

Indicator 3: Fatal Work-Related Injuries

Significance

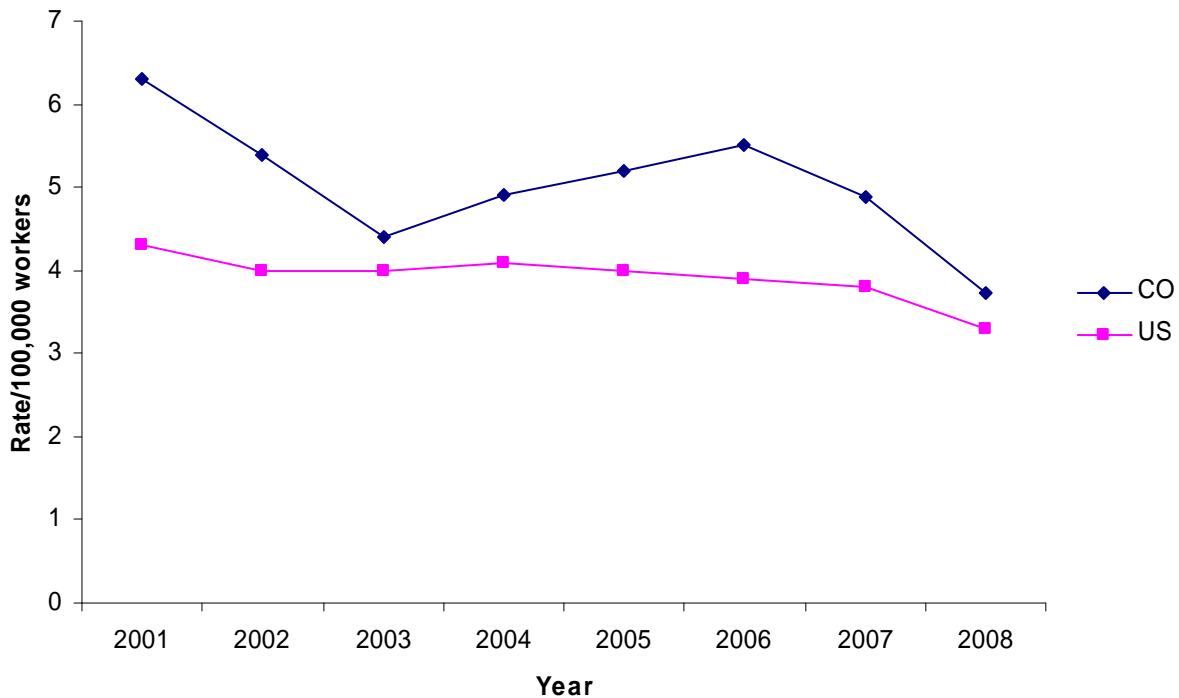
Fatal work-related injuries are defined as injuries that occur at work and result in death. **Unintentional** injuries include falls, electrocutions, acute poisonings and motor vehicle crashes occurring during work travel. **Intentional** injuries include homicides and suicides that occur at work. The identification of factors, risks and exposures through surveillance of work-related fatalities is useful for intervention, education and prevention.

Methods

The rates of fatal work-related injuries are reported for the years 2000 to 2008 for both Colorado and the United States. Numerator data were obtained from the Census of Fatal Occupational Injuries (CFOI) through the Colorado Department of Public Health and Environment and the Bureau of Labor Statistics. Denominator data were obtained from the Bureau of Labor Statistics, Current Population Survey.

Results

Figure 3.1 Rate of fatal work-related injuries per 100,000 workers, Colorado and the United States, 2001-2008



*Source: Census of Fatal Occupational Injuries (CFOI) from the Colorado Department of Public Health and Environment Health Statistics Section and the Bureau of Labor Statistics (numerator)
Bureau of Labor Statistics Current Population Survey (denominator)*

** Work-related fatalities of people younger than 16 may be included in the numerator but are not included in the denominator.*

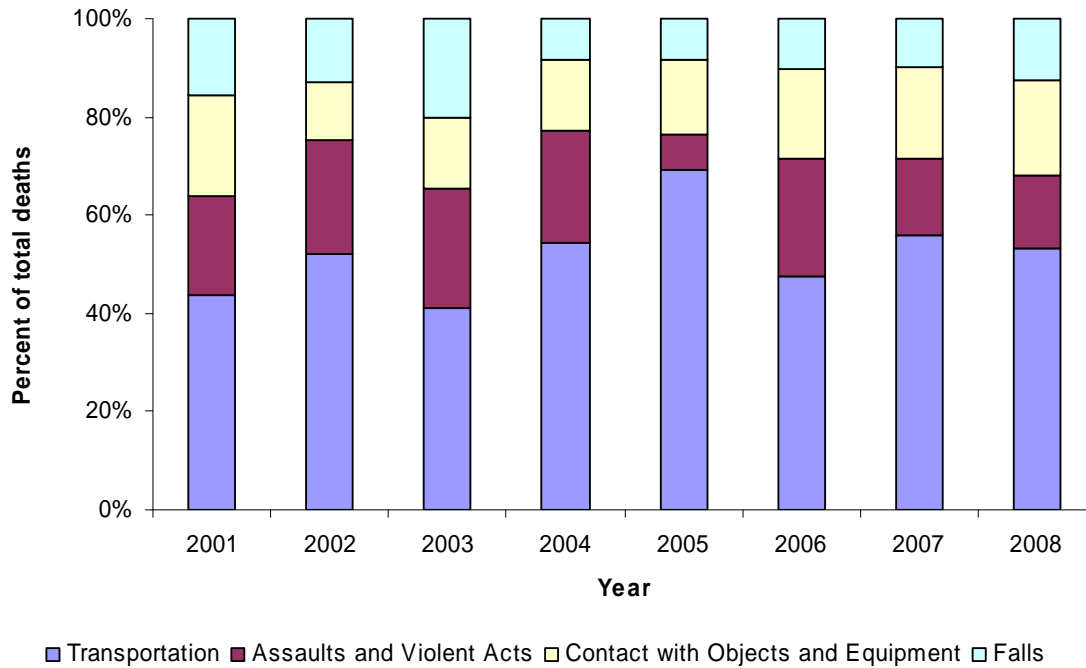
***Deaths in the military are included in the number of fatalities but not the rates because they are not part of the Bureau of Labor Statistics Current Population*

Table 3.1 Fatal Work-Related Injuries, Colorado and the United States, 2001-2008

	Colorado								
	2001	2002	2003	2004	2005	2006	2007	2008	Average
Fatal work-related injuries (all causes)	139	123	102	117	125	137	126	102	121.4
Fatality rate per 100,000 employed persons age 16 years and older	6.3	5.4	4.4	4.9	5.2	5.5	4.9	3.729	5.0
	United States								
Fatal work-related injuries (all causes)	5,915	5,534	5,575	5,764	5,734	5,703	5,488	5,071	5,598
Fatality rate per 100,000 employed persons age 16 years and older	4.3	4.0	4.0	4.1	4.0	3.9	3.8	3.0	3.9
<p><i>Source: Census of Fatal Occupational Injuries (CFOI) from the Colorado Department of Public Health and Environment Health Statistics Section and the Bureau of Labor Statistics (numerator)</i> <i>Bureau of Labor Statistics Current Population Survey (denominator)</i></p> <p><i>* Work-related fatalities of people younger than 16 may be included in the numerator but are not included in the denominator.</i> <i>**Deaths in the military are included in the number of fatalities but not the rates because they are not part of the Bureau of Labor Statistics Current Population</i></p>									

- Between 2001-2008, an average of 121 workers died from a work-related injury each year in Colorado (Table 3.1)
- On average for the years 2001 to 2008, a worker in Colorado died from a work-related injury every 3 days. (Table 3.1)
- Between 2001-2008, almost 5,600 workers died from a work-related injury each year throughout the United States (Table 3.1)
- On average for the years 2001 to 2008, over 15 workers died from a work-related injury each day throughout the United States. (Table 3.1)
- Annual work-related injury fatality rates in Colorado (average = 5.0/100,000 workers) were higher than overall US rates (average = 3.9/100,000 workers). (Table 3.1 and Figure 3.1)

Figure 3.2 Percentage of fatal work-related injuries by event or exposure in Colorado, 2001-2008



Source: Census of Fatal Occupational Injuries (CFOI) from the Colorado Department of Public Health and Environment Health Statistics Section and the Bureau of Labor Statistics

Event or Exposure, # (%)	2001	2002	2003	2004	2005	2006	2007	2008
Transportation incidents	56 (40.3)	61 (49.6)	39 (38.2)	60 (51.3)	76 (60.8)	60 (43.8)	63 (50.0)	47 (46.1)
Assaults and violent acts	26 (18.7)	27 (22.0)	23 (22.5)	25 (21.4)	8 (6.4)	30 (21.9)	18 (14.2)	13 (12.7)
Contact with objects and equipment	26 (18.7)	14 (11.4)	14 (13.7)	16 (13.7)	17 (13.6)	23 (16.8)	21 (16.7)	17 (16.7)
Falls	20 (14.4)	15 (12.2)	19 (18.6)	9 (7.8)	9 (7.2)	13 (9.5)	11 (8.7)	11 (10.8)
Exposure to harmful substances/environments	8 (5.8)	6 (4.9)	4 (3.9)	5 (4.3)	11 (8.8)	7 (5.1)	12 (9.5)	10 (9.8)
Fires and explosions	3 (2.2)	0 (0)	0 (0)	0 (0)	3 (2.4)	3 (2.2)	0 (0)	4 (3.9)
Total	139	123	102	117	125	137	126	102

Source: Census of Fatal Occupational Injuries (CFOI) from the Colorado Department of Public Health and Environment Health Statistics Section and the Bureau of Labor Statistics

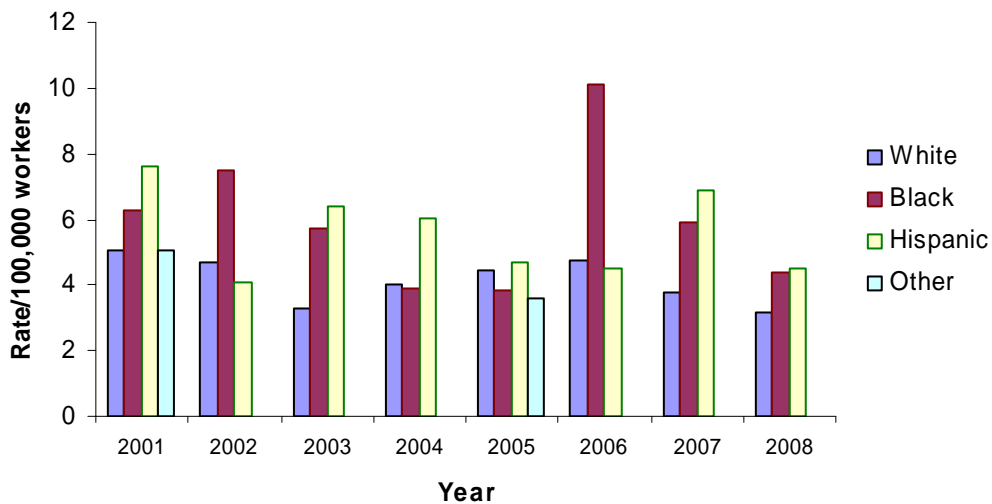
Table 3.3 Fatal Work-Related Injuries by Event or Exposure, United States, 2000-2008

Event or Exposure, # (%)	2001	2002	2003	2004	2005	2006	2007	2008
Transportation incidents	2,517 (43)	2,381 (43)	2,357 (42)	2,490 (43)	2,480 (43)	2,413 (42)	2234 (41)	2053 (40.5)
Assaults and violent acts	902 (15)	840 (15)	901 (16)	795 (14)	787 (14)	754 (13)	839 (15)	794 (15.7)
Contact with objects and equipment	962 (16)	873 (16)	911 (16)	1,004 (18)	1,001 (18)	983 (17)	916 (17)	923 (18.2)
Falls	808 (14)	714 (13)	691 (12)	815 (14)	767 (13)	809 (14)	835 (15)	680 (13.4)
Exposure to harmful substances or environments	499 (8)	538 (10)	485 (9)	459 (8)	496 (9)	525 (9)	488 (9)	432 (8.5)
Fires and explosions	188 (3)	165 (3)	198 (4)	159 (3)	158 (3)	201 (4)	151 (3)	173 (3.4)
Total	5,900	5,524	5,559	5,703	5,702	5,703	5,488	5055

Source: Census of Fatal Occupational Injuries (CFOI) from the Colorado Department of Public Health and Environment Health Statistics Section and the Bureau of Labor Statistics

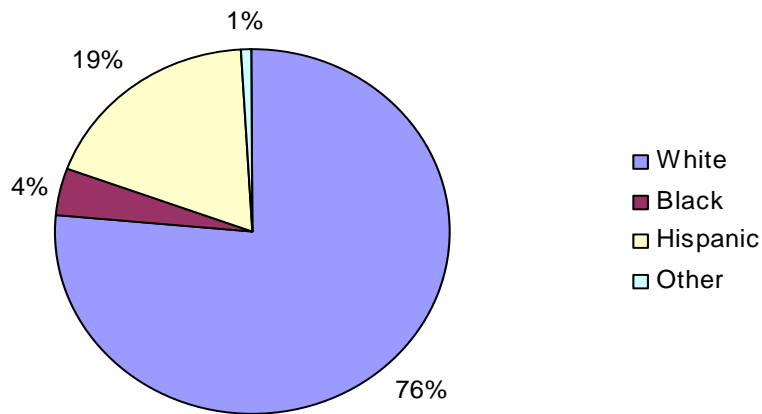
- The most common fatal work-related event or exposure for both Colorado and the United States was transportation incidents. (Table 3.2 and 3.3)
- The 2nd most common fatal work-related event or exposure in Colorado was assaults and violent acts. (Table 3.2 and 3.3)

Figure 3.3 Fatal work-related injury rate per 100,000 workers by race and ethnicity, Colorado, 2001-2008



Source: Census of Fatal Occupational Injuries (CFOI) from the Colorado Department of Public Health and Environment Health Statistics Section and the Bureau of Labor Statistics

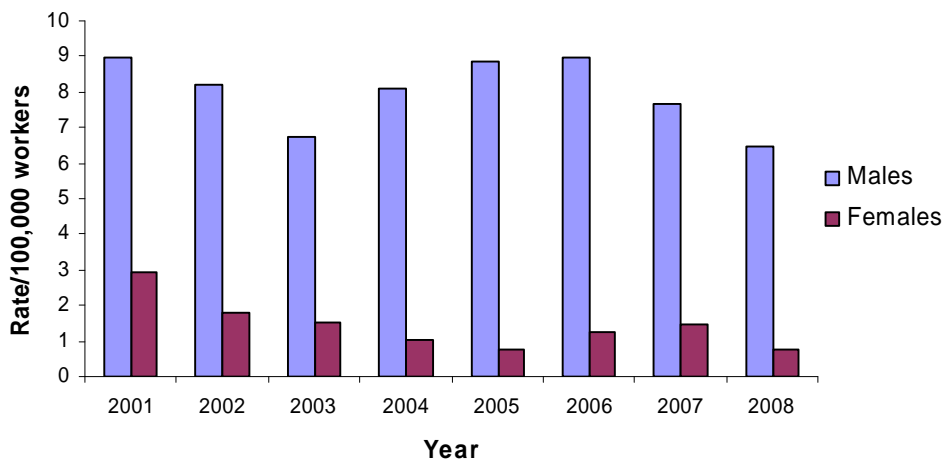
Figure 3.4 Percent of fatal work-related injuries by race and ethnicity, average in Colorado between 2001-2008



Source: Census of Fatal Occupational Injuries (CFOI) from the Colorado Department of Public Health and Environment Health Statistics Section and the Bureau of Labor Statistics

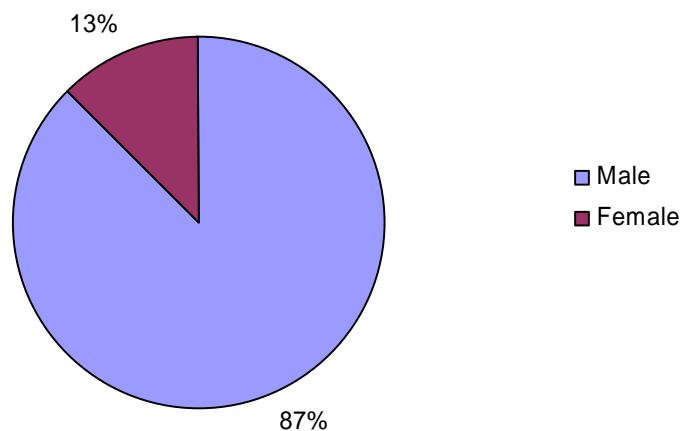
- Between 2001 and 2008 in Colorado, Black non-Hispanic workers had the highest average fatality rate per 100,000 FTEs at 6.2 followed by Hispanic or Latino workers at 5.8, White, non-Hispanic workers at 4.3, and Other Races at 1.2. (Figure 3.3)
- Between 2001 and 2008 in Colorado, the highest percentage of fatalities occurred among White, non-Hispanic workers (75%) followed by Hispanic or Latino workers, (18%) and Black non-Hispanic workers (4%). (Table 3.4)

Figure 3.5 Fatal work-related injury rate per 100,000 workers by gender, Colorado, 2001-2008,



Source: Census of Fatal Occupational Injuries (CFOI) from the Colorado Department of Public Health and Environment Health Statistics Section and the Bureau of Labor Statistics

Figure 3.6 Percent of fatal work-related injuries by gender, average in Colorado between 2001-2008



Source: Census of Fatal Occupational Injuries (CFOI) from the Colorado Department of Public Health and Environment Health Statistics Section and the Bureau of Labor Statistics

- In Colorado, between 2001 and 2008, the average fatality rate for males was 8.0/100,000 FTEs. The average fatality rate for females was 1.4/100,000 FTEs. (Figure 3.5)
- In Colorado, between 2001-2008, males accounted for 87% of the fatalities. (Figure 3.6)

Data Sources:

- Census of Fatal Occupational Injuries (CFOI) from the Colorado Department of Public Health and Environment Health Statistics Section and the Bureau of Labor Statistics (numerator)
- Bureau of Labor Statistics Current Population Survey (denominator)

Limitations:

- Work-related fatalities of people younger than 16 may be included in the numerator but are not included in the denominator.
- Since work-related fatalities are reported by state in which the fatality occurred and not the state of the worker's residence, rates may overestimate risk if the work-related fatalities involved workers who were out of state residents. Likewise, rates may be underestimated if fatalities occurred in other states.
- The numerator data includes the number of fatalities in Colorado among military personnel. Military personnel are not included in the denominator because they are not part of the Bureau of Labor Statistics Current Population Survey

Recommendations:

- Report fatal work-related injuries and illnesses in Colorado by industry, occupation, and injury/illness characteristics.
- Make further, more detailed comparisons with overall United States data.