

July 2010

Washington State Occupational Health Indicators, 2007

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

(SHARP Surveillance Report #80-7-2010)

Occupational Health Indicators

There are over 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 2007, in an effort to make WA State OHI data available in more "real-time."

As of July 2010, some 2007 data is not yet available; please check back periodically for updates.

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

2007 Highlights

- The estimated annual total number of work-related injuries and illness involving more than 10 days away from work was 15,610
- The annual number of total pneumoconiosis deaths was 82
- The annual rate of work-related low back disorder hospitalization (per 100,000 employed persons age 16 years or older) was 34.8

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	3,270,000
P1. Percentage of civilian workforce unemployed	4.6
P2. Percentage of civilian employment self-employed	7.2
P3. Percentage of civilian employment in part-time jobs	19.7
P4. Percentage of civilian employment by number of hours worked	
• 0-39 hours	36.2
• 40 hours	36.4
• 41+ hours	27.4
P5. Percentage of civilian employment by sex	
• Males	53.1
• Females	46.9
P6. Percentage of civilian employment by age group	
• 16 to 17	1.5
• 18 to 64	95.3
• 65+	3.2
P7. Percentage of civilian employment by race	
• White	84.1
• Black	3.0
• Other	12.9
P8. Percentage of civilian employment by Hispanic Origin	8.1
P9. Percentage of civilian employment by industry	
• Mining	0.2
• Construction	8.5
• Manufacturing: durable goods	8.9
• Manufacturing: non-durable goods	3.1
• Wholesale and retail trade	14.4
• Transportation and utilities	5.4
• Information	2.5
• Financial activities	6.2
• Professional and business services	10.4
• Education and health services	19.2
• Leisure and hospitality	8.8
• Other services	4.9
• Public administration	5.0
• Agriculture and related	2.7
P10. Percentage of civilian employment by occupation	
• Management, business and financial operations	15.3
• Professional and related occupations	22.3
• Service	15.2
• Sales and related occupations	11.0
• Office and administrative support	12.7
• Farming, fishing, and forestry	1.6
• Construction and extraction	5.8
• Installation, maintenance, and repair	4.1
• Production	5.9
• Transportation and material moving	6.0

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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	116,500
1.2 Estimated Annual Total Work-Related Injuries and Illness Incidence Rate ¹	6,100
1.3 Estimated Annual Total Number of Cases Involving Days Away From Work	37,700
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	15,610

INDICATOR 2: WORK-RELATED HOSPITALIZATION	
2.1 Annual Number of Work-Related Hospitalizations	5,435
2.2 Annual Crude Rate of Hospitalization	166.2

INDICATOR 3: FATAL WORK-RELATED INJURIES	
3.1 Annual Number of Work-Related Traumatic Fatalities	90
3.2 Annual Crude Fatality Rate	2.8

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	160
4.2 Estimated Annual Incidence Rate of Amputations Involving Days Away from Work	8.0

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

5.1 Annual Number of Amputations filed with State Workers' Compensation System	282
5.2 Annual Incidence Rate of Amputations filed with State Workers' Compensation System	9.9

INDICATOR 6: HOSPITALIZATION FOR WORK-RELATED BURNS

6.1 Annual number of work-related burn hospitalizations	90
6.2 Annual rate of work-related burn hospitalizations	2.8

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

7.1 Estimated annual number of all musculoskeletal disorders	15,300
7.2 Estimated annual incidence rate of all musculoskeletal disorders	795
7.3 Estimated annual number of MSDs of the neck, shoulder & upper extremities	4,240
7.4 Estimated annual incidence rate of disorders of neck, shoulder, and upper extremities	221
7.5 Estimated annual number of carpal tunnel syndrome cases	430
7.6 Estimated annual incidence rate of carpal tunnel syndrome cases	22
7.7 Estimated annual number of musculoskeletal disorders of the back	6,650
7.8 Estimated annual incidence rate of musculoskeletal disorders of the back	345

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	1,259
8.2 Annual incidence rate of carpal tunnel syndrome cases filed with State WC	44.1

INDICATOR 9: HOSPITALIZATION FROM OR WITH PNEUMOCONIOSIS	
9.1.1 Annual number of total pneumoconiosis hospital discharges	569
9.1.2 Annual rate of total pneumoconiosis hospital discharges	109.6
9.1.3 Annual, age-standardized, rate of total pneumoconiosis hospitalizations	117.2
9.2.1 Annual number of coal workers' pneumoconiosis hospital discharges	17.0
9.2.2 Annual rate of coal workers' pneumoconiosis hospital discharges	3.3
9.2.3 Annual, age-standardized, rate of coal workers' pneumoconiosis hospital discharges	3.3
9.3.1 Annual number of asbestosis hospital discharges	531
9.3.2 Annual rate of asbestosis hospital discharges	102.3
9.3.3 Annual, age-standardized, rate of asbestosis hospital discharges	109.9
9.4.1 Annual number of silicosis hospital discharges	16.0
9.4.2 Annual rate of silicosis hospital discharges	3.1
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	6.0
9.5.2 Annual rate of other and unspecified pneumoconiosis hospital discharges	1.2
9.5.3 Annual, age-standardized, rate of other and unspecified pneumoconiosis hospital discharges	1.2

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INDICATOR 10: MORTALITY FROM OR WITH PNEUMOCONIOSIS	
10.1.1 Annual number of total pneumoconiosis deaths	82.0
10.1.2 Annual total pneumoconiosis death rate per million residents	15.8
10.1.3 Annual, age-standardized total pneumoconiosis death rate	16.7
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 ²
10.2.3 Annual, age-standardized rate of coal workers' pneumoconiosis deaths	--
10.3.1 Annual number of asbestosis deaths	80.0
10.3.2 Annual asbestosis death rate per million residents	15.4
10.3.3 Annual, age-standardized asbestosis death rate	16.3
10.4.1 Annual number of silicosis deaths	--
10.4.2 Annual silicosis death rate per million residents	--
10.4.3 Annual, age-standardized silicosis death rate	--
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	87
12.2 Annual mesothelioma incidence rate per million residents	16.8
12.3 Annual, age-standardized mesothelioma incidence rate per million residents	17.2

³ Complete 2007 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)	68
13.2.2 Annual prevalence rate per 100,000 employed persons	2.1
13.2.3 Annual number of incident cases	48
13.2.4 Annual incidence rate per 100,000 employed persons	1.5
13.3.1 Annual number of residents with blood lead levels >=40 mcg/dL	11
13.3.2 Annual prevalence rate per 100,000 employed persons	0.3
13.3.3 Annual number of incident cases	7
13.3.4 Annual incidence rate per 100,000 employed persons	0.2

⁴ Washington State had not started collecting elevated blood levels for equal or greater than 10 mcg/dL during 2007.

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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	146,375
14.2 Percentage of employed persons in high morbidity risk NAICS industries	5.9

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	334,645
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	494,571
16.2 Percentage of employed persons in high mortality risk industries	15.0
16.3 Number of employed persons in high mortality risk occupations	333,581
16.4 Percentage of employed persons in high mortality risk occupations	10.1

INDICATOR 17: OCCUPATIONAL SAFETY AND HEALTH PROFESSIONALS

17.1 Rate of board-certified occupational physicians per 100,000 employees	2.9
17.2 Rate of ACOEM members per 100,000 employees	3.8
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	3.2
17.5 Rate of board-certified industrial hygienists per 100,000 employees	8.5
17.6 Rate of AIHA per 100,000 employees	7.2
17.7 Rate of board certified safety health professionals per 100,000 employees	7.6
17.8 Rate of ASSE membership per 100,000 employees	24.9

INDICATOR 18: OSHA ENFORCEMENT ACTIVITIES

18.1 Annual number of establishments inspected by Federal/State OSHA	6,370
18.2 Total number of establishments under OSHA jurisdiction	211,617
18.3 Estimated percentage of all establishments under OSHA jurisdiction inspected by OSHA	3.0
18.4 Annual number of employees whose work areas were inspected by OSHA	131,636
18.5 Estimated percentage of employees under OSHA jurisdiction whose work areas were inspected by OSHA	4.6

INDICATOR 19: WORKERS' COMPENSATION AWARDS

19.1 Total amount of workers' compensation benefits paid	\$1,994,598,000
19.2 Average amount of workers' compensation benefits paid per covered worker	\$698.14

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INDICATOR 20: HOSPITALIZATIONS FOR WORK-RELATED LOW BACK DISORDERS

20.1 Annual number of work-related surgical low back disorder hospitalizations for persons age 16 years or older (numerator)	968
20.2 Annual rate of work-related surgical low back disorder hospitalization per 100,000 employed persons age 16 years or older	29.6
20.3 Annual number of work-related low back disorder hospitalizations for persons age 16 years or older (numerator)	1,139
20.4 Annual rate of work-related low back disorder hospitalization per 100,000 employed persons age 16 years or older	34.8