1 mentions only the fire through the roof and that the location was a known crack house; Case 2 mentions that a caller indicated that the residents were gone for the day. Neither of these details tells us anything about the perception the officers had or the perception they should have had of these structures. We all know that callers routinely make wildly inaccurate statements and we all know that crack houses frequently have multiple impaired persons inside. Case 3 and Case 4 present some details that seem to offer clearer indications that the structures were unoccupied but fail to provide even cursory mention of fire conditions upon arrival of fire department units. I would venture to say that very few firefighters would accept a blanket directive to respond to vacant structures in all cases with a defensive attack, regardless of fire conditions. So the relevant data for Cases 3 & 4 are the fire conditions; was there fire through the roof? Were the floors collapsing when they arrived? Or was a minor amount of wispy smoke emanating from an open door? If we do not know we can not apply the lessons to our situations.

The case studies are therefore of extremely limited value as practical and applicable cautionary tales. These case studies do nothing more than, in effect, say "these buildings were vacant and these guys died, don't die in a vacant building." As far as a course of action this is little more than a glib tautology. What is instead needed for the internalization of actionable lessons is inclusion in the case studies of detailed descriptions of the size-ups *as perceived by those on scene*. In their current form these case studies are little more than "if they'd known then what we know now."

To carry the weight it appears the authors intend them to carry, the case studies should show us what that first-in officer saw so that we can match it to what we see when we arrive on scene. Thinking in terms of recognition-primed decision making, the fire officer needs to

internalize warning signs in such a way that they can be recalled immediately in practice. Did these victims know these structures were vacant? Did they consciously choose to pursue interior attacks in vacant structures because they thought their was savable and valuable property? Or did they just pursue interior operations out of misguided machismo?

Until these questions are answered most readers will simply dismiss the scenarios as “well I wouldn’t do something that reckless.” The decisions that get people hurt and killed for no reason ALWAYS look reckless in hindsight. These reports are presented from the perspective of hindsight- show us what the decisions look like in plain sight so we can use them in real time!

I also have a few minor comments on style and usage.

- You offer excellent statistics (that make a forceful case) (2); I think they would be more readily absorbed if they were set out in a text box. Likewise for the definitions of offensive and defensive fire attacks (2), they would benefit from being set aside for greater visibility.
- The authors included an excellent statement: “Failure to revise an inappropriate or outdated attack plan is likely to result in an elevated risk of death or injury to firefighters.” (2). This is a key point and should be expanded as a concept.
- Throughout the document the authors refer to responsibilities as belonging to the incident commander *or* the incident safety officer. This is incorrect, as size-up and strategic decision making are always the sole province of the incident commander. In its current wording this relieves the incident commander of his responsibility as the ultimate determiner of strategy, violating the bedrock ICS principle of fixing responsibility on one person.
- The report says preplans should be submitted to the dispatch computers, but makes no mention of MDT’s and other forms of electronic storage and access. Is this intentional?
- The authors do not define “unsafe” (7) or “fire” (first page of summary, no number).
- In at least two places the authors improperly use the acronym i.e. when they mean to use e.g. (second page of the summary and 8).
- The list in the third bullet in the left column of page 8, headed “Determine whether the building is occupied. ...Signs to look for include windows and doors boarded up;...” That is an indication that the building is unoccupied and is not in keeping with the rest of the list, which is made up of indications that a building is occupied.
- The fourth bullet in the left column of p. 8 says that use of thermal imaging cameras should be “consider(ed).” Given the unparalleled ability of TIC’s to identify fire in concealed truss voids I think a stronger word than “consider” is in order.

This is a good document and serves a necessary purpose. I think the language needs some attention and the internal argument for its necessity needs to be shored up. Thank you for your time and consideration,

-Patrick Mahoney

Lieutenant, Baytown Fire Department (Texas)

Training and Safety Office

281 420 5339

patrick.mahoney@baytown.org