



Occupational Injury Trends

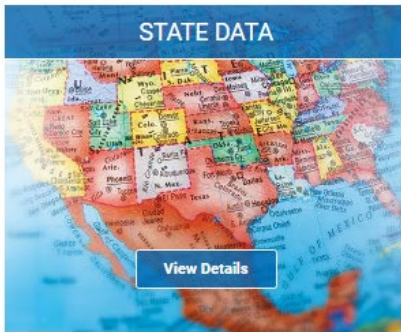
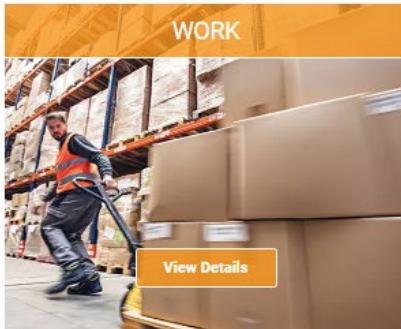
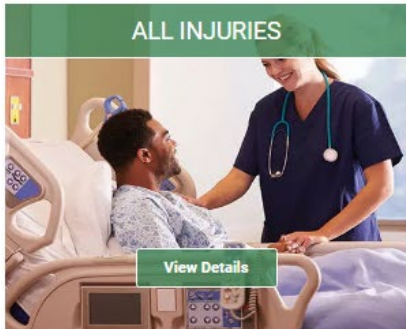
Ken Kolosh
Manager, Statistics

InjuryFacts.NSC.org

- Always up to date – explore injury and fatality topics free online

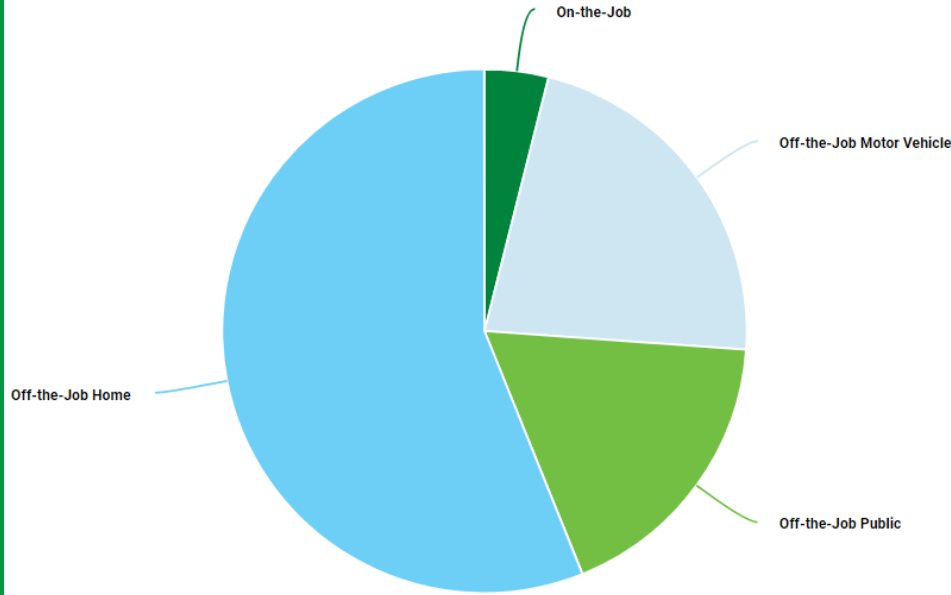


Comprehensive Source:

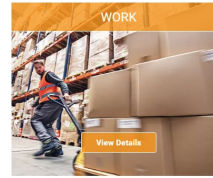


Workers' on- and off-the-job deaths, United States, 2021

Total: 113,573



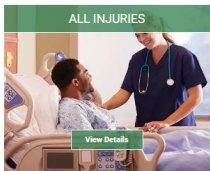
<https://injuryfacts.nsc.org/all-injuries/historical-preventable-fatality-trends/deaths-by-cause/>



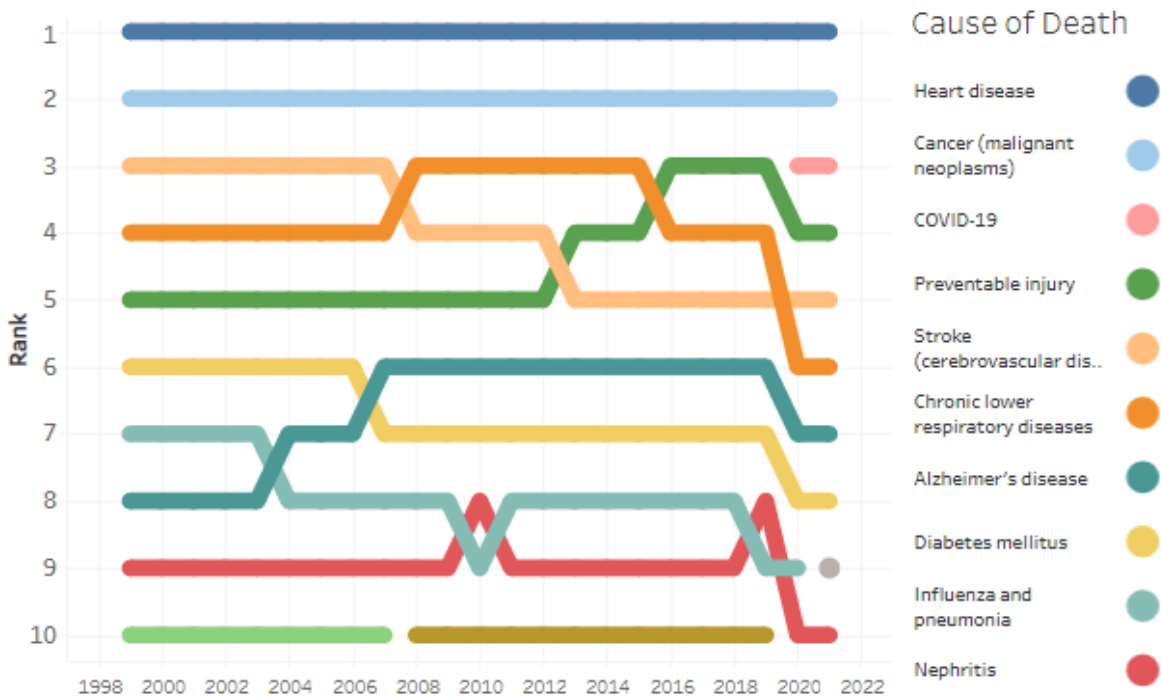
Off-the-Job 2021:

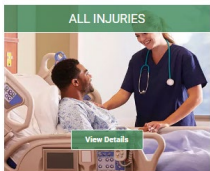
109,100 off-the-job deaths

- **24** off-the-job deaths for every **1** on-the-job death
- Where do workers die?
 - 56%: at home
 - 22%: on the road while off-the-job
 - 18%: in public places while off-the-job
 - 4%: on-the-job

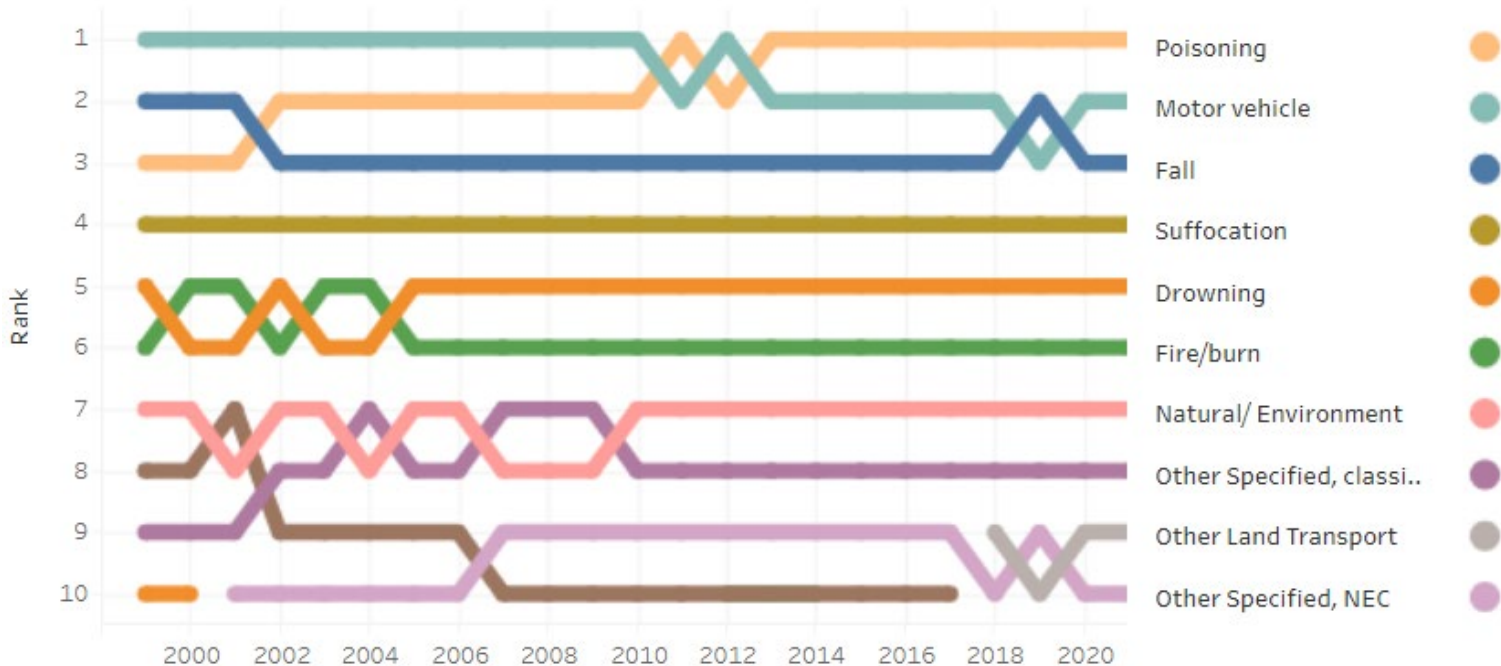


Leading Causes of Death



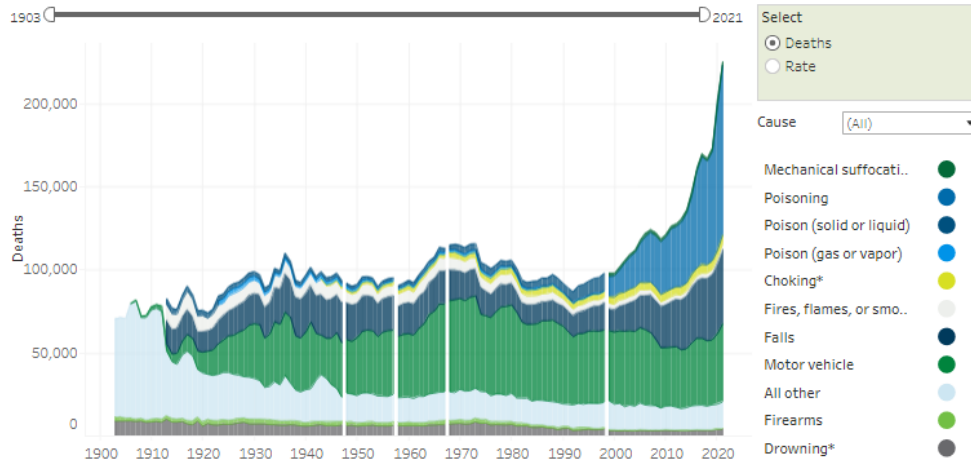


Preventable Death Ranking



<https://injuryfacts.nsc.org/all-injuries/deaths-by-demographics/top-10-preventable-injuries/data-details/>

Preventable-injury-related deaths by cause, United States, 1903-2021



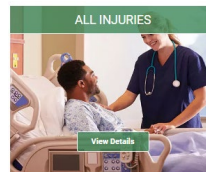
* Additional information and definitions available by hovering over data area.

Line breaks: indicate that data are not comparable to previous years due to classification changes made in the International Classification of Diseases in 1948, 1958, 1968, and 1999.

Source: National Center for Health Statistics and National Safety Council.

injuryfacts.nsc.org

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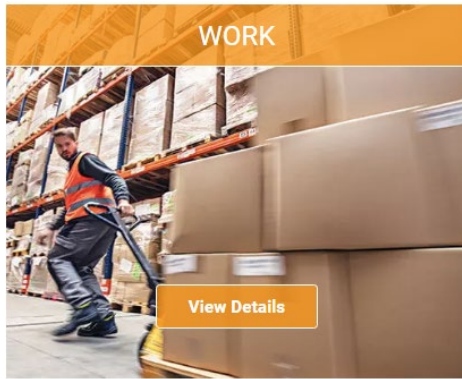


Biggest changes in 2021:

Total: 224,935 (+12%)

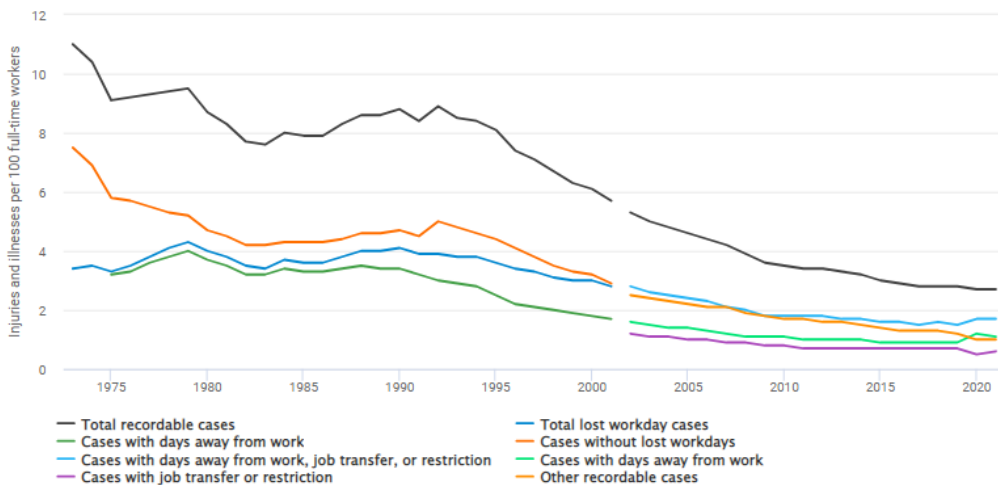
- Poisoning deaths (drug overdoses): +17%
- Motor vehicle deaths: +11%
- Fall deaths: +6%

<https://injuryfacts.nsc.org/all-injuries/historical-preventable-fatality-trends/deaths-by-cause/>

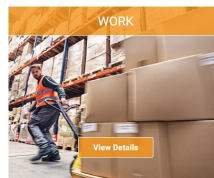


Workplace

Work-related-injury and illness incidence rates, private industry, United States, 1973-2021

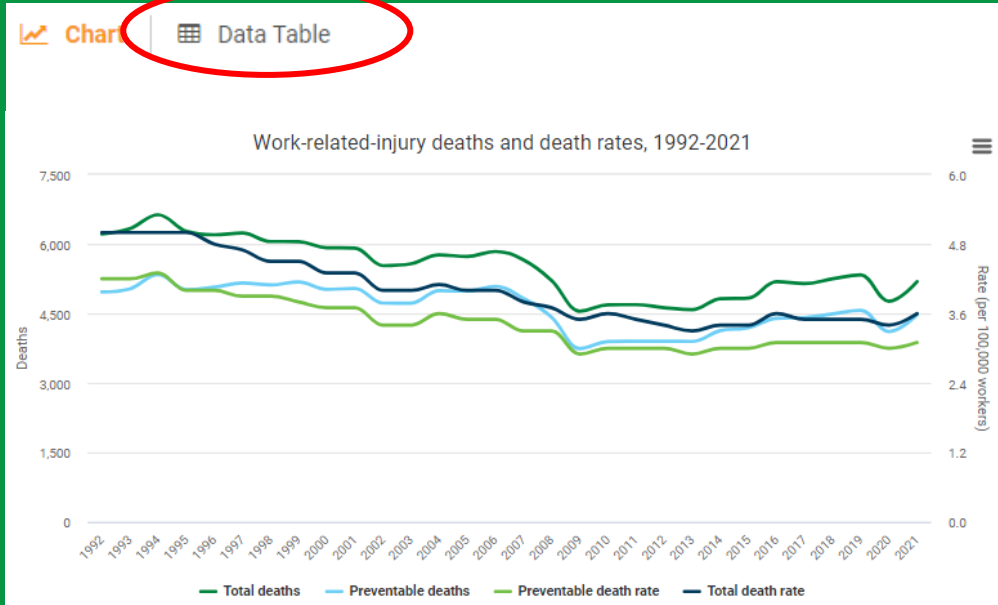


<https://injuryfacts.nsc.org/work/industry-incidence-rates/work-related-incident-rate-trends/>

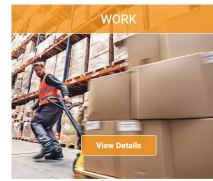


Nonfatal: 2021

- 2.6 million nonfatal cases (down 1.8%)
- 2.7 total injury & illness rate (unchanged)
 - **Injury** rate up 4.5%
 - **Illness** rate down 32.6%
 - Driven by a decrease in COVID-19 related cases



<https://injuryfacts.nsc.org/work/work-overview/work-related-fatality-trends/>



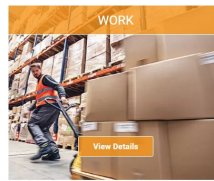
Preventable Work deaths: 2021

- 6% increase in preventable deaths
- Rebounded from the COVID-19 related decrease
- Preventable death rate increased from 3.0 to 3.1

Preventable-work-related-injury deaths and death rates, United States, 1992-2021

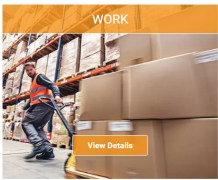
Year	Total deaths	Preventable Deaths	Workers (in thousands)	Hours workeda (in millions)	Total deaths per 100,000 workers	Preventable deaths per 100,000 workers (b)
1992	6,217	4,965	119,168		5.0	4.2
1993	6,331	5,034	120,778		5.0	4.2
1994	6,632	5,338	124,470		5.0	4.3
1995	6,275	5,015	126,248		5.0	4.0
1996	6,202	5,069	127,997		4.8	4.0
1997	6,238	5,160	130,810		4.7	3.9
1998	6,055	5,117	132,772		4.5	3.9
1999	6,054	5,184	134,688		4.5	3.8
2000	5,920	5,022	136,402		4.3	3.7
2001 (a)	5,915	5,042	136,246		4.3	3.7
2002	5,534	4,726	137,731		4.0	3.4
2003	5,575	4,725	138,988		4.0	3.4
2004	5,764	4,995	140,504		4.1	3.6
2005	5,734	4,984	142,946		4.0	3.5
2006	5,840	5,088	145,607		4.0	3.5
2007	5,657	4,829	147,203		3.8	3.3
2008 (b)	5,214	4,423	146,535	271,958	3.7	3.3

<https://injuryfacts.nsc.org/work/work-overview/work-related-fatality-trends/>



Preventable Work deaths: 2021

- 6% increase in preventable deaths
- Rebounded from the COVID-19 related decrease
- Preventable death rate increased from 3.0 to 3.1



Work Injury Costs - 2021

COST



total in 2021 ---- **\$167.0 billion**



per worker ----- **\$1,080**

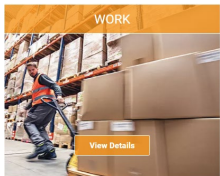


per death ----- **\$1,340,000**



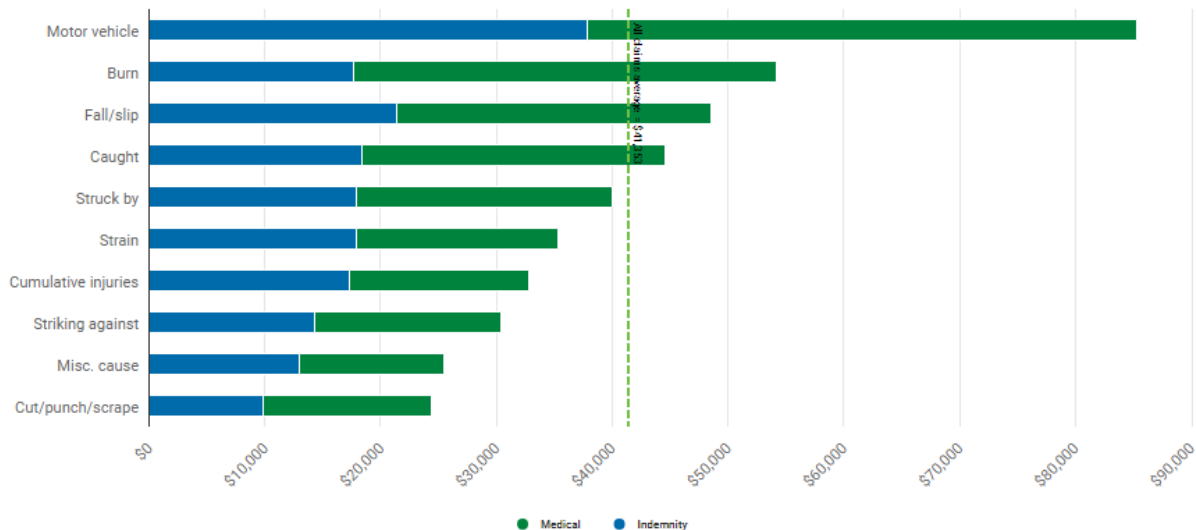
per medically consulted injury ----- **\$42,000**

<https://injuryfacts.nsc.org/work/costs/work-injury-costs/>



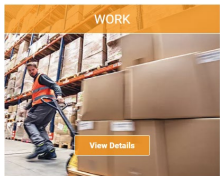
Average Workers Compensation Costs

Workers' compensation costs by cause, 2019-2020



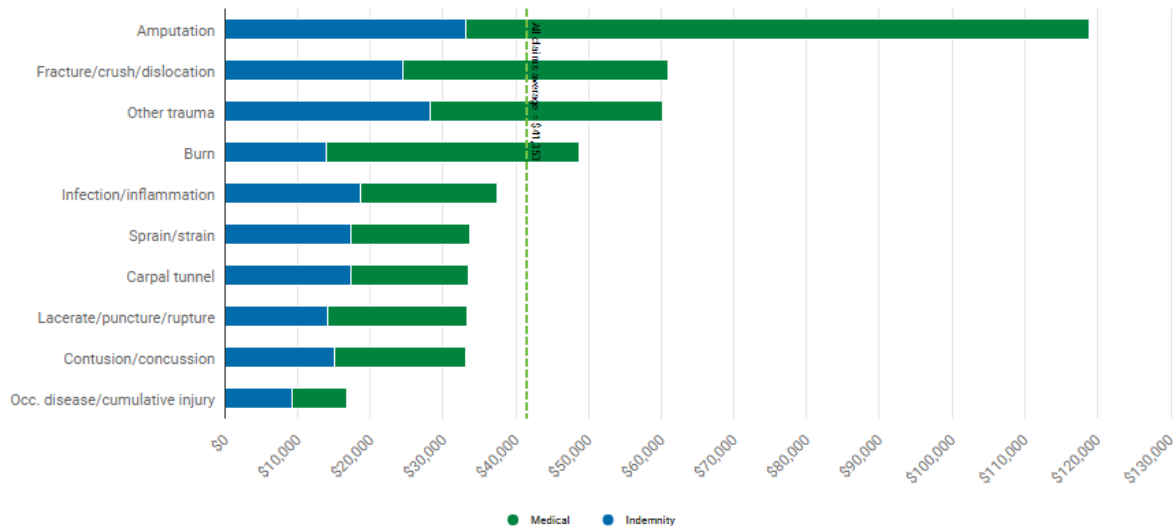
- Average total cost: \$41,353
 - Medical: \$22,377
 - Indemnity: \$18,976
- Motor vehicle: \$85,311
- Burn: \$54,173
- Fall/slip: \$48,575

<https://injuryfacts.nsc.org/work/costs/workers-compensation-costs/>



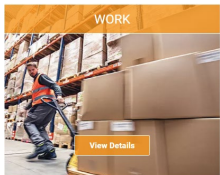
Average Workers Compensation Costs

Workers' compensation costs by nature, 2019-2020



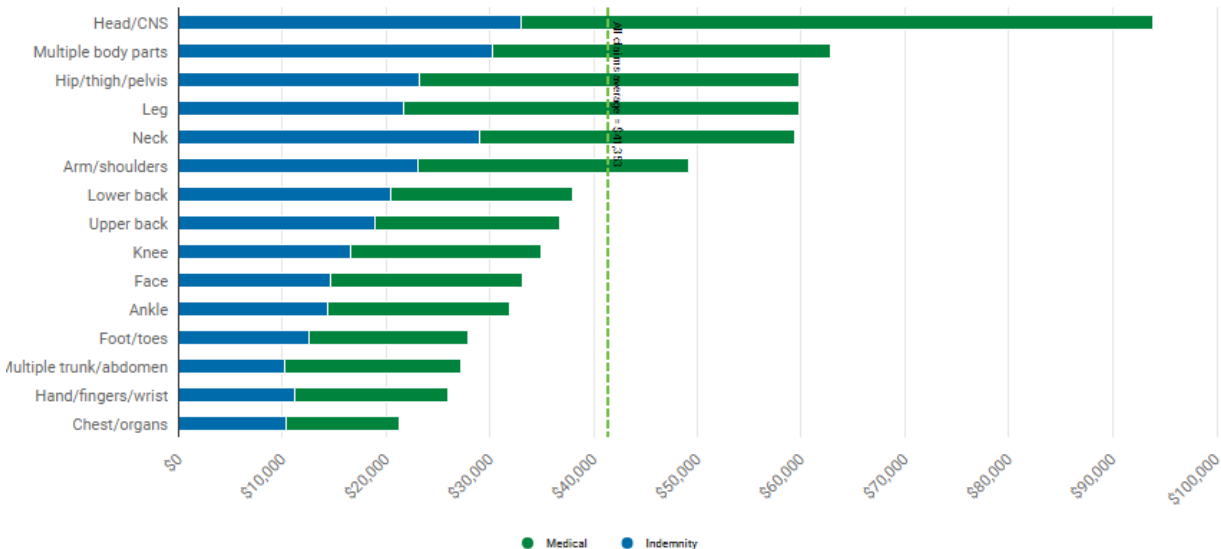
- Average total cost: \$41,353
 - Medical: \$22,377
 - Indemnity: \$18,976
- Amputation: \$118,837
- Fracture/crush/dislocation : \$60,934
- Burn: \$48,671

<https://injuryfacts.nsc.org/work/costs/workers-compensation-costs/>



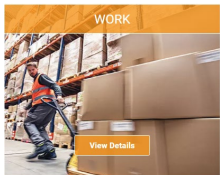
Average Workers Compensation Costs

Workers' compensation costs by part of body, 2019-2020



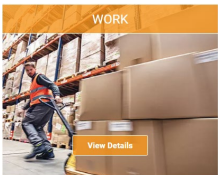
- Average total cost: \$93,942
 - Medical: \$22,377
 - Indemnity: \$18,976
- Head/CNS: \$85,311
- Multiple body parts: \$62,859
- Hip/thigh/pelvis: \$59,758

<https://injuryfacts.nsc.org/work/costs/workers-compensation-costs/>



Detailed nonfatal data for 2021 are not currently available.

The U.S. Bureau of Labor Statistics (BLS) is transitioning from an annual to a biennial (every two years) publication schedule. The final publication of a single year of cases involving days away from work estimates is for reference year 2020. In the fall of 2023, BLS will publish detailed data covering 2021 and 2022 for both Days Away from Work (DAFW) and for Days of Job Transfer or Restriction (DJTR) cases.

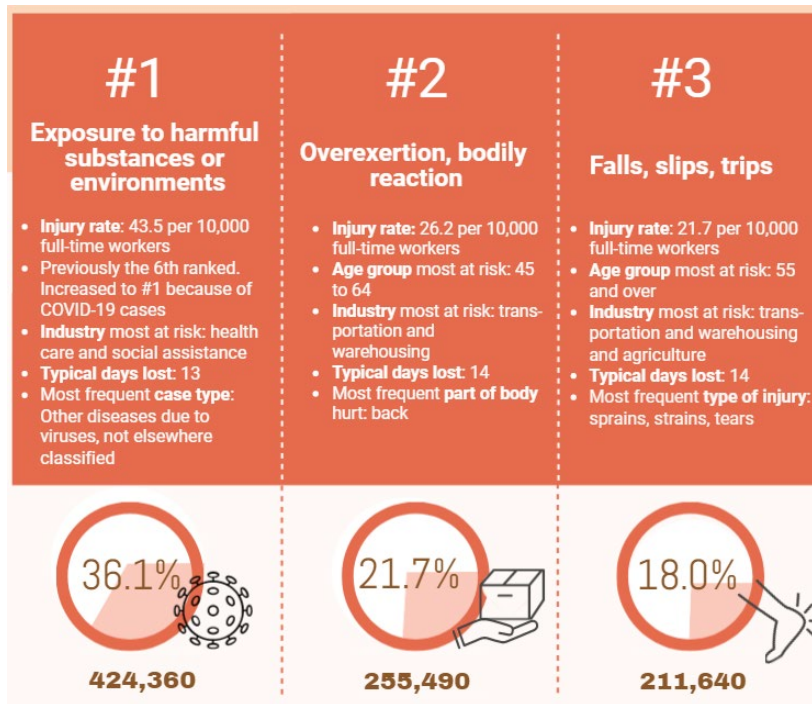


Top Work-related Injury Causes

Brief

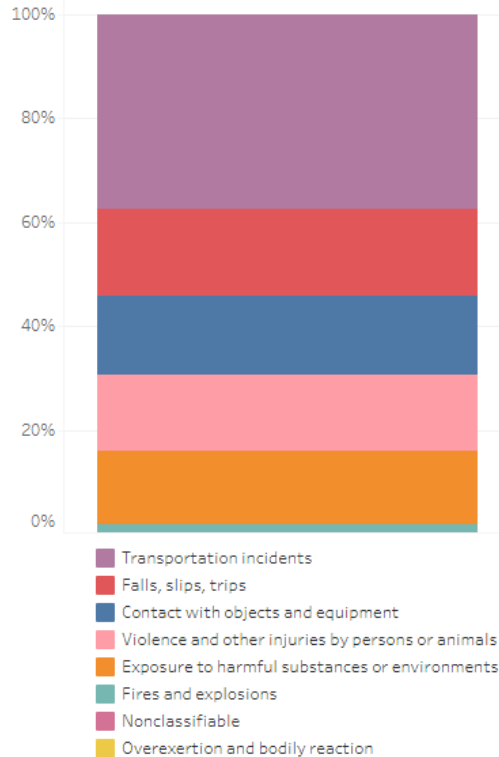
Data Details

2020:

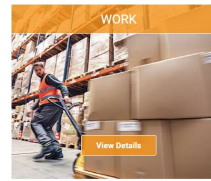
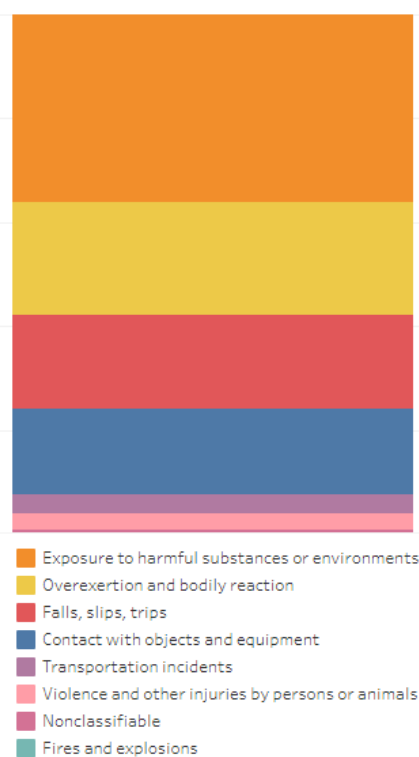


<https://injuryfacts.nsc.org/work/work-overview/top-work-related-injury-causes/>

Deaths



Nonfatal injuries/illnesses involving days away from work



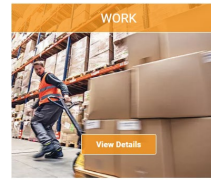
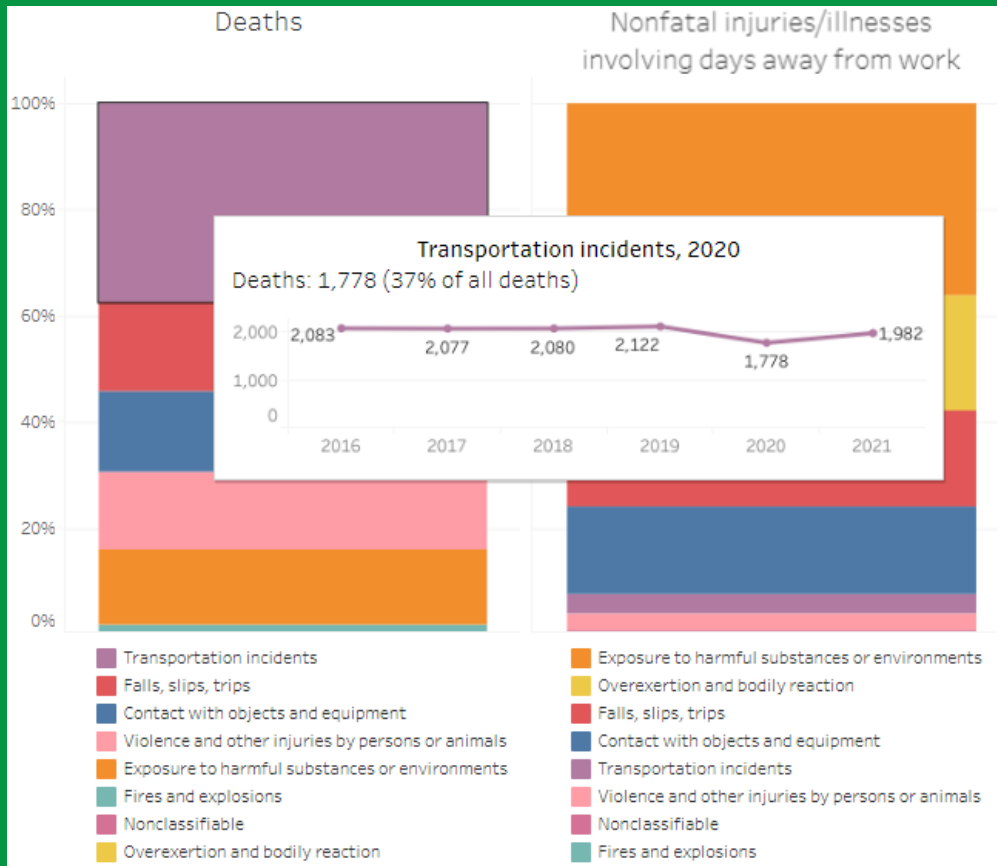
Causes of death and Injury (2020)

Deaths

1. Transportation
2. Falls, slips, trips
3. Contact

Nonfatal

1. Exposure to harmful substance or environments (COVID-19)
2. Overexertion
3. Falls, slips, trips



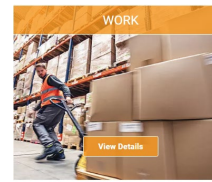
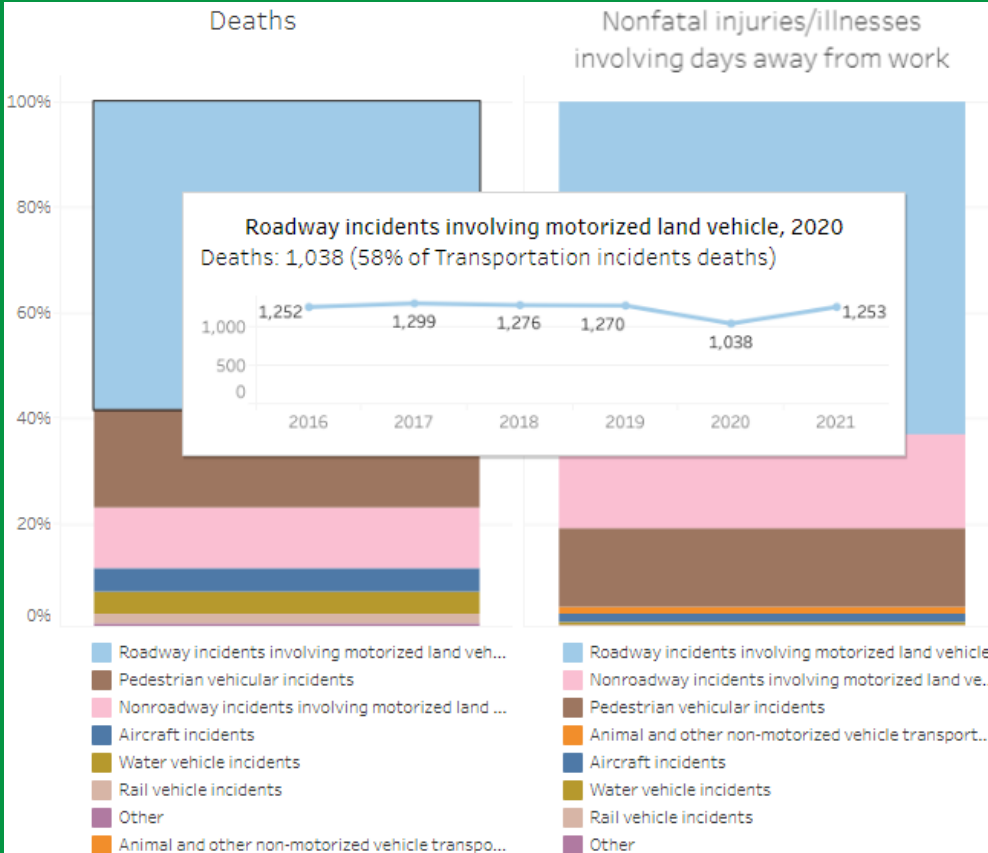
Causes of death and Injury

Deaths

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Causes of death and Injury

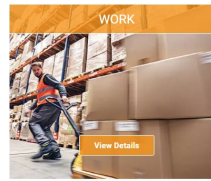
Deaths

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2. Falls, slips, trips
3. Contact

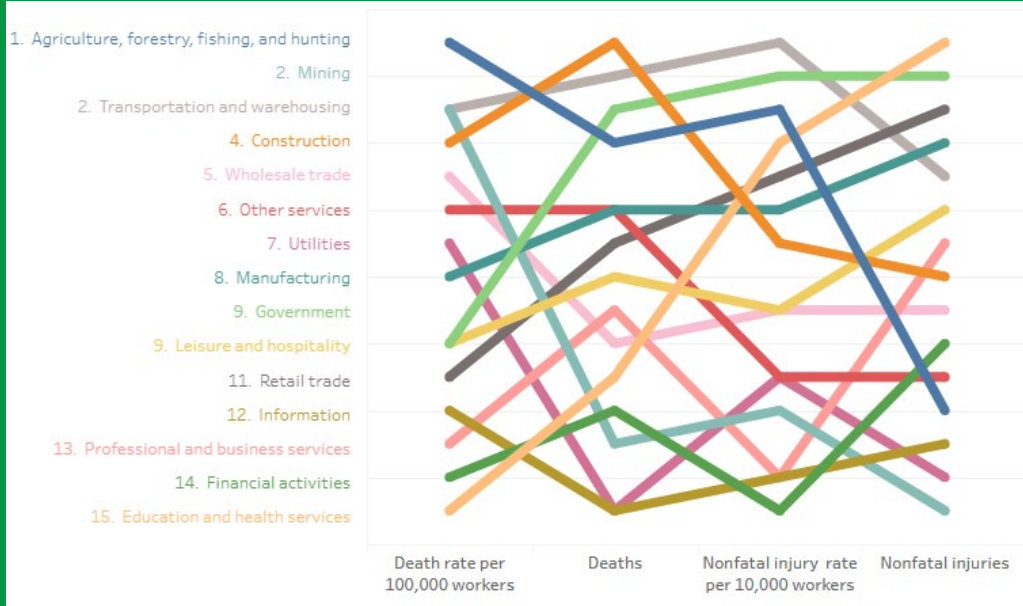
Nonfatal

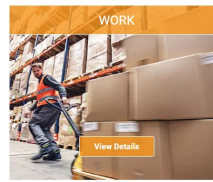
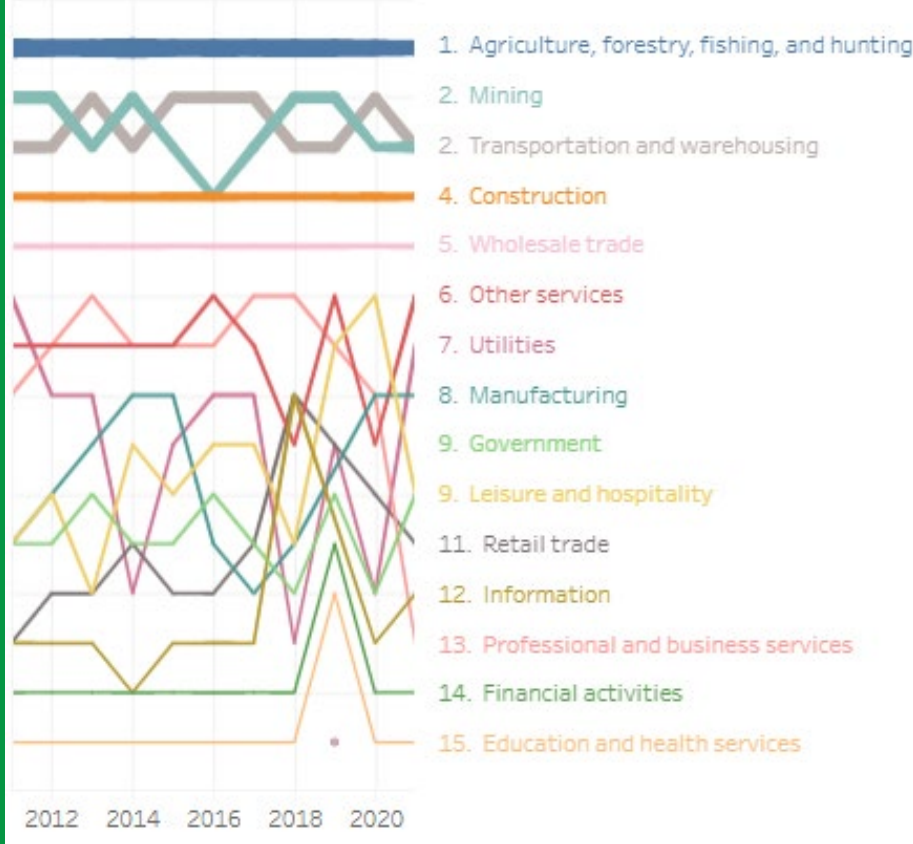
1. Exposure to harmful substance or environments (COVID-19)
2. Overexertion
3. Falls, slips, trips

What is the most dangerous industry?



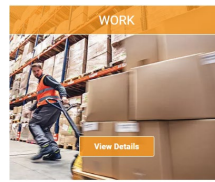
It depends on how you measure it...





Death rates by industry

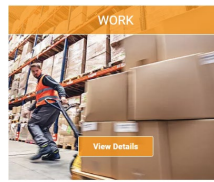
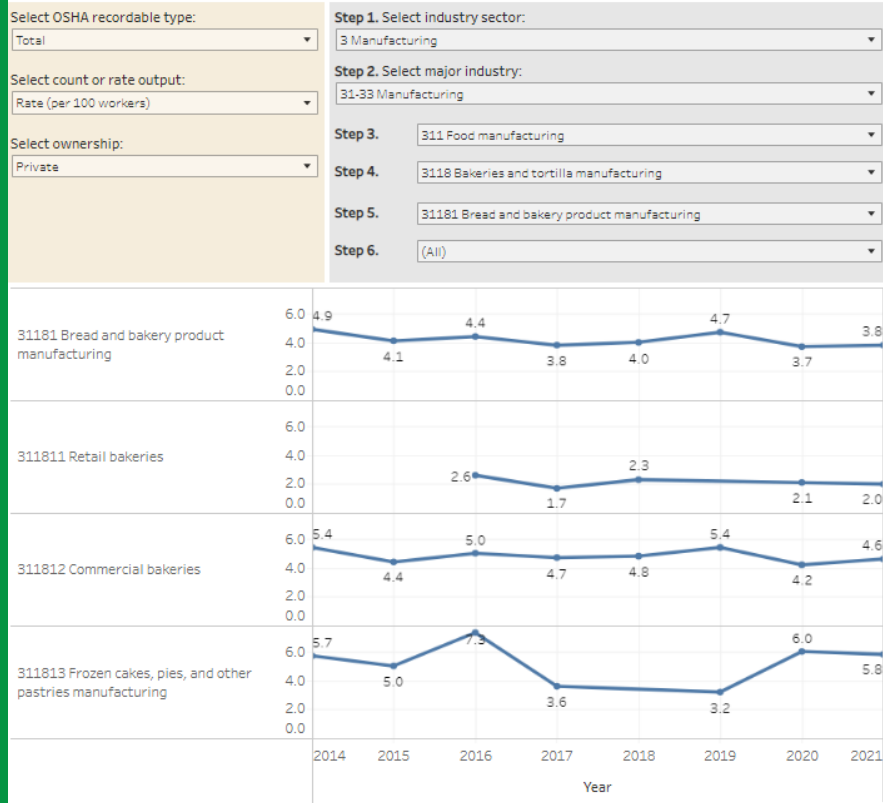
1. Agriculture, forestry, fishing, and hunting
2. Mining
3. Transportation and warehousing



Nonfatal rate by Industry

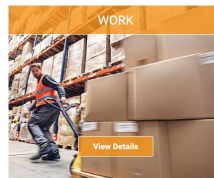
1. Transportation and warehousing
2. Government
3. Agriculture, forestry, fishing, and hunting

Nonfatal injury and illness incidence rate and count lookup tool



Industry Rates

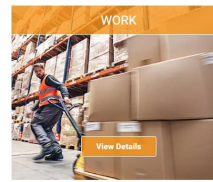
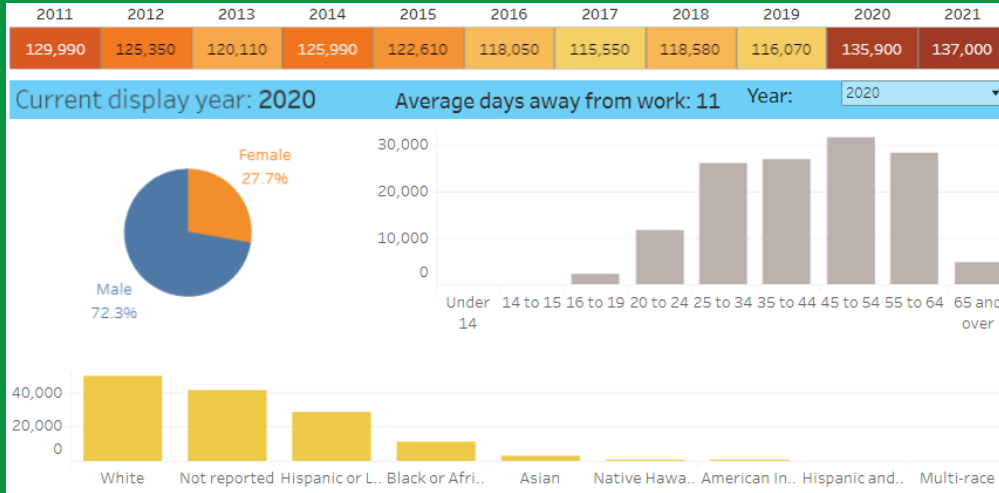
- Incident rate calculator
- Rate and count lookup tool
 - Multiple years of data
 - Total
 - DART
 - Cases with days away from work
 - Cases with days of job transfer or restriction
 - Other



Industry Profile

- Filter data by industry:
 - Deaths
 - Nonfatal cases
 - Nonfatal rates
- Demographics
- Event
- Occupation
- Body part
- Nature

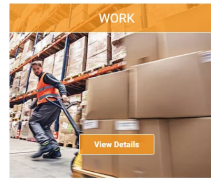
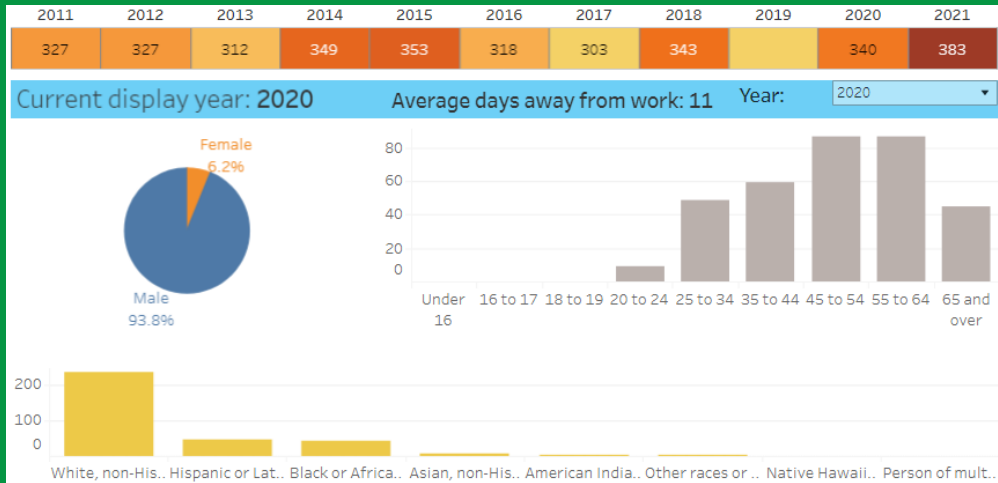
Manufacturing



Nonfatal cases with days away from work

- 72% male
- Number of cases highest from 45 to 54
- 31% of cases fail to report race or ethnic origin

Manufacturing



Fatal injuries

- 94% of deaths are men
- Number of deaths increase by age of worker (excluding workers 65 +)
- White non-Hispanic workers experience highest number of deaths

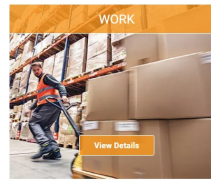
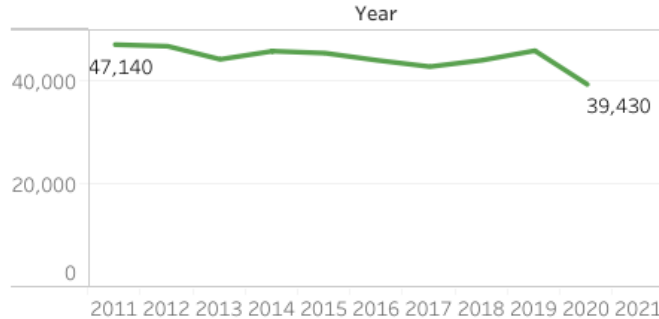
Manufacturing

Event

Contact with object
Exposure to harmful substances
Overexertion and motion
Falls, slips, trips
Struck by object
Fall on same level
Caught in object
Overexertion in lifting
Struck against or over
Repetitive motion
Fall to lower level

Event or exposure: Contact with object, equipment, Manufacturing

Current display year: 2020 | nonfatal | 39,430



Nonfatal cases with days away from work

Event:

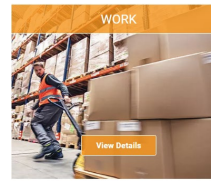
- Contact: 39,430
- Exposure: 35,890
- Overexertion: 34,170

Occupation:

- Production: 84,870

Manufacturing

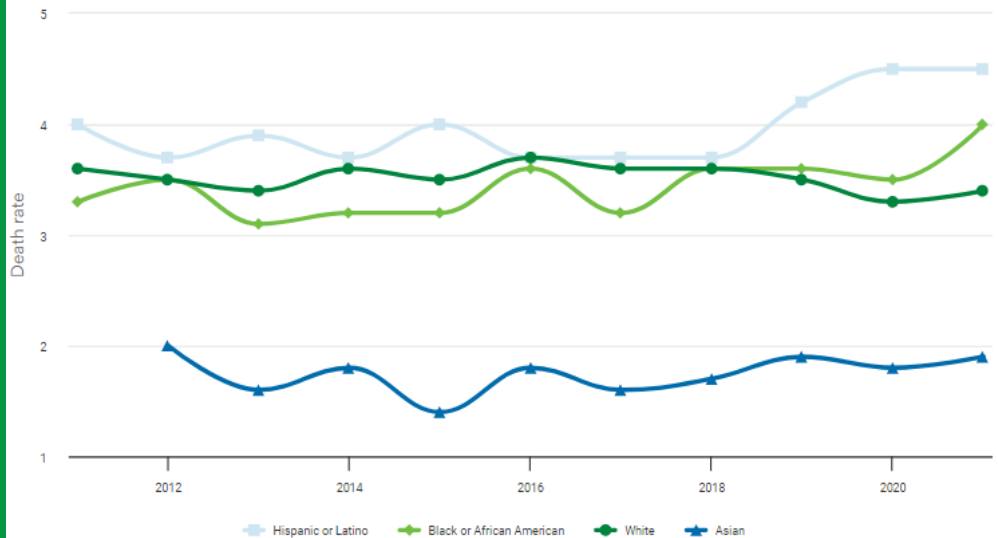
Part of Body		Nature of Injury or Illness	
Upper extremities	●	COVID-19 (Other diseases due to viruses, n.e.c.)	●
Body systems	●	Sprains, strains, tears	●
Hand	●	Soreness, pain	●
Lower extremities	●	Cuts, lacerations, punctures	●
Trunk	●	Fractures	●
Back	●	Cuts, lacerations	●
Head	●	Bruises, contusions	●
Shoulder	●	Amputations	●
Knee	●	Multiple traumatic injuries	●
Multiple	●	Punctures (except gunshot wounds)	●
Arm	●	Heat (thermal) burns	●
Foot	●	Carpal tunnel syndrome	●
Wrist	●	Chemical burns and corrosions	●



Nonfatal cases with days away from work

- Part of body:
 - Upper extremities: 45,520
 - Body systems: 31,780
- Nature:
 - COVID-19: 30,490
 - Sprains, strains, tears: 29,620

Occupational death rates per 100,000 workers by race or ethnic origin

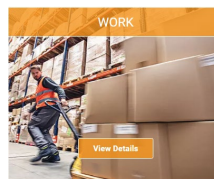
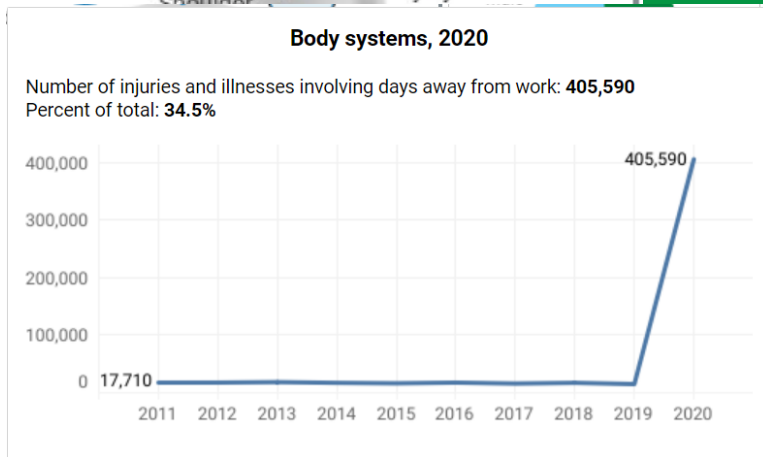
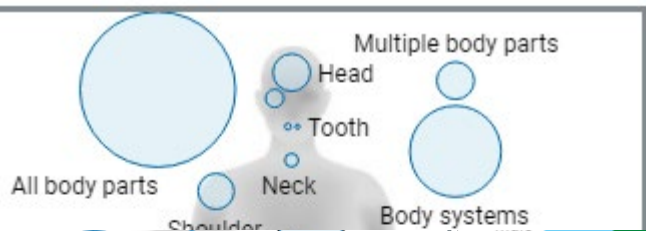


Race or Ethnic Origin

- Hispanic or Latino workers highest risk of death

In 2021, death rate:

- +14% - Black or African-American
- + 6% - Asian
- +3% - White

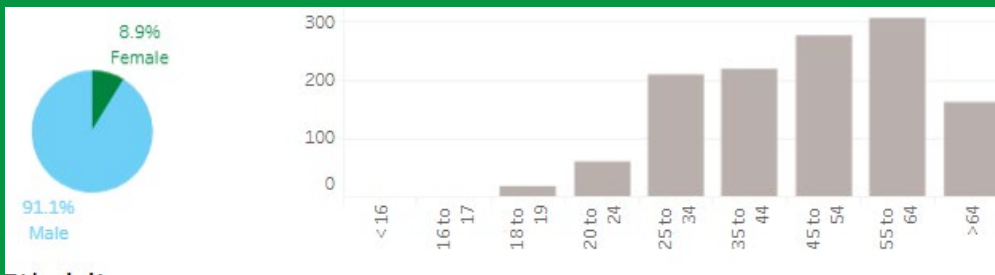


Nonfatal injuries/illnesses by part of body

1. Body systems: 34%
2. Upper extremities: 21%
3. Lower extremities: 16%
4. Trunk: 15%

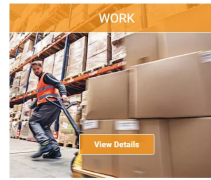
Safety Topics

- Overexertion and bodily reaction
- Falls – lower level
- Falls – same level
- Contact with objects and equipment
- Roadway
- Non-roadway incidents
- Pedestrian vehicle incidents
- Work-related fatigue
- Forklifts
- Assault at work
- Exposure to harmful substances or environments
- Musculoskeletal injuries and illnesses
- Overdose Deaths
- COVID-19



Industry

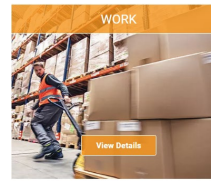
Trade, transportation, and utilities	
Construction	
Natural resources and mining	
Manufacturing	
Other services	
Leisure and hospitality	
Financial activities	
Education and health services	
Information	
Professional and business services	



Roadway Deaths

- Leading workplace fatality event
- Over 90% of victims are male
- Trade, transportation, and utilities experience the most deaths

Contact with Objects and Equipment Deaths



- A moving object striking a worker
- A worker striking against an object or equipment, including bumping into, stepping on, kicking, or being pushed or thrown onto an object
- Part of a worker's body being squeezed, pinched, compressed or crushed in equipment, between shifting objects, between stationary objects, or in a wire or rope
- A worker being struck, caught or crushed in collapsing structure, equipment or material
- A worker being injured as a result of friction or pressure between the person and the source of injury
- A worker being injured from vibration

Contact with objects and equipment, United States, 2011-2021

Total Fatal (work-related injuries, all industries)

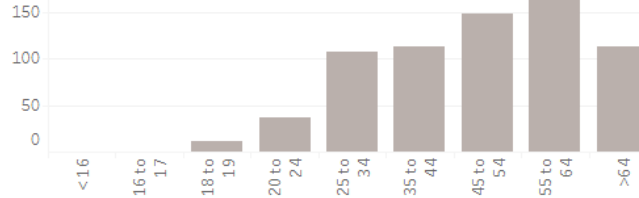
2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
710	723	721	715	722	761	695	786	732	716	705

Current display year: 2021

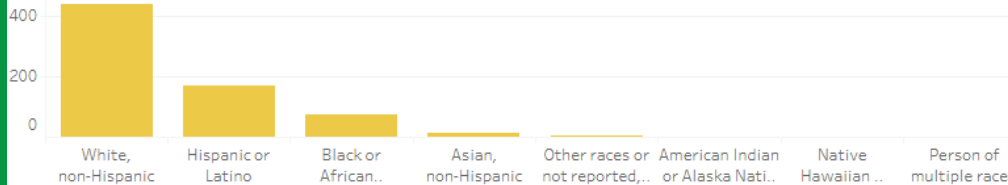
Average days away from work:

Year

2021



Race or Ethnicity



<https://injuryfacts.nsc.org/work/safety-topics/contact-with-objects-and-equipment/>

Falls lower-level, United States, 2011-2021

Total Fatal (work-related injuries, all industries)

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
553	570	595	660	648	697	713	615	711	645	680

Current display year: 2021

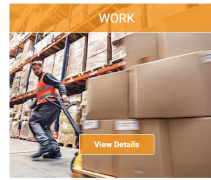
Average days away from work:

Year

2021



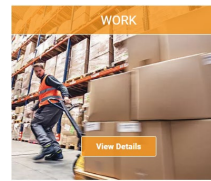
Race or Ethnicity



Falls Lower-Level Deaths

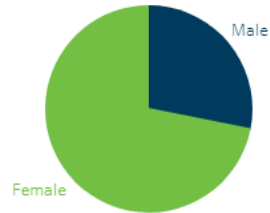
- Up 23% since 2011
- Down 4% since 2019
- 378 deaths in Construction
- Deaths increase with increasing age of worker

COVID-19: 2020 nonfatal involving days away

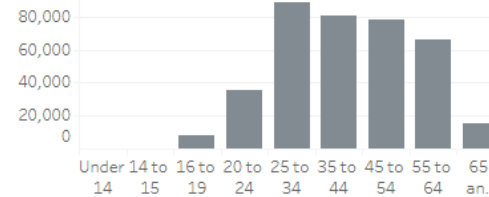


- 33% of all cases involving days away from work
- 72% female
- 74% in the education and health services industry
- 62% of cases involved 11 or more days away from work

Sex



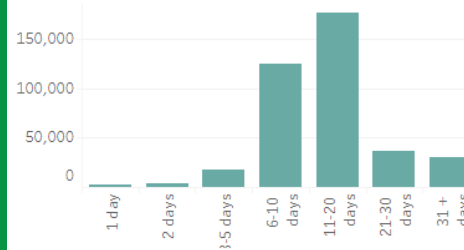
Age of Worker



Education and health services
Trade, transportation and utilities
Manufacturing
Professional and business services
Leisure and hospitality
Financial activities
Construction
Other services
Natural resources and mining
Information



Days away from work



<https://injuryfacts.nsc.org/work/safety-topics/covid-19/>

MSD page on Injury Facts

Musculoskeletal nonfatal injuries and illnesses involving days away from work

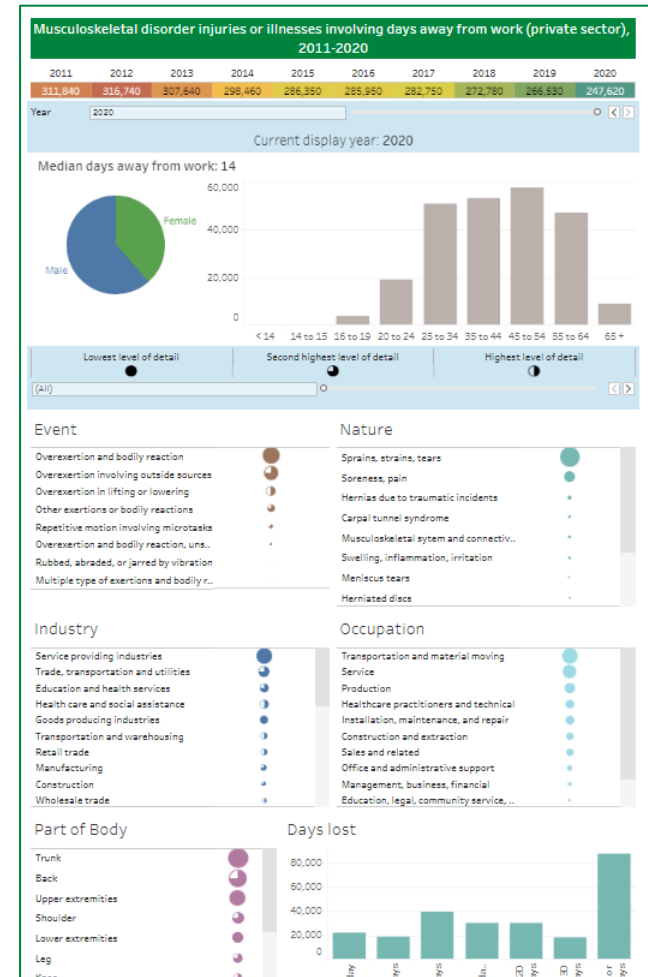
2020
TOTAL

All injuries and illnesses: 1,176,340
Musculoskeletal: 247,620

MEDIAN
DAYS
AWAY

2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

All events or exposures: 12 days
Musculoskeletal: 14 days



MSD Injury Definition

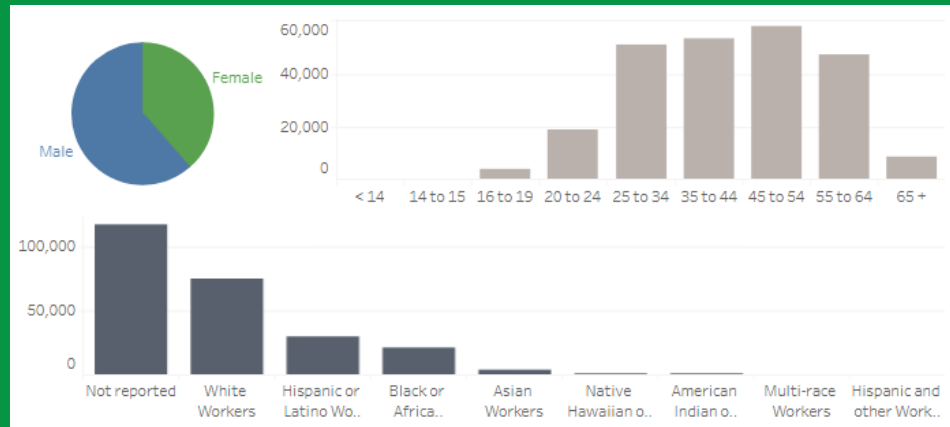
Nature:

- pinched nerve
- herniated disc
- meniscus tear
- sprains, strains, tears
- hernia (traumatic and nontraumatic)
- pain, swelling, and numbness
- carpal or tarsal tunnel syndrome
- Raynaud's syndrome or phenomenon
- or musculoskeletal system and connective tissue diseases and disorders

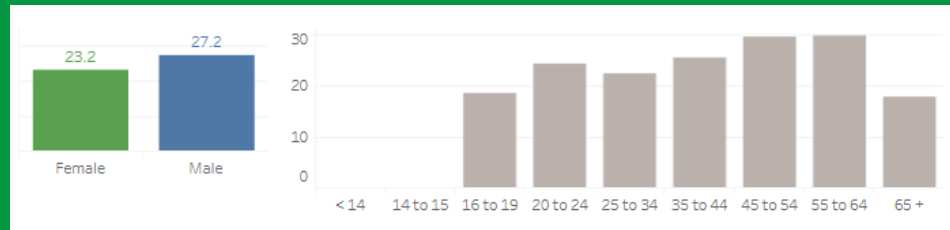
Event:

- overexertion and bodily reaction, unspecified
- overexertion involving outside sources
- repetitive motion involving microtasks
- other and multiple exertions or bodily reactions
- or rubbed, abraded, or jarred by vibration

Count:



Rate per 10,000 employees:



<https://injuryfacts.nsc.org/work/safety-topics/musculoskeletal-injuries/data-details/>

Musculoskeletal Injuries

- Male: 61%
- Age 45 to 54: 24%
- Age 35 to 44: 22%
- Age 25 to 34: 21%
- Trending up among 65 and older workers

MSDs account for 95% or more of the following injury events:

Event

Overexertion involving outside sources

Other exertions or bodily reactions

Repetitive motion involving microtasks

Overexertion and bodily reaction, uns..

Rubbed, abraded, or jarred by vibration



<https://injuryfacts.nsc.org/work/safety-topics/musculoskeletal-injuries/data-details/>

Musculoskeletal Injuries

- Outside sources: 174,140
- Other bodily reactions: 48,830
- Microtasks: 16,170

Industry

Trade, transportation and utilities	31%
Education and health services	14%
Manufacturing	24%
Construction	25%
Professional and business services	
Leisure and hospitality	
Financial activities	
Information	
Natural resources and mining,	

<https://injuryfacts.nsc.org/work/safety-topics/musculoskeletal-injuries/data-details/>

Musculoskeletal Injuries account for:

- Trade, transportation and utilities: 31%
- Education and health services: 14%
- Manufacturing: 24%
- Construction: 25%

Part of Body

Back

Shoulder

Leg

Arm

Wrist

Ankle

Hand

Foot



<https://injuryfacts.nsc.org/work/safety-topics/musculoskeletal-injuries/data-details/>

Musculoskeletal Injuries account for:

- Back: 75%
- Shoulder: 62%
- Leg: 28%
- Arm: 38%
- Wrist: 45%
- Ankle: 21%

Musculoskeletal Injuries:



<https://injuryfacts.nsc.org/work/safety-topics/musculoskeletal-injuries/data-details/>

- 32% result in 31 or more days away from work
- Median: 14 days

Learn more...
Visit: injuryfacts.nsc.org



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