

2013 Survey of Occupational Injuries and Illnesses (SOII) Data for Ohio

Summary Report

The incidence rate of non fatal occupational injuries and illnesses total recordable cases (TRC) for all establishments in Ohio, including private and public establishments, was estimated to be 3.0 per 100 full time equivalent (FTE) workers. This rate is below the national rate of 3.5 cases per 100 FTE workers. There was a 5% decrease in the estimated total recordable cases in 2013 from the previous year. There were 122,600 total recordable cases reported in 2013 for all industries; 28.4% of the cases involved one or more days away from work, 19.1% of cases involved one or more days of job restriction/transfer only and 52.5% were recordable cases with no loss time. The combined incidence rate for cases with days away from work for both private and public establishments was 0.8 per 100 FTE workers. Key findings from the Survey of Occupational Injuries and Illnesses for State of Ohio are described below.

I. Private Industry - Incidence rates

1. The incidence rate of total recordable cases (TRC) in private industry was 2.9 cases per 100 FTE workers. This rate is below the national private industry TRC incidence rate of 3.3 cases per 100 FTE workers. Ohio incidence rates are also lower for all case categories (days away, restriction and transfer and no loss time cases) than the corresponding national rates.
2. Private industry sectors with the highest total recordable cases incidence rates per 100 FTE workers in Ohio were:
 - i. Healthcare and social assistance – 4.4
 - ii. Agriculture, forestry, fishing and hunting – 4.0
 - iii. Manufacturing – 3.9
 - iv. Transportation and warehousing – 3.5
 - v. Wholesale trade – 3.2
3. There was a decline in TRC incidence rates for most industries in comparison to 2012 rates in all industries in Ohio except for agriculture, mining, education and information industries. The 2013 TRC incidence rates for these four industries were higher than corresponding 2012 rates.
4. TRC incidence rate per 100 FTE workers for all private sector industries by size classes:
 - i. Class size 1 (1-10 employees) – 1.5
 - ii. Class size 2 (11-49 employees) – 2.6

- iii. Class size 3 (50 – 249 employees) – 3.6
 - iv. Class size 4 (250 – 999 employees) – 2.9
 - v. Class size 5 (1000+ employees) – 3.2
5. There was also a decrease in the number of cases involving days away from work (DAFW) from the previous year. There were an estimated 28,910 cases of injuries and illnesses involving one or more days away from work in the private industry sector. Distribution of these cases by number of days away from work indicates that 26.1% had one or two days away, 20.1% had three to five days away from work and 31.2% cases had more than 20 days away from work.
 6. Median number of days away for DAFW cases was seven (7) days. This is an increase from the previous year’s median of six (6) days.
 7. Table 1 compares Ohio TRC incidence rates per 100 FTE workers with the national rates in selected in private industry sectors for which data is available for Ohio.

Table 1: TRC incidence rates for Ohio and U.S. in selected industries

Industry	NAICS code	OH	U.S
Private industry	All	2.9	3.3
Agriculture, forestry, fishing and hunting	11	4.0	5.7
Mining	21	2.7	2.0
Construction	23	2.9	3.8
Manufacturing	31-33	3.9	4.0
Wholesale trade	42	3.2	3.1
Retail trade	44-45	3.0	3.8
Transportation and warehousing	48-49	3.5	4.7
Utilities	22	1.5	2.1
Information	51	2.9	1.5
Professional and business services	54, 55 & 56	1.2	1.6

Educational services	61	1.5	2.0
Health care and social assistance	62	4.4	4.7
Leisure and hospitality	71 & 72	3.7	3.8

8. Ohio TRC incidence rates are lower than national rates in all selected industry sectors except in mining, wholesale trade and information industries.
9. Ohio private industry non-fatal occupational injuries and illnesses TRC incidence rate (2.9 cases per 100 FTE workers) compared with some states:
 - Michigan – 3.7
 - Pennsylvania - 3.9
 - Indiana - 3.6
 - California - 3.5
 - Illinois - 3.2
 - Kentucky - 4.0

II. Worker and injury characteristics – Private industry

SOII provides case and demographic information on injuries and illnesses involving one or more days away from work. The survey also gathers information on occupations of the injured workers. In 2013, key findings on demographic and occupational distribution of these cases for private sector industries were:

1. The incidence rate of non fatal occupational injuries and illnesses involving one or more days away from work in men was 83.3 cases per 10,000 FTE workers while the rate in women was 74.1 cases per 10,000 FTE. Men accounted for 58.1% of all DAFW cases in private industry in 2013.
2. The gap in the distribution of injury and illnesses involving days from work by gender was smaller in 2013 than the previous year. Men accounted for 63.9% of DAFW cases in 2012. There was also a significant decline in the incidence rate of DAFW cases among men from the 102.4 cases per 10,000 FTE workers to the current reported rate.
3. Injury and illness distribution by age shows that workers between 45-54 years accounted for 22% of all injuries. The distribution for other age groups was as follows:
 - i. 16-19 – 3.3%

- ii. 20-24 – 9.6%
 - iii. 25-34 – 21.1%
 - iv. 35-44 – 20.1%
 - v. 55-64 – 17.4%
 - vi. 65 and over – 4.9%
4. Incidence rate for DAFW cases in the age groups indicates that workers within the 16-19 years group were more likely to be injured. Incidence rates per 10,000 FTE workers of DAFW cases in the different age groups were as follows:
- i. 16-19 – 96.7
 - ii. 20-24 – 76.4
 - iii. 25-34 – 78.6
 - iv. 35-44 – 76.8
 - v. 45-54 – 79.4
 - vi. 55-64 – 78.9
 - vii. 65 and over – 88.8
5. The distribution of days away from work (DAFW) cases by employee length of service/employment was as follows:
- i. Less than 3 months – 11.8%
 - ii. 3 months to 1 year – 19.9%
 - iii. 1-5 years – 31.8%
 - iv. 5 years or more – 35.8%
6. Healthcare support occupations had the highest incidence rate of cases with one or more days away from work with an incidence rate of 198.2 cases per 10,000 FTE workers. Other occupations with high rates were; transportation and material moving occupations (196.4 cases per 10,000 FTE workers), construction and extraction occupations (160.3 cases per 10,000 FTE workers), building and grounds cleaning and maintenance occupations (130.8 cases per 10,000 FTE workers) and installation, maintenance and repair occupations (127.2 cases per 10,000 FTE workers).
7. Workers injured their back more than any other body part; 15.8% of all cases were back injuries. The hands and knees were also frequently injured with injuries to these parts accounting for 12.7% and 8.2%, respectively. Eleven percent of all injuries involved multiple body parts.
8. The distribution of DAFW cases by nature of injury and illness indicates that sprains/ strains and tears accounted for the highest percentage of injuries (39.2%). Fractures and bruises/contusion injuries were 12.3% and 10.2% of all cases, respectively.

9. The most frequent source of injury was floors/ walkways/ ground surfaces, which accounted for 21.7 % of all injuries. Injured worker's own position or bodily motion and vehicles were the source of 15.1% and 8.4% of cases, respectively.
10. Falls, slips and trips were the most common injury events and accounted for a combined 30.4% of all DAFW cases reported in 2013. Overexertion also accounted for 29.8% of all reported DAFW cases.

Table 2: Ranked distribution of DAFW cases in Ohio private industry by case/demographic factors

	Distribution					
	Age	Tenure	Part of body	Nature	Cause/source	Event
Rank						
1st	45-54yrs (22%)	> 5 years (35.8%)	Back (15.8%)	Sprain/strain/tears (39.2%)	Floors/ground surfaces (21.7%)	Falls, slips/trips (30.4%)
2nd	25-34yrs (21.1%)	1-5 yrs (31.8%)	Hands (12.7%)	Fractures (12.3%)	Worker's position/motion (15.1%)	Overexertion (29.8%)
3rd	35-44yrs (20.1%)	3months-1yr (19.9%)	Knee (8.2%)	Bruises/contusions (10.2%)	Vehicles (8.4%)	Contact with objects (25.4%)

III. PUBLIC SECTOR INDUSTRY – Incidence rates (State and Local government combined)

Survey results for 2013 include combined state and local government rates and statistics. It also includes information on state and local government rates separately. The TRC incidence rate per 100 FTE workers for Ohio public employer establishments in 2013 was 3.2. There were 15,900 total recordable cases reported in 2013 for all industries; 37% of the cases involved one or more days away from work, 11.9% of the cases involved one or more days of job restriction/transfer only and 51% were recordable cases with no loss time. A summary of the result is presented below.

IV. State government only

1. In 2013, TRC incidence rate for state government establishments in Ohio was 3.7 cases per 100 FTE workers while corresponding national rate was 5.2 cases per 100 FTE workers. There were an estimated 5,100 total recordable cases of workplace injuries and illnesses in Ohio state government establishments. Due to a low response rate in public industry, data available for this sector is limited.
2. Summary of state government total recordable cases incidence rates per 100 FTE worker by industry:
 - i. Education services – 1.5
 - ii. Public administration – 6.8
 - iii. State government colleges, universities and professional schools – 1.5
 - iv. State government hospitals – 3.4
3. There were 1,300 cases involving days away from work and 600 cases involving days of job restriction and/or transfer.
4. The distribution of DAFW cases indicates that 25.4% had one or two days away, 24.6% had three to five days away from work and 42.3% cases had more than 31 days away from work.
5. Median number of days away from work for these cases was six (6) days.

V. Worker and injury characteristics – State government only

1. Women accounted for 68.5% of all injured workers with an incidence rate of cases involving one or more days away from work of 133.4 cases per 10,000 FTE workers. Incidence rate for men was 45.4 cases per 10,000 FTE workers.

2. Injury and illness distribution by age shows that workers between 45-54 years accounted for 36.9% of all DAFW injuries. Workers within age groups 25-34, 55-64 and 35-44 years accounted for 24.6%, 13.8% and 6.9% of all injuries, respectively.
3. The distribution of days away from work (DAFW) cases by employee length of service/employment was as follows:
 - i. 3 months to 1 year – 15.4%
 - ii. 1-5 years – 20.8%
 - iii. 5 years or more – 50.8%
4. Workers injured their back more than any other body part; 26.2% of all cases were back injuries. Knee, ankle and shoulder each accounted for 3.1% of all DAFW cases. Cases involving multiple body parts made up 29.2% of all injuries.
5. The distribution by nature of injury and illness indicates that sprains/strains and tears accounted for the highest percentage of injuries (46%). Bruises/contusions and multiple injuries were 11.5% and 6.9% of all cases, respectively.
6. The most frequent source of injury was injured worker's own position or bodily motion, which accounted for 26.9 % of all injuries. Floors/walkways/ground surfaces and person other than injured/ill worker were the sources of 16.2% and 10.8% of cases, respectively.
7. Overexertion and falls on the same level were the most common injury events with 33.1% and 18.5% of cases falling under these categories, respectively.
8. Protective service occupations accounted for 46.2% of all cases in the state government. Management occupations and building, grounds cleaning and maintenance occupations each accounted for 7.7% of all injuries.

VI. PUBLIC SECTOR INDUSTRY – Incidence rates (Local government only)

1. TRC incidence rate for local government in Ohio was 3.0 cases per 100 FTE workers while corresponding national rate was 6.1 cases per 100 FTE workers. The reported rate for 2013 indicates a significant decrease from previous year's rate which was 4.0 cases per 100 FTE workers. There were also significant reductions in the TRC incidence rates reported for most local government industry sectors.
2. There were an estimated 10,800 total recordable cases of workplace injuries and illnesses. This represents a 24.5% decrease from the estimated number of TRC cases for the previous year.
3. Summary of local government industry sector total recordable incidence rates per 100 FTE worker:
 - i. Transportation and warehousing – 5.1
 - ii. Healthcare and social assistance – 4.1
 - iii. Public administration – 3.3
 - iv. Education services – 2.1
4. Despite the overall decrease in the TRC incidence rate reported in public administration industry for 2013, the justice, public order and safety activities subsector and fire protection subsector experienced an increase in their TRC rates.
5. Industry subsectors with the highest total recordable cases incidence rates per 100 FTE workers in Ohio were:
 - i. Fire protection – 9.0
 - ii. Local government nursing and residential care facilities – 6.7
 - iii. Local government transit and ground passenger transportation – 5.7
 - iv. Local government justice, public order and safety activities – 5.3
 - v. Local government hospitals – 4.2
6. There was a 29% increase in the number of cases involving one or more days away from work in local government from the previous year estimate. There were an estimated 4,550 cases of injuries and illnesses involving one or more days away from work.
7. There was a significant increase in the median number of days away for DAFW cases from 5 days reported in 2012 to 23 days in 2013.
8. Of the total DAFW cases, 19.1% had one or two days away, 15.4% cases required 3-5 days away from work and 51% of the cases required more than 20 days away from work.

VII. Worker and injury Characteristics – Local government only

1. Women accounted for 59.8% of all injured workers with an incidence rate for non-fatal occupational injuries and illnesses involving one or more days away from work of 143.8 cases per 10,000 FTE workers. Incidence rate for men was 110.7 cases per 10,000 FTE workers.
2. Injury and illness distribution by age indicates that workers within age group 55-64 years accounted for 27% of all injuries. Workers within age groups of 45-54, 25 – 34 and 35-44 years accounted for 25.7%, 17.6% and 15.6% of all injuries, respectively.
3. Days away from work (DAFW) cases percentage distribution by employee length of service/employment was as follows:
 - i. Less than 3 months – 6.6%
 - ii. 3 months to 1 year – 2.2%
 - iii. 1-5 years – 15.6%
 - iv. 5 years or more – 74.3%
4. Workers injured their back more than any other body part; 28.8% of all cases were back injuries. The knee and ankle were the two next most injured body parts with injuries to these parts accounting for 16.5% and 15.8% of all cases, respectively.
5. Distribution by nature of injury and illness indicates that sprains, strains and tears accounted for the highest percentage of injuries (66.8%). Soreness/pain injuries were 14.1% of all cases.
6. The most frequent source of injury was floors/walkways/ground surfaces which accounted for 31.2 % of all injuries. The injured worker's motion or position and ladders were the source of 19.6% and 12.3% of all cases, respectively.
7. Falls, slips and trips and overexertion were the most common injury events with 45.5% and 33.8% of cases falling under these categories, respectively.
8. Protective service occupations accounted for 27% of all cases in the local government sector. Education, training and library occupations and food preparation/serving related occupations accounted for 20% and 15.4% of all injuries respectively.

Table 3: Ranked distribution of DAFW cases by case/demographic factors in Ohio private, state and local government establishments.

Distribution												
	Part of body			Nature			Cause/source			Event		
	Private	State govt.	Local govt.	Private	State govt.	Local govt.	Private	State govt.	Local govt.	Private	State govt.	Local govt.
Rank												
1st	Back (16%)	Back (26%)	Back (29 %)	Sprain/strain/tears (39%)	Sprain/strain/tears (46%)	Sprain/strain/tears (46%)	Floors/gro und surfaces (22%)	Worker's position/ motion (27%)	Floors/gro und surfaces (31%)	Falls, slips/trip (30%)	Overexer tion (33%)	Falls, slips/trips (46%)
2nd	Hands (13%)	Knee (3%)	Knee (17%)	Fractures (12%)	Bruises/c ontusions (12%)	Soreness/ pain (14%)	Worker's position/ motion (15%)	Floors/gro und surfaces (16%)	Worker's position/ motion (20%)	Overexert ion (30%)	Falls, slips/trip s (19%)	Overexerti on (34%)
3rd	Knee (8%)	Ankle (3%)	Ankle (16%)	Bruises/c ontusions (10%)	Fractures (2%)	Fractures (3%)	Vehicles (8%)	Other person (11%)	Ladders (12%)	Contact (25%)	Exposure to harmful substanc e (15%)	Violence (8%)

For more information on data and statistics from the 2013 Survey of Occupational Injuries and Illnesses for the State of Ohio, please contact Division of Safety and Hygiene’s Research and Statistics Department staff at 614-995-8608 or visit <https://www.bwc.ohio.gov/employer/programs/safety/SOII/Statistics.asp>