

Workers' compensation claims due to musculoskeletal disorders, Washington State, 2006–2019

Jennifer Marcum, DrPH MS

SHARP Technical Report 99-06-2022

May 2022



Contents

Executive Summary.....	6
TECHNICAL NOTES	7
Inclusion criteria.....	7
Exclusion criteria	7
Rate calculations	7
Claim cost and time loss estimates.....	7
Trend analyses	7
Prevention Index ranking.....	7
Results.....	8
Burden of work-related musculoskeletal disorder (WMSD) claims.....	8
Work-related musculoskeletal disorder (WMSD) claim trends	9
Work-related musculoskeletal disorder (WMSD) claims by Washington risk class	12
Work-related musculoskeletal disorder (WMSD) claims by NAICS industry sector	29
Work-related musculoskeletal disorder (WMSD) claims by NAICS industry group (4-digit group)	35
Work-related musculoskeletal disorder (WMSD) claims by NAICS industry (5-digit NAICS).....	52

Tables

Table 1. Washington workers’ compensation claims for WMSDs and “all other” claims by coverage type and severity, 2017–2019.....	8
Table 2. Costs and time-loss associated with Washington workers’ compensation claims for work-related musculoskeletal disorders and “all other” claims by severity, State Fund only, 2017–2019.....	8
Table 3. Trend regression results for Washington workers’ compensation rates for WMSD and “all other” claims, State Fund medical aid only, 2006–2019.....	9
Table 4. Trend regression results for Washington workers’ compensation rates for WMSD and “all other” claims, State Fund wage replacement or disability only, 2006–2019.....	10
Table 5. Trend regression results for Washington workers’ compensation rates for WMSD and “all other” claims, self-insured wage replacement or disability claims, 2006–2019.....	11
Table 6. Washington workers’ compensation claim rates per 1,000 FTE for WMSDs, State Fund medical aid claims by Washington risk class and prevention index (PI) ranking, 2006–2019.....	12
Table 7. Washington workers’ compensation claim rates per 1,000 FTE for WMSDs, State Fund wage replacement or disability claims by Washington risk class and prevention index (PI) ranking, 2006–2019.....	20
Table 8. Washington workers’ compensation claim rates per 1,000 FTE for WMSDs, self-insured wage replacement or disability claims by Washington risk class, 2006–2019.....	26
Table 9. Washington workers’ compensation claim rates per 1,000 FTE for WMSDs, State Fund medical aid claims by North American Industry Classification System (NAICS) industry sector and prevention index (PI) rank, 2006–2019.....	29
Table 10. Washington workers’ compensation claim rates per 1,000 FTE for WMSDs, State Fund wage replacement or disability claims North American Industry Classification System (NAICS) industry sector and prevention index (PI) rank, 2006–2019.....	31
Table 11. Washington workers’ compensation claim rates per 1,000 FTE for WMSDs, self-insured wage replacement or disability claims by North American Industry Classification System (NAICS) industry sector and prevention index (PI) rank, 2006–2019.....	33
Table 12. Washington workers’ compensation claim rates per 1,000 FTE for WMSDs, State Fund medical aid claims by North American Industry Classification System (NAICS) industry group and prevention index (PI) rank group, 2006–2019.....	35
Table 13. Washington workers’ compensation claim rates per 1,000 FTE for WMSDs, State Fund wage replacement or disability claims by North American Industry Classification System (NAICS) industry group and prevention index (PI) rank group, 2006–2019.....	43
Table 14. Washington workers’ compensation claim rates per 1,000 FTE for WMSDs, self-insured wage replacement or disability claims by North American Industry Classification System (NAICS) industry group and prevention index (PI) rank group, 2006–2019.....	49
Table 15. Washington workers’ compensation claim rates per 1,000 FTE for WMSDs, State Fund medical aid claims by North American Industry Classification System (NAICS) industry and prevention index (PI) rank group, 2006–2019.....	52

Table 16. Washington workers’ compensation claim rates per 1,000 FTE for WMSDs, State Fund wage replacement or disability claims by North American Industry Classification System (NAICS) industry and prevention index (PI) rank group, 2006–2019.	62
Table 17. Washington workers’ compensation claim rates per 1,000 FTE for WMSDs, self-insured wage replacement or disability claims by North American Industry Classification System (NAICS) industry and prevention index (PI) rank group, 2006–2019.	68

Figures

Figure 1. Washington workers’ compensation claim rates per 1,000 FTE for WMSD and “all other” claims, State Fund medical aid only, 2006–2019.	9
Figure 2. Washington workers’ compensation claim rates per 1,000 FTE for WMSD and “all other” claims, State Fund wage replacement or disability only, 2006–2019.	10
Figure 3. Washington workers’ compensation claim rates per 1,000 FTE for WMSD and “all other” claims, self-insured wage replacement or disability only, 2006–2019.	11

DEFINITIONS

- **Work-related musculoskeletal disorders (WMSDs)** - conditions that disturb or disrupt the functions of the musculoskeletal system, and are caused or exacerbated by work. These conditions typically affect soft tissues such as joints, nerves, tendons, ligaments, muscles, blood vessels, cartilage, or spinal discs. WMSDs are generally caused by work activities that are repetitive, require forceful exertion, expose the worker to vibration, and/or involve awkward postures and unnatural positions of the worker. For more information on the identification of WMSDs in the workers' compensation data, see [SHARP WMSD case definition technical report](#).
- **All other claims** - includes any claim not classified as a WMSD.
- **State Fund** - the State Fund is Washington State's workers' compensation fund. Washington is an exclusive workers' compensation state, meaning all employers in the state must obtain workers' compensation coverage from the State Fund unless they are covered by an alternate system (e.g., the federal government, employers of railroad and long-shore workers), are specifically exempted in WA Statute (e.g., the self-employed), or self-insure. Washington State does not allow private carrier workers' compensation coverage. The State Fund insures approximately 75% of employed workers in Washington.
- **Self-insurance** - employers that self-insure for workers' compensation coverage in Washington must meet financial requirements, including net worth or revenue minimums and a demonstrated safety organization with a record of accident prevention (RCW 51.14.030/WAC 296-15-021). Approximately 25% of covered Washington workers are employed by self-insured employers. Data on time loss and claim costs are limited for self-insured claims.
- **Medical aid claim** - claims for less severe work-related injuries or illnesses, only qualifying for reimbursement of medical treatment costs.
- **Wage replacement or disability claim** - claims for more severe work-related injuries or illnesses, and qualifying for additional compensation beyond medical costs, including time-loss compensation, permanent disability awards, kept on salary, survivors' benefits, funeral expenses, and/or pension benefits. To qualify for this additional compensation, the injured worker must have been medically certified as unable to perform normal work duties beyond a three-calendar day waiting period not including the day of the injury.
- **North American Industry Classification System (NAICS)** - NAICS is the US national standard for classifying industries. It is a hierarchical system, with increasing specificity as the number of digits in the codes increases. Industry sector is 2-digit code, industry group is the 4-digit code, and industry is the 5-digit code.
- **Washington risk class** - Risk class is the system in Washington for which workers' compensation premiums are determined. All employers in Washington are assigned risk classes, for which they report hours into quarterly. Risk classes are designed to classify hours worked into groups based on injury or illness risk and financial risk.

EXECUTIVE SUMMARY

Work-related musculoskeletal disorders (WMSDs) are frequent and continue to account for a substantial portion of Washington’s total costs to workers’ compensation each year. Workers’ compensation claims for WMSDs continue to decline in Washington State, following similar trends previously described*. WMSD claim experience is not uniform across industries; we identify trends and other differences by industries here.

Key Findings:

- WMSDs account for one-third of all wage replacement or disability claims. WMSD costs the State Fund approximately 27% of medical aid claim costs and 45% of wage replacement or disability costs.
- State Fund medical aid rates decreased similarly for WMSD claims and all other claims, an estimated 3-4% decrease each year between 2006 and 2019. For State Fund wage replacement or disability rates, WMSD claims decreased at a statistically significant faster rate than all other claims—an estimated 5.3% versus 3.4% decrease each year, respectively.
- Self-insured wage replacement or disability claim rates decreased at slower rates than State Fund claims. Self-insured wage replacement or disability rates decreased an estimate 1.6% for WMSDs, and 1.7% for all other claims each year.
- The decline in claim rates is not the same across industries or risk classes, with no decline or increases in rates among specific industries/risk classes.
 - Medical aid WMSD claim rates statistically significantly increased among the following Washington risk classes in the State Fund: “Orchards”, “Inmates – Prison Industries”, and “Vineyards”.
 - Wage replacement or disability claim rates statistically significantly increased among the following self-insured Washington risk classes: “Home Health Services and Nursing Care, N.O.C.”, “Meat Products Mfg./Slaughter and Packing Houses”, “Fruit/Vegetable Canners/Food Product Mfg., N.O.C.”, “Temporary Help – Assembly”, “Motels and Hotels”, “Temporary Help – Warehousing”, “Meat, Fish, and Poultry Dealers – Wholesale”, “Clerical Office, N.O.C.”, and “Non Wood Frame Building Construction”.
- Additionally, the Prevention Index rankings identified industries and risk classes most in need of WMSD prevention. Examples of high-ranking risk classes include the following: State Fund “Nursing Homes”, State Fund “County and City Fire Fighters – Salaried”, and self-insured “Scheduled Airlines – Flight Crew”. Similarly, NAICS industry groups in most need are the following: State Fund “Nursing Care Facilities” and “Foundation, Structure, and Building Exterior Contractors”, and self-insured “Scheduled Air Transportation”.

*Marcum J, Adams D. Work-related musculoskeletal disorder surveillance using the Washington state workers' compensation system: Recent declines and patterns by industry, 1999-2013. *Am J Ind Med.* 2017 May;60(5):457-471. doi: 10.1002/ajim.22708. Epub 2017 Mar 15. PMID: 28295479.

TECHNICAL NOTES

Inclusion criteria

All accepted claims for WMSDs with a date of injury between 2006 and 2019 were considered for inclusion, queried in January 2022. State Fund and self-insured claims are presented here separately. Claim data for this report was retrieved on 04-28-22.

Exclusion criteria

Rates among risk classes or NAICS industries with fewer than 17 claims for the three year period from 2017 – 2019 are not displayed because they are not considered reliable, i.e., the Relative Standard Error (RSE) is above 25%.

Rate calculations

Claim rates are presented here for the combined time-period of 2017 through 2019 for a current estimate, and by year from 2006 to 2019 for trend analyses. For all rate calculations, the number of claims is divided by the number of reported hours to the workers' compensation system and displayed as claims per 1,000 FTE (2,000 reported hours = 1 FTE).

Claim cost and time loss estimates

Claim costs and time loss were estimated for all claims using the costs and time loss days paid to date for closed claims, and case reserve forecasts for open claims as of January 2022. Closed claims may be re-opened in the future, so costs are not necessarily final. All costs presented here were adjusted for inflation to reflect 2019 dollars using the Consumer Price Index. Median time loss days are presented among claims with any time loss greater than 0 days.

Trend analyses

Claim rate trends were analyzed using negative binomial regression analyses, controlling for number of hours reported. A trend or change in rate is considered statistically significant when the *P* value was less than 0.05.

Prevention Index ranking

The Prevention Index (PI) ranking is a method of ranking industries or risk classes to identify those most in need of intervention. The industry or risk class with the PI ranking of '1' is considered most at risk. The PI ranking takes both number of claims and claim rate into account: $PI = (\text{count of claims rank} + \text{claim rate rank})/2$.

RESULTS

Burden of work-related musculoskeletal disorder (WMSD) claims

Between 2017 and 2019, approximately 18% of all State Fund medical aid claims and one-third of all wage replacement or disability claims (State Fund and self-insured) were due to work-related musculoskeletal disorders (WMSDs).

Table 1. Washington workers' compensation claims for WMSDs and "all other" claims by coverage type and severity, 2017–2019.

Coverage type and severity	WMSD claims (row %)	All other claims (row %)	Total claims (row %)
State Fund: annual average of medical aid claims	12,816 (18%)	58,045 (82%)	70,861 (100%)
State Fund: annual average of wage replacement or disability claims	7,148 (30%)	16,483 (70%)	23,631 (100%)
Self-insured: annual average of wage replacement or disability claims	5,453 (37%)	9,204 (63%)	14,557 (100%)
State Fund & self-insured combined: annual average of wage replacement or disability claims	12,601 (33%)	25,587 (67%)	38,188 (100%)

Work-related musculoskeletal disorder claims account for approximately 27% of the total costs for medical aid claims, and 32% of wage replacement or disability claim costs in the State Fund each year.

Table 2. Costs and time-loss associated with Washington workers' compensation claims for work-related musculoskeletal disorders and "all other" claims by severity, State Fund only, 2017–2019.

State Fund claim costs and time loss	WMSD claims	All other claims
State Fund: median cost per claim, medical aid	\$1,198	\$658
State Fund: median cost per claim, wage replacement or disability	\$11,055	\$8,989
State Fund: median days of time loss per claim, wage replacement or disability	64	50
State Fund: average claim costs per year, medical aid (in millions)	\$96	\$255
State Fund: average claim costs per year, wage replacement or disability (in millions)	\$888	\$1,980

Work-related musculoskeletal disorder (WMSD) claim trends

The State Fund medical aid claim rates significantly declined during 2006 through 2019, with WMSD and “all other” claim rates decreasing at similar rates.

Figure 1. Washington workers’ compensation claim rates per 1,000 FTE for WMSD and “all other” claims, State Fund medical aid only, 2006–2019.

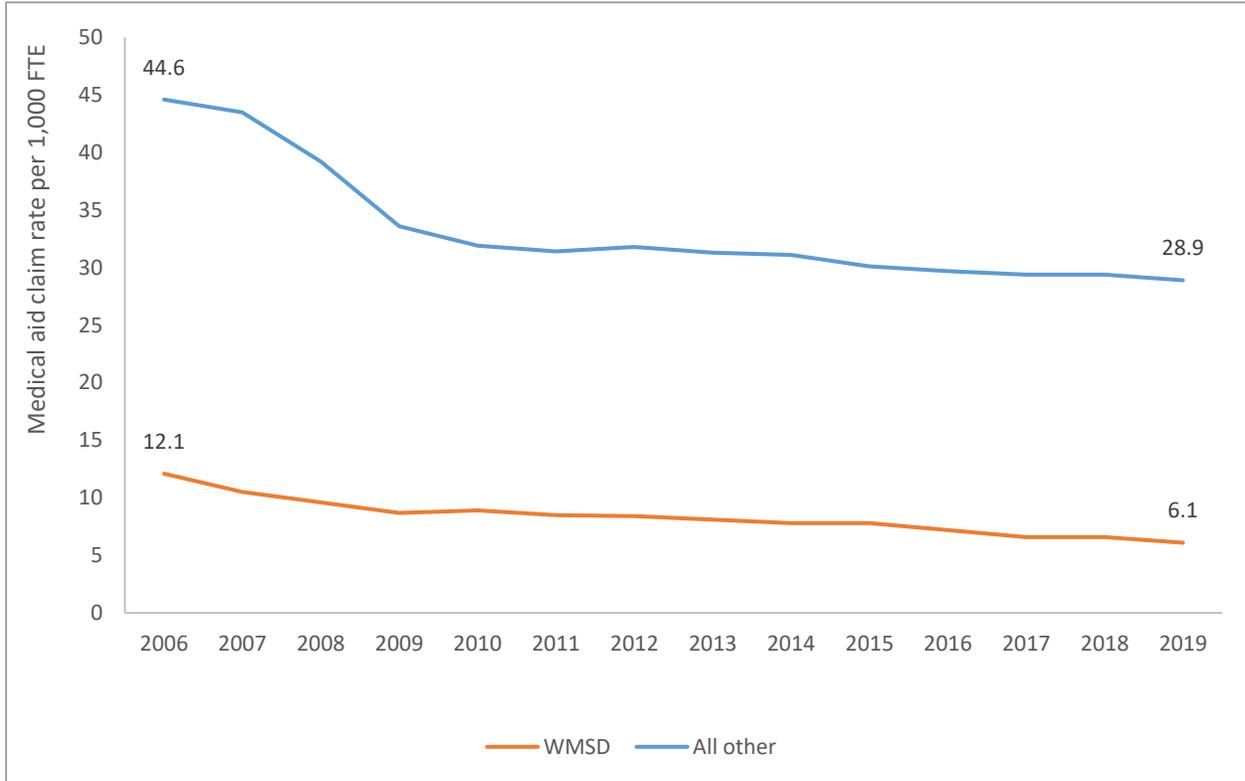


Table 3. Trend regression results for Washington workers’ compensation rates for WMSD and “all other” claims, State Fund medical aid only, 2006–2019.

Claim type	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
WMSD claims	-4.2% (-4.8%, -3.7%)	<.0001
All other claims	-3.0% (-3.8%, -2.2%)	<.0001

The State Fund wage replacement or disability claim rates significantly declined during 2006 through 2019, with WMSD rates declining at a faster rate than “all other” claim rates.

Figure 2. Washington workers’ compensation claim rates per 1,000 FTE for WMSD and “all other” claims, State Fund wage replacement or disability only, 2006–2019.

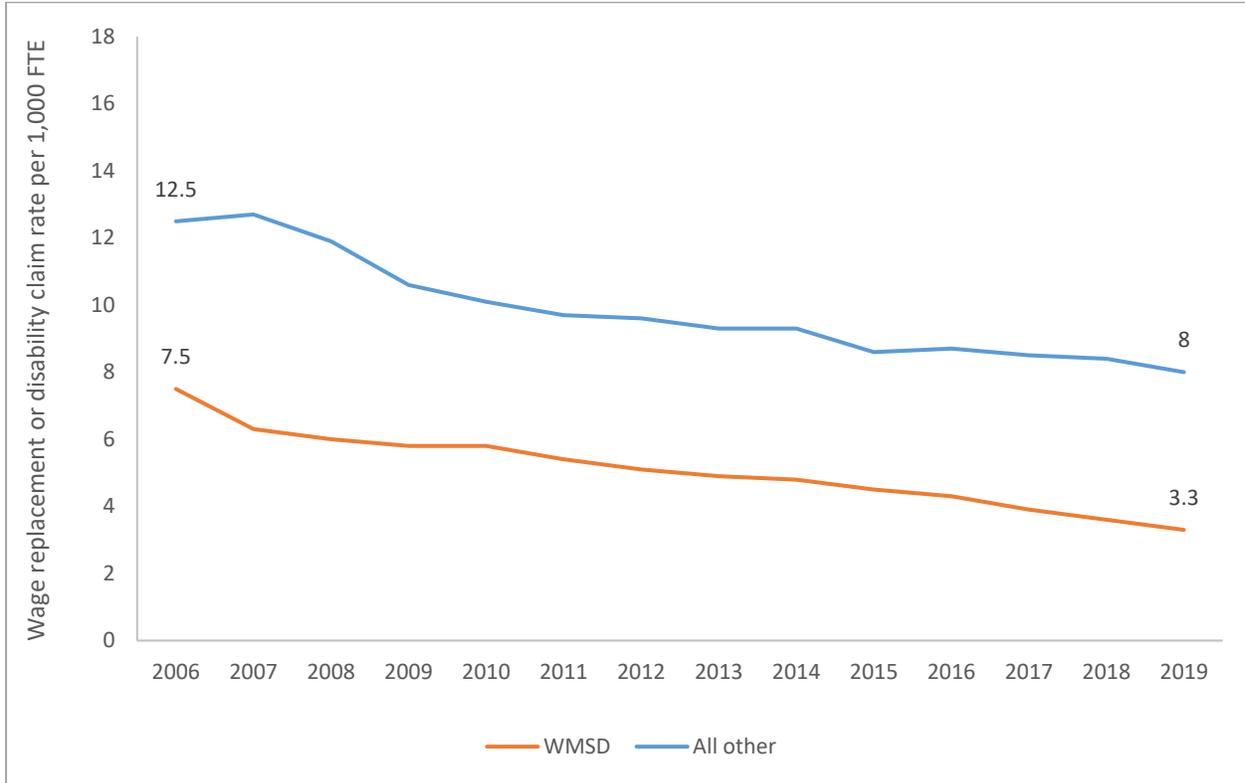


Table 4. Trend regression results for Washington workers’ compensation rates for WMSD and “all other” claims, State Fund wage replacement or disability only, 2006–2019.

Claim type	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
WMSD claims	-5.2% (-5.7%, -4.8%)	<.0001
All other claims	-3.4% (-3.9%, -2.9%)	<.0001

The self-insured wage replacement or disability claim rates significantly declined during 2006 through 2019, with WMSD and “all other” claim rates decreasing at similar rates.

Figure 3. Washington workers’ compensation claim rates per 1,000 FTE for WMSD and “all other” claims, self-insured wage replacement or disability only, 2006–2019.

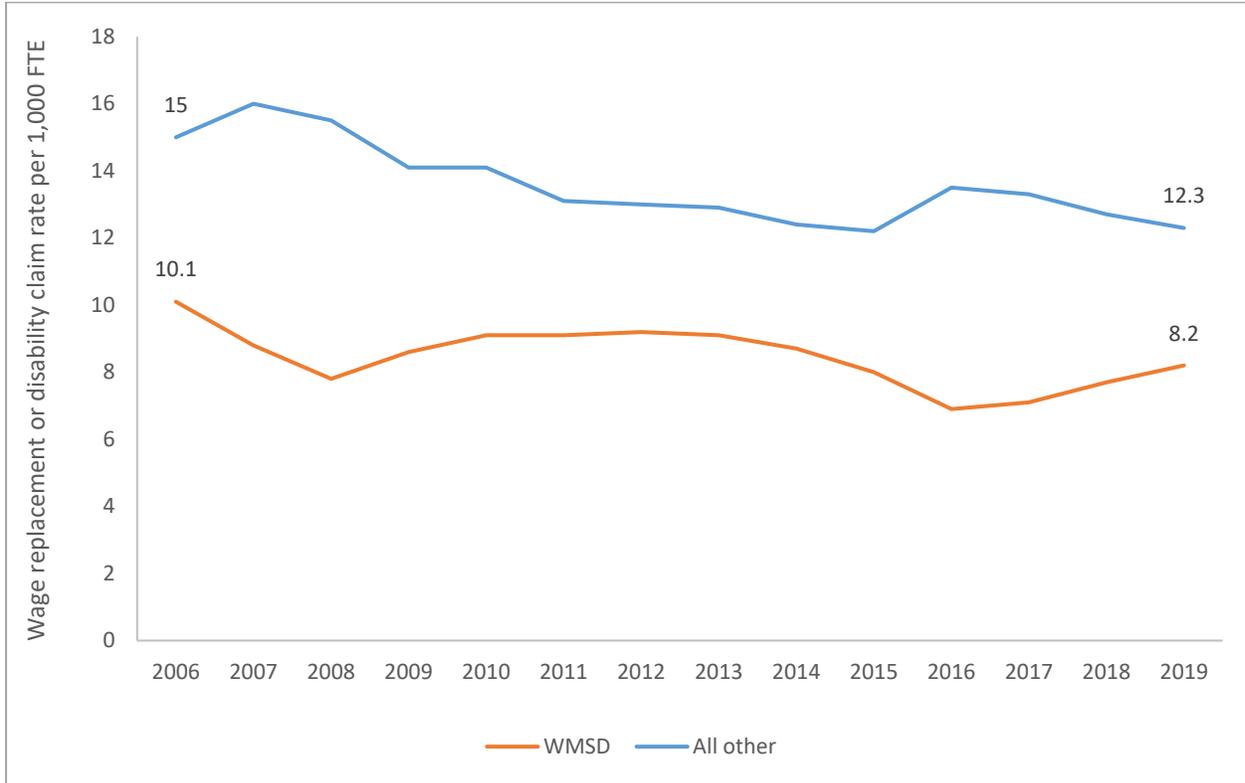


Table 5. Trend regression results for Washington workers’ compensation rates for WMSD and “all other” claims, self-insured wage replacement or disability claims, 2006–2019.

Claim type	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
WMSD claims	-1.6% (-2.6%, -0.6%)	<.0001
All other claims	-1.7% (-2.3, -1.1%)	<.0001

Work-related musculoskeletal disorder (WMSD) claims by Washington risk class

The top three State Fund risk classes to prioritize for prevention of medical aid WMSD claims are as follows:

- Nursing Homes
- Warehouses, N.O.C., Grocery Dist. & Recycle Centers
- Boarding Homes and Retirement Centers

State Fund risk classes with statistically significant increasing WMSD medical aid claim rates:

- Orchards
- Vineyards
- Inmates - Prison Industries

Table 6. Washington workers' compensation claim rates per 1,000 FTE for WMSDs, State Fund medical aid claims by Washington risk class and prevention index (PI) ranking, 2006–2019.

PI rank	Risk class	Risk class description	Annual average number of employers in risk class, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
1	6108	Nursing Homes	140	531	43%	55%	31.4 (29.9, 33.0)	-4.0 (-4.7, -3.3)	<.0001
2	2102	*Warehouses, N.O.C., Grocery Dist, & Recycle Centers	447	236	33%	46%	23.0 (21.3, 24.7)	-2.0 (-3.2, -0.8)	0.0013
3	6509	Boarding Homes and Retirement Centers	1,965	563	30%	41%	20.6 (19.6, 21.6)	-3.0 (-3.8, -2.1)	<.0001
4	2104	Fruit & Vegetable Packing - Fresh	179	336	26%	35%	20.5 (19.2, 21.8)	No significant change	0.8459
5	2105	Beer, Wine and Soft Drink Distributors	85	112	44%	48%	31.9 (28.5, 35.3)	-3.7 (-4.8, -2.6)	<.0001
6	2009	Lumber Yards and Building Material Dealers	663	160	27%	38%	20.7 (18.8, 22.5)	No significant change	0.6548
7	6802	*Scheduled Airlines - Flight Crew	33	93	31%	35%	25.7 (22.7, 28.7)	-20.3 (-25.3, -14.9)	<.0001
8	7114	Temporary Help - Assembly	107	67	27%	31%	35.8 (30.9, 40.8)	No significant change	0.5663
9	510	Wood Frame Building Construction	4,168	154	14%	22%	18.2 (16.5, 19.9)	-2.6 (-3.4, -1.7)	<.0001
10	1101	Parcel and Package Delivery Service	1,660	190	23%	30%	16.2 (14.9, 17.5)	-4.3 (-5.1, -3.4)	<.0001
11	6306	Furniture Stores	733	149	31%	36%	18.1 (16.4, 19.8)	-2.4 (-3.8, -1.0)	0.0011
12	507	Roofing Work - Construction and Repair	1,696	87	16%	24%	23.6 (20.7, 26.4)	-4.4 (-5.6, -3.1)	<.0001
13	6907	Moving and Storage Companies	260	54	23%	14%	30.1 (25.5, 34.8)	-4.9 (-6.4, -3.3)	<.0001

PI rank	Risk class	Risk class description	Annual average number of employers in risk class, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
14	2903	Wood Products Manufacturing, N.O.C.	424	106	17%	25%	18.9 (16.9, 21.0)	-3.6 (-5.2, -1.9)	<.0001
15	6402	Supermarkets	301	195	25%	42%	14.6 (13.4, 15.8)	-2.1 (-3.1, -1.1)	<.0001
16	1405	*Ambulance Service	26	47	45%	52%	39.3 (32.8, 45.7)	-4.5 (-7.7, -1.1)	0.0102
17	3404	Metal Goods Manufacturing, N.O.C. - Under 9 Gauge	687	114	18%	31%	16.5 (14.7, 18.2)	-3.8 (-4.9, -2.6)	<.0001
18	516	Carpentry, N.O.C.	5,974	152	15%	25%	15.5 (14.1, 17.0)	-3.8 (-4.8, -2.7)	<.0001
19	4305	Solid Waste Collection Services/Landfill Operations	233	60	25%	33%	25.2 (21.6, 28.9)	-3.2 (-4.9, -1.4)	0.0004
20	6504	Charitable and Welfare Stores	90	61	27%	36%	22.9 (19.6, 26.3)	-3.4 (-6.0, -0.9)	0.0092
21	2907	Cabinet and Countertop Manufacturing - Wood	474	79	21%	35%	18.5 (16.1, 20.9)	-4.1 (-5.7, -2.5)	<.0001
22	511	Glass Installation: Buildings	488	48	18%	30%	27.3 (22.8, 31.7)	-5.2 (-6.8, -3.6)	<.0001
23	518	Non Wood Frame Building Construction	799	131	17%	26%	14.9 (13.5, 16.4)	-4.6 (-6.7, -2.5)	<.0001
24	3902	Fruit/Vegetable Canneries/Food Product Mfg., N.O.C.	342	159	24%	33%	14.4 (13.1, 15.7)	-3.1 (-4.4, -1.7)	<.0001
25	6904	County and City Fire Fighters - Salaried	221	95	23%	11%	16.0 (14.2, 17.9)	-3.0 (-4.2, -1.7)	<.0001
26	301	Landscape Construction and Renovation	2,024	82	22%	31%	16.3 (14.2, 18.3)	-2.9 (-4.2, -1.5)	<.0001
27	2002	Freight Handling Services	262	52	26%	31%	20.3 (17.1, 23.4)	-4.5 (-6.2, -2.9)	<.0001
28	3510	Plastic Goods Mfg., N.O.C.	207	108	24%	43%	14.8 (13.2, 16.4)	-2.7 (-4.2, -1.3)	0.0003
29	306	Plumbing	1,524	123	19%	27%	14.2 (12.7, 15.6)	-4.4 (-5.6, -3.1)	<.0001
30	5103	Foundries, N.O.C.	30	34	20%	33%	39.2 (31.6, 46.9)	No significant change	0.6279
31	4805	Nurseries	433	75	26%	40%	15.9 (13.8, 18.0)	No significant change	0.5899
32	7115	Temporary Help - Food Processing	40	35	28%	49%	28.0 (22.7, 33.4)	No significant change	0.9408
33	6407	Wholesale Stores, N.O.C.	1,323	122	32%	42%	13.3 (12.0, 14.7)	-4.4 (-5.7, -3.1)	<.0001
34	3402	Machine Shops and Machinery Mfg., N.O.C.	1,245	142	16%	28%	12.9 (11.7, 14.2)	-2.8 (-4.0, -1.6)	<.0001
35	307	HVAC Systems, Installation, Service and Repair	1,091	107	13%	24%	13.6 (12.1, 15.1)	-5.4 (-6.5, -4.3)	<.0001
36	7117	Temporary Help - Machine Operation	129	31	16%	19%	29.0 (23.0, 34.9)	-7.5 (-9.7, -5.3)	<.0001
37	3304	Meat, Fish and Poultry Dealers - Wholesale	176	66	20%	29%	15.7 (13.5, 17.9)	-3.1 (-5.0, -1.2)	0.0017

PI rank	Risk class	Risk class description	Annual average number of employers in risk class, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
38	4905	Motels and Hotels	1,100	173	20%	29%	11.7 (10.7, 12.7)	-2.8 (-4.2, -1.4)	0.0001
39	4803	Orchards	1,772	336	11%	14%	9.9 (9.3, 10.6)	5.8 (4.1, 7.6)	<.0001
40	6804	Nonscheduled Airlines - Ground Crew	292	71	27%	34%	14.6 (12.6, 16.6)	-5.4 (-7.8, -2.9)	<.0001
41	6405	Tire Sales and Service Centers	281	43	20%	30%	17.9 (14.8, 21.0)	No significant change	0.4502
42	540	Wallboard Installation - Discounted Rate	142	27	24%	39%	30.3 (23.7, 36.8)	-2.9 (-5.5, -0.3)	0.0307
43	4910	Property and Building Management Services	4,052	193	19%	29%	9.6 (8.9, 10.4)	-4.3 (-5.2, -3.5)	<.0001
44	6120	Acute Care Hospitals with Safe Patient Handling	14	46	25%	35%	16.1 (13.4, 18.8)	No significant change	0.9945
45	3411	Automobile Dealers, Rentals and Service Shops	2,435	193	15%	26%	9.4 (8.6, 10.2)	-3.5 (-4.3, -2.6)	<.0001
46	3906	Bakeries - Wholesale, N.O.C.	190	48	27%	40%	15.6 (13.0, 18.1)	-1.9 (-3.7, -0.0)	0.0469
47	3702	Breweries, Wineries and Beverage Bottling	676	50	26%	36%	15.2 (12.7, 17.6)	-6.2 (-7.9, -4.4)	<.0001
48	803	Cities - All Other Employees, N.O.C.	270	73	18%	28%	13.6 (11.8, 15.4)	-4.0 (-5.4, -2.7)	<.0001
49	6511	Chore Services	467	165	23%	33%	10.0 (9.1, 10.9)	-2.2 (-4.0, -0.2)	0.0279
50	4301	Meat Products Mfg./Slaughter and Packing Houses	37	30	23%	27%	22.9 (18.1, 27.6)	No significant change	0.3769
51	302	Masonry Construction	591	31	23%	29%	21.4 (17.0, 25.7)	-3.6 (-5.6, -1.6)	0.0004
52	1501	County and Tribal Councils-All Other Employees, N.O.C.	472	88	18%	32%	12.8 (11.3, 14.3)	-4.0 (-5.2, -2.8)	<.0001
53	7108	Temporary Help - Warehousing	85	51	32%	38%	14.6 (12.3, 17.0)	No significant change	0.7038
54	217	Concrete Work - Foundations and Sidewalks	2,169	60	18%	21%	14.2 (12.2, 16.3)	-2.5 (-4.4, -0.6)	0.0099
55	3405	Aircraft Parts Manufacturing, N.O.C.	363	121	20%	40%	11.2 (10.0, 12.3)	-2.9 (-4.5, -1.3)	0.0004
56	601	Electrical Wiring: Buildings and Structures	1,915	146	15%	24%	10.2 (9.2, 11.1)	-4.9 (-5.8, -3.9)	<.0001
57	6309	Hardware, Auto Parts and Sporting Good Stores	2,341	178	24%	33%	8.7 (8.0, 9.5)	-3.5 (-4.7, -2.2)	<.0001
58	513	Interior Finish Carpentry	4,022	77	17%	30%	12.7 (11.0, 14.3)	-2.9 (-4.7, -1.2)	0.001
59	6110	Home Health Services and Nursing Care, N.O.C.	161	51	26%	28%	14.1 (11.9, 16.4)	-6.2 (-8.0, -4.3)	<.0001
60	308	Lawn Care Maintenance	2,557	88	17%	28%	12.3 (10.8, 13.8)	-2.2 (-3.5, -0.8)	0.0016

PI rank	Risk class	Risk class description	Annual average number of employers in risk class, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
61	6304	*Department Stores	186	27	29%	40%	22.1 (17.3, 26.9)	-2.3 (-4.3, -0.3)	0.0278
62	3512	Plastic - Cutting, Bending and Milling	93	33	27%	44%	16.8 (13.5, 20.1)	-3.9 (-6.3, -1.5)	0.0018
63	504	Painting: Building and Structures - Exterior Work	2,636	39	18%	23%	15.3 (12.5, 18.1)	-2.1 (-4.0, -0.1)	0.042
64	1102	Trucking, N.O.C.	1,742	104	20%	18%	10.2 (9.0, 11.3)	-5.9 (-7.1, -4.6)	<.0001
65	5307	State Government - All Other Employees, N.O.C.	47	110	18%	26%	9.9 (8.9, 11.0)	-5.8 (-7.3, -4.3)	<.0001
66	1108	Glass Merchants	215	30	20%	38%	17.0 (13.5, 20.5)	-4.2 (-6.3, -2.1)	<.0001
67	105	Fence Erection, N.O.C.	539	18	18%	29%	30.0 (21.9, 38.0)	-5.2 (-7.6, -2.8)	<.0001
68	4811	Hop and Mint Farms	67	45	15%	21%	13.7 (11.4, 16.0)	No significant change	0.2655
69	6406	Retail Stores, N.O.C.	2,812	181	25%	36%	7.0 (6.4, 7.6)	-4.1 (-5.1, -3.1)	<.0001
70	3905	Restaurants and Taverns	11,711	731	11%	24%	5.1 (4.8, 5.3)	-3.6 (-4.2, -3.1)	<.0001
71	6104	Schools, Churches and Day Care - All Other Staff	2,912	70	19%	25%	11.5 (9.9, 13.0)	-3.5 (-4.9, -2.2)	<.0001
72	607	Household Appliance Installation, Service and Repair	795	50	21%	34%	13.1 (11.0, 15.2)	-4.1 (-5.9, -2.3)	<.0001
73	2906	*Pattern or Model Manufacturing; Wood Instrument Mfg.	53	17	22%	36%	26.1 (18.9, 33.3)	No significant change	0.4919
74	2203	Laundries - Commercial	23	24	29%	45%	19.1 (14.8, 23.5)	No significant change	0.0662
75	7118	Temporary Help - Construction	113	24	14%	17%	20.2 (15.5, 24.8)	-5.8 (-8.8, -2.7)	0.0003
76	6403	Convenience Grocery Stores - No Gas	2,165	112	24%	41%	7.7 (6.9, 8.5)	-3.3 (-4.8, -1.7)	<.0001
77	514	Garage Door Installation	311	8	14%	28%	36.7 (22.0, 51.3)	-7.4 (-11.1, -3.5)	0.0003
78	3708	Textile Good Manufacturing, N.O.C.	75	25	28%	50%	17.6 (13.6, 21.6)	-4.7 (-7.4, -1.8)	0.0016
79	6109	Physicians & Medical Clinics	9,102	238	12%	26%	2.9 (2.7, 3.1)	-5.9 (-6.6, -5.1)	<.0001
80	6602	Janitorial Service	3,113	106	15%	19%	7.8 (6.9, 8.6)	-4.8 (-5.9, -3.6)	<.0001
81	4906	Colleges & Universities	294	199	18%	26%	2.8 (2.6, 3.0)	-5.8 (-7.0, -4.7)	<.0001
82	6107	Veterinary Services	648	70	5%	18%	8.9 (7.7, 10.2)	No significant change	0.9047
83	3105	Concrete Products Manufacturing	64	22	17%	40%	18.8 (14.3, 23.4)	-3.2 (-5.8, -0.4)	0.0239
84	606	Vending Machine Installation, Service and Repair	149	10	27%	29%	27.1 (17.2, 36.9)	-3.1 (-5.5, -0.6)	0.0165
85	2004	Iron and Steel Merchants	58	23	18%	30%	18.4 (14.1, 22.8)	No significant change	0.1279
86	6103	Schools, Churches and Day Care - Prof./Clerical Staff	7,055	187	15%	21%	3.6 (3.3, 3.9)	-4.5 (-5.6, -3.5)	<.0001

PI rank	Risk class	Risk class description	Annual average number of employers in risk class, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
87	7308	Pet Grooming/Boarding Services/Animal Shelters	649	41	9%	19%	12.5 (10.3, 14.7)	-7.2 (-9.1, -5.2)	<.0001
88	3104	Stone Cutting and Monument Dealers	161	10	20%	31%	25.1 (16.2, 33.9)	-4.0 (-7.3, -0.5)	0.0235
89	106	Tree services	534	7	11%	11%	26.5 (15.4, 37.5)	-12.9 (-24.1, -0.1)	0.0485
90	6505	Special Work Experience Programs	41	14	21%	32%	21.4 (15.0, 27.8)	No significant change	0.4865
91	101	Excavation and Grading, N.O.C.	1,837	66	17%	21%	8.5 (7.3, 9.7)	-5.2 (-6.5, -3.9)	<.0001
92	6409	Dealers: Service/repair garages, machinery, equipment N.O.C.	509	50	14%	21%	9.8 (8.3, 11.4)	-6.9 (-8.4, -5.4)	<.0001
93	6908	Paper Products Manufacturing	27	19	27%	38%	17.1 (12.6, 21.6)	No significant change	0.1179
94	7201	*State Patient or Health Care Personnel, N.O.C.	<5	39	15%	25%	11.4 (9.3, 13.5)	-4.8 (-6.8, -2.8)	<.0001
95	107	Utility Line & Pipelaying Const., Underground N.O.C.	636	39	16%	36%	11.0 (9.0, 13.0)	-6.1 (-7.7, -4.5)	<.0001
96	5208	Iron Works - Shop	252	29	11%	17%	13.5 (10.6, 16.3)	-4.1 (-6.4, -1.8)	0.0007
97	7122	Temporary Help - Laborers For Manufacturing	82	23	19%	20%	15.1 (11.5, 18.7)	-7.1 (-11.1, -3.0)	0.001
98	3407	Gas or Oil Dealers	176	32	23%	22%	12.3 (9.9, 14.8)	-4.9 (-6.9, -2.9)	<.0001
99	512	Insulation Installation and Asbestos Abatement Work	540	29	13%	21%	12.9 (10.2, 15.6)	-4.1 (-6.2, -1.9)	0.0003
100	3511	*Fiberglass Products Manufacturing, N.O.C.	56	6	15%	30%	22.3 (12.0, 32.6)	-4.5 (-8.4, -0.6)	0.0255
101	6305	Clothing and Shoe Stores	1,114	72	20%	29%	5.4 (4.7, 6.1)	-3.0 (-4.4, -1.6)	<.0001
102	3101	Redi-Mix Concrete Dealers	52	6	21%	19%	18.8 (10.3, 27.2)	-3.7 (-6.5, -0.8)	0.0114
103	4404	Cold Storage Warehouse	34	21	24%	33%	14.4 (10.9, 18.0)	-5.7 (-8.2, -3.1)	<.0001
104	4904	Clerical Office, N.O.C.	34,881	110	20%	26%	0.5 (0.4, 0.5)	-11.2 (-12.4, -9.9)	<.0001
105	3414	Boat Dealers, Marinas and Boat Houses	319	13	20%	24%	16.1 (11.0, 21.1)	-3.4 (-6.1, -0.6)	0.0188
106	1002	Sawmills and Automated Shake and Shingle Mills	56	26	18%	25%	12.7 (9.9, 15.5)	-5.7 (-8.1, -3.3)	<.0001
107	603	Machinery Installation, Service and Repair	701	36	16%	25%	8.6 (7.0, 10.3)	-5.0 (-7.2, -2.7)	<.0001
108	5209	Metal Goods Manufacturing, N.O.C. - 9 Gauge or More	126	15	12%	29%	14.4 (10.3, 18.6)	-4.6 (-6.9, -2.2)	0.0002
109	4907	*Inmates - Prison Industries	9	18	24%	19%	14.0 (10.3, 17.7)	14.8 (8.8, 21.1)	<.0001

PI rank	Risk class	Risk class description	Annual average number of employers in risk class, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
110	3909	Catering Services	348	29	17%	29%	10.5 (8.3, 12.7)	-3.7 (-6.1, -1.3)	0.0031
111	3412	Automobile Body Repair Centers Repair	660	36	12%	19%	8.5 (6.9, 10.2)	-2.8 (-5.1, -0.4)	0.0204
112	4808	Diversified Field Crops	1,842	41	14%	16%	7.6 (6.2, 8.9)	No significant change	0.0521
113	4802	Vegetable Farms - Machine Harvest	579	45	12%	17%	7.0 (5.9, 8.2)	No significant change	0.5
114	6909	Medical and Testing Labs/Blood Banks	511	53	19%	32%	5.1 (4.3, 5.9)	-4.2 (-6.0, -2.4)	<.0001
115	3701	Chemical Mixing and Manufacturing	327	40	22%	28%	7.5 (6.2, 8.9)	-6.1 (-7.9, -4.3)	<.0001
116	6105	Hospitals, N.O.C.	29	17	15%	24%	13.6 (9.8, 17.4)	No significant change	0.0543
117	502	Floor Covering Installation	1,784	24	16%	27%	11.9 (9.2, 14.6)	-6.6 (-9.2, -3.9)	<.0001
118	4101	Printing	361	29	26%	38%	10.2 (8.0, 12.3)	-3.7 (-5.9, -1.4)	0.0016
119	6709	Sheltered Workshops	43	30	20%	24%	9.0 (7.1, 10.8)	-5.3 (-7.1, -3.5)	<.0001
120	7301	Dairy Farms	294	34	10%	16%	7.9 (6.4, 9.5)	No significant change	0.5557
121	6303	Sales Personnel - Outside, N.O.C.	14,159	68	14%	16%	1.2 (1.0, 1.4)	-6.6 (-8.1, -5.1)	<.0001
122	5109	Heavy Machinery Manufacturing	145	14	16%	19%	13.8 (9.6, 18.0)	-3.7 (-6.2, -1.2)	0.0037
123	4107	Business Machines-Installation, Service and Repair	930	37	28%	32%	7.1 (5.7, 8.4)	-2.9 (-4.8, -1.0)	0.0032
124	6801	*Scheduled Airlines - Flight Crew	33	17	31%	35%	13.1 (9.5, 16.7)	-20.3 (-25.3, -14.9)	<.0001
125	3802	Garments and Handbag Manufacturing	481	29	27%	35%	8.9 (7.1, 10.8)	-2.9 (-5.1, -0.7)	0.0116
126	2401	Pulp and Paper Goods Manufacturing, N.O.C.	42	33	24%	33%	7.8 (6.3, 9.3)	-6.8 (-9.1, -4.5)	<.0001
127	5301	Accounting, Law and Service Companies	15,643	67	16%	28%	0.8 (0.7, 0.9)	-7.6 (-8.8, -6.3)	<.0001
128	3603	Electroplating and Detinning, N.O.C.	140	21	20%	39%	12.4 (9.4, 15.5)	-7.2 (-9.8, -4.5)	<.0001
129	4809	Greenhouses	534	34	21%	35%	7.2 (5.8, 8.6)	-5.6 (-8.6, -2.6)	0.0004
130	521	Painting: Buildings - Interior Work	3,448	38	18%	43%	6.4 (5.2, 7.6)	No significant change	0.6283
131	3410	Convenience Grocery Store - with Self Service Gas	1,273	44	18%	31%	4.7 (3.9, 5.5)	-5.8 (-7.5, -4.0)	<.0001
132	6512	*Home care services/consumer directed employer program	<5	45	35%	41%	1.7 (1.4, 2.0)	-5.3 (-7.2, -3.4)	<.0001
133	2101	Grain, Feed and Flour Mills	127	14	16%	15%	12.6 (8.8, 16.5)	-5.3 (-7.9, -2.5)	0.0002
134	3602	Electronic Products and Jewelry Mfg./Dental Labs	828	38	20%	39%	3.7 (3.0, 4.4)	-5.9 (-7.7, -4.0)	<.0001

PI rank	Risk class	Risk class description	Annual average number of employers in risk class, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
135	4902	State Government - Office and Admin. Employees	109	44	22%	32%	1.8 (1.5, 2.2)	-10.3 (-12.2, -8.4)	<.0001
136	108	Sewer and Septic System Construction	637	15	17%	24%	11.5 (8.1, 14.8)	-4.0 (-6.4, -1.5)	0.0015
137	112	Sand and Gravel Production Including Dealers	145	7	17%	30%	13.3 (7.5, 19.1)	No significant change	0.1093
138	5206	Construction or Logging Contractors - Permanent Yard	2,727	33	13%	25%	5.8 (4.6, 6.9)	-4.1 (-6.3, -1.9)	0.0003
139	1507	Waterworks Operations, Repair and Maintenance	279	13	15%	21%	12.1 (8.3, 15.8)	-4.5 (-7.4, -1.5)	0.0031
140	2106	Fertilizer Dealer	87	6	16%	26%	13.6 (7.3, 19.8)	-4.1 (-7.1, -1.1)	0.0085
141	608	Telephone and Electrical Alarm System Installation	630	29	17%	18%	6.9 (5.5, 8.4)	-5.6 (-7.7, -3.4)	<.0001
142	4810	Vegetable Farms - Hand Harvest	484	24	21%	33%	8.4 (6.4, 10.3)	No significant change	0.4849
143	6905	County and City Law Enforcement Officers	182	27	6%	8%	6.9 (5.4, 8.4)	-4.3 (-7.0, -1.6)	0.0022
144	3406	Gas Stations-Full Service, Car Washes and Detailers	569	28	13%	20%	6.2 (4.9, 7.5)	-4.4 (-6.8, -2.0)	0.0003
145	7103	*State Government - Law Enforcement Officers	11	30	8%	12%	4.9 (3.8, 5.9)	-6.5 (-9.0, -4.0)	<.0001
146	1301	Electric Power Plants	60	12	18%	27%	10.1 (6.8, 13.3)	-6.6 (-8.9, -4.2)	<.0001
147	1407	Bus Companies - Private	91	7	20%	23%	11.3 (6.3, 16.2)	No significant change	0.0732
148	3901	Bakeries - Retail	516	25	15%	23%	6.2 (4.8, 7.6)	-3.0 (-5.7, -0.3)	0.0301
149	7111	Temporary Help - Health Care	264	17	19%	39%	8.1 (5.8, 10.3)	-7.9 (-10.0, -5.7)	<.0001
150	4813	Vineyards	415	24	11%	10%	6.2 (4.7, 7.6)	4.7 (1.5, 8.1)	0.0038
151	6501	Barbers, Beauty Salons and Tanning Parlors	2,636	28	17%	43%	2.5 (2.0, 3.1)	-7.7 (-9.8, -5.5)	<.0001
152	6205	Fraternal Clubs	545	19	16%	26%	6.1 (4.5, 7.7)	-4.4 (-7.0, -1.7)	0.0016
153	5300	State Government - Admin. Field Personnel	86	25	13%	17%	1.9 (1.5, 2.3)	-6.7 (-9.0, -4.3)	<.0001
154	6204	Health Clubs and Exercise Facilities	1,221	24	15%	23%	3.6 (2.8, 4.5)	-4.3 (-6.7, -1.8)	0.0006
155	4504	Movie and Live Theaters	182	15	15%	30%	6.6 (4.6, 8.5)	-3.4 (-5.9, -0.8)	0.0099
156	6209	Campgrounds	388	6	10%	18%	8.2 (4.4, 12.0)	-4.4 (-7.5, -1.3)	0.0065
157	7200	*State Acute Health Care Facilities w/Safe Patient Handling	<5	6	6%	7%	8.1 (4.5, 11.7)	-9.1 (-12.3, -5.8)	<.0001

PI rank	Risk class	Risk class description	Annual average number of employers in risk class, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
158	6601	Detective Agencies	345	23	9%	10%	2.5 (1.9, 3.0)	-5.4 (-7.9, -2.9)	<.0001
159	5302	Software Design & Engineering and Internet Service Providers	9,409	24	14%	18%	0.2 (0.2, 0.3)	-11.4 (-13.8, -9.0)	<.0001
160	6502	Banks and Financial Institutions	1,811	24	14%	27%	0.5 (0.4, 0.7)	-11.5 (-13.1, -9.8)	<.0001
161	1007	Grading, Inspection Bureaus/Forestry Services, N.O.C.	647	7	13%	34%	6.8 (3.8, 9.8)	-5.9 (-9.8, -1.7)	0.0059
162	6203	YMCA, YWCA, Boys and Girls Clubs	87	7	11%	15%	5.8 (3.3, 8.3)	-6.3 (-9.0, -3.4)	<.0001
163	6607	Card Rooms, Bingo Parlors and Recreational Centers	231	7	16%	34%	4.9 (2.8, 6.9)	No significant change	0.0725
164	6411	Retail stores -small scale merchandise	1,114	9	23%	29%	3.7 (2.3, 5.0)	No significant change	0.6202
165	4901	Consulting Engineers and Architectural Services	2,374	14	15%	16%	1.0 (0.7, 1.3)	-9.2 (-11.4, -7.1)	<.0001
--	--	All combined	--	12,816	20%	30%	6.5 (6.4, 6.5)	-4.2 (-4.8, -3.7)	<.0001

An Excel version of this table can be downloaded from the following webpage: [SHARP webpage for WMSD claim tracking publications](#).

*50% or more of the WMSD claims in this group are contributed by a single employer.

The top three State Fund risk classes to prioritize for prevention of wage replacement or disability WMSD claims are as follows:

- Warehouses, N.O.C., Grocery Dist. & Recycle Centers
- County and City Fire Fighters – Salaried
- Parcel and Package Delivery Services

State Fund risk classes with statistically significant increasing WMSD wage replacement or disability claim rates:

- Warehouses, N.O.C., Grocery Dist. & Recycle Centers

Table 7. Washington workers’ compensation claim rates per 1,000 FTE for WMSDs, State Fund wage replacement or disability claims by Washington risk class and prevention index (PI) ranking, 2006–2019.

PI rank	Risk class	Risk class description	Annual average number of employers in risk class, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
1	2102	*Warehouses, N.O.C., Grocery Dist, & Recycle Centers	447	326	53%	53%	31.8 (29.8, 33.8)	3.8 (0.7, 7.1)	0.0168
2	6904	County and City Fire Fighters - Salaried	221	105	37%	21%	17.7 (15.7, 19.7)	No significant change	0.0897
3	1101	Parcel and Package Delivery Service	1,660	159	31%	31%	13.5 (12.3, 14.8)	-2.7 (-3.7, -1.6)	<.0001
4	6802	*Scheduled Airlines - Flight Crew	33	83	42%	41%	22.9 (20.1, 25.8)	-16.9 (-21.8, -11.7)	<.0001
5	516	Carpentry, N.O.C.	5,974	119	27%	26%	12.2 (10.9, 13.4)	-4.1 (-5.6, -2.5)	<.0001
6	7201	*State Patient or Health Care Personnel, N.O.C.	<5	71	27%	22%	21.0 (18.2, 23.9)	-4.9 (-7.1, -2.7)	<.0001
7	1102	Trucking, N.O.C.	1,742	119	25%	22%	11.6 (10.4, 12.9)	-4.6 (-5.9, -3.3)	<.0001
8	6108	Nursing Homes	140	165	53%	51%	9.7 (8.9, 10.6)	-6.6 (-7.8, -5.4)	<.0001
9	510	Wood Frame Building Construction	4,168	103	19%	17%	12.1 (10.8, 13.5)	-5.8 (-7.7, -3.8)	<.0001
10	507	Roofing Work - Construction and Repair	1,696	59	22%	17%	16.1 (13.7, 18.4)	-6.4 (-8.6, -4.1)	<.0001
11	301	Landscape Construction and Renovation	2,024	68	35%	38%	13.4 (11.5, 15.2)	-2.6 (-4.1, -1.1)	0.0007
12	1501	County and Tribal Councils-All Other Employees, N.O.C.	472	78	36%	32%	11.4 (9.9, 12.8)	-3.9 (-5.4, -2.4)	<.0001
13	6907	Moving and Storage Companies	260	43	40%	37%	24.0 (19.8, 28.1)	-5.7 (-7.4, -3.9)	<.0001
14	6801	*Scheduled Airlines - Flight Crew	33	56	42%	41%	15.4 (13.1, 17.7)	-16.9 (-21.8, -11.7)	<.0001
15	2105	Beer, Wine and Soft Drink Distributors	85	54	47%	54%	15.5 (13.1, 17.9)	-3.0 (-5.6, -0.3)	0.0286

PI rank	Risk class	Risk class description	Annual average number of employers in risk class, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
16	5307	State Government - All Other Employees, N.O.C.	47	102	31%	34%	9.2 (8.2, 10.3)	-4.9 (-6.5, -3.4)	<.0001
17	7114	Temporary Help - Assembly	107	41	38%	43%	21.8 (18.0, 25.7)	No significant change	0.5037
18	4305	Solid Waste Collection Services/Landfill Operations	233	44	38%	40%	18.4 (15.2, 21.5)	-4.6 (-6.5, -2.7)	<.0001
19	307	HVAC Systems, Installation, Service and Repair	1,091	76	29%	38%	9.6 (8.3, 10.8)	-5.8 (-7.1, -4.5)	<.0001
20	607	Household Appliance Installation, Service and Repair	795	52	44%	46%	13.7 (11.5, 15.8)	-1.9 (-3.6, -0.2)	0.0273
21	6509	Boarding Homes and Retirement Centers	1,965	202	46%	48%	7.4 (6.8, 8.0)	-5.9 (-6.7, -5.0)	<.0001
22	6402	Supermarkets	301	103	44%	48%	7.8 (6.9, 8.6)	-3.8 (-5.1, -2.4)	<.0001
23	513	Interior Finish Carpentry	4,022	58	33%	31%	9.6 (8.1, 11.0)	-3.5 (-5.0, -2.0)	<.0001
24	1405	Ambulance Service	26	29	62%	55%	23.8 (18.8, 28.8)	-6.0 (-8.9, -3.1)	<.0001
25	302	Masonry Construction	591	30	37%	22%	20.9 (16.6, 25.2)	-4.0 (-6.3, -1.6)	0.0011
26	518	Non Wood Frame Building Construction	799	75	28%	34%	8.6 (7.4, 9.7)	-6.5 (-7.8, -5.3)	<.0001
27	6306	Furniture Stores	733	70	45%	49%	8.5 (7.4, 9.7)	No significant change	0.0719
28	6511	Chore Services	467	111	40%	40%	6.7 (6.0, 7.4)	-4.3 (-6.8, -1.7)	0.0015
29	540	Wallboard Installation - Discounted Rate	142	24	39%	55%	27.0 (20.8, 33.2)	-4.9 (-6.9, -2.9)	<.0001
30	4910	Property and Building Management Services	4,052	126	34%	39%	6.3 (5.7, 6.9)	-4.3 (-5.5, -3.1)	<.0001
31	511	Glass Installation: Buildings	488	29	35%	39%	16.8 (13.3, 20.3)	-5.3 (-7.6, -3.0)	<.0001
32	7108	Temporary Help - Warehousing	85	40	40%	37%	11.5 (9.4, 13.5)	No significant change	0.4504
33	502	Floor Covering Installation	1,784	31	48%	55%	15.0 (11.9, 18.1)	-4.1 (-6.2, -1.9)	0.0003
34	6602	Janitorial Service	3,113	95	28%	29%	7.0 (6.2, 7.8)	-4.9 (-6.2, -3.6)	<.0001
35	7118	Temporary Help - Construction	113	26	31%	37%	21.6 (16.8, 26.4)	-4.0 (-6.3, -1.6)	0.0009
36	3411	Automobile Dealers, Rentals and Service Shops	2,435	121	30%	37%	5.9 (5.3, 6.5)	-5.5 (-6.5, -4.6)	<.0001
37	4905	Motels and Hotels	1,100	99	35%	38%	6.7 (5.9, 7.4)	-4.3 (-6.3, -2.2)	<.0001
38	3304	Meat, Fish and Poultry Dealers - Wholesale	176	40	32%	35%	9.6 (7.9, 11.3)	-2.4 (-4.3, -0.4)	0.0168

PI rank	Risk class	Risk class description	Annual average number of employers in risk class, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
39	217	Concrete Work - Foundations and Sidewalks	2,169	40	28%	39%	9.5 (7.8, 11.2)	-5.4 (-7.9, -2.8)	<.0001
40	2104	Fruit & Vegetable Packing - Fresh	179	102	33%	29%	6.2 (5.5, 6.9)	-1.7 (-3.3, -0.1)	0.0417
41	306	Plumbing	1,524	65	28%	33%	7.5 (6.4, 8.5)	-7.2 (-8.6, -5.7)	<.0001
42	3404	Metal Goods Manufacturing, N.O.C. - Under 9 Gauge	687	55	35%	54%	7.9 (6.7, 9.1)	-3.7 (-5.2, -2.1)	<.0001
43	2903	Wood Products Manufacturing, N.O.C.	424	46	25%	30%	8.2 (6.8, 9.5)	-4.8 (-6.6, -3.0)	<.0001
44	606	Vending Machine Installation, Service and Repair	149	9	59%	62%	24.3 (14.9, 33.6)	No significant change	0.3564
45	6409	Dealers: Service/repair garages, machinery, equipment N.O.C.	509	42	31%	33%	8.2 (6.8, 9.6)	-5.8 (-7.6, -3.9)	<.0001
46	601	Electrical Wiring: Buildings and Structures	1,915	81	30%	37%	5.7 (5.0, 6.4)	-6.2 (-7.4, -4.9)	<.0001
47	2907	Cabinet and Countertop Manufacturing - Wood	474	37	33%	37%	8.6 (7.0, 10.2)	-5.6 (-7.4, -3.8)	<.0001
48	7117	Temporary Help - Machine Operation	129	13	29%	23%	19.5 (13.4, 25.5)	-8.3 (-10.4, -6.2)	<.0001
49	101	Excavation and Grading, N.O.C.	1,837	54	23%	29%	6.9 (5.9, 8.0)	-6.8 (-8.4, -5.1)	<.0001
50	6407	Wholesale Stores, N.O.C.	1,323	59	43%	47%	6.4 (5.5, 7.4)	-3.0 (-4.9, -1.1)	0.0018
51	3402	Machine Shops and Machinery Mfg., N.O.C.	1,245	66	30%	36%	6.0 (5.2, 6.9)	-5.7 (-7.0, -4.4)	<.0001
52	3905	Restaurants and Taverns	11,711	299	22%	29%	2.1 (1.9, 2.2)	-6.3 (-7.2, -5.4)	<.0001
53	106	Tree services	534	6	18%	10%	24.8 (13.6, 35.9)	-16.2 (-29.3, -0.7)	0.0417
54	7115	Temporary Help - Food Processing	40	13	38%	51%	15.8 (10.9, 20.7)	No significant change	0.9034
55	3902	Fruit/Vegetable Canneries/Food Product Mfg., N.O.C.	342	64	27%	30%	5.8 (5.0, 6.6)	-3.4 (-5.4, -1.3)	0.0014
56	6309	Hardware, Auto Parts and Sporting Good Stores	2,341	86	37%	36%	4.2 (3.7, 4.8)	-3.7 (-5.0, -2.4)	<.0001
57	4906	*Colleges & Universities	294	157	39%	38%	2.2 (2.0, 2.4)	-2.9 (-4.5, -1.3)	0.0004
58	6405	Tire Sales and Service Centers	281	24	37%	60%	9.9 (7.6, 12.2)	No significant change	0.1214
59	2009	Lumber Yards and Building Material Dealers	663	52	34%	35%	6.7 (5.6, 7.7)	-4.5 (-6.0, -2.9)	<.0001
60	308	Lawn Care Maintenance	2,557	48	24%	21%	6.7 (5.6, 7.8)	-5.1 (-6.9, -3.2)	<.0001
61	6504	Charitable and Welfare Stores	90	25	42%	57%	9.5 (7.3, 11.6)	-4.7 (-7.3, -1.9)	0.0009

PI rank	Risk class	Risk class description	Annual average number of employers in risk class, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
62	3906	Bakeries - Wholesale, N.O.C.	190	28	38%	42%	9.0 (7.1, 11.0)	-2.5 (-4.8, -0.2)	0.0372
63	6406	Retail Stores, N.O.C.	2,812	97	43%	47%	3.8 (3.3, 4.2)	-2.9 (-4.5, -1.2)	0.0006
64	6109	Physicians & Medical Clinics	9,102	128	38%	42%	1.6 (1.4, 1.7)	-6.6 (-8.1, -5.1)	<.0001
65	4805	Nurseries	433	36	36%	41%	7.6 (6.2, 9.1)	No significant change	0.1973
66	6120	Acute Care Hospitals with Safe Patient Handling	14	26	56%	55%	9.0 (7.0, 11.0)	-4.6 (-7.5, -1.6)	0.0032
67	803	Cities - All Other Employees, N.O.C.	270	38	29%	34%	7.0 (5.7, 8.3)	-4.9 (-7.1, -2.6)	<.0001
68	1108	Glass Merchants	215	13	36%	23%	11.2 (7.8, 14.7)	-3.6 (-6.7, -0.3)	0.033
69	3412	Automobile Body Repair Centers Repair	660	31	37%	55%	7.5 (6.0, 9.0)	-2.2 (-4.2, -0.2)	0.0338
70	504	Painting: Building and Structures - Exterior Work	2,636	23	20%	27%	9.2 (7.1, 11.4)	-5.0 (-7.6, -2.3)	0.0004
71	6403	*Convenience Grocery Stores - No Gas	2,165	62	40%	45%	4.2 (3.6, 4.9)	-4.4 (-6.2, -2.5)	<.0001
72	2203	Laundries - Commercial	23	6	46%	46%	14.3 (7.9, 20.7)	No significant change	0.2123
73	107	Utility Line & Pipelaying Const., Underground N.O.C.	636	29	31%	44%	8.0 (6.3, 9.7)	-7.2 (-9.3, -5.1)	<.0001
74	3510	Plastic Goods Mfg., N.O.C.	207	45	41%	30%	6.2 (5.2, 7.2)	-3.4 (-5.1, -1.7)	0.0001
75	108	Sewer and Septic System Construction	637	13	28%	41%	10.2 (7.0, 13.4)	-7.0 (-9.5, -4.4)	<.0001
76	4803	Orchards	1,772	82	11%	12%	2.4 (2.1, 2.7)	No significant change	0.3062
77	3405	Aircraft Parts Manufacturing, N.O.C.	363	54	43%	53%	5.0 (4.2, 5.8)	-4.6 (-6.3, -2.8)	<.0001
78	512	Insulation Installation and Asbestos Abatement Work	540	21	24%	27%	9.1 (6.8, 11.3)	-5.2 (-7.7, -2.7)	<.0001
79	2002	Freight Handling Services	262	23	30%	42%	8.8 (6.7, 10.9)	-5.9 (-8.0, -3.8)	<.0001
80	1407	Bus Companies - Private	91	7	32%	25%	10.5 (5.9, 15.1)	-3.2 (-6.0, -0.3)	0.0321
81	6104	Schools, Churches and Day Care - All Other Staff	2,912	38	34%	46%	6.3 (5.1, 7.4)	-4.2 (-6.2, -2.3)	<.0001
82	6110	Home Health Services and Nursing Care, N.O.C.	161	27	39%	30%	7.5 (5.9, 9.2)	-7.7 (-9.6, -5.7)	<.0001
83	1301	Electric Power Plants	60	6	30%	44%	10.2 (5.5, 14.8)	-5.7 (-8.6, -2.8)	0.0002
84	5208	Iron Works - Shop	252	7	22%	33%	9.0 (5.1, 13.0)	-9.1 (-11.6, -6.4)	<.0001
85	7103	*State Government - Law Enforcement Officers	11	32	14%	16%	5.2 (4.1, 6.2)	-4.4 (-7.3, -1.5)	0.0032

PI rank	Risk class	Risk class description	Annual average number of employers in risk class, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
86	3512	Plastic - Cutting, Bending and Milling	93	6	37%	32%	9.4 (5.2, 13.6)	No significant change	0.4048
87	7200	*State Acute Health Care Facilities w/Safe Patient Handling	<5	13	9%	9%	8.4 (5.8, 11.1)	-7.2 (-9.8, -4.6)	<.0001
88	3407	Gas or Oil Dealers	176	14	27%	36%	7.8 (5.4, 10.2)	-5.1 (-7.8, -2.3)	0.0004
89	6103	Schools, Churches and Day Care - Prof./Clerical Staff	7,055	52	19%	16%	1.0 (0.8, 1.2)	-6.1 (-7.6, -4.5)	<.0001
90	7111	Temporary Help - Health Care	264	20	47%	44%	6.5 (4.8, 8.2)	-6.3 (-9.0, -3.6)	<.0001
91	6804	Nonscheduled Airlines - Ground Crew	292	26	36%	33%	5.4 (4.2, 6.6)	-3.3 (-6.0, -0.6)	0.0173
92	4904	Clerical Office, N.O.C.	34,881	50	31%	31%	0.2 (0.2, 0.2)	-11.4 (-12.6, -10.2)	<.0001
93	1002	Sawmills and Automated Shake and Shingle Mills	56	6	28%	40%	8.7 (4.7, 12.8)	-3.9 (-6.7, -1.0)	0.0092
94	603	Machinery Installation, Service and Repair	701	23	27%	32%	5.6 (4.3, 6.9)	-5.4 (-7.7, -3.1)	<.0001
95	521	Painting: Buildings - Interior Work	3,448	27	22%	18%	4.5 (3.5, 5.5)	No significant change	0.0618
96	6501	Barbers, Beauty Salons and Tanning Parlors	2,636	30	50%	75%	2.7 (2.1, 3.3)	-8.6 (-10.7, -6.5)	<.0001
97	6512	*Home care services/consumer directed employer program	<5	36	52%	48%	1.3 (1.1, 1.6)	-9.0 (-11.0, -7.0)	<.0001
98	4902	State Government - Office and Admin. Employees	109	31	38%	32%	1.3 (1.0, 1.6)	-9.0 (-11.4, -6.6)	<.0001
99	3909	Catering Services	348	6	29%	49%	6.9 (3.7, 10.2)	-7.8 (-11.1, -4.4)	<.0001
100	6305	Clothing and Shoe Stores	1,114	27	34%	33%	2.0 (1.6, 2.5)	-6.0 (-8.1, -3.9)	<.0001
101	5301	Accounting, Law and Service Companies	15,643	30	27%	29%	0.3 (0.3, 0.4)	-9.6 (-11.3, -7.8)	<.0001
102	4802	Vegetable Farms - Machine Harvest	579	17	19%	24%	4.0 (2.9, 5.1)	No significant change	0.2277
103	3701	Chemical Mixing and Manufacturing	327	14	34%	27%	4.2 (2.9, 5.4)	-4.3 (-7.1, -1.4)	0.0044
104	5206	Construction or Logging Contractors - Permanent Yard	2,727	15	25%	25%	4.1 (2.9, 5.3)	-4.6 (-7.1, -2.1)	0.0004
105	7308	Pet Grooming/Boarding Services/Animal Shelters	649	6	20%	23%	5.7 (3.2, 8.3)	-9.2 (-11.8, -6.5)	<.0001
106	6107	Veterinary Services	648	17	25%	35%	3.3 (2.4, 4.2)	-3.2 (-6.1, -0.1)	0.0448
107	3410	Convenience Grocery Store - with Self Service Gas	1,273	22	28%	21%	2.3 (1.7, 2.9)	-8.4 (-10.7, -6.1)	<.0001
108	4813	Vineyards	415	7	24%	32%	5.0 (2.8, 7.2)	No significant change	0.9727

PI rank	Risk class	Risk class description	Annual average number of employers in risk class, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
109	608	Telephone and Electrical Alarm System Installation	630	7	27%	20%	4.8 (2.7, 6.9)	-7.0 (-9.6, -4.3)	<.0001
110	3602	Electronic Products and Jewelry Mfg./Dental Labs	828	16	42%	37%	2.4 (1.7, 3.0)	-6.4 (-8.6, -4.1)	<.0001
111	4808	Diversified Field Crops	1,842	7	17%	26%	4.0 (2.3, 5.7)	-5.3 (-7.9, -2.6)	0.0001
112	6303	Sales Personnel - Outside, N.O.C.	14,159	21	17%	21%	0.4 (0.3, 0.5)	-10.0 (-12.8, -7.1)	<.0001
113	6709	Sheltered Workshops	43	6	32%	32%	5.4 (2.9, 7.8)	No significant change	0.0674
114	7301	Dairy Farms	294	6	14%	12%	4.2 (2.3, 6.1)	No significant change	0.751
115	4107	Business Machines-Installation, Service and Repair	930	6	42%	42%	3.4 (1.8, 5.0)	No significant change	0.1317
116	4809	Greenhouses	534	6	35%	29%	3.9 (2.1, 5.7)	-9.2 (-12.2, -6.1)	<.0001
117	6909	Medical and Testing Labs/Blood Banks	511	6	32%	26%	1.8 (1.0, 2.6)	-7.5 (-9.8, -5.1)	<.0001
118	6204	Health Clubs and Exercise Facilities	1,221	6	31%	57%	2.7 (1.5, 4.0)	No significant change	0.0523
--	--	All combined	--	7,148	34%	36%	3.6 (3.6, 3.6)	-5.2 (-5.7, -4.8)	<.0001

An Excel version of this table can be downloaded from the following webpage: [SHARP webpage for WMSD claim tracking publications](#).

*50% or more of the WMSD claims in this group are contributed by a single employer.

The top three self-insured risk classes to prioritize for prevention of wage replacement or disability WMSD claims are as follows:

- Scheduled Airlines – Flight Crew
- Parcel and Package Delivery Services
- County and City Fire Fighters - Salaried

Self-insured risk classes with statistically significant increasing WMSD wage replacement or disability claim rates:

- Freight Handling Services
- Home Health Services and Nursing Care, N.O.C.
- Meat Products Mfg./Slaughter and Packing Houses
- Fruit/Vegetable Canneries/Food Product Mfg., N.O.C.
- Motels and Hotels
- Temporary Help – Assembly
- Temporary Help – Warehousing
- Meat, Fish, and Poultry Dealers – Wholesale
- Clerical Office, N.O.C.
- Orchards

Table 8. Washington workers’ compensation claim rates per 1,000 FTE for WMSDs, self-insured wage replacement or disability claims by Washington risk class, 2006–2019.

PI rank	Risk class	Risk class description	Annual average number of employers in risk class, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
1	6802	*Scheduled Airlines - Flight Crew	<5	298	44%	60.0 (56.1, 64.0)	No significant change	0.8073
2	1101	Parcel and Package Delivery Service	30	261	42%	28.6 (26.6, 30.7)	No significant change	0.0658
3	6904	*County and City Fire Fighters - Salaried	17	106	34%	32.7 (29.1, 36.3)	-2.0 (-3.4, -0.7)	0.0029
4	6402	Supermarkets	6	453	43%	19.6 (18.6, 20.7)	No significant change	0.0686
5	2002	*Freight Handling Services	5	64	49%	32.5 (27.9, 37.1)	6.7 (1.2, 12.5)	0.0164
6	1501	*County and Tribal Councils-All Other Employees, N.O.C.	15	230	32%	19.6 (18.1, 21.1)	No significant change	0.2531
7	803	Cities - All Other Employees, N.O.C.	18	145	36%	17.8 (16.1, 19.5)	-3.3 (-4.7, -1.9)	<.0001

PI rank	Risk class	Risk class description	Annual average number of employers in risk class, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
8	6407	*Wholesale Stores, N.O.C.	9	180	50%	17.5 (16.0, 18.9)	No significant change	0.1241
9	6104	Schools, Churches and Day Care - All Other Staff	25	285	33%	16.5 (15.4, 17.6)	-2.5 (-4.0, -1.1)	0.0009
10	1102	Trucking, N.O.C.	30	78	35%	19.8 (17.2, 22.3)	No significant change	0.7572
11	6110	*Home Health Services and Nursing Care, N.O.C.	<5	37	45%	23.0 (18.7, 27.3)	17.3 (4.4, 31.9)	0.0075
12	6801	*Scheduled Airlines - Flight Crew	<5	86	44%	17.3 (15.2, 19.4)	No significant change	0.8073
13	3403	*Aircraft Manufacturing	<5	605	44%	11.1 (10.6, 11.6)	No significant change	0.3869
14	6105	Hospitals, N.O.C.	19	933	50%	11.0 (10.6, 11.4)	-2.8 (-4.4, -1.1)	0.0009
15	7122	*Temporary Help - Laborers For Manufacturing	<5	19	43%	55.9 (41.3, 70.5)	-37.3 (-47.2, -25.5)	<.0001
16	3906	*Bakeries - Wholesale, N.O.C.	<5	32	43%	22.2 (17.7, 26.6)	No significant change	0.0512
17	2105	*Beer, Wine and Soft Drink Distributors	<5	35	49%	19.5 (15.7, 23.2)	-6.7 (-10.8, -2.5)	0.0022
18	4301	*Meat Products Mfg./Slaughter and Packing Houses	<5	40	43%	17.0 (13.9, 20.0)	12.3 (4.7, 20.4)	0.0011
19	3902	Fruit/Vegetable Canners/Food Product Mfg., N.O.C.	12	61	28%	14.6 (12.5, 16.8)	7.6 (3.7, 11.6)	<.0001
20	2009	*Lumber Yards and Building Material Dealers	14	91	43%	11.6 (10.2, 12.9)	No significant change	0.1733
21	1404	*Cabulance and Paratransit	<5	15	35%	22.3 (15.8, 28.8)	-4.5 (-7.1, -1.8)	0.0012
22	6304	*Department Stores	6	116	38%	9.6 (8.6, 10.7)	No significant change	0.1734
23	5301	*Accounting, Law and Service Companies	<5	7	72%	25.7 (14.4, 37.0)	No significant change	0.5783
24	2102	Warehouses, N.O.C., Grocery Dist, & Recycle Centers	22	138	47%	7.4 (6.7, 8.1)	No significant change	0.3395
25	7117	*Temporary Help - Machine Operation	<5	7	34%	32.0 (18.0, 46.0)	No significant change	0.6387
26	4905	*Motels and Hotels	<5	13	39%	21.5 (14.6, 28.3)	34.0 (19.0, 50.9)	<.0001
27	7114	*Temporary Help - Assembly	<5	29	45%	15.3 (12.1, 18.5)	10.3 (4.0, 17.0)	0.0012
28	1002	Sawmills and Automated Shake and Shingle Mills	9	36	28%	11.7 (9.5, 13.8)	-2.6 (-5.0, -0.2)	0.0367
29	7108	*Temporary Help - Warehousing	<5	7	43%	22.5 (12.6, 32.3)	16.5 (8.3, 25.3)	<.0001
30	3304	Meat, Fish and Poultry Dealers - Wholesale	<5	22	52%	15.0 (11.4, 18.6)	7.3 (0.3, 14.9)	0.0417
31	4305	*Solid Waste Collection Services/Landfill Operations	<5	27	37%	14.5 (11.3, 17.7)	No significant change	0.7384
32	1301	Electric Power Plants	10	40	30%	9.9 (8.2, 11.7)	-4.6 (-7.2, -1.9)	0.0009
33	6303	Sales Personnel - Outside, N.O.C.	168	66	46%	5.7 (4.9, 6.5)	No significant change	0.7852

PI rank	Risk class	Risk class description	Annual average number of employers in risk class, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
34	3402	*Machine Shops and Machinery Mfg., N.O.C.	12	15	40%	16.8 (11.9, 21.7)	No significant change	0.1179
35	6108	Nursing Homes	6	27	53%	12.3 (9.6, 14.9)	No significant change	0.3671
36	2104	Fruit & Vegetable Packing - Fresh	9	42	32%	7.9 (6.5, 9.3)	No significant change	0.7232
37	6103	Schools, Churches and Day Care - Prof./Clerical Staff	25	108	11%	1.2 (1.1, 1.4)	-3.4 (-5.1, -1.6)	0.0002
38	1407	*Bus Companies - Private	<5	7	33%	19.3 (10.8, 27.7)	-5.9 (-9.2, -2.4)	0.001
39	6504	*Charitable and Welfare Stores	<5	23	43%	12.4 (9.5, 15.4)	No significant change	0.2501
40	1303	*Telephone Companies - All Other Employees, N.O.C.	<5	6	27%	20.8 (11.2, 30.4)	6.5 (1.6, 11.6)	0.0082
41	6905	County and City Law Enforcement Officers	33	43	12%	6.1 (5.0, 7.1)	-4.0 (-7.0, -1.0)	0.0102
42	4904	Clerical Office, N.O.C.	238	103	42%	0.8 (0.7, 0.9)	4.3 (0.9, 7.8)	0.0132
43	7002	*DOE Contractors Administrative and Professional Employees	<5	43	36%	4.6 (3.8, 5.4)	No significant change	0.067
44	6405	*Tire Sales and Service Centers	<5	17	33%	11.5 (8.3, 14.6)	No significant change	0.1617
45	1405	*Ambulance Service	<5	29	54%	7.9 (6.2, 9.6)	-16.4 (-22.2, -10.1)	<.0001
46	518	Non Wood Frame Building Construction	15	7	32%	12.5 (7.0, 18.0)	No significant change	0.199
47	4803	Orchards	8	31	16%	5.0 (4.0, 6.0)	7.7 (3.3, 12.2)	0.0004
48	2401	Pulp and Paper Goods Manufacturing, N.O.C.	7	13	32%	11.2 (7.7, 14.7)	No significant change	0.4687
49	6109	*Physicians & Medical Clinics	9	35	47%	2.8 (2.3, 3.4)	No significant change	0.8274
50	6602	*Janitorial Service	<5	7	34%	11.4 (6.6, 16.2)	-8.4 (-11.8, -4.9)	<.0001
51	6309	Hardware, Auto Parts and Sporting Good Stores	10	18	39%	3.4 (2.5, 4.3)	No significant change	0.5668
52	3905	*Restaurants and Taverns	9	13	28%	4.4 (3.0, 5.8)	-4.0 (-6.2, -1.6)	0.0009
53	3404	*Metal Goods Manufacturing, N.O.C. - Under 9 Gauge	10	6	44%	7.6 (4.2, 11.0)	No significant change	0.1001
54	3602	Electronic Products and Jewelry Mfg./Dental Labs	9	6	45%	4.9 (2.6, 7.1)	No significant change	0.1174
--	--	All industries combined	--	5,453	38%	7.6 (7.5, 7.8)	-1.6 (-2.6, -0.6)	0.0023

An Excel version of this table can be downloaded from the following webpage: [SHARP webpage for WMSD claim tracking publications](#).

*50% or more of the WMSD claims in this group are contributed by a single employer.

Work-related musculoskeletal disorder (WMSD) claims by NAICS industry sector

The top three State Fund industry sectors to prioritize for prevention of medical aid WMSD claims are as follows:

- Construction
- Manufacturing
- Health Care and Social Assistance

Table 9. Washington workers' compensation claim rates per 1,000 FTE for WMSDs, State Fund medical aid claims by North American Industry Classification System (NAICS) industry sector and prevention index (PI) rank, 2006–2019.

PI rank	NAICS code	NAICS sector description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
1	23	Construction	26,080	1,626	16%	25%	9.7 (9.4, 10.0)	-4.5 (-5.1, -3.8)	<.0001
2	31-33	Manufacturing	6,575	1,427	20%	32%	10.2 (9.9, 10.5)	-3.6 (-4.5, -2.8)	<.0001
3	62	Health Care and Social Assistance	15,209	1,985	23%	35%	7.6 (7.4, 7.8)	-4.6 (-5.2, -4.0)	<.0001
4	11	Agriculture, Forestry, Fishing and Hunting	6,759	904	15%	20%	10.4 (10.0, 10.8)	No significant change	0.1151
5	48-49	Transportation and Warehousing	4,193	639	23%	27%	10.8 (10.3, 11.3)	-4.0 (-4.7, -3.2)	<.0001
6	44-45	Retail Trade	15,033	1,428	22%	33%	7.6 (7.3, 7.8)	-4.0 (-5.0, -3.1)	<.0001
7	42	Wholesale Trade	11,183	830	24%	33%	7.8 (7.5, 8.1)	-4.2 (-4.8, -3.6)	<.0001
8	56	Administrative and Support and Waste Management and Remediation Services	12,586	912	20%	27%	6.0 (5.8, 6.2)	-5.1 (-6.1, -4.0)	<.0001
9	72	Accommodation and Food Services	15,270	954	13%	23%	5.6 (5.4, 5.8)	-3.8 (-4.4, -3.3)	<.0001
10	92	Public Administration	1,009	440	16%	22%	5.6 (5.3, 5.9)	-5.7 (-6.8, -4.6)	<.0001
11	22	Utilities	353	44	19%	23%	7.5 (6.3, 8.8)	-4.6 (-6.2, -2.9)	<.0001
12	53	Real Estate and Rental and Leasing	7,031	302	20%	29%	4.9 (4.6, 5.2)	-3.0 (-4.3, -1.6)	<.0001
13	81	Other Services (except Public Administration)	16,994	393	14%	24%	4.6 (4.3, 4.8)	-4.7 (-5.4, -4.0)	<.0001
14	21	Mining, Quarrying, and Oil and Gas Extraction	155	15	17%	36%	6.9 (4.9, 9.0)	No significant change	0.2534
15	71	Arts, Entertainment, and Recreation	2,940	124	13%	22%	5.1 (4.6, 5.6)	-3.8 (-5.2, -2.3)	<.0001

PI rank	NAICS code	NAICS sector description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
16	61	Educational Services	3,264	194	15%	22%	3.1 (2.8, 3.3)	-5.2 (-6.0, -4.4)	<.0001
17	54	Professional, Scientific, and Technical Services	25,294	288	12%	26%	1.5 (1.4, 1.6)	-5.8 (-6.5, -5.2)	<.0001
18	51	Information	2,322	65	17%	28%	1.4 (1.2, 1.6)	-9.1 (-10.4, -7.7)	<.0001
19	55	Management of Companies and Enterprises	212	14	22%	38%	4.1 (2.9, 5.4)	No significant change	0.6922
20	52	Finance and Insurance	5,131	48	17%	27%	0.7 (0.6, 0.8)	-10.0 (-11.2, -8.8)	<.0001
--	--	All combined	--	12,816	20%	30%	6.5 (6.4, 6.5)	-4.2 (-4.8, -3.7)	<.0001

An Excel version of this table can be downloaded from the following webpage: [SHARP webpage for WMSD claim tracking publications](#).

The top three State Fund industry sectors to prioritize for prevention of wage replacement or disability WMSD claims are as follows:

- Construction
- Transportation and Warehousing
- Administrative and Support and Waste Management and Remediation Services

Table 10. Washington workers' compensation claim rates per 1,000 FTE for WMSDs, State Fund wage replacement or disability claims North American Industry Classification System (NAICS) industry sector and prevention index (PI) rank, 2006–2019.

PI rank	NAICS code	NAICS sector description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
1	23	Construction	26,080	1,086	26%	26%	6.5 (6.3, 6.7)	-5.9 (-6.6, -5.2)	<.0001
2	48-49	Transportation and Warehousing	4,193	637	35%	30%	10.8 (10.3, 11.2)	-2.0 (-3.5, -0.5)	0.0103
3	56	Administrative and Support and Waste Management and Remediation Services	12,586	659	32%	32%	4.3 (4.1, 4.5)	-4.9 (-5.9, -3.8)	<.0001
4	31-33	Manufacturing	6,575	628	32%	35%	4.5 (4.3, 4.7)	-5.2 (-5.7, -4.7)	<.0001
5	62	Health Care and Social Assistance	15,209	999	39%	35%	3.8 (3.7, 3.9)	-6.1 (-7.0, -5.2)	<.0001
6	44-45	Retail Trade	15,033	700	36%	39%	3.7 (3.5, 3.9)	-4.9 (-5.6, -4.1)	<.0001
7	42	Wholesale Trade	11,183	423	35%	38%	4.0 (3.8, 4.2)	-4.4 (-5.4, -3.4)	<.0001
8	92	Public Administration	1,009	336	27%	24%	4.2 (4.0, 4.5)	-4.5 (-5.9, -3.1)	<.0001
9	22	Utilities	353	27	30%	36%	4.6 (3.6, 5.6)	-6.4 (-8.5, -4.3)	<.0001
10	11	Agriculture, Forestry, Fishing and Hunting	6,759	310	18%	18%	3.6 (3.3, 3.8)	-2.8 (-3.6, -1.9)	<.0001
11	72	Accommodation and Food Services	15,270	413	24%	31%	2.4 (2.3, 2.6)	-5.8 (-6.7, -4.8)	<.0001
12	81	Other Services (except Public Administration)	16,994	244	29%	38%	2.8 (2.6, 3.1)	-6.0 (-6.8, -5.2)	<.0001

PI rank	NAICS code	NAICS sector description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
13	53	Real Estate and Rental and Leasing	7,031	174	33%	32%	2.8 (2.6, 3.1)	-3.0 (-4.3, -1.7)	<.0001
14	21	Mining, Quarrying, and Oil and Gas Extraction	155	6	16%	16%	2.9 (1.6, 4.3)	-7.8 (-12.0, -3.4)	0.0007
15	71	Arts, Entertainment, and Recreation	2,940	56	20%	21%	2.3 (2.0, 2.7)	-6.4 (-7.8, -4.9)	<.0001
16	61	Educational Services	3,264	93	26%	29%	1.5 (1.3, 1.7)	-5.0 (-6.4, -3.6)	<.0001
17	54	Professional, Scientific, and Technical Services	25,294	122	28%	32%	0.6 (0.6, 0.7)	-7.2 (-8.2, -6.2)	<.0001
18	51	Information	2,322	25	27%	29%	0.5 (0.4, 0.7)	-11.0 (-13.7, -8.1)	<.0001
19	55	Management of Companies and Enterprises	212	5	28%	15%	1.5 (0.7, 2.2)	No significant change	0.5386
20	52	Finance and Insurance	5,131	21	27%	28%	0.3 (0.2, 0.4)	-9.4 (-11.7, -7.0)	<.0001
--	--	All combined	--	7,148	34%	36%	3.6 (3.6, 3.6)	-5.2 (-5.7, -4.8)	<.0001

An Excel version of this table can be downloaded from the following webpage: [SHARP webpage for WMSD claim tracking publications](#).

The top three self-insured industry sectors to prioritize for prevention of wage replacement or disability WMSD claims are as follows:

- Transportation and Warehousing
- Retail Trade
- Health Care and Social Assistance

Self-insured industry sectors with statistically significant increasing WMSD wage replacement or disability claim rates:

- Administrative and Support and Waste Management and Remediation Services
- Agriculture, Forestry, Fishing and Hunting

Table 11. Washington workers' compensation claim rates per 1,000 FTE for WMSDs, self-insured wage replacement or disability claims by North American Industry Classification System (NAICS) industry sector and prevention index (PI) rank, 2006–2019.

PI rank	NAICS code	NAICS sector description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
1	48-49	Transportation and Warehousing	30	519	41%	19.1 (18.1, 20.0)	No significant change	0.5825
2	44-45	Retail Trade	34	1,096	42%	10.2 (9.8, 10.5)	-2.0 (-3.3, -0.8)	0.0014
3	62	Health Care and Social Assistance	27	1,100	50%	9.4 (9.1, 9.7)	-3.0 (-4.5, -1.6)	<.0001
4	92	Public Administration	32	569	29%	9.6 (9.1, 10.0)	-2.7 (-4.5, -0.9)	0.003
5	42	Wholesale Trade	33	244	40%	11.0 (10.2, 11.8)	No significant change	0.129
6	31-33	*Manufacturing	75	908	42%	7.9 (7.6, 8.2)	No significant change	0.3205
7	55	*Management of Companies and Enterprises	<5	76	47%	14.5 (12.6, 16.4)	No significant change	0.2505
8	56	Administrative and Support and Waste Management and Remediation Services	14	229	36%	9.3 (8.6, 10.0)	1.7 (0.2, 3.3)	0.0283
9	21	*Mining, Quarrying, and Oil and Gas Extraction	<5	10	29%	15.5 (9.8, 21.1)	No significant change	0.1584
10	11	Agriculture, Forestry, Fishing and Hunting	9	79	24%	6.7 (5.9, 7.6)	4.6 (1.7, 7.6)	0.0019
11	61	Educational Services	24	373	21%	3.7 (3.5, 3.9)	-3.4 (-4.6, -2.1)	<.0001
12	81	Other Services (except Public Administration)	7	56	37%	6.3 (5.3, 7.2)	-2.9 (-5.3, -0.5)	0.0179
13	23	Construction	25	53	31%	4.9 (4.1, 5.6)	-5.0 (-6.5, -3.4)	<.0001
14	54	*Professional, Scientific, and Technical Services	<5	20	44%	7.8 (5.8, 9.8)	No significant change	0.8357
15	72	*Accommodation and Food Services	<5	45	24%	3.0 (2.5, 3.5)	-3.3 (-5.8, -0.6)	0.0155
16	22	Utilities	6	25	29%	3.4 (2.6, 4.1)	-7.1 (-9.6, -4.5)	<.0001
17	53	*Real Estate and Rental and Leasing	<5	2	32%	3.5 (0.7, 6.4)	No significant change	0.4295
18	51	Information	7	38	24%	0.6 (0.5, 0.8)	-7.7 (-9.2, -6.1)	<.0001
--	--	All combined	--	5,453	38%	7.6 (7.5, 7.8)	-1.6 (-2.6, -0.6)	0.0023

An Excel version of this table can be downloaded from the following webpage: [SHARP webpage for WMSD claim tracking publications](#).

*50% or more of the WMSD claims in this group are contributed by a single employer.

Work-related musculoskeletal disorder (WMSD) claims by NAICS industry group (4-digit group)

The top three State Fund industry groups to prioritize for prevention of medical aid WMSD claims are as follows:

- Nursing Care Facilities
- Community Care Facilities for the Elderly
- Support Activities for Crop Production

State Fund industry groups with statistically significant increasing WMSD medical aid claim rates:

- Fruit and Tree Nut Farming

Table 12. Washington workers' compensation claim rates per 1,000 FTE for WMSDs, State Fund medical aid claims by North American Industry Classification System (NAICS) industry group and prevention index (PI) rank group, 2006–2019.

PI rank	NAICS code	NAICS industry group description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
1	6231	Nursing Care Facilities	216	401	43%	54%	26.6 (25.1, 28.1)	-3.8 (-4.7, -2.9)	<.0001
2	6233	Community Care Facilities for the Elderly	1,831	563	36%	48%	22.9 (21.8, 24.0)	-3.7 (-4.4, -2.9)	<.0001
3	1151	Support Activities for Crop Production	352	373	18%	24%	15.5 (14.6, 16.5)	No significant change	0.4819
4	4244	Grocery and Related Product Merchant Wholesalers	1,016	206	28%	35%	14.0 (12.9, 15.1)	-1.9 (-3.2, -0.6)	0.0032
5	2381	Foundation, Structure, and Building Exterior Contractors	4,534	343	15%	24%	13.0 (12.2, 13.8)	-4.2 (-4.8, -3.6)	<.0001
6	4921	*Couriers and Express Delivery Services	172	86	35%	39%	25.2 (22.2, 28.3)	No significant change	0.721
7	4451	Grocery Stores	1,395	272	26%	43%	13.3 (12.4, 14.2)	-2.0 (-2.8, -1.1)	<.0001
8	3121	Beverage Manufacturing	687	117	28%	36%	15.2 (13.6, 16.7)	-2.9 (-4.3, -1.5)	<.0001
9	4421	Furniture Stores	294	69	34%	46%	18.4 (15.9, 20.9)	-3.0 (-4.4, -1.6)	<.0001
10	4441	Building Material and Supplies Dealers	794	154	23%	33%	12.1 (11.0, 13.2)	-2.8 (-4.8, -0.8)	0.0062
11	4533	Used Merchandise Stores	479	74	27%	37%	15.8 (13.7, 17.9)	-3.4 (-4.9, -1.9)	<.0001
12	3261	Plastics Product Manufacturing	148	80	24%	41%	13.8 (12.1, 15.6)	-2.5 (-4.3, -0.7)	0.0076
13	2383	Building Finishing Contractors	4,988	233	17%	29%	10.4 (9.6, 11.2)	-3.4 (-4.2, -2.6)	<.0001
14	4842	Specialized Freight Trucking	1,058	92	20%	22%	12.4 (10.9, 13.9)	-4.2 (-5.7, -2.6)	<.0001

PI rank	NAICS code	NAICS industry group description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
15	2361	Residential Building Construction	7,563	262	15%	25%	10.2 (9.5, 10.9)	-4.3 (-5.0, -3.5)	<.0001
16	6219	*Other Ambulatory Health Care Services	102	58	37%	45%	19.8 (16.8, 22.7)	No significant change	0.6144
17	3371	Household and Institutional Furniture and Kitchen Cabinet Manufacturing	292	61	23%	45%	16.0 (13.7, 18.3)	-3.8 (-5.9, -1.6)	0.0007
18	3219	Other Wood Product Manufacturing	211	62	18%	25%	15.9 (13.6, 18.1)	-2.1 (-3.7, -0.4)	0.0148
19	3315	Foundries	35	48	17%	34%	29.2 (24.4, 33.9)	No significant change	0.3247
20	5617	Services to Buildings and Dwellings	5,578	283	17%	24%	9.9 (9.2, 10.6)	-3.5 (-4.2, -2.8)	<.0001
21	3119	Other Food Manufacturing	126	61	33%	40%	15.8 (13.5, 18.1)	No significant change	0.2623
22	5621	*Waste Collection	131	49	25%	33%	22.6 (18.9, 26.3)	-3.3 (-5.6, -1.0)	0.0055
23	7223	Special Food Services	667	118	20%	18%	10.9 (9.7, 12.0)	-2.6 (-4.0, -1.3)	0.0002
24	4413	Automotive Parts, Accessories, and Tire Stores	576	88	21%	27%	11.5 (10.2, 12.9)	-2.4 (-3.8, -1.0)	0.0008
25	5613	Employment Services	1,633	318	22%	31%	9.0 (8.5, 9.6)	-3.3 (-4.9, -1.8)	<.0001
26	2382	Building Equipment Contractors	4,506	403	15%	25%	8.6 (8.1, 9.0)	-5.2 (-5.8, -4.5)	<.0001
27	4811	*Scheduled Air Transportation	39	57	32%	33%	15.3 (13.0, 17.6)	-6.1 (-8.3, -3.9)	<.0001
28	4931	Warehousing and Storage	231	77	21%	31%	11.2 (9.8, 12.7)	-5.3 (-6.7, -3.9)	<.0001
29	4881	Support Activities for Air Transportation	179	69	26%	34%	11.8 (10.2, 13.4)	-6.0 (-9.1, -2.8)	0.0003
30	4233	Lumber and Other Construction Materials Merchant Wholesalers	448	61	25%	36%	13.1 (11.2, 15.0)	-2.0 (-3.6, -0.3)	0.018
31	2389	Other Specialty Trade Contractors	2,494	150	17%	28%	9.7 (8.8, 10.6)	-4.4 (-6.0, -2.8)	<.0001
32	3114	Fruit and Vegetable Preserving and Specialty Food Manufacturing	69	73	21%	30%	10.8 (9.4, 12.3)	-3.3 (-5.4, -1.2)	0.0019
33	3364	Aerospace Product and Parts Manufacturing	121	93	23%	44%	10.0 (8.9, 11.2)	-1.8 (-3.3, -0.2)	0.027
34	4442	Lawn and Garden Equipment and Supplies Stores	355	52	24%	36%	13.7 (11.6, 15.8)	No significant change	0.0638
35	1113	Fruit and Tree Nut Farming	1,913	244	12%	15%	8.4 (7.8, 9.0)	3.3 (1.4, 5.2)	0.0005
36	2362	Nonresidential Building Construction	865	124	17%	23%	9.3 (8.4, 10.2)	-5.2 (-6.8, -3.6)	<.0001
37	5311	Lessors of Real Estate	2,599	134	21%	33%	9.0 (8.1, 9.9)	-3.6 (-4.6, -2.6)	<.0001
38	7211	Traveler Accommodation	1,319	183	18%	28%	8.2 (7.5, 8.9)	-2.7 (-4.0, -1.4)	<.0001

PI rank	NAICS code	NAICS industry group description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
39	3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	40	37	18%	27%	16.8 (13.7, 19.9)	-4.5 (-7.2, -1.7)	0.0018
40	3329	Other Fabricated Metal Product Manufacturing	139	46	21%	40%	13.7 (11.4, 16.0)	-2.7 (-4.5, -1.0)	0.0022
41	4841	General Freight Trucking	1,081	95	20%	20%	9.2 (8.2, 10.3)	-5.7 (-6.8, -4.7)	<.0001
42	3116	Animal Slaughtering and Processing	65	35	22%	27%	17.5 (14.2, 20.9)	-2.6 (-4.6, -0.4)	0.0179
43	3323	Architectural and Structural Metals Manufacturing	274	55	13%	21%	11.5 (9.8, 13.3)	-5.1 (-6.9, -3.3)	<.0001
44	6241	Individual and Family Services	1,111	174	21%	30%	7.2 (6.6, 7.9)	-4.5 (-5.9, -3.0)	<.0001
45	4529	Other General Merchandise Stores	122	44	26%	42%	12.5 (10.4, 14.6)	-3.9 (-5.8, -1.9)	0.0001
46	4521	*Department Stores	20	32	26%	37%	16.6 (13.3, 19.9)	No significant change	0.4541
47	1114	Greenhouse, Nursery, and Floriculture Production	598	68	22%	36%	9.3 (8.0, 10.6)	-3.1 (-4.8, -1.4)	0.0004
48	5629	Remediation and Other Waste Management Services	310	55	19%	22%	10.4 (8.8, 12.0)	No significant change	0.5162
49	6221	General Medical and Surgical Hospitals	34	33	26%	43%	14.0 (11.2, 16.8)	No significant change	0.4787
50	4231	Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers	338	52	21%	28%	10.3 (8.7, 12.0)	-3.8 (-5.5, -2.1)	<.0001
51	9221	Justice, Public Order, and Safety Activities	318	132	15%	17%	6.8 (6.1, 7.5)	-5.0 (-6.6, -3.3)	<.0001
52	1119	Other Crop Farming	864	67	13%	18%	8.9 (7.7, 10.1)	No significant change	0.4659
53	8111	Automotive Repair and Maintenance	3,066	119	13%	22%	6.8 (6.1, 7.5)	-4.8 (-5.9, -3.6)	<.0001
54	6244	Child Day Care Services	1,844	121	19%	25%	6.8 (6.1, 7.5)	-3.8 (-5.0, -2.7)	<.0001
55	4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	328	57	27%	38%	9.5 (8.1, 10.9)	-4.3 (-6.1, -2.5)	<.0001
56	9211	Executive, Legislative, and Other General Government Support	349	152	14%	21%	6.2 (5.7, 6.8)	-5.1 (-6.2, -3.9)	<.0001
57	9241	Administration of Environmental Quality Programs	88	63	17%	26%	8.8 (7.6, 10.1)	-3.3 (-4.8, -1.9)	<.0001
58	7222	Limited-Service Eating Places	5,271	288	11%	23%	5.1 (4.8, 5.5)	-3.7 (-4.4, -3.0)	<.0001
59	4248	Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholesalers	210	33	35%	36%	12.0 (9.6, 14.3)	-9.5 (-10.9, -7.9)	<.0001

PI rank	NAICS code	NAICS industry group description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
60	3332	Industrial Machinery Manufacturing	55	30	23%	42%	12.6 (10.0, 15.2)	No significant change	0.6102
61	3273	Cement and Concrete Product Manufacturing	84	31	16%	20%	12.3 (9.8, 14.7)	-4.6 (-6.8, -2.3)	0.0001
62	7221	Full-Service Restaurants	6,644	305	10%	21%	4.3 (4.0, 4.6)	-4.2 (-4.9, -3.4)	<.0001
63	4411	Automobile Dealers	823	133	16%	26%	5.5 (5.0, 6.1)	-2.8 (-4.1, -1.5)	<.0001
64	3334	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing	32	23	21%	42%	19.3 (14.7, 23.8)	No significant change	0.4338
65	5323	General Rental Centers	50	20	28%	30%	22.5 (16.7, 28.2)	No significant change	0.0591
66	3211	Sawmills and Wood Preservation	88	34	17%	20%	11.1 (9.0, 13.3)	-5.6 (-7.3, -3.8)	<.0001
67	3279	Other Nonmetallic Mineral Product Manufacturing	56	23	27%	31%	17.1 (13.1, 21.2)	No significant change	0.2962
68	4238	Machinery, Equipment, and Supplies Merchant Wholesalers	1,136	75	17%	27%	6.7 (5.8, 7.5)	-3.6 (-4.8, -2.3)	<.0001
69	8123	Drycleaning and Laundry Services	476	31	27%	42%	11.5 (9.2, 13.8)	No significant change	0.1225
70	5419	Other Professional, Scientific, and Technical Services	1,324	75	6%	17%	6.6 (5.7, 7.4)	No significant change	0.5691
71	3118	Bakeries and Tortilla Manufacturing	419	46	19%	32%	9.2 (7.7, 10.8)	-3.2 (-5.2, -1.2)	0.0018
72	6211	Offices of Physicians	1,892	163	16%	31%	4.0 (3.7, 4.4)	-5.5 (-6.4, -4.6)	<.0001
73	1141	Fishing	56	7	24%	37%	26.1 (14.9, 37.3)	No significant change	0.1262
74	1112	Vegetable and Melon Farming	362	44	16%	21%	8.6 (7.1, 10.0)	No significant change	0.6873
75	5313	Activities Related to Real Estate	1,745	71	18%	27%	5.6 (4.9, 6.4)	-2.6 (-4.2, -1.1)	0.0009
76	6214	*Outpatient Care Centers	304	130	17%	26%	3.1 (2.8, 3.4)	-5.6 (-7.1, -4.2)	<.0001
77	3222	Converted Paper Product Manufacturing	48	26	30%	40%	10.4 (8.1, 12.7)	-3.2 (-5.4, -1.0)	0.0051
78	7213	Rooming and Boarding Houses	181	30	21%	36%	10.1 (8.0, 12.2)	-7.0 (-9.1, -4.9)	<.0001
79	4232	Furniture and Home Furnishing Merchant Wholesalers	196	28	30%	37%	10.3 (8.1, 12.4)	-3.5 (-6.1, -0.9)	0.0092
80	2373	Highway, Street, and Bridge Construction	265	38	17%	23%	8.4 (6.9, 9.9)	-3.2 (-5.0, -1.3)	0.001
81	3149	Other Textile Product Mills	116	13	28%	33%	13.5 (9.2, 17.8)	No significant change	0.4088
82	1121	Cattle Ranching and Farming	532	41	10%	16%	8.0 (6.6, 9.4)	No significant change	0.9365
83	4249	Miscellaneous Nondurable Goods Merchant Wholesalers	713	44	18%	24%	7.1 (5.9, 8.3)	-4.0 (-5.6, -2.4)	<.0001

PI rank	NAICS code	NAICS industry group description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
84	6111	Elementary and Secondary Schools	424	72	14%	20%	4.5 (3.9, 5.1)	-4.9 (-6.2, -3.6)	<.0001
85	6243	Vocational Rehabilitation Services	138	40	18%	22%	8.1 (6.7, 9.6)	-5.2 (-6.9, -3.5)	<.0001
86	4539	Other Miscellaneous Store Retailers	1,475	59	20%	29%	6.1 (5.2, 7.0)	-8.9 (-10.7, -7.2)	<.0001
87	3327	Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing	398	41	15%	31%	7.5 (6.2, 8.8)	-4.0 (-5.8, -2.2)	<.0001
88	4251	Wholesale Electronic Markets and Agents and Brokers	3,133	68	25%	37%	5.0 (4.3, 5.7)	No significant change	0.1139
89	6216	Home Health Care Services	149	91	30%	36%	2.9 (2.6, 3.3)	-7.1 (-8.5, -5.6)	<.0001
90	4481	Clothing Stores	792	64	19%	29%	5.3 (4.5, 6.0)	-3.3 (-4.7, -1.8)	<.0001
91	8114	Personal and Household Goods Repair and Maintenance	477	8	19%	31%	13.8 (8.2, 19.5)	No significant change	0.3033
92	6232	*Residential Mental Retardation, Mental Health and Substance Abuse Facilities	61	39	13%	19%	8.0 (6.6, 9.5)	-6.0 (-7.6, -4.3)	<.0001
93	8122	Death Care Services	248	6	31%	42%	15.2 (8.3, 22.0)	No significant change	0.4305
94	4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	162	26	17%	32%	10.0 (7.8, 12.3)	No significant change	0.3692
95	7139	Other Amusement and Recreation Industries	1,879	64	13%	21%	4.5 (3.8, 5.1)	-4.8 (-6.4, -3.2)	<.0001
96	4922	Local Messengers and Local Delivery	170	28	17%	19%	9.4 (7.4, 11.4)	-6.2 (-8.6, -3.8)	<.0001
97	4461	Health and Personal Care Stores	701	58	24%	30%	5.3 (4.5, 6.1)	-4.3 (-5.7, -2.9)	<.0001
98	5611	*Office Administrative Services	2,515	89	25%	39%	2.0 (1.8, 2.3)	-10.2 (-13.5, -6.8)	<.0001
99	4431	Electronics and Appliance Stores	614	53	22%	29%	5.4 (4.6, 6.3)	-4.5 (-6.8, -2.2)	0.0002
100	3117	Seafood Product Preparation and Packaging	51	14	15%	18%	11.0 (7.7, 14.4)	-3.9 (-6.5, -1.2)	0.0053
101	4885	Freight Transportation Arrangement	393	37	31%	39%	6.7 (5.5, 7.9)	No significant change	0.426
102	6113	Colleges, Universities, and Professional Schools	252	64	18%	25%	2.8 (2.4, 3.2)	-5.8 (-7.1, -4.4)	<.0001
103	7111	Performing Arts Companies	188	7	14%	16%	12.2 (7.0, 17.4)	No significant change	0.6739
104	6239	Other Residential Care Facilities	65	29	15%	23%	8.4 (6.6, 10.2)	-3.7 (-5.8, -1.7)	0.0005
105	2123	Nonmetallic Mineral Mining and Quarrying	90	7	17%	16%	11.8 (6.8, 16.9)	No significant change	0.8224
106	4247	Petroleum and Petroleum Products Merchant Wholesalers	94	20	26%	36%	10.0 (7.5, 12.5)	-3.8 (-6.3, -1.2)	0.0048

PI rank	NAICS code	NAICS industry group description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
107	4239	Miscellaneous Durable Goods Merchant Wholesalers	590	33	17%	26%	6.9 (5.5, 8.2)	-3.9 (-5.9, -1.9)	0.0002
108	5322	Consumer Goods Rental	220	20	26%	29%	10.0 (7.5, 12.5)	No significant change	0.3132
109	2371	Utility System Construction	536	45	14%	19%	5.3 (4.4, 6.2)	-7.8 (-9.1, -6.4)	<.0001
110	4471	Gasoline Stations	1,563	51	18%	31%	5.0 (4.2, 5.8)	-5.6 (-7.1, -4.0)	<.0001
111	4412	Other Motor Vehicle Dealers	332	30	15%	18%	7.1 (5.7, 8.6)	-4.6 (-6.6, -2.4)	<.0001
112	4243	Apparel, Piece Goods, and Notions Merchant Wholesalers	157	9	36%	30%	10.4 (6.4, 14.3)	-4.7 (-8.3, -1.0)	0.0137
113	3399	Other Miscellaneous Manufacturing	397	35	21%	38%	6.5 (5.2, 7.7)	-4.4 (-6.2, -2.5)	<.0001
114	4452	Specialty Food Stores	581	35	16%	30%	6.3 (5.1, 7.6)	-4.4 (-6.4, -2.4)	<.0001
115	3328	Coating, Engraving, Heat Treating, and Allied Activities	95	12	19%	36%	10.0 (6.8, 13.2)	-7.0 (-9.5, -4.4)	<.0001
116	4511	Sporting Goods, Hobby, and Musical Instrument Stores	881	39	21%	34%	5.4 (4.4, 6.3)	-5.8 (-7.8, -3.8)	<.0001
117	5324	Commercial and Industrial Machinery and Equipment Rental and Leasing	198	23	23%	38%	9.0 (6.8, 11.1)	No significant change	0.0513
118	3272	Glass and Glass Product Manufacturing	57	6	20%	38%	10.8 (5.8, 15.8)	-5.2 (-8.1, -2.3)	0.0005
119	5413	Architectural, Engineering, and Related Services	3,038	60	17%	26%	1.8 (1.6, 2.1)	-3.9 (-5.4, -2.4)	<.0001
120	3366	Ship and Boat Building	110	12	16%	32%	9.8 (6.7, 13.0)	-6.2 (-8.5, -3.8)	<.0001
121	4884	Support Activities for Road Transportation	320	9	16%	16%	9.9 (6.1, 13.7)	-6.7 (-9.6, -3.8)	<.0001
122	6242	Community Food and Housing, and Emergency and Other Relief Services	232	24	22%	28%	8.2 (6.3, 10.0)	-4.4 (-6.6, -2.3)	<.0001
123	9261	*Administration of Economic Program	158	41	18%	25%	4.3 (3.5, 5.1)	-8.2 (-10.4, -6.1)	<.0001
124	6213	Offices of Other Health Practitioners	3,838	47	18%	31%	2.6 (2.1, 3.0)	-6.6 (-8.1, -5.0)	<.0001
125	4422	Home Furnishings Stores	393	24	18%	25%	7.6 (5.8, 9.3)	-6.9 (-8.9, -4.8)	<.0001
126	8133	Social Advocacy Organizations	634	24	14%	25%	6.9 (5.3, 8.5)	-3.3 (-6.1, -0.4)	0.025
127	8129	Other Personal Services	1,017	30	8%	18%	5.6 (4.5, 6.8)	-3.5 (-6.3, -0.6)	0.0189
128	5619	Other Support Services	415	27	19%	31%	6.4 (5.0, 7.7)	No significant change	0.0801
129	4234	Professional and Commercial Equipment and Supplies Merchant Wholesalers	1,302	41	27%	47%	3.0 (2.5, 3.5)	-6.2 (-7.9, -4.5)	<.0001

PI rank	NAICS code	NAICS industry group description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
130	9231	*Administration of Human Resource Programs	53	43	19%	30%	2.5 (2.1, 2.9)	-8.5 (-9.8, -7.1)	<.0001
131	6222	*Psychiatric and Substance Abuse Hospitals	12	25	8%	10%	6.6 (5.1, 8.0)	-7.6 (-9.7, -5.5)	<.0001
132	8113	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	554	25	11%	25%	6.3 (4.9, 7.8)	-3.5 (-5.8, -1.2)	0.0035
133	4532	Office Supplies, Stationery, and Gift Stores	462	9	27%	42%	8.1 (5.0, 11.2)	-3.8 (-6.6, -0.9)	0.0104
134	2211	Electric Power Generation, Transmission and Distribution	57	14	20%	26%	6.9 (4.8, 9.0)	-6.2 (-8.5, -3.9)	<.0001
135	3231	Printing and Related Support Activities	455	24	26%	43%	6.2 (4.8, 7.6)	-3.2 (-5.5, -0.8)	0.0085
136	5612	Facilities Support Services	38	7	19%	25%	8.2 (4.7, 11.7)	-7.4 (-10.2, -4.5)	<.0001
137	8131	Religious Organizations	3,791	36	15%	20%	2.2 (1.8, 2.7)	-5.0 (-6.8, -3.2)	<.0001
138	4543	Direct Selling Establishments	750	26	21%	21%	5.3 (4.1, 6.4)	No significant change	0.91
139	5616	Investigation and Security Services	481	33	11%	11%	2.7 (2.2, 3.3)	-7.1 (-9.1, -5.0)	<.0001
140	5416	Management, Scientific, and Technical Consulting Services	4,578	36	17%	24%	1.3 (1.1, 1.6)	-8.4 (-10.3, -6.5)	<.0001
141	6112	Junior Colleges	30	30	18%	27%	2.8 (2.2, 3.4)	-4.9 (-7.4, -2.3)	0.0003
142	2379	Other Heavy and Civil Engineering Construction	170	7	14%	26%	6.7 (3.9, 9.5)	-5.0 (-8.6, -1.2)	0.0105
143	5614	Business Support Services	1,045	26	26%	45%	3.0 (2.3, 3.7)	-5.1 (-7.6, -2.5)	0.0001
144	3221	Pulp, Paper, and Paperboard Mills	23	12	22%	34%	5.7 (3.9, 7.6)	-4.4 (-7.8, -0.8)	0.0176
145	8134	Civic and Social Organizations	600	23	13%	25%	4.4 (3.4, 5.4)	-5.5 (-7.7, -3.3)	<.0001
146	8121	Personal Care Services	2,924	27	18%	37%	2.4 (1.9, 2.9)	-8.8 (-10.7, -6.8)	<.0001
147	5417	Scientific Research and Development Services	593	29	26%	51%	2.0 (1.6, 2.4)	-6.0 (-8.3, -3.5)	<.0001
148	6212	Offices of Dentists	3,197	30	5%	16%	1.7 (1.3, 2.0)	-5.7 (-7.9, -3.4)	<.0001
149	5418	Advertising, Public Relations, and Related Services	731	19	25%	42%	3.5 (2.6, 4.3)	No significant change	0.0914
150	7224	Drinking Places (Alcoholic Beverages)	894	13	9%	29%	3.9 (2.6, 5.1)	-7.7 (-10.1, -5.1)	<.0001
151	6215	Medical and Diagnostic Laboratories	181	13	14%	25%	3.8 (2.6, 5.0)	-5.0 (-7.5, -2.5)	0.0001

PI rank	NAICS code	NAICS industry group description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
152	8139	Business, Professional, Labor, Political, and Similar Organizations	1,737	23	12%	13%	2.2 (1.7, 2.8)	-5.3 (-7.4, -3.1)	<.0001
153	5412	Accounting, Tax Preparation, Bookkeeping, and Payroll Services	2,755	24	17%	27%	1.5 (1.1, 1.8)	-2.9 (-5.3, -0.3)	0.0268
154	4236	Electrical and Electronic Goods Merchant Wholesalers	548	7	26%	46%	4.6 (2.6, 6.6)	-4.0 (-6.7, -1.2)	0.0049
155	5415	Computer Systems Design and Related Services	8,345	25	18%	24%	0.4 (0.3, 0.5)	-11.7 (-13.7, -9.7)	<.0001
156	5312	Offices of Real Estate Agents and Brokers	2,087	14	18%	17%	0.9 (0.6, 1.1)	No significant change	0.0799
157	5191	Other Information Services	442	8	24%	43%	1.3 (0.8, 1.9)	-15.9 (-18.6, -13.1)	<.0001
158	5411	Legal Services	3,326	6	22%	37%	1.1 (0.6, 1.6)	-8.7 (-11.1, -6.3)	<.0001
159	5242	Agencies, Brokerages, and Other Insurance Related Activities	2,559	6	23%	27%	1.1 (0.6, 1.6)	-7.8 (-10.6, -4.9)	<.0001
--	--	All combined	--	12,816	20%	30%	6.5 (6.4, 6.5)	-4.2 (-4.8, -3.7)	<.0001

An Excel version of this table can be downloaded from the following webpage: [SHARP webpage for WMSD claim tracking publications](#).

*50% or more of the WMSD claims in this group are contributed by a single employer.

The top three State Fund industry groups to prioritize for prevention of wage replacement or disability WMSD claims are as follows:

- Couriers and Express Delivery Services
- Foundation, Structure, and Building Exterior Contractors
- Scheduled Air Transportation

State Fund industry groups with statistically significant increasing WMSD wage replacement or disability claim rates:

- Couriers and Express Delivery Services

Table 13. Washington workers' compensation claim rates per 1,000 FTE for WMSDs, State Fund wage replacement or disability claims by North American Industry Classification System (NAICS) industry group and prevention index (PI) rank group, 2006–2019.

PI rank	NAICS code	NAICS industry group description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
1	4921	*Couriers and Express Delivery Services	172	185	54%	51%	47.9 (43.9, 51.9)	10.6 (4.2, 17.4)	0.001
2	2381	Foundation, Structure, and Building Exterior Contractors	4,534	236	24%	22%	9.0 (8.3, 9.6)	-5.8 (-7.1, -4.5)	<.0001
3	6233	Community Care Facilities for the Elderly	1,831	202	52%	54%	8.2 (7.6, 8.9)	-6.3 (-7.1, -5.5)	<.0001
4	2361	Residential Building Construction	7,563	198	26%	24%	7.7 (7.1, 8.3)	-5.3 (-6.1, -4.5)	<.0001
5	4841	General Freight Trucking	1,081	102	26%	25%	9.9 (8.8, 11.0)	-4.6 (-5.6, -3.5)	<.0001
6	4842	Specialized Freight Trucking	1,058	87	31%	22%	11.7 (10.3, 13.2)	-4.1 (-5.4, -2.9)	<.0001
7	6231	Nursing Care Facilities	216	125	53%	48%	8.3 (7.4, 9.1)	-6.7 (-7.8, -5.6)	<.0001
8	5617	Services to Buildings and Dwellings	5,578	213	28%	28%	7.5 (6.9, 8.0)	-4.4 (-5.3, -3.4)	<.0001
9	4811	*Scheduled Air Transportation	39	67	42%	45%	17.9 (15.4, 20.4)	No significant change	0.5741
10	9221	Justice, Public Order, and Safety Activities	318	147	26%	19%	7.6 (6.9, 8.3)	-3.1 (-4.7, -1.5)	0.0002
11	4451	Grocery Stores	1,395	150	44%	46%	7.3 (6.6, 8.0)	-3.1 (-4.1, -2.0)	<.0001
12	2383	Building Finishing Contractors	4,988	160	26%	27%	7.2 (6.5, 7.8)	-5.5 (-6.9, -4.1)	<.0001
13	4244	Grocery and Related Product Merchant Wholesalers	1,016	111	37%	40%	7.5 (6.7, 8.4)	-2.6 (-3.7, -1.4)	<.0001
14	6232	*Residential Mental Retardation, Mental Health and Substance Abuse Facilities	61	52	24%	17%	10.6 (8.9, 12.3)	-6.8 (-8.7, -4.9)	<.0001
15	5613	Employment Services	1,633	211	35%	33%	6.0 (5.5, 6.5)	-3.1 (-4.9, -1.3)	0.0009

PI rank	NAICS code	NAICS industry group description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
16	6219	Other Ambulatory Health Care Services	102	40	59%	58%	13.6 (11.2, 16.1)	No significant change	0.9488
17	5621	Waste Collection	131	35	38%	39%	16.0 (12.9, 19.1)	-4.9 (-7.3, -2.5)	0.0001
18	2389	Other Specialty Trade Contractors	2,494	100	25%	27%	6.5 (5.8, 7.2)	-5.2 (-6.6, -3.9)	<.0001
19	2382	Building Equipment Contractors	4,506	231	28%	32%	4.9 (4.5, 5.3)	-6.5 (-7.2, -5.7)	<.0001
20	4421	Furniture Stores	294	32	49%	49%	8.6 (6.8, 10.3)	-2.5 (-4.6, -0.4)	0.02
21	6222	*Psychiatric and Substance Abuse Hospitals	12	33	13%	11%	8.5 (6.9, 10.2)	-8.1 (-10.4, -5.8)	<.0001
22	4413	Automotive Parts, Accessories, and Tire Stores	576	49	35%	47%	6.4 (5.3, 7.4)	-2.7 (-4.4, -1.1)	0.0015
23	4529	Other General Merchandise Stores	122	30	47%	49%	8.4 (6.6, 10.1)	No significant change	0.0993
24	8111	Automotive Repair and Maintenance	3,066	93	30%	46%	5.3 (4.7, 6.0)	-5.2 (-6.4, -4.0)	<.0001
25	3121	Beverage Manufacturing	687	47	38%	43%	6.1 (5.1, 7.1)	-4.8 (-7.5, -2.1)	0.0006
26	4441	Building Material and Supplies Dealers	794	71	35%	40%	5.5 (4.8, 6.3)	-4.0 (-5.4, -2.6)	<.0001
27	2362	Nonresidential Building Construction	865	73	29%	35%	5.5 (4.8, 6.2)	-6.1 (-7.4, -4.7)	<.0001
28	6241	Individual and Family Services	1,111	105	37%	35%	4.4 (3.9, 4.9)	-5.8 (-7.6, -4.0)	<.0001
29	4922	Local Messengers and Local Delivery	170	24	25%	18%	12.2 (9.4, 15.0)	No significant change	0.3199
30	5311	Lessors of Real Estate	2,599	79	35%	37%	5.3 (4.6, 6.0)	-4.3 (-5.5, -3.0)	<.0001
31	4931	Warehousing and Storage	231	41	34%	31%	5.9 (4.9, 7.0)	-4.5 (-7.0, -2.0)	0.0005
32	7211	Traveler Accommodation	1,319	101	33%	34%	4.6 (4.0, 5.1)	-3.6 (-5.5, -1.7)	0.0003
33	1151	Support Activities for Crop Production	352	103	21%	21%	4.3 (3.8, 4.8)	-2.9 (-4.3, -1.5)	<.0001
34	4233	Lumber and Other Construction Materials Merchant Wholesalers	448	30	35%	37%	6.5 (5.2, 7.9)	-3.2 (-5.3, -1.1)	0.0029
35	3261	Plastics Product Manufacturing	148	35	38%	34%	6.0 (4.8, 7.1)	-3.3 (-5.2, -1.3)	0.0011
36	3116	Animal Slaughtering and Processing	65	21	38%	52%	10.5 (7.9, 13.1)	No significant change	0.8048
37	3371	Household and Institutional Furniture and Kitchen Cabinet Manufacturing	292	28	35%	41%	7.3 (5.7, 8.9)	-5.0 (-6.9, -2.9)	<.0001
38	7223	Special Food Services	667	51	33%	39%	4.7 (3.9, 5.4)	-6.0 (-8.0, -3.9)	<.0001
39	3114	Fruit and Vegetable Preserving and Specialty Food Manufacturing	69	36	28%	29%	5.4 (4.4, 6.4)	-3.7 (-5.9, -1.5)	0.001
40	4855	*Charter Bus Industry	26	15	41%	35%	15.6 (11.0, 20.2)	No significant change	0.2868
41	1133	Logging	408	22	18%	17%	8.2 (6.2, 10.1)	-4.6 (-7.0, -2.2)	0.0003

PI rank	NAICS code	NAICS industry group description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
42	2371	Utility System Construction	536	40	28%	29%	4.7 (3.9, 5.6)	-8.0 (-9.6, -6.3)	<.0001
43	9211	Executive, Legislative, and Other General Government Support	349	90	25%	24%	3.7 (3.2, 4.1)	-4.6 (-6.3, -2.8)	<.0001
44	6214	*Outpatient Care Centers	304	114	43%	41%	2.7 (2.4, 3.0)	-2.5 (-4.3, -0.6)	0.0115
45	6221	General Medical and Surgical Hospitals	34	16	56%	56%	9.5 (6.8, 12.2)	-7.1 (-9.8, -4.4)	<.0001
46	8123	Drycleaning and Laundry Services	476	21	42%	51%	7.6 (5.7, 9.5)	No significant change	0.2381
47	3315	Foundries	35	13	37%	44%	11.6 (7.9, 15.3)	No significant change	0.0717
48	5313	Activities Related to Real Estate	1,745	50	33%	33%	4.0 (3.4, 4.6)	No significant change	0.3555
49	4411	Automobile Dealers	823	83	31%	37%	3.4 (3.0, 3.9)	-4.4 (-5.6, -3.1)	<.0001
50	2373	Highway, Street, and Bridge Construction	265	26	23%	25%	5.8 (4.5, 7.0)	-5.2 (-7.4, -2.9)	<.0001
51	9261	*Administration of Economic Program	158	38	29%	31%	4.1 (3.3, 4.8)	-5.5 (-7.4, -3.6)	<.0001
52	7221	Full-Service Restaurants	6,644	129	20%	26%	1.8 (1.6, 2.0)	-6.4 (-7.4, -5.4)	<.0001
53	5611	*Office Administrative Services	2,515	101	47%	41%	2.3 (2.0, 2.6)	No significant change	0.1624
54	3211	Sawmills and Wood Preservation	88	8	27%	34%	8.4 (5.1, 11.6)	-6.3 (-8.8, -3.7)	<.0001
55	3117	Seafood Product Preparation and Packaging	51	6	33%	40%	10.0 (5.5, 14.5)	No significant change	0.2109
56	1113	Fruit and Tree Nut Farming	1,913	72	13%	17%	2.5 (2.1, 2.8)	-1.5 (-3.0, -0.0)	0.0428
57	3323	Architectural and Structural Metals Manufacturing	274	20	27%	41%	6.3 (4.7, 7.8)	-6.2 (-8.1, -4.3)	<.0001
58	7222	Limited-Service Eating Places	5,271	105	21%	30%	1.9 (1.7, 2.1)	-5.3 (-6.8, -3.9)	<.0001
59	4238	Machinery, Equipment, and Supplies Merchant Wholesalers	1,136	40	34%	41%	3.5 (2.9, 4.1)	-4.8 (-7.0, -2.6)	<.0001
60	6239	*Other Residential Care Facilities	65	15	25%	20%	6.6 (4.7, 8.5)	-7.9 (-10.6, -5.1)	<.0001
61	5619	Other Support Services	415	17	32%	46%	6.3 (4.6, 8.1)	No significant change	0.0575
62	4533	Used Merchandise Stores	479	19	38%	43%	6.1 (4.5, 7.7)	-4.4 (-6.9, -1.8)	0.001
63	3219	Other Wood Product Manufacturing	211	22	23%	18%	5.7 (4.3, 7.0)	-5.3 (-7.9, -2.5)	0.0002
64	4248	Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholesalers	210	7	48%	53%	7.7 (4.4, 11.0)	-6.5 (-9.8, -3.0)	0.0003
65	3327	Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing	398	26	37%	53%	4.8 (3.7, 5.9)	No significant change	0.0662

PI rank	NAICS code	NAICS industry group description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
66	3364	Aerospace Product and Parts Manufacturing	121	34	44%	50%	3.7 (2.9, 4.4)	-2.7 (-5.1, -0.3)	0.0291
67	6244	Child Day Care Services	1,844	45	29%	26%	2.5 (2.1, 3.0)	-4.1 (-6.1, -2.1)	<.0001
68	6243	Vocational Rehabilitation Services	138	25	32%	22%	5.0 (3.9, 6.2)	-4.8 (-6.9, -2.7)	<.0001
69	4231	Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers	338	25	32%	36%	4.9 (3.8, 6.0)	-4.9 (-7.2, -2.6)	<.0001
70	1114	Greenhouse, Nursery, and Floriculture Production	598	29	32%	32%	3.9 (3.1, 4.8)	-5.9 (-8.0, -3.7)	<.0001
71	4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	328	26	38%	46%	4.3 (3.4, 5.3)	-3.7 (-6.1, -1.3)	0.003
72	6216	*Home Health Care Services	149	61	48%	46%	1.9 (1.7, 2.2)	-8.6 (-9.9, -7.3)	<.0001
73	4884	Support Activities for Road Transportation	320	6	19%	17%	7.5 (4.1, 10.9)	-9.8 (-12.7, -6.7)	<.0001
74	4881	Support Activities for Air Transportation	179	26	32%	29%	4.4 (3.4, 5.3)	-6.5 (-8.9, -4.0)	<.0001
75	6211	Offices of Physicians	1,892	71	43%	41%	1.7 (1.5, 2.0)	-6.4 (-7.7, -5.2)	<.0001
76	3118	Bakeries and Tortilla Manufacturing	419	23	35%	47%	4.7 (3.6, 5.7)	-3.5 (-6.4, -0.5)	0.0235
77	3119	Other Food Manufacturing	126	14	29%	41%	5.6 (3.9, 7.3)	No significant change	0.1003
78	8121	Personal Care Services	2,924	30	49%	77%	2.7 (2.2, 3.3)	-8.6 (-10.6, -6.6)	<.0001
79	7139	Other Amusement and Recreation Industries	1,879	33	22%	27%	2.3 (1.9, 2.8)	-6.6 (-8.4, -4.8)	<.0001
80	2379	Other Heavy and Civil Engineering Construction	170	7	29%	26%	6.1 (3.4, 8.7)	-7.0 (-10.0, -4.0)	<.0001
81	9241	Administration of Environmental Quality Programs	88	26	31%	31%	3.7 (2.9, 4.5)	-4.4 (-6.9, -1.7)	0.0012
82	4471	Gasoline Stations	1,563	28	28%	32%	2.8 (2.2, 3.4)	-6.7 (-9.1, -4.3)	<.0001
83	4251	Wholesale Electronic Markets and Agents and Brokers	3,133	32	35%	36%	2.3 (1.9, 2.8)	No significant change	0.0928
84	6212	Offices of Dentists	3,197	36	56%	50%	2.0 (1.7, 2.4)	-4.3 (-6.3, -2.3)	<.0001
85	4442	Lawn and Garden Equipment and Supplies Stores	355	13	29%	32%	5.1 (3.5, 6.7)	-5.8 (-8.0, -3.5)	<.0001
86	4539	Other Miscellaneous Store Retailers	1,475	27	33%	40%	2.8 (2.2, 3.4)	-9.9 (-12.3, -7.4)	<.0001

PI rank	NAICS code	NAICS industry group description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
87	6111	Elementary and Secondary Schools	424	33	24%	30%	2.1 (1.7, 2.5)	-4.2 (-6.2, -2.1)	<.0001
88	8113	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	554	7	21%	28%	5.6 (3.2, 8.0)	-6.3 (-8.9, -3.6)	<.0001
89	4249	Miscellaneous Nondurable Goods Merchant Wholesalers	713	23	30%	31%	3.7 (2.9, 4.6)	-5.8 (-7.9, -3.7)	<.0001
90	2211	Electric Power Generation, Transmission and Distribution	57	6	30%	35%	5.9 (3.2, 8.6)	-5.3 (-8.1, -2.5)	0.0003
91	5419	Other Professional, Scientific, and Technical Services	1,324	27	24%	27%	2.4 (1.8, 2.9)	-4.2 (-6.6, -1.7)	0.0011
92	4461	Health and Personal Care Stores	701	26	38%	49%	2.4 (1.9, 2.9)	-3.7 (-5.8, -1.5)	0.0011
93	1119	Other Crop Farming	864	24	17%	18%	3.1 (2.4, 3.9)	No significant change	0.0886
94	4452	Specialty Food Stores	581	15	31%	34%	4.2 (3.0, 5.4)	-4.9 (-7.4, -2.2)	0.0004
95	5629	Remediation and Other Waste Management Services	310	19	26%	38%	3.7 (2.7, 4.6)	-5.2 (-7.5, -2.8)	<.0001
96	6213	Offices of Other Health Practitioners	3,838	31	30%	41%	1.7 (1.4, 2.0)	-7.0 (-9.9, -4.0)	<.0001
97	3329	Other Fabricated Metal Product Manufacturing	139	6	32%	32%	5.5 (3.0, 8.1)	No significant change	0.1799
98	9231	*Administration of Human Resource Programs	53	30	31%	36%	1.7 (1.4, 2.1)	-7.6 (-9.4, -5.8)	<.0001
99	4239	Miscellaneous Durable Goods Merchant Wholesalers	590	13	29%	26%	4.1 (2.8, 5.4)	-3.5 (-6.0, -1.0)	0.0059
100	1112	Vegetable and Melon Farming	362	7	21%	21%	4.3 (2.5, 6.1)	-3.1 (-5.9, -0.3)	0.0297
101	5418	Advertising, Public Relations, and Related Services	731	8	44%	46%	4.2 (2.5, 5.9)	No significant change	0.4159
102	4481	Clothing Stores	792	26	35%	35%	2.1 (1.7, 2.6)	-5.3 (-7.4, -3.2)	<.0001
103	6113	Colleges, Universities, and Professional Schools	252	29	29%	31%	1.3 (1.0, 1.5)	-5.8 (-7.6, -3.9)	<.0001
104	3399	Other Miscellaneous Manufacturing	397	13	36%	28%	3.6 (2.5, 4.8)	-5.3 (-7.7, -2.8)	<.0001
105	4431	Electronics and Appliance Stores	614	22	39%	53%	2.2 (1.7, 2.7)	-4.5 (-6.9, -2.1)	0.0003
106	6112	Junior Colleges	30	16	31%	33%	2.3 (1.7, 3.0)	-3.0 (-5.3, -0.5)	0.0166
107	4885	Freight Transportation Arrangement	393	7	30%	36%	3.6 (2.0, 5.2)	No significant change	0.8192
108	1121	Cattle Ranching and Farming	532	6	12%	10%	3.5 (1.9, 5.1)	No significant change	0.0577

PI rank	NAICS code	NAICS industry group description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
109	5413	Architectural, Engineering, and Related Services	3,038	20	24%	25%	0.6 (0.5, 0.8)	-5.8 (-8.1, -3.5)	<.0001
110	5416	Management, Scientific, and Technical Consulting Services	4,578	18	27%	31%	0.7 (0.5, 0.9)	-8.0 (-10.3, -5.6)	<.0001
111	4234	Professional and Commercial Equipment and Supplies Merchant Wholesalers	1,302	14	40%	39%	1.5 (1.0, 1.9)	-6.0 (-8.6, -3.4)	<.0001
112	5614	Business Support Services	1,045	6	34%	45%	2.2 (1.2, 3.2)	-9.1 (-12.1, -5.9)	<.0001
113	5616	Investigation and Security Services	481	6	16%	8%	1.6 (0.8, 2.3)	-5.8 (-8.7, -2.9)	0.0001
--	--	All combined	--	7,148	34%	36%	3.6 (3.6, 3.6)	-5.2 (-5.7, -4.8)	<.0001

An Excel version of this table can be downloaded from the following webpage: [SHARP webpage for WMSD claim tracking publications](#).

*50% or more of the WMSD claims in this group are contributed by a single employer.

The top three self-insured industry groups to prioritize for prevention of wage replacement or disability WMSD claims are as follows:

- Scheduled Air Transportation
- Couriers and Express Delivery Services
- Bakeries and Tortilla Manufacturing

Self-insured industry groups with statistically significant increasing WMSD wage replacement or disability claim rates:

- Bakeries and Tortilla Manufacturing
- Employment Services
- Cattle Ranching and Farming
- Wholesale Electronic Markets and Agents and Brokers
- Fruit and Tree Nut Farming
- Telecommunications Resellers
- Administration of Economic Program

Table 14. Washington workers' compensation claim rates per 1,000 FTE for WMSDs, self-insured wage replacement or disability claims by North American Industry Classification System (NAICS) industry group and prevention index (PI) rank group, 2006–2019.

PI rank	NAICS code	NAICS industry group description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
1	4811	*Scheduled Air Transportation	<5	206	45%	24.6 (22.6, 26.5)	No significant change	0.4484
2	4921	*Couriers and Express Delivery Services	<5	146	41%	19.8 (17.9, 21.6)	No significant change	0.1995
3	4451	*Grocery Stores	<5	296	43%	14.2 (13.3, 15.2)	No significant change	0.2443
4	3118	*Bakeries and Tortilla Manufacturing	<5	43	44%	20.9 (17.3, 24.5)	3.4 (1.1, 5.7)	0.003
5	4841	General Freight Trucking	13	94	40%	18.6 (16.4, 20.8)	No significant change	0.7919
6	4244	Grocery and Related Product Merchant Wholesalers	12	135	40%	15.7 (14.2, 17.3)	No significant change	0.3981
7	4529	*Other General Merchandise Stores	<5	263	50%	13.4 (12.5, 14.3)	No significant change	0.3954
8	4851	*Urban Transit Systems	<5	30	37%	19.0 (15.1, 23.0)	-2.5 (-4.7, -0.3)	0.0249
9	5511	*Management of Companies and Enterprises	<5	76	47%	14.5 (12.6, 16.4)	No significant change	0.2505
10	6221	General Medical and Surgical Hospitals	17	983	51%	9.8 (9.4, 10.1)	-3.3 (-4.8, -1.8)	<.0001
11	5613	*Employment Services	6	138	39%	12.8 (11.5, 14.0)	2.7 (1.0, 4.4)	0.0018
12	9211	Executive, Legislative, and Other General Government Support	32	556	29%	9.9 (9.4, 10.4)	-2.6 (-4.2, -0.9)	0.0029

PI rank	NAICS code	NAICS industry group description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
13	4248	*Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholesalers	<5	38	50%	15.5 (12.7, 18.4)	-4.1 (-7.3, -0.9)	0.0137
14	6241	*Individual and Family Services	<5	36	44%	13.2 (10.7, 15.7)	No significant change	0.9547
15	4521	Department Stores	6	285	40%	9.4 (8.8, 10.0)	-3.4 (-4.9, -1.9)	<.0001
16	3364	*Aerospace Product and Parts Manufacturing	<5	615	44%	8.4 (8.1, 8.8)	No significant change	0.302
17	6219	*Other Ambulatory Health Care Services	<5	12	52%	30.2 (20.4, 40.1)	No significant change	0.0773
18	4441	*Building Material and Supplies Dealers	6	133	42%	9.7 (8.7, 10.6)	-3.0 (-5.2, -0.8)	0.0083
19	1121	*Cattle Ranching and Farming	<5	10	39%	28.0 (18.0, 38.0)	68.5 (37.7, 106.2)	<.0001
20	4251	*Wholesale Electronic Markets and Agents and Brokers	<5	9	38%	24.9 (15.7, 34.2)	19.1 (4.7, 35.4)	0.0077
21	3117	*Seafood Product Preparation and Packaging	<5	30	50%	10.9 (8.6, 13.2)	No significant change	0.494
22	4413	Automotive Parts, Accessories, and Tire Stores	<5	41	38%	9.5 (7.8, 11.1)	No significant change	0.3829
23	3211	*Sawmills and Wood Preservation	<5	15	26%	13.4 (9.5, 17.3)	No significant change	0.7581
24	4533	*Used Merchandise Stores	<5	23	43%	12.4 (9.5, 15.4)	No significant change	0.2441
25	4852	*Interurban and Rural Bus Transportation	<5	9	35%	18.9 (11.8, 26.1)	No significant change	0.066
26	4233	*Lumber and Other Construction Materials Merchant Wholesalers	<5	21	32%	10.9 (8.2, 13.7)	No significant change	0.4622
27	5621	Waste Collection	<5	63	36%	7.4 (6.4, 8.5)	-4.4 (-7.4, -1.3)	0.006
28	6111	Elementary and Secondary Schools	21	368	21%	3.7 (3.5, 3.9)	-3.4 (-4.7, -2.2)	<.0001
29	3313	*Alumina and Aluminum Production and Processing	<5	14	39%	12.0 (8.3, 15.6)	No significant change	0.5622
30	3119	*Other Food Manufacturing	<5	7	40%	16.7 (9.4, 23.9)	No significant change	0.6473
31	5412	*Accounting, Tax Preparation, Bookkeeping, and Payroll Services	<5	13	43%	10.0 (6.9, 13.1)	No significant change	0.946
32	3115	*Dairy Product Manufacturing	<5	6	36%	18.2 (9.8, 26.6)	No significant change	0.6934
33	3114	Fruit and Vegetable Preserving and Specialty Food Manufacturing	6	29	31%	7.4 (5.8, 8.9)	No significant change	0.8604
34	5617	*Services to Buildings and Dwellings	<5	23	33%	8.0 (6.1, 9.9)	No significant change	0.2669
35	3221	Pulp, Paper, and Paperboard Mills	<5	13	42%	9.7 (6.7, 12.8)	No significant change	0.2056
36	8131	*Religious Organizations	<5	25	35%	6.5 (5.0, 8.0)	No significant change	0.8161
37	6211	*Offices of Physicians	<5	30	47%	3.9 (3.1, 4.7)	-7.6 (-9.2, -6.0)	<.0001
38	8139	*Business, Professional, Labor, Political, and Similar Organizations	<5	13	46%	8.7 (6.0, 11.5)	No significant change	0.6614
39	1113	*Fruit and Tree Nut Farming	<5	18	18%	6.5 (4.8, 8.2)	6.7 (2.6, 11.0)	0.0012

PI rank	NAICS code	NAICS industry group description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
40	1151	*Support Activities for Crop Production	<5	24	21%	5.5 (4.2, 6.8)	No significant change	0.1091
41	2211	Electric Power Generation, Transmission and Distribution	6	25	29%	3.4 (2.6, 4.1)	-7.1 (-9.6, -4.5)	<.0001
42	5173	*Telecommunications Resellers	<5	6	27%	10.3 (5.5, 15.1)	5.0 (1.4, 8.6)	0.0054
43	7222	*Limited-Service Eating Places	<5	27	21%	2.3 (1.8, 2.8)	No significant change	0.2524
44	4231	*Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers	<5	13	39%	6.0 (4.1, 7.9)	No significant change	0.8887
45	3361	*Motor Vehicle Manufacturing	<5	9	53%	8.7 (5.3, 12.0)	No significant change	0.8033
46	2362	Nonresidential Building Construction	8	13	28%	6.0 (4.1, 7.9)	-3.7 (-6.8, -0.5)	0.023
47	4883	*Support Activities for Water Transportation	<5	6	28%	9.0 (5.0, 13.1)	No significant change	0.4825
48	9261	*Administration of Economic Program	<5	13	43%	3.9 (2.7, 5.1)	**	**
49	3339	*Other General Purpose Machinery Manufacturing	<5	8	52%	5.9 (3.5, 8.3)	No significant change	0.3289
50	3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	<5	7	66%	4.5 (2.6, 6.5)	No significant change	0.2897
51	4481	*Clothing Stores	<5	8	27%	2.3 (1.4, 3.2)	-5.7 (-8.5, -2.8)	0.0001
52	5171	*Wired Telecommunications Carriers	<5	7	25%	2.5 (1.4, 3.7)	-9.2 (-13.2, -4.9)	<.0001
--	--	All combined	--	5,453	38%	7.6 (7.5, 7.8)	-1.6 (-2.6, -0.6)	0.0023

An Excel version of this table can be downloaded from the following webpage: [SHARP webpage for WMSD claim tracking publications](#).

*50% or more of the WMSD claims in this group are contributed by a single employer.

**Not enough years' data to assess trend.

Work-related musculoskeletal disorder (WMSD) claims by NAICS industry (5-digit NAICS)

The top three State Fund industries to prioritize for prevention of medical aid WMSD claims are as follows:

- Nursing Care Facilities
- Community Care Facilities for the Elderly
- Soft Drink and Ice Manufacturing

State Fund industries with statistically significant increasing WMSD medical aid claim rates:

- Remediation Services
- Noncitrus Fruit and Tree Nut Farming

Table 15. Washington workers’ compensation claim rates per 1,000 FTE for WMSDs, State Fund medical aid claims by North American Industry Classification System (NAICS) industry and prevention index (PI) rank group, 2006–2019.

PI rank	NAICS code	NAICS industry description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
1	62311	Nursing Care Facilities	216	401	43%	54%	26.6 (25.1, 28.1)	-3.8 (-4.7, -2.9)	<.0001
2	62331	Community Care Facilities for the Elderly	1,831	563	36%	48%	22.9 (21.8, 24.0)	-3.7 (-4.4, -2.9)	<.0001
3	31211	*Soft Drink and Ice Manufacturing	34	87	44%	50%	28.1 (24.7, 31.5)	No significant change	0.0866
4	11511	Support Activities for Crop Production	352	373	18%	24%	15.5 (14.6, 16.5)	No significant change	0.4819
5	49211	*Couriers and Express Delivery Services	172	86	35%	39%	25.2 (22.2, 28.3)	No significant change	0.721
6	44511	Supermarkets and Other Grocery (except Convenience) Stores	637	254	27%	44%	14.8 (13.7, 15.9)	-1.8 (-2.7, -1.0)	<.0001
7	62191	*Ambulance Services	38	50	43%	46%	29.5 (24.8, 34.2)	No significant change	0.7009
8	44211	Furniture Stores	294	69	34%	46%	18.4 (15.9, 20.9)	-3.0 (-4.4, -1.6)	<.0001
9	23816	Roofing Contractors	874	85	16%	25%	16.0 (14.0, 17.9)	-4.1 (-5.3, -2.8)	<.0001
10	42448	Fresh Fruit and Vegetable Merchant Wholesalers	162	71	27%	34%	16.5 (14.3, 18.7)	No significant change	0.7894
11	56211	*Waste Collection	131	49	25%	33%	22.6 (18.9, 26.3)	-3.3 (-5.6, -1.0)	0.0055
12	32619	Other Plastics Product Manufacturing	93	62	26%	42%	17.2 (14.8, 19.7)	No significant change	0.1846

PI rank	NAICS code	NAICS industry description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
13	45331	Used Merchandise Stores	479	74	27%	37%	15.8 (13.7, 17.9)	-3.4 (-4.9, -1.9)	<.0001
14	56173	Landscaping Services	2,751	157	18%	26%	12.6 (11.5, 13.8)	-2.7 (-3.7, -1.8)	<.0001
15	48421	Used Household and Office Goods Moving	238	48	24%	33%	22.2 (18.5, 25.8)	-3.4 (-5.3, -1.5)	0.0004
16	44419	Other Building Material Dealers	472	96	22%	32%	13.3 (11.7, 14.8)	-2.7 (-5.0, -0.4)	0.0228
17	92216	Fire Protection	264	77	23%	21%	14.1 (12.3, 15.9)	-2.6 (-4.1, -1.1)	0.0009
18	72231	*Food Service Contractors	85	91	22%	33%	12.5 (11.0, 14.0)	-2.0 (-3.7, -0.2)	0.028
19	48111	*Scheduled Air Transportation	39	57	32%	33%	15.3 (13.0, 17.6)	-6.1 (-8.3, -3.9)	<.0001
20	23813	Framing Contractors	1,358	82	13%	24%	12.5 (10.9, 14.0)	-3.6 (-4.7, -2.4)	<.0001
21	23611	Residential Building Construction	7,563	262	15%	25%	10.2 (9.5, 10.9)	-4.3 (-5.0, -3.5)	<.0001
22	62412	Services for the Elderly and Persons with Disabilities	379	108	26%	34%	10.9 (9.8, 12.1)	-3.4 (-5.4, -1.4)	0.0011
23	23811	Poured Concrete Foundation and Structure Contractors	975	75	16%	22%	11.8 (10.3, 13.4)	-3.8 (-5.2, -2.5)	<.0001
24	42441	General Line Grocery Merchant Wholesalers	131	49	32%	47%	14.3 (12.0, 16.6)	-2.2 (-3.9, -0.5)	0.0115
25	32121	Veneer, Plywood, and Engineered Wood Product Manufacturing	40	37	18%	27%	16.8 (13.7, 19.9)	-4.5 (-7.2, -1.7)	0.0018
26	23899	All Other Specialty Trade Contractors	981	75	17%	27%	11.2 (9.7, 12.6)	-5.3 (-7.3, -3.2)	<.0001
27	23822	Plumbing, Heating, and Air-Conditioning Contractors	2,093	232	16%	27%	9.8 (9.1, 10.5)	-5.0 (-5.9, -4.1)	<.0001
28	56132	Temporary Help Services	1,225	291	22%	31%	9.5 (8.9, 10.1)	-3.1 (-4.5, -1.7)	<.0001
29	44422	Nursery, Garden Center, and Farm Supply Stores	311	48	24%	36%	14.1 (11.8, 16.4)	No significant change	0.0578
30	48811	Airport Operations	50	34	31%	38%	20.0 (16.1, 23.8)	-5.4 (-9.5, -1.0)	0.0158
31	33711	Wood Kitchen Cabinet and Countertop Manufacturing	174	37	23%	49%	16.7 (13.6, 19.8)	No significant change	0.1864
32	31161	Animal Slaughtering and Processing	65	35	22%	27%	17.5 (14.2, 20.9)	-2.6 (-4.6, -0.4)	0.0179
33	31142	Fruit and Vegetable Canning, Pickling, and Drying	54	43	20%	30%	14.6 (12.1, 17.1)	No significant change	0.3029
34	23831	Drywall and Insulation Contractors	785	75	16%	24%	11.1 (9.7, 12.6)	-3.9 (-5.2, -2.6)	<.0001

PI rank	NAICS code	NAICS industry description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
35	31191	*Snack Food Manufacturing	12	30	38%	43%	25.6 (20.3, 30.8)	No significant change	0.9445
36	33299	All Other Fabricated Metal Product Manufacturing	129	42	22%	40%	14.3 (11.8, 16.8)	-2.2 (-4.0, -0.4)	0.0194
37	33641	Aerospace Product and Parts Manufacturing	121	93	23%	44%	10.0 (8.9, 11.2)	-1.8 (-3.3, -0.2)	0.027
38	23622	Commercial and Institutional Building Construction	801	118	18%	23%	9.5 (8.5, 10.5)	-5.4 (-7.2, -3.6)	<.0001
39	53111	Lessors of Residential Buildings and Dwellings	1,342	97	23%	34%	9.7 (8.6, 10.8)	-4.0 (-5.2, -2.7)	<.0001
40	44132	Tire Dealers	215	35	20%	25%	16.0 (13.0, 19.1)	No significant change	0.2572
41	33151	Ferrous Metal Foundries	19	27	22%	35%	32.7 (25.5, 39.8)	No significant change	0.6678
42	45211	*Department Stores	20	32	26%	37%	16.6 (13.3, 19.9)	No significant change	0.4541
43	49312	Refrigerated Warehousing and Storage	51	42	21%	33%	13.3 (11.0, 15.6)	-3.8 (-5.8, -1.7)	0.0003
44	45299	All Other General Merchandise Stores	115	42	25%	41%	12.7 (10.5, 14.9)	-3.7 (-5.7, -1.6)	0.0005
45	11142	Nursery and Floriculture Production	247	45	23%	37%	11.5 (9.6, 13.5)	No significant change	0.2914
46	11133	Noncitrus Fruit and Tree Nut Farming	1,913	244	12%	15%	8.4 (7.8, 9.0)	3.3 (1.4, 5.2)	0.0005
47	42331	Lumber, Plywood, Millwork, and Wood Panel Merchant Wholesalers	224	36	26%	37%	14.2 (11.5, 16.9)	No significant change	0.4148
48	23835	Finish Carpentry Contractors	870	46	15%	28%	11.1 (9.3, 13.0)	-5.0 (-7.3, -2.6)	<.0001
49	72111	Hotels (except Casino Hotels) and Motels	1,153	179	19%	28%	8.3 (7.6, 9.0)	-2.7 (-3.9, -1.4)	<.0001
50	62211	General Medical and Surgical Hospitals	34	33	26%	43%	14.0 (11.2, 16.8)	No significant change	0.4787
51	23891	Site Preparation Contractors	1,513	75	16%	28%	8.6 (7.5, 9.7)	-3.3 (-4.9, -1.6)	0.0002
52	56291	*Remediation Services	133	38	22%	24%	11.2 (9.1, 13.2)	5.9 (2.9, 8.9)	<.0001
53	23821	Electrical Contractors and Other Wiring Installation Contractors	2,155	156	15%	23%	7.6 (6.9, 8.2)	-5.1 (-6.2, -4.1)	<.0001
54	32191	Millwork	80	27	22%	36%	16.3 (12.8, 19.9)	-2.9 (-5.0, -0.8)	0.0071
55	23815	Glass and Glazing Contractors	189	28	20%	37%	15.4 (12.2, 18.7)	-3.9 (-6.1, -1.8)	0.0004
56	11199	All Other Crop Farming	568	62	13%	19%	9.5 (8.1, 10.9)	No significant change	0.9375

PI rank	NAICS code	NAICS industry description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
57	33152	*Nonferrous Metal Foundries	16	22	14%	32%	25.8 (19.5, 32.1)	No significant change	0.0577
58	44131	Automotive Parts and Accessories Stores	361	53	22%	29%	9.8 (8.2, 11.3)	-2.9 (-4.7, -1.2)	0.0013
59	92119	Other General Government Support	245	100	14%	20%	7.7 (6.8, 8.6)	-4.5 (-5.8, -3.2)	<.0001
60	33341	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing	32	23	21%	42%	19.3 (14.7, 23.8)	No significant change	0.4338
61	48412	General Freight Trucking, Long-Distance	763	63	19%	22%	8.9 (7.7, 10.2)	-5.0 (-6.6, -3.4)	<.0001
62	62441	Child Day Care Services	1,844	121	19%	25%	6.8 (6.1, 7.5)	-3.8 (-5.0, -2.7)	<.0001
63	33232	Ornamental and Architectural Metal Products Manufacturing	184	33	14%	24%	12.0 (9.6, 14.4)	-5.9 (-7.8, -4.0)	<.0001
64	81233	Linen and Uniform Supply	20	20	32%	46%	22.1 (16.5, 27.7)	No significant change	0.1017
65	54194	Veterinary Services	705	67	5%	17%	8.5 (7.3, 9.7)	No significant change	0.9554
66	53231	General Rental Centers	50	20	28%	30%	22.5 (16.7, 28.2)	No significant change	0.0591
67	45391	Pet and Pet Supplies Stores	160	27	23%	44%	14.8 (11.5, 18.0)	-7.2 (-9.6, -4.7)	<.0001
68	32799	All Other Nonmetallic Mineral Product Manufacturing	55	22	27%	31%	17.1 (13.0, 21.3)	No significant change	0.6187
69	23812	Structural Steel and Precast Concrete Contractors	133	30	16%	22%	12.3 (9.8, 14.9)	-7.6 (-9.5, -5.6)	<.0001
70	23832	Painting and Wall Covering Contractors	1,882	62	18%	34%	8.5 (7.3, 9.8)	-1.8 (-3.6, -0.1)	0.0437
71	33712	*Household and Institutional Furniture Manufacturing	118	25	22%	40%	15.1 (11.6, 18.5)	-6.6 (-9.0, -4.0)	<.0001
72	32111	Sawmills and Wood Preservation	88	34	17%	20%	11.1 (9.0, 13.3)	-5.6 (-7.3, -3.8)	<.0001
73	44413	Hardware Stores	269	38	22%	28%	10.0 (8.2, 11.8)	No significant change	0.285
74	56172	Janitorial Services	2,085	87	17%	23%	7.1 (6.2, 8.0)	-4.7 (-5.9, -3.4)	<.0001
75	72221	Limited-Service Eating Places	5,271	288	11%	23%	5.1 (4.8, 5.5)	-3.7 (-4.4, -3.0)	<.0001
76	42481	Beer and Ale Merchant Wholesalers	63	18	39%	43%	18.4 (13.6, 23.3)	-8.6 (-10.3, -6.8)	<.0001
77	31181	Bread and Bakery Product Manufacturing	400	42	19%	33%	9.5 (7.8, 11.1)	-3.3 (-5.4, -1.2)	0.0024

PI rank	NAICS code	NAICS industry description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
78	62321	*Residential Mental Retardation Facilities	25	35	15%	23%	10.5 (8.5, 12.6)	-5.0 (-6.9, -3.2)	<.0001
79	11121	Vegetable and Melon Farming	362	44	16%	21%	8.6 (7.1, 10.0)	No significant change	0.6873
80	92412	Administration of Conservation Programs	64	44	15%	24%	8.5 (7.1, 10.0)	-4.5 (-6.2, -2.8)	<.0001
81	44111	New Car Dealers	365	109	16%	27%	5.7 (5.0, 6.3)	-3.0 (-4.2, -1.8)	<.0001
82	72211	Full-Service Restaurants	6,644	305	10%	21%	4.3 (4.0, 4.6)	-4.2 (-4.9, -3.4)	<.0001
83	81111	Automotive Mechanical and Electrical Repair and Maintenance	1,885	62	13%	23%	7.4 (6.3, 8.5)	-4.2 (-5.7, -2.8)	<.0001
84	42321	Furniture Merchant Wholesalers	84	20	36%	38%	14.8 (11.0, 18.6)	No significant change	0.1023
85	62111	Offices of Physicians	1,892	163	16%	31%	4.0 (3.7, 4.4)	-5.5 (-6.4, -4.6)	<.0001
86	32732	Ready-Mix Concrete Manufacturing	39	14	20%	25%	16.3 (11.4, 21.2)	-4.8 (-8.1, -1.4)	0.0055
87	11411	Fishing	56	7	24%	37%	26.1 (14.9, 37.3)	No significant change	0.1262
88	48411	General Freight Trucking, Local	318	33	20%	16%	9.9 (7.9, 11.9)	-6.2 (-7.8, -4.5)	<.0001
89	32192	Wood Container and Pallet Manufacturing	51	15	16%	17%	15.7 (11.1, 20.3)	No significant change	0.1285
90	42372	Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers	125	29	30%	37%	10.9 (8.6, 13.2)	No significant change	0.6609
91	44311	Appliance, Television, and Other Electronics Stores	417	49	24%	30%	7.5 (6.2, 8.7)	-4.6 (-7.0, -2.1)	0.0003
92	53131	Real Estate Property Managers	1,223	70	18%	27%	6.4 (5.5, 7.2)	-3.7 (-5.3, -2.2)	<.0001
93	23833	Flooring Contractors	959	27	21%	30%	11.1 (8.7, 13.5)	-3.8 (-6.1, -1.5)	0.0012
94	49311	General Warehousing and Storage	134	29	25%	32%	10.3 (8.1, 12.4)	-7.2 (-9.1, -5.3)	<.0001
95	23731	Highway, Street, and Bridge Construction	265	38	17%	23%	8.4 (6.9, 9.9)	-3.2 (-5.0, -1.3)	0.001
96	72131	Rooming and Boarding Houses	181	30	21%	36%	10.1 (8.0, 12.2)	-7.0 (-9.1, -4.9)	<.0001
97	42393	Recyclable Material Merchant Wholesalers	118	20	17%	25%	14.0 (10.4, 17.5)	No significant change	0.1368
98	62431	Vocational Rehabilitation Services	138	40	18%	22%	8.1 (6.7, 9.6)	-5.2 (-6.9, -3.5)	<.0001
99	62149	*Other Outpatient Care Centers	127	113	18%	28%	3.1 (2.8, 3.5)	-5.5 (-7.1, -3.9)	<.0001

PI rank	NAICS code	NAICS industry description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
100	42449	Other Grocery and Related Products Merchant Wholesalers	380	28	28%	30%	10.4 (8.1, 12.6)	-5.7 (-7.7, -3.6)	<.0001
101	33271	Machine Shops	376	39	15%	32%	8.0 (6.6, 9.5)	-3.6 (-5.4, -1.7)	0.0003
102	33329	*Other Industrial Machinery Manufacturing	42	17	21%	39%	13.8 (10.0, 17.6)	No significant change	0.7137
103	48819	Other Support Activities for Air Transportation	129	35	22%	31%	8.4 (6.8, 10.0)	-3.6 (-5.8, -1.4)	0.0015
104	23814	Masonry Contractors	425	16	18%	25%	13.9 (10.0, 17.8)	-4.7 (-6.9, -2.4)	<.0001
105	42512	Wholesale Trade Agents and Brokers	3,126	68	25%	37%	5.1 (4.4, 5.8)	No significant change	0.1528
106	42446	Fish and Seafood Merchant Wholesalers	124	17	21%	28%	13.1 (9.5, 16.7)	No significant change	0.7914
107	61111	Elementary and Secondary Schools	424	72	14%	20%	4.5 (3.9, 5.1)	-4.9 (-6.2, -3.6)	<.0001
108	62161	Home Health Care Services	149	91	30%	36%	2.9 (2.6, 3.3)	-7.1 (-8.5, -5.6)	<.0001
109	42351	Metal Service Centers and Other Metal Merchant Wholesalers	160	26	17%	32%	10.0 (7.8, 12.3)	No significant change	0.3623
110	11212	Dairy Cattle and Milk Production	291	35	10%	17%	8.2 (6.6, 9.7)	No significant change	0.4517
111	23834	Tile and Terrazzo Contractors	304	6	23%	56%	18.5 (9.9, 27.0)	-3.3 (-6.6, -0.0)	0.0492
112	42312	Motor Vehicle Supplies and New Parts Merchant Wholesalers	187	17	23%	28%	11.6 (8.5, 14.8)	No significant change	0.1607
113	32221	Paperboard Container Manufacturing	18	13	33%	41%	13.8 (9.5, 18.1)	No significant change	0.0693
114	49221	Local Messengers and Local Delivery	170	28	17%	19%	9.4 (7.4, 11.4)	-6.2 (-8.6, -3.8)	<.0001
115	62419	Other Individual and Family Services	574	58	17%	25%	4.8 (4.1, 5.5)	-5.1 (-6.6, -3.4)	<.0001
116	56111	*Office Administrative Services	2,515	89	25%	39%	2.0 (1.8, 2.3)	-10.2 (-13.5, -6.8)	<.0001
117	33231	Plate Work and Fabricated Structural Product Manufacturing	90	22	12%	16%	10.8 (8.2, 13.5)	-4.0 (-7.0, -0.9)	0.0121
118	48422	Specialized Freight (except Used Goods) Trucking, Local	611	28	16%	17%	9.0 (7.0, 10.9)	-5.3 (-7.2, -3.3)	<.0001
119	48851	Freight Transportation Arrangement	393	37	31%	39%	6.7 (5.5, 7.9)	No significant change	0.426
120	44711	Gasoline Stations with Convenience Stores	1,478	46	18%	32%	4.9 (4.1, 5.7)	-5.3 (-7.0, -3.7)	<.0001
121	62399	Other Residential Care Facilities	65	29	15%	23%	8.4 (6.6, 10.2)	-3.7 (-5.8, -1.7)	0.0005

PI rank	NAICS code	NAICS industry description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
122	81112	Automotive Body, Paint, Interior, and Glass Repair	728	36	13%	22%	6.6 (5.3, 7.8)	-5.4 (-7.5, -3.1)	<.0001
123	61131	Colleges, Universities, and Professional Schools	252	64	18%	25%	2.8 (2.4, 3.2)	-5.8 (-7.1, -4.4)	<.0001
124	31141	*Frozen Food Manufacturing	15	30	21%	31%	7.9 (6.2, 9.5)	-5.5 (-8.9, -1.9)	0.0027
125	44814	Family Clothing Stores	234	39	19%	28%	6.0 (4.9, 7.1)	-3.1 (-5.0, -1.1)	0.0021
126	31199	All Other Food Manufacturing	43	12	27%	30%	13.0 (8.8, 17.3)	No significant change	0.416
127	31171	Seafood Product Preparation and Packaging	51	14	15%	18%	11.0 (7.7, 14.4)	-3.9 (-6.5, -1.2)	0.0053
128	23711	Water and Sewer Line and Related Structures Construction	294	29	16%	23%	7.8 (6.2, 9.5)	-7.6 (-9.5, -5.6)	<.0001
129	92214	*Correctional Institutions	30	42	11%	18%	4.5 (3.7, 5.3)	-7.7 (-10.5, -4.8)	<.0001
130	56133	Professional Employer Organizations	141	23	28%	35%	9.4 (7.2, 11.6)	No significant change	0.8047
131	48423	Specialized Freight (except Used Goods) Trucking, Long-Distance	209	8	16%	15%	11.3 (6.7, 15.9)	-5.9 (-8.9, -2.9)	0.0002
132	72232	Caterers	299	25	17%	8%	8.4 (6.5, 10.3)	-3.9 (-6.3, -1.5)	0.0017
133	53229	Other Consumer Goods Rental	161	13	26%	29%	11.0 (7.5, 14.4)	-5.3 (-8.1, -2.4)	0.0004
134	92411	*Administration of Air and Water Resource and Solid Waste Management Programs	24	14	22%	36%	10.4 (7.2, 13.5)	No significant change	0.8357
135	42383	Industrial Machinery and Equipment Merchant Wholesalers	539	33	17%	26%	6.2 (5.0, 7.5)	-5.2 (-7.0, -3.4)	<.0001
136	56171	Exterminating and Pest Control Services	157	6	13%	20%	11.3 (6.1, 16.5)	No significant change	0.0585
137	33281	Coating, Engraving, Heat Treating, and Allied Activities	95	12	19%	36%	10.0 (6.8, 13.2)	-7.0 (-9.5, -4.4)	<.0001
138	42311	Automobile and Other Motor Vehicle Merchant Wholesalers	99	14	18%	25%	9.4 (6.6, 12.3)	-4.1 (-6.8, -1.3)	0.0038
139	44611	*Pharmacies and Drug Stores	232	32	22%	28%	5.0 (4.0, 5.9)	-6.0 (-7.8, -4.2)	<.0001
140	92313	*Administration of Human Resource Programs (except Education, Public Health, and Veterans' Affairs Programs)	30	37	19%	30%	2.6 (2.1, 3.1)	-8.6 (-10.0, -7.1)	<.0001

PI rank	NAICS code	NAICS industry description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
141	33661	Ship and Boat Building	110	12	16%	32%	9.8 (6.7, 13.0)	-6.2 (-8.5, -3.8)	<.0001
142	32721	Glass and Glass Product Manufacturing	57	6	20%	38%	10.8 (5.8, 15.8)	-5.2 (-8.1, -2.3)	0.0005
143	81331	Social Advocacy Organizations	634	24	14%	25%	6.9 (5.3, 8.5)	-3.3 (-6.1, -0.4)	0.025
144	62221	*Psychiatric and Substance Abuse Hospitals	12	25	8%	10%	6.6 (5.1, 8.0)	-7.6 (-9.7, -5.5)	<.0001
145	42491	Farm Supplies Merchant Wholesalers	198	22	17%	21%	7.7 (5.8, 9.5)	-3.2 (-6.2, -0.1)	0.042
146	81311	Religious Organizations	3,791	36	15%	20%	2.2 (1.8, 2.7)	-5.0 (-6.8, -3.2)	<.0001
147	42382	Farm and Garden Machinery and Equipment Merchant Wholesalers	116	6	14%	24%	9.9 (5.5, 14.4)	-4.1 (-6.9, -1.2)	0.0061
148	81131	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	554	25	11%	25%	6.3 (4.9, 7.8)	-3.5 (-5.8, -1.2)	0.0035
149	92612	*Regulation and Administration of Transportation Programs	51	30	19%	24%	4.4 (3.5, 5.3)	-5.0 (-7.6, -2.4)	0.0002
150	71391	Golf Courses and Country Clubs	214	24	15%	35%	6.5 (5.0, 8.0)	-3.0 (-5.4, -0.5)	0.0177
151	11141	Food Crops Grown Under Cover	351	22	22%	34%	6.7 (5.1, 8.3)	-7.5 (-11.4, -3.4)	0.0004
152	45399	All Other Miscellaneous Store Retailers	1,157	29	20%	24%	4.0 (3.2, 4.9)	-9.2 (-11.4, -7.0)	<.0001
153	54133	Engineering Services	1,684	34	17%	22%	1.5 (1.2, 1.8)	-4.1 (-6.0, -2.2)	<.0001
154	92114	Executive and Legislative Offices, Combined	33	24	14%	20%	5.4 (4.2, 6.7)	-6.6 (-8.8, -4.3)	<.0001
155	61121	Junior Colleges	30	30	18%	27%	2.8 (2.2, 3.4)	-4.9 (-7.4, -2.3)	0.0003
156	81291	Pet Care (except Veterinary) Services	609	7	6%	16%	8.6 (5.0, 12.2)	-6.8 (-10.3, -3.2)	0.0003
157	32311	Printing	410	23	26%	43%	6.2 (4.7, 7.7)	-3.6 (-6.1, -1.1)	0.0045
158	44121	Recreational Vehicle Dealers	74	6	13%	16%	9.5 (5.1, 14.0)	-5.1 (-8.7, -1.3)	0.0094
159	56199	All Other Support Services	294	15	20%	31%	7.1 (5.0, 9.2)	-4.1 (-6.9, -1.2)	0.0054
160	44112	Used Car Dealers	458	24	17%	21%	5.0 (3.8, 6.2)	No significant change	0.4263
161	48841	Motor Vehicle Towing	273	6	13%	12%	9.0 (4.8, 13.1)	No significant change	0.054
162	62121	Offices of Dentists	3,197	30	5%	16%	1.7 (1.3, 2.0)	-5.7 (-7.9, -3.4)	<.0001

PI rank	NAICS code	NAICS industry description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
163	53112	Lessors of Nonresidential Buildings (except Miniwarehouses)	506	7	18%	30%	8.3 (4.8, 11.8)	-3.0 (-5.5, -0.5)	0.0186
164	81119	Other Automotive Repair and Maintenance	452	16	12%	20%	6.5 (4.7, 8.4)	-5.0 (-7.3, -2.6)	<.0001
165	56121	Facilities Support Services	38	7	19%	25%	8.2 (4.7, 11.7)	-7.4 (-10.2, -4.5)	<.0001
166	92111	Executive Offices	38	14	16%	30%	6.9 (4.8, 9.0)	-2.9 (-5.5, -0.2)	0.0339
167	81341	Civic and Social Organizations	600	23	13%	25%	4.4 (3.4, 5.4)	-5.5 (-7.7, -3.3)	<.0001
168	54171	Research and Development in the Physical, Engineering, and Life Sciences	510	28	27%	51%	2.1 (1.6, 2.5)	-6.1 (-8.6, -3.6)	<.0001
169	44122	Motorcycle, Boat, and Other Motor Vehicle Dealers	259	12	17%	21%	7.6 (5.2, 10.1)	-4.5 (-7.2, -1.8)	0.0014
170	51912	Libraries and Archives	38	7	35%	51%	8.0 (4.6, 11.4)	-6.4 (-9.4, -3.3)	<.0001
171	44512	Convenience Stores	758	14	19%	32%	6.3 (4.4, 8.2)	-4.2 (-6.7, -1.6)	0.0015
172	81211	Hair, Nail, and Skin Care Services	2,401	23	18%	47%	2.5 (1.9, 3.1)	-8.7 (-10.8, -6.6)	<.0001
173	54151	Computer Systems Design and Related Services	8,345	25	18%	24%	0.4 (0.3, 0.5)	-11.7 (-13.7, -9.7)	<.0001
174	71399	All Other Amusement and Recreation Industries	588	6	11%	13%	6.9 (3.8, 10.0)	-7.7 (-11.5, -3.7)	0.0002
175	23799	Other Heavy and Civil Engineering Construction	170	7	14%	26%	6.7 (3.9, 9.5)	-5.0 (-8.6, -1.2)	0.0105
176	54121	Accounting, Tax Preparation, Bookkeeping, and Payroll Services	2,755	24	17%	27%	1.5 (1.1, 1.8)	-2.9 (-5.3, -0.3)	0.0268
177	56161	Investigation, Guard, and Armored Car Services	290	17	9%	11%	2.4 (1.8, 3.1)	-6.7 (-9.1, -4.2)	<.0001
178	71394	Fitness and Recreational Sports Centers	896	13	13%	16%	3.9 (2.7, 5.0)	-4.2 (-7.5, -0.9)	0.014
179	42345	Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers	490	6	26%	45%	6.0 (3.3, 8.7)	-5.0 (-7.7, -2.2)	0.0005
180	54161	Management Consulting Services	3,570	19	17%	23%	1.4 (1.0, 1.7)	-9.3 (-11.3, -7.2)	<.0001
181	62151	Medical and Diagnostic Laboratories	181	13	14%	25%	3.8 (2.6, 5.0)	-5.0 (-7.5, -2.5)	0.0001

PI rank	NAICS code	NAICS industry description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
182	62139	Offices of All Other Health Practitioners	1,168	13	22%	34%	3.9 (2.7, 5.2)	-8.6 (-11.4, -5.8)	<.0001
183	72241	Drinking Places (Alcoholic Beverages)	894	13	9%	29%	3.9 (2.6, 5.1)	-7.7 (-10.1, -5.1)	<.0001
184	23713	Power and Communication Line and Related Structures Construction	222	6	12%	16%	6.1 (3.3, 8.9)	-8.6 (-11.6, -5.4)	<.0001
185	45111	Sporting Goods Stores	496	6	17%	32%	5.0 (2.7, 7.2)	-6.4 (-9.2, -3.6)	<.0001
186	62134	Offices of Physical, Occupational and Speech Therapists, and Audiologists	638	13	20%	42%	3.1 (2.1, 4.1)	-6.0 (-9.1, -2.7)	0.0004
187	53121	Offices of Real Estate Agents and Brokers	2,087	14	18%	17%	0.9 (0.6, 1.1)	No significant change	0.0799
188	45439	Other Direct Selling Establishments	698	6	21%	19%	4.7 (2.5, 6.9)	No significant change	0.4955
189	62142	Outpatient Mental Health and Substance Abuse Centers	140	6	11%	19%	3.5 (1.9, 5.1)	-5.1 (-8.6, -1.5)	0.0066
190	54111	Offices of Lawyers	3,180	6	23%	40%	1.1 (0.6, 1.6)	-8.8 (-11.3, -6.3)	<.0001
--	--	All combined	--	12,816	20%	30%	6.5 (6.4, 6.5)	-4.2 (-4.8, -3.7)	<.0001

An Excel version of this table can be downloaded from the following webpage: [SHARP webpage for WMSD claim tracking publications](#).

*50% or more of the WMSD claims in this group are contributed by a single employer.

The top three State Fund industries to prioritize for prevention of wage replacement or disability WMSD claims are as follows:

- Couriers and Express Delivery Services
- Fire Protection
- Scheduled Air Transportation

State Fund industries with statistically significant increasing WMSD wage replacement or disability claim rates:

- Couriers and Express Delivery Services

Table 16. Washington workers' compensation claim rates per 1,000 FTE for WMSDs, State Fund wage replacement or disability claims by North American Industry Classification System (NAICS) industry and prevention index (PI) rank group, 2006–2019.

PI rank	NAICS code	NAICS industry description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
1	49211	*Couriers and Express Delivery Services	172	185	54%	51%	47.9 (43.9, 51.9)	10.6 (4.2, 17.4)	0.001
2	92216	Fire Protection	264	83	36%	19%	15.3 (13.4, 17.1)	No significant change	0.0583
3	48111	*Scheduled Air Transportation	39	67	42%	45%	17.9 (15.4, 20.4)	No significant change	0.5741
4	62331	Community Care Facilities for the Elderly	1,831	202	52%	54%	8.2 (7.6, 8.9)	-6.3 (-7.1, -5.5)	<.0001
5	56173	Landscaping Services	2,751	106	27%	26%	8.5 (7.6, 9.4)	-4.7 (-5.9, -3.6)	<.0001
6	62311	Nursing Care Facilities	216	125	53%	48%	8.3 (7.4, 9.1)	-6.7 (-7.8, -5.6)	<.0001
7	44511	Supermarkets and Other Grocery (except Convenience) Stores	637	140	46%	49%	8.2 (7.4, 8.9)	-2.8 (-3.9, -1.7)	<.0001
8	23611	Residential Building Construction	7,563	198	26%	24%	7.7 (7.1, 8.3)	-5.3 (-6.1, -4.5)	<.0001
9	62321	*Residential Mental Retardation Facilities	25	48	24%	18%	14.6 (12.2, 17.0)	-6.8 (-8.9, -4.6)	<.0001
10	23816	Roofing Contractors	874	54	22%	17%	10.2 (8.6, 11.8)	-5.8 (-7.7, -3.8)	<.0001
11	62191	Ambulance Services	38	35	61%	58%	20.5 (16.6, 24.4)	No significant change	0.9046
12	48421	Used Household and Office Goods Moving	238	38	40%	32%	17.5 (14.3, 20.7)	-4.9 (-7.3, -2.5)	<.0001
13	23813	Framing Contractors	1,358	62	21%	15%	9.5 (8.2, 10.9)	-4.7 (-5.9, -3.5)	<.0001
14	42441	General Line Grocery Merchant Wholesalers	131	44	45%	51%	12.8 (10.7, 15.0)	No significant change	0.7471
15	48412	General Freight Trucking, Long-Distance	763	63	25%	23%	9.0 (7.7, 10.3)	-4.2 (-5.9, -2.5)	<.0001

PI rank	NAICS code	NAICS industry description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
16	56211	Waste Collection	131	35	38%	39%	16.0 (12.9, 19.1)	-4.9 (-7.3, -2.5)	0.0001
17	56132	Temporary Help Services	1,225	197	35%	33%	6.5 (5.9, 7.0)	-2.6 (-4.2, -0.8)	0.0036
18	23831	Drywall and Insulation Contractors	785	58	27%	30%	8.7 (7.4, 10.0)	-5.9 (-7.5, -4.3)	<.0001
19	48411	General Freight Trucking, Local	318	39	29%	30%	11.8 (9.7, 14.0)	-4.8 (-6.4, -3.2)	<.0001
20	31211	Soft Drink and Ice Manufacturing	34	34	49%	56%	11.1 (8.9, 13.2)	-4.6 (-7.9, -1.3)	0.0071
21	62412	Services for the Elderly and Persons with Disabilities	379	69	46%	44%	7.0 (6.0, 7.9)	-4.8 (-6.8, -2.7)	<.0001
22	56172	Janitorial Services	2,085	73	28%	29%	6.0 (5.2, 6.8)	-4.4 (-6.3, -2.5)	<.0001
23	23822	Plumbing, Heating, and Air-Conditioning Contractors	2,093	130	27%	33%	5.5 (4.9, 6.0)	-6.9 (-7.8, -6.0)	<.0001
24	48422	Specialized Freight (except Used Goods) Trucking, Local	611	31	27%	19%	9.9 (7.9, 11.9)	-2.2 (-4.4, -0.1)	0.0436
25	23811	Poured Concrete Foundation and Structure Contractors	975	47	26%	27%	7.4 (6.2, 8.7)	-5.6 (-7.5, -3.6)	<.0001
26	49221	Local Messengers and Local Delivery	170	24	25%	18%	12.2 (9.4, 15.0)	No significant change	0.3199
27	23814	Masonry Contractors	425	23	33%	22%	13.3 (10.2, 16.4)	-5.8 (-8.1, -3.4)	<.0001
28	23899	All Other Specialty Trade Contractors	981	48	29%	32%	7.1 (5.9, 8.2)	-4.8 (-6.5, -3.1)	<.0001
29	44211	Furniture Stores	294	32	49%	49%	8.6 (6.8, 10.3)	-2.5 (-4.6, -0.4)	0.02
30	62221	*Psychiatric and Substance Abuse Hospitals	12	33	13%	11%	8.5 (6.9, 10.2)	-8.1 (-10.4, -5.8)	<.0001
31	23891	Site Preparation Contractors	1,513	53	23%	24%	6.0 (5.1, 7.0)	-5.6 (-7.3, -3.9)	<.0001
32	31161	Animal Slaughtering and Processing	65	21	38%	52%	10.5 (7.9, 13.1)	No significant change	0.8048
33	23622	Commercial and Institutional Building Construction	801	68	29%	36%	5.4 (4.7, 6.2)	-6.5 (-7.9, -5.2)	<.0001
34	48551	*Charter Bus Industry	26	15	41%	35%	15.6 (11.0, 20.2)	No significant change	0.2868
35	92214	*Correctional Institutions	30	53	19%	20%	5.7 (4.8, 6.6)	-4.3 (-6.7, -1.9)	0.0005
36	44419	Other Building Material Dealers	472	44	32%	35%	6.1 (5.1, 7.1)	-3.9 (-5.5, -2.3)	<.0001
37	72111	Hotels (except Casino Hotels) and Motels	1,153	100	34%	35%	4.6 (4.1, 5.2)	-3.3 (-5.2, -1.3)	0.0011
38	81111	Automotive Mechanical and Electrical Repair and Maintenance	1,885	48	31%	47%	5.8 (4.8, 6.7)	-5.4 (-6.9, -3.8)	<.0001
39	45299	All Other General Merchandise Stores	115	27	48%	48%	8.2 (6.4, 10.0)	No significant change	0.1045
40	11511	Support Activities for Crop Production	352	103	21%	21%	4.3 (3.8, 4.8)	-2.9 (-4.3, -1.5)	<.0001

PI rank	NAICS code	NAICS industry description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
41	23821	Electrical Contractors and Other Wiring Installation Contractors	2,155	89	29%	32%	4.3 (3.8, 4.9)	-5.9 (-7.1, -4.7)	<.0001
42	23835	Finish Carpentry Contractors	870	30	28%	13%	7.3 (5.8, 8.9)	-6.6 (-8.6, -4.5)	<.0001
43	32619	Other Plastics Product Manufacturing	93	27	40%	37%	7.5 (5.9, 9.1)	No significant change	0.7015
44	53111	Lessors of Residential Buildings and Dwellings	1,342	52	35%	36%	5.2 (4.4, 6.0)	-4.7 (-6.2, -3.3)	<.0001
45	62211	General Medical and Surgical Hospitals	34	16	56%	56%	9.5 (6.8, 12.2)	-7.1 (-9.8, -4.4)	<.0001
46	62149	*Other Outpatient Care Centers	127	108	46%	45%	3.0 (2.7, 3.3)	-2.1 (-3.9, -0.2)	0.0325
47	72231	Food Service Contractors	85	40	38%	46%	5.5 (4.5, 6.5)	-5.1 (-7.2, -3.0)	<.0001
48	42331	Lumber, Plywood, Millwork, and Wood Panel Merchant Wholesalers	224	15	41%	49%	9.1 (6.5, 11.7)	No significant change	0.8012
49	48423	Specialized Freight (except Used Goods) Trucking, Long-Distance	209	14	25%	22%	9.7 (6.8, 12.7)	-6.6 (-9.0, -4.2)	<.0001
50	11331	Logging	408	22	18%	17%	8.2 (6.2, 10.1)	-4.6 (-7.0, -2.2)	0.0003
51	44111	New Car Dealers	365	69	32%	37%	3.6 (3.1, 4.1)	-4.3 (-5.7, -3.0)	<.0001
52	48811	Airport Operations	50	7	35%	24%	11.1 (6.4, 15.7)	-4.0 (-6.6, -1.4)	0.0032
53	81112	Automotive Body, Paint, Interior, and Glass Repair	728	32	35%	55%	5.8 (4.7, 7.0)	-4.6 (-6.7, -2.4)	<.0001
54	53131	Real Estate Property Managers	1,223	49	34%	34%	4.5 (3.8, 5.2)	No significant change	0.0672
55	92119	Other General Government Support	245	56	24%	23%	4.3 (3.6, 4.9)	-3.5 (-5.6, -1.4)	0.0015
56	44132	Tire Dealers	215	14	36%	56%	9.4 (6.5, 12.3)	No significant change	0.0806
57	23833	Flooring Contractors	959	14	38%	41%	8.6 (6.0, 11.2)	-4.8 (-7.3, -2.2)	0.0003
58	31142	Fruit and Vegetable Canning, Pickling, and Drying	54	21	28%	33%	7.2 (5.5, 9.0)	No significant change	0.1111
59	56111	*Office Administrative Services	2,515	101	47%	41%	2.3 (2.0, 2.6)	No significant change	0.1624
60	72211	Full-Service Restaurants	6,644	129	20%	26%	1.8 (1.6, 2.0)	-6.4 (-7.4, -5.4)	<.0001
61	56179	Other Services to Buildings and Dwellings	362	6	29%	28%	13.8 (7.6, 20.0)	No significant change	0.4572
62	23711	Water and Sewer Line and Related Structures Construction	294	24	27%	32%	6.4 (4.9, 7.9)	-7.5 (-9.7, -5.3)	<.0001
63	11133	Noncitrus Fruit and Tree Nut Farming	1,913	72	13%	17%	2.5 (2.1, 2.8)	-1.5 (-3.0, -0.1)	0.0425
64	44131	Automotive Parts and Accessories Stores	361	31	35%	40%	5.6 (4.5, 6.8)	-2.7 (-5.3, -0.1)	0.0408

PI rank	NAICS code	NAICS industry description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
65	72221	Limited-Service Eating Places	5,271	105	21%	30%	1.9 (1.7, 2.1)	-5.3 (-6.8, -3.9)	<.0001
66	49311	*General Warehousing and Storage	134	20	43%	31%	7.0 (5.2, 8.8)	-5.4 (-9.1, -1.6)	0.0062
67	33711	Wood Kitchen Cabinet and Countertop Manufacturing	174	7	32%	40%	9.9 (5.6, 14.1)	-6.3 (-8.9, -3.7)	<.0001
68	23731	Highway, Street, and Bridge Construction	265	26	23%	25%	5.8 (4.5, 7.0)	-5.2 (-7.4, -2.9)	<.0001
69	32111	Sawmills and Wood Preservation	88	8	27%	34%	8.4 (5.1, 11.6)	-6.3 (-8.8, -3.7)	<.0001
70	23832	Painting and Wall Covering Contractors	1,882	34	18%	17%	4.7 (3.8, 5.6)	-5.5 (-8.2, -2.7)	0.0002
71	31171	Seafood Product Preparation and Packaging	51	6	33%	40%	10.0 (5.5, 14.5)	No significant change	0.2109
72	45331	Used Merchandise Stores	479	19	38%	43%	6.1 (4.5, 7.7)	-4.4 (-6.9, -1.8)	0.001
73	62111	Offices of Physicians	1,892	71	43%	41%	1.7 (1.5, 2.0)	-6.4 (-7.7, -5.2)	<.0001
74	92612	*Regulation and Administration of Transportation Programs	51	32	30%	34%	4.7 (3.8, 5.7)	No significant change	0.53
75	23812	Structural Steel and Precast Concrete Contractors	133	13	26%	35%	7.9 (5.4, 10.4)	-7.5 (-10.5, -4.4)	<.0001
76	33232	Ornamental and Architectural Metal Products Manufacturing	184	14	31%	43%	7.2 (5.0, 9.4)	-4.9 (-7.5, -2.3)	0.0003
77	62399	*Other Residential Care Facilities	65	15	25%	20%	6.6 (4.7, 8.5)	-7.9 (-10.6, -5.1)	<.0001
78	62161	*Home Health Care Services	149	61	48%	46%	1.9 (1.7, 2.2)	-8.6 (-9.9, -7.3)	<.0001
79	33641	Aerospace Product and Parts Manufacturing	121	34	44%	50%	3.7 (2.9, 4.4)	-2.7 (-5.1, -0.3)	0.0291
80	56199	All Other Support Services	294	14	31%	44%	6.6 (4.6, 8.6)	No significant change	0.063
81	62441	Child Day Care Services	1,844	45	29%	26%	2.5 (2.1, 3.0)	-4.1 (-6.1, -2.1)	<.0001
82	42448	Fresh Fruit and Vegetable Merchant Wholesalers	162	23	30%	27%	5.3 (4.1, 6.6)	No significant change	0.6671
83	62431	Vocational Rehabilitation Services	138	25	32%	22%	5.0 (3.9, 6.2)	-4.8 (-6.9, -2.7)	<.0001
84	33271	Machine Shops	376	18	36%	53%	5.6 (4.1, 7.1)	No significant change	0.1073
85	62419	Other Individual and Family Services	574	34	28%	26%	2.8 (2.3, 3.4)	-6.3 (-8.2, -4.3)	<.0001
86	62121	Offices of Dentists	3,197	36	56%	50%	2.0 (1.7, 2.4)	-4.3 (-6.3, -2.3)	<.0001
87	44422	Nursery, Garden Center, and Farm Supply Stores	311	7	30%	36%	6.3 (3.6, 9.0)	-5.9 (-8.3, -3.5)	<.0001
88	61111	Elementary and Secondary Schools	424	33	24%	30%	2.1 (1.7, 2.5)	-4.2 (-6.2, -2.1)	<.0001

PI rank	NAICS code	NAICS industry description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
89	31181	Bread and Bakery Product Manufacturing	400	15	34%	43%	5.0 (3.5, 6.4)	-4.3 (-7.7, -0.7)	0.0191
90	42512	Wholesale Trade Agents and Brokers	3,126	32	35%	36%	2.4 (1.9, 2.9)	No significant change	0.1174
91	44711	Gasoline Stations with Convenience Stores	1,478	27	29%	29%	2.8 (2.2, 3.5)	-6.7 (-9.1, -4.2)	<.0001
92	23799	Other Heavy and Civil Engineering Construction	170	7	29%	26%	6.1 (3.4, 8.7)	-7.0 (-10.0, -4.0)	<.0001
93	42383	Industrial Machinery and Equipment Merchant Wholesalers	539	20	35%	47%	3.8 (2.9, 4.8)	-6.0 (-9.0, -2.9)	0.0002
94	81211	Hair, Nail, and Skin Care Services	2,401	26	49%	75%	2.8 (2.2, 3.4)	-8.7 (-10.7, -6.6)	<.0001
95	81131	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	554	7	21%	28%	5.6 (3.2, 8.0)	-6.3 (-8.9, -3.6)	<.0001
96	11142	Nursery and Floriculture Production	247	13	35%	39%	5.1 (3.5, 6.6)	-4.1 (-6.6, -1.5)	0.0023
97	11199	All Other Crop Farming	568	21	17%	14%	3.2 (2.4, 4.0)	No significant change	0.2094
98	49312	Refrigerated Warehousing and Storage	51	6	27%	27%	5.9 (3.3, 8.6)	-4.1 (-7.2, -0.9)	0.0135
99	44413	Hardware Stores	269	7	36%	43%	5.5 (3.1, 7.8)	-5.6 (-8.2, -3.0)	<.0001
100	92313	*Administration of Human Resource Programs (except Education, Public Health, and Veterans' Affairs Programs)	30	27	31%	39%	1.9 (1.5, 2.4)	-7.3 (-9.1, -5.5)	<.0001
101	92412	Administration of Conservation Programs	64	8	28%	30%	4.9 (3.0, 6.9)	-5.8 (-8.6, -3.0)	<.0001
102	54194	Veterinary Services	705	17	25%	33%	3.2 (2.4, 4.1)	-3.3 (-6.3, -0.3)	0.0322
103	61131	Colleges, Universities, and Professional Schools	252	29	29%	31%	1.3 (1.0, 1.5)	-5.8 (-7.6, -3.9)	<.0001
104	92114	Executive and Legislative Offices, Combined	33	13	31%	35%	4.5 (3.1, 5.8)	-6.2 (-8.6, -3.7)	<.0001
105	31141	*Frozen Food Manufacturing	15	6	27%	24%	5.2 (2.8, 7.5)	-4.9 (-8.7, -0.9)	0.0161
106	11121	Vegetable and Melon Farming	362	7	21%	21%	4.3 (2.5, 6.1)	-3.1 (-5.9, -0.3)	0.0297
107	61121	Junior Colleges	30	16	31%	33%	2.3 (1.7, 3.0)	-3.0 (-5.3, -0.5)	0.0166
108	44311	Appliance, Television, and Other Electronics Stores	417	13	40%	55%	3.0 (2.1, 4.0)	-4.6 (-7.1, -1.9)	0.0007

PI rank	NAICS code	NAICS industry description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	Percent of total costs due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
109	71391	Golf Courses and Country Clubs	214	6	27%	28%	4.9 (2.6, 7.2)	-5.6 (-8.8, -2.3)	0.0011
110	44611	*Pharmacies and Drug Stores	232	7	37%	50%	3.3 (1.9, 4.7)	-3.6 (-6.2, -0.9)	0.0103
111	48851	Freight Transportation Arrangement	393	7	30%	36%	3.6 (2.0, 5.2)	No significant change	0.8192
112	44814	Family Clothing Stores	234	7	38%	43%	3.1 (1.8, 4.5)	-5.8 (-8.5, -2.9)	<.0001
113	45399	All Other Miscellaneous Store Retailers	1,157	6	34%	41%	2.5 (1.4, 3.7)	-8.7 (-11.1, -6.3)	<.0001
--	--	All combined	--	7,148	34%	36%	3.6 (3.6, 3.6)	-5.2 (-5.7, -4.8)	<.0001

An Excel version of this table can be downloaded from the following webpage: [SHARP webpage for WMSD claim tracking publications](#).

*50% or more of the WMSD claims in this group are contributed by a single employer.

The top three self-insured industries to prioritize for prevention of wage replacement or disability WMSD claims are as follows:

- *Scheduled Air Transportation*
- *General Line Grocery Merchant Wholesalers*
- *Couriers and Express Delivery Services*

Self-insured industries with statistically significant increasing WMSD wage replacement or disability claim rates:

- *Bread and Bakery Product Manufacturing*
- *Temporary Help Services*
- *Beef Cattle Ranching and Farming, including Feedlots*
- *Noncitrus Fruit and Tree Nut Farming*
- *Telecommunications Resellers*

Table 17. Washington workers' compensation claim rates per 1,000 FTE for WMSDs, self-insured wage replacement or disability claims by North American Industry Classification System (NAICS) industry and prevention index (PI) rank group, 2006–2019.

PI rank	NAICS code	NAICS industry description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
1	48111	*Scheduled Air Transportation	<5	206	45%	24.6 (22.6, 26.5)	No significant change	0.4484
2	42441	General Line Grocery Merchant Wholesalers	<5	87	46%	25.5 (22.4, 28.6)	No significant change	0.4766
3	49211	*Couriers and Express Delivery Services	<5	146	41%	19.8 (17.9, 21.6)	No significant change	0.1995
4	44511	*Supermarkets and Other Grocery (except Convenience) Stores	<5	296	43%	14.2 (13.3, 15.2)	No significant change	0.2443
5	31181	*Bread and Bakery Product Manufacturing	<5	41	44%	25.1 (20.7, 29.5)	4.2 (2.0, 6.6)	0.0002
6	45291	*Warehouse Clubs and Supercenters	<5	263	50%	13.4 (12.5, 14.3)	No significant change	0.3718
7	48412	General Freight Trucking, Long-Distance	12	83	39%	18.9 (16.5, 21.2)	No significant change	0.9987
8	56132	*Temporary Help Services	5	135	40%	14.2 (12.8, 15.5)	3.4 (1.6, 5.3)	0.0002
9	55111	*Management of Companies and Enterprises	<5	76	47%	14.5 (12.6, 16.4)	No significant change	0.2505
10	48511	*Urban Transit Systems	<5	30	37%	19.0 (15.1, 23.0)	-2.5 (-4.7, -0.3)	0.0249
11	92119	*Other General Government Support	15	243	30%	11.3 (10.5, 12.1)	-2.4 (-3.9, -1.0)	0.0011
12	62211	General Medical and Surgical Hospitals	17	983	51%	9.8 (9.4, 10.1)	-3.3 (-4.8, -1.8)	<.0001
13	92111	*Executive Offices	5	207	29%	10.1 (9.3, 10.9)	No significant change	0.0937
14	42481	*Beer and Ale Merchant Wholesalers	<5	28	48%	15.9 (12.5, 19.3)	No significant change	0.2238
15	45211	Department Stores	6	285	40%	9.4 (8.8, 10.0)	-3.4 (-4.9, -1.9)	<.0001

PI rank	NAICS code	NAICS industry description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
16	62191	*Ambulance Services	<5	12	52%	30.2 (20.4, 40.1)	No significant change	0.0773
17	62412	*Services for the Elderly and Persons with Disabilities	<5	36	44%	13.2 (10.7, 15.7)	No significant change	0.9547
18	33641	*Aerospace Product and Parts Manufacturing	<5	615	44%	8.4 (8.1, 8.8)	No significant change	0.302
19	11211	*Beef Cattle Ranching and Farming, including Feedlots	<5	10	39%	28.0 (18.0, 38.0)	68.5 (37.7, 106.2)	<.0001
20	44411	*Home Centers	<5	115	44%	9.6 (8.6, 10.6)	-3.3 (-5.8, -0.8)	0.0105
21	42512	*Wholesale Trade Agents and Brokers	<5	9	38%	26.4 (16.2, 36.5)	**	**
22	31171	*Seafood Product Preparation and Packaging	<5	30	50%	10.9 (8.6, 13.2)	No significant change	0.494
23	45331	*Used Merchandise Stores	<5	23	43%	12.4 (9.5, 15.4)	No significant change	0.2441
24	48521	*Interurban and Rural Bus Transportation	<5	9	35%	18.9 (11.8, 26.1)	No significant change	0.066
25	32111	*Sawmills and Wood Preservation	<5	15	26%	13.4 (9.5, 17.3)	No significant change	0.7581
26	44132	*Tire Dealers	<5	26	36%	11.0 (8.6, 13.4)	No significant change	0.5992
27	42331	*Lumber, Plywood, Millwork, and Wood Panel Merchant Wholesalers	<5	7	29%	23.9 (13.9, 33.9)	No significant change	0.7054
28	61111	Elementary and Secondary Schools	21	368	21%	3.7 (3.5, 3.9)	-3.4 (-4.7, -2.2)	<.0001
29	42448	Fresh Fruit and Vegetable Merchant Wholesalers	<5	36	34%	9.1 (7.4, 10.8)	No significant change	0.9145
30	44419	Other Building Material Dealers	<5	14	35%	12.1 (8.4, 15.8)	No significant change	0.417
31	33131	*Alumina and Aluminum Production and Processing	<5	14	39%	12.0 (8.3, 15.6)	No significant change	0.5622
32	92112	*Legislative Bodies	6	56	28%	8.1 (6.8, 9.3)	-3.9 (-6.5, -1.2)	0.0042
33	56211	Waste Collection	<5	63	36%	7.4 (6.4, 8.5)	-4.4 (-7.4, -1.3)	0.006
34	31191	*Snack Food Manufacturing	<5	7	40%	16.7 (9.4, 23.9)	No significant change	0.6473
35	92114	*Executive and Legislative Offices, Combined	6	51	26%	7.1 (5.9, 8.2)	-3.5 (-5.1, -1.9)	<.0001
36	31151	*Dairy Product (except Frozen) Manufacturing	<5	6	36%	18.2 (9.8, 26.6)	No significant change	0.6934
37	48411	*General Freight Trucking, Local	<5	8	46%	13.3 (7.9, 18.8)	No significant change	0.9905
38	31141	Frozen Food Manufacturing	<5	18	31%	9.6 (7.1, 12.1)	No significant change	0.8691
39	54121	*Accounting, Tax Preparation, Bookkeeping, and Payroll Services	<5	13	43%	10.0 (6.9, 13.1)	No significant change	0.946
40	32212	Paper Mills	<5	13	42%	9.7 (6.7, 12.8)	No significant change	0.2189
41	56172	*Janitorial Services	<5	20	34%	8.2 (6.1, 10.3)	No significant change	0.149
42	62111	*Offices of Physicians	<5	30	47%	3.9 (3.1, 4.7)	-7.6 (-9.2, -6.0)	<.0001
43	81311	*Religious Organizations	<5	25	35%	6.5 (5.0, 8.0)	No significant change	0.8161
44	81392	*Professional Organizations	<5	13	46%	8.7 (6.0, 11.5)	No significant change	0.6614

PI rank	NAICS code	NAICS industry description	Annual average number of employers in NAICS sector, 2017–2019	Annual average number of WMSD claims, 2017–2019	Percent of total claims due to WMSDs, 2017–2019	WMSD claim rate per 1,000 FTE, 2017–2019	Estimated annual percent change in WMSD claim rate, 2006–2019	Trend P value
45	11511	*Support Activities for Crop Production	<5	24	21%	5.5 (4.2, 6.8)	No significant change	0.1091
46	44131	*Automotive Parts and Accessories Stores	<5	7	41%	10.0 (5.6, 14.3)	No significant change	0.3567
47	11133	*Noncitrus Fruit and Tree Nut Farming	<5	18	18%	6.5 (4.8, 8.2)	6.7 (2.6, 11.0)	0.0012
48	72221	*Limited-Service Eating Places	<5	27	21%	2.3 (1.8, 2.8)	No significant change	0.2524
49	51731	*Telecommunications Resellers	<5	6	27%	10.3 (5.5, 15.1)	5.0 (1.4, 8.6)	0.0054
50	33612	*Heavy Duty Truck Manufacturing	<5	9	53%	8.7 (5.3, 12.0)	No significant change	0.8033
51	92613	*Regulation and Administration of Communications, Electric, Gas, and Other Utilities	<5	13	43%	3.9 (2.7, 5.1)	**	**
52	33392	*Material Handling Equipment Manufacturing	<5	6	63%	7.4 (4.1, 10.8)	No significant change	0.8483
53	33451	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	<5	7	66%	4.5 (2.6, 6.5)	No significant change	0.2897
54	51711	*Wired Telecommunications Carriers	<5	7	25%	2.5 (1.4, 3.7)	-9.2 (-13.2, -4.9)	<.0001
55	22112	*Electric Power Transmission, Control, and Distribution	<5	6	27%	3.3 (1.8, 4.8)	-7.2 (-10.3, -3.9)	<.0001
--	--	All combined	--	5,453	38%	7.6 (7.5, 7.8)	-1.6 (-2.6, -0.6)	0.0023

An Excel version of this table can be downloaded from the following webpage: [SHARP webpage for WMSD claim tracking publications](#).

*50% or more of the WMSD claims in this group are contributed by a single employer.

**Not enough years' data to assess trend.