Fatalities in the construction industry

Minnesota Department of Labor and Industry Occupational Safety and Health Administration January 2020



Bureau of Labor Statistics Census of Fatal Occupational Injuries, 2018

- 5,250 fatal work injuries in the U.S. in 2018
- An increase of 2% from 2017
- 2018 fatality rate of 3.5 no change from 2017



Construction fatalities:

rose from 971 in 2017 to 1,008 in 2018 (up 4%);

• it is the highest number reported since 2008 (except for 2016, with 1,034 fatalities); and

 the fatality rate of 9.5 for construction in 2018 stayed the same as in 2017.



Other industries had higher increases in the number of fatalities:

- mining increased 15%;
- manufacturing increased 13%; and
- administrative and support, and waste management and remediation services increased 8%.



2018

- Fatal falls, slips and trips decreased 11%, from 887 in 2017 to 791 in 2018.
- There was a decrease of 14% in falls to a lower level, from 713 in 2017 to 615 in 2018.
- There were 504 fatal falls where the height of the fall was known:
 - 58% involved falls of 20 feet or fewer; and
 - 51% of falls from collapsing structure or equipment were of more than 30 feet.

- Heavy and civil engineering construction had an 18% increase in fatalities, from 152 in 2017 to 180 in 2018.
- This is NAICS 237XXX, which includes utility system, highway, street and bridge construction.
- Nonresidential construction also had an increase of 29%, from 55 in 2017 to 71 in 2018.
- Residential construction decreased 7%, from 135 fatalities in 2017 to 126 in 2018.

Minnesota data

- There were 75 fatalities in Minnesota in 2018.
- This is a decrease from 101 in 2017.
- And is below the average of 80 cases a year from 2013 through 2017.



BLS - CFOI

Preliminary 2018

- Agriculture, forestry, fishing and hunting recorded the highest number of fatalities, with 22, a decrease of one from 2017.
- Construction had the second-highest, with 14, up from 11 in 2017.
- Third-highest was trade, transportation and utilities with 13; however, that was decreased from 29 in 2017.

- Causes of fatalities in Minnesota:
 - transportation incidents, 26;
 - contact with objects and equipment, 13;
 - falls, 12;
 - violence 12; and
 - exposure to harmful substances or environments,
 9.
- Sixty-seven were men; eight were women.

BLS – CFOI Minnesota construction fatalities

- There were 14 fatalities.
- Inspected included:
 - four falls; and
 - three contact.



A fatality under Minnesota OSHA Compliance jurisdiction is defined as:

 an employee death resulting from an employment incident or illness caused by or related to a workplace hazard.



MNOSHA Compliance does not investigate:

- motor-vehicle or airplane accidents;
- mining sites;
- small family farms;
- self-employed workers with no employees; and
- federal or railroad employees.

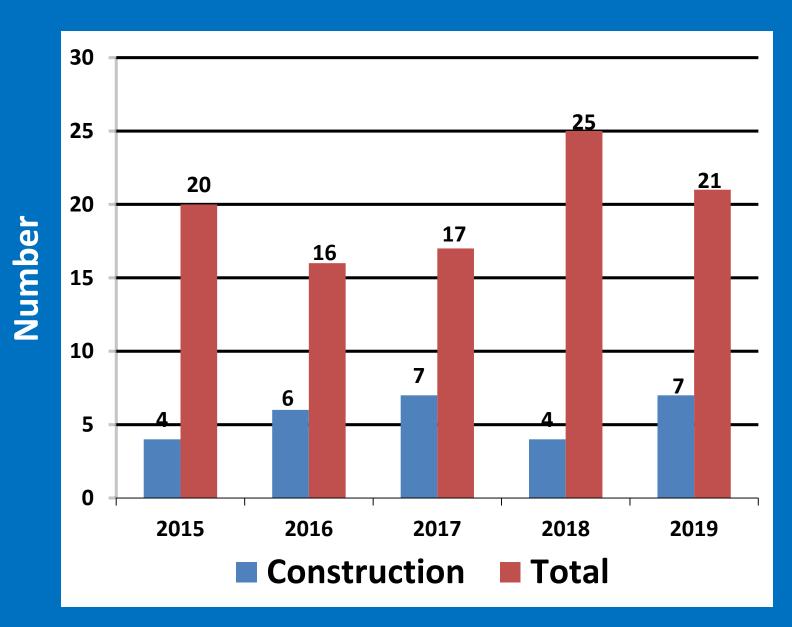


MNOSHA construction fatalities

Five years: federal-fiscal-years 2015-2019 Oct. 1, 2015, through Sept. 30, 2019



Construction fatalities FFY 2015-2019



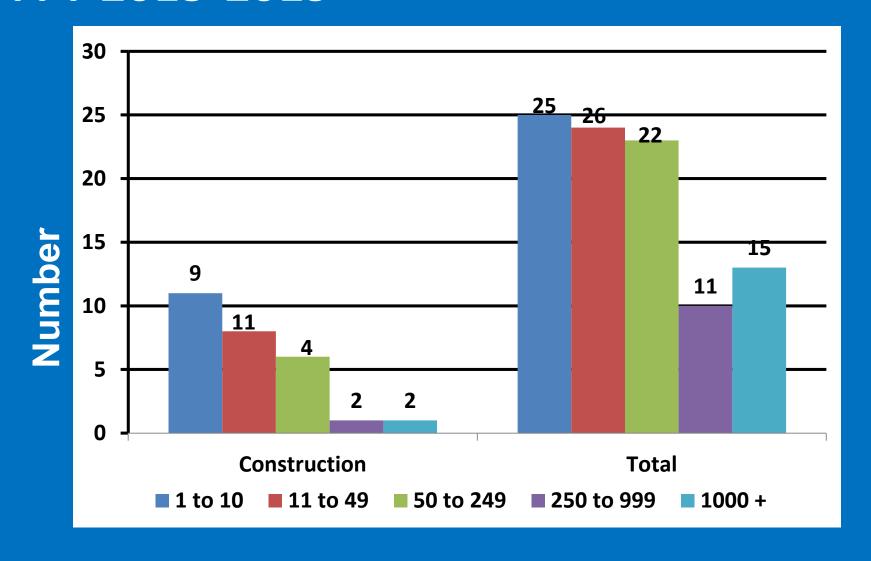
MNOSHA fatalities

- Federal-fiscal-years 2011 through 2015:
 - 92 total; and
 - an average of 18 each year 30 construction
 (33%) and 62 general industry (67%).

- Federal-fiscal-years 2015 through 2019:
 - 99 total; and
 - an average of 20 each year 28 construction
 (28%) and 71 general industry (72%).

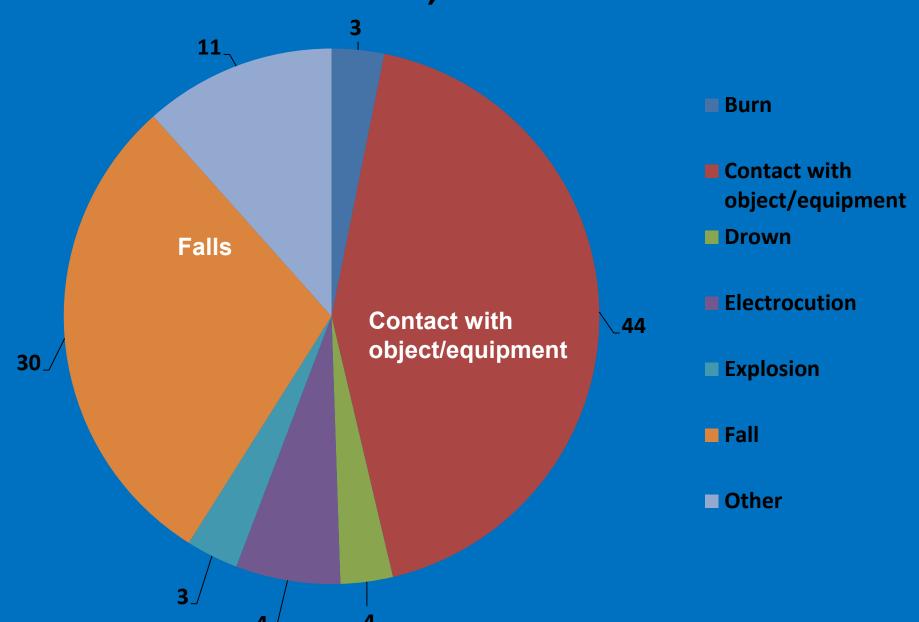


Construction fatalities by company size, FFY 2015-2019



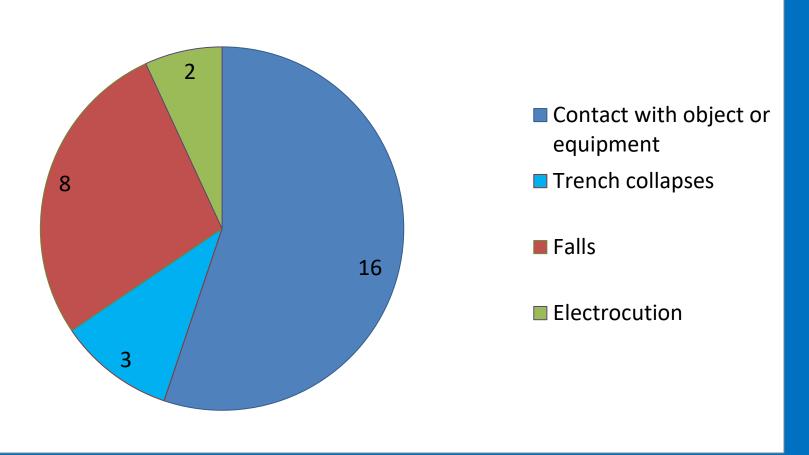


Cause of all fatalities, FFY 2015-2019



Causes of MNOSHA construction fatalities 2015 through 2019

Cause of Fatalities – with trench subset



Construction fatality citations 2015-2019

There were 28 construction fatalities, including:

- four cases with no citations (14%); and
- 24 cases with citations (86%).



Construction fatality citations

There were 24 cases with citations.

Sixty-nine citations were issued:

- 55 serious (80%);
- seven willful (10%); and
- seven nonserious (10%).



Cause/contribute penalties

If the violation causes or contributes to the death of an employee, the minimum nonnegotiable fine is:

- \$25,000 for a serious violation; and
- \$50,000 for willful or repeat violation.

(See Minnesota Statutes, section 182.666, subd. 2a.)



Construction fatality citations

Twenty of the 24 cases with citations had cause/contribute penalties.

The average amount of total penalties for cases with citations was \$44,489.



Minnesota OSHA's most-frequently cited standards in construction, FFY 2019

Standard	Description	Frequency
1926.501	Fall protection	184
Minnesota Statutes 182.653, subd. 8	A Workplace Accident and Injury Reduction (AWAIR) program	77
1926.451	General requirements for scaffolds	69
1910.1200	Hazard communication	47
1926.651	Specific requirements for excavations	39
1926.503	Fall protection training requirements	32
1926.1053	Ladders	31
1926.652	Protective systems for excavations	30
1926.405	Electrical wiring, components and equipment	27
Minnesota Rules 5207.1100	Elevating work platform equipment	26

Age of workers in the U.S.

- Twenty-five to 34 years old: Fatalities increased 8% from 2017, to 946. This is the highest increase of all age brackets.
- The age range with the highest number of fatalities was 45 to 54 (1,114 or 21%).
- Fatalities by age groups were: 25 to 54 increased 7% (3,026 or 58% of fatalities), while 18 to 24 and 55 and older decreased 4% from 2017 to 2018.

Age of workers in Minnesota

- Workers 65 years and older accounted for 22 fatalities or 29% of the total.
- Twenty-five to 34 years accounted for 15 fatalities or 20% of the total.

 Forty-five years and older accounted for 60% of the fatalities.



MNOSHA construction fatalities FFY 2015-2019

Twenty-five- to 34-year-olds had the highest rate, with nine or 29%, followed by 35- to 44-year-olds, with eight or 26%.

For 45- to 54-year-olds:

- 2011-2015 10 33%

– 2015-2019 5 16%

Average age of victim:

– 2011-2015 42

- 2015-2019 42



MNOSHA construction fatalities trends

- Falls are still a majority cause of fatalities.
- The ages 25 to 44 accounted for 55% of the fatalities.
- There are increasing occurrences of struck-by and contact-with vehicles and aerial lifts.



Resources

Bureau of Labor Statistics:

www.bls.gov

www.bls.gov/iif/

Minnesota Department of Labor and Industry:

www.dli.mn.gov

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