

## Tendinitis

Nearly 18,000 tendinitis cases recorded in SOII in 1997 required days away from work. Women accounted for more than 60% of those cases, and the upper extremities were affected in more than 70% of cases. Most cases occurred in the manufacturing (45%) and services (20%) industries (Figure 5–11) among operators, fabricators, and laborers (47%) and technical, sales, and administrative personnel (17%) (Figure 5–12). Worker motion or position was the event or exposure accounting for 73% of cases.

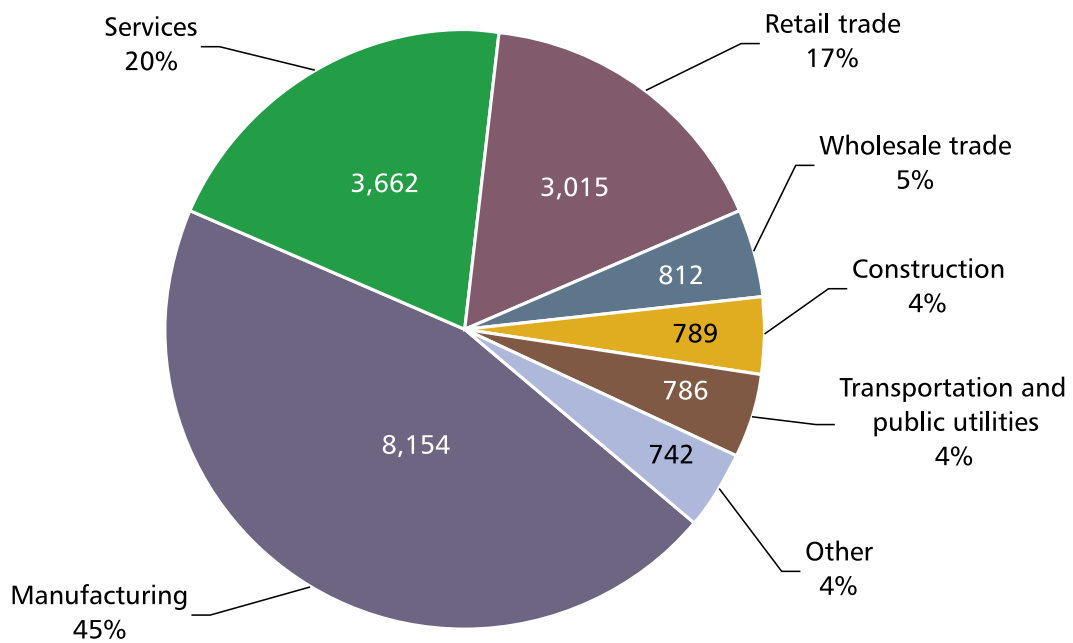
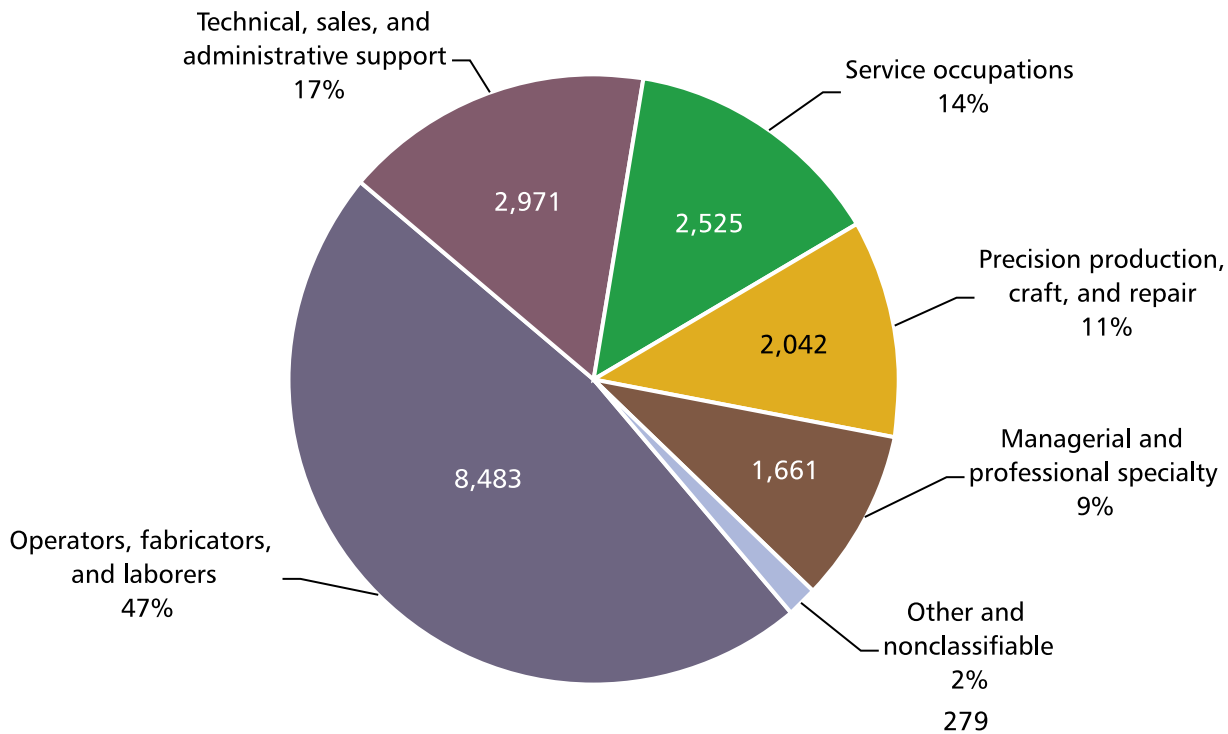


Figure 5–11. Number and distribution of tendinitis cases with days away from work in private industry by industry division, 1997. (Source: SOII [1999].)

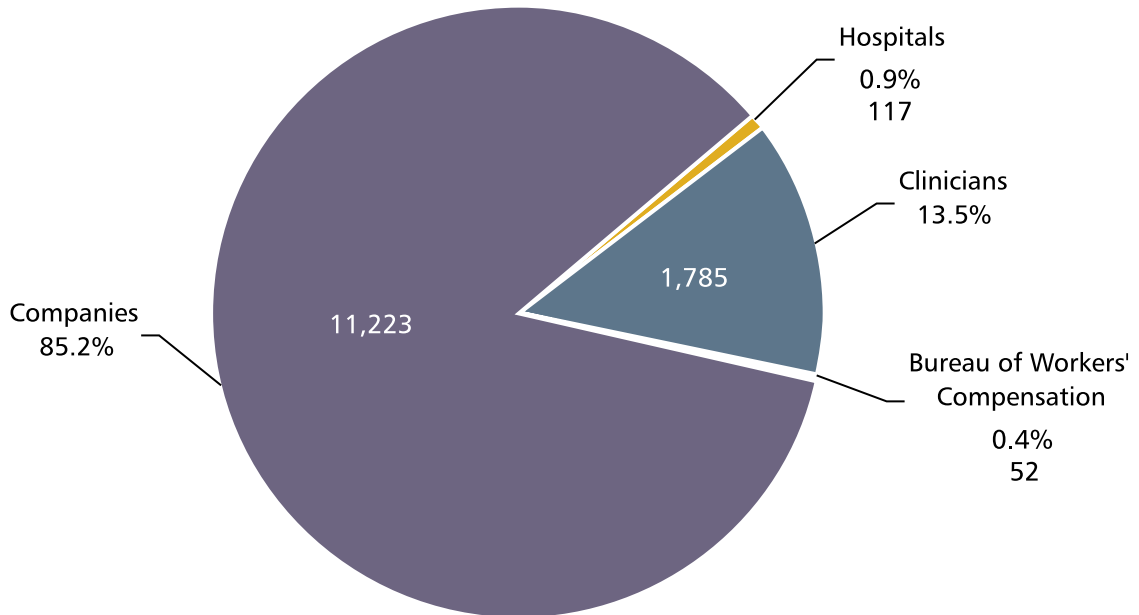


**Figure 5–12.** Number and distribution of tendinitis cases with days away from work in private industry by occupational group, 1997. (Source: SOII [1999].)

## Noise-Induced Hearing Loss

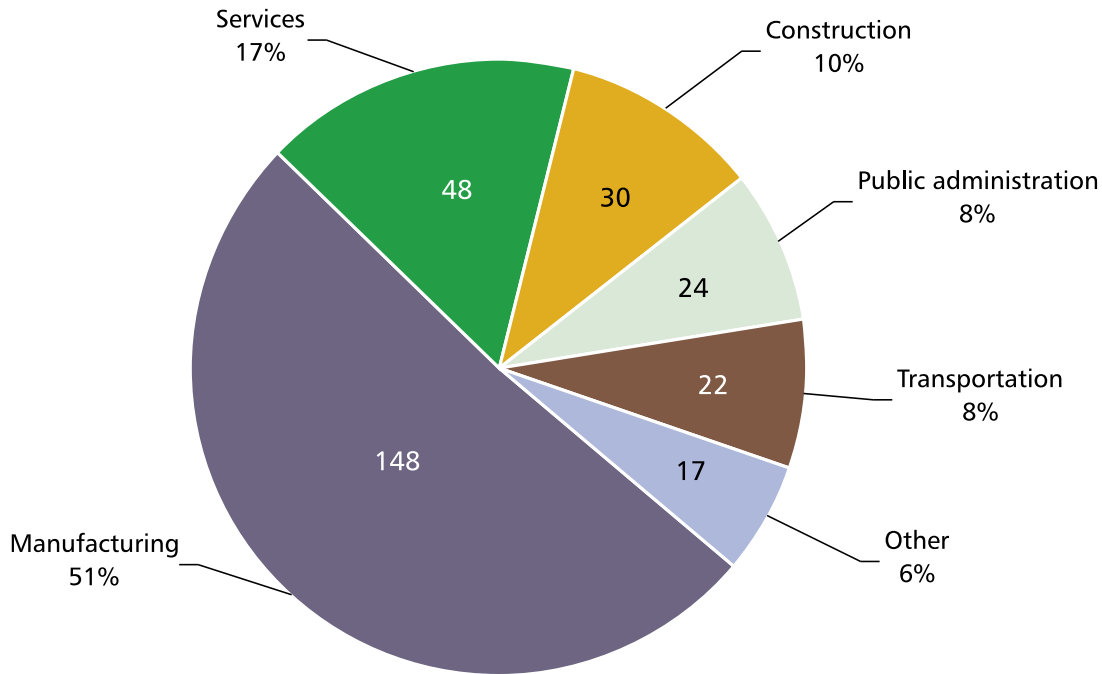
A SENSOR program to protect workers from noise-induced hearing loss was initiated in Michigan in 1992. The case definition for occupational noise-induced hearing loss under the program requires audiometric findings consistent with noise-induced hearing loss and a history of noise exposure at work sufficient to cause hearing loss. This case definition includes (1) workers with standard threshold shifts reported by company hearing conservation programs and (2) workers with a permanent noise-induced hearing loss diagnosed by a clinician. From 1992 to 1998, there were 13,177 cases of noise-induced hearing loss reported by companies, audiologists, otolaryngologists, the Bureau of Workers’ Compensation, and hospitals. Companies accounted for 85.2% of these cases (Figure 5–13). The SENSOR program interviews workers identified with permanent hearing loss by clinicians. In 1998, most of these cases were associated with manufacturing (Figure 5–14). Within the manufacturing sector, 60% of cases were associated with transportation manufacturing, which includes automobile manufacturing.

According to patient interviews, 25% to 76% of companies in major industry divisions did not test hearing at the time the worker was exposed to noise (Figure 5–15). Patients with hearing loss reported by companies (more than 85% of the reports) tended to be younger than patients whose hearing loss was reported by health professionals (Figure 5–16). Of the cases in which sex was listed, 89% were men.

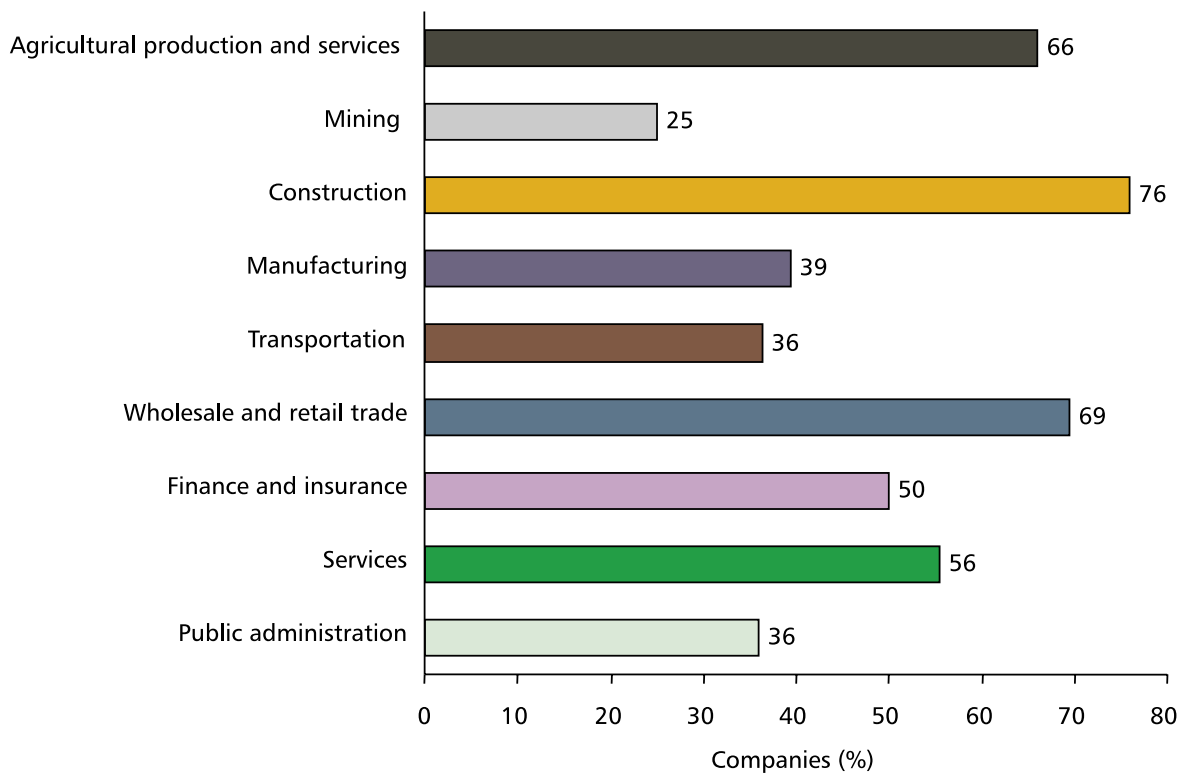


**Figure 5–13.** Number and distribution of noise-induced hearing loss cases in Michigan by source of reports, 1992–1998. Total number of cases was 13,177. (Source: SENSOR [Rosenman and Reilly 1999].)

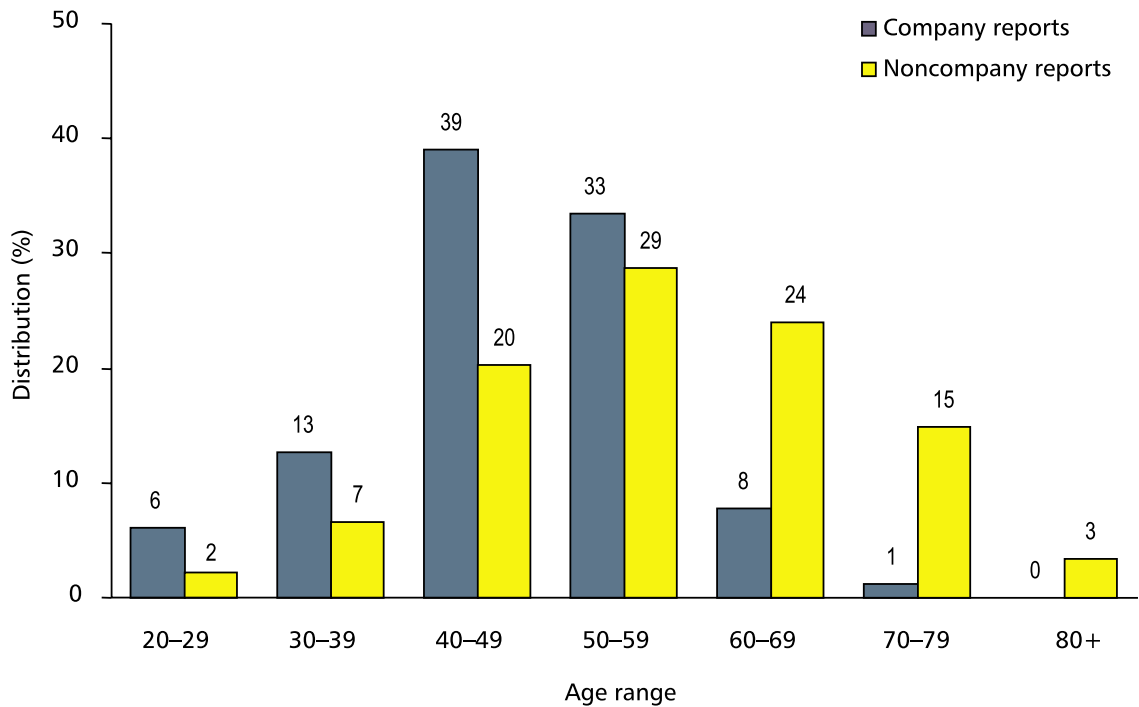
# NONFATAL ILLNESS



**Figure 5–14.** Number and distribution of permanent hearing loss cases reported by clinicians by industry division, 1998. (Source: SENSOR [Rosenman et al. 1999].)



**Figure 5–15.** Percentage of companies within major industry divisions that did not test hearing at the time the worker was exposed to noise, as reported by patient interviews, 1992–1998. (Source: SENSOR [Rosenman et al. 1999].)



**Figure 5-16.** Distributions of noise-induced hearing loss cases by age range of patients and by company and noncompany reports, 1998. Age was unknown for 31 workers reported by company medical departments and 12 workers reported by noncompany hearing health professionals. (Source: SENSOR [Rosenman et al. 1999].)

## Skin Diseases or Disorders

Skin diseases or disorders accounted for 13% (57,900) of all illness cases reported in SOII in 1997. These disorders include allergic and irritant dermatitis, skin cancer, and other conditions. Manufacturing accounted for 45% of the skin diseases or disorders in private industry in 1997 (Figure 5-17). The highest reported incidence rate was in the canned and cured fish and seafoods industry (181 cases per 10,000 workers). Other industries with the highest rates of occupational skin disease or disorder were meat packing plants (104 cases per 10,000 workers), ball and roller bearings (92 cases per 10,000 workers), and leather tanning and finishing (86 cases per 10,000 workers). Dermatitis, a subcategory of skin diseases and disorders, was associated with nearly 6,600 cases involving time away from work in 1997. A median number of 3 days away from work was associated with dermatitis. Exposures to chemicals and chemical products accounted for 53% of job-related dermatitis cases. The manufacturing and service industry divisions accounted for the most dermatitis cases with days away from work (29% each) (Figure 5-18). Occupational groups that experienced most dermatitis conditions were operators, fabricators, and laborers (36%) and precision production, craft, and repair personnel (18%) (Figure 5-19).

## NONFATAL ILLNESS

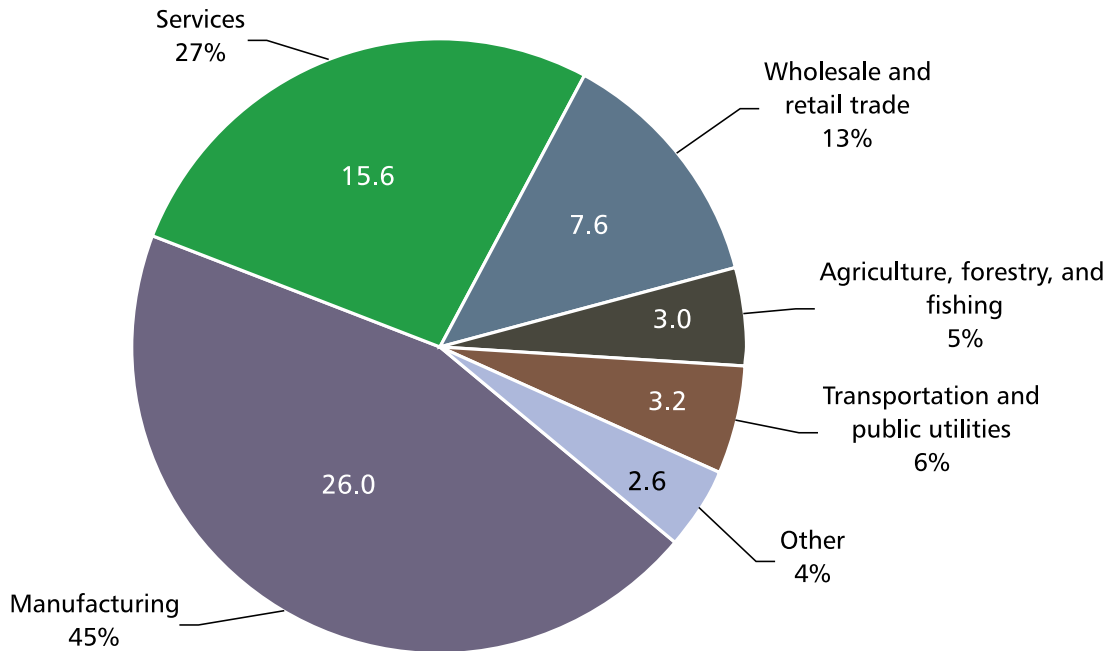


Figure 5-17. Number (thousands) and distribution of skin disease or disorder cases in private industry by industry division, 1997. (Source: SOII [1999].)

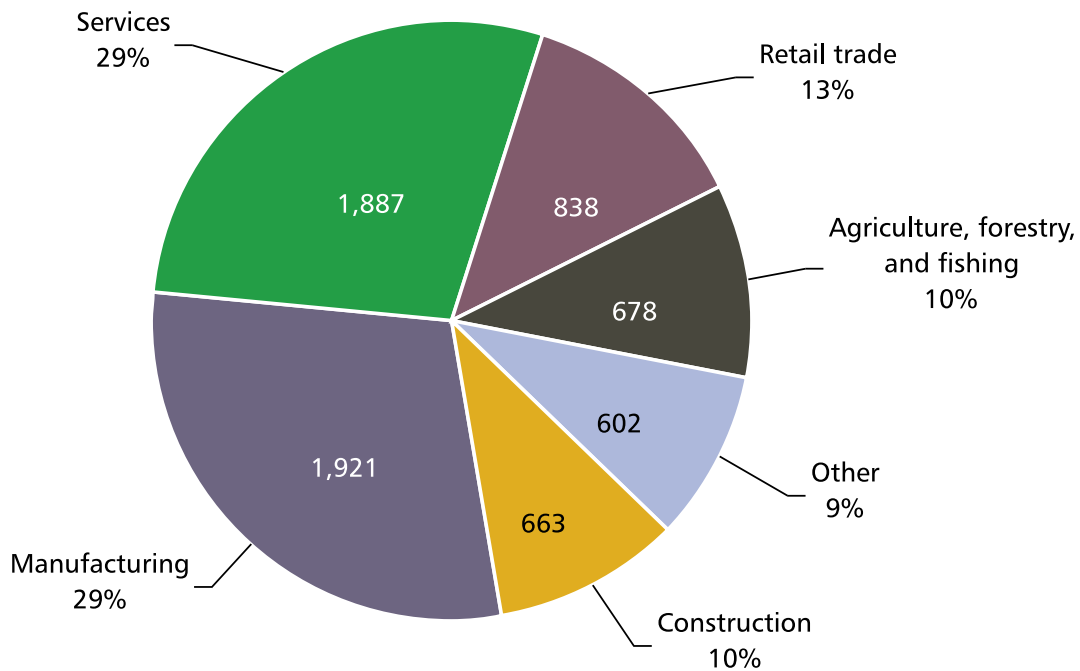


Figure 5-18. Number and distribution of dermatitis cases with days away from work in private industry by industry division, 1997. (Source: SOII [1999].)

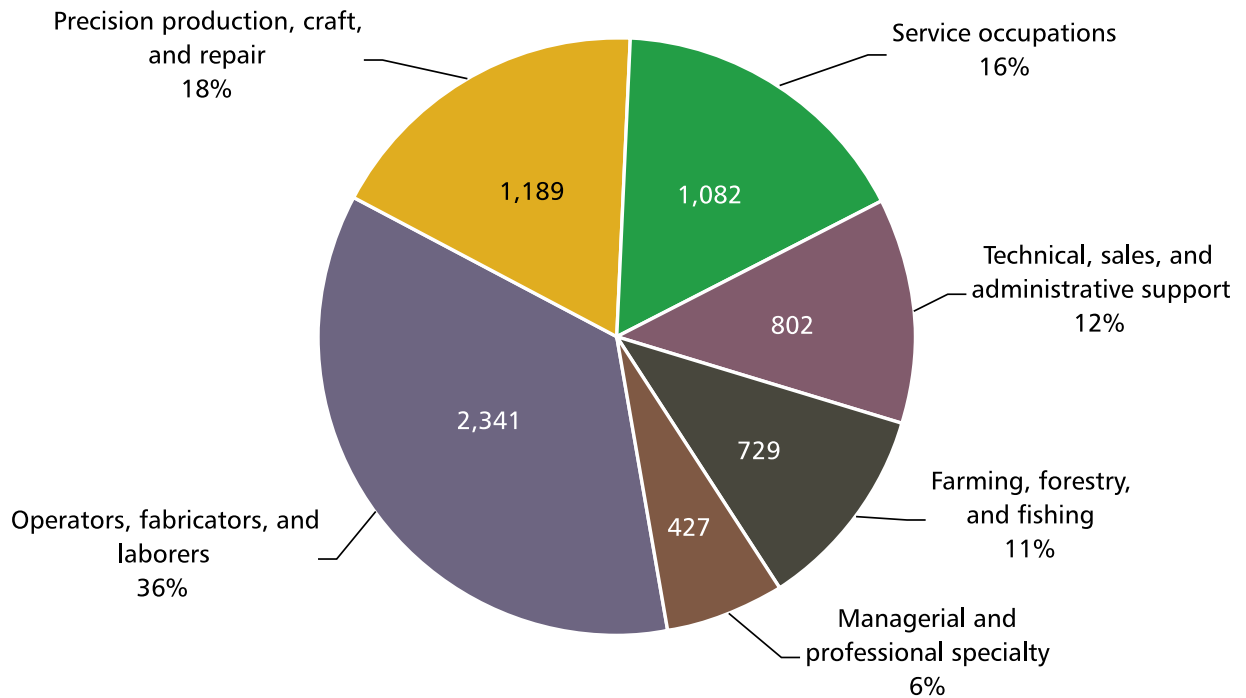
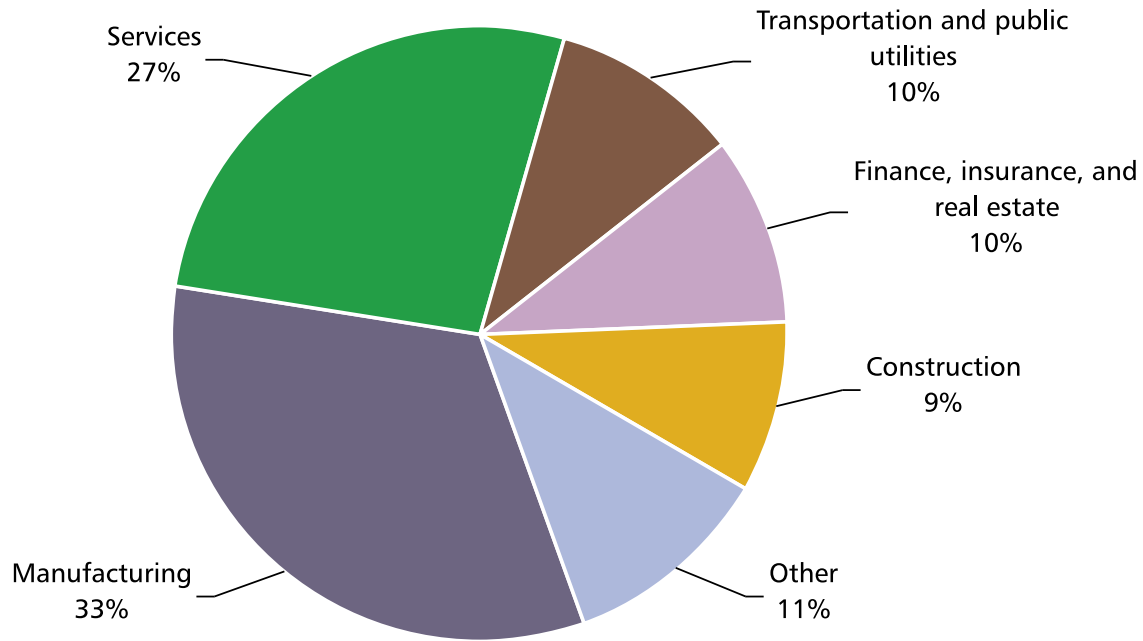


Figure 5–19. Number and distribution of dermatitis cases with days away from work in private industry by occupational group, 1997. (Source: SOII [1999].)

## Respiratory Disorders

### Dust Diseases of the Lungs

Dust diseases of the lungs accounted for less than 1% (2,900) of the nonfatal occupational illness cases recorded in SOII in 1997. These diseases include silicosis, asbestosis, and coal workers’ pneumoconiosis (CWP). The most cases of occupational dust diseases of the lungs occurred in the manufacturing (33%) and service (27%) industries in 1997 (Figure 5–20). The highest dust disease incidence rates occurred in aluminum sheet, plate, and foil manufacturing (33 per 10,000 workers), anthracite mining (30 per 10,000 workers), and ship building and repairing (12 per 10,000 workers).



**Figure 5–20.** Distribution of occupational cases of dust diseases of the lungs in private industry, by industry division, 1997. Total number of cases was 2,900. (Source: SOII [1999].)

## Coal Workers’ Pneumoconiosis

The prevalence and severity of CWP are examined in Coal Workers’ X-Ray Surveillance Program (CWXSP). CWP is defined as having X-ray evidence of lung abnormalities (grade 1/0 or higher) using the International Labour Organization (ILO) *Guidelines for the use of ILO International Classification of Radiographs of Pneumoconioses* [ILO 1980]. Among workers with 25 or more years of underground tenure, the prevalence of CWP category 1/0 or greater decreased from more than 28% during 1970–1973 to less than 10% during 1992–1995 (Figure 5–21). In the same tenure group, the prevalence of the more severe CWP category 2/1 or greater decreased from more than 10% during 1970–1973 to less than 2% during 1992–1995 (Figure 5–22). Decreases in prevalence are also apparent in groups with less tenure in underground mining (Figures 5–21 and 5–22).



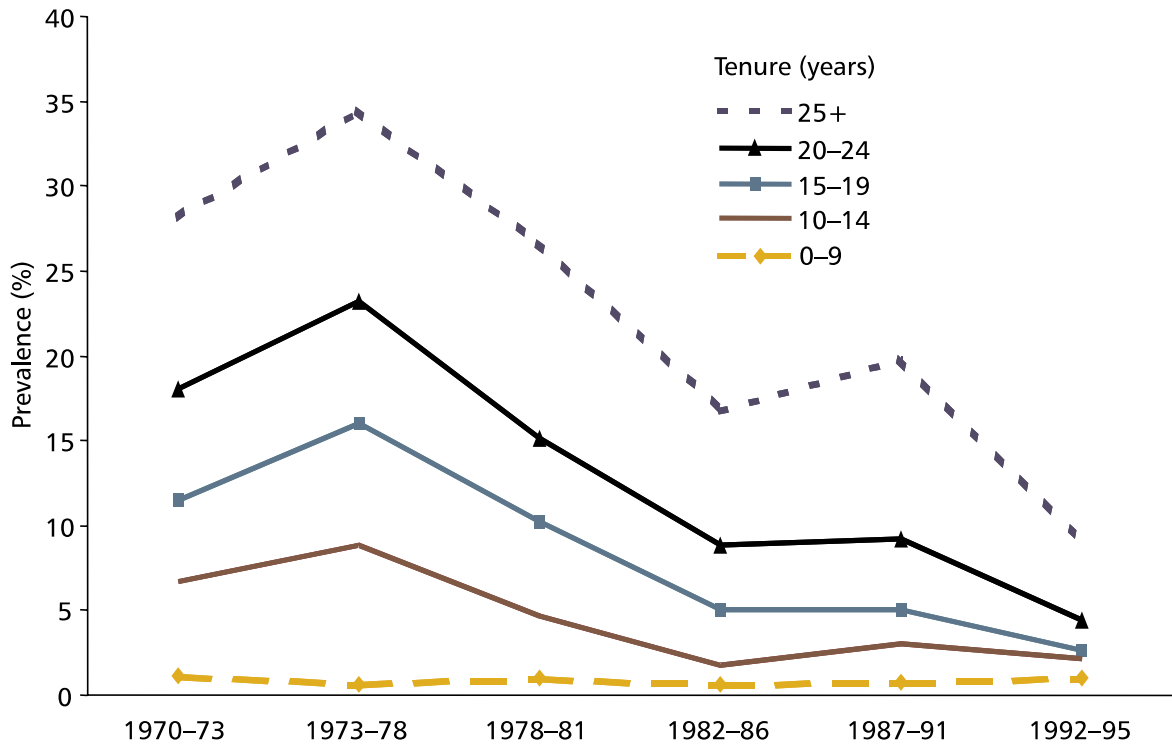


Figure 5-21. Prevalence of examined miners with CWP category 1/0 or greater by tenure in mining, 1970-1995. (Source: CWXSP [1999].)

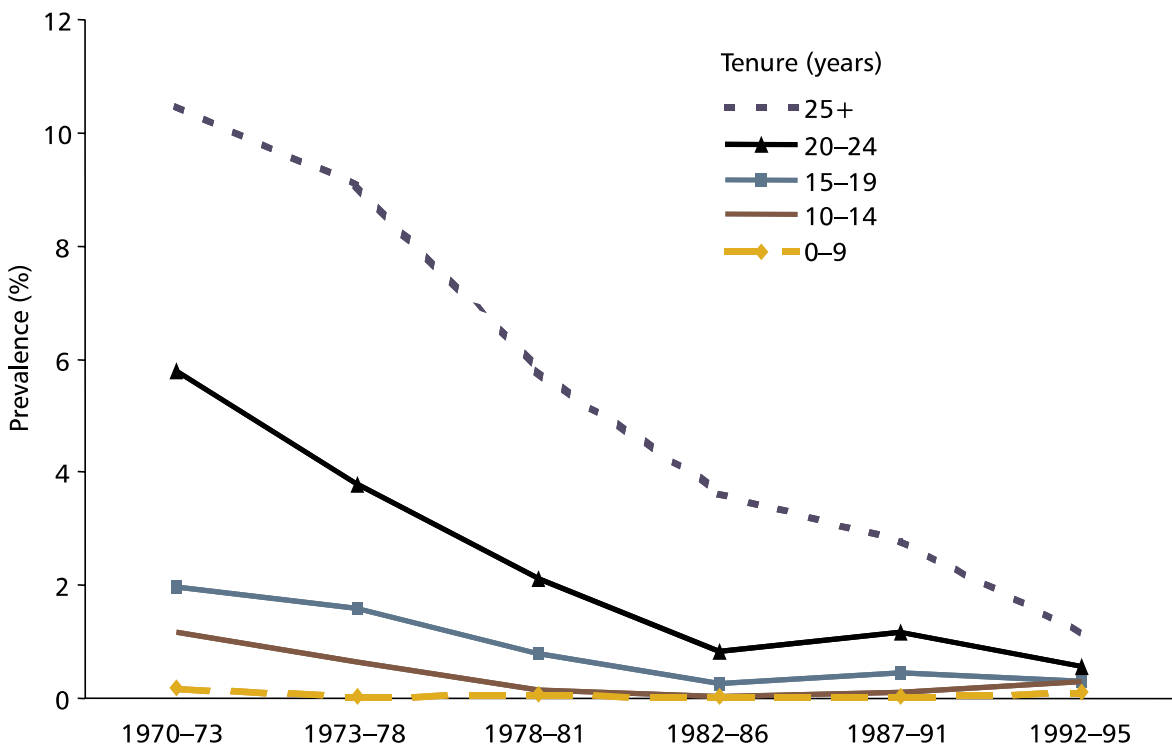


Figure 5-22. Prevalence of examined miners with CWP category 2/1 or greater by tenure in mining, 1970-1995. (Source: CWXSP [1999].)