# 5 Nonfatal Illness

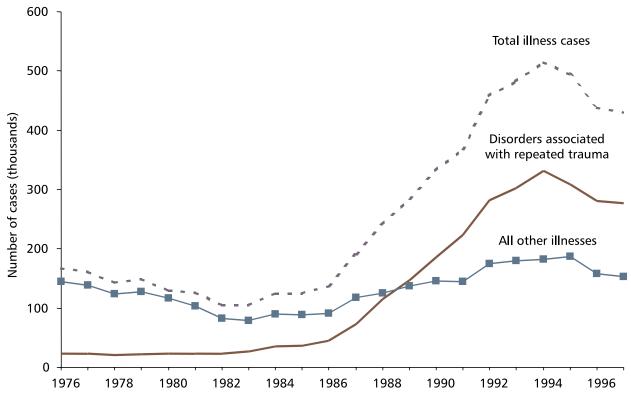
llnesses are often more difficult to link with work than injuries. Illnesses related to occupational exposures (e.g., tuberculosis [TB], cancers, central nervous system disorders, and asthma) appear no different when encountered in the absence of occupational exposures. Work-related aspects of illness may go unrecognized for many reasons, including long latency periods between the exposure and development of some diseases and the failure of health care professionals to recognize or report work-related illnesses or obtain information about a patient's work history.

The Bureau of Labor Statistics (BLS) records information about nonfatal occupational illness in the Survey of Occupational Injuries and Illnesses (SOII) using data from logs maintained by employers. The illnesses reported in SOII are those most easily and directly related to workplace activity. Illnesses with workplace associations that are not immediately obvious are vastly undercounted in SOII. Other illness surveillance systems use different approaches to record and classify illnesses for targeting prevention efforts. Data are presented here from SOII and other systems, including the Sentinel Event Notification System for Occupational Risk (SENSOR), the Third National Health and Nutrition Examination Survey (NHANES III), the Coal Workers' X-Ray Surveillance Program (CWXSP), the Adult Blood Lead Epidemiology and Surveillance Program (ABLES), the National Surveillance System for Hospital Health Care Workers (NaSH), and various reporting systems for human immunodeficiency virus (HIV) and acquired immune deficiency syndrome (AIDS), viral hepatitis, and TB. Details about each of the surveillance systems and information contacts are presented in Appendix A.



# Incidence of Occupational Illness in Private Industry

New nonfatal occupational illness cases recorded in SOII totaled 429,800 in 1997—the third year of decline in reported illnesses after a high of more than 500,000 cases in 1994 (Figure 5–1). Disorders associated with repeated trauma accounted for most of the decrease from 1994 to 1997. Sixty percent of nonfatal occupational illnesses reported in 1997 occurred in manufacturing (Figure 5–2). The overall incidence rate that year was 49.8 illnesses per 10,000 full-time workers, with the highest rates reported by establishments with 1,000 or more workers (Figure 5–3). The highest rate by industry division occurred in manufacturing (Figure 5–4).



**Figure 5–1**. Incidence of nonfatal occupational illness cases in private industry, 1976–1997. (Source: SOII [1999].)



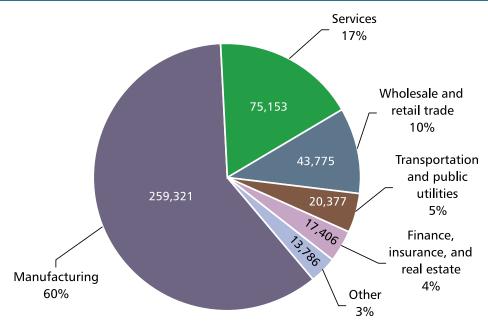


Figure 5–2. Number and distribution of nonfatal occupational illnesses in private industry by industry division, 1997. (Source: SOII [1999].)

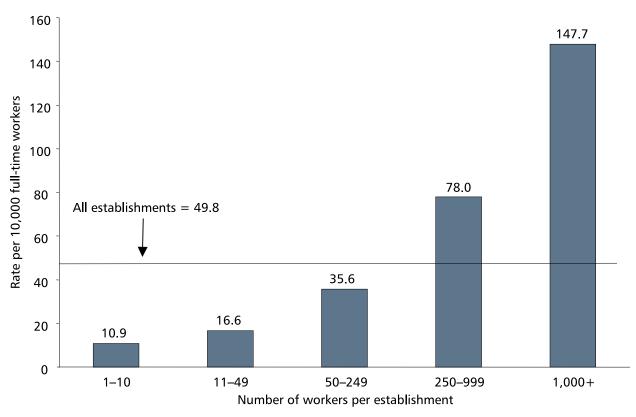
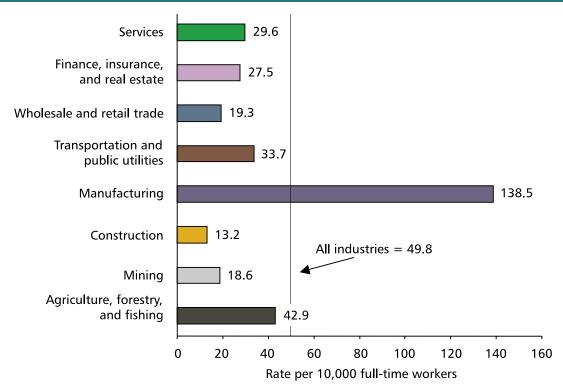


Figure 5–3. Incidence rates of nonfatal occupational illness in private industry by establishment employment size, 1997. (Source: SOII [1999].)

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**Figure 5–4**. Incidence rates of nonfatal occupational illness in private industry by industry division, 1997. (Source: SOII [1999].)

## Repeated Trauma Disorders

Repeated trauma disorders accounted for 64% (276,600 cases) of all nonfatal occupational illness cases recorded in SOII in 1997. Included in this category are carpal tunnel syndrome (CTS), tendinitis, and noise-induced hearing loss. Repeated trauma disorders accounted for most of the increases in nonfatal occupational illnesses recorded in SOII from 1976 through 1997 (Figure 5–1). Manufacturing accounted for 72% of the cases in private industry in 1997 (Figure 5–5). Industries associated with the highest rates of nonfatal occupational disorders involving repeated trauma were meat packing plants (1,192 cases per 10,000 workers), motor vehicles and car bodies (741 cases per 10,000 workers), and poultry slaughtering and processing (523 cases per 10,000 workers).



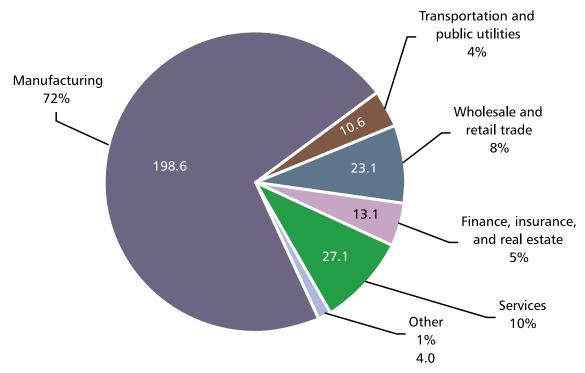


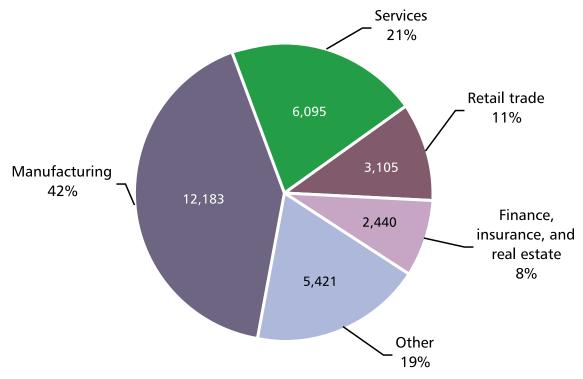
Figure 5–5. Number (thousands) and distribution of repeated trauma disorders in private industry by industry division, 1997. (Source: SOII [1999].)

### **Carpal Tunnel Syndrome**

#### Cases Recorded by SOII

CTS accounted for more than 29,000 nonfatal occupational illness cases with days away from work recorded in SOII in 1997. Women accounted for 70% of these cases, and more than half of all CTS cases required 25 or more days away from work. Most CTS cases occurred in the manufacturing (42%) and service (21%) industries in 1997 (Figure 5–6) among operators, fabricators, and laborers (39%) and technical, sales, and administrative support personnel (30%) (Figure 5–7). The vast majority of SOII cases of CTS (98%) were attributed to job tasks requiring repetitive motion.





**Figure 5–6**. Number and distribution of CTS cases with days away from work in private industry by industry division, 1997. (Source: SOII [1999].)

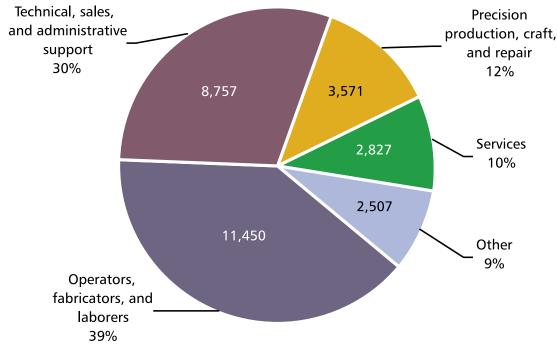
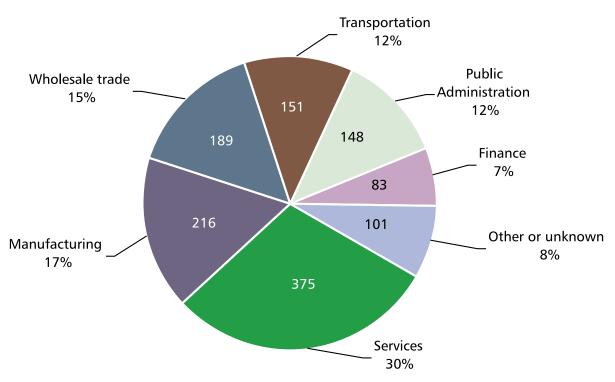


Figure 5–7. Number and distribution of CTS cases with days away from work in private industry by occupational group, 1997. (Source: SOII [1999].)



#### Cases Identified by SENSOR

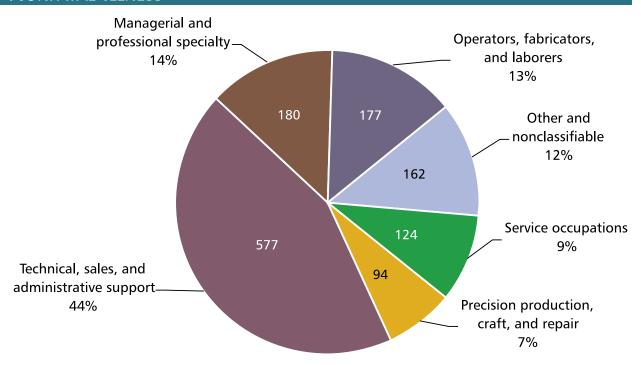
In collaboration with the National Institute for Occupational Safety and Health (NIOSH), the California Department of Health Services conducts a SENSOR program for CTS using first reports filed by physicians seeking reimbursement through the State workers' compensation system. The CTS case definition for SENSOR includes (1) symptoms such as pain, burning, or numbness in the hands or wrists, (2) objective evidence from a physical examination or electrodiagnostic tests, and (3) a history of work involving one of the known risk factors. Of the approximately 1,300 CTS cases identified by the California SENSOR program in 1998, the industries with the most cases were services (30%), manufacturing (17%), and wholesale trade (15%) (Figure 5–8). Most cases occurred among technical, sales, and administrative support personnel (44%) and managerial and professional specialty personnel (14%) (Figure 5–9). Of the cases in which an activity or exposure was associated with the injury, 49% reported using a computer (Figure 5–10).



**Figure 5–8**. Number and distribution of CTS cases in California by industry group, 1998. (Source: SENSOR [California Department of Health Services 1999].)



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**Figure 5–9**. Number and distribution of CTS cases in California by occupational group, 1998. (Source: SENSOR. [California Department of Health Services 1999].)

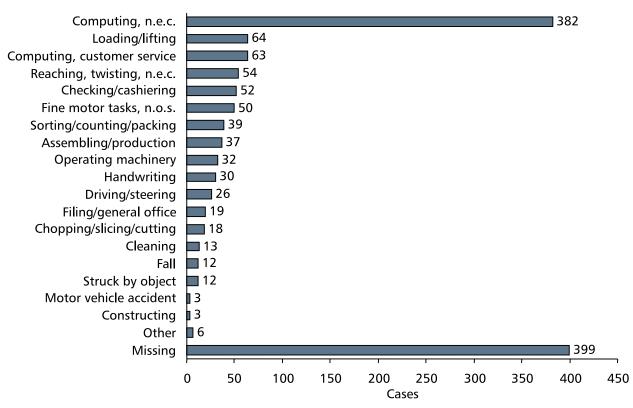


Figure 5–10. Number of CTS cases in California by type of activity or exposure, 1998. (Source: SENSOR [California Department of Health Services 1999].)