

2011 NASA Occupational Health Conference

Portals to the Future: People, Partnerships and Prevention

Title of the presentation: *Updates and Trends in Occupational Health and Safety*

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Key words: *Occupational health and safety, legislation, wellness programs, health education, health screening, nutrition, metabolic and other chronic disorders, injuries, mortality and morbidity*

Learning Objectives

1. Review recent developments in the field of occupational medicine and environmental health.
2. Address current legislation landscape and discuss possible programmatic impacts.
3. Discuss possible means to improve the delivery of preventive program and minimize impacts of constrained resources.

Abstract

According to the World Health Organization (WHO) 9% of the world's mortality can be attributed to injuries from: traffic accidents, drowning, poisoning, and violence. This is over 5 million deaths/year. WHO also estimates that for every death as many as 12 individuals who survive their injuries require acute and/or chronic medical care.

In the U.S., the preliminary 2010 census revealed a rate of 3.3 of fatal work injuries per 100,000 full-time equivalent workers. Aircraft pilots and engineers, industrial machinery installers and repair workers, refuse and recyclable material workers, traveling sales workers and truck drivers, had 57.1, 25.2, 18.5 and 18.3 fatal work injury rates respectively.

Health and safety are important elements of the NASA research and operations culture. NASA has and continues to proactively pursue improvements in this interdisciplinary area of medicine, health and engineering. The U.S. Office of Personnel Management (OPM) is striving to establish a common approach to surveillance, prevention and reporting across the Federal government. In a recent briefing to NASA, OPM has identified five major areas of interest. These areas flow from the HHS Healthy People 2010 planning strategy, and consist of:

1. Health Education
2. Supportive Social and Physical Environments
3. Health Screenings
4. Linkages with Related Programs, and
5. Integration of Worksite Wellness Program into the Organizational Structure.

This survey identified the first three areas of interest as needing further development based on the low overall scores.

Signed by the President of the United States on April 15, 2011, Public Law 112-10, commonly referred to as a continuing resolution, is intended to fund the Federal government through September 30, 2011. The budget cuts approximately \$13 billion in appropriations from the President's funding request for the U.S. Departments of Labor (DOL), Education, and Health and Human Services. The appropriation level

proposed for this category is 49 million USD less than the DOL 2010 allocations, and \$132 million less than what was requested for FY 2011. Only the Mine Safety and Health Administration (MSHA) will see an increase of 3 million USD over the previous years. In the meantime, the Voluntary Protection Program has been reintroduced as a continuing legislation by the Congress (H.R. 1511, S. 807) and OSHA plans to develop and propose standards for exposures to silica and airborne infection hazards to include influenza transmission and the risks posed by nanotechnology. There is concern that the budget agreement of April 8, 2011 (HR 1473) and the anticipated out year budgetary shortcomings could translate to a reduction or at worst reprioritization of the health and safety activities by the federal agencies.

Increased efficiency and improved prevention will be required to sustain the high standard of health and safety for the NASA workforce in a fiscally constrained environment and changing planning strategies. Use of new means such as social networks and IT for health education, training, and wellness programs might be necessary for maintaining a healthy but increasingly demographically diverse NASA workforce. Knowledge on the cost/benefits of medical screening programs, nutrition, exercise, disease detection and prevention are advancing at a fast pace and requires careful assessments for inclusion into the wellness programs in the future.