Kentucky
Occupational Health Indicators Report

Authored by
Terry Bunn, PhD
Rebecca Honaker, MPH
Patrick Maloney, MPH

December 2023
INTRODUCTION

Every year, thousands of Kentucky workers are injured or become ill as a result of health or safety hazards at work. A set of occupational health indicators (OHIs) was developed collaboratively by states, the National Institute for Occupational Safety and Health (NIOSH), and the Council of State and Territorial Epidemiologists. OHIs are an important part of conducting state-based surveillance of occupational health and developing priorities for workplace injury and illness prevention. Definitions and information about data sources used to calculate the OHIs can be found at https://www.cste.org/page/OHIndicators.

The Kentucky Occupational Safety and Health Surveillance Program (KOSHS) at the Kentucky Injury Prevention and Research Center (KIPRC) has also developed a set of nine Kentucky-specific OHIs (OHIs 26-34 in this report) that focus on occupational health priority areas for our state.

Note: This report presents the most recently available data for each OHI at the time this report was developed. Whenever possible, a 10-year period of data was utilized. Data on OHIs 11 (work-related pesticide-associated illness and injury reported to poison control centers), 17 (occupational safety and health professionals), 20 (work-related low back disorder hospitalizations), and 21 (asthma among adults caused by or made worse by work) are not currently being collected and these were not included in this report.

HIGHLIGHTS FROM THE REPORT

- Kentucky’s nonfatal work-related injury and illness rate has steadily decreased over the past decade but remains consistently higher than the U.S. rate. (Page 2)
- Kentucky’s occupational fatal injury rate has fluctuated over the past decade and continues to be above the U.S. rate. (Page 4)
- The 2022 Kentucky age-standardized death rate from or with pneumoconiosis for residents 16 years of age or older was at its highest in the past 10-year period during 2021, at 38 per one million residents. (Page 11)
- In 2022, the number and rate of occupational heat-related emergency department visits was at its highest since 2018. (Page 22)
- In 2022, the total number of commercial vehicles involved in collisions in Kentucky was at its highest since 2018. While the overall number of collisions increased in 2022, the number of fatal commercial vehicle collisions decreased by 30% from a high point in 2021. (Page 25)
- Three new Kentucky-specific OHIs were developed this year, including:
  - OHI 32: Workplace deaths by suicide (Page 29)
  - OHI 33: Drug overdose deaths by industry (Page 30)
  - OHI 34: Work-related injuries using syndromic surveillance data (Page 31).
Indicator #1: Nonfatal Work-Related Injuries and Illnesses Reported by Employers

In 2022, there were 40,600 nonfatal work-related injuries and illnesses in Kentucky private industry, with an incidence rate of 3,000 per 100,000 full-time equivalents (FTEs). Kentucky's nonfatal work-related injury and illness rate has steadily decreased over the past decade but remains consistently higher than the U.S. rate (Figure 1).

Figure 1. Nonfatal Work-Related Injury and Illness Incidence Rates in Private Industry, 2013-2022

Indicator #2: Work-Related Hospitalizations

In 2022 in Kentucky, there were 1,041 work-related hospitalizations, with an annual crude rate of 53 per 100,000 employed persons aged 16 years and older (Figure 2).

Figure 2. Work-Related Hospitalization Rates, 2013-2022

Data Sources:
Numerator: Kentucky inpatient hospitalization claims files, Office of Health Data and Analytics, Kentucky Cabinet for Health and Family Services

Kentucky inpatient hospitalization claim counts represent encounters of care and could be greater than the number of individual patients treated. Starting October 1, 2015, coding switched from ICD-9-CM to ICD-10-CM. As there is not a one-to-one correspondence between ICD-9-CM and ICD-10-CM codes, the coding system transition should be considered when interpreting the data.
Indicator #3: Fatal Work-Related Injuries

In 2021, there were 97 fatal occupational injuries in Kentucky, which translates to a rate of 5.2 per 100,000 FTEs. The Kentucky rate remained consistently higher than the U.S. rate from 2012-2021.

Figure 3. Fatal Work-Related Injury Rates, 2012-2021

Data Sources:
Numerator: Census of Fatal Occupational Injuries
Denominator: NIOSH employed labor force estimates
Indicator #4: Work-Related Amputations with Days Away from Work

There were an estimated 100 amputation cases with days away from work in 2020 in Kentucky. The 2020 Kentucky rate was 8 per 100,000 FTEs, which is a 60% increase over the 2019 rate (Figure 4).

Figure 4. Work-Related Amputation Rates, 2011-2020

Data Source: Annual U.S. Bureau of Labor Statistics Survey of Occupational Injuries and Illnesses
Indicator #5: Amputations Filed with the State Workers’ Compensation System by Injury Year

At the time of writing, 90 amputations have been reported to the Kentucky Department of Workers’ Compensation for 2021.* This translates to a rate of 5 per 100,000 covered workers (Figure 5).

Figure 5. Work-Related Amputation Rates, 2012-2021

Data Sources:
Numerator: Kentucky Department of Workers’ Claims

*Workers’ compensation claim numbers are provisional, because claimants have two years from the date of injury to file a claim.
Indicator #6: Hospitalizations for Work-Related Burns

In Kentucky in 2022 there were 16 work-related burn hospitalizations, resulting in an annual crude rate for work-related burn hospitalizations of 0.8 per 100,000 employed persons aged 16 years or older. Overall, the rate of work-related burn hospitalizations in Kentucky has declined over the past decade, with a peak of 1.4 per 100,000 in 2014* (Figure 6).

**Figure 6. Burn Hospitalization Rates, 2013-2022**

Data Sources:
Numerator: Kentucky inpatient hospitalization claims files, Office of Health Data and Analytics, Cabinet for Health and Family Services

Kentucky inpatient hospitalization claim counts represent encounters of care and could be greater than the number of individual patients treated.

*Starting October 1, 2015, coding switched from ICD-9-CM to ICD-10-CM. As there is not a one-to-one correspondence between ICD-9-CM and ICD-10-CM codes, the coding system transition should be considered when interpreting the data.
Indicator #7: Work-Related Musculoskeletal Disorders (MSDs) with Days Away from Work

The overall annual MSD incidence rate with days away from work has steadily decreased in Kentucky following an uptick in cases in 2016. In 2020, there were an estimated 3,680 MSDs with days away from work reported by employers, which translates to a rate per 100,000 FTEs of 293 (Figure 7).

Figure 7. Musculoskeletal Disorder Incidence Rates Involving Days Away from Work, 2011-2020

Data Source: Annual Bureau of Labor Statistics Survey of Occupational Injuries and Illnesses
Indicator 8: State Workers’ Compensation Claims for Carpal Tunnel Syndrome with Lost Work Time

At the time of writing 81 carpal tunnel cases had been reported to the Kentucky Department of Workers’ Compensation for 2021*, which translates to a rate per 100,000 covered workers of 4.5 (Figure 8).

Figure 8. Lost Work Claim Rates for Carpal Tunnel Syndrome Cases Identified in State Workers’ Compensation Systems, 2012-2021

Data Sources:
Numerator: Kentucky Department of Workers’ Claims

*Workers’ compensation claim numbers are provisional, because claimants have two years from the date of injury to file a claim.
Indicator #9: Hospitalization from or with Pneumoconiosis

The annual age-standardized rate of pneumoconiosis hospitalizations in Kentucky decreased slightly from 2019-2022, reaching a low of 356 hospitalizations per million residents in 2022 (Figure 9).

Figure 9. Age-Standardized Hospitalization Rates from or with Total Pneumoconiosis, 2013-2022

Data Sources:

Kentucky inpatient hospitalization claim counts represent encounters of care and could be greater than the number of individual patients treated. Starting October 1, 2015, coding switched from ICD-9-CM to ICD-10-CM. As there is not a one-to-one correspondence between ICD-9-CM and ICD-10-CM codes, the coding system transition should be considered when interpreting the data.
Indicator #10: Mortality from or with Pneumoconiosis

In 2022, there were 181 Kentucky residents aged 16 years or older died from or with pneumoconiosis. That same year, the Kentucky age-standardized death rate from or with pneumoconiosis for residents aged 16 or older was at its highest for the 10-year period, at 38 per one million residents (Figure 10).

Figure 10. Age-Standardized Mortality Rate from or with Pneumoconiosis, 2013-2022

Data Sources:
Numerator: Kentucky Office of Vital Statistics

Kentucky mortality data provided by the Kentucky Office of Vital Statistics are provisional and subject to change.
Indicator #12: Incidence of Malignant Mesothelioma

In Kentucky in 2021, 34 mesothelioma cases were recorded and the age-standardized rate was 8.2 per one million residents aged 15 years or older (Figure 12).

Figure 12. Age-Standardized Incidence Rates of Malignant Mesothelioma, Kentucky, 2012–2021

Data Source:
Numerator: Kentucky Cancer Registry
Denominator: U.S. Census Bureau
Indicator #13: Elevated Blood Lead Levels among Adults

The 2022 Kentucky annual prevalence rate of persons aged 16 years or older with elevated blood lead levels (BLL) ≥10μg/dL was 14.5 per 100,000 employed persons (Figure 13). The 2022 Kentucky annual prevalence rate for elevated BLL >25μg/dL was 1.7 per 100,000 (Figure 14).

Figure 13. Annual Prevalence Rates of Elevated BLL ≥10 μg/dL among Persons Aged 16 Years and Older, Kentucky, 2013–2022

Figure 14. Annual Prevalence Rates of Elevated BLL ≥25 μg/dL among Persons Aged 16 Years and Older, Kentucky, 2013–2022

Data sources:
Numerator: Kentucky Lead Poisoning Prevention Program, Division of Maternal & Child Health, Cabinet for Health and Family Services

Note: Kentucky 2016 and 2020 data collection was impacted by administrative changes and may not reflect true prevalence.
Indicator #14: Workers Employed in Industries with High Risk for Occupational Morbidity

The percentage of workers employed in industries that are high risk for occupational morbidity has remained consistently higher for Kentucky than for the U.S. (Figure 15).

Figure 15. Percentage of Workers in Industries with High Risk for Occupational Morbidity, 2013–2021

Data Source:
U.S. Census Bureau, Population Division
Indicator #15: Percentage of Workers Employed in Occupations at High Risk for Occupational Morbidity

The percentage of Kentucky workers employed in occupations at high risk for occupational morbidity decreased to 15.2% in 2021, its lowest since 2018. (Figure 16).

Figure 16. Percentage of Kentucky Workers in Occupations with High Risk for Occupational Morbidity, 2013–2021

Data Source:
Indicator #16: Percentage of Workers Employed in Occupations with High Risk for Occupational Mortality

The percentage of Kentucky workers employed in occupations with high risk for occupational mortality decreased from a high of 15.8% in 2020 to 13% in 2021, while the U.S. rate has remained stable (Figure 17).

Figure 17. Percentage of Workers Employed in Occupations with High Risk for Occupational Mortality, 2013–2021

Data Source:
Indicator #18: Occupational Safety and Health Administration Enforcement Activities

In 2021, 864 employer establishments were inspected by Kentucky Occupational Safety and Health Administration, comprising 0.7% of the establishments eligible for inspection (Table 1). This was the highest number of employer establishments inspected since 2016.

Table 1. Occupational Safety and Health Administration Enforcement Activities, 2012–2021

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of employer establishments inspected by OSHA</td>
<td>1,062</td>
<td>842</td>
<td>1,027</td>
<td>964</td>
<td>989</td>
<td>760</td>
<td>668</td>
<td>759</td>
<td>760</td>
<td>864</td>
</tr>
<tr>
<td>Number of OSHA-covered establishments eligible for OSHA</td>
<td>109,955</td>
<td>116,838</td>
<td>119,888</td>
<td>121,109</td>
<td>122,388</td>
<td>120,323</td>
<td>115,880</td>
<td>118,087</td>
<td>124,157</td>
<td>130,657</td>
</tr>
<tr>
<td>Percentage of establishments eligible for inspection that were inspected by OSHA</td>
<td>1.0</td>
<td>0.7</td>
<td>0.9</td>
<td>0.8</td>
<td>0.8</td>
<td>0.6</td>
<td>0.6</td>
<td>0.6</td>
<td>0.6</td>
<td>0.7</td>
</tr>
<tr>
<td>Number of employees whose work areas were inspected by OSHA</td>
<td>78,923</td>
<td>66,279</td>
<td>59,379</td>
<td>59,854</td>
<td>60,626</td>
<td>47,448</td>
<td>46,509</td>
<td>42,706</td>
<td>69,885*</td>
<td>125,509*</td>
</tr>
<tr>
<td>Number of OSHA-covered employees</td>
<td>1,737,291</td>
<td>1,758,737</td>
<td>1,786,636</td>
<td>1,817,585</td>
<td>1,846,342</td>
<td>1,850,806</td>
<td>1,656,754</td>
<td>1,678,145</td>
<td>1,778,070</td>
<td>1,842,941</td>
</tr>
<tr>
<td>Percentage of employees eligible for inspection whose work areas were inspected by OSHA</td>
<td>4.5</td>
<td>3.8</td>
<td>3.3</td>
<td>3.3</td>
<td>3.3</td>
<td>2.6</td>
<td>2.8</td>
<td>2.3</td>
<td>3.9*</td>
<td>6.8*</td>
</tr>
</tbody>
</table>

Data Sources:
Occupational Safety and Health Administration annual reports, U.S. Bureau of Labor Statistics

Note: Mines and farms are not typically covered by OSHA and are not included in the table above. Data for 2021 were provided by the Kentucky Education and Labor Cabinet.

*Preliminary data based on fiscal years, not annual.
Indicator #19: Workers’ Compensation Awards

The total amount of workers’ compensation benefits paid in Kentucky in 2021 was $514.7 million. The average amount of benefits paid per covered worker in 2021 was $283, which is the lowest amount paid in the past 10 years (Figure 18).

Figure 18. Average Amount of Workers’ Compensation Benefits Paid Per Worker in Kentucky, 2012–2021

Data Source:
The National Academy of Social Insurance Benefits, Cost, and Coverage Report

Workers' compensation claim numbers are provisional, because claimants have two years from the date of injury to file a claim.
Indicator #22: Work-Related Severe Traumatic Injury Hospitalizations

The rate of work-related severe traumatic injury hospitalizations per 100,000 employed persons in Kentucky rose from a low of 4.2 in 2021 to 7 in 2022 (Figure 19).

Figure 19. Work-Related Severe Traumatic Injury Hospitalization Rates, 2013–2022

Data Sources:
 Numerator: Kentucky inpatient hospitalization claims files, Office of Health Data and Analytics, Kentucky Cabinet for Health and Family Services
Indicator #23: Influenza Vaccination Coverage among Hospital Care Personnel

During the 2022-2023 influenza season, 82.1% of Kentucky hospital care personnel received an influenza vaccination. The percentage has decreased over the last three flu seasons but remains slightly higher than the U.S. percentage of vaccinated hospital care personnel (Figure 20).

Data Source:
National Healthcare Safety Network, Centers for Disease Control and Prevention
**Indicator #24: Occupational Heat-Related Emergency Department Visits**

The number and rate of Kentucky emergency department visits for occupational heat-related illness per 100,000 employed persons were at their highest since 2018 (Table 2).

**Table 2. Number and Rates of Occupational Heat-Related Emergency Department (ED) Visits, 2013–2022**

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of ED Visits for Occupational Heat-Related Illness</th>
<th>Rate of ED Visits for Occupational Heat-Related Illness (per 100,000 employed persons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>68</td>
<td>3.6</td>
</tr>
<tr>
<td>2014</td>
<td>141</td>
<td>7.5</td>
</tr>
<tr>
<td>2015</td>
<td>151</td>
<td>8.2</td>
</tr>
<tr>
<td>2016</td>
<td>180</td>
<td>8.4</td>
</tr>
<tr>
<td>2017</td>
<td>104</td>
<td>5.3</td>
</tr>
<tr>
<td>2018</td>
<td>169</td>
<td>8.6</td>
</tr>
<tr>
<td>2019</td>
<td>105</td>
<td>5.3</td>
</tr>
<tr>
<td>2020</td>
<td>97</td>
<td>5.2</td>
</tr>
<tr>
<td>2021</td>
<td>112</td>
<td>5.8</td>
</tr>
<tr>
<td>2022</td>
<td>133</td>
<td>6.8</td>
</tr>
</tbody>
</table>

Data Sources:
Numerator data: Kentucky Outpatient Services Database, Office of Health Data and Analytics, Cabinet for Health and Human Services

Note: Kentucky Outpatient Services Database counts represent encounters of care and could be greater than the number of individual patients treated. Starting October 1, 2015, coding switched from ICD-9-CM to ICD-10-CM. As there is not a one-to-one correspondence between ICD-9-CM and ICD-10-CM codes, the coding system transition should be considered when interpreting the data. 2015 numbers and rate are estimates based on available data due to the ICD-9-CM to ICD-10-CM coding change.
Indicator #25: Hospitalizations for or with Occupational Eye Injuries

The rate of Kentucky inpatient hospitalizations for or with occupational eye injuries per 100,000 employed persons has remained low since Kentucky began tracking this indicator in 2016 (Table 3).

Table 3. Inpatient Hospitalizations for or with Occupational Eye Injuries, 2016-2022

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Inpatient</td>
<td>&lt;5</td>
<td>12</td>
<td>&lt;5</td>
<td>13</td>
<td>8</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Hospitalizations for or</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>with Occupational Eye</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Injuries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rate of Inpatient</td>
<td></td>
<td>0.6</td>
<td></td>
<td>0.7</td>
<td>0.5</td>
<td>0.4</td>
<td>0.6</td>
</tr>
<tr>
<td>Hospitalizations for or</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>with Occupational Eye</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Injuries (per 100,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>employed persons)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Data Sources:
Numerator: Kentucky inpatient hospitalization claims files, Kentucky Cabinet for Health and Family Services, Office of Health Policy

*Counts greater than zero but less than five are suppressed in accordance with state data management policy. Rates based on counts greater than zero but less than 10 are suppressed in accordance with state data management policy and indicated with an asterisk (*).
Indicator #26 (Kentucky-Specific): Occupational Motor Vehicle Collision First Reports of Injuries Filed with Workers’ Claims by Injury Year

There were 957 occupational motor vehicle collision claims or first reports of injury filed with the Kentucky Department of Workers’ Claims for injuries during 2021. The 2019 rate of motor vehicle collision claims or first reports of injury was the highest in recent years, at 86 per 100,000 covered workers. The 2021 rate was 53 per 100,000 workers, but additional claims could still be made for 2021 that may alter this rate (Figure 21).

Figure 21. Occupational Motor Vehicle Collision Injury Rates, 2012-2021

Data Sources:
Numerator: Kentucky Department of Workers’ Claims
Denominator: National Academy of Social Insurance

Workers’ compensation claim numbers are provisional, because claimants have two years from the date of injury to file a claim.
Indicator #27 (Kentucky-Specific): Fatal and Nonfatal Commercial Motor Vehicle Collision Injuries

In 2022, the total number of commercial vehicles involved in collisions in Kentucky was at its highest since 2018. While the overall number of collisions increased in 2022, the number of fatal commercial vehicle decreased by 30% from its high in 2021 (Table 4).

Table 4. Counts of Kentucky Commercial Vehicle Collisions, 2013–2022

<table>
<thead>
<tr>
<th></th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of commercial vehicles involved in collisions</td>
<td>6,296</td>
</tr>
<tr>
<td>Unit at fault according to police</td>
<td>4,097</td>
</tr>
<tr>
<td>Commercial vehicle driver’s injury</td>
<td></td>
</tr>
<tr>
<td>Fatal</td>
<td>9</td>
</tr>
<tr>
<td>Incapacitating</td>
<td>37</td>
</tr>
<tr>
<td>Non-incapacitating</td>
<td>125</td>
</tr>
<tr>
<td>Possible injury</td>
<td>139</td>
</tr>
<tr>
<td>Vehicle Fire</td>
<td>25</td>
</tr>
<tr>
<td>KY licensed driver</td>
<td>2,909</td>
</tr>
<tr>
<td>Total number of fatalities in collisions involving a commercial vehicle</td>
<td>72</td>
</tr>
<tr>
<td>Total number of injuries in collisions involving a commercial vehicle</td>
<td>1,399</td>
</tr>
<tr>
<td>Single vehicle collision</td>
<td>1,440</td>
</tr>
<tr>
<td>Unit type</td>
<td></td>
</tr>
<tr>
<td>Bus</td>
<td>156</td>
</tr>
<tr>
<td>School bus</td>
<td>71</td>
</tr>
<tr>
<td>Truck and trailer</td>
<td>1,094</td>
</tr>
<tr>
<td>Truck, single unit</td>
<td>1,484</td>
</tr>
<tr>
<td>Truck tractor and semi-trailer</td>
<td>3,558</td>
</tr>
<tr>
<td>Truck, other combination</td>
<td>106</td>
</tr>
<tr>
<td>Other</td>
<td>25</td>
</tr>
<tr>
<td>Hazard cargo present</td>
<td>136</td>
</tr>
</tbody>
</table>

Data Source:
Kentucky State Police Collision Report Analysis for Safer Highways database
Indicator #28 (Kentucky-Specific): Occupational Fall First Reports of Injury and Claims Filed with Kentucky Department of Workers’ Claims by Injury Year

In 2021 in Kentucky, there were 5,910 first reports of injury associated with occupational fall injuries, which translates to a rate per 100,000 covered workers of 325 (Figure 22).

Figure 22. Occupational Fall Injury Incidence Rates, 2012–2021

Data Sources:
Numerator: Kentucky Department of Workers’ Claims
Denominator: National Academy of Social Insurance

Workers’ compensation claim numbers are provisional, because claimants have two years from the date of injury to file a claim.
Indicator #29 (Kentucky-Specific): Work-Related Traumatic Injuries Treated in Kentucky Trauma Hospitals

In 2021, there were 337 work-related injuries treated in Kentucky's reporting trauma facilities. Work-related traumatic injuries accounted for 2.8% of all traumatic injuries in individuals aged 16 and older reported to the state trauma registry, the lowest percentage during the past 10 years (Figure 23).

Figure 23. Work-Related Traumatic Injuries as a Percentage of All Traumatic Injuries Reported to the State Trauma Registry, 2013-2021

Data Source:
Kentucky Trauma Registry

Note: Kentucky Trauma Registry data reflect the most severe traumatic injuries treated in Kentucky acute care hospitals that are verified trauma hospitals, levels I to IV, or that are in the process of applying for such designation.
Indicator #30 (Kentucky-Specific): Work-Related Traumatic Brain Injuries Treated in Kentucky Acute Care Hospitals

In 2022 there were 61 work-related traumatic brain injuries treated in Kentucky acute care hospitals, a nearly 30% increase from 2021. This translates to a rate per 100,000 employed persons of 3.1 (Figure 24).

Figure 24. Rates of Work-Related Traumatic Brain Injuries Treated in Kentucky Acute Care Hospitals, 2013-2022

Data Sources:
Numerator: Kentucky inpatient hospitalization claims files, Office of Health Data and Analytics, Kentucky Cabinet for Health and Family Services

Kentucky inpatient hospitalization claim counts represent encounters of care and could be greater than the number of individual patients treated. Starting October 1, 2015, coding switched from ICD-9-CM to ICD-10-CM. As there is not a one-to-one correspondence between ICD-9-CM and ICD-10-CM codes, the coding system transition should be considered when interpreting the data.
Indicator #31 (Kentucky-Specific): Work-Related Concussions Reported to the State Workers’ Compensation System

In 2021 in Kentucky there were 216 first reports of injury associated with concussions. This translates to a rate of 11.9 per 100,000 employed persons (Figure 25).

Figure 25. Rates of Work-Related Concussions Reported to the Kentucky Workers’ Compensation System, 2012-2021

Data Sources:
Numerator: Kentucky Department of Workers’ Claims
Denominator: The National Academy of Social Insurance

Workers’ compensation claim numbers are provisional, because claimants have two years from the date of injury to file a claim.
Indicator #32 (Kentucky-Specific): Workplace Deaths by Suicide

From 2013 to 2022 in Kentucky there were 37 workplace deaths by suicide. This translates to a rate of 0.2 per 100,000 employed persons (Figure 26).

Figure 26. Rates of Workplace Deaths by Suicide, 2013-2022

Data Sources:
Numerator: Kentucky Fatality Assessment and Control Evaluation database
Indicator #33 (Kentucky-Specific): Drug Overdose Deaths by Industry

The figure below represents overdose deaths in Kentucky by Bureau of Labor and Statics supersectors. The table below lists the cases for which insufficient industry and occupation information was available to determine their industry. From 2018-2022 overdose deaths were consistently highest among those working in construction, followed by trade, transportation & utilities, and manufacturing (Figure 27).

Figure 27. Counts of Drug Overdose Deaths by Industry, 2018-2022

<table>
<thead>
<tr>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insufficient Industry and Occupation Information</td>
<td>388</td>
<td>386</td>
<td>536</td>
<td>697</td>
</tr>
</tbody>
</table>

Data Source:
Kentucky Office of Vital Statistics
Indicator #34 (Kentucky-Specific): Work-Related Injuries using Syndromic Surveillance Data

In 2022 in Kentucky there were 13,249 emergency department visits and 5,816 non-emergency department visits for work-related injuries identified utilizing syndromic surveillance data. This translates to rates per 100,000 FTEs of 677 and 297, respectively (Figure 28).

Figure 28. Rates of Work-Related Injury Emergency Department (ED) Visits and Non-Emergency Department using Syndromic Surveillance Data, 2019-2022

Data Sources:
Numerator: ESSENCE

ED visits were obtained using a Facility Type filter of “Emergency Care” and setting HasBeenE to “Yes.” Non-ED visits were obtained by removing the Facility Type filter and setting HasBeenE to “No” to assess encounters reported by primary care providers, medical specialty providers, urgent care providers, non-ED hospital clinic visits, and direct-admit inpatient hospital encounters. Encounters were limited to Kentucky residents with an age greater than or equal to 16 years old. Data are provisional and subject to change and should not be interpreted as comprehensive estimates of the total work-related injury burden in Kentucky.
This publication was supported by grant number 5 U60OH008483-17-00 from CDC-NIOSH. Its contents are solely the responsibility of the Kentucky Injury Prevention and Research Center and do not necessarily represent the official views of NIOSH. The Kentucky Injury Prevention and Research Center is a partnership between the Kentucky Department for Public Health and the University of Kentucky’s College of Public Health that combines academic investigation with practical public health initiatives. Inquiries should be directed to:

Kentucky Injury Prevention and Research Center
2356 Harrodsburg Road
Southcreek Building B, Suite B475
Lexington, Kentucky 40504
(859)-323-4750 office
(859) 218-8924 fax

The Kentucky Occupational Safety and Health Surveillance Program maintains a presence on social media, enabling us to share references and links to occupational injury prevention materials and sources. Please visit us:

@KOSHSNews
@KOSHSNews

GIVE US YOUR FEEDBACK

All KOSHS publications are posted on the Kentucky Injury Prevention and Research Center website:

https://kiprc.uky.edu/

Please click here or use the QR code below to complete a brief survey. Your feedback helps us to improve future output.

Subscribe to our mailing list

If you would like to receive future reports and publications from the Kentucky Occupational Safety and Health Surveillance program click here or use the QR code below.