

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

From:
Sent: Thursday, April 10, 2008 11:51 AM
To: NIOSH Docket Office (CDC)
Cc: Fairobent, Jim; Freshwater, David; Lu, Po-Yung
Subject: NIOSH Docket 126- Public Comment

Hi:

The following comments are my personal opinion after reviewing the NIOSH Strategic Goals posted on the <http://www.cdc.gov/niosh/programs/epr/goals.html>. Please let me know if you need additional information.

Thanks,

To improve the safety and health of emergency workers the following are, in my opinion, the top three goals:

Strategic Goal 1: Safety Climate

This is the most important of all to protect our emergency workers. A terrorist's act doesn't necessarily need to cause physical damage. Simply weakening the psychology of responders would be a great success. Lack of a totally healthy and safe climate may impair the ability of responders to perform at full capacity. One suggestion is to consider moving up the time line for Performance Measure 1.6.1.

Strategic Goal 4: Characterization/Assessment of Potential Hazards

This strategic goal seems to focus on the instrument side of characterization. Areas of sampling strategies and hazard evaluation can be expanded from the goals or performance measures. Various sampling and dispersion models can be applied to improve chemical hazard evaluation.

Hazardous situations are more likely to arise from chemical spills of various types than from terrorist attacks. Usually, chemicals involved in spills will be known, but this may not always be the case. What is needed are more reliable measures of just how dangerous the chemical(s) are to humans based on studies of other animal systems as well as studies done using *in vitro* cell culture techniques. If a particular chemical does not have a great deal of toxicity information available, then one may want to consider Quantitative Structure Activity Relationship studies that could be used to estimate the potential hazard of the un- or undercharacterized chemical. In addition, the EPA Gene-Tox Program chemical classification scheme may be used as the "first screen" device to evaluate chemical toxicity.

A number of emergency planning toxicity values are available today, such as ACGIH TLVs, AIHA ERPGs, DOE TEELs, EPA AEGLs and PALs, NIOSH RELs and IDLHs, and OSHA PELs. These were developed to meet specific needs to implement programmatic applications. They are similar to each other in certain aspects. However, based on the methodology applied to each data set, they could provide

variations in the final toxicity planning values for the same chemical. Having an integrated harmonized database to provide toxicity planning values to emergency workers would be ideal. Furthermore, these values should be presented and communicated in simple language understandable to the workers.

Additional applications of these harmonized toxicity values can be employed to improve technologies for monitoring devices to reduce response time and increase specificity and reliability.

Strategic Goal 2: Personal Protective Equipment (PPE)

The approaches are comprehensive. Two suggestions:

1. Better hazard characterization of potential chemicals or agents will enable better design of PPE for emergency workers. The completion of an integrated comprehensive database knowledge system will facilitate the deliverable of Strategic goal 2.
2. Expand the Goal of 2.6 to consider an integrated approach "from cradle to grave" for the final disposal of used or contaminated PPEs; otherwise may generate "secondary pollution" of these contaminated PPEs.

Additional comments:

Strategic Goal 2

Under Goal 2.1, Performance Measure 2.1.7: The complete database should include the American Industrial Hygiene Association's Emergency Response Planning Guidelines that focus on important industrial chemicals.

Strategic Goal 5

Under "Overall Performance Goal: By 2014, reduce the injury and illness rate by 15%." This is an admirable goal to achieve. It should be applied to the entire worker community and not limited to underserved cultural or social subgroups as mentioned in Goal 5.1.

Performance Measure 5.1.3 and 5.1.4 are very critical, and consideration should be given to accelerating the completion time to 2010.

Strategic Goal 6

Performance Goal 6.2: A number of toxicity values available today can be used to modify to fit your goals but not duplicate efforts. See Comments under Strategic Goal 4 above.

Performance Goal 6.4: This is not well defined. Refer to Strategic Goal 5 (above) to include entire population, not just the underserved groups.