

The Survey of Occupational Injuries and Illnesses for Wyoming, 2020

Prepared by the Research & Planning section of the Wyoming Department of Workforce Services in cooperation with the U.S. Bureau of Labor Statistics.

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“Your Source for Wyoming Labor Market Information”

Who We Are

Research & Planning (R&P) functions as an exclusively statistical entity within the Wyoming Department of Workforce Services. R&P collects, analyzes, and publishes timely and accurate labor market information (LMI) meeting established statistical standards. We work to make the labor market more efficient by providing the public and the public’s representatives with the information needed for evidence-based, informed decision making.



Survey of Occupational Injuries and Illnesses for Wyoming, 2020

by: *Christine McGrath, Senior Statistician*

Wyoming's nonfatal occupational injury and illness incidence rate for all industries in 2020 was 3.3, according to the Survey of Occupational Injuries and Illnesses (SOII). Incidence rates represent the number of injuries and illnesses per 100 full-time workers. The Research & Planning (R&P) section of the Wyoming Department of Workforce Services conducts the SOII for Wyoming in cooperation with the U.S. Bureau of Labor Statistics (BLS) annually as part of a nationwide data collection effort.

These estimates are all recordable nonfatal occupational injuries and illnesses which include: days away from work cases, days of job transfer or restriction cases, and other recordable cases. For example, Wyoming had an estimated 2,300 occupational injury and illness cases with days away from work in private industry in 2020. Non-recordable cases include, but are not limited to, first aid cases, such as an adhesive strip on a cut, or a water flush of an eye to remove a foreign object. For further information on recordable and non-recordable cases, visit <https://www.bls.gov/iif/oshdef.htm>.

This publication is intended to introduce the reader to the data available for Wyoming from the Survey of Occupational Injuries and Illnesses. For additional information, please see <https://doe.state.wy.us/LMI/OSH/toc.htm>.

Methodology

The Occupational Injuries and Illnesses

form is a mandatory survey that was sent out in January 2021 requesting information from OSHA logs for calendar year 2020. The data collection period lasted approximately seven months, after which data and results were reviewed by state, regional, and national BLS staff and incidence rates were calculated.

Data were reported by employers on the basis of a single incident or occurrence. If an employee experienced more than one nonfatal work-related injury or illness during the calendar year, each incident was reported separately and is referred to as a case. If an incident injured more than one employee, each employee was reported separately on the questionnaire. For a work-related injury/illness to be categorized as a recordable case, it must result in any of the following:

- death
- days away from work
- restricted work or transfer to another job
- medical treatment beyond first aid, or loss of consciousness
- a significant injury or illness diagnosed by a physician or other licensed health care professional, even if it does not result in death, days away from work, restricted work, or job transfer.

For additional information see the OSHA Recordkeeping Rules online.

Total Number of Nonfatal Occupational Injuries and Illnesses Involving Days Away From Work by Selected Worker Occupations and Selected Major Industry Sector can be found on Table 1 (see pages 4 and 5).

Table 1: Number of Nonfatal Occupational Injuries and Illnesses Involving Days Away From Work¹ by Selected Worker Occupations and Selected Major Industry Sector, Private Industry, Wyoming, 2020

Occupation	Private industry ^{2,3,4}	Goods-Producing			
		Total	Natural Resources & Mining ^{2,3}	Construction	Manufacturing
Total	2,300	850	210	400	230
Heavy and tractor-trailer truck drivers	170	80	20	--	--
Construction laborers	130	130	--	130	--
Nursing assistants	120	--	--	--	--
Electricians	90	80	--	80	--
Landscaping and groundskeeping workers	80	--	--	--	--
Butchers and meat cutters	70	60	--	--	60
Laborers & freight, stock, & material movers, hand	60	--	--	--	--
Carpenters	60	60	--	--	--
Registered nurses	50	--	--	--	--
Farmworkers, farm, ranch, & aquacultural animals	50	40	40	--	--
Driver/sales workers	50	--	--	--	--
Retail salespersons	50	--	--	--	--
Training and development specialists	40	--	--	--	--
Stockers and order fillers	40	--	--	--	--
Light truck drivers	40	--	--	--	--
Maintenance and repair workers, general	40	--	--	--	--
Maids and housekeeping cleaners	40	--	--	--	--
Personal care aides	30	--	--	--	--
Plumbers, pipefitters, and steamfitters	30	30	--	--	--
Industrial machinery mechanics	30	--	20	--	--
Automotive service technicians and mechanics	30	--	--	--	--
Cashiers	30	--	--	--	--
Food preparation workers	30	--	--	--	--
Cooks, restaurant	30	--	--	--	--
First-line supervisors of retail sales workers	30	--	--	--	--
Veterinary technologists and technicians	20	--	--	--	--

¹Days-away-from-work cases include those that result in days away from work with or without job transfer or restriction.

²Excludes farms with fewer than 11 employees.

³Data for mining (Sector 21 in the North American Industry Classification System) include establishments not governed by the Mine Safety and Health Administration (MSHA) rules and reporting, such as those in oil and gas extraction and related support activities. Data for mining operators in coal, metal, and nonmetal mining are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor. Independent mining contractors are excluded from the coal, metal, and nonmetal mining industries. These data do not reflect the changes the Occupational Safety and Health Administration made to its recordkeeping requirements effective January 1, 2002; therefore estimates for these industries are not comparable to estimates in other industries.

⁴Data for employers in rail transportation are provided to BLS by the Federal Railroad Administration, U.S. Department of Transportation. These data do not reflect the changes the Occupational Safety and Health Administration made to its recordkeeping requirements effective January 1, 2002; therefore estimates for these industries are not comparable to estimates in other industries.

NOTE: Dashes indicate data that are not available. Because of rounding and data exclusion of nonclassifiable responses, data may not sum to the totals.

SOURCE: U.S. Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries and Illnesses in cooperation with participating state agencies, November 03, 2021

(Table continued on page 5)

(Table continued from page 4)

Table 1: Number of Nonfatal Occupational Injuries and Illnesses Involving Days Away From Work¹ by Selected Worker Occupations and Selected Major Industry Sector, Private Industry, Wyoming, 2020

Occupation	Private industry ^{2,3,4}	Service-Providing				
		Total	Trade, transp. & utilities ⁴	Info.	Edu. & health serv.	Leisure & hosp.
Total	2,300	1,450	590	40	420	200
Heavy and tractor-trailer truck drivers	170	80	70	--	--	--
Construction laborers	130	--	--	--	--	--
Nursing assistants	120	120	--	--	120	--
Electricians	90	--	--	--	--	--
Landscaping and groundskeeping workers	80	80	--	--	--	--
Butchers and meat cutters	70	--	--	--	--	--
Laborers & freight, stock, & material movers, hand	60	50	50	--	--	--
Carpenters	60	--	--	--	--	--
Registered nurses	50	50	--	--	50	--
Farmworkers, farm, ranch, & quacultural animals	50	--	--	--	--	--
Driver/sales workers	50	50	50	--	--	--
Retail salespersons	50	50	50	--	--	--
Training and development specialists	40	40	40	--	--	--
Stockers and order fillers	40	40	40	--	--	--
Light truck drivers	40	40	30	--	--	--
Maintenance and repair workers, general	40	30	--	--	--	20
Maids and housekeeping cleaners	40	40	--	--	--	20
Personal care aides	30	30	--	--	30	--
Plumbers, pipefitters, and steamfitters	30	--	--	--	--	--
Industrial machinery mechanics	30	--	--	--	--	--
Automotive service technicians and mechanics	30	30	30	--	--	--
Cashiers	30	30	30	--	--	--
Food preparation workers	30	30	--	--	--	20
Cooks, restaurant	30	30	--	--	--	30
First-line supervisors of retail sales workers	30	30	30	--	--	--
Veterinary technologists and technicians	20	20	--	--	--	--

¹Days-away-from-work cases include those that result in days away from work with or without job transfer or restriction.

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NOTE: Dashes indicate data that are not available. Because of rounding and data exclusion of nonclassifiable responses, data may not sum to the totals.

SOURCE: U.S. Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries and Illnesses in cooperation with participating state agencies, November 03, 2021

Glossary

Case of job transfer: An injured or ill employee was assigned to a job other than his or her regular job for part of the day other than the day of injury or illness.

Case of restricted duty: An employee was kept from performing one or more routine functions (work activities the employee performed at least once per week) of his or her job, or was kept from working a full workday, or a licensed health care professional recommended either of the above.

Cases with days away from work: Severe cases that counted the day after the injury or onset of the illness, which may or may not include days of job transfer or restriction. Up to 180 days away from work (and/or days of job transfer or restriction) are counted for each injury.

Event or exposure: The manner in which the injury or illness was produced or inflicted, such as falls, overexertion, or repetitive motion.

Incidence rate: Represents the number of injuries and illnesses per 100 full-time workers, calculated as $(N/EH) \times 200,000$ where:

- N = number of injuries and illnesses
- EH = total hours worked by all employees during the calendar year
- 200,000 = base for 100 equivalent full-time workers (working 40 hours per week, 50 weeks per year).

Mandatory survey: Participation by private sector employers is required by Public Law 91-596 by the Bureau of Labor Statistics (BLS). Participation by public sector employers is required by law by Wyoming OSHA, as Wyoming is a State Plan State. If an employer receives a survey from the BLS, even if they are partially exempt by OSHA due to having less than 11 employees for example, they must still complete the survey.

Nature of injury or illness: The physical characteristics of the disabling injury or illness, such as cuts, fractures, or sprains.

Other recordable cases: Cases not involving days away from work or days of job transfer or restricted duty but requiring medical treatment beyond first aid. Other recordable cases include, for example, stitches, prescription medication, a concussion, loss of consciousness, medical removal from job site, musculoskeletal disorders, or other significant diagnosed injury or illness.

Part of body: The part of the body directly linked to the nature of injury or illness cited, such as back, finger, or eye.

Source of injury or illness: The object, substance, exposure, or bodily motion that directly caused the disabling condition, such as chemical, vehicle, or machinery.

Incidence Rates for Wyoming and the U.S.

As shown in Figure 1, the incidence rate for Wyoming’s private sector in 2020 was 3.0, while the rate for the U.S. private sector was 2.7. Wyoming’s public sector rate went from 4.4 in 2019 to 4.3 in 2020. Since 2010, the incidence rate for Wyoming’s private sector has remained between 3.0 and 4.0.

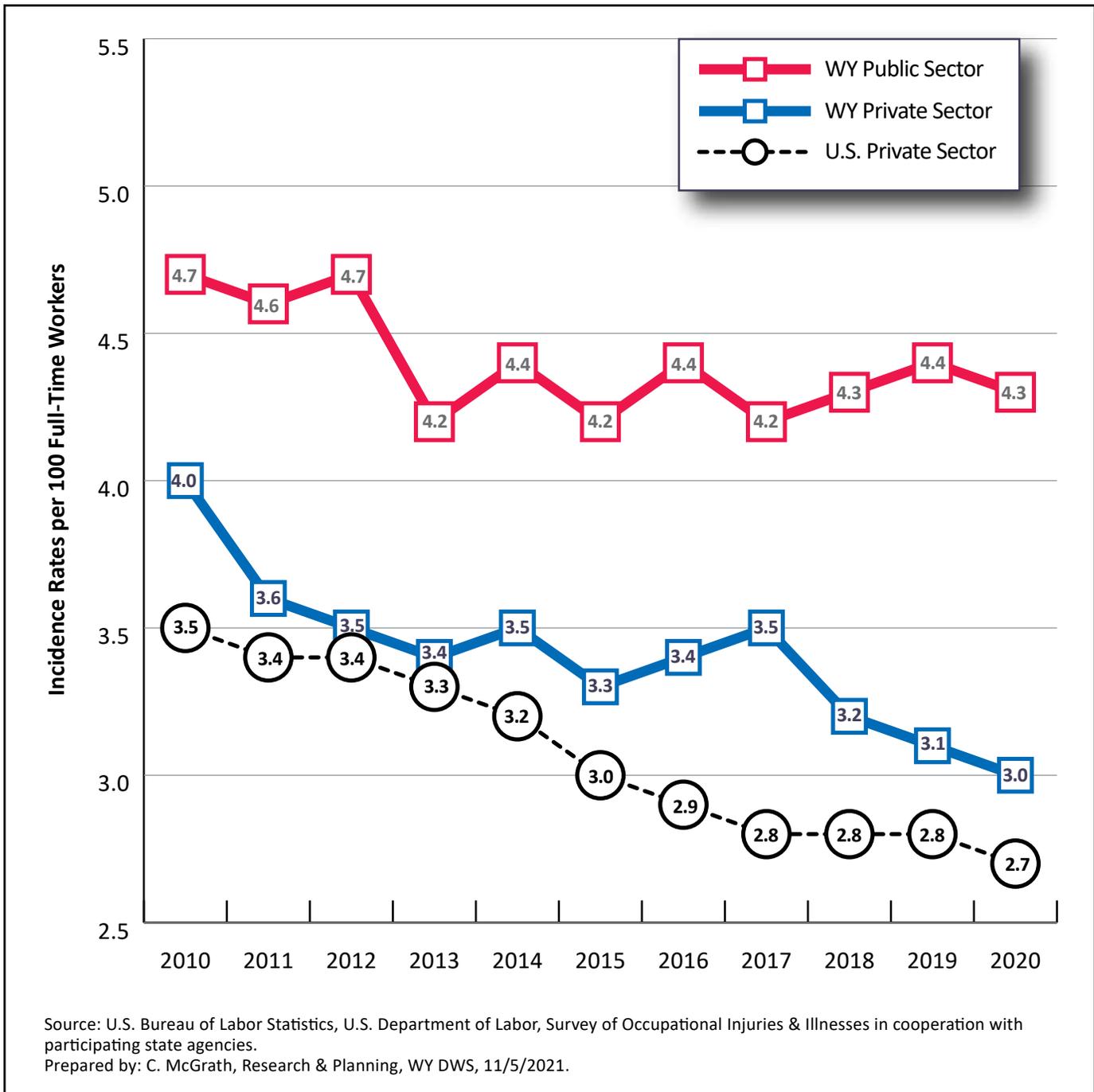


Figure 1: Incidence Rates per 100 Full-Time Workers for Total Nonfatal Occupational Injuries and Illnesses, Wyoming and the U.S., 2010-2020

Incidence Rates by Major Industry Sector, WY and U.S.

Figure 2 shows incidence rates by major industry sector for Wyoming and the United States. In 2020, manufacturing and education & health services had the highest incidence rates in Wyoming (4.4 and 4.0). Education & health services had an incidence rate of 5.0 in the U.S., followed by natural resources & mining (3.3). The high incidence rates in education & health services in Wyoming and the U.S. were driven by the rise in the respiratory illness rate, which includes reported COVID-19 pandemic-related illnesses.

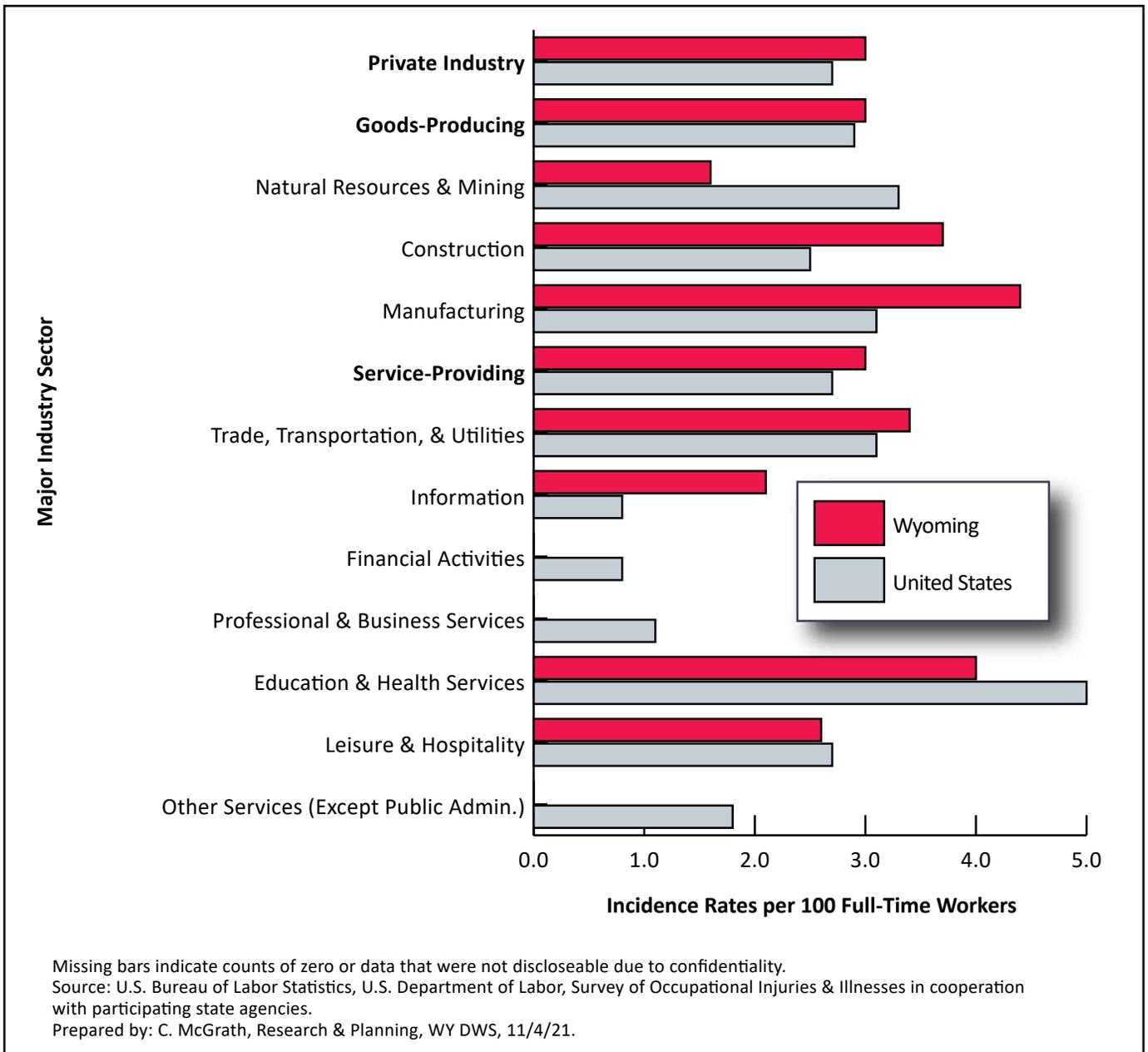


Figure 2: Incidence Rates per 100 Full-Time Workers for Total Nonfatal Occupational Injuries and Illnesses by Major Industry Sector, Wyoming and the U.S., 2020

Incidence Rates by Major Industry Sector in WY

Goods-producing industries include agriculture, mining, construction, and manufacturing. Within private industry, Wyoming’s goods-producing sectors had an incidence rate of 3.0, compared to 2.1 in 2019 (see Figure 3). Incidence rates in goods-producing sectors in 2020 ranged from 1.6 in natural resources & mining to 4.4 in manufacturing. Construction had an incidence rate of 3.7 in 2020, compared to 2.5 in 2019.

The service-providing sectors — such as education & health services — had an incidence rate of 4.0 in 2020 compared to 5.0 in 2019. Incidence rates in service-providing sectors in 2020 varied from 2.1 in information to 4.3 in state and local government. Leisure & hospitality had an incidence rate of 2.6 (see Figure 3).

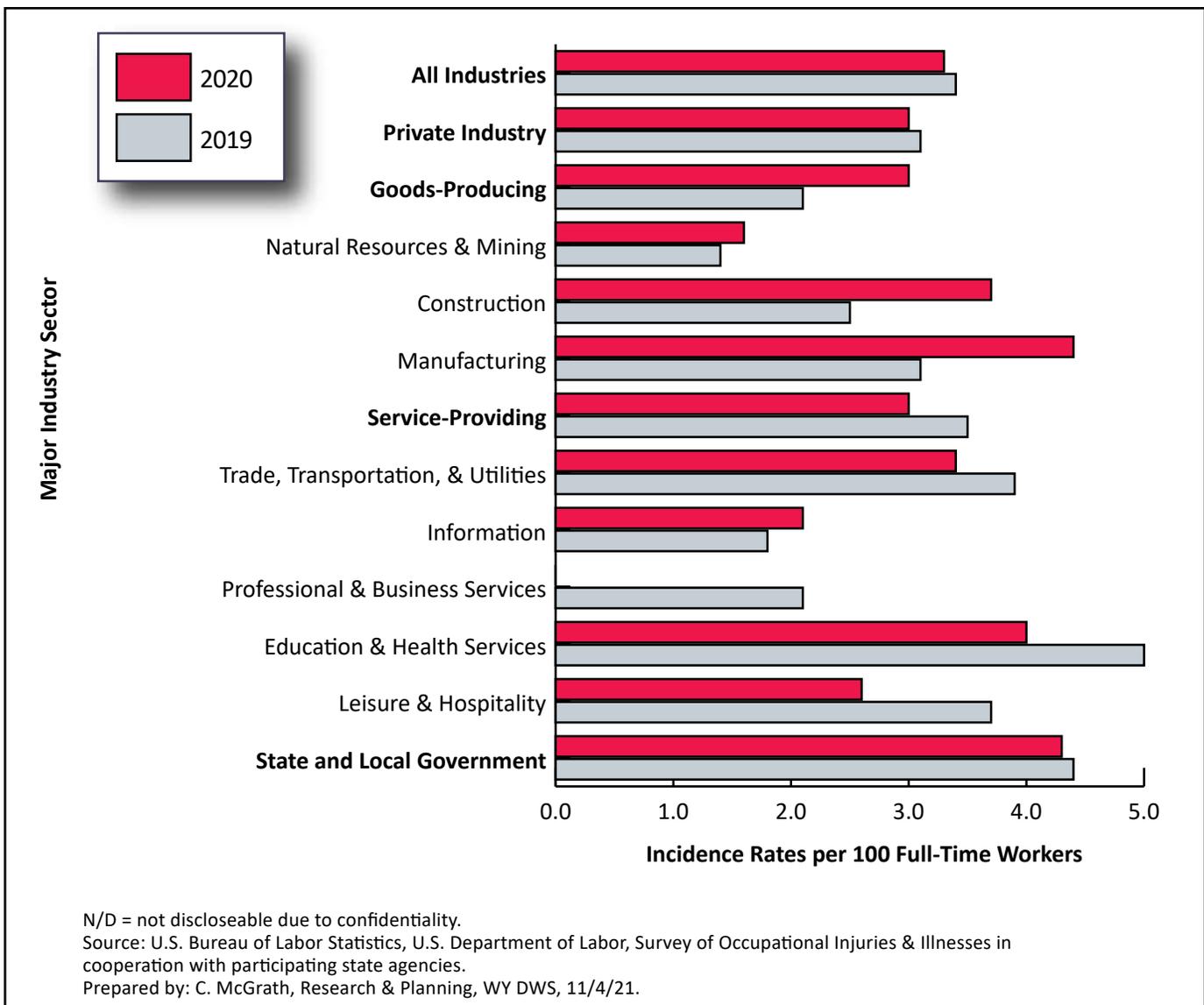


Figure 3: Incidence Rates per 100 Full-Time Workers for Total Nonfatal Occupational Injuries and Illnesses by Major Industry Sector in Wyoming, 2019 and 2020

Industry Subsectors with the Highest Incidence Rates

At the NAICS three-digit subsector level in Wyoming, nursing & residential care facilities had an incidence rate of 10.6 (see Figure 4), followed by wood product manufacturing (7.8), and local government administration of environmental quality programs (7.5).

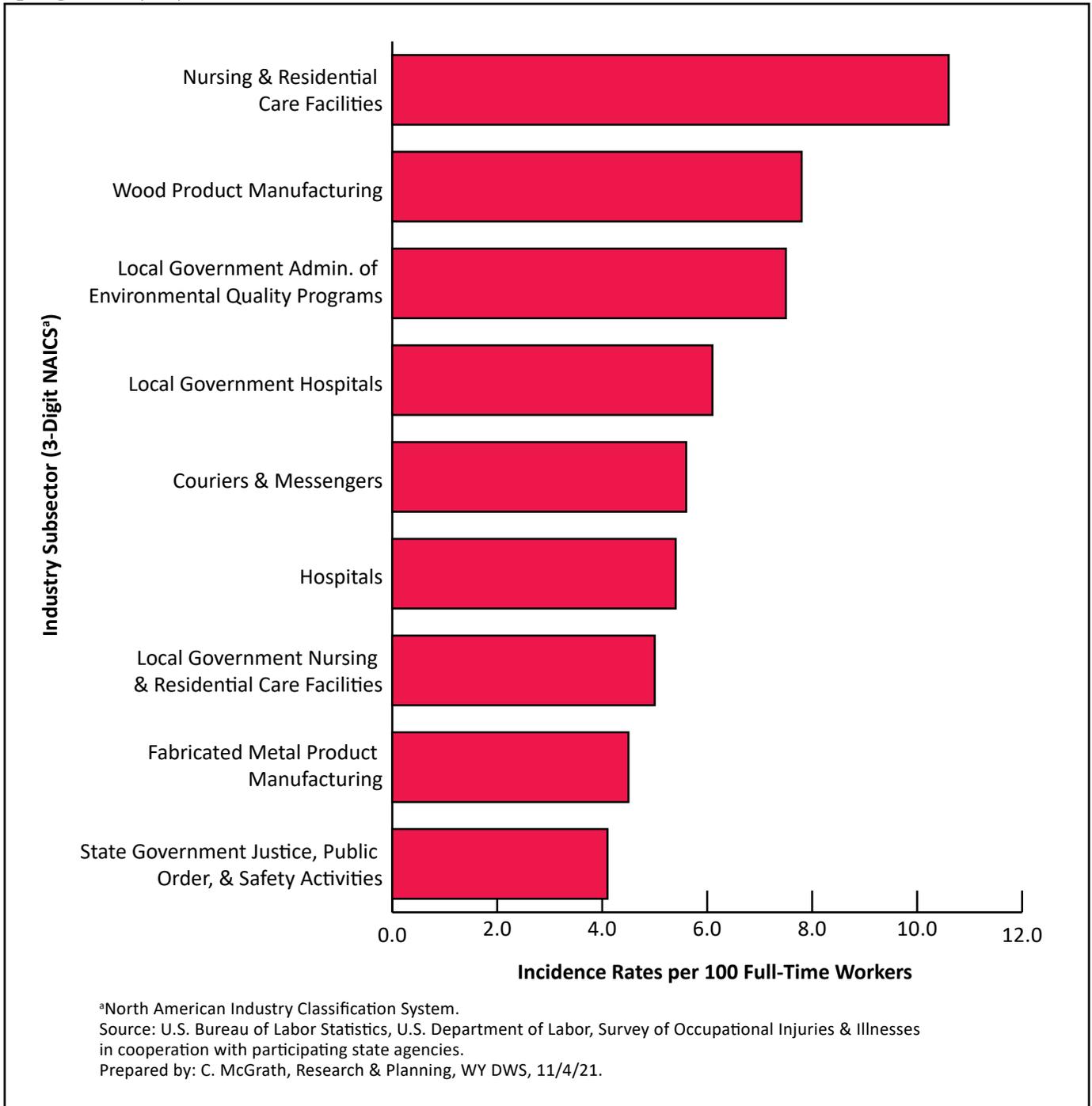


Figure 4: Subsectors (3-Digit NAICS) with the Highest Incidence Rates of Total Nonfatal Occupational Injuries and Illnesses in Wyoming, 2020

Incidence Rates by Employer Size Class

Table 2 shows incidence rates for Wyoming and the U.S. by employer class size from 2016 to 2020. In Wyoming, employers with 50-249 had an incidence rate of 3.7, followed by employers with 250-999 employees with an incidence rate of 3.3 (see Figure 5).

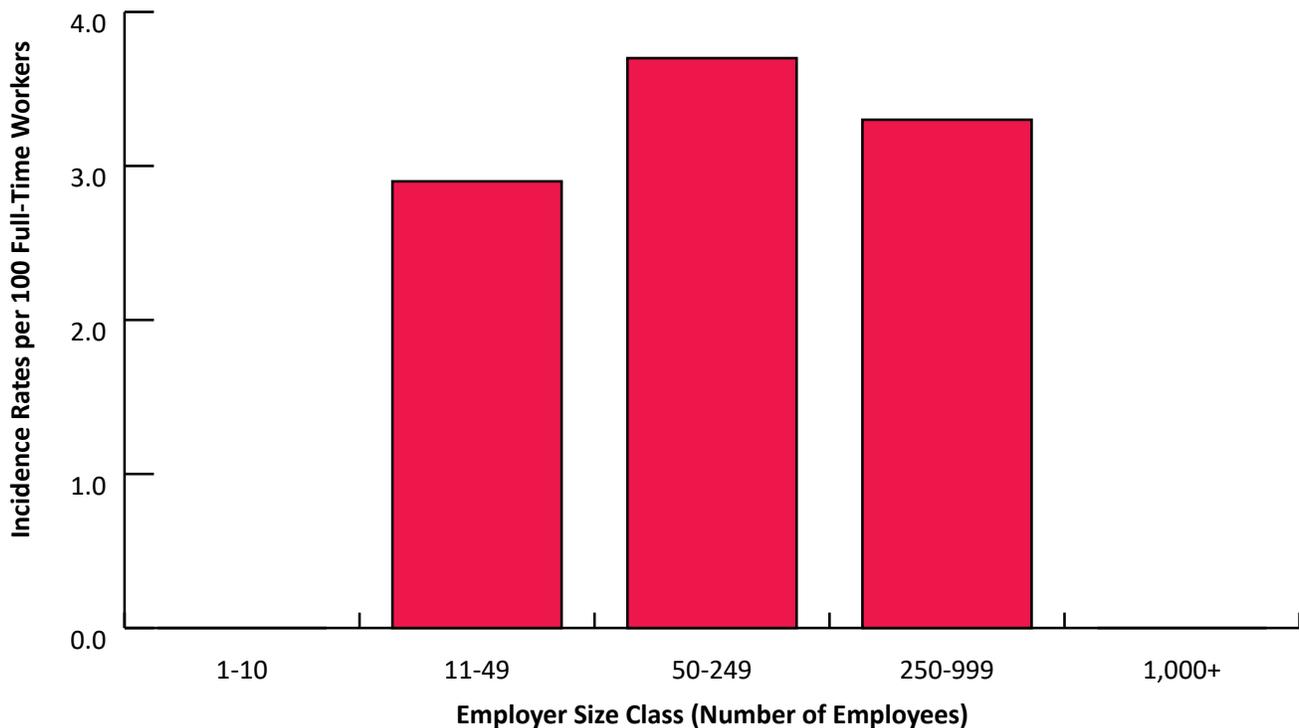
Table 2: Incidence Rates per 100 Full-Time Workers for Total Nonfatal Occupational Injuries and Illnesses by Employer Size Class in Wyoming, 2016-2020

Year	Number of Employees				
	1-10	11-49	50-249	250-999	1,000+
2016	2.8	3.6	3.5	-	-
2017	3.3	3.5	3.7	4.2	0.7
2018	1.9	3.5	3.7	-	-
2019	1.9	3.3	3.7	3.0	3.7
2020	-	2.9	3.7	3.3	-

N/D = not discloseable due to confidentiality.

Source: U.S. Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries & Illnesses in cooperation with participating state agencies.

Prepared by: C. McGrath, Research & Planning, WY DWS, 11/18/21



Source: U.S. Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries & Illnesses in cooperation with participating state agencies.

Prepared by: C. McGrath, Research & Planning, WY DWS, 11/18/21.

Figure 5: Incidence Rates per 100 Full-Time Workers for Total Nonfatal Occupational Injuries and Illnesses by Employer Size Class in Wyoming and the U.S., 2020

Incidents by Major Occupation Group (Men)

Figure 6 shows the number of occupational injuries and illnesses for men by major occupation group in private industry in Wyoming for 2019 and 2020. Construction & extraction occupations recorded 390 injuries & illnesses in 2020, followed by transportation & material moving (330) and production (180). These three occupations followed similar trends in the number of recorded injuries and illnesses in 2019.

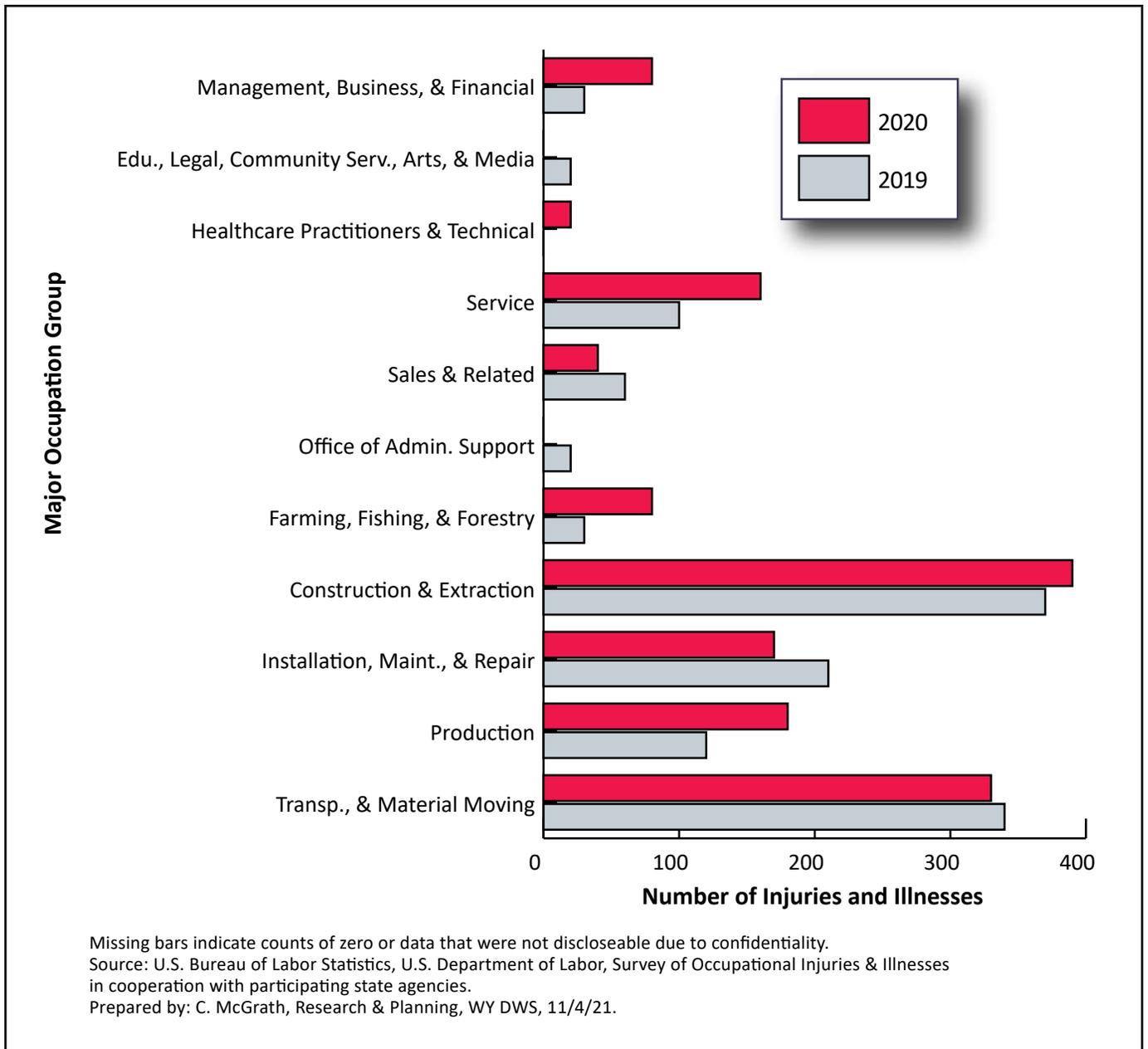


Figure 6: Number of Injuries and Illnesses with Days Away from Work for Men by Major Occupation in Private Industry in Wyoming, 2019 & 2020

Incidents by Major Occupation Group (Women)

The number of occupational injuries and illnesses for women by major occupation group in private industry in Wyoming for 2019 and 2020 are shown in Figure 7. Women working in service occupations reported 350 injuries & illnesses in 2020 and 270 in 2019. Occupations within the service group include protective service workers, security guards, animal control workers, and several others. Healthcare practitioners & technical occupations followed with 110 incidents in 2020 compared to 40 in 2019.

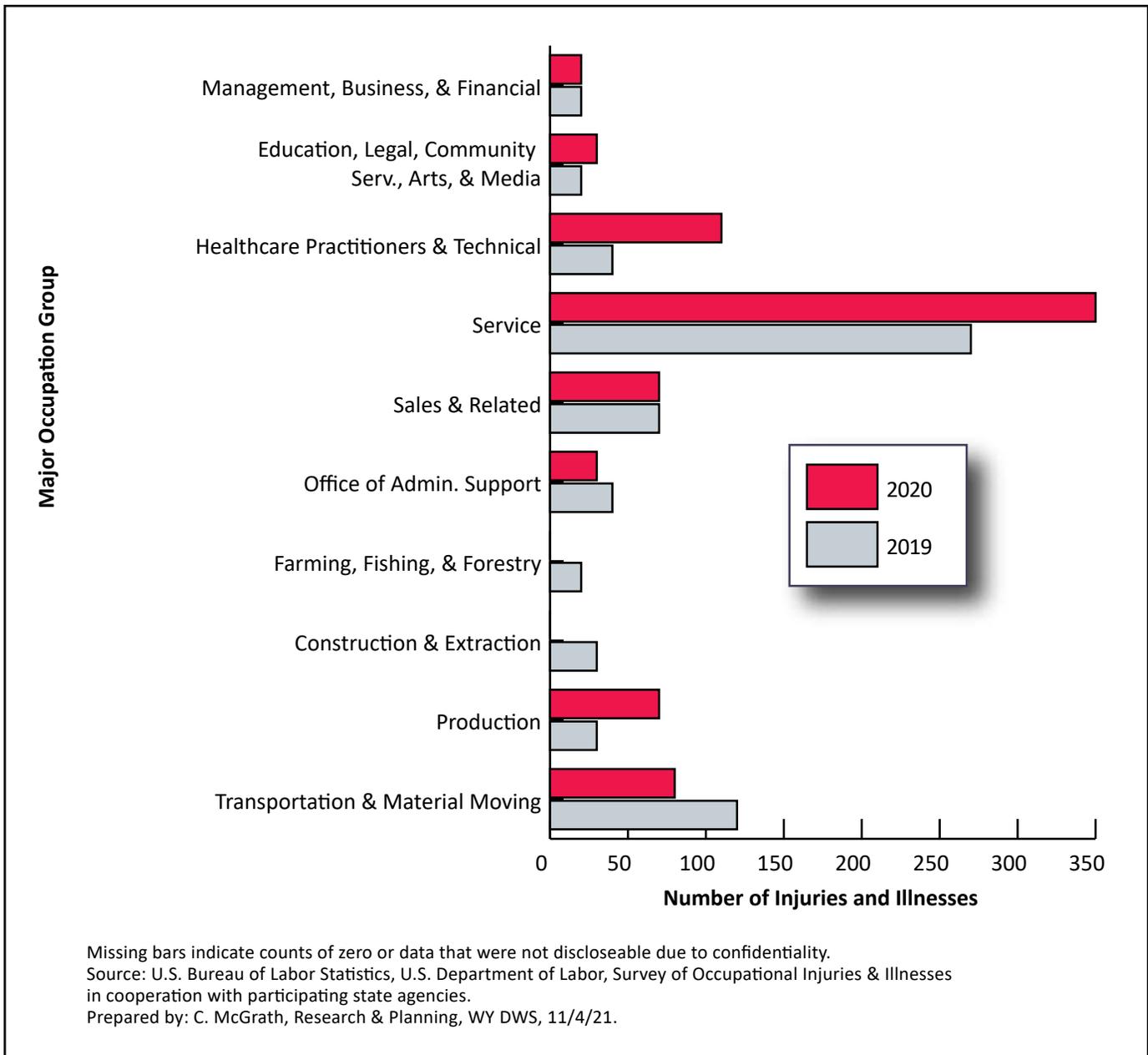
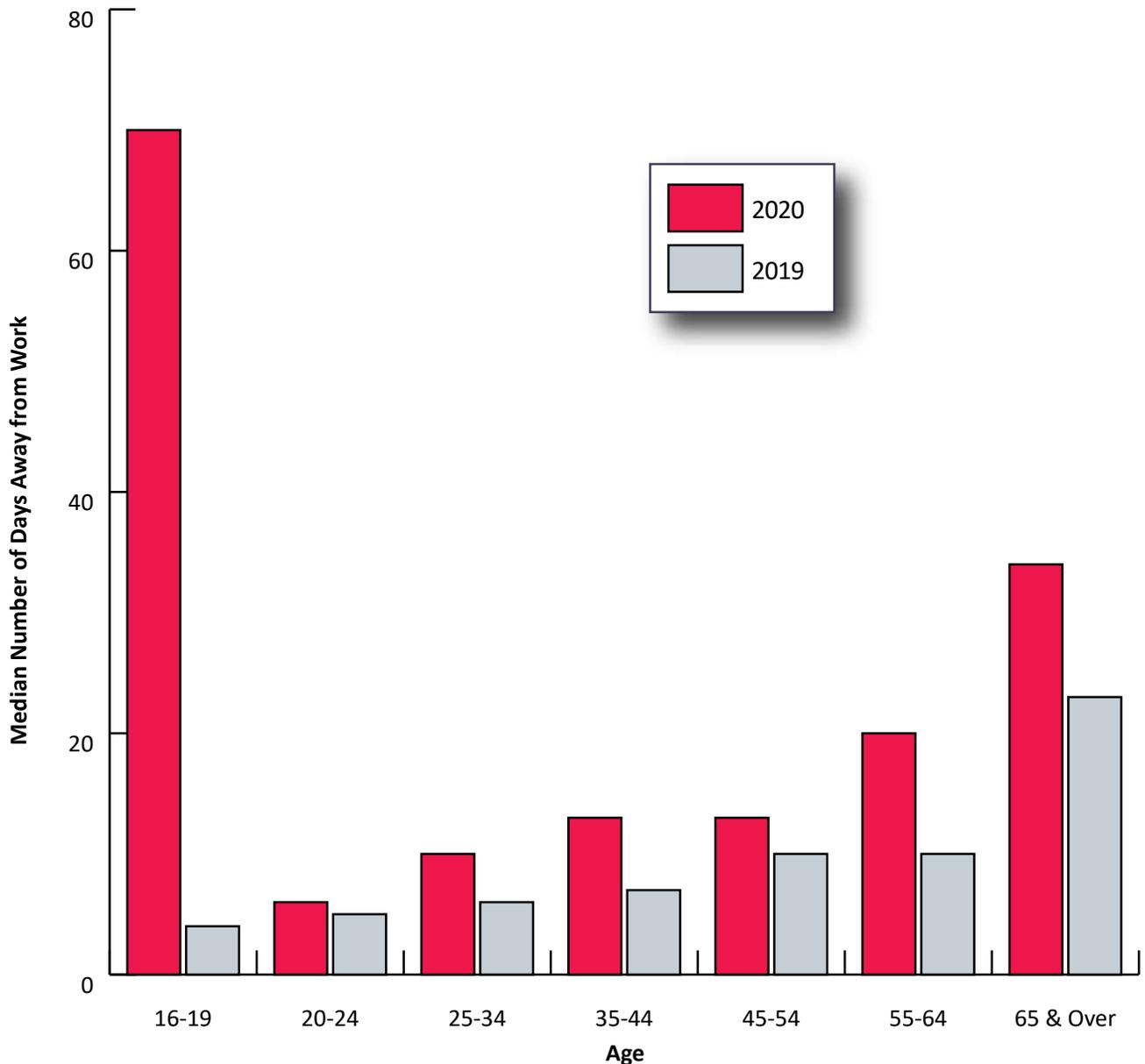


Figure 7: Number Of Injuries and Illnesses with Days Away from Work for Women by Major Occupation in Private Industry in Wyoming, 2019 & 2020

Days Away From Work

The median number of days away from work by age in private industry in Wyoming in 2019 and 2020 are shown in Figure 8. In 2020, individuals ages 16-19 reported 70 days away from work on average, followed by ages 65 & over with 34.



Source: U.S. Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries & Illnesses in cooperation with participating state agencies.
 Prepared by: C. McGrath, Research & Planning, WY DWS, 11/4/21.

Figure 8: Median Number of Days Away from Work Due to Injuries and Illnesses with Days Away from Work in Private Industry in Wyoming 2019 & 2020

Length of Service

Figure 9 shows the proportion of injuries and illnesses by length of service and gender in private industry in Wyoming in 2020. Of the 1,490 injuries and illnesses reported for men, 44.0% occurred among men who had been with an employer for one to five years. For women in 2020, 37.0% of the 790 reported injuries and illnesses occurred among those who had been with an employer for one to five years, followed by 27.0% employed three to 11 months.

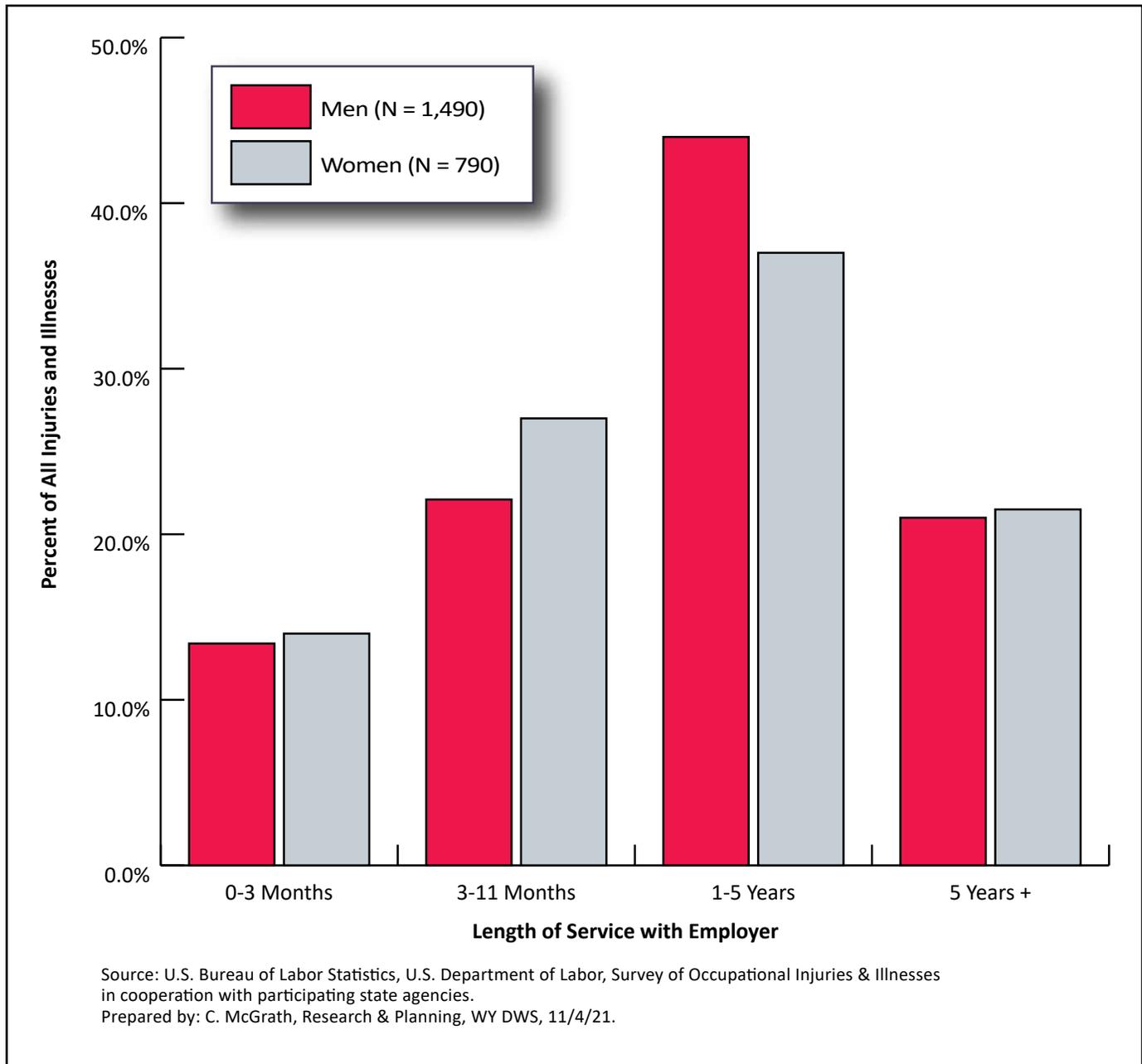


Figure 9: Proportion of Injuries and Illnesses with Days Away from Work by Length of Service and Gender in Private Industry in Wyoming, 2020

Nature of Injury or Illness

The *nature of injury or illness* refers to the physical characteristics of the disabling injury or illness, such as cuts, fractures, or sprains. In 2020, 29.1% of the 2,300 cases of nonfatal occupational injuries or illness in private industry in Wyoming resulted in sprains, strains, tears, and 16.1% caused soreness, pain (see Figure 10). Bruises and contusions accounted for 7.4% of the nature of injury or illness.

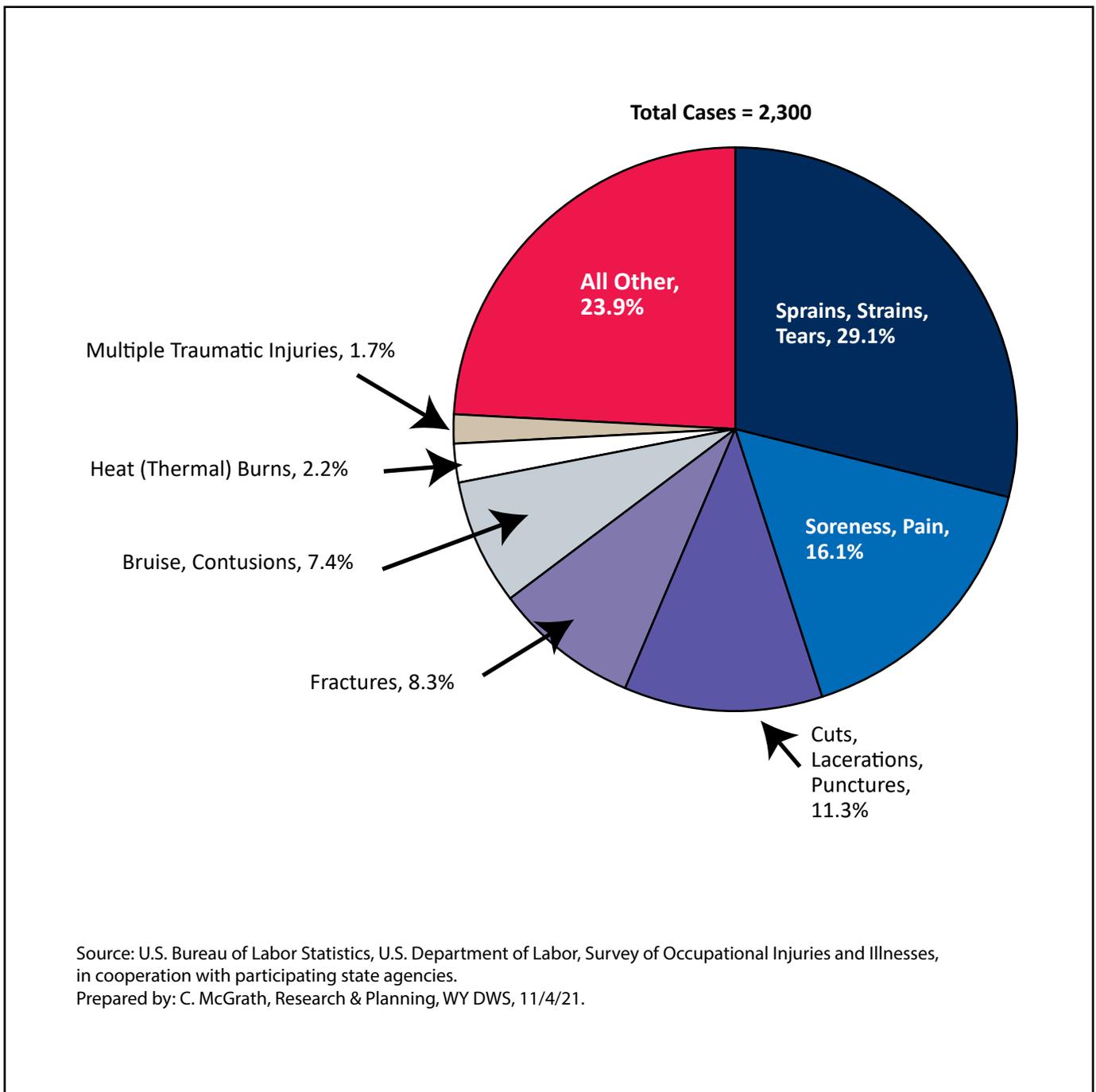


Figure 10: Distribution of Injuries and Illnesses with Days Away from Work by Nature in Private Industry in Wyoming, 2020

Part of the Body

The *part of the body* is directly linked to the nature of injury or illness cited, such as back, finger, or eye. Figure 11 shows that upper extremities had 690 injuries and illnesses, or 30% of the total 2,300 cases in 2020. The category titled upper extremities includes the elbow, arm, wrist, fingers, hand, and shoulder. There were 540 (23.5%) injuries and illnesses related to lower extremities, which includes the thigh, leg, knee, foot, and toes.

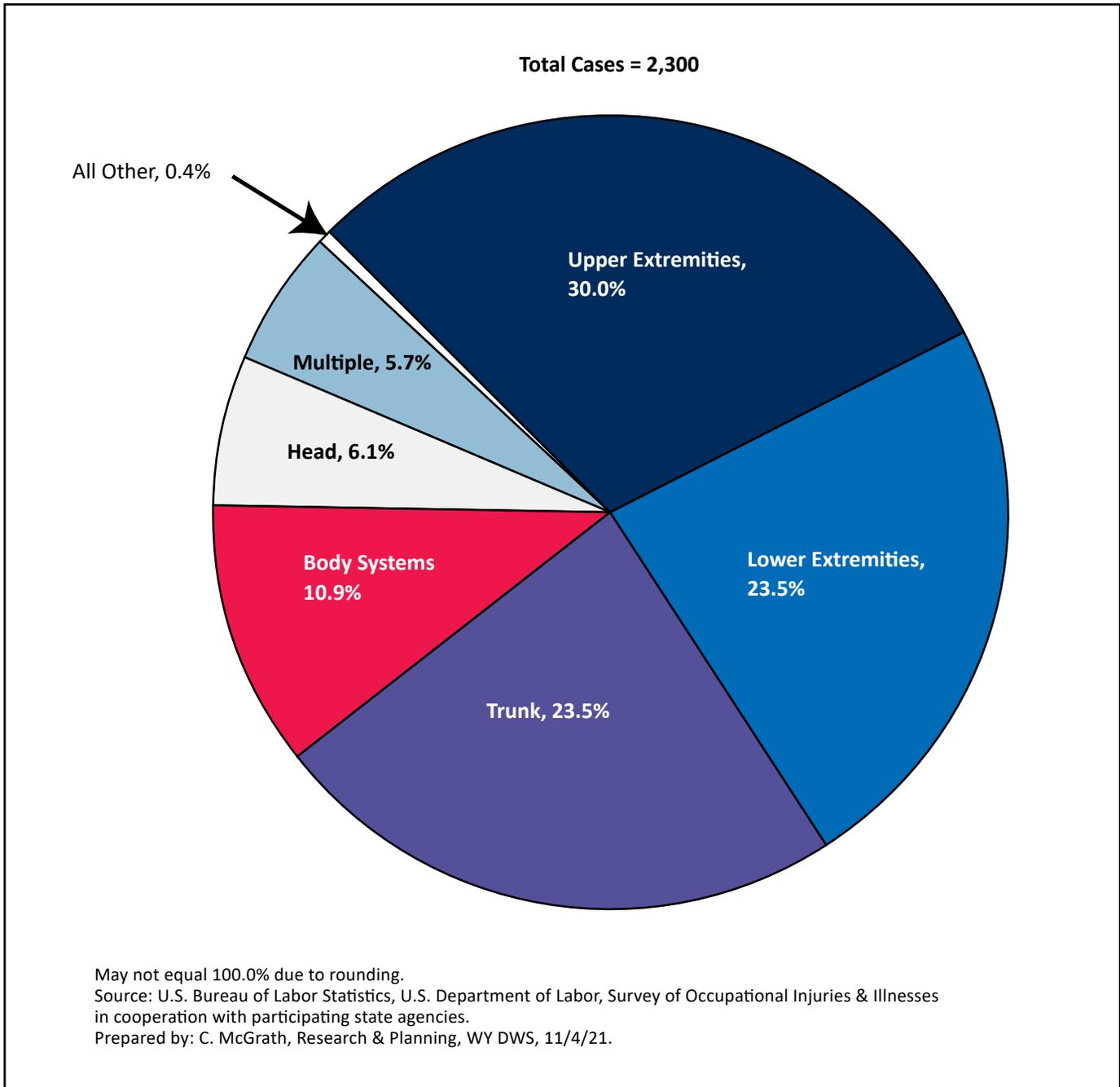


Figure 11: Distribution of Injuries and Illnesses with Days Away from Work by Part of Body in Private Industry in Wyoming, 2020

Event or Exposure

The *event or exposure* in a case is the manner in which the injury or illness was produced or inflicted, such as falls, overexertion, or repetitive motion. Contact with object, equipment, and overexertion and bodily reaction accounted for 520 and 460 injuries or illnesses, respectively, among men in 2020 (see Figure 12). For women, overexertion and bodily reaction accounted for 230 injuries or illnesses, followed by exposure to harmful substances or environments (200).

An example of an injury or illness that would be produced by overexertion and bodily reaction would be a job that required excessive amounts of physical exertion, such as standing, climbing, kneeling, bending, or stepping, which resulted in the injury or illness. The injuries or illnesses inflicted in contact with object, equipment category are a result of contact between the injured person and the source. Examples would be an employee being cut by a slipping knife or an employee caught under collapsing material.

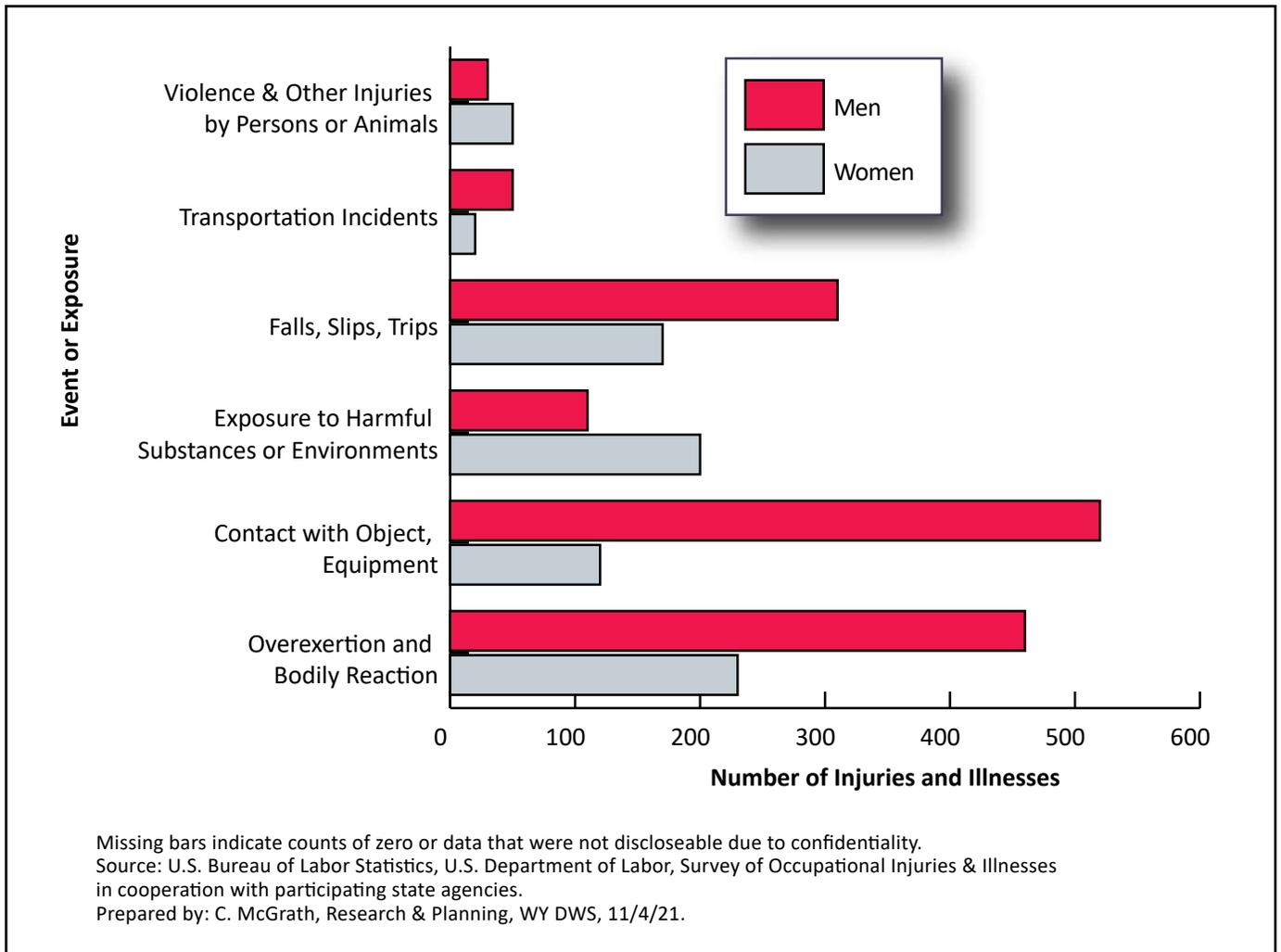


Figure 12: Distribution of Injuries and Illnesses with Days Away from Work by Event or Exposure in Private Industry in Wyoming, 2020

Source of Injury or Illness

The *source of a nonfatal occupational injury or illness* is the object, substance, exposure, or bodily motion that directly caused the disabling condition, such as chemical, vehicle, or machinery. Figure 13 illustrates the distribution of injuries and illnesses by source for private industry in Wyoming in 2020. Of the 2,300 total cases, person, injured or ill worker was the source for 15.2% of all cases. Containers followed with 330 cases, or 14.3%. One example of when the injured or ill worker was the source of an injury. It involved an incident with a slip or trip without falling. If a worker trips over a box on the floor without falling and suffers a sprain, the source is the employee and the box is the secondary source as a contributing factor. Containers are classified as receptacles that are used to store, hold, or carry materials and include pressurized and non-pressurized containers.

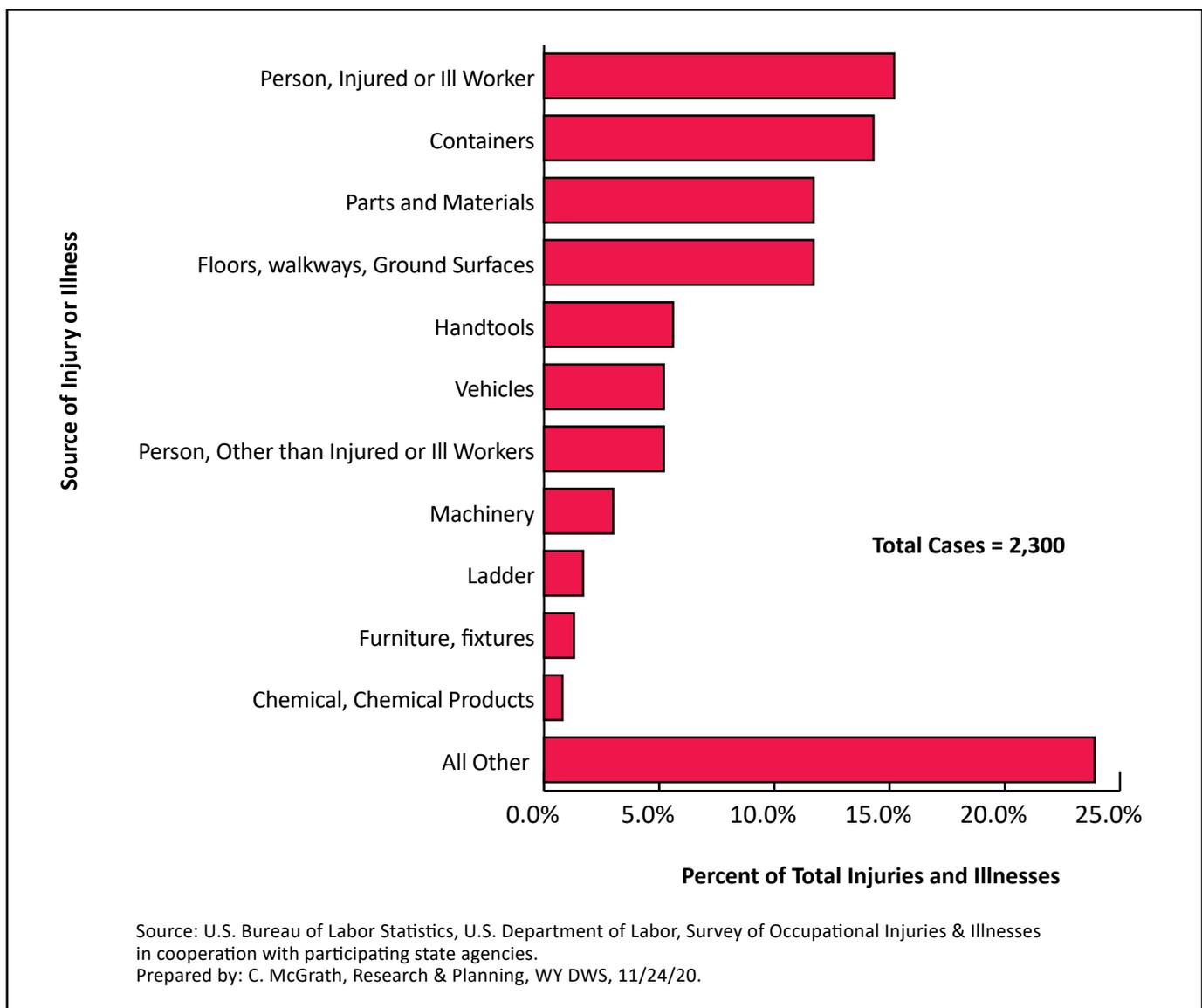


Figure 13: Distribution of Injuries and Illnesses with Days Away from Work by Source in Private Industry in Wyoming, 2020



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