# Kentucky FACE Program

2019 Annual Report

# About the Kentucky FACE Program

The Kentucky Fatality Assessment and Control Evaluation (FACE) Program is an occupational fatality surveillance program of the Kentucky Injury Prevention and Research Center (KIPRC)\*. The goal of KY FACE is to prevent fatal work injuries by studying the worker, work environment, energy exchange resulting in fatal injury, and role of management, engineering, and behavioral changes in preventing future injuries. KY FACE investigators evaluate data from multiple sources, including 1) interviews of employers, coworkers, witnesses, and other investigators; 2) examination of the work site and equipment; 3) Occupational Safety and Health Administration reports, police reports, and medical examiner reports; 4) employer safety procedures; and 5) information provided by the Office of Vital Statistics. FACE does not seek to determine fault or place blame on companies or individual workers. Rather, findings are summarized in narrative reports that include recommendations for preventing similar events in the future.

FACE would like to respectfully acknowledge the individuals who lost their lives to workplace injury in Kentucky, and the pain and loss endured by their families and colleagues. It is hoped that surveillance of these tragic workplace incidents will help government, industry, workers, and communities target their injury prevention efforts and resources.

Prepared by: Terry Bunn, PhD Michael Turner, MS Madison Liford, MPH

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For more
detailed
information
concerning KY
FACE

KY FACE Program,
Kentucky Injury Prevention
and Research Center
(KIPRC)

333 Waller Avenue Suite 242 Lexington, KY 40504 TEL: (859) 257 - 4955 FAX: (859) 257 - 3909





<sup>\*</sup>Organizationally, KIPRC is located in the University of Kentucky and is a bona fide agent of the Kentucky Department for Public Health. Funding for the KY FACE Program is provided by the National Institute for Occupational Safety and Health (NIOSH) Cooperative Agreement Number 5U60OH008483-16.

#### Kentucky Worker Fatalities at a Glance

To create effective occupational injury prevention programs, it is important to look at where and how fatal injuries among workers occur in Kentucky. Here is a brief snapshot of worker fatalities that occurred from January 1, 2019 through December 31, 2019.

#### How many workers died from injuries in 2019?

While working in Kentucky in 2019, 79 residents from Kentucky, Tennessee, Illinois, Indiana, Massachusetts, North Carolina, Ohio, Mexico, and Canada died on the job. December was the deadliest month for workers in Kentucky, with 13% of fatalities in 2019 (10 deaths).

#### **Leading Causes**

- Motor Vehicle Collision (38%)
- Falls (13%)
- Struck by Object (11%)
- Drug Overdose (8%)
- Machinery (8%)
- Agricultural Machinery (6%)

#### Leading Industries and Occupations

- Trade, Transportation, and Utilities (26 deaths)
  - 54% of cases in this industry involved transportation and warehousing occupations.
- Natural Resources and Mining (16 deaths)
  - o 56% of cases in this industry were farmers.
- Construction Industry (15 deaths)

#### Incidents by County

- Jefferson (14%). Jefferson County is the location of the state's largest city, Louisville, and contains 17% of the state's population.
- The remaining fatalities (86%) are distributed across 48 of Kentucky's 120 counties, with no more than three fatal incidents in any one county.

Note: All data is preliminary and subject to change based on the availability of new or corrected information.

#### Fatal Occupational Injury Rate for 2019

- In 2019, the Kentucky fatal occupational injury rate was 4.2 deaths per 100,000 workers, a decrease from 4.4 deaths per 100,000 workers in 2018.
- In 2019, Kentucky's fatal occupational injury rate of 4.2 deaths per 100,000 full-time employees was 20% higher than the national rate of 3.5 deaths per 100,000 full-time employees.\*

\*Rates for 2019 were provided by the Bureau of Labor Statistics.

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# **Demographics**

In Kentucky, 79 workers died as a result of work-related injuries in 2019. The following lists the demographic profile of this group.

Table 1: Demographics of Kentucky Fatal Work-Related Injuries, 2019

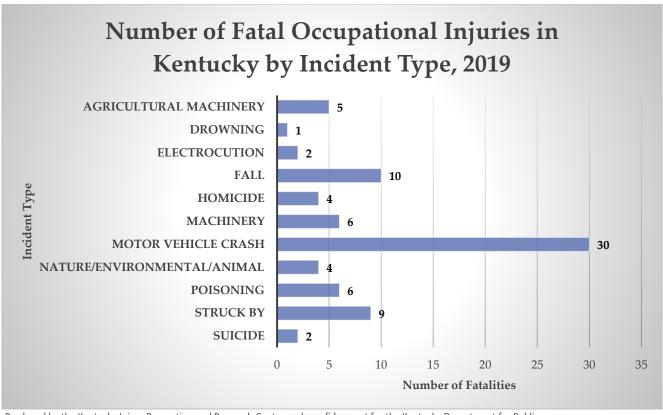
Characteristics		Number	Percentage of total fatalities*
Sex	Male	76	96%
	Female	3	4%
Race	White	62	78%
	Black	7	9%
	Other/Unknown	10	13%
Age	20-29	14	18%
	30-39	11	14%
	40-49	17	22%
	50-59	15	19%
	60-69	15	19%
	70+	7	9%
Marital Status	Married	40	51%
	Divorced/Separated	20	25%
	Never Married	17	22%
	Unknown	2	3%
Education	8 <sup>th</sup> Grade or Less	5	6%
	Some High School	7	9%
	High School Graduate/GED	42	53%
	Some College	12	15%
	College and Beyond (AA+)	9	11%
	Unknown	4	5%
Country of Origin	United States	67	85%
	Mexico	3	4%
	Other	7	9%
	Unknown	2	3%
Ethnicity	Not Hispanic or Latino	71	90%
	Hispanic or Latino	7	9%
	Unknown	1	1%
State of Residence	Kentucky	62	78%
	Tennessee	5	6%
	Ohio	4	5%
	Other/Unknown	8	10%

Produced by the Kentucky Injury Prevention and Research Center as bona fide agent for the Kentucky Department for Public Health. January 2021. Data source: Kentucky FACE Database.

<sup>\*</sup>Percentages may not equal 100 due to rounding

## Types of Events Causing Worker Deaths

Figure 1



Produced by the Kentucky Injury Prevention and Research Center, as bona fide agent for the Kentucky Department for Public Health. January 2021. Data source: Kentucky FACE Database.

#### Highlights:

- Of the 79 occupational fatalities in Kentucky in 2019, 38% (n=30) were motor vehicle crashes (MVC) (Figure 1), similar to numbers observed in 2018 (n=32). Motor vehicle crashes have been the leading cause of work-related fatalities in Kentucky every year since 2004.
- Of the 30 MVC deaths in Kentucky in 2019, one-third (n=10) were pedestrians struck by a motor vehicle. This represents an alarming increase when compared to the number of pedestrian deaths in 2017 (n=5) and 2018 (n=5).
- Two of the fatal motor vehicle collisions involved a tractor being operated on a public roadway at the time of injury.
- Eleven fatalities were caused by machinery (n=6 machinery and n=5 agricultural machinery).
   Machinery fatalities represented 14% of all 2019 Kentucky occupational fatalities; frequently operated machinery included lawnmowers, plows, tractors, mining equipment, skid steers, bulldozers, and forklifts.
- Of the 10 falls shown in Figure 1, six occurred in the construction industry. This represents a 200% increase in fatal construction falls from 2018 (n=2). The six fatal construction falls included

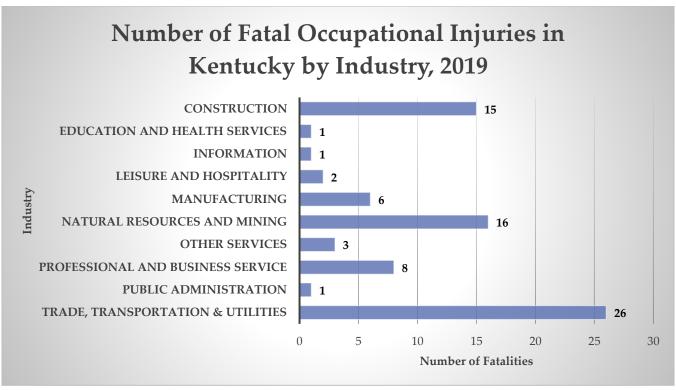
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- falling from a roof (n=3), falling through a roof (n=1), falling from a roof after contacting a high voltage power line (n=1), and falling from a ladder (n=1).
- After an alarming number of suicides in the workplace in 2018 (n=7), FACE released a hazard alert entitled <u>Intentional Self-Harm in the Workplace</u>. In 2019, the number of workplace suicides decreased by 71% (n=2).
- Homicides accounted for four of the 80 workplace fatalities and were carried out primarily with firearms (n=3); 75% (n=3) of homicide victims were self-employed or business owners.
- Eight percent (n=6) of fatalities occurred due to accidental drug poisoning/overdoses. Of the six deaths, four were employed in the trade, transportation and utilities industry and the remaining two were employed in the construction industry. Four of the six drug overdose deaths involved methamphetamine use. Three of the six drug overdose deaths involved fentanyl use.
- FACE works with county coroners to obtain toxicology testing results for workplace fatalities when available. In 2019, 40 decedents received autopsies and post-mortem toxicology exams, 27 of which were received by FACE staff.
  - Of the 27 toxicology reports received, 12 employees tested positive for drugs of abuse at the time of death. The remaining 15 tested negative for drugs of abuse.
  - Of those 12 employees, five were employed in the trade, transportation and utilities industry; three were employed in the construction industry; one in manufacturing; one in information; one in professional and business service; and one in other services (except public administration).
  - o Substances detected included fentanyl, norfentanyl, morphine, hydromorphone, methamphetamine, amphetamine, THC, THC-COOH, oxycodone, 4-ANPP, acetylfentanyl, tramadol, nortramadol, buprenorphine, norbuprenorphine, temazapam, codeine, hydrocodone, and hydromorphine.

## Fatal Injuries at Work by Industry

Figure 2



Produced by the Kentucky Injury Prevention and Research Center, as bona fide agent for the Kentucky Department for Public Health. January 2021. Data source: Kentucky FACE Database.

#### Highlights:

- The trade, transportation and utilities industry accounted for 33% (n=26) of Kentucky's 79 occupational fatalities in 2019. This represents a modest 4% increase when compared to the industry's 25 fatalities in 2018; however, this continues the upward trend of fatalities in the industry. In 2017, Kentucky's trade, transportation, and utilities industry saw just 17 fatalities; that figure increased by 53% in 2019.
  - O The trade, transportation and utilities industry encompasses a variety of occupations. Of the 26 fatalities from this industry, half were involved in truck driving as either a driver (n=11) or owner-operator (n=2).
- Fatalities in the construction industry rose from 11 in 2018 to 15 in 2019, an increase of 36%. Of the 15 fatalities, six were victims of falls; four died in motor vehicle crashes; two died by accidental drug poisoning; two were electrocuted; and one was struck by an object. The construction industry continues to be a dangerous occupation, and the Kentucky FACE program offers a variety of investigation reports concerning fatalities in this field.

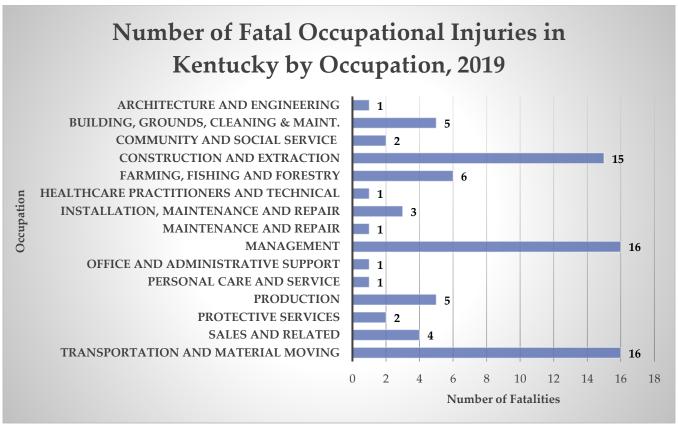
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• The natural resources and mining industry continues to be a dangerous occupation for Kentucky's older workers in 2019, with the average age of the industry's 15 decedents being 58 years. The average age of the decedents in all other industries was 45 years of age. Farmers in this category (n=9) have a particularly high average age - 63 years.

# Fatal Injuries at Work by Occupation

#### Figure 3



Produced by the Kentucky Injury Prevention and Research Center, as bona fide agent for the Kentucky Department for Public Health. January 2021. Data source: Kentucky FACE Database.

# Highlights:

- The 16 fatal injuries suffered by those employed in management occupations came from a variety of industries, including 6 farm owners. Half of the deaths in management occupations were due to motor vehicle crashes.
- Of the 16 fatal injuries of those employed in the transportation and material moving occupations in 2019, over half died in motor vehicle crashes (n=9). Of all deaths by drug overdoses in the workplace, 50% (n=3) were employed in transportation and material moving occupations.

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## **Investigation Program**

FACE completed eight investigations of selected occupational fatalities from July 1, 2019 to June 30, 2020. Each report begins with a case summary and provides recommendations for preventing future similar incidents. Our reports do not determine fault or blame. We do not use personal identifiers in our reports or identify the names of companies.

2019 FACE investigations are listed below. For the complete report, see the KIPRC website.

Case ID	Title	Category
17KY057	Traffic Control Worker Struck and Killed by Vehicle While Setting up	Motor Vehicle
	Cones on Interstate. A 55-year-old traffic control worker was	Crash
	setting up traffic cones in the left lane of a major four-lane	
	interstate when he was struck from behind and killed by a motorist	
19KY013	IT Consultant Dies on Kentucky Interstate in Single Vehicle Collision.	Motor Vehicle
	While traveling on a Kentucky interstate en route to a regional airport	Crash
	to return to his home state, a 37-year-old information technologist	
	lost control of his rental car and was killed in a one-vehicle crash.	
19KY033	Commercial Truck Driver Dies on Kentucky Interstate in Single Vehicle	Motor Vehicle
	<u>Collision.</u> While traveling in early morning hours, a 44-year-old semi-	Crash
	truck driver fell asleep and died when the vehicle overturned on a	
	Kentucky interstate.	
19KY034	Gutter Installer Dies after Falling from Roof. While installing gutter	Fall
	guards on the second story of a private residence, a 47-year-old	
	contractor died after falling 18 feet from the roof to the concrete	
	surface below.	
19KY045	Dump Truck Driver Dies on Kentucky Interstate in Single Vehicle	Motor Vehicle
	Collision. A 63-year-old commercial truck driver died after the front	Crash
	driver's side tire on the dump truck he was operating disintegrated,	
	causing the vehicle to overturn and strike an earth embankment.	
19KY047	Commercial Driver Dies after Overturning on Two-Lane State Highway.	Motor Vehicle
	A 68-year-old commercial truck driver died after losing control of the	Crash
10101050	semi-truck he was operating on a two-lane rural Kentucky highway.	
19KY050	Construction Worker Dies on Kentucky Interstate in Single Vehicle	Motor Vehicle
	Collision. A 42-year-old construction worker died after he failed to	Crash
	notice traffic on the interstate he was traveling on had stopped due to	
20KY006	an earlier collision, and he struck the back of a semi-truck.	Grain Bin
20KY006	Farmworker Dies in Grain Bin Engulfment. A 44-year-old farmworker	
	died after he entered a grain bin to dislodge corn that had bridged	Engulfment
	near the top of the bin. The corn collapsed while the worker was on	
	top of it and engulfed him.	

#### Kentucky Hazard Alerts

The Kentucky Occupational Safety and Health Program produced four Hazard Alerts based on Kentucky FACE investigations and data between July 1, 2019 and June 30, 2020:

- <u>Injuries Related to Operating Riding Lawnmowers.</u> From 2008 to 2010, an estimated 35,000 injuries related to riding lawnmowers that were treated in emergency departments in the US. Riding lawnmowers kill more than 70 people each year around the country.
- <u>Elevated Blood Lead Levels in Workers</u>. From January 2, 2017, to October 25, 2019, 793
  Kentucky adults, age 16 and up, had at least one blood lead level (BLL) measurement at or
  above 10 micrograms per deciliter of blood (µg/dL). Since the National Institute for
  Occupational Safety and Health began tracking BLL rates ≥10 µg/dL for adults in 2010,
  Kentucky has averaged rates 40% higher than the estimated national prevalence rate.
- Intentional Self-Harm in the Workplace. According to the Bureau of Labor Statistics, workplace suicides in the United States totaled 304 in 2018 an increase of 11 percent from the previous year and the highest number since the bureau began tracking the data in 1992. From 2009 to 2018, 40 Kentucky workers died by suicide in the workplace.
- Women as Victims of Workplace Violence. In Kentucky, from 1998-2018, 33 women were victims of homicide in the workplace, accounting for 22% of all workplace fatalities involving women. By comparison, homicides of men made up only 5% of workplace fatalities in the same time period. In Kentucky, homicides are the second highest cause of workplace deaths for women, second only to motor vehicle crashes.

To access Hazard Alerts, go to the KIPRC website: <a href="http://www.mc.uky.edu/kiprc/face/hazard-alerts.html">http://www.mc.uky.edu/kiprc/face/hazard-alerts.html</a>.

# Kentucky FACE Social Media

Kentucky FACE maintains a presence on Social Media, enabling us to share references and links to occupational injury prevention materials and sources. Please visit us:





# Kentucky FACE Data Source

All data in this report was produced by the Kentucky Injury Prevention and Research Center, as bona fide agent for the Kentucky Department for Public Health. January 2021. Data source: Kentucky FACE Database. The Kentucky FACE Database collects occupational fatality data from multiple surveillance data sources.

# Survey

<u>Please click here</u> to take a brief, anonymous survey. Your feedback helps us to improve future output.