

WORK-RELATED INJURIES

A Statistical Highlight of 1981

By James Wilson

The 4th annual governor's safety conference that convened in Anchorage during the first week in October highlighted issues of safety in Alaska. This conference provided a forum for discussion among persons in all areas of safety. Coincident with this meeting was the release of two publications dealing with work related injuries in Alaska. The two reports are produced annually, in a cooperative effort with the U.S. Bureau of Labor Statistics. "Occupational Injury and Illness Survey, Alaska 1981" provides incidence rate data for Alaska industries and is based on data collected directly from employers. "Work Injuries and Illnesses: the Supplementary Data System, Alaska 1981" describes the characteristics of work related injuries and is based on data filed with the Alaska Division of Workers' Compensation. Following is a brief summary of information contained in the two reports.

1981 Injury/Illness Rate One of the Lowest Ever

In 1981 Alaska's private sector occupational injury and illness rate was 10.0 cases per 100 workers. This rate equaled the lowest rate recorded (in 1978) in the ten year old annual survey. The 1981 rate is 32% lower than the high of 14.7 cases per 100 workers recorded in 1973. Alaska's private sector case rate is the sum of the injury case rate and the illness case rate. The private sector injury case rate, which has been stable for the last four years, held at the same level as recorded in 1980 (9.8). The rate for occupational illness cases in the private sector fell from an unusually high level in 1980 to its lowest level in several years. This drop in the illness rate is responsible for the decline in the overall case rate from 1980, since the injury rate was unchanged.

Cost of Time Loss Cases Over \$8 Million

In addition to being the sum of injury and illness components, the private sector case rate can be subdivided into time loss and nontime loss case rates. The 1981 incidence rate for lost workday cases in the private sector was the lowest ever recorded in the annual survey, due largely to a record low time loss case rate in manufacturing industries. The nontime loss case rate rose slightly over its 1980 level (5.1 to 5.2). The average number of lost workdays per lost workday case remained unchanged (17 days) during the past four years. An estimate of the total number of lost workdays in the private sector would equal a loss of one year of work for 354 people. Measured in salary, the cost was over \$8 million.

During 1981 the Alaska Division of Workers' Compensation processed 8,082 time loss claims, an increase of 10% over 1980. Private industry accounted for nearly 90% of all claims. Less than five percent of the time loss cases were due to occupational illness. Injuries are always most prevalent during the summer and early fall when Alaska's labor force is at its seasonal peak. In 1981, July was the peak month for on-the-job time loss injuries. Women filed 18.4% of the time loss claims during 1981 although they comprised a much higher percentage of the work force. This fact supports the contention that women workers tend to be found in less hazardous occupations.

Changes in High Risk Industries

During 1981 mining, construction, and manufacturing industries had substantial changes in their occupational injury and illness case incidence rates over 1980. The oil and gas industry had 23% growth in employment from 1980 to 1981 while the work injury and illness rate increased by 27% during this period. Construction employment increased at a rate unseen since the Trans-Alaska pipeline project. The rate of injuries and illnesses was the highest in seven years, surpassing the rate during peak pipeline construction. Manufacturing industries experienced the lowest total case rate in the ten years of the survey.

Both seafood processing and lumber and wood products rates fell dramatically. Heavy losses in employment levels were a major factor. In times of rising employment there are more inexperienced workers, who statistically incur most of the injuries. Thus when employment rises there is a tendency for injury rates to rise. Conversely, when employment drops the rate may go down as well.

Construction Employment and Injuries Increase

For the first time since 1977, the construction industry lead all others in the number of time loss cases. This is largely due to increases in construction employment in the last few years. Construction accounted for 19.3% of all cases while comprising only 7.8 of the nonfederal employment. Craftsmen, operators (excluding transport), and laborers, with nearly two-thirds of the claims, consistently lead all occupational groups in numbers of time loss cases. These occupations are typically associated with mining, construction, logging, and seafood processing industries.

Back Most Frequently Injured

Data for several years show that sprains and strains continue to be the leading type of injury (45.2% of the total). The back, involved in one-fourth of all time loss cases, is the most frequently injured part of the body.

**Ten Highest Incidence Rate Industries
Alaska 1981**

| Industry | SIC 1/ | 1981 2/ Annual Employment | Incidence Rate 3/ 1980 | Incidence Rate 3/ 1981 | Percent Change | 1980 Rank |
|-------------------------|--------|---------------------------------|---------------------------|---------------------------|-------------------|--------------|
| Lumber & Wood Prod. | 24 | 2,031 | 32.5 | 26.8 | -17.5 | 1 |
| Food & Kindred Prod. | 20 | 6,871 | 26.7 | 22.2 | -16.9 | 2 |
| Building Construction | 15 | 2,733 | 16.5 | 19.8 | +20.0 | 5 |
| Trucking & Whseing. | 42 | 2,039 | 21.7 | 17.8 | -18.0 | 3 |
| Special Trade Contrs. | 17 | 5,521 | 15.9 | 17.8 | +12.0 | 7 |
| Water Transportation | 44 | 1,356 | 16.2 | 16.6 | +2.5 | 6 |
| Oil & Gas Extraction | 13 | 7,328 | 12.4 | 15.8 | +27.4 | — |
| Heavy Const. Contrs. | 16 | 4,213 | 17.3 | 15.1 | -12.7 | 4 |
| Electric, Gas, & Sanit. | 49 | 1,367 | 14.6 | 13.9 | -4.8 | 9 |
| Air Transportation | 45 | 5,419 | 13.2 | 13.6 | +3.0 | 10 |

1/ *Standard Industrial Classification Manual*, 1972 Edition.

2/ Annual average employment figures are based on Employer Data (ES-202) from Alaska's Employment Security Division. These data were produced using information available at the time of this report, but may differ from those elsewhere in the publication.

3/ Incidence rates represent the equivalent number of injuries and illnesses per 100 full time workers. Since many workers in higher rate industries are employed less than full time during a year, the actual proportion of injured workers is less than implied by the incidence rate.

Source: *Annual Survey of Occupational Injuries and Illnesses, 1980 and 1981*; Research and Analysis Section, Alaska Department of Labor in cooperation with the Bureau of Labor Statistics, U.S. Department of Labor.

Sprains and strains are the most common back injuries. During 1981, as in prior years, overexertion was the leading cause of injury. In this year 85% of all overexertion cases were sprains and strains. The proportion of time loss cases due to overexertion has grown steadily since 1976 and overexertion now accounts for 26% of all injuries.

TGIF

Claim data for 1979, 1980 and 1981 show Monday to be the most hazardous day of the regular work week, while Friday was the most injury free day. Over one-half of all time loss injuries involved employees who had been on the job one year or less. In construction and manufacturing at least 20% of the cases occurred during an employee's first month on the the job.

Aircraft Related Deaths

Alaska's dependence upon commercial and private aviation has resulted in a high proportion of work-related deaths occurring in aircraft accidents. In 1981, 53% of on the job deaths involved aircraft. The proportion has been at least this high for three of the last four years.

The two publications highlighted above may be obtained from the Research and Analysis Section, Alaska Department of Labor, Box 1149 Juneau, Alaska 99802. Contact Jim Wilson (907) 465-4520 for further information on Alaskas Occupational Injury and Illness Statistics.
