

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

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**Comments**

The current EOSTI performance requirements are dangerously outdated and were developed for technology that existed prior to 1960 and do not reflect current fire service needs or technological realities. IN fact almost 20% of the fatalities of fire fighters over the past decade, where in part attributed to fire fighters becoming lost, trapped or disorientation, which are usually caused by lack of breathing air. While half of fire fighter fatalities are attributed to non-cardiac events, we realize that not all of these occur in an interior of a structure while wearing respiratory protection. However, over 2/3's of the deaths where fire fighters become lost, trapped or disorientated and where the cause of death was asphyxiation occurred inside a building structure where respiratory protection was used.

Fire fighting remains arduous work and the strategy employed to protect citizens and their property remains getting to the seat of a fire. Further, with today's ability for fire fighters to get deeper into structures due to advances in personal protection technologies exit time strategies are severely limited. Providing greater air supply is not the answer, since this places significant physiological burden on fire fighters with known health consequences. SCBA must provide an amount of air for a reasonable work period during an emergency, often in IDLH atmospheres, while at the same time allowing for sufficient exit time.

This can be accomplished by providing an earlier EOSTI warning and accordingly such a change is warranted.

In fact the entire membership of the IAFF, 294,000 men and women fire fighters and emergency medical personnel, have supported this through formal convention action, by passage of a resolution in 2004.

The alarms must continue to alert the user until air supply is depleted. This signal not only alerts the user that air supply is now limited, but alerts others in his or her crew that the user is low on air and must begin exiting the IDLH area.

The IAFF believes that the high end must be above the current minimum value (20%). In fact it is our position that this level should reflect what fire fighters and emergency responders do during emergencies and should allow for 50% of their time for entry and work and 50% of their time for managing and completing their exit.