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Washington State Occupational Health Indicators, 2006

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

(SHARP Surveillance Report #80-6-2009)

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 2006, in an effort to make WA State OHI data available in more “real-time.”

This July 2010 update adds data for Employment Profiles, and corrects the numbers in Indicator 14. As of July 2010, some 2006 data is not yet available (Indicator 11); please check back periodically for updates.

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

2006 Highlights

- The estimated annual total number of work-related injuries and illness was 122,500
- 1,334 claims for carpal tunnel syndrome were filed with state Workers’ Compensation
- 10% of employed persons were employed in “high mortality risk” occupations

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	3,168,000
P1. Percentage of civilian workforce unemployed	5
P2. Percentage of civilian employment self-employed	8.2
P3. Percentage of civilian employment in part-time jobs	20.4
P4. Percentage of civilian employment by number of hours worked	
• 0-39 hours	36.4
• 40 hours	36.1
• 41+ hours	27.5
P5. Percentage of civilian employment by sex	
• Males	54
• Females	46
P6. Percentage of civilian employment by age group	
• 16 to 17	2
• 18 to 64	95
• 65+	3
P7. Percentage of civilian employment by race	
• White	84
• Black	3
• Other	13
P8. Percentage of civilian employment by Hispanic Origin	6
P9. Percentage of civilian employment by industry	
• Mining	0.1
• Construction	7.6
• Manufacturing: durable goods	7.9
• Manufacturing: non-durable goods	3.1
• Wholesale and retail trade	16.3
• Transportation and utilities	5.3
• Information	3.0
• Financial activities	6.0
• Professional and business services	10.7
• Education and health services	18.9
• Leisure and hospitality	8.7
• Other services	5.2
• Public administration	4.6
• Agriculture and related	2.5
P10. Percentage of civilian employment by occupation	
• Management, business and financial operations	15.5
• Professional and related occupations	21.7
• Service	15.8
• Sales and related occupations	12.0
• Office and administrative support	12.7
• Farming, fishing, and forestry	1.2
• Construction and extraction	5.9
• Installation, maintenance, and repair	3.5
• Production	5.7
• 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	122,500
1.2 Estimated Annual Total Work-Related Injuries and Illness Incidence Rate ¹	6,600
1.3 Estimated Annual Total Number of Cases Involving Days Away From Work	40,100
1.4 Estimated Annual Total Incidence Rate for Cases Involving Days Away From Work	2,200
1.5 Estimated Annual Total Number of Cases Involving More Than 10 Days Away From Work	14,700

INDICATOR 2: WORK-RELATED HOSPITALIZATION

2.1 Annual Number of Work-Related Hospitalizations	5,424
2.2 Annual Crude Rate of Hospitalization	171.2

INDICATOR 3: FATAL WORK-RELATED INJURIES

3.1 Annual Number of Work-Related Traumatic Fatalities	87
3.2 Annual Crude Fatality Rate	2.7

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	140
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	238
5.2 Annual Incidence Rate of Amputations filed with State Workers' Compensation System	8.6

INDICATOR 6: HOSPITALIZATION FOR WORK-RELATED BURNS

6.1 Annual number of work-related burn hospitalizations	60
6.2 Annual rate of work-related burn hospitalizations	1.9

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

7.1 Estimated annual number of all musculoskeletal disorders	16,580
7.2 Estimated annual incidence rate of all musculoskeletal disorders	892
7.3 Estimated annual number of MSDs of the neck, shoulder & upper extremities	5,060
7.4 Estimated annual incidence rate of disorders of neck, shoulder, and upper extremities	272
7.5 Estimated annual number of carpal tunnel syndrome cases	990
7.6 Estimated annual incidence rate of carpal tunnel syndrome cases	53
7.7 Estimated annual number of musculoskeletal disorders of the back	7,450
7.8 Estimated annual incidence rate of musculoskeletal disorders of the back	401

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	1,334
8.2 Annual incidence rate of carpal tunnel syndrome cases filed with State WC	48

INDICATOR 9: HOSPITALIZATION FROM OR WITH PNEUMOCONIOSIS	
9.1.1 Annual number of total pneumoconiosis hospital discharges	586
9.1.2 Annual rate of total pneumoconiosis hospital discharges	113.9
9.1.3 Annual, age-standardized, rate of total pneumoconiosis hospitalizations	139.1
9.2.1 Annual number of coal workers' pneumoconiosis hospital discharges	20
9.2.2 Annual rate of coal workers' pneumoconiosis hospital discharges	3.9
9.2.3 Annual, age-standardized, rate of coal workers' pneumoconiosis hospital discharges	4.7
9.3.1 Annual number of asbestosis hospital discharges	536
9.3.2 Annual rate of asbestosis hospital discharges	104.2
9.3.3 Annual, age-standardized, rate of asbestosis hospital discharges	127.5
9.4.1 Annual number of silicosis hospital discharges	21
9.4.2 Annual rate of silicosis hospital discharges	4.1
9.4.3 Annual, age-standardized, rate of silicosis hospital discharges	4.7
9.5.1 Annual number of other and unspecified pneumoconiosis hospital discharges	10
9.5.2 Annual rate of other and unspecified pneumoconiosis hospital discharges	1.9
9.5.3 Annual, age-standardized, rate of other and unspecified pneumoconiosis hospital discharges	2.2

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INDICATOR 10: MORTALITY FROM OR WITH PNEUMOCONIOSIS	
10.1.1 Annual number of total pneumoconiosis deaths	50
10.1.2 Annual total pneumoconiosis death rate per million residents	9.7
10.1.3 Annual, age-standardized total pneumoconiosis death rate	8.6
10.2.1 Annual number of coal workers' pneumoconiosis deaths	--
10.2.2 Annual coal workers' pneumoconiosis death rate per million residents	--
10.2.3 Annual, age-standardized rate of coal workers' pneumoconiosis deaths	--
10.3.1 Annual number of asbestosis deaths	48
10.3.2 Annual asbestosis death rate per million residents	9.3
10.3.3 Annual, age-standardized asbestosis death rate	8.3
10.4.1 Annual number of silicosis deaths	<5
10.4.2 Annual silicosis death rate per million residents	n/a ²
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

² 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 CENTER³

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

INDICATOR 12: INCIDENCE OF MALIGNANT MESOTHELIOMA

12.1 Annual number of incident mesothelioma cases	94
12.2 Annual mesothelioma incidence rate per million residents	18.3
12.3 Annual, age-standardized mesothelioma incidence rate per million residents	19.2

³ Complete 2006 work-related pesticide poisoning case data are not yet available.

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INDICATOR 13: ELEVATED BLOOD LEAD LEVELS AMONG ADULTS

13.1.1 Annual number of residents with elevated blood lead levels (>=10 mcg/dL)	N/A ⁴
13.1.2 Annual prevalence rate per 100,000 employed persons	--
13.1.3. Annual number of incident cases	N/A
13.1.4 Annual incidence rate per 100,000 employed persons	--
13.2.1 Annual number of residents with elevated blood lead levels (>=25 mcg/dL)	75
13.2.2 Annual prevalence rate per 100,000 employed persons	2.4
13.2.3 Annual number of incident cases	55
13.2.4 Annual incidence rate per 100,000 employed persons	1.7
13.3.1 Annual number of residents with blood lead levels >=40 mcg/dL	17
13.3.2 Annual prevalence rate per 100,000 employed persons	0.5
13.3.3 Annual number of incident cases	16
13.3.4 Annual incidence rate per 100,000 employed persons	0.5

⁴ Washington State had not started collecting elevated blood levels for equal or greater than 10 mcg/dL during 2006.

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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	147,420
14.2 Percentage of employed persons in high morbidity risk NAICS industries	6.1

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	323,771
15.2 Percentage of employed persons in high morbidity risk 1990 Bureau of the Census occupations	10.1

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	466,700
16.2 Percentage of employed persons in high mortality risk industries	14.6
16.3 Number of employed persons in high mortality risk occupations	319,650
16.4 Percentage of employed persons in high mortality risk occupations	10

INDICATOR 17: OCCUPATIONAL SAFETY AND HEALTH PROFESSIONALS

17.1 Rate of board-certified occupational physicians per 100,000 employees	2.7
17.2 Rate of ACOEM members per 100,000 employees	4.1
17.3 Rate of board-certified occupational health registered nurses per 100,000 employees	3.4
17.4 Rate of members of the AAOH per 100,000 employees	3.4
17.5 Rate of board-certified industrial hygienists per 100,000 employees	8.9
17.6 Rate of AIHA per 100,000 employees	8.5
17.7 Rate of board certified safety health professionals per 100,000 employees	7.8
17.8 Rate of ASSE membership per 100,000 employees	29.2

INDICATOR 18: OSHA ENFORCEMENT ACTIVITIES

18.1 Annual number of establishments inspected by Federal/State OSHA	7,082
18.2 Total number of establishments under OSHA jurisdiction	207,669
18.3 Estimated percentage of all establishments under OSHA jurisdiction inspected by OSHA	3.4
18.4 Annual number of employees whose work areas were inspected by OSHA	132,612
18.5 Estimated percentage of employees under OSHA jurisdiction whose work areas were inspected by OSHA	4.8

INDICATOR 19: WORKERS' COMPENSATION AWARDS

19.1 Total amount of workers' compensation benefits paid	\$1,926,644,000
19.2 Average amount of workers' compensation benefits paid per covered worker	\$692.79

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