

Abstract

Aging Workforce and NASA

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Purpose

To discuss review demographic and global, US workforce, and NASA in particular, trends and assess the adequacy of existing health and safety guidelines targeting the aging workforce.

Background

The world population is aging. Older individuals are either unable to work and place increased burden on the health system, or continue to work with potential for injuries and health problems which impact the overall health care cost expenditures for the employers(1,2).

The United States, Canada and Japan are facing a dramatic rise in their population over the age of 60, which is estimated to jump from 16% in 2000 to over 28% and 36% in 2025 and 2054 respectively. NASA has not been immune to this problem and is facing skill shortages in many areas. One of the contributing factors identified by the Columbia Accident Investigation Board was the loss of the skilled workforce at NASA, which was the result from the 1990 -2002 decade of downsizing policies (3).

Today NASA has to compete for talent and skilled work force with the private sector and recruitment or retention of employees might be problematic. Older workforce presents a unique pool of talent and skills which are now targeted for retention.

Recent studies have shown that workers age 55 and older as a whole tend to have a better performance and motivation and in most instances do have lower accident rates. However they also exhibit a higher incidence of musculoskeletal injuries and are subject to chronic diseases which result in higher workman's compensations and longer recovery periods reflected in higher absenteeism and health care cost (4).

Remediation

Many employers have shifted their focus to wellness and prevention as means to address the healthcare costs of an aging workforce. The emphasis is placed on behavioral changes such as smoking cessation, weight management and exercise, combined with the creation of a safer environment to include (adapted from reference 4):

- Proper illumination

- Safe access and exit at home and in the workplace
- Properly designed traffic patterns in the workplace
- Accessibility to emergency and first aid care
- Good safety practices such as:
 - clear communications
 - identification of hazards and risks

Additional preventive measures should include periodic skill training, timely all hazards drills, stress reduction and better work rest cycles. Telecommuting and work safety practices at home are to be addressed, since major accidents do occur at home. Understanding the “healthy aging process” and the associated physiological changes helps in designing safer work environments by addressing issues such as vision, hearing and ergonomics.

References

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Conflicts of Interest

None