

Types of Work Injuries Associated with Lengthy Absences from Work

BY MARTIN E. PERSONICK

Workers afflicted with carpal tunnel syndrome typically missed 30 days of work, the lengthiest absence reported for any major type of job-related injury or illness covered by the Bureau's Survey of Occupational Injuries and Illnesses. Work-related hernias, amputations, and fractures also commonly kept workers off the job for several weeks, far longer than the national median of 5 workdays lost for all types of nonfatal injuries and illnesses in 1995. This article summarizes the characteristics of these serious nonfatal injuries and illnesses and compares their profiles to the national profile, for all nonfatal incidents involving days away from work. Median days away from work is the measure used to summarize information on the number of days away from work counted for individual survey cases. The 1995

median for carpal tunnel syndrome of 30 days, for example, signifies that half the 31,500 cases associated with that condition involved more than 30 days away from work, and half involved fewer than 30 days. For some workers, however, the number of workdays missed after sustaining a certain type of injury or illness can vary widely from the norm (median). Table 1 shows, for instance, that a fourth of the work-related carpal tunnel syndrome cases lasted 10 days or less. Absences from work due to carpal tunnel syndrome can differ, depending on injury severity, time to heal, and whether the injured temporarily performs light work activities (e.g., non-typing duties) while recovering.

Severe injuries profiled

This section looks at work-related carpal tunnel syndrome, hernias, amputations, and fractures—the four most disabling conditions shown in table 1—from three differ-

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Table 1. Nature of injury or illness: Number of work-related cases and days away from work, 1995

Disabling condition	Total cases ¹	Percent of total cases involving:				Median days away from work ²
		Under 3 days	3 to 10 days	11 to 20 days	21 days or more	
Total	2,040,929	30	34	11	24	5
Carpal tunnel syndrome	31,457	7	18	14	62	30
Hernia	30,482	5	16	25	54	22
Amputation	11,308	10	22	18	50	21
Fracture	124,601	14	25	14	46	18
Sprain, strain	876,792	27	38	12	23	5
Cut, laceration	153,193	43	35	10	13	3
Chemical burn	13,861	52	34	7	7	2

¹ Total days away from work cases includes data for disabling conditions in addition to those shown separately.

² Median workdays lost is the point at which half the injuries and illnesses involved more lost workdays and half

involved fewer days.

NOTE: Because of rounding, percentages may not add to 100.

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor

ent views: Gender, occupation, and event or exposure. Table 2 contains a percent distribution of each condition's case total by these three characteristics.

Men dominated three of the four types of severe injuries, but women outnumbered men suffering from carpal tunnel syndrome—the condition associated with most workdays missed. As table 2 shows, women workers were a clear majority (seven-tenths) of the lost-worktime cases involving carpal tunnel syndrome, compared with less than a tenth of the case totals for hernias and amputations, and a fourth of all fractures. More women sustained carpal tunnel syndrome operating machinery, on assembly lines, and tending retail stores than they did typing, keying, and performing other duties associated with office workers. Nationally, women made up about a third of the 2 million injuries and illnesses in 1995 with days away from work, a smaller proportion than their 45-percent share of the 95 million private wage and salary workers covered by the BLS survey.

Workers sustaining the aforementioned injuries performed a variety of work activities, such as handling clerical and sales duties, operating or repairing machinery, fabricating products on assembly lines, moving material by hand or truck, cleaning and maintaining buildings, and staffing construction sites. Although workers in these kinds of occupations figured prominently in all lost-worktime injuries, their risk of sustaining some severe injuries appears to be particularly high. Assemblers' share of total lost-worktime injuries and illnesses (2.7 percent), for example, was twice their portion of total private wage and salary employment (1.3 percent); their share of carpal tunnel syndrome cases, however, was 8 percent. Similarly, truckdrivers sustained 9 percent of all fractures and about 7½ percent of all lost-worktime cases; they were about 2½ percent of the 1995 employment total.

The manner in which workers sustained severe injuries differed, suggesting that remedies to prevent such injuries need to address a variety of hazardous working conditions and unsafe work practices (see chart). Virtually all cases of carpal tunnel syndrome resulted from stress or strain upon a worker's wrist due to a task's repetitive nature. Examples include grasping and unraveling bolts of cloth, scanning groceries, typing or key entry, and cutting meat or poultry on an assembly line. By contrast, about three-fifths of work-related amputations involved a worker's finger being caught in or compressed by a piece of equipment, machinery, or an object, such as a conveyor, printing press, or wire reel. Seven-eighths of the hernias resulted from overexertion, primarily while workers lifted heavy objects, laborers moved household goods, or butchers maneuvered carcasses of meat, for example. Seven-tenths of fractures on the job were due to falls or workers being struck by objects, such as janitors falling off ladders or falling lumber hitting carpenters. For all lost-worktime injuries and illnesses, the leading event and exposure was overexertion (slightly more than a fourth of the total of 2 million cases). Next in frequency among all types of lost-worktime injuries and illnesses were ob-

straining workers and workers falling to the same level, such as the ground or walkway that supported them at the inception of the fall; each category accounted for about an eighth of the 2-million case total.

Survey scope, methods, and definitions

The Survey of Occupational Injuries and Illnesses is a Federal/State program (equally funded) in which employer reports are collected from about 250,000 private industry establishments, and processed by State agencies cooperating with the Bureau of Labor Statistics. Occupational injury and illness data for coal, metal, and nonmetal mining and for railroad activities were provided by the Department of Labor's Mine Safety and Health Administration and the Department of Transportation's Federal Railroad Administration. The survey excludes all fatalities at work and work-related nonfatal injuries to, and illnesses of, the self-employed; workers on farms with fewer than 11 employees; private household workers; and employees in Federal, State, and local government agencies.

For injuries and illnesses involving days away from work, 1995 survey participants provided information on the characteristics of workers disabled and the disabilities they sustained. Employers also reported the number of missed workdays due to each injury or illness. Occupation and gender profiles, shown in this article for four severe work disabilities, are based on two of five worker characteristics reported by employers (the other three are age, race/ethnic origin, and length of service with employer at the time of the incident). Information provided on the physical characteristics of the disabling condition was used by survey coders to identify the nature of the injury or illness, while information on how the incident occurred enabled coders to classify the event and exposure leading to a lost-worktime injury or illness. The part of body affected and the primary injury or illness-producing source were also described and coded for each injury or illness involving days away from work; these characteristics were not profiled here primarily due to limitations of space and time.

The four severe injuries and illnesses profiled in this article are described in detail in the 1992 BLS Occupational Injury and Illness Classification Manual. Carpal tunnel syndrome results from a compression of the median nerve where it passes through the wrist. Hernias include those of the abdominal cavity (e.g., inguinal, hiatal, ventral) and are characterized by the protrusion of an internal body structure through the abdominal wall. Amputations include traumatic loss of limb or other external body part resulting in bone loss. Fractures are traumatic injuries resulting in broken bones or teeth. The categories used here to describe the way in which these disabilities occurred are part of seven specifically defined divisions comprising the BLS event and exposure code structure: Contact with objects and equipment (for example, struck by an object or caught in a piece of machinery); falls (including those on the same level and those to a lower level); bodily reaction

and exertion (for example, overexertion and repetitive motion); exposure to harmful substances or environments (such as contact with electric current); transportation accidents, (including, for example, highway mishaps); fires and explosions; and assaults and violent acts.

The 1990 Occupational Classification System, developed by the Census Bureau, was used to determine the appropriate

occupational category. The system, for example, places the job title laborer into the occupation construction laborer when construction is reported as the industry of the injured worker. A laborer in agricultural production, however, receives the occupational code farm worker; the same title in most other industries is coded as laborer, except in construction.

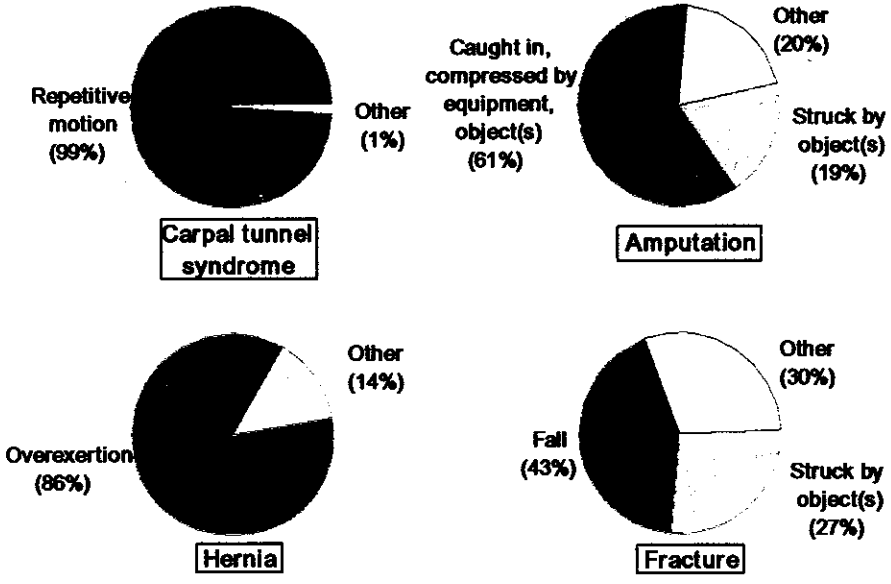
Table 2. Profiles for four types of injuries resulting in lengthy absences from work, by gender, occupations most often affected, and ways in which injury occurred, 1995

CARPAL TUNNEL SYNDROME		AMPUTATION	
Number of cases	31,457	Number of cases	11,308
Percent	100	Percent	100
Sex of injured:	100	Sex of injured:	100
Female	71	Female	9
Male	28	Male	90
Occupation:	100	Occupation:	100
Clerical and other administrative support	22	Machine operator	30
Data entry keyer	4	Sawing machine	3
Secretary	3	Punching and stamping press	2
General office clerk	2	Precision production and craft	27
Machine operator	21	Carpenter	3
Sewing machine operator	4	Industrial machinery repairer	3
All other occupations	57	Butcher and meatcutter	2
Assembler	8	All other occupations	43
Laborer, excluding construction	3	Laborer, excluding construction	6
Cashier	23	Assembler	4
Sales supervisor	2	Truckdriver	3
Event or exposure:	100	Construction laborer	3
Repetitive motion, all types	99	Event or exposure:	100
Placing, grasping, excluding tool	6	Caught in, compressed by equipment, machinery, or object(s)	61
Typing or key entry	22	Struck by object(s)	19
Use of tool(s)	14	Struck against object(s)	13
All other events, exposures	1	All other events, exposures	8
HERNIA		FRACTURE	
Number of cases	30,482	Number of cases	124,601
Percent	100	Percent	100
Sex of injured:	100	Sex of injured:	100
Female	7	Female	25
Male	93	Male	74
Occupation:	100	Occupation:	100
Operator, fabricator, and laborer	45	Handler, helper, and laborer	16
Truckdriver	8	Laborer, excluding construction	6
Laborer, excluding construction	6	Construction laborer	4
Assembler	3	Transportation, material handling	12
Welder and cutter	3	Truckdriver	9
Precision production, craft	27	Construction trade	10
Carpenter	3	Carpenter	3
Butcher and meatcutter	2	Machine operator	10
All other occupations	29	All other occupations	51
Cook	3	Janitor and cleaner	2
Janitor and cleaner	3	Assembler	2
Event or exposure:	100	Miscellaneous food preparer	2
Overexertion, all types	86	Event or exposure:	100
Lifting	60	Fall, all types	43
Pulling or pushing	13	Fall from ladder	5
Holding, carrying, turning	7	Struck by object(s)	27
All other events, exposures	14	Caught in, compressed by equipment, machinery, or object(s)	13
Bodily reaction (e.g., slip)	5	All other events, exposures	17

NOTE: Each profile is a percent distribution of cases involving days away from work. The four disabling conditions are part of the BLS nature of injury and illness classification structure, issued in

1992. Because of rounding and omitted subcategories, percentages may not add to 100.
SOURCE: Bureau of Labor Statistics, U.S. Department of Labor

Percent distribution of lost-worktime injuries and illnesses for four disabling conditions, by major event and exposure, 1995



Source: Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries and Illnesses, 1995