# Non-fatal Occupational Injury

**Definition:** Any wound or damage to the body resulting in a lost work time, permanent partial disability, or kept-on-salary Washington State workers' compensation claim identified by the following ANSI Z16.2 injury event codes: 010 – 023; 025-132, 200 – 500, and 502-899. Eligibility for Washington State workers' compensation is for all employees of Washington State employers with worksites in Washington State regardless of the employee's state of residence.

#### Summary

Washington State's non-fatal occupational injury rate decreased from 1996-2004. Women accounted for 35% of all non-fatal occupational injuries. Occupational injury rates were highest for men and women in the 45-54 age groups. Non-fatal occupational injury rates were highest in the Transportation and Warehousing, and Construction industry sectors.

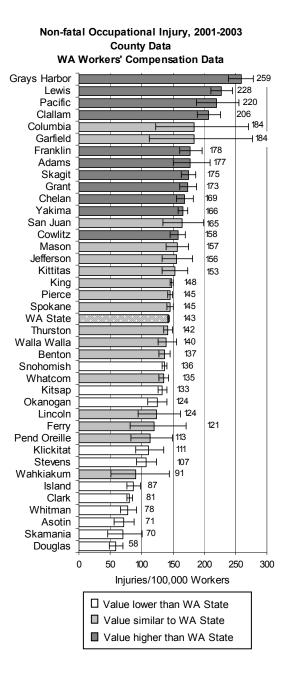
## **Time Trends**

The rate of non-fatal occupational injuries decreased from about 270 per 10,000 full time equivalent workers (FTE) in 1996 to 195 per 10,000 workers in 2004. The average annual number of non-fatal occupational injuries during this time period was 52,965.



## Year 2010 Goals

The national *Healthy People 2010* does not have a goal for non-fatal occupational injury rates using workers compensation data.

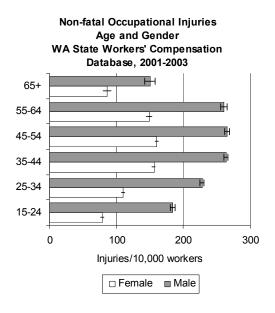


## **Geographic Variation**

The average annual non-fatal occupational injury rate for Washington in 2001-2003 combined was 143 per 10,000 workers. Grays Harbor County had the highest non-fatal occupational injury rate (259 per 10,000 workers) and Douglas County had the lowest rate (58 per 10,000 workers). The employment distribution by industry probably explains differences in injury rates by county. Employment of county residents outside a county's geographic boundary probably biases county estimates of occupational injury rates.

# Age and Gender

Between 2001 and 2003 men had higher nonfatal occupational injury rates than women for all age groups. About 35% of all non-fatal occupational injuries occurred in women. Occupational injury rates were highest for men and women ages 45-54.



## Race and Hispanic Origin

Occupational injury rates by race and Hispanic origin are not available for Washington State and the United States.

## Income and Education

Non-fatal occupational injury rates are not available by income and education in Washington State and the United States.

# Other Measures of Impact and Burden

Estimates for the cumulative impact of work-related occupational injury and illness can be made only from the workers' compensation data from the Washington workers compensation State Fund.<sup>1</sup> The State Fund insures approximately two-thirds of the state civilian workforce and all but 400 of Washington's 160,000 employers. These 400 are among the state's largest employers and self-insure for workers' compensation. Between 1999 and 2003, the annual average total direct cost of occupational injuries to the Washington state workers compensation state fund was \$800 million. The average annual number of lost workdays for the State Fund workers' compensation program was 4.8 million.

# **Risk and Protective Factors**

Non-fatal occupational injury rates vary by industry sector.<sup>1</sup> For 2001-2003, non-fatal occupational injury rates were highest in the Transportation and Warehousing, and Construction industry sectors (506 and 477 per 10,000 FTE, respectively) and lowest in the Finance and Insurance, and the Professional, Scientific, and Technical Services industry sectors (44 and 56 per 10,000 FTE, respectively).

## Intervention Strategies

Regulatory enforcement inspections by Washington's state OSHA program are significantly associated with decreasing workers' compensation claims rates for non-fatal occupational injuries among fixed site employers in a single business location with more than 10 employees.<sup>2</sup>

Stakeholders in workplace safety include workers, worker groups, employers, and employer associations. Active engagement with these groups leverages existing state resources. Improvements in worker safety might also occur through a variety of voluntary activities:

- Recognition programs for employers with exemplary safety records through the Voluntary Protection Program and Small Business Recognition Programs;
- Partnerships with industry associations to foster safe workplaces – this occurs through training and education and the development and sharing of innovative solutions; and
- Financial incentives to employers for primary prevention of injuries through the workers'

compensation system, such as the retrospective rating program.

#### See Related Chapter: Fatal Occupational Injuries

#### **Data Sources**

All numerator data meeting the above case definition originate from the Washington State workers' compensation data warehouse. Population-based estimates of the number of non-fatal injuries are from the Washington workers' compensation State Fund and self-insured employers.

Denominator data used to generate FTE estimates for non-fatal occupational injury time trends and industry sector rates are from the Washington State workers' compensation data warehouse.<sup>1</sup> A FTE is considered 2000 worker hours.

County rates are based on the estimated number of employed workers from the 2000 US Census.

Denominator data for age and gender injury rates are from the US Census Local Employment Dynamics Program.

#### For More Information

Washington State Department of Labor and Industries' Safety and Health Assessment and Research for Prevention (SHARP) Program

E-mail: SHARP@LNI.wa.gov

Phone: 1-888-66-SHARP

#### **Technical Notes**

Workers' compensation data are an administrative data set. Information reported in the Heath of Washington State using workers' compensation data are based on the date of injury and claims status as of October 2006. Washington workers' compensation data systems do not include non-fatal occupational injuries to the self-employed, federal workers, or those covered by alternative workers' compensation systems such as Longshore and Harborworkers.

Workers' compensation data in Washington State are superior to alternative data sources for non-fatal occupational injury. Employers report hours of exposure to work for their workers. Thus denominator data for injury rates are available for each employer.

#### Endnotes

<sup>2</sup> Baggs, J., Silverstein, B., & Foley, M. (2002) Workplace Health and Safety Regulations: Impact of Enforcement and Consultation on Workers' compensation Claims Rates in Washington State. *American Journal of Industrial Medicine*, *43*, 483-494.

<sup>&</sup>lt;sup>1</sup> Bonauto, D. K., Silverstein, B. A., Adams, D., & Foley, M. (1996). Prioritizing Industries for Occupational Injury and Illness Prevention and Research, Washington State Workers' Compensation Claims, 1999-2003. *Journal of Occupational and Environmental Medicine*, *48*, 840-851.