

July 2009

Washington State Occupational Health Indicators, 2005

Data from the Safety & Health Assessment & Research for Prevention (SHARP) program at L&I.

SHARP Surveillance Report #80-5-2009.

Occupational Health Indicators

There are 3 million workers in Washington State. Every year tens of thousands are injured or made ill on the job. These work-related injuries and illnesses have high human and economic costs, but can be prevented. Tracking these injuries and illnesses is the first step to understanding whether prevention methods are succeeding or need to be improved.

Washington State researchers at the Department of Labor and Industries worked with the Council of State and Territorial Epidemiologists (CSTE) Occupational Health workgroup to develop a set of measures to track occupational injuries and illnesses. These measures are called ‘occupational health indicators’ (OHI) and are compiled yearly¹. They are meant to provide an overview and general assessment of the occupational health status of Washington State.

While more in-depth reports compiling and comparing several years of data are published at regular intervals by SHARP and CSTE, more recent information has not always been readily available. This report summarizes the data available for 2005, in an effort to make WA State OHI data available in more “real-time.”

Rates given are per 100,000 full-time equivalent employees (FTEs) unless otherwise noted.

2005 Highlights

- The estimated annual number of all musculoskeletal disorders was 13,200.
- 61 workers reported elevated blood-lead levels (≥ 25 mcg/dL).
- 13.6% of employed persons were employed in “high mortality risk” industries.

Need more information?

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¹ See the technical notes in our report #80-4-2008 “Occupational Health Indicators for Washington State, 1997-2004” for more information on data sources, the indicators, and how the indicators are generated.

EMPLOYMENT PROFILE

Employed Persons	3,114,000
P1. Percentage of civilian workforce unemployed	5.6
P2. Percentage of civilian employment self-employed	8.6
P3. Percentage of civilian employment in part-time jobs	20.8
P4. Percentage of civilian employment by number of hours worked	
• 0-39 hours	36.4
• 40 hours	35.1
• 41+ hours	28.5
P5. Percentage of civilian employment by sex	
• Males	53.7
• Females	46.3
P6. Percentage of civilian employment by age group	
• 16 to 17	1.5
• 18 to 64	96.0
• 65+	2.5
P7. Percentage of civilian employment by race	
• White	85.0
• Black	2.7
• Other	12.3
P8. Percentage of civilian employment by Hispanic Origin	6.4
P9. Percentage of civilian employment by industry	
• Mining	<1
• Construction	7.0
• Manufacturing: durable goods	7.5
• Manufacturing: non-durable goods	3.5
• Wholesale and retail trade	16.6
• Transportation and utilities	6.1
• Information	2.4
• Financial activities	6.4
• Professional and business services	10.5
• Education and health services	19.4
• Leisure and hospitality	8.9
• Other services	4.4
• Public administration	5.2
• Agriculture and related	2.1
P10. Percentage of civilian employment by occupation	
• Management, business and financial operations	15.6
• Professional and related occupations	23.2
• Service	15.6
• Sales and related occupations	11.0
• Office and administrative support	13.1
• Farming, fishing, and forestry	1.2
• Construction and extraction	5.6
• Installation, maintenance, and repair	3.2
• Production	5.3
• Transportation and material moving	6.1

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INDICATOR 1: NON-FATAL WORK-RELATED INJURIES AND ILLNESSES REPORTED BY EMPLOYERS

1.1 Estimated Annual Total Number of Work-Related Injuries and Illnesses	109,900
1.2 Estimated Annual Total Work-Related Injuries and Illness Incidence Rate	6,100 ²
1.3 Estimated Annual Total Number of Cases Involving Days Away From Work	36,400
1.4 Estimated Annual Total Incidence Rate for Cases Involving Days Away From Work	2,000
1.5 Estimated Annual Total Number of Cases Involving More Than 10 Days Away From Work	14,080

INDICATOR 2: WORK-RELATED HOSPITALIZATION

2.1 Annual Number of Work-Related Hospitalizations	5,012
2.2 Annual Crude Rate of Hospitalization	161.1

INDICATOR 3: FATAL WORK-RELATED INJURIES

3.1 Annual Number of Work-Related Traumatic Fatalities	85
3.2 Annual Crude Fatality Rate	2.7

² Rates are per 100,000 full-time equivalent employees (FTEs) unless otherwise specified.

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INDICATOR 4: WORK-RELATED AMPUTATIONS WITH DAYS AWAY FROM WORK REPORTED BY EMPLOYERS

4.1 Estimated Annual Number of Amputations Involving Days Away from Work	150
4.2 Estimated Annual Incidence Rate of Amputations Involving Days Away from Work	8.0

INDICATOR 5: STATE WORKERS COMPENSATION CLAIMS FOR AMPUTATIONS WITH LOST WORK TIME

5.1 Annual Number of Amputations filed with State Workers' Compensation System	286
5.2 Annual Incidence Rate of Amputations filed with State Workers' Compensation System	10.6

INDICATOR 6: HOSPITALIZATION FOR WORK-RELATED BURNS

6.1 Annual number of work-related burn hospitalizations	66
6.2 Annual rate of work-related burn hospitalizations	2.1

INDICATOR 7: WORK-RELATED MUSCULOSKELETAL DISORDERS WITH DAYS AWAY FROM WORK REPORTED BY EMPLOYERS

7.1 Estimated annual number of all musculoskeletal disorders	13,200
7.2 Estimated annual incidence rate of all musculoskeletal disorders	737
7.3 Estimated annual number of MSDs of the neck, shoulder & upper extremities	3,770
7.4 Estimated annual incidence rate of disorders of neck, shoulder, and upper extremities	210
7.5 Estimated annual number of carpal tunnel syndrome cases	620
7.6 Estimated annual incidence rate of carpal tunnel syndrome cases	34
7.7 Estimated annual number of musculoskeletal disorders of the back	6,320
7.8 Estimated annual incidence rate of musculoskeletal disorders of the back	353

INDICATOR 8: CARPAL TUNNEL SYNDROME CASES FILED WITH THE STATE WORKERS' COMPENSATION SYSTEM

8.1 Annual number of carpal tunnel syndrome cases filed with State WC	886
8.2 Annual incidence rate of carpal tunnel syndrome cases filed with State WC	32.9

INDICATOR 9: HOSPITALIZATION FROM OR WITH PNEUMOCONIOSIS

9.1.1 Annual number of total pneumoconiosis hospital discharges	668
9.1.2 Annual rate of total pneumoconiosis hospital discharges	132.5
9.1.3 Annual, age-standardized, rate of total pneumoconiosis hospitalizations	158.6
9.2.1 Annual number of coal workers' pneumoconiosis hospital discharges	29
9.2.2 Annual rate of coal workers' pneumoconiosis hospital discharges	5.8
9.2.3 Annual, age-standardized, rate of coal workers' pneumoconiosis hospital discharges	6.7
9.3.1 Annual number of asbestosis hospital discharges	621
9.3.2 Annual rate of asbestosis hospital discharges	123.1
9.3.3 Annual, age-standardized, rate of asbestosis hospital discharges	147.7
9.4.1 Annual number of silicosis hospital discharges	13
9.4.2 Annual rate of silicosis hospital discharges	2.6
9.4.3 Annual, age-standardized, rate of silicosis hospital discharges	3.0
9.5.1 Annual number of other and unspecified pneumoconiosis hospital discharges	5
9.5.2 Annual rate of other and unspecified pneumoconiosis hospital discharges	1.0
9.5.3 Annual, age-standardized, rate of other and unspecified pneumoconiosis hospital discharges	1.1

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INDICATOR 10: MORTALITY FROM OR WITH PNEUMOCONIOSIS

10.1.1 Annual number of total pneumoconiosis deaths	65
10.1.2 Annual total pneumoconiosis death rate per million residents	12.8
10.1.3 Annual, age-standardized total pneumoconiosis death rate	13.6
10.2.1 Annual number of coal workers' pneumoconiosis deaths	<5
10.2.2 Annual coal workers' pneumoconiosis death rate per million residents	n/a ³
10.2.3 Annual, age-standardized rate of coal workers' pneumoconiosis deaths	n/a
10.3.1 Annual number of asbestosis deaths	62
10.3.2 Annual asbestosis death rate per million residents	12.2
10.3.3 Annual, age-standardized asbestosis death rate	13
10.4.1 Annual number of silicosis deaths	<5
10.4.2 Annual silicosis death rate per million residents	n/a
10.4.3 Annual, age-standardized silicosis death rate	n/a
10.5.1 Annual number of other and unspecified pneumoconiosis deaths	<5
10.5.2 Annual other and unspecified pneumoconiosis death rate per million residents	n/a
10.5.3 Annual, age-standardized pneumoconiosis death rate per million residents	n/a

³ Rates are only calculated where there are 5 or more cases.

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INDICATOR 11: ACUTE WORK-RELATED PESTICIDE-ASSOCIATED ILLNESS AND INJURY REPORTED TO POISON CONTROL CENTER

11.1 Annual number of reported work-related pesticide poisoning cases	92
11.2 Annual incidence rate of reported work-related pesticide poisoning cases per 100,000 employed persons age 16 years or older	2.96

INDICATOR 12: INCIDENCE OF MALIGNANT MESOTHELIOMA

12.1 Annual number of incident mesothelioma cases	94
12.2 Annual mesothelioma incidence rate per million residents	14.9
12.3 Annual, age-standardized mesothelioma incidence rate per million residents	19

INDICATOR 13: ELEVATED BLOOD LEAD LEVELS AMONG ADULTS

13.1.1 Annual number of workers with elevated blood lead levels (≥ 25 mcg/dL)	61
13.1.2 Annual prevalence rate per 100,000 employed persons	2
13.1.3 Annual number of incident cases	40
13.1.4 Annual incidence rate per 100,000 employed persons	1.3
13.2.1 Annual number of workers with blood lead levels ≥ 40 mcg/dL	14
13.2.2 Annual prevalence rate per 100,000 employed persons	0.5
13.2.3 Annual number of incident cases	12
13.2.4 Annual incidence rate per 100,000 employed persons	0.4

INDICATOR 14: PERCENTAGE OF WORKERS EMPLOYED IN INDUSTRIES AT HIGH RISK FOR OCCUPATIONAL MORBIDITY

14.1 Number of employed persons in high morbidity risk NAICS industries	143,273
14.2 Percentage of employed persons in high morbidity risk NAICS industries	6.2

INDICATOR 15: PERCENTAGE OF WORKERS EMPLOYED IN OCCUPATIONS AT HIGH RISK FOR OCCUPATIONAL MORBIDITY

15.1 Average number of employed persons in high morbidity risk 1990 Bureau of the Census occupations	304,566
15.2 Percentage of employed persons in high morbidity risk 1990 Bureau of the Census occupations	9.8

INDICATOR 16: PERCENTAGE OF WORKERS EMPLOYED IN INDUSTRIES AND OCCUPATIONS AT HIGH RISK FOR OCCUPATIONAL MORTALITY

16.1 Average number of employed persons in high mortality risk industries	424,109
16.2 Percentage of employed persons in high mortality risk industries	13.6
16.3 Number of employed persons in high mortality risk occupations	303,352
16.4 Percentage of employed persons in high mortality risk occupations	9.8

INDICATOR 17: OCCUPATIONAL SAFETY AND HEALTH PROFESSIONALS

17.1 Rate of board-certified occupational physicians per 100,000 employees	2.6
17.2 Rate of ACOEM members per 100,000 employees	4.2
17.3 Rate of board-certified occupational health registered nurses per 100,000 employees	3.1
17.4 Rate of members of the AAOH per 100,000 employees	3.6
17.5 Rate of board-certified industrial hygienists per 100,000 employees	8.5
17.6 Rate of AIHA per 100,000 employees	9.8
17.7 Rate of board certified safety health professionals per 100,000 employees	7.7
17.8 Rate of ASSE membership per 100,000 employees	26.5

INDICATOR 18: OSHA ENFORCEMENT ACTIVITIES

18.1 Annual number of establishments inspected by Federal/State OSHA	7,771
18.2 Total number of establishments under OSHA jurisdiction	202,478
18.3 Estimated percentage of all establishments under OSHA jurisdiction inspected by OSHA	3.8
18.4 Annual number of employees whose work areas were inspected by OSHA	142,291
18.5 Estimated percentage of employees under OSHA jurisdiction whose work areas were inspected	5.3

INDICATOR 19: WORKERS' COMPENSATION AWARDS

19.1 Total amount of workers' compensation benefits paid	\$1,864,015,000
19.2 Average amount of workers' compensation benefits paid per covered worker	\$691.14