# Kentucky FACE Program

2018 Annual Report

# About the Kentucky FACE Program

The Kentucky Fatality Assessment and Control Evaluation (KY 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) review of Occupational Safety and Health Administration (OSHA) reports, police reports, and medical examiner reports; 4) employer safety procedures; and 5) review of information provided by the Office of Vital Statistics. The FACE program does not seek to determine fault or place blame on companies or individual workers. Findings are summarized in narrative reports that include recommendations for preventing similar events in the future.

This report is dedicated to the memory of Nancy Hanner, KIPRC Center Editor and FACE program database coordinator, who passed away on April 4, 2019. Nancy was the spiritual guide for KIPRC lending her intelligence to reports, publications and presentations, grace to KIPRC fellowship, and compassion for the faces of the programs at KIPRC. She is dearly missed by all.

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

• • •

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 (KDPH). Funding for the KY FACE Program is provided by the National Institute for Occupational Safety and Health (NIOSH) Cooperative Agreement Number 5U60OH008483-15.

## Kentucky Worker Fatalities at a Glance

To create effective 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, 2018 through December 31, 2018.

# How many workers died from injuries in 2018?

While working in Kentucky in 2018, 87 residents from KY, AR, GA, IN, KY, LA, MI, MO, OH, SD, TN, VA died on the job.

#### **Leading Causes**

- Motor vehicle collision (32)
- Fall (8)
- Machine (7)
- Poisoning (7)
- Suicide (7)

#### Incidents by County

- Jefferson (12)
- Fayette (7)
- The remaining fatalities are distributed across 50 of Kentucky's 120 counties, with no more than four deaths in any one county.

#### Leading Industries and Occupations

- Transportation and Warehousing Industry (20)
- Agriculture, Forestry, Fishing, and Hunting Industry (14)
- Construction Industry (11)
- Administrative Support, Waste Management, and Remediation Services (10)

#### Fatal Occupational Injury Rate for 2018

In 2018, the Kentucky fatal occupational injury rate increased from 3.6 deaths per 100,000 workers (2017) to 4.2 deaths per 100,000 workers (2018).

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

# **Demographics**

In Kentucky, 87 workers died as a result of work-related injuries in 2018. The following lists the demographic profile of this group.

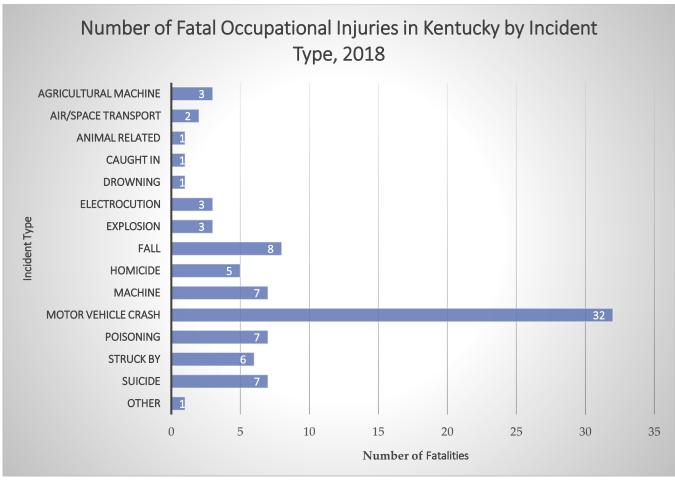
Table 1: Demographics of Kentucky Fatal Work-Related Injuries, 2018

Characteristics		Number	Percentage of total fatalities
Sex	Male	83	95%
	Female	4	5%
Race	White	83	95%
	Black	3	3%
	Unknown	1	1%
Age	<20	2	2%
	20-29	8	9%
	30-39	16	18%
	40-49	22	25%
	50-59	22	25%
	60-69	12	14%
	70-79	5	6%
Marital Status	Married	50	57%
	Divorced	21	24%
	Never Married	13	15%
	Single/Widowed/Separated	3	3%
Education	Less than High School	4	5%
	Some High School	15	17%
	Finished High School	35	40%
	Some College	17	20%
	College and Beyond (AA+)	13	15%
	Unknown	3	3%
Country of Origin	United States	78	90%
	Mexico	2	2%
	Other	7	8%
Primary Language	English	77	89%
	Spanish	5	6%
	Unknown/Other	5	6%
State of Residence	Kentucky	69	79%
	Indiana	3	3%
	Louisiana	3	3%
	Tennessee	3	3%
	Other	9	10%

Produced by the Kentucky Injury Prevention and Research Center as bona fide agent for the Kentucky Department for Public Health. July 2019. Data source: Kentucky FACE Database.

# 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. July 2019. Data source: Kentucky FACE Database.

# Highlights:

- Of the 87 occupational fatalities in Kentucky in 2018, 37% (n=32) were motor vehicle collisions (MVC) (Figure 1). Motor vehicle collision deaths were up from 21 deaths in 2017, an increase of 52%.
- The number of suicides at work (7) is the third highest number of any year since the Kentucky FACE program began collecting data on worker fatalities in 1994. Only 2008 and 2012 (9 each) had a higher number of suicides at work. There was only one worker suicide in 2017.
- Of the eight falls shown in Figure 1, two occurred in the construction industry. This represents a 71% decrease in fatal construction falls from 2017 (n=7). Of the two construction falls, one was a fall from a roof and one was a fall into an elevator shaft.

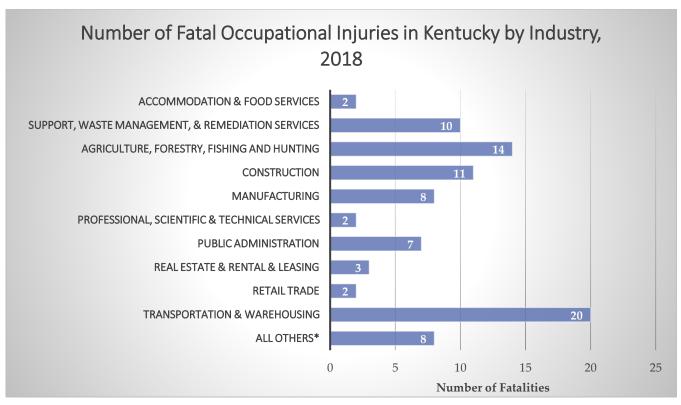
#### Kentucky FACE Program

• • •

• With the help of coroners and medical examiners, Kentucky FACE receives toxicology data on work-related fatalities. This data allow better understanding of how drugs and alcohol potentially impact the workplace. Of the 87 cases in 2017, 9% (n=8) involved drugs/narcotics, 13% (n=11) had no intoxication involvement, and 1% (n=1) involved alcohol. Seventy-seven percent (n=67) of cases remain undetermined, either because no toxicology was ordered, testing was impossible due to circumstances at the time of death, or requested toxicology results were not received by Kentucky FACE. Of the nine fatalities that involved drugs or alcohol, two of the decedents were employed in the Manufacturing industry. The remaining seven decedents were employed in the Professional, Scientific & Technical Services; Agriculture, Forestry, Fishing and Hunting; Accommodation & Food Services; Transportation & Warehousing; Retail Trade; Utilities; and Merchant Wholesalers of Durable Goods industries.. The Kentucky FACE program would like to thank all participating coroners for their contributions. Substances detected included fentanyl, norfentanyl, oxycodone, oxymorphone, hydrocodone, amphetamine, methamphetamine, and THC (data not shown).

## 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. July 2019. Data source: Kentucky FACE Database.

# Highlights:

- The transportation and warehousing industry accounted for 23% (n=20) of Kentucky's 87 occupational fatalities in 2018. This represents a 67% increase when compared to the industry's 12 fatalities in 2017. Of the 20 fatalities, 11 were truck drivers, an increase of 22% when compared to 2017's nine trucker deaths. Of the remaining nine fatalities, three employees were inland water passenger transporters; two were taxi drivers; one maintenance worker; one river tower; one was a temporary warehouse worker; and one was a dump truck driver. Kentucky FACE recognizes trucking as a risky occupation, and the Kentucky Occupational Safety and Health program provides safety training videos for truckers.
- Fatalities in the construction industry fell from 13 in 2017 to 11 in 2018, a decrease of 15%. Of the 11 fatalities, two were victims of falls; two were electrocuted; two were in motor vehicle crashes; one was involved in a heavy machinery rollover; one died by suicide; and one was a

<sup>\*</sup> All other industries includes Wholesale Trade, Utilities, Other Services, Mining, Merchant Wholesalers, Information, Finance & Insurance, and Arts, Entertainment, & Recreation with no more than one fatality in each industry.

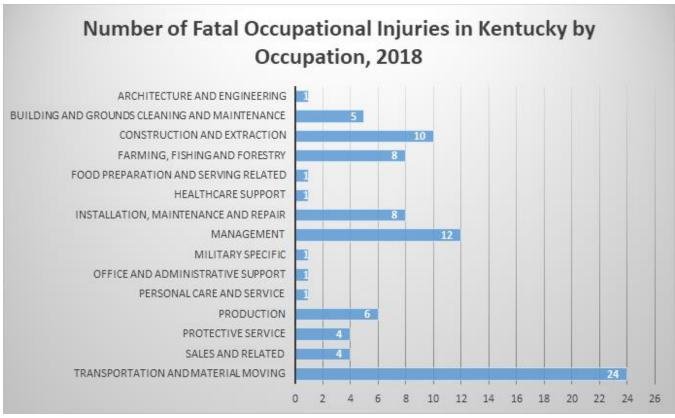
#### Kentucky FACE Program

• • •

- victim of homicide. The construction industry continues to be a dangerous occupation, and the Kentucky FACE program offers a variety of <u>investigation reports</u> concerning fatalities in this field.
- The agriculture industry continues to be a dangerous occupation for older workers, with the average age of the decedents being 56. Of the 14 agricultural-related fatalities, four involved all-terrain vehicle crashes; three were killed while operating a tractor; three were killed in logging incidents; two died while operating heavy farm equipment; one died in a motor vehicle crash; and one died in a fall from a barn loft.

# 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. July 2019. Data source: Kentucky FACE Database.

## Highlights:

- Of the 24 fatal injuries suffered by those employed in the transportation and material moving occupation in 2018, 75% (n=18) died in motor vehicle crashes. The remaining six fatalities included two victims of a helicopter crash; one electrocution; one fall from a barge; one homicide; and one drug overdose.
- The management occupation experienced 12 fatal occupational injuries in 2018. Of the 12 fatalities, 75% (n=8) owned their business, including four farm owners, one hotel owner, one recycling company owner, one welding company owner, and one rental property owner.
- Four police officers died while in the line of duty in 2018. This is the highest number of deaths in Kentucky since 2015 when five law enforcement officers lost their lives. One police officer was killed in Kentucky in 2017.

#### Kentucky FACE Program

• • •

# **Investigation Program**

The Kentucky FACE Program completed five investigations of selected occupational fatalities from July 1, 2018 to June 30, 2019. 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.

2018 FACE investigations are listed below. For the complete report, see the KIPRC website.

Case ID	Title	Category
18KY007	Police Officer Drives Into Flood Waters and Drowns. While on nightly	Drowning
	patrol, a police officer inadvertently drives into flood waters that have	
	overtaken a road. While attempting to escape the submerging vehicle,	
	the officer leaps into the water and never resurfaces.	
18KY024	Dump Truck Operator Electrocuted After Truck Bed Contacts High	Electrocution
	<u>Voltage Line.</u> A dump truck driver raised his truck bed to dump a load	
	of debris and contacted a high voltage wire carrying 7,200 volts. The	
	current caused one of the truck's tires to catch fire. When the driver	
	stepped from the truck, he inadvertently completed the circuit from	
	the ground to the truck and was electrocuted.	_,
18KY054	Teen Roofer Electrocuted When Ladder Contacts High Voltage Power	Electrocution
	<u>Lines.</u> A teen roofer was attempting to access the front of a residential	
	house using an aluminum ladder when the weight of the ladder	
	caused it to fall backwards into a high voltage power line. The victim	
17KY037	was immediately electrocuted.	Construction
1/KYU3/	Gutter Installer Died After Falling From Ladder Placed on Roof While	Construction
	<u>Taking Measurements.</u> A gutter installer placed a ladder on the roof of a residential porch in an attempt to take measurements. The ladder	
	became unstable and tipped over, resulting in a fall of 10'9". The	
	victim was pronounced dead at the hospital.	
17KY057	Traffic Control Worker Struck and Killed by Vehicle While Setting up	Motor Vehicle
1////02/	Cones on Interstate. A traffic control worker was tasked with closing	Collision
	the left lane of a four-lane interstate when he was struck by a vehicle	COIIISION
	from behind. The victim died at the scene.	
	HOTH Belling. The Victill died at the Scene.	

## Kentucky Hazard Alerts

The Kentucky Occupational Safety and Health Program produced four Hazard Alerts based on Kentucky FACE investigations and data between July 1, 2018 and June 30, 2019:

- <u>Traumatic Brain Injuries in the Workplace</u> examines the leading causes of work-related brain injuries, which include MVC, falls, and struck by/against. Work-related traumatic brain injuries cost Kentucky companies 5.2 million in 2016.
- <u>Incidents Involving Dump Trucks</u>. From 2011-2016, there was an average of 340 fatal crashes involving dump trucks in the U.S. each year. With an expected 13% growth in the dump truck service market by 2025, employers must become cognizant of preventing the significant risks that dump trucks pose.
- <u>Farmers Killed in Incidents Involving All-Terrain Vehicles.</u> From 1982-2016, Kentucky reported 675 all-terrain vehicle related deaths, the 5<sup>th</sup> highest total in the nation. Farmers who use ATVs are especially vulnerable due to their use in isolated and often unstable terrain.
- Working in Extreme Heat and Humidity. Since 1986, more people in the United States have died due to heat-related injuries and illnesses than any other weather-related disaster.
   Because of Kentucky's hot and humid summers, employers must take appropriate action to protect those employees who are required to work in extreme temperatures.

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. July 2019. 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.