

Kentucky FACE Program

2012 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, the work environment, the energy exchange resulting in fatal injury, and the role of management, engineering, and behavioral changes in preventing future injuries. KY FACE investigators evaluate information 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; and 4) employer safety procedures. 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.

*Organizationally, KIPRC is located in the University of Kentucky College of Public Health 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 5U60OH008483-09.

For more
detailed
information
concerning KY
FACE



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Kentucky Work Fatalities at a Glance

To create effective injury prevention programs, it's important to look at where and how injuries occur in Kentucky. Here is a brief snapshot of work fatalities that occurred from January 1, 2012 through December 30, 2012.

How many workers died from injuries in 2012?

Ninety five residents from Florida, Illinois, Indiana, Kentucky, Maryland, Michigan, North Carolina, Ohio, South Carolina, Tennessee and West Virginia died while working in Kentucky this year.

What were the leading causes?

- Motor vehicle collisions (28)
- Struck by (9)
- Suicide (9)
- Fall (9)
- Agriculture Machine (8)
- Homicide (8)
- Machine (5)

Who was at the highest risk?

- Transportation workers (25)
- Construction workers (14)
- Farmers (10)
- Installation/maintenance workers (8)
- Building and grounds/cleaning (6)

Deaths by County

- Jefferson (12)
- Pike (6)
- Laurel (4)
- Trigg (4)
- The remainder of fatalities is spread across 49 of Kentucky's 120 counties, with no more than two deaths per county.

Fatal Occupational Injury rate for 2012

In 2012, the Kentucky rate of fatal occupational injury was 4.6 deaths per 100,000 workers, 31% above the 2011 U.S. rate of 3.5 deaths per 100,000 workers. In 2011, the Kentucky rate was 5.6 deaths per 100,000 workers.



Demographics

In Kentucky, 95 workers died as a result of work related injuries. The following lists the demographic profile of this group.

Table 1: Demographics of Kentucky work-related injuries, 2012

Characteristics		Number	Percent of 95 fatalities
Sex	Male	85	90%
	Female	10	10%
Race	White	81	85%
	Other	12	13%
	Unknown	2	2%
Age	20 - 29	8	8%
	30 - 39	16	17%
	40 - 49	28	30%
	50 - 59	21	22%
	60 - 69	16	17%
	70 - 79	5	5%
	80 - 89	1	1%
Marital Status	Married	50	53%
	Never Married	9	9%
	Widowed	3	3%
	Divorced	28	30%
	Unknown	5	5%
Education	Less than High School	10	11%
	Some High School	3	3%
	Finished High School	49	52%
	Some College	15	16%
	College Graduate	9	9%
	Unknown	9	9%
Country of Origin	United States	88	93%
	Mexico	3	3%
	Other	4	4%
Primary Language	English	88	93%
	Spanish	5	5%
	Other	1	1%
	Unknown	1	1%
State of Residence	Kentucky	80	84%
	Other	15	16%



Investigation Program

The Kentucky FACE Program completed six investigations of selected occupational fatalities from July 1, 2012 to June 30, 2013. For more detailed descriptions of each case, see the KIPRC website at: <http://www.mc.uky.edu/kiprc/projects/KOSHS/index.html>

Semi-Truck Driver Dies after Being Struck by Flatbed Driver in Crossover Collision (11KY001)

In the winter of 2011, a 46-year-old semi-truck driver (D1) hauling a flatbed trailer was traveling north in the right lane on a four lane interstate. Several minutes ahead of the semi was a pickup truck hauling an extension ladder that fell out onto the northbound travel lanes. A car behind the pickup swerved to avoid the falling ladder. Other cars swerved to avoid the ladder. The semi came upon the ladder and swerving cars. To avoid striking the cars and ladder, the semi driver swerved to the right, over-corrected to the left, drove across the northbound lanes, over a cable barrier, then into the southbound travel lanes. Another semi-truck driver (D2) traveling in the right southbound lane pulling a 53' trailer struck the cab of the northbound semi. D2 died at the scene, and D1 was ejected and found alive under the right steer tire.

To prevent similar injuries, the Kentucky FACE program recommends:

- Loads in open pickup truck beds should be properly secured before transport commences.
- Ladders should be labeled by manufacturers to instruct users on the importance of securing ladders during transport.
- Retail establishments should locate signage in the ladder area to instruct customers on the importance of load securement.
- Law enforcement should be alert for load securement issues in open bed trucks and issue citations for non-secure transport of ladders.
- Brakes on commercial vehicles should be maintained in proper working order.

Two Semis Collide – Fire Ensues; Both Drivers Perish (11KY031)

One summer's night, A 49-year-old semi-truck driver (D1), pulling a flatbed loaded with salvage cars for recycling traveled north on a three-lane state highway. D1 topped a hill and drove through a right curve, when the unit rolled onto the driver's side, slid across the center line and entered a straight stretch approximately half way to the bottom of a hill. As D1's unit was sliding down the hill in the south bound lanes, a 52-year-old semi-truck driver (D2) hauling bottled beverages was traveling south in the straight stretch up the hill. As D1 slid down the hill, D2 tried to avoid being struck head-on and struck the guardrail. D2 was struck by D1; both vehicles caught fire and both drivers died at the scene.

To prevent similar injuries, the Kentucky FACE program recommends:

- Transportation companies should educate commercial drivers on proper load securement.
- Transportation companies should require drivers to utilize restraints while operating commercial vehicles.
- Electronic stability systems should be mandatory equipment on all commercial vehicles.
- Companies should provide new and refresher commercial driver safety training for company drivers addressing driver distraction and including defensive driving techniques.

Owner/Operator Hauling Asphalt Flux Dies after Driving into a Ravine and Striking Trees (11KY072)

In the early morning of a late summer's day, a 50-year-old semi-truck driver was transporting a load of asphalt flux. He had been driving for approximately five hours and was getting ready to exit the interstate, when for an unknown reason, the unit left the interstate, sideswiped a SUV parked on the shoulder, drove through a guardrail then proceeded into a ravine. A passing motorist called emergency services, who upon their arrival, contacted the local coroner. The driver had been ejected from the cab and was pronounced dead at the scene.

To prevent similar injuries, the Kentucky FACE program recommends:

- Companies should provide new and refresher commercial driver safety training for company drivers that addresses driver distraction and includes defensive driving techniques.
- Vehicle stabilizer and sensory systems should be mandatory equipment on all commercial vehicles.
- Semi tractor-trailer drivers should be trained to recognize signs of fatigue and drowsiness and when to seek appropriate rest areas.

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Truck Driver Dies When Tractor-Trailer Overtakes After Leaving Road (12KY011)

In the early morning hours of a spring day around 5:45 a.m., a 55-year-old male truck driver was driving south on an interstate transporting sheet metal. It is unknown how long he had been driving when he exited from the highway, traveled partially up the ramp and struck the left side guard rail. The truck left the road, traveled down an embankment and overturned onto its roof. A passing motorist called emergency medical services. The driver was extricated by mechanical means and declared dead at the scene.

To prevent similar injuries, the Kentucky FACE program recommends:

- Employers should provide training to drivers on the importance of being attentive and not engaging in distracting tasks or behaviors while driving.
- Semi tractor-trailer drivers should be trained to recognize signs of fatigue and drowsiness and when to seek appropriate rest areas.
- Places for truck drivers to stop and rest should be located at regular intervals along interstates that are heavily traveled by trucks.

Day Care Monitor Dies After Crash of 15-Passenger Van (12KY026)

In the late afternoon of a spring day, a day care van operator and a monitor loaded 16 children into a 15-passenger van. Carrying a total of 18 passengers in the 15-passenger van, the operator and the monitor proceeded to transport the children to their homes. After dropping off two children at their residences, the van was traveling 46-50 mph in the left hand lane headed east in a 35 mph zone on a non-divided four-lane state road. As the van approached a side street on the right, the right rear tire blew out and the van veered sharply to the left, crossing over two westbound lanes and striking a tree head-on. Witnesses called emergency services and began extracting the children, operator, and monitor from the van. All occupants were transported to local hospitals for treatment of injuries. The monitor died at the hospital; the operator and all other passengers survived.

To prevent similar injuries, the Kentucky FACE program recommends:

- Daycare facilities that utilize 15-passenger vans should ensure operators are properly trained in safe vehicle operations.
- Daycare facility owners should ensure company vehicles have routine maintenance and inspections performed.
- Daycare employees involved in the transportation of children must follow all the transportation rules and laws that apply.
- Kentucky daycare facilities should use alternatives to 15-passenger vans to transport children for the safety of the children and the daycare employees.
- Kentucky should authorize one agency to oversee daycare transportation operations.
- Manufacturers should improve the safety of 15-passenger vans, especially since they are often used to transport children.

Factory Laborer Dies when a Car Driven by Coworker Crashes into Him in Parking Lot (12KY037)

On a summer day, a 29-year-old male manufacturing laborer was outside under a small metal stairway in the loading dock area of the manufacturing plant during his lunch break. Another employee entered her car in the employee parking lot to leave on her lunch break. Her car unexpectedly malfunctioned when in reverse, sped backward, and crashed into the stairway under which the worker was taking a break. The collision pushed the metal stairway along the wall of the factory, crushing the worker between the building and the passenger side of the car. Emergency medical services arrived and transported the worker to the nearest hospital. From there, the worker was flown to the nearest trauma hospital, where he died shortly after arriving.

To prevent similar injuries, the Kentucky FACE program recommends:

- Employers should establish policies requiring employees to use the safe break areas that are provided.
- Outdoor break areas, if provided, should be in areas that are separated from vehicular traffic.



Kentucky Hazard Alerts

The Kentucky FACE Program completed two HazAlerts on selected occupational fatalities from July 1, 2012 to June 30, 2013. For the complete HazAlerts, see the KIPRC website:

<http://www.mc.uky.edu/kiprc/projects/KOSHS/index.html>

Drivers Killed Due to Tire Failures

In 2012, four truck drivers were killed as a direct result of tire blowouts. A 46-year-old male flatbed truck driver was fatally injured when the front passenger tire failed and his truck went off the road. A 59-year-old male semi-truck driver died after his vehicle struck another semi truck that was traveling at low speed due to a tire failure. A 46-year-old male driving a sealing and stripping truck for an asphalt company died after the rear passenger tire failed. A daycare facility van monitor died after the van approached a side street in a 35 mph zone, and the rear passenger tire failed.

To prevent tire failures, the Kentucky FACE program recommends that employers:

- Ensure that routine maintenance is performed on work vehicles.
- Implement and enforce an employer seat belt safety program.

To prevent tire failures, the Kentucky FACE program recommends that employees:

- Be properly trained in safe work vehicle operation.
- Perform routine pre-trip and post-trip inspections, including inspection of the tires.
- Ensure that tires do not run below 80% of the recommended pressure.

Workers Killed Due to Driver Distraction

From January 2011 to April 2012, three workers were killed as a direct result of driver distraction. The workers included a fire chief and two truck drivers, all between the ages of 50 and 55.

To prevent driver distraction, the Kentucky FACE program recommends that employers:

- Provide training on the importance of being attentive and not engaging in distracting tasks or behaviors while driving.
- Develop policies that minimize or eliminate the use of in-vehicle devices while driving.

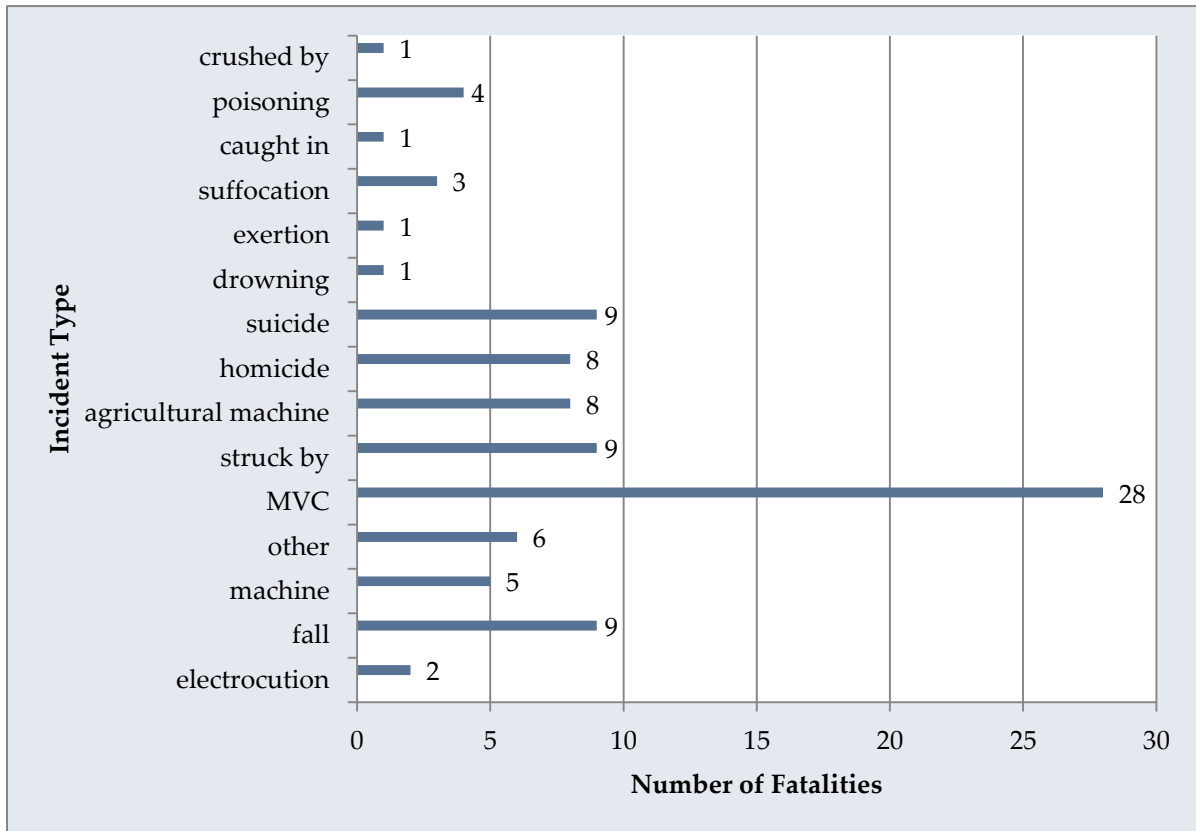
To prevent driver distraction, the Kentucky FACE program recommends that employees:

- Not use dispatching devices while driving.
- Not text or manually dial a cell phone while driving.
- Refrain from activities such as reading, writing or map reading while driving.



Types of Events Causing Worker Deaths

Figure 1: Number of fatal injuries at work by event, Kentucky, 2012*



Highlights:

- Of the 95 fatal occupational injuries in Kentucky, 28 were motor vehicle collisions. Fifteen of the motor vehicle collisions involved truck drivers from Florida, Kentucky, Maryland, North Carolina, South Carolina and Tennessee. Two of the fifteen were pedestrian incidents, where the driver exited the truck and was struck. One of the fifteen was a woman driving a coal haul truck.
- Five of the nine struck by deaths were loggers and tree trimmers.
- Nine Kentucky men died in the workplace as a result of suicide; 33%(n=3) of these suicides were in the construction industry. Four were young men in their twenties.
- Victims of falls in Kentucky this year ranged in age between 37 and 83; 56% (n=5) of the falls took place in the construction industry.
- Nine Kentucky men died of homicides in 2012. Four of the eight victims were in their twenties. Self-employed workers accounted for 44%* (n=4) of the homicide fatalities, with 33% (n=3) of the victims working in the construction industry.

* Percentage calculated on the number of known self-employed workers.

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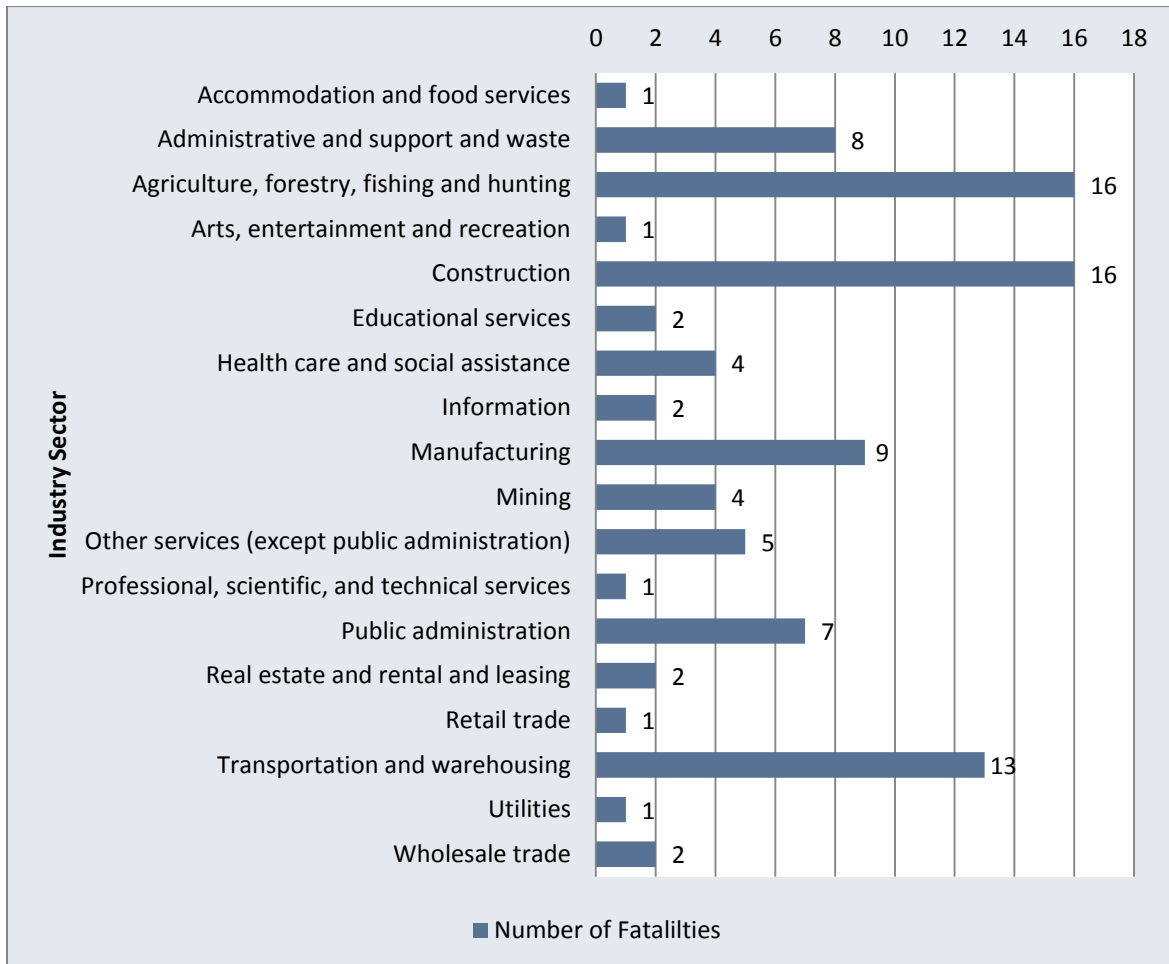


- Seven farmers (5 men and 2 women) died this year from farm machinery deaths. One school maintenance worker died while repairing a bushhog. All 2012 agriculture machine fatalities involved Kentuckians over the age of 50.
- One Tennessee man and four Kentucky men between the ages of 39 and 49 suffered machine-related deaths. Two of those deaths were due to mowers.
- Three Kentucky workers died from natural disasters, including a farmer struck by lightning while working in a field, a truck driver killed by a tornado and a worker killed by a cave-in while working on a water pipe.



Fatal Injuries at Work by Industry

Figure 2: Number of fatal injuries at work by industry, Kentucky, 2012



Highlights:

- The Agriculture, Forestry, Fishing and Hunting Industry accounted for 16 of Kentucky’s 95 work-related fatalities, including 10 farmers who own and manage their farms. Seven of the 10 farmers were killed in incidents involving tractors.
- Loggers and tree trimmers spanned three different industries, with 6 deaths attributed to Agriculture, Forestry, Fishing and Hunting, one attributed to Construction and two attributed to Administrative and Support and Waste, for a total of nine fatalities.
- Sixteen of the 95 worker fatalities occurred in the construction industry. Five of those deaths were falls. Construction Industry deaths are up from 11 recorded deaths in 2011.
- The Transportation Industry deaths included 12 truck drivers and one mechanic. Transportation deaths were down from 16 recorded deaths in 2011.
- Of the 9 workplace fatalities in the Manufacturing Industry, two Kentucky men were electrocuted.

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- Two tree trimmers, a lawn services worker and a lawn services owner/worker accounted for half the fatalities in the Administrative and Support and Waste Industry.
- Seven Public Administration workers died on the job in 2012. A U.S. army specialist and a soldier, both Kentucky men ages 21 and 22, took their own lives. A sheriff's deputy was shot. A sheriff's deputy, a police officer and a soldier were killed in motor vehicle collisions. One maintenance worker died due to a cave-in while he was laying pipe.
- In the industry categorized as Other Services, a president and a board member of a Kentucky homeowners' association were both shot over a neighborhood dispute.
- Two Kentucky Health Care Industry workers, a 51-year-old dentist and a 41-year-old medical assistant died due to drug poisoning.



Conclusions

The Kentucky Injury Prevention and Research Center would like to take a moment to respectfully acknowledge the individuals that the numbers in this report represent, and the pain and loss their families must endure. It is hoped that surveillance of these tragic workplace situations will help guide government, industry, workers and communities to direct their efforts toward future injury prevention.