



# Work-Related Fatalities in North Carolina, 2011 and Five-Year Trend (2007-2011)

# Introduction

Workplace fatalities are rare; when they do occur, they are typically during a worker's most productive years and generally represent the impact of high risk jobs or unsafe working conditions.<sup>1–3</sup> This report describes work-related fatalities in North Carolina during 2007 to 2011. This analysis will help to identify the most high-risk industries and occupations and other risk factors that may be useful in the evaluation and development of risk-reduction strategies.

# Definitions

A work-related fatality is defined as a person who was self-employed, working for pay, or volunteering at the time of the event, engaged in a legal work activity, and present at the site of the incident as a job requirement. Fatalities that occur during a person's normal commute to and from work are excluded from the United States Bureau of Labor Statistics' (BLS) Census of Fatal Occupational Injuries (CFOI) counts.

# Methods

Fatality counts (numerators) were obtained from the U.S. BLS CFOI. Population denominators were defined as all employed persons in NC during 2007 to 2011, aged 16 years or older. Rates were calculated annually per number of employed persons. Comparisons to national data were calculated when possible. Counts and rates were stratified by variables of interest for work-related fatalities that were reported in 2011(the most current year available at time of analysis) and for each year from 2007 through 2011. Poisson regression was used to assess changes in rates over time.

# Data Sources

Since 1992, CFOI has been providing comprehensive annual work-related fatality data for the U.S. Reported fatalities are verified by cross-referencing reported counts from multiple sources, such as death certificates, media reports, workers' compensation reports, follow-up questionnaires, and administrative reports from federal and state agencies such as the Occupational Safety and Health Administration (OSHA).<sup>4</sup> CFOI offers detailed information on all work-related fatalities in the U.S., which includes data on worker characteristics: demographics, data on industry and occupation, and data concerning fatal incidents (e.g. equipment involved and circumstances of the event). Counts for the employed population (denominators) were obtained from the BLS Current Population Survey (CPS) and the BLS Geographic Profile of Employment and Unemployment (GP). The CPS is a monthly survey of households conducted by the Bureau of Census for the BLS, and provides comprehensive employment data on the labor force.<sup>5</sup> The GP provides employment and unemployment annual averages from the CPS by geographic regions and selected demographic and economic characteristics.<sup>6</sup>

# Results

# Demographics

In North Carolina (NC), a total of 148 workers were killed on the job in 2011 at a rate of 3.6 workers per 100,000 employed persons in the state, as compared to a national average rate of 3.4 per 100,000 employed persons (Appendix, Table 1). Males accounted for 139 (94%) of these fatalities; the fatality rate for males was 13 times greater than the rate among females. This rate among males (6.3 per 100,000 employed persons) was also higher than the national rate (5.8 per 100,000 employed persons), but not significantly different from the national rate (p=0.31). However, the fatality rate among females (0.5 per 100,000) was lower than the national rate (0.6 per 100,000), but also not significantly different than the national rate (p=0.48).

The highest rates of fatalities occurred among employed persons aged 65 years and above in NC (7.4 per 100,000), but was lower than the national rate (8.6 per 100,000) for this age group. The fatality rate among Hispanics (6.6 per 100,000) was more than twice the rate among non-Hispanic (NH) Whites (3.2 per 100,000), and about 2.5 times the rate among NH Blacks (2.6 per 100,000). The fatality rate among Hispanics was also double the national rate (3.7 per 100,000) in 2011.

# Employee Status

Fatalities occurred four times more often among self-employed persons (11.0 per 100,000) than wage and salary workers (3.0 per 100,000) in 2011 (Table 1). Fatality rates among self-employed workers were also greater than the national rate (7.2 per 100,000) in 2011.

# Contributing Events or Exposures

"Transportation incidents" accounted for most work-related deaths during 2011 in NC; followed by "violence and other injuries by persons or animals", and "falls, slips, and trips" (Table 2). The largest proportion of "transportation-related incidents" was due to "roadway incidents involving motorized land vehicles". "Intentional injury by another person" was the largest sub-category of "violence and other injuries by persons or animals". "Falls to a lower level" was the most common type of event in the "falls, slips, or trips" category.

# Event/Exposure by Employee Status

When wage and salary workers were compared to self-employed workers, "transportation incidents" was the leading cause of work-related deaths for both groups (Table 3).

# Event/Exposure by Gender

The most frequently reported fatal event or exposure among both women and men in NC were "transportation incidents" (Table 4). 27 (19%) of deaths among men, and 3 (33%) deaths among women, were due to "violent injuries by persons or animals".

# Industry

Almost half (49%) of work-related fatalities occurred within three industry sectors in NC during 2011 (Figure 1): construction, transportation and warehousing, and agriculture, forestry, fishing, and hunting. Agriculture, forestry, fishing, and hunting had the highest work-related fatality rate (28.3 deaths per 100,000 employed persons), followed by transportation and warehousing (17.6 per 100,000) and construction (10.3 per 100,000). The fatality rate across most industry sectors was consistently higher in NC than the respective national rate by industry, except for manufacturing, education and health services, and other services except public administration.

### Industry by Event/Exposure

For industry sectors with the highest fatality rates, transportation incidents occurred more than 75% of the time within the transportation and warehousing industry (table not shown). Falls, slips, and trips accounted for the largest proportion (44%) of deaths within the construction industry. Transportation incidents also accounted for the largest proportion of deaths within the agriculture, forestry, fishing and hunting industry (47%). Although violent injuries were the second most common event type associated with fatal work-related injuries overall, these events occurred mostly (69%) in the retail trade industry.

### Industry by Race/Ethnicity

Among both NH Whites (16.7 deaths per 100,000 employed persons) and Hispanics (48.7 per 100,000) in NC, the highest rates of work-related fatalities occurred in the agriculture, forestry, fishing, and hunting industry (Table 5). Among NH Blacks, the highest rate of work-related deaths occurred in the transportation and warehousing industry (18.2 per 100,000).

#### Industry by Age

Figure 2 compares fatality rates by age groups among six industry sectors with the highest fatality rates. The highest rate of work-related fatalities among 20-44 year olds occurred in the transportation and warehousing industry (18.6 per 100,000). Among both 45-54 year olds (41.2 per 100,000) and 55 year olds and older (20.8 per 100,000), however, the highest rate of work-related fatalities occurred within the agriculture, forestry, fishing, and hunting industry sector.

#### Occupation

The highest rate of work-related fatalities was reported among security guards and gaming surveillance officers (24.2 deaths per 100,000 employed persons), followed by aircraft pilots and flight engineers (13.2 per 100,000) and roofers (13.1 per 100,000) (table not shown).

# Trends Over Five Years

The overall fatality rate in NC decreased from 2007 to 2009 and then increased from 2009 to 2011, with an overall modest decrease (Figure 3). In 2008 and 2011, the NC rate was above the national rate.

# Trends by Event/Exposure

The number of transportation-related fatal incidents exceeded all other event or exposure types during the 5-year period (Figure 4). There was a decrease of 32 transportation-related deaths from 2007 to 2010, but an increase by 4 deaths from 2010 to 2011. There was an increase in work-related deaths from falls, slips and trips from 2009 to 2011 by 10 deaths.

#### Trends by Gender

The death rate among males was consistently higher than among females across all five years (Figure 5).

# Trends by Race/Ethnicity

Work-related fatality rates among NH Whites were lower than other racial/ethnic groups for all years except 2011, when rates among NH Whites (3.2 per 100,000) were higher than among NH Blacks (2.6 per 100,000) (Figure 6). Fatality rates among NH Blacks seemed to fluctuate annually with an overall gradual decrease. Fatality rates among Hispanics were higher compared to all groups for all years, and have increased since 2010, but not significantly (p=0.18).

# Trends by Industry

The number of fatal incidents within the construction industry exceeded the number of fatalities within all other industry sectors for all five years (Figure 7). There was a decrease by 16 construction-related deaths from 2007 to 2009, but an increase by 10 deaths from 2009 to 2011. From 2008 to 2011, the work-related fatality rate was consistently greatest among the agriculture, forestry, fishing, and hunting industry sector; followed by the transportation and warehousing sector; as compared to other industry sectors (Table 6). None of these changes in trends were statistically significant.

# **Public Health Significance**

Work-related fatalities are preventable, and the first step in preventing work-related fatalities is to better describe how often they occur, what groups are affected, and the circumstances of these incidents. Fatal work-related incidents occurred 13 times more often among men compared to women. This may be due to women working in far fewer hazardous occupations as compared to men.<sup>7</sup> Rates of fatal work-related incidents among Hispanic workers were consistently higher than among any other racial/ethnic group from 2007 through 2011. Fatal occupational injuries among Hispanic workers also tended to occur more often within the agriculture, forestry, fishing, and hunting industry. This may be due to Hispanics tending to be overrepresented within hazardous industries such as construction or agriculture, forestry, fishing, and hunting, especially foreign-born Hispanics.<sup>8</sup> Most foreign-born Hispanics may also be unaware of local laws, or received poor or very little formal training in their native language regarding worker safety and health protection.<sup>9</sup> Workers aged 65 years and over tend to have the highest rate of fatal incidents on the job as compared to other age groups, possibly as a result of workers in the US living longer and remaining employed well past the age of 55.<sup>10</sup>

Fatal work-related incidents among self-employed workers were over three times that of wage and salary workers in 2011. Self-employed workers may often be employed in higher-risk industries such as construction or transportation and warehousing.<sup>11</sup>

Almost consistently across the five-year period, regardless of age or race/ethnicity, the vast majority of all fatal workrelated injuries occurred within three industry sectors: construction, transportation and warehousing, and agriculture, forestry, fishing, and hunting industry sectors. Transportation-related events were responsible for most of the fatal work-related incidents within the agriculture, forestry, fishing, and hunting industry sector. The event type most responsible for transportation-related deaths with in the transportation industry sector was "roadway incidents involving motorized land vehicles". "Falls, slips, and trips" events comprised the majority of construction-related fatalities. Transportation-related events were also the leading type of fatal work-related event type across all five years.

Targeting industry sectors (where more fatalities occurred than other industry sectors) would be worthwhile to obtain more detailed information about the circumstances surrounding these deaths.<sup>12</sup> Collaborating with representatives from the highest-risk industry sectors in the state to explore additional data sources that collect more detailed data on workers in these industries is a good first step. Workers in these industries may also benefit from targeted health and safety awareness in the workplace focusing on falls, slips, and trips, and transportation-related accident prevention.

# Limitations

CFOI data does not capture work-related fatalities caused by illness so counts related to fatal illness acquired while on the job are not included. Additionally, CFOI suppresses counts that are less than five; therefore, there may be an undercount.<sup>4</sup>

The Occupational Injury and Illness Classification System (OIICS) provided the classification system used to code the case characteristics of fatal injuries in CFOI. OIICS underwent a comprehensive revision in 2010 into OIICS 2.0, and as a result, 2011 data utilizes a different classification system than previous years, and all counts and stratifications in this report from 2011 utilize the OIICS 2.0 system. This limitation should be noted when comparing data from 2011 to previous years. For instance, the "Falls" incident type category was expanded to include "Slips", and the category "Trips without fall" were combined with "Falls" category to create the new category "Falls, slips and trips". More information about OIICS 2.0 and other changes can be found at <a href="http://bls.gov/iif/oshoiics.htm">http://bls.gov/iif/oshoiics.htm</a>.<sup>13</sup> Trend changes observed from 2010 to 2011 therefore may be influenced by a different data classification system.

Prior to 2008, CFOI used employment-based rates that measured risk of fatal injury for those employed given a period of time, regardless of hours worked. Since 2008, CFOI has calculated national fatal injury rates using full-time equivalent (FTE) work hours-based rates as the denominator rather than employed persons. Because FTE data are not available at the state level<sup>4</sup>, employed persons was used as the denominator to calculate all rates for North Carolina in this report. Additionally, US rates used for comparison were also re-calculated for the respective categories and years using employed persons as denominator.

# References

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#### Appendix

Table 1. Number and rate of fatal work-related injuries by select\* worker characteristics, NC and US, 2011

Worker Characteristics	Number of Fatalities (N) <sup>1</sup>	NC Fatality Rate <sup>2</sup>	US Fatality Rate <sup>3</sup>
Total	148	3.6	3.4
Gender			
Male	139	6.3	5.8
Female	9	0.5	0.6
Age			
16 to 17 years <sup>4</sup>			
18 to 19 years	4	4	1.4
20 to 24 years	11	2.9	2.2
25 to 34 years	25	2.8	2.3
35 to 44 years	27	2.7	2.9
45 to 54 years	45	4.8	3.7
55 to 64 years	25	3.8	4.2
65 years and over	14	7.4	8.6
Race or Ethnic Origin <sup>5</sup>			
White (non-Hispanic)	99	3.2	2.9
Black or African-American (non-Hispanic)	21	2.6	2.9
Hispanic or Latino	21	6.6	3.7
Employee Status			
Wage and Salary Workers <sup>6</sup>	115	3.0	2.9
Self-employed <sup>7</sup>	33	11.0	7.2

Sources: BLS Census of Fatal Occupational Injuries (CFOI) and workforce estimates from the BLS Current Population Survey (CPS).

\*Selected rate categories had 5 or more reported fatal work injuries in 2011.

<sup>1</sup> Figures may not add to totals because of rounding. Totals for major categories may include subcategories not shown separately.

<sup>2</sup> Rates calculated per 100,000 employed persons aged  $\geq$ 16 years in North Carolina.

<sup>3</sup> Rates calculated per 100,000 employed persons aged  $\geq$ 16 years in the US

<sup>4</sup> Counts under five were censored for confidentiality purposes or no data was reported.

<sup>5</sup> Persons identified as Hispanic or Latino may be of any race. The race categories shown exclude data for Hispanics and Latinos except where indicated.

<sup>6</sup> Includes workers employed by governmental organizations regardless of industry, volunteers, and workers receiving other types of compensation.

<sup>7</sup> Includes self-employed workers, owners of unincorporated businesses and farms, paid and unpaid family workers, and may include some owners of incorporated businesses or members of partnerships.

Event or Exposure <sup>1</sup>	N <sup>2</sup> (%)		
Violence and other injuries by persons or animals	29 (19.6)		
Intentional injury by person	27 (18.2)		
Intentional injury by other person	19 (12.8)		
Shooting by other personintentional	17 (11.5)		
Self-inflicted injuryintentional	8 (5.4)		
Transportation incidents	51 (34.5)		
Aircraft incidents	7 (4.7)		
Pedestrian vehicular incident	8 (5.4)		
Water vehicle incidents	3 (2.0)		
Roadway incidents involving motorized land vehicle	26 (17.6)		
Nonroadway incident involving motorized land vehicles	5 (3.4)		
Fires and explosions	4 (2.7)		
Falls, slips, trips	28 (18.9)		
Falls to lower level	26 (17.6)		
Exposure to harmful substances or environments	12 (8.1)		
Exposure to temperature extremes	5 (3.4)		
Exposure to environmental heat	5 (3.4)		
Exposure to other harmful substances	5 (3.4)		
Inhalation of harmful substance	4 (2.7)		
Contact with objects and equipment	24 (16.2)		
Struck by object or equipment	17 (11.5)		
Struck by powered vehiclenontransport	8 (5.4)		
Struck or run over by rolling powered vehicle	3 (2.0)		
Struck by falling object or equipmentother than powered vehicle	7 (4.7)		
Caught in or compressed by equipment or objects	5 (3.4)		
Caught in running equipment or machinery	4 (2.7)		
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Table 2. Number of fatal work-related injuries by event or exposure type, NC, 2011

Source: BLS Census of Fatal Occupational Injuries (CFOI).

<sup>1</sup> Based on the BLS Occupational Injury and Illness Classification System (OIICS) 2.01 implemented for 2011 data and onward.
<sup>2</sup> Figures may not add to totals because of rounding. Totals for major categories may include subcategories not shown separately.
NOTE: CFOI fatality counts exclude illness-related deaths unless precipitated by an injury event. Workers under the age of 16 years, volunteer

workers, and members of the resident military are not included in rate calculations to maintain consistency with the CPS employment.

Table 3. Number and rate of fatal work-related injuries by event or exposure type and employee status, NC, 2011

Event or Exposure <sup>1</sup>	To	Total			Employee Status			
			Wage and Work		Self-employed <sup>3</sup>			
	N <sup>4</sup> (%)	Rate <sup>5</sup>	N <sup>4</sup> (%)	Rate <sup>5</sup>	N <sup>4</sup> (%)	Rate <sup>5</sup>		
Violence and other injuries by persons or animals	29 (20)	0.7	21 (18)	0.6	8 (24)	1.7		
Transportation incidents	51 (34)	1.3	36 (31)	1.0	15 (45)	3.1		
Falls, slips, trips	28 (19)	0.7	23 (20)	0.6	5 (15)	1.0		
Exposure to harmful substances or environments <sup>6</sup>	12 (8)	0.3	12 (10)	0.3				
Contact with objects and equipment	24 (16)	0.6	19 (17)	0.5	5 (15)	1.0		
Fires and explosions <sup>6</sup>								

Sources: BLS Census of Fatal Occupational Injuries (CFOI) and workforce estimates from the BLS Current Population Survey (CPS).

<sup>1</sup> Based on the BLS Occupational Injury and Illness Classification System (OIICS) 2.01 implemented for 2011 data and onward

<sup>2</sup> Includes workers employed by governmental organizations regardless of industry, volunteers, and workers receiving other types of compensation.

<sup>3</sup> Includes self-employed workers, owners of unincorporated businesses and farms, paid and unpaid family workers, and may include some owners of incorporated businesses or members of partnerships.

<sup>4</sup> Figures may not add to totals because of rounding. Totals for major categories may include subcategories not shown separately.

<sup>5</sup> Rates calculated using standardized population at risk denominator per 100,000 employed persons in for Wage and Salary Workers and for Self-Employed workers.

<sup>6</sup> No data was reported.

NOTE: Selected rate categories had 5 or more reported fatal work injuries in 2011. CFOI fatality counts exclude illness-related deaths unless precipitated by an injury event. Workers under the age of 16 years, volunteer workers, and members of the resident military are not included in rate calculations to maintain consistency with the CPS employment.

Table 4. Number and percentage of fatal work-related injuries by gender and event or exposure type, NC, 2011

	Men	Women
Event or Exposure <sup>1</sup>	$N^2$ (%)	N <sup>2</sup> %
Transportation incidents	46 (33)	5 (56)
Falls, slips, trips	27 (19)	3
Violence and other injuries by persons or animals	26 (19)	3 (33)
Contact with objects and equipment	24 (17)	3
Exposure to harmful substances or environments	12 (9)	3
Fires and explosions	4 (3)	3
Total	139 (100)	9 (100)

Source: BLS Census of Fatal Occupational Injuries (CFOI)

<sup>1</sup> Based on the BLS Occupational Injury and Illness Classification System (OIICS) 2.01 implemented for 2011 data and onward.

<sup>2</sup> Figures may not add to totals because of rounding. Totals for major categories may include subcategories not shown separately.

<sup>3</sup> No data was reported.

NOTE: Selected rate categories had 5 or more reported fatal work injuries in 2011. CFOI fatality counts exclude illness-related deaths unless precipitated by an injury event. Workers under the age of 16 years, volunteer workers, and members of the resident military are not included in rate calculations to maintain consistency with the CPS employment.

Table 5. Rate of fatal work-related injuries per 100,000 employed persons by race/ethnicity and select industry sector, NC, 2011

Industry <sup>1</sup>	Race	Race or Ethnic Origin <sup>2</sup>				
	White, non-Hispanic	Black, non-Hispanic	Hispanic			
Construction	5.9	16.9	10.0			
Transportation and Warehousing	16.6	18.2	3			
Agriculture, forestry, fishing and hunting	16.7	3	48.7			

Sources: BLS Census of Fatal Occupational Injuries (CFOI) and workforce estimates from the BLS Current Population Survey (CPS).

<sup>1</sup> Industry data from 2009 to the present are classified using the North American Industry Classification System, 2007. Includes workers employed by governmental organizations regardless of industry, volunteers, and workers receiving other types of compensation. Also includes self-employed workers, owners of unincorporated businesses and farms, paid and unpaid family workers, and may include some owners of incorporated businesses or members of partnerships.

<sup>2</sup> Persons identified as Hispanic or Latino may be of any race. The race categories shown exclude data for Hispanics and Latinos except where indicated. <sup>3</sup> No data was reported.

NOTE: CFOI fatality counts exclude illness-related deaths unless precipitated by an injury event. Workers under the age of 16 years, volunteer workers, and members of the resident military are not included in rate calculations to maintain consistency with the CPS employment.

Table 6. Rate of fatal work-related injuries per 100,000 employed persons by select industry sector, NC, 2007-2011

Industry <sup>1</sup>	2007	2008	2009	2010	2011	p-value <sup>2</sup>
Agriculture, forestry, fishing, and hunting	12.3	40.7	29.6	22.0	28.3	0.39
Construction	9.6	8.5	6.7	8.6	10.3	0.84
Manufacturing	2.2	2.8	3.4	1.0	1.3	0.08
Wholesale trade	4.7	4.4	3.6	9.3	6.9	0.21
Retail trade	3.7	2.7	1.7	2.6	2.6	0.33
Transportation and warehousing	21.0	12.1	11.9	12.0	17.6	0.47
Professional and business services	3.0	4.0	2.3	6.0	3.6	0.32
Education and health services	0.3	0.5	0.5	0.5	0.3	0.98
Leisure and hospitality	1.7	1.3	3.6	1.8	2.2	0.52
Other services (except public administration)	1.8	0.0	1.7	3.0	1.8	0.31
Government <sup>3</sup>	3.4	3.9	2.7	2.5	2.6	0.15
Total	3.9	3.8	3.1	3.4	3.6	0.31

Sources: BLS Census of Fatal Occupational Injuries (CFOI) and workforce estimates from the BLS Current Population Survey (CPS).

\*Selected rate categories had 5 or more reported fatal work injuries in 2011.

<sup>1</sup> Industry data from 2009 to the present are classified using the North American Industry Classification System, 2007. Includes workers employed by governmental organizations regardless of industry, volunteers, and workers receiving other types of compensation. Also includes self-employed workers, owners of unincorporated businesses and farms, paid and unpaid family workers, and may include some owners of incorporated businesses or members of partnerships.

<sup>2</sup> Poisson regression was used to calculate p-values and assess significance of trend changes

<sup>3</sup> Includes all fatal occupational injuries meeting this ownership criterion across all specified years, regardless of industry classification or classification system.



Figure 1. Number and rate of fatal work-related injuries by select\* industry sector, NC and US, 2011

Sources: BLS Census of Fatal Occupational Injuries (CFOI) and workforce estimates from the BLS Current Population Survey (CPS).

\* Selected rate categories had 5 or more reported fatal work injuries in 2011.

<sup>1</sup> Industry data from 2003 to 2008 are classified using the 2002 North American Industry Classification System. Industry data from 2009 to the present are classified using the North American Industry Classification System, 2007. Includes workers employed by governmental organizations regardless of industry, volunteers, and workers receiving other types of compensation. Also includes self-employed workers, owners of unincorporated businesses and farms, paid and unpaid family workers, and may include some owners of incorporated businesses or members of partnerships

<sup>2</sup> Includes all fatal occupational injuries meeting this ownership criterion across all specified years, regardless of industry classification system.

<sup>3</sup> Counts under five were censored for confidentiality purposes or no data was reported.



# Figure 2. Rate of fatal work-related injuries by select\* age group and select industry<sup>1</sup> sector, NC, 2011

Sources: BLS Census of Fatal Occupational Injuries (CFOI) and workforce estimates from the BLS Current Population Survey (CPS).

\*Selected rate categories had 5 or more reported fatal work injuries in 2011.

<sup>1</sup> Industry data from 2009 to the present are classified using the North American Industry Classification System, 2007. Includes workers employed by governmental organizations regardless of industry, volunteers, and workers receiving other types of compensation. Also includes self-employed workers, owners of unincorporated businesses and farms, paid and unpaid family workers, and may include some owners of incorporated businesses or members of partnerships. NOTE: CFOI fatality counts exclude illness-related deaths unless precipitated by an injury event. Workers under the age of 16 years, volunteer workers, and members of the resident military are not included in rate calculations to maintain consistency with the CPS employment.





Sources: BLS Census of Fatal Occupational Injuries (CFOI) and workforce estimates from the BLS Current Population Survey (CPS). NOTE: Includes workers employed by governmental organizations regardless of industry, volunteers, and workers receiving other types of compensation. Also includes self-employed workers, owners of unincorporated businesses and farms, paid and unpaid family workers, and may include some owners of incorporated businesses or members of partnerships. CFOI fatality counts exclude illness-related deaths unless precipitated by an injury event. Workers under the age of 16 years, volunteer workers, and members of the resident military are not included in rate calculations to maintain consistency with the CPS employment.



# Figure 4. Number of fatal work-related injuries by event or exposure<sup>1</sup> type, NC, 2007-2011

Sources: BLS Census of Fatal Occupational Injuries (CFOI) and workforce estimates from the BLS Current Population Survey (CPS).

<sup>1</sup> Based on the BLS Occupational Injury and Illness Classification System (OIICS) 2.01 implemented for 2011 data and onward.

<sup>2</sup> Counts under five were censored for confidentiality purposes or no data was reported.

NOTE: Includes workers employed by governmental organizations regardless of industry, volunteers, and workers receiving other types of compensation. Also includes self-employed workers, owners of unincorporated businesses and farms, paid and unpaid family workers, and may include some owners of incorporated businesses or members of partnerships. CFOI fatality counts exclude illness-related deaths unless precipitated by an injury event. Workers under the age of 16 years, volunteer workers, and members of the resident military are not included in rate calculations to maintain consistency with the CPS employment.





Sources: BLS Census of Fatal Occupational Injuries (CFOI) and workforce estimates from the BLS Current Population Survey (CPS). NOTE: Includes workers employed by governmental organizations regardless of industry, volunteers, and workers receiving other types of compensation. Also includes self-employed workers, owners of unincorporated businesses and farms, paid and unpaid family workers, members of partnerships, and may include owners of incorporated businesses. Selected rate categories had 5 or more reported fatal work injuries in 2011. CFOI fatality counts exclude illness-related deaths unless precipitated by an injury event. Workers under the age of 16 years, volunteer workers, and members of the resident military are not included in rate calculations to maintain consistency with the CPS employment.



Sources: BLS Census of Fatal Occupational Injuries (CFOI) and workforce estimates from the BLS Current Population Survey (CPS).

\* Selected rate categories had 5 or more reported fatal work injuries in 2011.

<sup>1</sup> Persons identified as Hispanic or Latino may be of any race. Race categories shown exclude data for Hispanics and Latinos except where indicated. NOTE: Includes workers employed by governmental organizations regardless of industry, volunteers, and workers receiving other types of compensation. Also includes self-employed workers, owners of unincorporated businesses and farms, paid and unpaid family workers, and may include some owners of incorporated businesses or members of partnerships. CFOI fatality counts exclude illness-related deaths unless precipitated by an injury event. Workers under the age of 16 years, volunteer workers, and members of the resident military are not included in rate calculations to maintain consistency with the CPS employment.



# Figure 7. Number of fatal work-related injuries by select industry<sup>1</sup> sector, NC, 2007-2011

Sources: BLS Census of Fatal Occupational Injuries (CFOI) and workforce estimates from the BLS Current Population Survey (CPS).

<sup>1</sup> Counts under five were censored for confidentiality purposes or no data was reported.

<sup>2</sup> Industry data from 2003 to 2008 are classified using the 2002 North American Industry Classification System. Industry data from 2009 to the present are classified using the North American Industry Classification System, 2007. Includes workers employed by governmental organizations regardless of industry, volunteers, and workers receiving other types of compensation. Also includes self-employed workers, owners of unincorporated businesses and farms, paid and unpaid family workers, and may include some owners of incorporated businesses or members of partnerships.