

Suicide by Industry & Occupation, 2008-2012

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Disclaimers

- Findings are preliminary estimates
- Data are not controlled for other suicide risk factors
- Some analyses include all ages, some only age 16-64
- This work was supported (in part) by cooperative agreement 5U60OH009842-04. Contents do not necessarily represent official views of CDC-NIOSH.

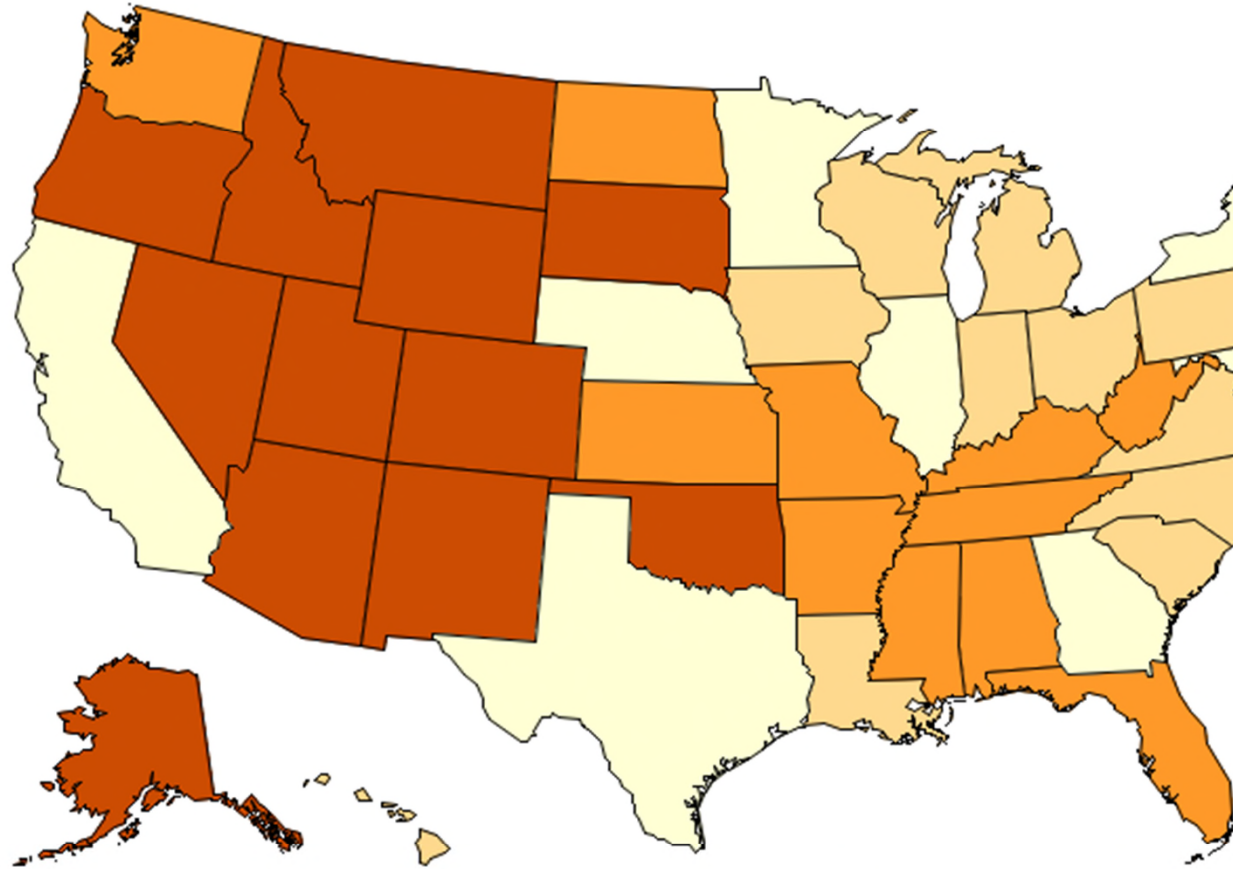


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2008-2010, United States
Age-adjusted Death Rates per 100,000 Population
 All Injury, Suicide, All Races, All Ethnicities, Both Sexes, All Ages
 Annualized Age-adjusted Rate for United States: 11.81

Top States (2008-10)

1. Alaska (22.3)
2. Wyoming
3. Montana
4. New Mexico
5. Nevada
6. Idaho
7. Utah
8. **Colorado (16.5)**
9. South Dakota
10. Arizona
11. Oregon
12. Oklahoma (15.8)



US: 11.8/100,000

CDC WISQARS

11/6/2013

on



Reports for All Ages include those of unknown age.

* Rates based on 20 or fewer deaths may be unstable. States with these rates are cross-hatched in the map (see legend above). Such rates have an asterisk.
 The standard population for age-adjustment represents the year 2000, all races, both sexes.

Suicide in Colorado

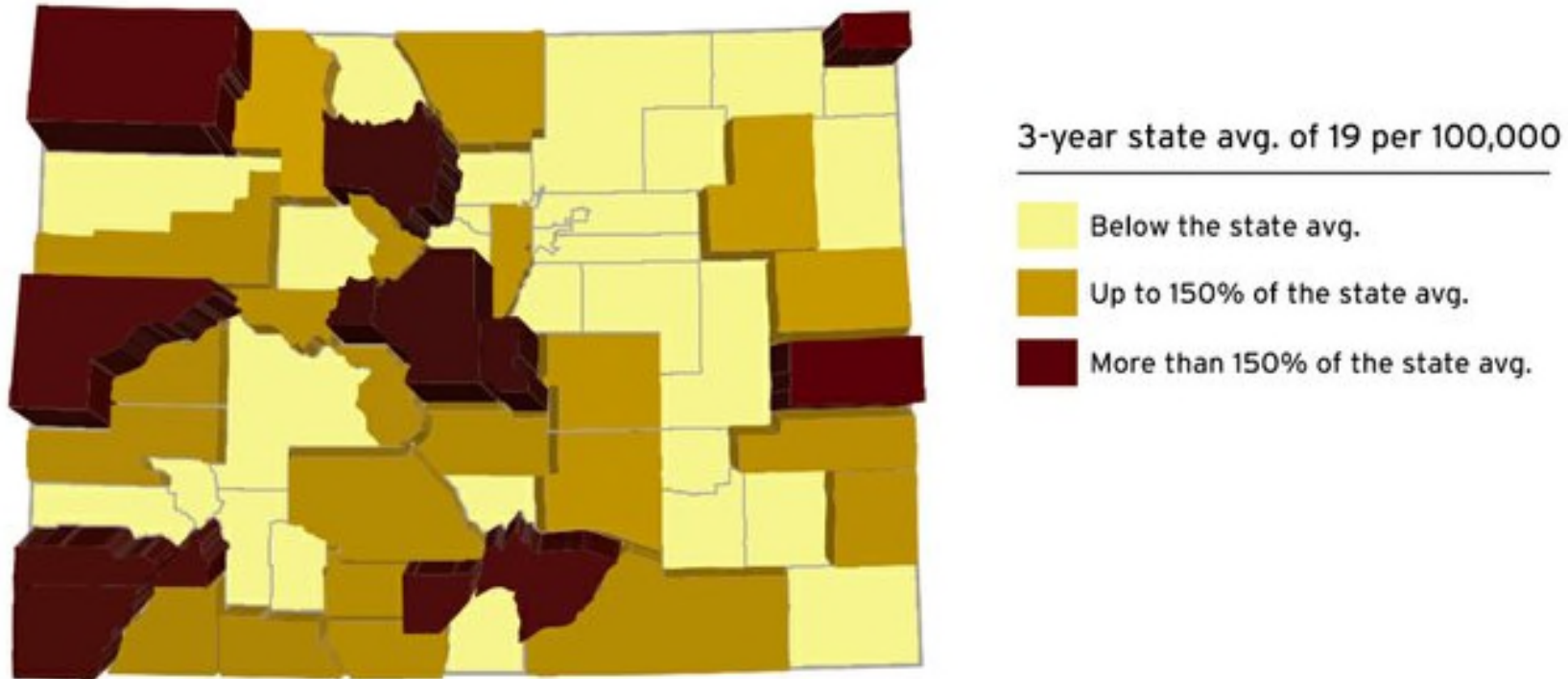
- In 2013 there were 1,004 suicide deaths in Colorado - 19% increase over 10 yrs¹
 - 186 homicides
- Estimated that suicide costs over **\$1 Billion** annually in Colorado²
 - Suicides and suicide attempts
 - Direct & indirect costs
- Most commonly occurs among middle-aged, white males¹

¹ Colorado Violent Death Reporting System, Colorado Department of Public Health & Environment.

² 2009. *Preventing Suicide in Colorado: Progress Achieved and Goals for the Future*. The Colorado Trust.



How the suicide rates in Colorado counties compare to the statewide average of 19 deaths per 100,000 population



Source:

<http://www.craigdailynews.com/photos/2014/sep/06/75068/>

<http://www.craigdailynews.com/news/2014/sep/06/suicide-robin-williams-highlights-local-public-hea/>

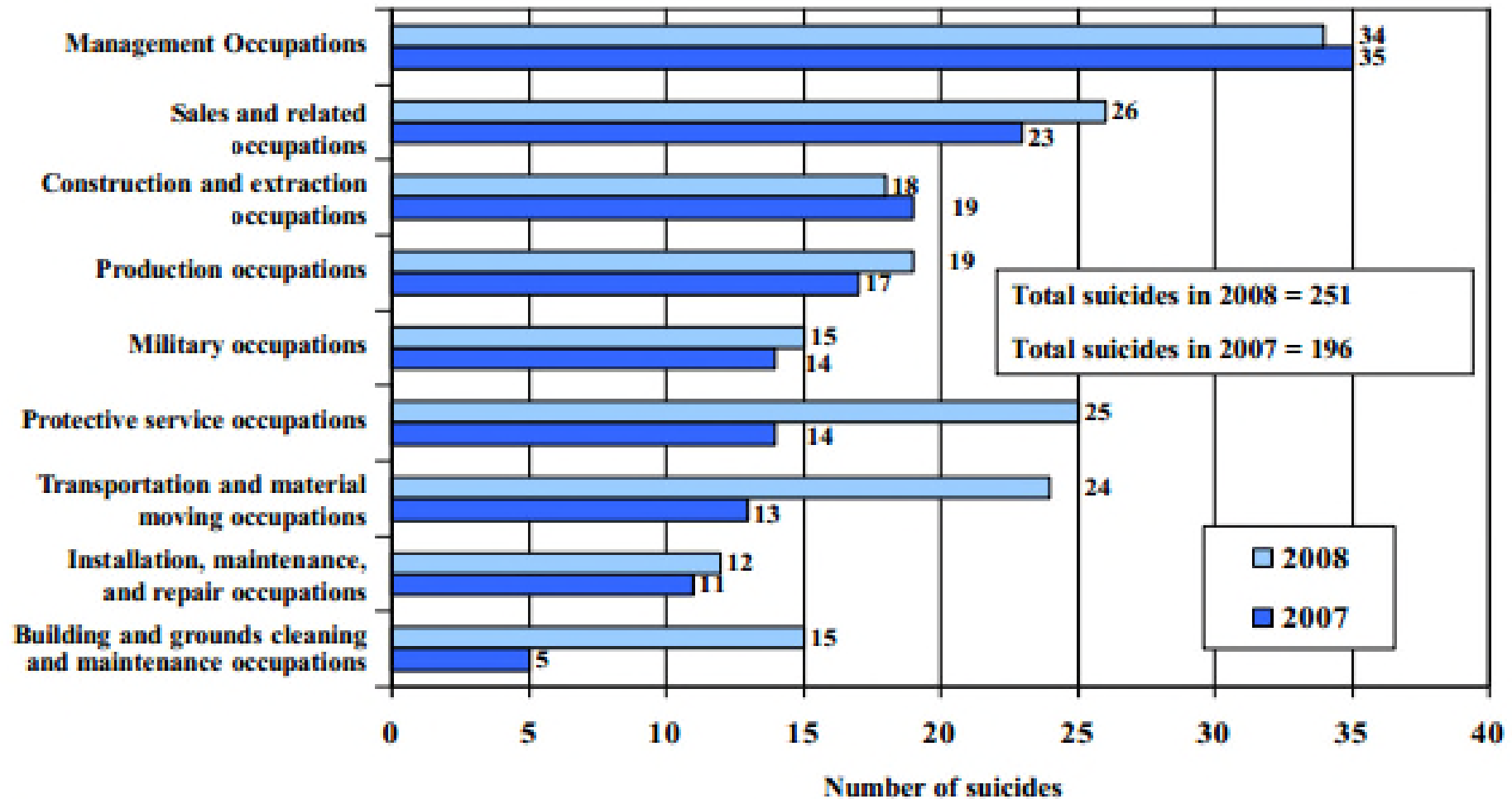
Suicide by Occupation

- Significant differences in burden and means of suicide were seen by occupation (*Stallones, 2013*)
- Males who were in pesticide exposed occupations had higher odds of suicide (*Stallones, 2006*)
- Seasonality of violent suicides was most strongly seen as a spring peak and a winter trough among outdoor workers (*Koskinen, 2002*)
- Elevated rates of suicide in a particular occupational group may result from a complex interaction between job factors such as work stress and access to means and other risk factors such as age and presence of a mental disorder (*Boxer, 1995*)



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Suicides by Selected Occupations, 2007–08*



*Data for 2008 are preliminary. Data for prior years are revised and final.
 SOURCE: U.S. Bureau of Labor Statistics, U.S. Department of Labor, 2009.

Colorado Violent Death Reporting System

- CDC National Violent Death Reporting System since 2004
 - 31 states participating (starting in 2015)
- Ongoing, state-based surveillance to monitor violent deaths to support planning and evaluation
 - Homicide, suicide, deaths of undetermined intent, legal intervention and unintentional firearm deaths
- Data collected from
 - Death certificates
 - Coroner/medical examiner reports
 - Law enforcement reports
- Detailed case information including demographics, circumstances, toxicology, weapon information, etc



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Analysis Methods

- Death certificate = “Usual occupation”
- NIOSH coded I&O literals for 2008-2012
 - N= 3,900(Approximate)
- Auto coding success rate:
 - 43.6% industry
 - 44.3 % occupation
- Denominator data = U.S. Census Bureau’s 5-Year American Community Survey, 2008-2012.

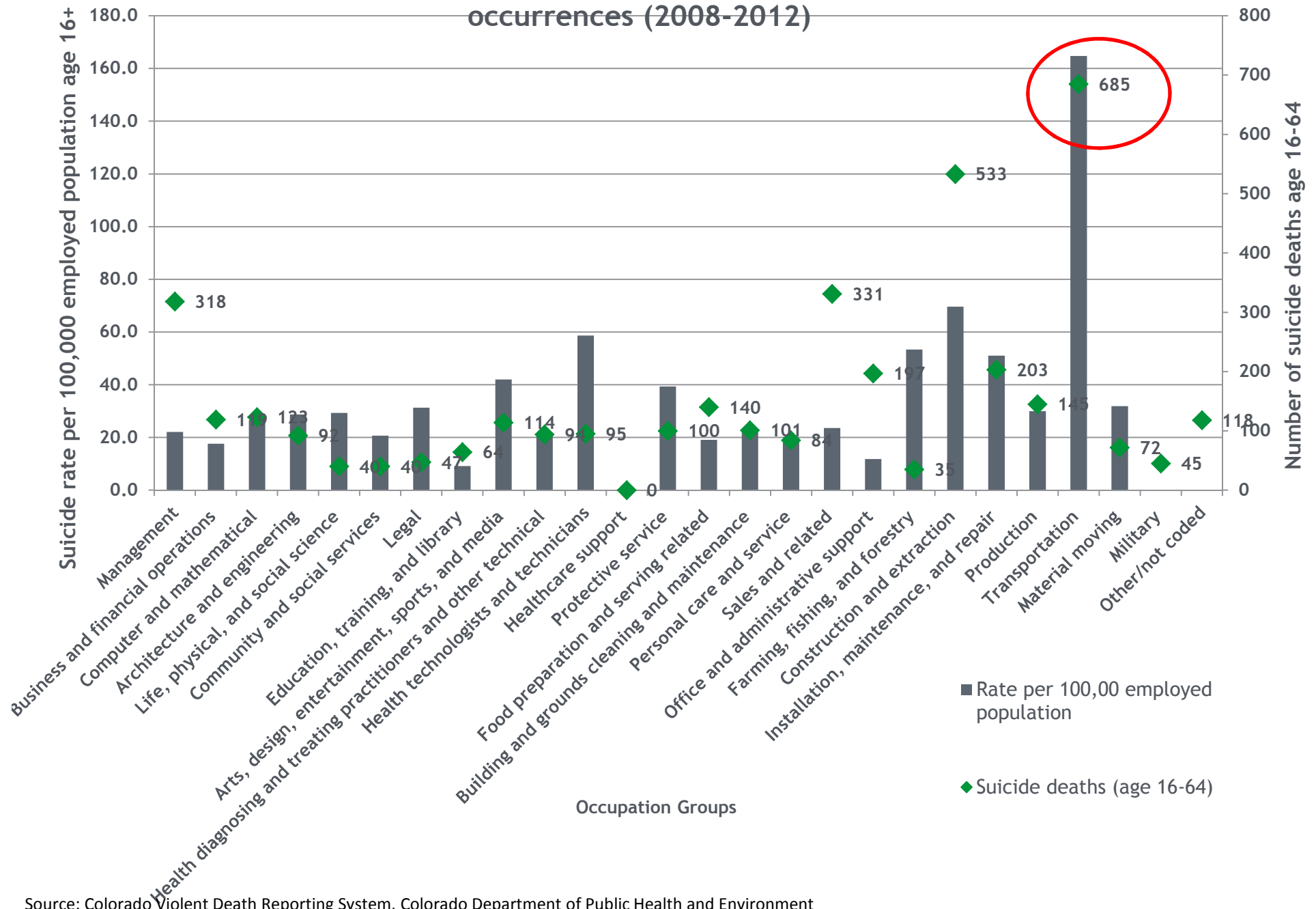


Data by Occupation



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Suicide deaths and rates by occupation for ages 16-64yrs, Colorado occurrences (2008-2012)



Source: Colorado Violent Death Reporting System, Colorado Department of Public Health and Environment

Transportation Occupations

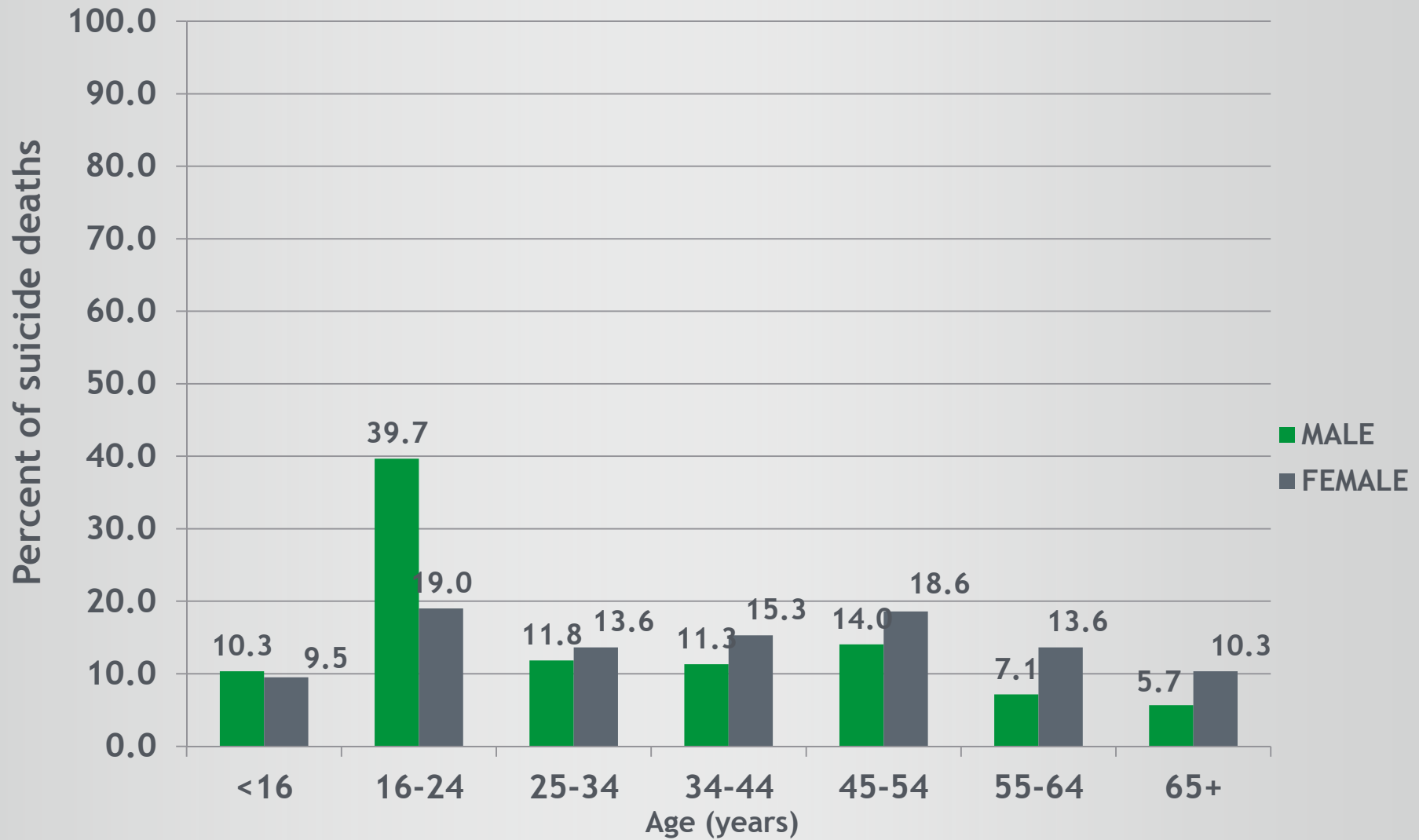
- Supervisors of transportation and material moving workers
- Aircraft pilots and flight engineers
- Air traffic controllers and airfield operations specialists
- Flight attendants
- Ambulance drivers and attendants, except emergency medical technicians
- Bus drivers
- Driver/sales workers and truck drivers
- Taxi drivers and chauffeurs
- Motor vehicle operators, all other
- Locomotive engineers and operators
- Railroad brake, signal, and switch operators
- Railroad conductors and yardmasters
- Subway, streetcar, and other rail transportation workers
- Sailors and marine oilers
- Ship and boat captains and operators
- Ship engineers
- Bridge and lock tenders
- Parking lot attendants
- Automotive and watercraft service attendants
- Transportation inspectors
- Transportation attendants, except flight attendants
- Other transportation workers

Source: Industry and Occupation Classification, Current Population Survey, U.S. Census Bureau.



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Percent of Suicide Deaths by Age and Gender among Transportation Occupations, Colorado Occurrences (2008-2011)



Source: Colorado Violent Death Reporting System, Colorado Department of Public Health and Environment



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Circumstances for Suicides among Transportation Occupations, Colorado Occurrences (2008-2011)

Circumstance	N	Percent*
Current depressed mood	357	57.9
Current mental health problem	298	48.3
Ever treated for mental health problem	291	47.2
Current mental health treatment	251	40.7
Left a suicide note	239	38.7
Disclosed intent to commit suicide	225	36.5
Intimate partner problem	219	35.5
History of previous suicide attempts	218	35.3
Diagnosis of depression	210	34.0
Physical health problem	167	27.1
Problem with alcohol	124	20.1
Problem with other substance	119	19.3
Financial problem	85	13.8
Job problem	78	12.6

Source: Colorado Violent Death Reporting System, Colorado Department of Public Health and Environment



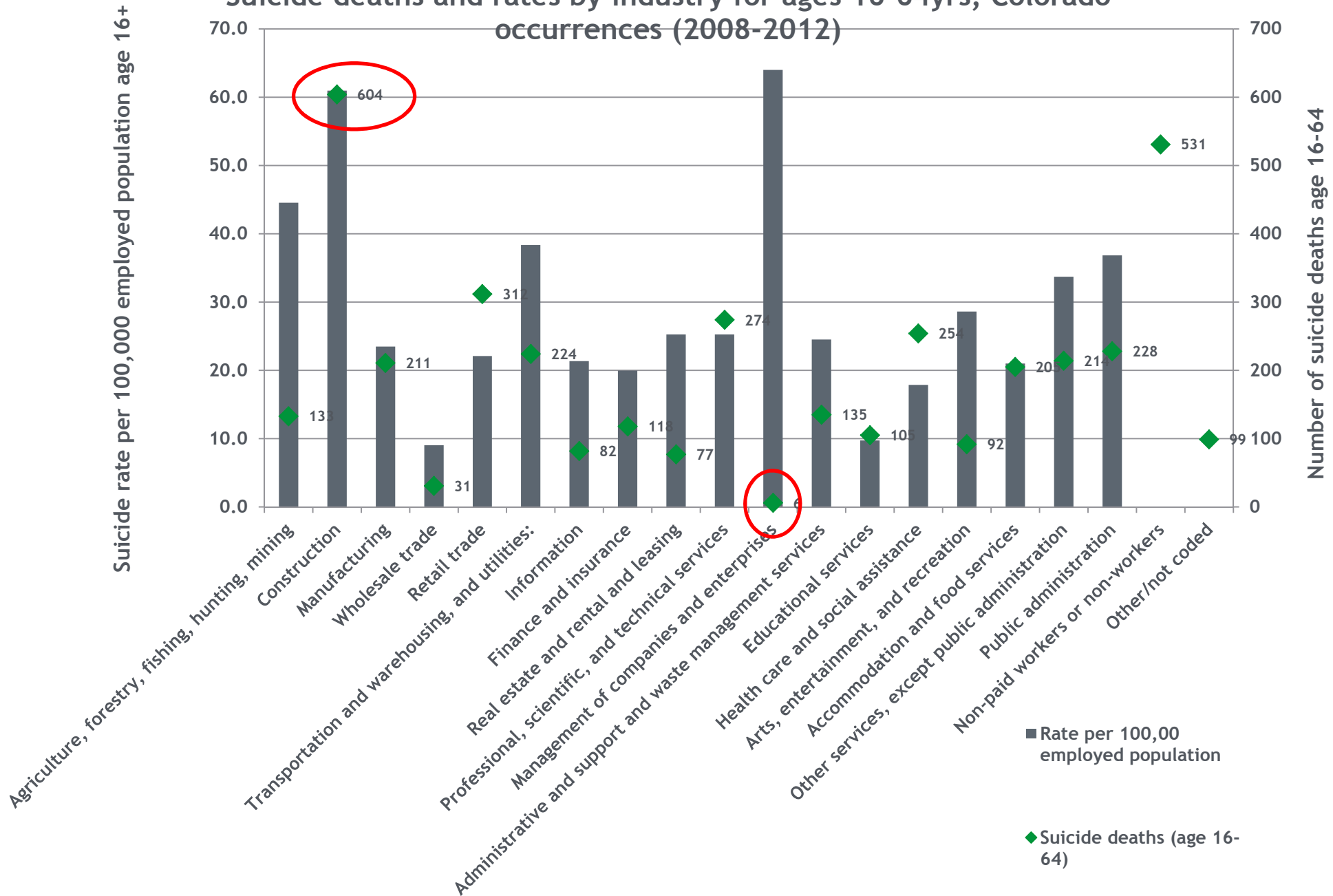
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Data by Industry



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Suicide deaths and rates by industry for ages 16-64yrs, Colorado occurrences (2008-2012)



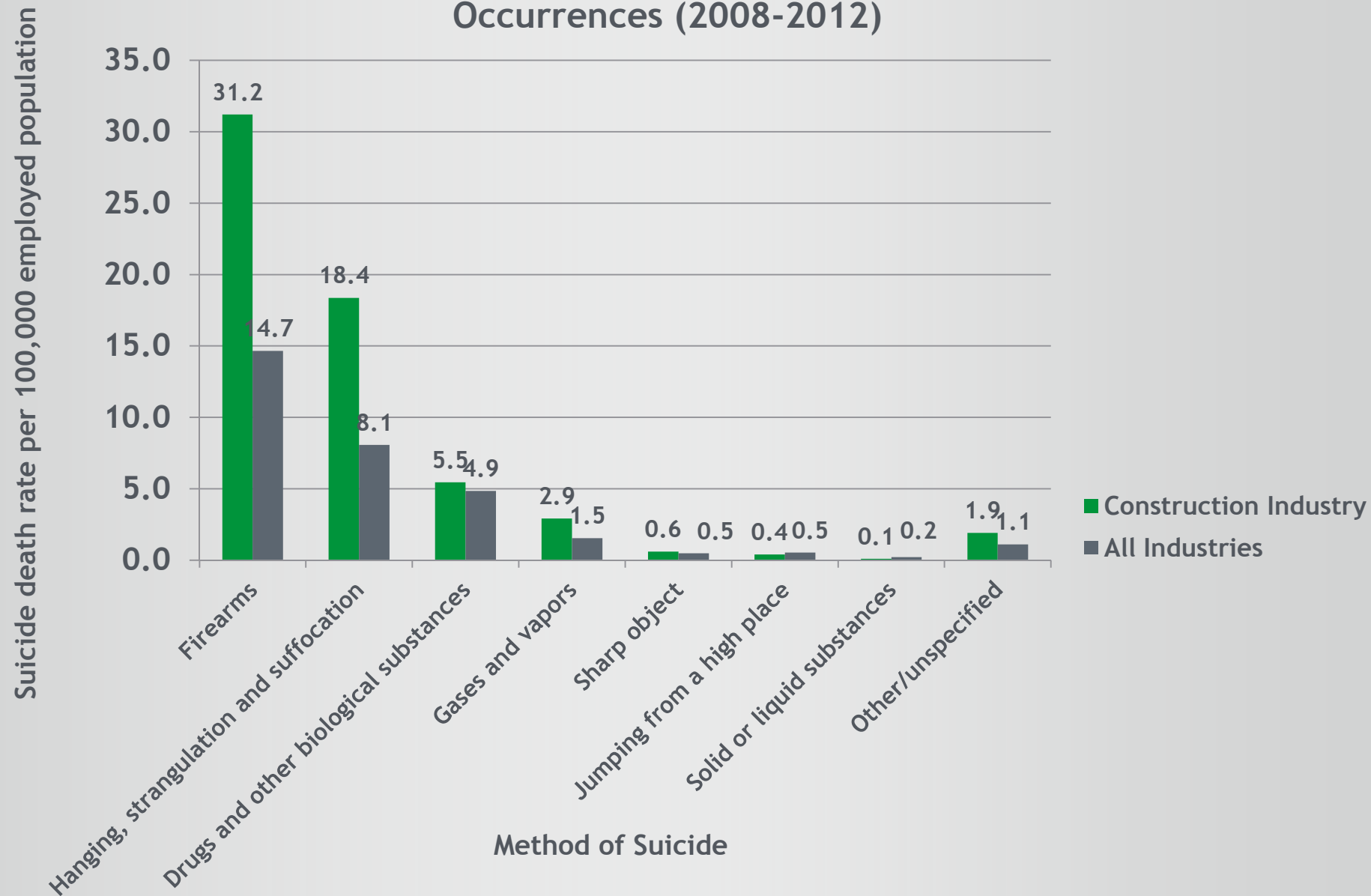
Source: Colorado Violent Death Reporting System, Colorado Department of Public Health and Environment

*Percent of Suicide Deaths by Occupation within
Construction Industry, Colorado Occurrences (2008-2012)*

Occupation	Percent
Construction and extraction occupations	76.8
Management occupations	10.8
Installation, maintenance, and repair occupations	3.0
Production occupations	1.8
Transportation occupations	1.5
Business and financial operations occupations	1.3
Architecture and engineering occupations	1.3
Office and administrative support occupations	1.0
Sales and related occupations	0.8
Protective service occupations	0.7
Material moving occupations	0.7
Other*	< 0.5
TOTAL	100



Suicide death rates by method of suicide and Industry, Colorado Occurrences (2008-2012)

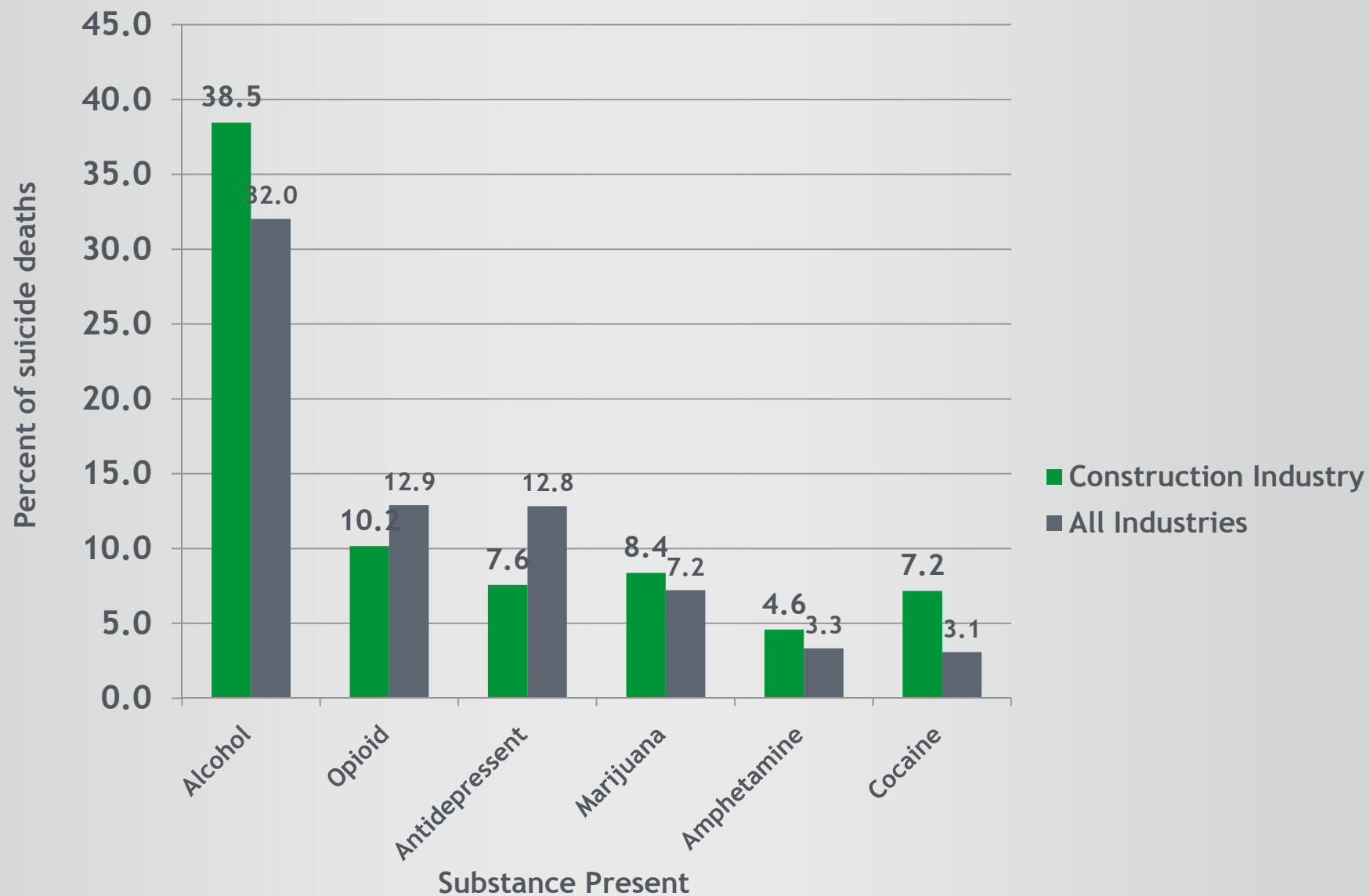


Source: Colorado Violent Death Reporting System, Colorado Department of Public Health and Environment



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Percent* of Suicide Deaths by Industry and Substances Presence, Colorado Occurrences (2008-2011)



Source: Colorado Violent Death Reporting System, Colorado Department of Public Health and Environment



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What can we do?

- Targeted outreach & intervention
- Resources:
 - www.suicidepreventioncolorado.org
 - Mantherapy.org
 - Colorado's new statewide mental health crisis hotline is open 24 hours per day, 365 days per year: **1-844-493-8255**



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- Alison Grace Bui, MPH
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Questions?

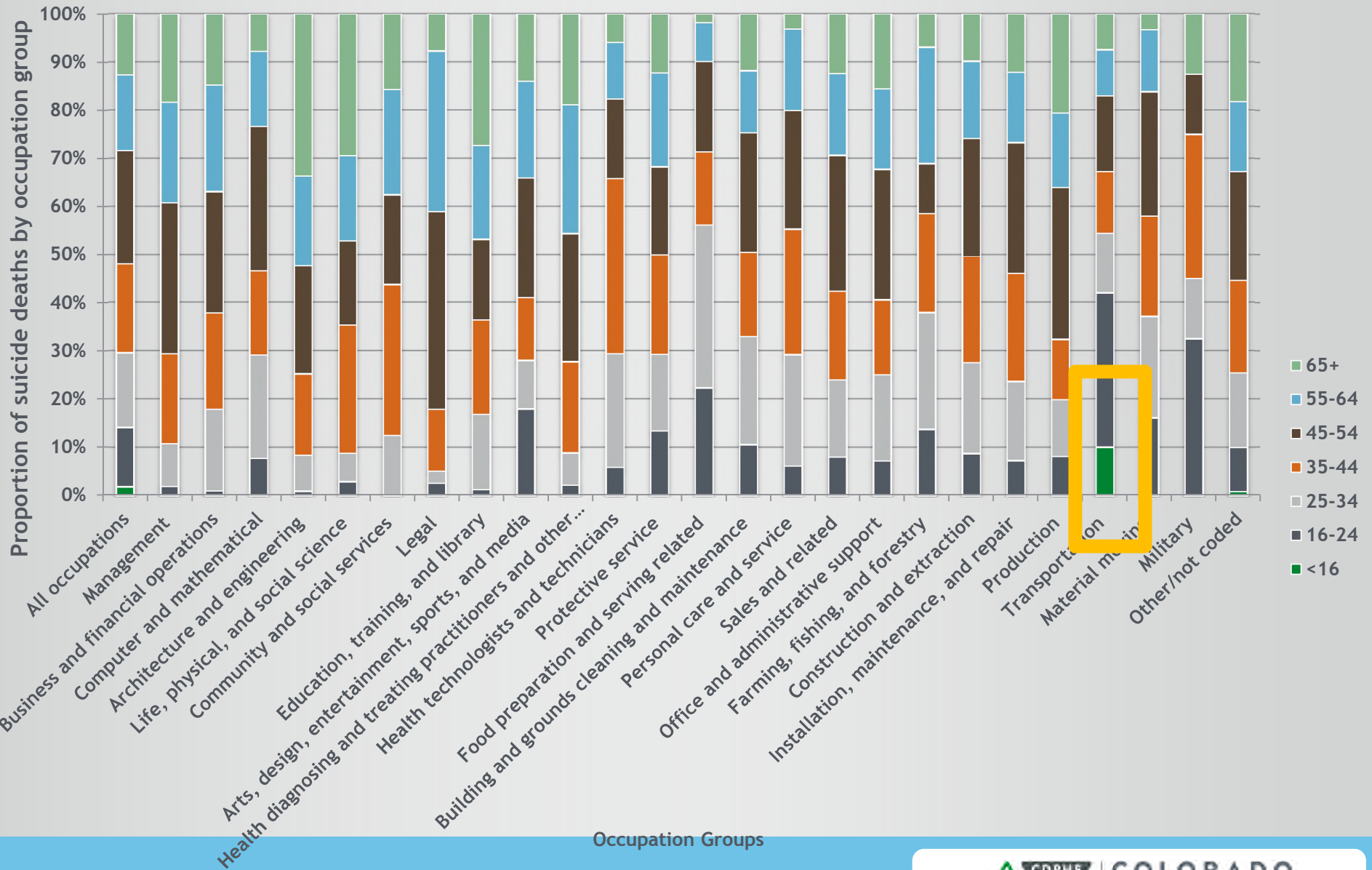
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Suicide deaths by occupation and age, Colorado occurrences (2008-2011)



Source: Colorado Violent Death Reporting System, Colorado Department of Public Health and Environment

