

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

From: Friday, May 09, 2008 4:54 PM
Sent: NIOSH Docket Office (CDC)
To: Chen, Jihong (Jane) (CDC/NIOSH/EID) (CTR); Doyle, Glenn (CDC/NIOSH/EID)
Cc: 128 - FiringRangesAlert Comments
Subject:

Name

Organization

Email

Address

Comments

I appreciate the efforts made to complete this document. It is well researched, designed and the key points are well stated.

In the opening statements on recommended controls, the document does not emphasize the need for double hearing protection, availability of sanitary facilities or waterless handwipes to clean hands and face, and the use of lead free or full metal jacketed bullets to significantly reduce exposure to noise and lead. The document does research all three aspects, but does not fully address them in the opening or summary as to the effectiveness of implementing these three leading methods of reducing hazardous exposures. Rather these three issues are more important than informing someone on the recognition of an acute exposure in this situation which is extremely rare if not unknown, versus the chronic exposure. Also, the relationship on exposure to cleaning solvents and use of appropriate solvent resistant gloves is poorly made.

There is a statement regarding dip coated copper bullets, metal jacketed and copper clad bullets that is ambiguous, and its conclusion that one is not as effective as the other, and is subject to wearing off in the barrel exposing the lead core. This statement should be verified with various bullet manufacturers, particular as to the definitions of each. Generally I have found metal jacket bullets with heeled bases (the copper jacket is formed like a cup, and the lead core is sealed to the jacket with an epoxy) has the lowest potential for lead exposure with common law enforcement hollow point ammunition and is the most commonly provided by the largest suppliers). Practice ammunition using a dip coated full metal jacket (without an open heeled base exposing the lead core) has the lowest potential of lead exposure. Copper clad bullets having the copper wear off is manufacturer dependant.

Irregardless, the use of lead bullets in indoor ranges is clearly a significant hazard compared to any of the three types of bullets. Dip coated bullets reduce exposures only fractionally compared to full metal jacket open based bullets and copper clad. There is very little "burn" on the base of lead bullet that volatilizes lead fumes, the primary exposure comes from over-sized soft lead bullets and the friction and cutting action caused by the lands and grooves of the barrel.

The discussion on double hearing protection needs to be expanded to the use of ear plugs and electronic hearing protection. As a safety matter, it is extremely important to hear range commands. Electronic Hearing Protection offered by several vendors provide automatic noise suppression when noise exceeds 80 dbA. The current vendors of electronic hearing protection should be contacted for current specifications of equipment.

As an aside, I would strongly recommend that these vendors provide a behind the neck style of electronic ear muffs designed for the law enforcement officer and the range of head ware (hats, ball caps, helmets).

In the document, NIOSH states that it has a unique hand cleanser that removes lead, under the patent process and looking for a vendor. While the usefulness of such a product is clearly needed, I'm not sure this document is the appropriate venue.

Please feel free to contact me if you having any questions regarding these comments.