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Sent: Monday, March 09, 2009 3:14 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: Comments to Docket Number NIOSH.doc

To Whom It May Concern:

Attached are my comments to the above document draft. Thank you for the opportunity to have them read. I can make myself available for any additional discussion or questions you may have. I am a former volunteer firefighter and fire officer in Prince George's County (MD) and am employed within the fire service community, as you may notice below.

Thank you,
Bill Carey

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Comments to Docket Number NIOSH-141, "Preventing Deaths and Injuries of Firefighters When Fighting Fires in Unoccupied Structures"

The NIOSH Draft Alert, "Preventing Deaths and Injuries of Firefighters When Fighting Fires in Unoccupied Structures" appears to be a well-intentioned attempt to produce recommendations for safe firefighting in unoccupied structures; however, the homogenous plans within will face resistance and apathy among the nation's fire service. In an attempt to provide fire chiefs, line officers and firefighters with a safety plan for fireground operations, a great debate to define 'unoccupied' needs to first be resolved.

To many in the fire service, 'unoccupied structure' is loosely defined as having no one inside for a certain period of time not to be construed as 'abandoned'. Examples of this for the private and multiple dwelling are when the occupants are not at home; away to work; gone on an errand; or away on vacation. Examples for commercial occupancies would be during non-business hours; closed for holidays. It should be noted that in some commercial occupancies, workers may be physically operating in the structure while it is closed to the general public. Workers may also be operating during various around-the-clock shifts, giving the structure a 24-hour occupancy.

'Abandoned' and 'vacant' may be one in the same; however the key difference between these two and 'unoccupied' will be the length of time the structure is unoccupied and its physical state. Most 'abandoned' and 'vacant' structures are well known by many firefighters by the length of time vacant; outward appearance; community knowledge; and municipal building/code enforcement. Some departments have been able to identify such structures with a uniform marking system, differentiating them from 'unoccupied' structures and highlighting potential firefighting hazards.

The key for the draft to have an impact on fireground operations is to be able to give a universally acceptable definition. This is best done by not using 'unoccupied', 'abandoned' and 'vacant' interchangeably. 'Unoccupied' should apply to structures that are:

- Currently in proper, legal ownership and maintenance according to local building and zoning codes
- Routinely occupied on a consistent basis that is easily considered as 'daily living'
- Places of employment and/or manufacturing that operate under certain occupancy hours and have no employees in the structure outside of such hours

'Vacant' and 'abandoned' should apply to those structures that are:

- In violation of various building and zoning codes regarding maintenance and appearance
- In questionable or undeterminable ownership with regard to such maintenance and appearance violations
- Show obvious exterior signs of neglect, disrepair and structurally hazardous conditions
- Are well known throughout the community (fire department, other municipal departments, neighborhood actions groups, etc) about questionable occupancy, structural damage and possible illegal activities conducted in and/or around the structure

By having a universal definition, a safe fireground recommendation such as this one could give fire departments more leverage to work with building departments and other local government organizations, to increase the identification of 'vacant' and 'abandoned' structures. The early identification, followed by a department's own standard operating guidelines/procedures for such, will be a greater contribution to firefighter safety. Using the case reports in the draft document, we can make the difference between the definitions as well as see the reasoning why referring to an 'aggressive' interior attack will cause the draft document in its current state to fail to make an impact.

Case 1

"The 50-year-old house was abandoned and known by residents in the area to be a "crack house" at the time of the incident." Draft Document

"The house had been vacant since the owner's death in 2004 and had been vandalized and was known by locals and fire department and police agencies to be used by vagrants for illicit drug activities." NIOSH Report

In this case, the investigation reveals that the community as well local government had knowledge of the occupancy status of the structure since the owner's death. Vacant building marking, coupled with the reported significant fire conditions on arrival could provide greater caution for the arriving companies. While no one in the fire service would agree to 'playing God' with the lives of persons inside allegedly involved in illegal activities, the measure of risk analysis would be lesser than if this structure were simply considered 'unoccupied' i.e. the occupants not in the home at the time of the fire.

Case 2

“The caller indicated that the residents were gone for the day.” Draft Document

While this case refers to a report from a neighbor about the state of occupancy, there are many other points to look deeper into regarding the loss of life in this incident. Despite the information from the calling party, and other examples of firefighter fatalities and injuries, the draft document will not have its desired impact by focusing on calling party information. Instead, recommending that departments and media agencies work to produce a public safety announcement related to home fire drills can give two-fold remedies. First, by educating the public further on having designated meeting places and performing a head-count, occupants can confirm all are present and direct this confirmation to the arriving firefighters. Another line of duty death, such as this one, could have been avoided if the occupants had instructed the firefighters that they were all accounted for. Instead, they remained in a neighbor’s home across the street from the fire, while firefighters searched for them. Second, by having this confirming information fire departments can then adjust the speed with which they will make the initial attack and primary search. The phrase most often used ‘the building isn’t clear until we say it is’ does go along with the risk phrases as well, ‘risk a little to save a little’; however, any extra bit of detailed information while enroute and when arriving on the scene, coupled with the fire conditions present, will make a greater impact on the safety of the fireground instead of a vague ‘no one is home’ resolution. Communities are changeable and continuously transitioning in their occupancy. Not every department can rely on the goodness and kindness of neighbors.

Case 3

“The structure was vacant, all businesses in the building were closed, and burglar bars and gates were installed and locked on all windows and doors of this structure. Many windows were boarded over.” Draft Document

“There were five openings on the second level, D-side (one being partially bricked, with the remainder being closed with block glass), two windows on the first level, A-side, and three relatively tall windows on the second level, A-side (Photo 1). Other than the block glass window on the D-side (Photo 3), all windows were either made of plexi-glass or sealed substantially with wood. The structure was uninhabited at the time of the incident.” NIOSH Report

As is Case 2, there are other factors from the fireground that contributed to the loss of life, aside from the structure’s occupancy. It should be noted that the need for clear occupancy definitions is important, as in this case, with the use of the word ‘uninhabited’. For the purpose of the draft and its subsequent reader comments, the fire service now has four terms to describe building occupancy. Being aware of the other factors, having a uniform building marking system can label such occupancies. In many areas, it is common to have occupancies above first floor stores and businesses. These may have the same owner or different owners. Inspections, code enforcement and pre-planning can contribute to a more efficient fire attack and search, especially of known residents above stores.

Case 4

“The church was locked and unoccupied.” Draft Document

Again, as in Case 3 and Case 2, there are other factors to consider rather than the state of occupancy. Having a generic ‘everyone is out’ approach to fireground attack and primary search will not have the impact desired. As communities change, especially economically, their occupancy changes as well. Some religious institutions have adjoining residential occupancies, such as a parish house or manse. Some operate as a shelter for homeless persons. Others operate as educational centers providing both child and adult services in varying schedules. Greater code enforcement and pre-planning will provide departments with information about such religious-use structures. Additionally, when looking at churches, departments must consider newly founded religious organizations that meet in various structures. These would be schools, former stores, occupancies above first-floor stores and private dwellings.

The draft document does well in raising various points about pre-planning, attack, search, structural stability and the like, however with the vague occupancy definitions; the proposed recommendations may be largely ignored. Consideration of vague recommendations are:

“When operating in an unoccupied building, NO RISK is worth your life or injury.”
Draft Document.

- There needs to be definition between ‘unoccupied’ ‘abandoned’ and ‘vacant’ if we want greater use of the method of ‘risk analyses’.

“No offensive interior attacks should be made in unoccupied or unsafe structures.” Draft Document.

- As the fire service culture changes, so do many perceptions and beliefs, especially about safety. By using the word ‘interior’ with ‘offensive’, the draft document gives the impression that operating on the exterior is not to be considered offensive. We can be offensive, and aggressive, when we are faced with deploying the first initial handlines and searches to a severely exposed structure, based on the fire conditions present. This is a cultural attitude that is constantly evolving and should be encouraged as offensive. There may be some departments where, based on pre-alarm limitations, this may be their only course of action.

“Work with municipal agencies such as the local housing authority to identify and mark unsafe and unoccupied buildings. When appropriate, such buildings should be condemned, demolished, or repaired at the owner’s expense.” Draft Document

- Greater impact in the area of safety can be made if the focus of the draft document is occupancy definition and marking. There are many reports and much data from both fire departments, government agencies and civic groups focusing on the problem of neighborhood blight. Such information can be used to legislate for a national building marking standard.

“Check the structural integrity of walls, roofs, and floors.” Draft Document

- Realizing the true purpose of the draft document, and its intentions, this recommendation gives a great example to the need for occupancy definition and building marking. The performance of this act is not without its own hazards though. For some departments, walking through ‘abandoned’, ‘vacant’ buildings, especially those allegedly related to criminal activity, is more of a danger to its members than the act of firefighting itself.

“Determine whether the building is unoccupied. Signs to look for include windows and doors boarded up; vehicles in garage, driveway or parked nearby; people at windows of apartment or office buildings calling for help; time of day; type of occupancy; and reports from neighbors, by-standers and occupants who have escaped the burning structure [Richman, 1986].” Draft Document

- Efforts aimed at more detailed public fire safety information can provide better information. Neither of the above examples to use fully confirm nor deny the presence of someone inside the structure. In the case of structures with Collyer Mansion conditions, the outward physical appearance may indicate ‘abandoned’ or ‘vacant’ occupancy.

Overall the draft document does well in providing fire departments with generic strategies for alleviating the risk of injury and death to its members. The problem this document will experience is a lack of acceptance based on its vague view of ‘unoccupied’. Firefighters have, and always will, refer to the risk a little, risk a lot phrase as the easy explanation for their department’s philosophy about the fire attack and primary search. We should know that one department’s interpretation of risk will be very different from another. Aggressive to one company will be reckless to another. The draft document will have more of an impact of firefighter safety if it can narrow its focus from ‘unoccupied’ to ‘abandoned’ and ‘vacant’.