Private and public sector industries combined

- We estimate the incidence rate of non-fatal occupational injuries and illnesses total recordable cases (TRC) for all establishments in Ohio to be 2.9 cases per 100 full-time equivalent (FTE) workers. This includes private and public establishments.
- Ohio combined TRC incidence rate (2.9) was lower than the national rate of 3.4 cases per 100 FTE workers.
- Of the estimated 121,300 total recordable cases reported in 2014 for all industries:
  - 30.6 percent of the cases involved one or more days away from work (DAFW);
  - 20 percent of cases involved one or more days of job restriction/transfer only;
  - 48.5 percent were recordable cases with no loss time
- Estimated number of total recordable cases in 2014 decreased from the previous year by 1 percent.
- The combined incidence rate for cases with DAFW for private and public establishments was 0.9 per 100 FTE workers.

Private industry - Incidence rates

- The incidence rate of TRC in private industry was 2.9 cases per 100 FTE workers. The rate remained unchanged from the previous year. This rate is below the national private industry TRC incidence rate of 3.2 cases per 100 FTE workers.
- Ohio incidence rates are also lower or on par with corresponding national rates for other case categories.
- Private industry sectors with the highest TRC incidence rates per 100 FTE workers in Ohio were:
  - Transportation and warehousing – 4.6;
  - Arts, entertainment, and recreation – 4.5;
  - Health care and social assistance – 4.1;
  - Manufacturing – 3.9;
  - Agriculture, forestry, fishing and hunting – 3.7.
- TRC incidence rates in most private sector industries decreased in comparison to the previous year. There were also a few industries where estimates indicated an increase in rates. The table below summarizes this information.
Table 1: Table shows private sector industries with increase, decrease and stable TRC rates for 2014 in comparison to previous year.

<table>
<thead>
<tr>
<th>Industry</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Decrease in rates</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>4.0</td>
<td>3.7</td>
</tr>
<tr>
<td>Mining</td>
<td>2.7</td>
<td>1.7</td>
</tr>
<tr>
<td>Wholesale</td>
<td>3.2</td>
<td>2.5</td>
</tr>
<tr>
<td>Retail</td>
<td>3.0</td>
<td>2.7</td>
</tr>
<tr>
<td>Information</td>
<td>2.9</td>
<td>1.1</td>
</tr>
<tr>
<td>Health care and social assistance</td>
<td>4.4</td>
<td>4.1</td>
</tr>
<tr>
<td><strong>Increase in rates</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transportation (3.5 to 4.6)</td>
<td>3.5</td>
<td>4.6</td>
</tr>
<tr>
<td>Construction (2.9 to 3.5)</td>
<td>2.9</td>
<td>3.5</td>
</tr>
<tr>
<td><strong>Unchanged rates</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing (3.9)</td>
<td>3.9</td>
<td>3.9</td>
</tr>
</tbody>
</table>

Rates show number of cases per 100 FTE.

- TRC incident rate per 100 FTE workers for all private sector industries by size classes
  - Class size 1 (1 to 10 employees) – 1.4
  - Class size 2 (11 to 49 employees) – 2.6
  - Class size 3 (50 to 249 employees) – 3.7
  - Class size 4 (250 to 999 employees) – 2.9
  - Class size 5 (1,000 or more employees) – 3.2
- There was also a 7-percent increase in the number of cases involving DAFW in comparison to the previous year. There were an estimated 31,010 cases of injuries and illnesses involving one or more DAFW in the private industry sector.
- Median number of days away of DAFW cases was six days. This is a decrease from the previous year’s median of seven days.
- Ohio TRC rates are lower than national rates in all selected industry sectors except in the arts, entertainment and recreation industries.
- Ohio private industry non-fatal occupational injuries and illnesses TRC incident rate (2.9 cases per 100 FTE workers) compares favorably with other states.
  - West Virginia – 4.0
  - Indiana – 3.8
  - Kentucky – 3.7
  - Pennsylvania – 3.7
  - Michigan – 3.6
  - California – 3.4
  - Illinois – 2.8
Table 2 compares Ohio TRC incident rates per 100 FTE workers with national rates in selected private industry sectors for which data is available for Ohio.

Table 2

<table>
<thead>
<tr>
<th>NAICS</th>
<th>Industry</th>
<th>OH</th>
<th>U.S</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Private industry</td>
<td>2.9</td>
<td>3.2</td>
</tr>
<tr>
<td>11</td>
<td>Agriculture, forestry, fishing and hunting</td>
<td>3.7</td>
<td>5.5</td>
</tr>
<tr>
<td>21</td>
<td>Mining</td>
<td>1.7</td>
<td>2.0</td>
</tr>
<tr>
<td>23</td>
<td>Construction</td>
<td>3.5</td>
<td>3.6</td>
</tr>
<tr>
<td>31-33</td>
<td>Manufacturing</td>
<td>3.9</td>
<td>4.0</td>
</tr>
<tr>
<td>42</td>
<td>Wholesale trade</td>
<td>2.5</td>
<td>2.9</td>
</tr>
<tr>
<td>44-45</td>
<td>Retail trade</td>
<td>2.7</td>
<td>3.6</td>
</tr>
<tr>
<td>48-49</td>
<td>Transportation and warehousing</td>
<td>4.6</td>
<td>4.8</td>
</tr>
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<td>51</td>
<td>Information</td>
<td>1.1</td>
<td>1.3</td>
</tr>
<tr>
<td>52</td>
<td>Finance and insurance</td>
<td>0.2</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>Professional and business services</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>62</td>
<td>Health care and social assistance</td>
<td>4.1</td>
<td>4.5</td>
</tr>
<tr>
<td>71</td>
<td>Arts, entertainment and recreation</td>
<td>4.5</td>
<td>4.2</td>
</tr>
<tr>
<td>72</td>
<td>Accommodation and food services</td>
<td>2.7</td>
<td>3.5</td>
</tr>
<tr>
<td>82</td>
<td>Other services (except public administration)</td>
<td>2.4</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Worker and injury characteristics – Private industry

The estimated number of cases involving DAFW in the private sector in 2014 was 31,010. 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. Overall incidence rate for DAFW cases in Ohio private industry in 2014 was 84.7 cases per 10,000 full-time workers. Other important data points on case and demographic distribution in private sector industries are below.
Demographics

Gender

- Men accounted for 61.3 percent of cases involving one or more days away from work.
- Incidence rate of DAFW cases in men significantly increased from 83.3 the previous year to 93.2 cases per 10,000 full-time workers in 2014.
- Contrastingly, incidence rate of DAFW cases in women slightly decreased from 74.1 in 2013 to 73.8 cases per 10,000 full-time workers in 2014.
- Incidence rate of DAFW cases involving falls on same level in women was almost twice as high as the rate reported for men. Incidence rate in women was 23.3 compared to 12.3 cases per 10,000 full-time workers in men.

Age

- Distribution of DAFW cases by age group
  - 16 to 19 – 4.2 percent
  - 20 to 24 – 9.9 percent
  - 25 to 34 – 22.5 percent
  - 35 to 44 – 20.1 percent
  - 45 to 54 – 21.2 percent
  - 55 to 64 – 17.3 percent
  - 65 and older – 3.7 percent
- Incidence rate of cases per 10,000 full-time workers of DAFW cases by age group
  - 16 to 19 – 129.8
  - 20 to 24 – 87.3
  - 25 to 34 – 83.8
  - 35 to 44 – 81.9
  - 45 to 54 – 81.3
  - 55 to 64 – 87.7
  - 65 and older – 73.4
- SOII results for 2014 indicate incidence rate of DAFW cases increased in all age groups except in workers 65 years and older in comparison to the previous year.
- Incidence rate of DAFW cases in age group 16 to 19 years almost doubled within the last three years. Incidence rates in this age group in 2012 and 2013 were 74.4 and 96.7 cases per 10,000 full-time workers, respectively.
Tenure

- Distribution of DAFW cases by employee length of service/employment
  - Less than three months – 17.4 percent
  - Three months to one year – 21.8 percent
  - One to five years – 25.8 percent
  - Five years or more – 34.5 percent

- Workers with less than three months of tenure accounted for a higher proportion of DAFW cases in 2014 than in previous years. This category of workers accounted for 10.8 percent and 11.8 percent of DAFW cases in 2012 and 2013, respectively.

- Workers with more than five years of tenure had the highest median days away from work of all tenure groups with eight days.

Occupation

- Occupation groups with highest incidence rates of DAFW cases per 10,000 full-time workers
  - Transportation and material moving occupations – 219.1
  - Building and grounds cleaning and maintenance occupations – 175
  - Installation, maintenance, and repair occupations – 164.8
  - Construction and extraction occupations – 164.6
  - Health-care support occupation – 156.6

- Occupations with highest median days away from work for DAFW cases
  - Bus and truck mechanics and diesel engine specialist – 34
  - Janitors and cleaners – 30
  - Heavy and tractor-trailer truck drivers – 21
  - Light truck or delivery services drivers – 20
  - Administrative services managers – 19
  - Helpers – installation, maintenance and repair workers – 12

Case characteristics

Nature of injuries

- Distribution of DAFW cases by type of injury
  - Sprains, strains, tears – 41.9 percent
  - Fractures – 10.7 percent
  - Bruises and contusions – 10.4 percent
  - Cuts, lacerations – 9.2 percent
  - Soreness and pain – 4.6 percent

- Incidence rate of fracture cases was twice as high in men as in women.
• Workers in age group 16 to 19 years had significantly higher incidence rate of DAFW cases involving sprains strains and tears.

Body parts
• Distribution of DAFW cases by body part injured
  o Back – 17.3 percent
  o Hands – 16.5 percent
  o Knee – 8.8 percent
  o Shoulder – 8.4 percent
  o Head – 7.9 percent
• Incidence rate statistics indicated women were more likely to injure their backs while men were more likely to injure hands.
• Incidence rates information also indicated health-care support occupations had the highest rate for back injuries compared to other occupation groups.
• Construction and extraction occupations had the highest incidence rate of DAFW cases involving injuries to the hand in comparison to other occupation groups.

Source of injury
• Distribution of DAFW cases by source of injury
  o Floors, walkways, ground surfaces - 21.7 percent
  o Worker’s motion or position – 17.8 percent
  o Containers - 10.4 percent
  o Parts and material – 8.6 percent
  o Machinery – 7.3 percent
• Building and grounds, and cleaning and maintenance occupations had the highest incidence rate of DAFW cases involving floors and walkways by a significant margin.

Events/Causation
• Distribution of DAFW cases by event
  o Overexertion – 33.5 percent
  o Falls, slips, trips – 28.9 percent
  o Contact with objects – 28.7 percent
  o Exposure to harmful substances or environment – 3.9 percent
  o Transportation incidents – 2.5 percent
• Workers in age group greater than 65 years had the highest incidence rate for slips, trips and falls of all the age categories.
• Workers in 16 to 19 year age group had the highest incidence rate of overexertion related injuries of all age groups.
• Transportation and material moving occupations also had the highest rate of DAFW cases related to overexertion of all occupation groups by a significant margin.
• Incidence rate statistics also indicated that building and grounds, cleaning and maintenance occupations had the highest rate of slips, trips and fall cases by a margin that doubles the rate of like cases in any other occupation group.

Public sector industry – Incidence rates (local government only)

• TRC incident rate for local government in Ohio was 3.6 cases per 100 FTE workers. The corresponding national rate was 5.4 cases per 100 FTE workers. The reported rate for 2014 indicates a significant increase in comparison to previous year’s rate of three cases per 100 FTE workers. There were also increases in TRC incidence rates reported for most local government industry sectors.
• In 2014, there were an estimated 13,700 total recordable cases of workplace injuries and illnesses. This represents a 27-percent increase in the estimated number of TRC cases compared to the previous year.
• A summary of local government industry sector total recordable incident rates per 100 FTE worker follows:
  o Transportation and warehousing – 7.4;
  o Public administration – 5.0;
  o Utilities – 2.3.
• Industry subsectors with the highest total recordable cases incident rates per 100 FTE workers in Ohio were:
  o Fire protection – 9;
  o Local government transit and ground passenger transportation – 7.1;
  o Local government nursing and residential care facilities – 6.7;
  o Local government hospitals – 4.
• There was a 16-percent increase in the number of cases involving one more DAFW in local government from the previous year estimate. There were an estimated 5,270 cases of injuries and illnesses involving one or more DAFW.
Worker and injury characteristics – Local government establishments only

Overall incidence rate of DAFW cases in Ohio local government establishment in 2014 was 139.7 cases per 10,000 full-time workers. Important data points on case and demographic distribution in local government establishments are below.

Demographics

Gender

- Women accounted for 55.2 percent of cases involving one or more DAFW.
- Incidence rate of DAFW cases was higher in women. Survey results indicate that rate of DAFW cases in men and women were 130.3 and 148.3 cases per 10,000 full-time workers, respectively.

Age

- Distribution of DAFW cases by age group
  - 20-24 to 17.1 percent
  - 25-34 to 7.0 percent
  - 35-44 to 27.9 percent
  - 45-54 to 33.2 percent
  - 55-64 to 7.6 percent
  - 65 and older – 3.4 percent
- Incidence rate of cases per 10,000 full-time workers of DAFW cases by age group
  - 20 to 24 – 614.3
  - 25 to 34 – 44.2
  - 35 to 44 – 172.1
  - 45 to 54 – 181.0
  - 55 to 64 – 61.0
  - 65 and older – 123.8
- SOII results for 2014 indicate incidence rates of DAFW cases in workers within 25 to 34 and 55 to 64 age groups were lower in local government than in private industries.
- Incidence rates of DAFW cases for worker in other age groups were significantly higher in local government than private industry.

Tenure

- Distribution of DAFW cases by employee length of service/employment
  - Three months to one year – 11.8 percent
o One to five years – 29.6 percent
o Five years or more – 54.5 percent

Case characteristics
Nature of injuries
- Distribution of DAFW cases by type of injury
  - Sprains, strains, tears – 37.4 percent
  - Bruises and contusions – 13.1 percent
  - Fractures – 8.7 percent
  - Cuts, lacerations – 1.9 percent
- Incidence rate of sprain, strains and tears was significantly higher in women than in men.
- Workers in age group 20 to 24 years had the highest incidence rate of DAFW cases involving sprains strains and tears.

Body parts
- Distribution of DAFW cases by body part injured
  - Back – 9.7 percent
  - Hands – 9.7 percent
  - Shoulder – 4.9 percent
  - Ankle – 3.6 percent
- Incidence rate statistics indicated rate of back injuries in men was almost twice as high as the estimated rate in women.

Source of injury
- Distribution of DAFW cases by source of injury
  - Person, other than injured worker – 27.75 percent
  - Worker’s motion or position – 14.8 percent
  - Floors, walkways, ground surfaces – 14.6 percent
  - Containers - 12.7 percent
  - Parts and material – 8.6 percent

Events/Causation
- Distribution of DAFW cases by event
  - Overexertion – 32.6 percent
  - Violence – 23.3 percent
  - Contact with objects – 19.2 percent
  - Falls, slips, trips – 18 percent
Transportation incidents – 4.7 percent

- Incidence rate statistics indicate rate of DAFW cases because of violence in local government more than tripled in 2014 from the previous year.
- Furthermore, incidence rate of DAFW cases in women involving violence in 2014 was 57.4 cases per 10,000 full-time workers. This represents more than a sixfold increase from rate of 8.6 reported in 2013.
- Incidence rate of cases involving overexertion was significantly higher in men than women in 2014.

For more information on data and statistics from the 2014 Survey of Occupational Injuries and Illnesses for the State of Ohio, call the Division of Safety & Hygiene’s Research and Statistics Department staff at 614-995-8608.