Occupational safety and health

Injuries, illnesses, and fatalities among older workers

Americans are living longer than ever before and many are staying in the workforce past age 55; although older workers experience similar events leading to injury, they sustain more severe injuries than their younger counterparts and require more days away from work to recover

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lder workers face many of the same workplace hazards as do other workers; the most prevalent events leading to jobrelated injuries or fatalities are falls, assaults, harmful exposures, or transportation incidents. But in many cases, the nature of the injury suffered by an older worker is more severe than that suffered by younger workers. Older workers who suffer a workplace injury may experience longer recovery periods than their younger counterparts. And older workers die from workplace injuries at a higher rate than do younger workers. This analysis focuses on occupational injuries, illnesses, and fatalities among older workers, and identifies differences in the severity of the events as a result of age.

Americans are living longer than ever before, and increasing numbers of older Americans are working. These facts have led to expanded interest in the activities of older Americans, and their work life. Americans born at the beginning of the 21st century can expect to live an average of 77 years, an increase of 9 years, compared with persons born a half century ago. Those aged 65 in 2000 can expect to live 18 years. Considering age 65 to be a typical retirement age, individuals can expect to live nearly 2 additional decades. Both the need to feel productive and the need for income may lead these older Americans to work during what are typically considered retirement years.¹ Further, the cohort of older Americans is getting larger. There are currently 35 million Americans aged 65 and older, and another 28 million age 55–64. The baby-boom generation, those born in the years following World War II, are currently in their early 40s to late 50s. Over the next 20 years, the percent of Americans aged 65 and older will grow from the current 12 percent of the population to 21 percent. Clearly there is much interest in this group.

Sixty percent of those aged 55-64 are in the labor force; 14 percent of those aged 65 and older are in the labor force. For many years, starting in the 1960s, these percentages have declined, the result perhaps of available retirement income benefits from a variety of sources. But that trend has turned around in recent years, and the percent of older Americans in the labor force has been increasing. This may be due to changes in the Social Security retirement age, which requires individuals to work longer to receive full benefits. Another possible reason for an increase in older workers in the labor force is the need for increased income to pay medical and other expenses. Older Americans work in a variety of industries, but have large concentrations in education, health services, and wholesale and retail trade.

But the need to work does not come without potential hazards. This article explores recent data on workplace injuries, illnesses, and fatalities among older workers. Data from the Bureau of Labor Statistics Survey of Occupational Injuries and Illnesses and Census of Fatal Occupational Injuries provide a wide range of information about the events that led to an injury, illness, or fatality, the demographics of the workers involved, and the types of occupations and industries where these incidents occur.²

The Survey of Occupational Injuries and Illnesses provides the number of workplace injuries and illnesses and the rate of such incidents, based on full-time equivalent workers. Data are available for most private industry workers. For those cases that involve days away from work, which are generally considered the most serious cases, the survey also provides detailed demographic data on the worker involved and detailed characteristics of the case, such as the event that precipitated the incident and the part of body affected.

The Census of Fatal Occupational Injuries provides counts of the number of workplace fatalities and the rate of such incidents per worker. Data include private industry, governments, the residential military, and the self-employed. For each fatality, data are available on the event, the demographics of the decedent, and his or her industry and occupation.

Workplace injuries and illnesses

In 2003, 1.57 million of the most serious occupational injury and illness cases—those requiring days away from work beyond the day of incident—involved workers 55 years of age and older. These workers accounted for about 12 percent of injury and illness cases requiring days away from work, slightly less than their 13-percent share of total hours worked. Though older workers suffered injury and illness cases at a rate proportionately lower than their percentage of hours worked, the injuries they sustained were generally more severe than those sustained by younger workers. (See table 1.)

Table 1. Percent distribution of hours worked and days away from work cases by age group, 2003						
Age group	Percentage of hours worked	Percentage of cases involving days away from work				
Total 16 years and older 16-19 years 20-24 years 25-34 years 35-44 years 45-54 years 55-64 years 65 years and older 55 years and older	100.0 3.2 10.3 24.3 26.6 22.6 10.7 2.3 13.0	100.0 3.3 11.1 24.2 27.5 21.9 10.2 1.9 12.1				

Older workers required more days away from work to recover from a workplace injury or illness than did their younger counterparts. The median of days away from work for all workers was 8 days; for those aged 55–64, it was 12 days, and for those aged 65 and older, it was 18 days. (See chart 1.) Older workers have more disabling conditions like fractures and multiple injuries than do younger workers. And similar events lead to more severe injuries in older workers than in others.

An example of the severity of injuries and illnesses sustained by older workers can be seen by looking at the nature of the injury or illness sustained. Nature is defined as the principal physical characteristics of the injury or illness, such as a cut, a bruise, or a sprain. Chart 2 shows the percent distribution of days-away-from-work injuries and illnesses by the nature of injury for different age categories. Although sprains, strains, and tears are the largest single category at all ages, there is a noticeable tradeoff between that category and fractures as age increases. For older workers, the percentage suffering a sprain, strain, or tear declines as the percentage suffering a fracture increases.

Fatalities

Of the 5,575 workplace fatalities in 2003, 523—just under 10 percent—were among workers aged 65 and older. But the fatality rate for older workers (11.3 fatalities for 100,000 workers) was nearly 3 times that of younger workers. The most prevalent fatal events among workers aged 65 and older were transportation incidents and falls. (See charts 3 and 4.)

The available data on workplace injuries, illnesses, and fatalities allow for case studies of a number of variables, including specific industries, occupations, and events. The remainder of this article explores two examples of such case studies, looking at older truckdrivers and falls among older workers.

Case studies

Truckdrivers. Truckdrivers have consistently been one of the occupations with the greatest number of injury and illness cases involving days away from work. Beginning in 2003, the truckdriver occupation was divided into three categories—heavy and tractor-trailer truckdriver, light or delivery service truckdriver, and driver-sales worker. This division helped to identify heavy and tractor-trailer truck drivers as the most dangerous of the truckdriver occupations, with more than 70,000 days-away-from-work cases in 2003. And within this dangerous occupation, clear differences in the injuries and illnesses are evident among older drivers.

Heavy and tractor-trailer truckdrivers aged 65 and older experience twice the percentage of fractures as do such drivers





of all ages. Twenty percent of older truckdriver injuries result in fractures, compared with 9.3 percent for all truckdrivers. (See table 2.) Fatalities among all truckdrivers are typically highway incidents, such as a collision between two vehicles. For truckdrivers aged 65 and older, the most prevalent highway incident was a vehicle striking a stationary object or equipment on the side of the road. Such incidents were less prevalent among younger truckdrivers.

Falls on the same level. Falls on the same level occur when the motion producing the contact was generated by gravity following the employee's loss of equilibrium (the person was unable to maintain an upright position) and the point of contact was at the same level or above the surface supporting the person at the inception of the fall. This case study indicates how such an event, which might not be considered particularly serious, can have more severe effects on older workers than on younger workers.

Sprains, strains, and tears are the most prevalent injury resulting from a fall on the same level for all workers, and for those aged 45–54 and 55–65. However, for those aged 65 and older, the most prevalent injury resulting from a fall on the same level is a fracture. Fully one-third of falls on the same level among workers in this age group led to a fracture.

Table 2.Percent distribution of days away from work cases by nature of injury and age, heavy and tractor-trailer truckdrivers, 2003					
Injury	All ages	45-54	55–64	65 and older	
Sprains, strains, and tears Fractures Bruises, contusions Nonspecified injuries Other	48.7 9.3 8.4 11.2 22.4	46.7 12.7 8.0 12.3 20.3	52.9 11.3 10.9 9.9 15	37.7 19.9 16.4 8.9 17.1	

Consequently, the percentage of such falls that resulted in a sprain, strain, or tear declined with age. (See chart 5.)

Among all workers, the occupations with the greatest number of falls on the same level were heavy and tractortrailer truckdrivers, laborers and freight movers, and nursing aides, orderlies, and attendants. For workers aged 65 and older, the occupations with the greatest number of falls on the same level were retail salespersons, heavy and tractor-trailer truckdrivers, and laborers and freight movers. The addition of retail salespersons at the top of the list suggests that falls are much more prominent among all occupations at this age level, and that the job does not have to be one that is traditionally





considered high risk or dangerous to lead to a fall among an older worker.

Twelve percent of all occupational fatalities were the result of falls, with only about 10 percent of those falls being falls on the same level. Such events do not often lead to a fatality, except among older workers. For those aged 65 and older, 17 percent of fatalities were the result of falls, and 30 percent of those were falls on the same level. (See chart 6, page 29.) Workers who died from fatal falls on the same level often injured their head or injured multiple body parts. The physical condition resulting from a fall on the same level was often multiple intracranial injuries and injuries to external organs. For cases in which the injury affected the limbs or trunk, workers may have had complications following medical treatment that ultimately led to their death.

THESE CASE STUDIES are intended to provide an overview of how BLS occupational injury, illness, and fatality data can be used to construct an overview of the safety and health issues related to a particular population. Data are available to produce cross-tabulations by a variety of data elements, including industry, occupation, and characteristics related to the incident. Data on occupational injuries, illnesses, and fatalities include similar variables and coding structures which can be used together to construct a continuum of severity for many case studies.

Notes

¹ Data from several Federal statistical agencies on population, life expectancy, and work status of older Americans are compiled by the Federal Interagency Forum on Aging-Related Statistics in a chartbook titled Older Americans 2004: Key Indicators of Well Being. The chartbook is available on the Internet at www.agingstats.gov/ chartbook2004/default.htm.

² For more information on the BLS occupational safety and health statistics program, go online to www.bls.gov/iif.