



CONSTRUCTION SECTOR INJURIES IN KENTUCKY, 2008-2015

Kentucky Occupational Safety and Health Surveillance Program

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Purpose: Construction industries continue to rank among the highest for work-related fatal and nonfatal injuries and illnesses both at state and national levels. This report analyzes characteristics for all fatal workplace injuries in Kentucky's construction sector from 2008-2015. Also displayed are nonfatal injury rates for select construction industries in Kentucky. The data contained in this report are intended to inform intervention strategies and policies.

Data Used: Fatal and nonfatal workplace injury rates were obtained from the Bureau of Labor Statistics, U.S. Department of Labor; rates in charts are calculated per 100,000 full-time equivalent (FTE) workers. Industry, occupation, demographic, and other characteristics were obtained from the Kentucky Fatality Assessment and Control Evaluation (FACE) Program, Kentucky Injury Prevention and Research Center (KIPRC). Industries are classified by the North American Industry Classification System (NAICS) codes, which defines business establishments based upon the primary activities in which they engage. Occupations were classified by the Standard Occupational Classification (SOC) System.

About KOSHS: This report was produced by the Kentucky Occupational Safety and Health Surveillance (KOSHS) Program, which is funded by the National Institute for Occupational Safety and Health (NIOSH) to conduct surveillance of fatal and nonfatal workplace injuries and illnesses in Kentucky. KOSHS is located organizationally within the Kentucky Injury Prevention and Research Center (KIPRC), a bona fide agent of the Kentucky Department for Public Health. Using research findings, KOSHS develops free training materials to specifically address occupational injury and illness trends. The Kentucky Fatality Assessment and Control Evaluation Program (FACE) Program, located organizationally within KOSHS, investigates workplace fatal injuries and produces reports detailing the events surrounding the incident and provides recommendations for prevention.

Key Findings:

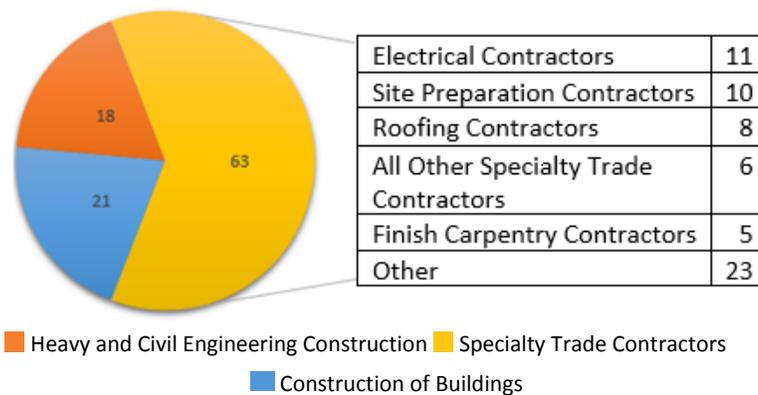
- For each year of the study period, the construction sector had a higher fatality rate when compared to all industries combined in Kentucky, with year 2015 having the highest rate of 17 per 100,000 FTE workers.
- Specialty Trade Contractors (NAICS 238) comprised 62% of work-related fatalities in construction.
- Falls accounted for over 1 in 3 deaths (35%) and were the leading external cause of deaths.
- 30% of all fatalities were incurred by directly contracted workers.
- Nearly 1 in 4 (23%) fatalities occurred between 10:00 am and 11:59 am.
- Workers ages 45-54 incurred 30 fatalities, accounting for the highest proportion overall (29%).
- In 16% of all fatalities, the decedent was foreign born and did not speak English as a primary language.
- 1 in 4 (27%) of all decedents had not obtained a high school diploma.

Figure 1. Fatal Work-Related Injuries and Illnesses, Construction Sector vs. All Industries Combined, Kentucky, 2008-2015



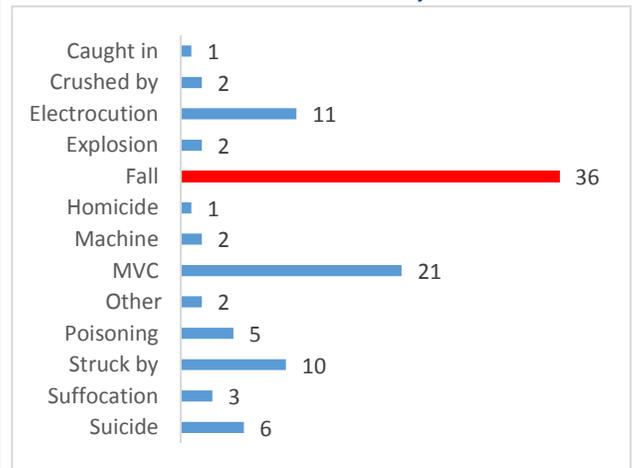
A total of 102 workers in the construction sector were killed due to a workplace injury between the years of 2008 and 2015. The fatality rate for construction sector workers in Kentucky was lowest in year 2009 and highest in year 2015, with 7.6 deaths and 17 deaths per 100,000 FTE workers, respectively. The construction fatality rate in year 2015 was more than 3 times higher than the rate for all industries combined. Rates were obtained from the Bureau of Labor Statistics (BLS) Census of Fatal Occupational Injuries (CFOI).

Figure 2. Kentucky Work-Related Construction Sector Fatalities by Subsector and Occupation, 2008-2015



Specialty Trade Contractors (NAICS 238) accounted for the highest proportion of fatalities at 62%. Electrical Contractors, Site Preparation Contractors, and Roofing Contractors were the leading subsectors for fatalities within the Specialty Trade Contractor sector.

Figure 3. Kentucky Work-Related Construction Sector Fatalities by External Cause of Death, 2008-2015



Falls were the most common external cause of deaths and accounted for over a third of all construction sector deaths (35%). Roofers were the occupation with the highest number of fall deaths (n=8, 22%), followed by carpenters and construction laborers (n=6, 17% for both).

Figure 4. Top Four Construction Occupations with Highest Fatality Numbers in Kentucky, 2008-2015

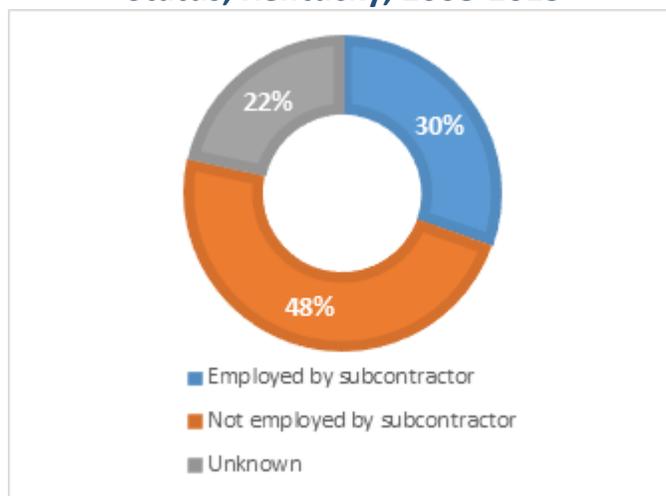
Based on 6-digit SOC code

Occupation	Number	% total
Construction Laborer	17	16.7%
Roofers	10	9.8%
Driver/Sales Workers and Truck Drivers	9	8.8%
Carpenter	8	7.8%
Electricians	5	4.9%

Produced by the Kentucky Occupational Safety and Health Surveillance Program, Kentucky Injury Prevention and Research Center.

The construction laborer occupation had the highest number of fatal injuries, accounting for 17 percent of all construction sector fatalities.

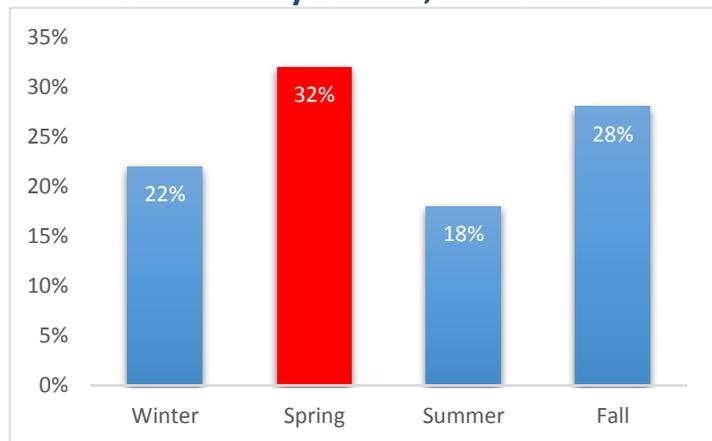
Figure 5. Construction Occupation Fatalities by Subcontractor Employment Status, Kentucky, 2008-2015



Produced by the Kentucky Occupational Safety and Health Surveillance Program, Kentucky Injury Prevention and Research Center.

The highest proportion of construction sector workers who died (48%) due to a workplace injury were contracted directly for the job activities they were performing at the time of the fatal incidents.

Figure 6. Kentucky Construction Sector Fatalities by Season, 2008-2015



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Most construction sector fatalities occurred during spring months (n=33). Falls were most common during the winter (n=12), while motor vehicle collisions were most common during the spring (n=9).

Figure 7. Kentucky Construction Sector Fatalities by Time of Day, 2008-2015



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Most construction sector fatalities occurred between 10:00 am and 11:59 am. As expected, only 1 fatality occurred between midnight and 5:59 am. Time of death was known for 96 cases.

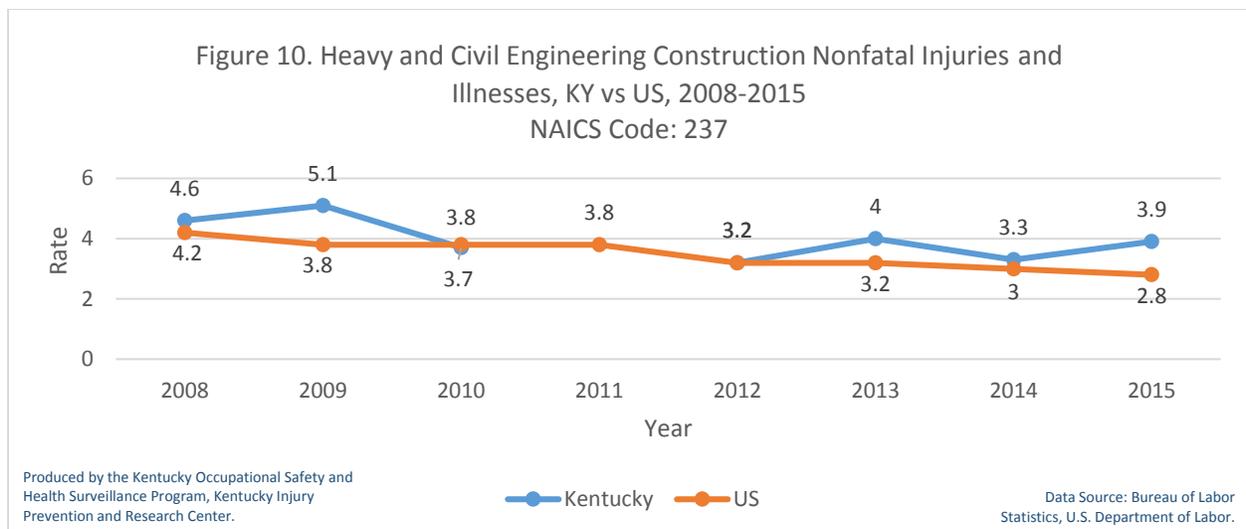
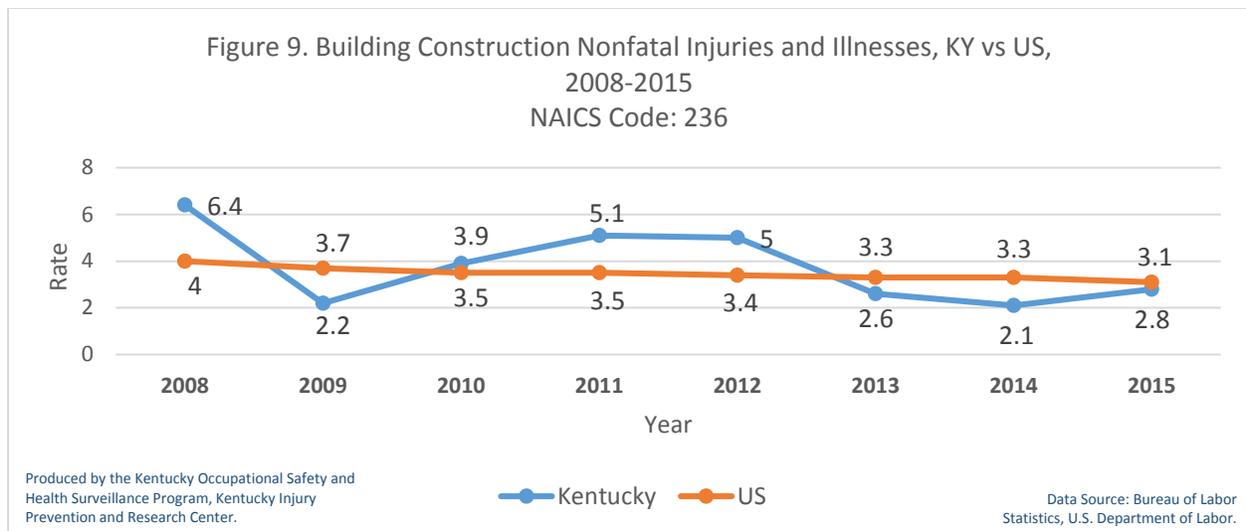
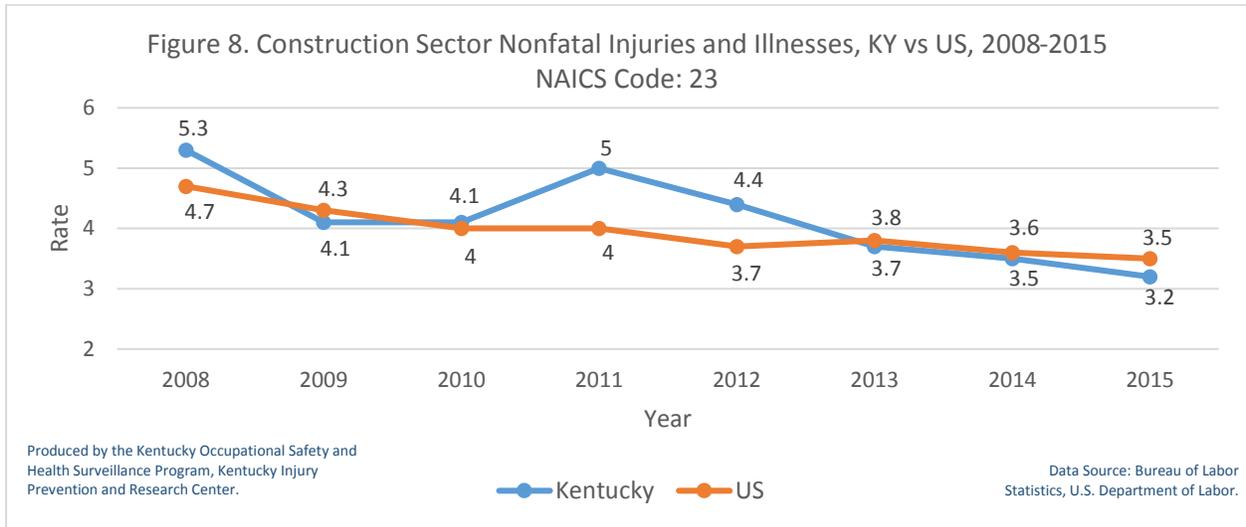
Table 1. Demographic Characteristics of Construction Worker Deaths, Kentucky, 2008-2015

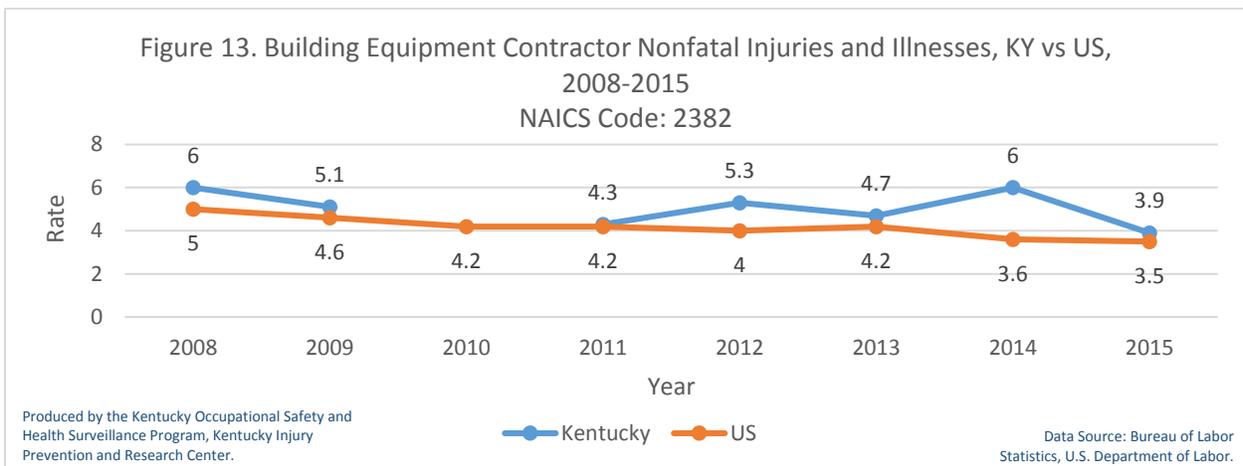
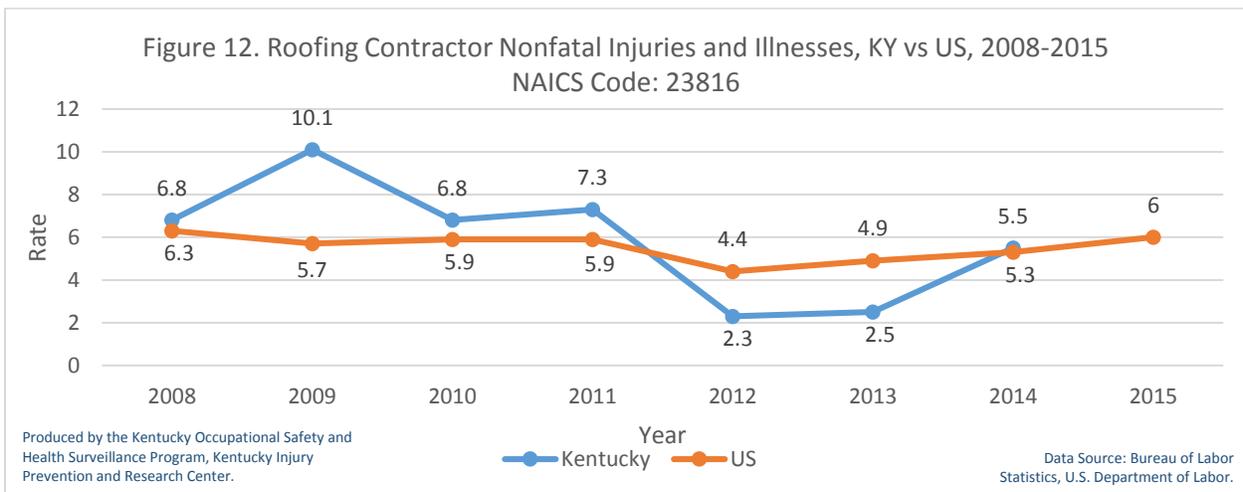
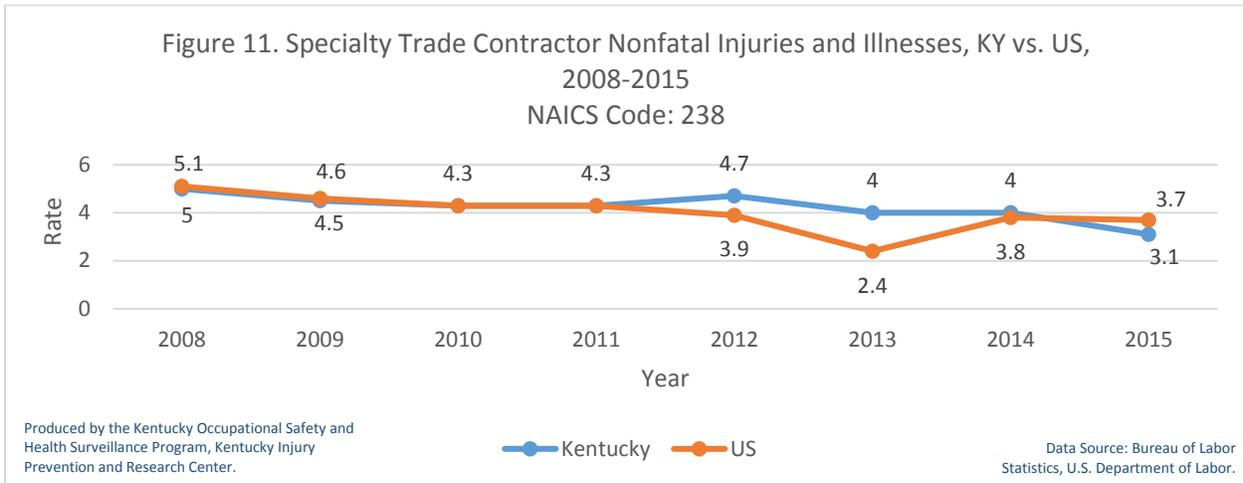
Characteristic	Number	Percentage of Total
	102	
Sex		
Male	101	99%
Female	1	1%
Race		
White	93	91%
Black	7	7%
Unknown	2	2%
Age (in years)		
18 to 24	10	10%
25 to 34	15	15%
35 to 44	23	23%
45 to 54	30	29%
55 to 64	16	16%
65 to 74	7	7%
75 or older	1	1%
Marital Status		
Married	55	54%
Never married	23	23%
Divorced	18	18%
Widowed	1	1%
Unknown	5	5%
Highest Level of Education Attained		
Less than high school	13	13%
Some high school	14	14%
Completed high school	48	47%
Some college	14	14%
Completed college or beyond	1	1%
Unknown	12	12%
Country of Origin		
USA	86	84%
Mexico	12	12%
Other	4	4%
Primary Language		
English	86	84%
Spanish	14	14%
Other	2	2%

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Percentages may not total 100 due to rounding

Figures 8-13. Nonfatal Injury and Illness Rates, Construction Sector and Select Subsector, Group, and Industry, Kentucky vs U.S., 2008-2015





Rates calculated per 100,000 full-time equivalent (FTE) workers.

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