DAY ONE—TUESDAY, OCTOBER 17, 2000

Session: A1.0
Title: Special Population at Risk: The Aging Workforce
Category: Special Session
Organized by Suzanne Marsh, National Institute for Occupational Safety and Health
Moderator(s): David Wegman

A1.1 The Aging Workforce: Demographic Trends and Factors Affecting the Risk of Injury—Grosch JW

A critical challenge in public health during the next decade is how to insure the safety and health of an aging U.S. workforce. The Bureau of Labor Statistics (BLS) estimates that by 2005, 53 million workers, or 33% of the workforce, will be 45 years or older. Research suggests that older workers are at greater risk for a variety of adverse health outcomes, ranging from musculoskeletal disorders to fatal accidents. This presentation will focus on demographic trends in the U.S. workforce over the next decade, highlighting those occupations and industries that are projected to have the largest number of older workers. In addition, a brief overview will be given of how recent changes in the nature of work may place older workers at greater risk for injury in the future.

A1.2 Occupational Fatalities Among Older Workers in the United States—Marsh SM, Myers JR

Workers 55 years of age and older have been identified as a population at high risk of fatal occupational injuries. This is especially true for the agricultural production industry. The need to understand these high fatality risks for older workers is increasing in importance because of the aging of the U.S. workforce. Data from the Bureau of Labor Statistics (BLS), Census of Fatal Occupational Injuries (CFOI) surveillance system, for the years 1992 through 1997, were analyzed to provide descriptive statistics on all occupational fatalities occurring to workers 55 year of age and older, and statistics specific to the production agriculture industry. Fatality rates were calculated based on employment information from the BLS Current Population Survey (CPS). Between 1992 and 1997, there were 36,932 occupational fatalities identified by CFOI, of which 7,967 (22%) occurred to workers 55 years of age and older, for a fatality rate of 8.8 deaths/100,000 workers. The leading sources of injury for these older worker deaths were: highway vehicles (27%); plant and industrial vehicles (13%); and floors and other working surfaces (12%). The leading events causing these fatalities were: highway transportation (21%); non-highway transportation (13%); and violent acts and assaults (13%). Approximately 25 percent of these deaths occurred in the Agriculture, Forestry, and Fishing industrial division. During the same time period, there were 3,503 deaths in production agriculture, of which 1,823 (52%) occurred to workers 55 years of age and older. The fatality rate for these older production agriculture workers was 46 deaths/100,000 workers. The leading sources of injury for these older production agriculture workers were: tractors (45%); trucks (8%); and agricultural mowers (5%). These data indicate that older workers in general, and older workers in production agriculture specifically, are a key special population to address in future injury prevention efforts.

A1.3 Nonfatal Workplace Injuries to Older Workers: Evidence From the BLS Survey of Occupational Injuries and Illness—Ruser JW

This paper combines three years (1996-98) of BLS data from the Survey of Occupational Injuries and Illnesses (SOII) to describe the workplace injury and illness experience of older workers - those age 55 and older. The paper identifies those occupations by gender that are associated with the highest number of conditions to older workers and indicates the types (e.g., back sprains, fractured ankles) and durations of conditions that they sustain. The distribution of cases by type and duration is compared between older and prime-aged workers (25 to 54 years of age) by gender, to contrast the workplace safety and health experience of these groups of workers.

Because SOII does not collects hours worked for groups of workers, injury rates by worker demographics are not usually calculated. This paper addresses this shortcoming utilizing hours worked estimates from the household-based Current Population Survey (CPS). This paper uses CPS micro data for 1996 to 1998 to generate annual hours worked estimates by detailed occupation and gender for older workers. These denominator data are matched to the SOII case counts to yield workplace injury and illness rates by gender and occupation. The paper shows which occupations are the most risky to older men and women.

A1.4 Injury Rates Among Women and Older Workers in Metal Manufacturing—Cullen MR

As part of an ongoing service relationship with a large, multi-national metals manufacturer, we have merged databases including personnel files, non-workers' comp health claims, industrial hygiene data and a real-time safety data system. By linking these separate data systems, each designed for unrelated purposes, we have been able to investigate the interrelationship between injury rates and severity and an array of possible predictors, including extensive demographic information, information about work and work environment, and location-specific information on work organization. Although this work is at a preliminary stage, evidence suggests a trend towards slightly decreasing injury rates in older workers, but these are unadjusted for injury severity or specific job task. Likewise, injury rates in hourly female workers appear higher than for male counterparts, based on unadjusted preliminary analyses. Methodologic aspects and possible ramifications of early observations will be discussed.

Pittsburgh, Pennsylvania
October 17-19, 2000

ABSTRACTS

National Occupational Injury Research Symposium

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