Allsup Study of Workplace Injuries

Introduction

A 20-year-old worker has a 30 percent chance of becoming disabled before reaching retirement age, according to the Social Security Administration (SSA). The SSA tracks these statistics through its administration of the Social Security Disability Insurance (SSDI) program. SSDI is a federal insurance program that provides seriously injured or ill workers income until their conditions improve or they qualify for retirement benefits.

However, only a small percentage of the American population with disabilities will qualify for SSDI. Qualified beneficiaries will have conditions that restrict them from doing their previous work, prevent them from adjusting to other work because of medical condition(s); and will last for at least one year or result in death. Many others will suffer serious injuries or illnesses that still don't qualify for SSDI.

An Internet search for "most dangerous jobs in America" returns an annual ranking of high-risk occupations from information collected by the U.S. Department of Labor's Bureau of Labor Statistics (BLS). The National Census of Fatal Occupational Injuries (CFOI) tallies lethal accidents across all occupations and annually leads with high-risk jobs on the frontiers of water, land and sky.

Occupations with Highest Fatal Work Injury Rates

1. Fishers and related fishing workers
2. Logging workers
3. Aircraft pilots and flight engineers
4. Refuse and recyclable material collectors
5. Roofers
6. Structural iron and steel workers
7. Farmers, ranchers and other agricultural managers
8. Driver/sales workers and truck drivers
9. Electrical power-line installers and repairers
10. Taxi drivers and chauffeurs

Source: U.S. Bureau of Labor Statistics

The fact that fishermen, loggers and pilots have spawned numerous reality shows in recent years, while garbage collectors have not, certainly demonstrates the importance of attractive scenery when pitching a TV concept. However, it also highlights the gap that can exist between perceived and actual occupational risk.

A recent report from the SSA's Office of Retirement and Disability Policy, "Outcome Variation in the Social Security Disability Insurance Program: The Role of Primary Diagnoses," used statistical sampling to identify injuries as the sixth-leading cause of SSDI claims. However, many claims not filed as injuries involve conditions that can be job related. For example, musculoskeletal conditions make up the largest category of SSDI claims. This class includes items such a degenerative back disorders that can be caused or exacerbated by work and severely hamper an individual's ability to find a new source of employment.

Each year, more than 1 million U.S. workers—many working in industries that don't seem particularly unsafe—experience an injury that causes them to miss a day or more of work. Even in the most dangerous industries, workers are far more likely to be seriously injured each year than they are to be killed.

A second annual BLS report, Nonfatal Occupational Injuries and Illnesses Requiring Days Away From Work, presents information on those serious, but nonfatal, workplace injuries and illnesses. However, the BLS presents the data only at a high level and in a way that makes cross-state comparisons time-consuming and difficult.

Allsup, a nationwide provider of Social Security disability, veterans disability appeal, Medicare and Medicare Secondary Payer compliance services for individuals, employers and insurance carriers, has developed this report to resolve that issue. The results should be eye opening for policymakers, workplace safety advocates and Americans who may underestimate their chances of experiencing a disabling injury.

Report Methodology

Every November, the BLS publishes results from a national survey of employers: "Nonfatal Occupational Injuries and Illnesses Requiring Days Away From Work."[1] In addition to its own reports, the BLS makes available for FTP download the underlying data in a flat file format (ftp://ftp.bls.gov/pub/time.series/ii/).

Using those data, Allsup built a relational database that can be used to quickly search for and present direct comparisons of injury rates across states and industries. By drilling deeper into those data, Allsup is able to show not just which industries are responsible for the most serious injuries—but where. That information makes up the bulk of this report.

Note that individual data for 2011 are only available from 41 states and the District of Columbia. The following states do not consistently report data to the U.S. Bureau of Labor Statistics and could not be incorporated for the purposes of this study: Colorado, Idaho, Mississippi, New Hampshire, North Dakota, Ohio,[2] Rhode Island and South Dakota. Florida has participated in this reporting program in the past, but 2011 data are not available.

At a time when nearly 9 million workers receive SSDI benefits—many of whom originally may have been injured on the job—this sort of information should be made available from all jurisdictions. See ftp://ftp.bls.gov/pub/time.series/ii/ii.txt for more information about these data.

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[1] Occupational illnesses make up a small percentage of all workplace events (5 percent of the total injuries and illnesses). Many of these illnesses would be considered injuries in common parlance (e.g., hearing loss, skin conditions caused by chemical exposure, poisoning and frostbite). For brevity, we use the term "injuries" in this report to mean "injuries and illnesses." For more regarding BLS injury definitions, see: http://www.bls.gov/iif/oshdef.htm

[2] Ohio recently received a matching grant to begin participating in this survey in future years. http://www.riskandinsurance.com/story.jsp?storyId=533351748

Serious Injuries Can Touch Anyone

In 2011, the food manufacturing industry experienced 51 fatal injuries, according to BLS statistics. This was a rate of 3.1 per 100,000 workers, close to the 2011 national average of 3.5.

Assuming that the food manufacturing industry's fatal injury rate holds steady from year to year, some math shows that an "average" worker in the industry has a 0.09 percent chance of dying in a workplace accident over a 30-year career (see box at right). Any rate above zero is clearly too high, but the chance any one worker in this industry will die on the job is very low.

Now, consider nonfatal injuries. The BLS makes available the number and rate of nonfatal injuries that are nonetheless serious enough to involve "days of job transfer or restriction":

> "Job transfer or restriction cases occur when, as a result of a work-related injury or illness, an employer or health care professional keeps, or recommends keeping an employee from doing the routine functions of his or her job or from working the full workday that the employee would have been scheduled to work before the injury or illness occurred."
> *Source: http://www.bls.gov/iif/oshdef.htm*

Calculating 30-year Injury Rates

Calculating the chance an event with a known annual probability happens at least once over a longer period requires finding the chance the event *doesn't* occur and subtracting that probability from one. For 30-year injury rates, the general formula would then be:

1 - (% chance of non-injury) ^ (# of years)
= % chance of injury

We can complicate the math by using a statistical tool known as a "Poisson distribution" to calculate the likelihood someone experiences *more* than one serious injury in a 30-year career, but that's not necessary for the purposes here.

The transfers or restrictions can be temporary or permanent, depending on severity. Workers with permanent disabilities may qualify for workers' compensation or Social Security Disability Insurance, which provides seriously injured or ill workers income until their conditions improve or they reach Social Security retirement age.

In 2011, the food manufacturing industry experienced 29,900 nonfatal injuries that required job transfers or restrictions—a rate of 2,100 per 100,000 workers. Applying the same 30-year analysis as above, we find that an average food-manufacturing worker has almost a one in two chance of suffering a serious injury over a 30-year career.

Not all of these injuries will leave an individual permanently disabled. Some employers may be able to accommodate transfer within the company after rehabilitation.

We find similar results in industries that would rank as much less dangerous on lists based solely on fatality rates. Privately owned U.S. hospitals experienced 16 fatalities in 2011, a rate of 0.3 per 100,000 workers. Over an average 30-year career, a private-sector hospital worker could expect to have a fatal injury chance of less than 0.01 percent.

However, those same hospitals were the site of 41,700 injuries or illnesses requiring days of job transfer or restriction—a rate of 1,100 per 100,000 workers. Over a 30-year career, that equates to a one in four chance that at some point, a worker will be forced to deal with a serious work-related injury or illness.[3]

Variation by State

These eye-opening figures understate the risk some workers face. Major occupational injury rates vary significantly by state. According to a 2003 BLS report regarding workplace fatalities, one primary reason for this variation is the mix of industries operating within each state:

> "[S]imple comparisons between States can be a bit misleading. Many rural States, for example, have fatality rates much greater than those of States with a more urban composition; the differences are not reflective of the concern for safety within those States, but, rather, of differences in the industry or type of work among those States."[4]

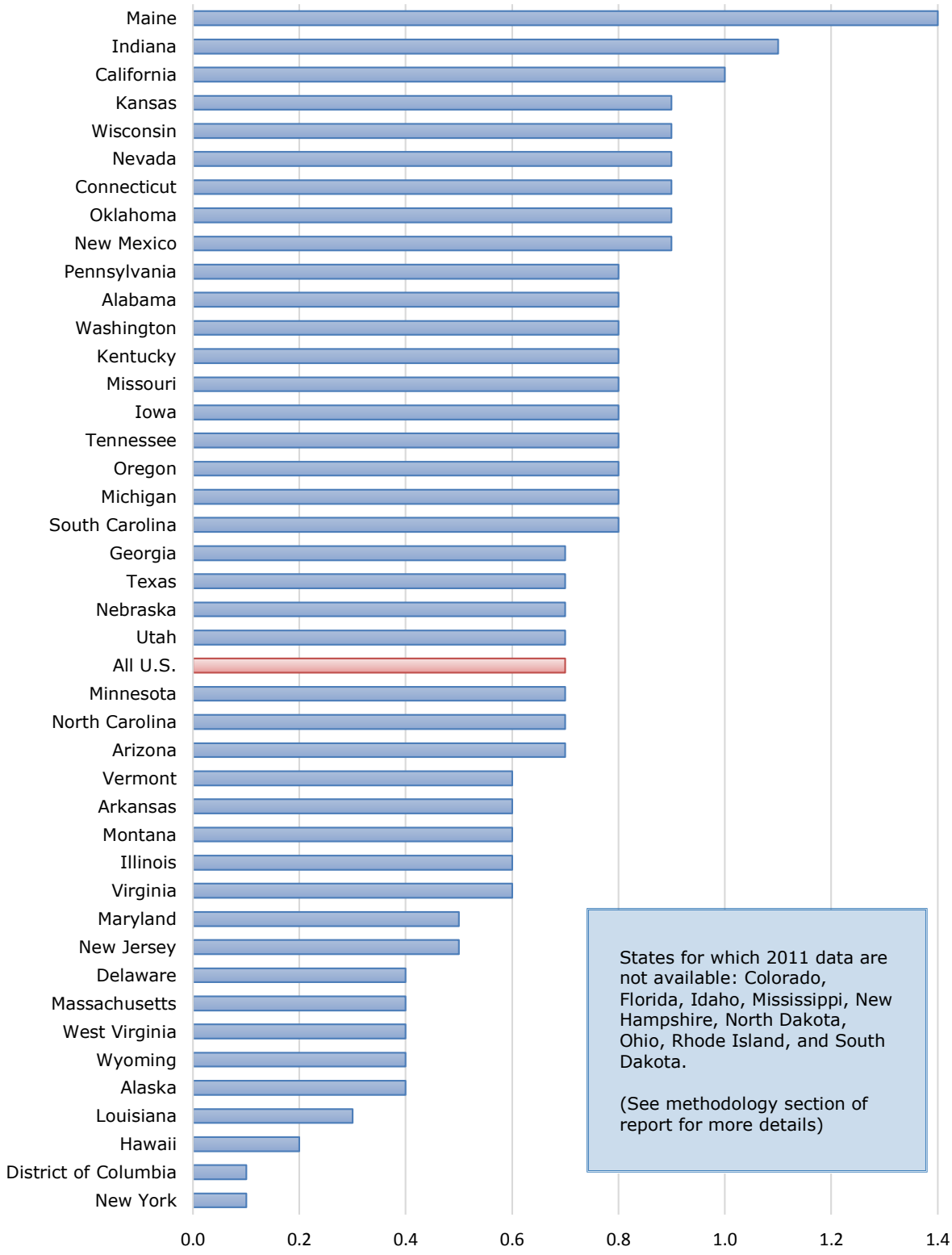
As this report will demonstrate, state injury rates can vary substantially for workers in the same industries. These variations could be due to a wide range of factors, including differing environmental conditions—operating a tractor on heavily sloped terrain can be far more dangerous than on flatlands—and regulatory issues, such as differences in state disability policies, workers' compensation regimes, or even reporting practices.

These issues are outside the scope of this report, but represent an area for further study and investigation by labor groups, employers, media and policymakers.

[3] Moving forward, we will focus on the annual injury rates per 100 full-time workers. However, the 30-year calculations expressed above can provide a better overall sense of lifetime risk.

[4] These same industry variations are why there are limits to the data presented later in this report. For example, if an industry does not have a substantial presence within a state, no state-level injury statistics will be available.

Injury & Illness Cases with Days of Job Transfer or Restriction Per 100 Full-Time Workers | All Industries



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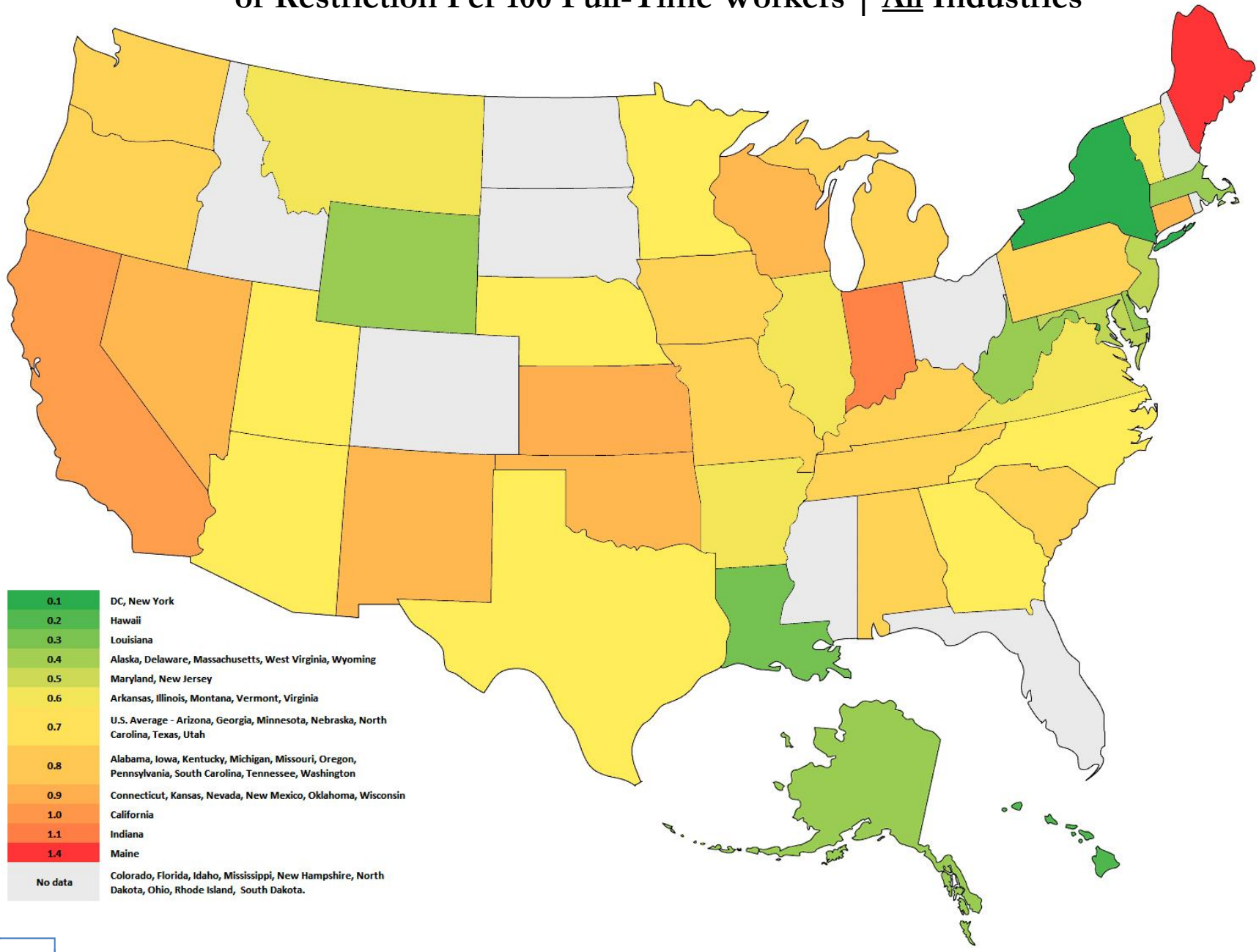
State Variation in Injury & Illness Cases with Job Transfer or Restriction Per 100 Full-Time Workers | All Industries



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Private Sector vs. Government Workforces

Injury and illness rates are similar between the private and public sectors. In 2011, the rate of injury and illness cases per 100 full-time workers was 0.7 in private industry and 0.6 in state and local governments. However, because the private sector accounts for the vast majority of U.S. jobs, it also sees most of the injuries (see table below).

Private vs. Public Sector Injury & Illness Rates per 100 Full-Time Workers

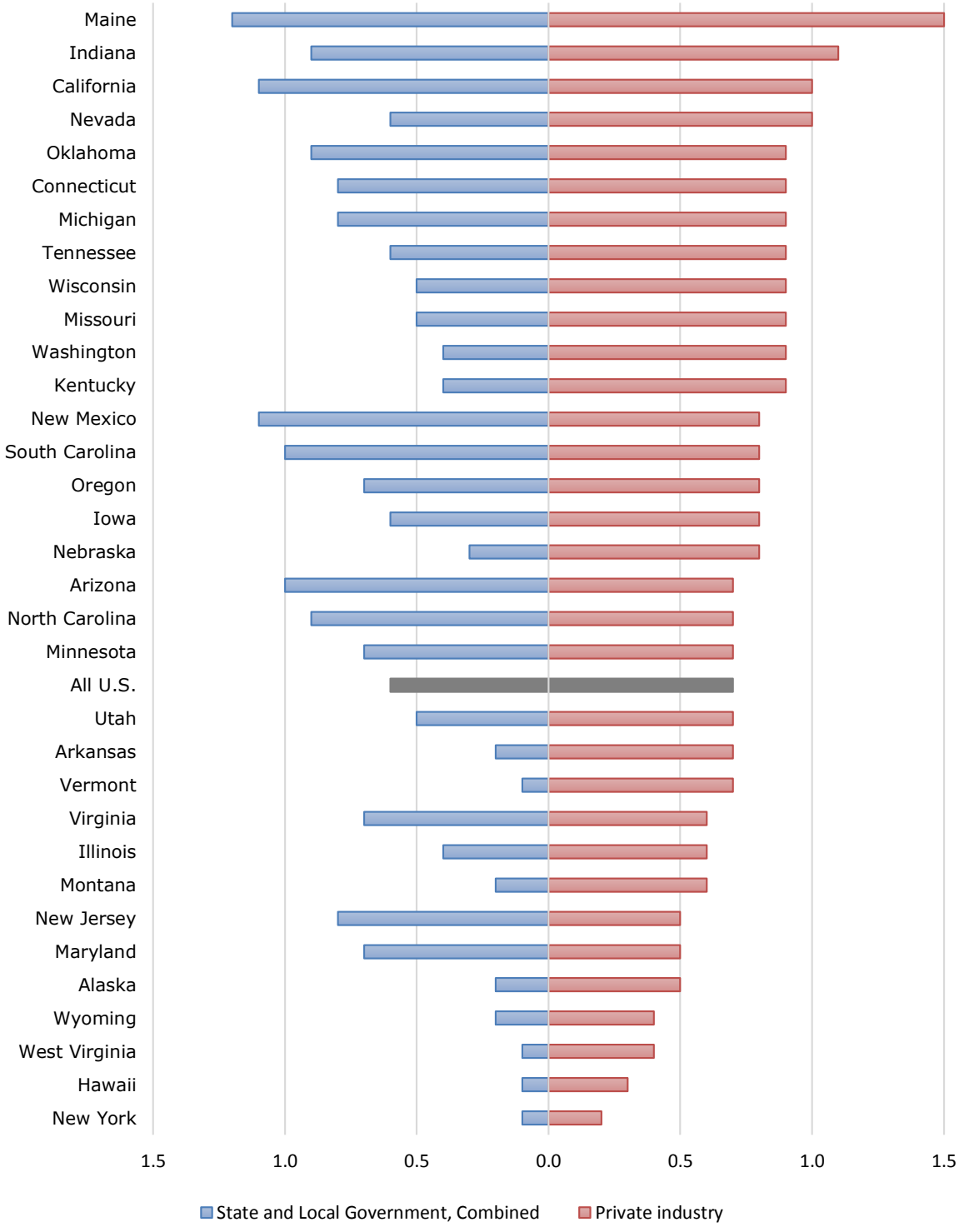
	Injury and illness cases involving days of job transfer or restriction (thousands)	Rate of injury & illness cases per 100 full-time workers
Private industry *	630.4	0.7
State and local government combined	92.1	0.6
State government	18.5	0.5
Local government	73.7	0.7
All ownerships	722.5	0.7

* ***Reminder when comparing raw data: Most Americans are employed in the private sector***

Within states, private and public sector injury rates do not move in lockstep. There is a high-level statistical relationship,[5] but, for example, although both Nebraska and New Mexico have a private industry injury and illness rate of 0.8 per 100 full-time workers, the former's public-sector injury rate is 0.3 while the latter's is 1.1 (see chart next page). We see similar variation when comparing injury rates for private industry, state governments and local governments for the states that provide this level of data (see figures below and next page).

[5] Correlation coefficient for 2011 private and public sector injury rates: 0.62.

Injury & Illness Cases with Days of Job Transfer or Restriction per 100 Full-Time Workers | Private vs. Public Sector



Not all states provide injury rates for public sector employers. States for which 2011 data are not available: Alabama, Colorado, Delaware, Florida, Georgia, Idaho, Kansas, Louisiana, Massachusetts, Mississippi, New Hampshire, North Dakota, Ohio, Pennsylvania, Rhode Island, South Dakota and Texas.

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Most Work-Threatening Industry Groups Nationwide

Using BLS data, we can look at the most work-threatening industries nationwide based on the rates of injuries that are serious enough to involve "days of job transfer or restriction." The following table compares those national rates to the rates in individual states to find places that are significantly higher or lower than the national average. As industry classifications get more specific, fewer state-level results are reported, either because the industry itself is small or it has a small (or nonexistent) footprint in a specific state.

Most Work-Threatening Industry Groups Nationwide

As determined by four-digit NAICS code (e.g., dairy product manufacturing = 3115XX)
State-level rates of injury and illness per 100 full-time private industry workers
Cases involving days of job transfer or restriction

#	Industry	U.S. Average	Highest States	Lowest States
1	Amusement parks and arcades	3.2	No state rates available.	
2	Animal slaughtering and processing	3.1	Oregon - 8.3 Nebraska - 5.5 Kansas - 4.5 Tennessee - 4.4 Indiana - 3.9	Washington - 2.2 South Carolina - 2.1 Maryland - 1.9 New Jersey - 1.2 Louisiana - 0.7
3	Beverage manufacturing	2.7	Oklahoma - 6.6 Tennessee - 4.2 Michigan - 3.7 California - 3.5 Minnesota - 3.0	Washington - 2.4 Massachusetts - 2.3 North Carolina - 1.5 Kentucky - 0.9 Louisiana - 0.7
	Foundries	2.7	Utah - 6.1 Wisconsin - 3.6 Kentucky - 3.4 California - 3.1 Texas - 3.0	Tennessee - 2.6 Alabama - 2.2 Oregon - 2 Virginia - 1.1 Michigan - 1.0
5	Nursing care facilities	2.6	Maine - 5.1 Minnesota - 3.5 Wisconsin - 3.0 Utah - 2.7	

#	Industry	U.S. Average	Highest States	Lowest States
6	Beer, wine, and distilled alcoholic beverage merchant wholesalers	2.4	Texas - 2.8 New Jersey - 2.6	Nevada - 1.9 Maryland - 1.5 Massachusetts - 1.4 Louisiana - 0.8 New York - 0.5
7	Motor vehicle body and trailer manufacturing	2.3	Washington - 6.8 Texas - 3.2 Indiana - 3.1 Nebraska - 3 Oklahoma - 2.4	Minnesota - 1.9 Alabama - 1.9 Oregon - 1.6 Utah - 1.5 Michigan - 1.3
8	Hog and pig farming	2.2	No state rates.	
	Motor vehicle manufacturing	2.2	North Carolina - 3.5 Indiana - 3.2 Texas - 2.8	Michigan - 2.2 Minnesota - 2.0 South Carolina - 1.3 Tennessee - 1.1
	Community care facilities for the elderly	2.2	Maine - 3.7 Utah - 3.2 Wisconsin - 2.4	
	Poultry and egg production	2.2		Missouri - 1.9

Notes:

The following states do not consistently report data to the U.S. Bureau of Labor Statistics and so could not be incorporated into this study: Colorado, Idaho, Mississippi, New Hampshire, North Dakota, Ohio, Rhode Island and South Dakota. Florida has participated in this reporting program in the past, but 2011 data are not available. See methodology section for more information.

Under the NAICS industrial classification system, the first two digits describe the industry sector, the third the industry subsector, the fourth the industry group, and the fifth the specific industry.

The BLS surveys employers nationwide. However, as the industry classifications get more specific, fewer state-level results are reported, either because the industry itself is small or it has a small (or nonexistent) footprint in a specific state.

Most Work-Threatening Industries by Location

Using data provided by the BLS, we can look at all industries in every reporting state to determine the most dangerous places in America to work—based on the local rates of injuries that are serious enough to involve "days of job transfer or restriction."

We also can compare those rates to the national averages within each industry to determine how much greater the risk actually is. For example, both the soft drink manufacturing industry in Texas, and the household and institutional furniture and kitchen cabinet manufacturing industry in Utah have injury rates of 4.0 per 100 full-time workers. However, the national averages for those industries are 3.8 and 1.5 respectively, meaning the high injury rates in Utah are far more atypical.

There are some practical limitations to these data. Information is not always available for all states and industries. The information provided by the BLS also may be restricted, if the number of injury cases is very low and could be used to identify an individual firm. These data are therefore naturally aligned with states that have significant employment within a given industry.

Most Work-Threatening Industries by Location

State-level rates of injury and illness per 100 full-time workers
Cases involving days of job transfer or restriction

#	State	Industry	Owner	State Rate	U.S. Average	Ratio of State to U.S. Avg.
1	Oregon	Animal slaughtering and processing	Private	**8.3**	3.1	**2.7**
2	Maine	Nursing and residential care facilities	State Gov't	**7.1**	1.5	**4.7**
	Maryland	Hospitals	State Gov't	**7.1**	1.2	**5.9**
4	Texas	All other wood product manufacturing	Private	**7.0**	2.6	**2.7**
5	Washington	Motor vehicle body and trailer manufacturing	Private	**6.8**	2.3	**3.0**
6	Oklahoma	Beverage and tobacco product manufacturing	Private	**6.4**	2.5	**2.6**
7	Massachusetts	Natural gas distribution	Private	**6.2**	1.5	**4.1**
8	Utah	Foundries	Private	**6.1**	2.7	**2.3**
9	California	Soft drink and ice manufacturing	Private	**5.6**	3.5	**1.6**

#	State	Industry	Owner	State Rate	U.S. Average	Ratio of State to U.S. Avg.
10	Nebraska	Animal slaughtering and processing	Private	**5.5**	3.1	**1.8**
11	Massachusetts	Utilities	Private	**5.4**	0.9	**6.0**
	Nevada	Framing contractors	Private	**5.4**	1.3	**4.2**
13	Arizona	Framing contractors	Private	**5.3**	1.3	**4.1**
14	Illinois	Hospitals	State Gov't	**5.2**	1.2	**4.3**
	Maine	Warehousing and storage	Private	**5.2**	1.9	**2.7**
16	Maine	Nursing care facilities	Private	**5.1**	2.6	**2.0**
17	Kansas	Primary metal manufacturing	Private	**5.0**	1.7	**2.9**
18	Iowa	Metalworking machinery manufacturing	Private	**4.9**	0.9	**5.4**
	Maine	Building material and garden equipment and supplies dealers	Private	**4.9**	1.8	**2.7**
	Michigan	Support activities for agriculture and forestry	Private	**4.9**	1.1	**4.5**
21	California	Ferrous metal foundries	Private	**4.7**	3.1	**1.5**
22	Iowa	Nursing and residential care facilities	State Gov't	**4.6**	1.5	**3.1**
23	Georgia	Other wood product manufacturing	Private	**4.5**	2	**2.3**
	Kansas	Animal slaughtering and processing	Private	**4.5**	3.1	**1.5**
25	Tennessee	Animal slaughtering and processing	Private	**4.4**	3.1	**1.4**
26	Indiana	Nursing and residential care facilities	Private	**4.3**	2.2	**2.0**
	Nevada	Plastics and rubber products manufacturing	Private	**4.3**	1.5	**2.9**
	Oregon	Bakeries and tortilla manufacturing	Private	**4.3**	1.6	**2.7**
	Utah	Animal production	Private	**4.3**	1.8	**2.4**
	Wisconsin	Iron foundries	Private	**4.3**	2.7	**1.6**

#	State	Industry	Owner	State Rate	U.S. Average	Ratio of State to U.S. Avg.
31	Indiana	Steel product manufacturing from purchased steel	Private	**4.2**	2	**2.1**
	Montana	Nonresidential building construction	Private	**4.2**	0.7	**6.0**
	Nebraska	Warehousing and storage	Private	**4.2**	1.9	**2.2**
	Tennessee	Beverage manufacturing	Private	**4.2**	2.7	**1.6**
35	Arizona	Beverage and tobacco product manufacturing	Private	**4.1**	2.5	**1.6**
	Michigan	Fruit and vegetable preserving and specialty food manufacturing	Private	**4.1**	1.7	**2.4**
37	Michigan	Other furniture related product manufacturing	Private	**4.0**	1.7	**2.4**
	Texas	Soft drink manufacturing	Private	**4.0**	3.8	**1.1**
	Utah	Household and institutional furniture and kitchen cabinet manufacturing	Private	**4.0**	1.5	**2.7**

Note: *The following states do not consistently report data to the U.S. Bureau of Labor Statistics and could not be incorporated into this study: Colorado, Idaho, Mississippi, New Hampshire, North Dakota, Ohio, Rhode Island and South Dakota. Florida has participated in this reporting program in the past, but 2011 data are not available. See methodology section for more information.*

Injuries-Illnesses and SSDI Claims

More than 1 million U.S. workers each year experience an injury that causes them to miss a day or more of work. A recent report from the Social Security Administration's Office of Retirement and Disability Policy used statistical sampling to identify injuries as the sixth-leading cause of SSDI claims.

Even many claims not filed as injuries involve conditions that can be job related. For example, musculoskeletal conditions make up the largest category of SSDI claims. This group includes impairments such as degenerative back disorders that can be caused or exacerbated by work and severely hamper an individual's ability to find a new source of employment.

Work-Threatening Injuries and SSDI Claims by State (2011)

Injury cases involving days of job transfer or restriction / All initial SSDI claims

	Number of injury and illness cases (thousands)	Initial SSDI Claims (thousands)
Alabama	11.6	79.6
Alaska	1.1	5.5
Arizona	14.0	51.2
Arkansas	6.2	51.3
California	109.4	279.4
Connecticut	11.3	28.0
Colorado	*	37.5
Delaware	1.3	8.9
District of Columbia	0.5	8.8
Florida	*	222.5
Georgia	21.4	81.7
Hawaii	1.0	8.8
Idaho	*	13.9
Illinois	26.5	110.8
Indiana	23.2	74.0
Iowa	9.3	24.8
Kansas	8.8	19.6
Kentucky	10.9	68.3
Louisiana	5.1	71.7
Maine	6.2	14.4
Maryland	9.4	59.2
Massachusetts	9.8	53.1

Michigan	24.9	120.2
Minnesota	14.5	40.5
Mississippi	*	54.8
Missouri	16.9	87.5
Montana	1.8	8.7
Nebraska	5.3	13.5
Nevada	8.4	20.1
New Hampshire	*	11.8
New Jersey	16.1	67.2
New Mexico	5.3	18.0
New York	9.5	171.2
North Carolina	21.8	115.6
North Dakota	*	4.3
Ohio	*	138.8
Oklahoma	10.7	45.7
Oregon	10.2	36.3
Pennsylvania	36.9	151.0
Rhode Island	*	11.2
South Carolina	12.1	59.1
South Dakota	*	6.1
Tennessee	17.5	85.7
Texas	60.5	252.4
Utah	6.2	15.5
Vermont	1.4	5.9
Virginia	17.9	69.0
Washington	17.1	61.9
West Virginia	2.1	27.7
Wisconsin	17.5	47.3
Wyoming	0.8	3.8

**** Note:*** *The following states do not consistently report data to the U.S. Bureau of Labor Statistics and so could not be incorporated into this study: Colorado, Idaho, Mississippi, New Hampshire, North Dakota, Ohio, Rhode Island and South Dakota. Florida has participated in this reporting program in the past, but 2011 data are not available. See methodology section for more information.*

About Allsup

Allsup is the nation's premier disability representation company®. Founded in 1984 by Jim Allsup, a former Social Security field representative, Allsup was the first nationwide, non-attorney Social Security disability claims services company. The company built its reputation on the philosophy of: "You stay at home. We do the work."® Allsup offers an expert understanding of the specialized needs of those with disabilities.

Allsup has successfully secured Social Security Disability Insurance (SSDI) benefits for more than 200,000 deserving customers. In addition, in 2008 Allsup began expanding the True Help® it provides to those with disabilities, offering access to a broad range of financial and healthcare information and services that help our customers live lives that are as financially secure and as healthy as possible. These services include the *Allsup Medicare Advisor*®, Allsup *Disability Life Planning Service*® and *Allsup Veterans Disability Appeal Service*℠.

The company is based in Belleville, Ill., near St. Louis. For more information, go to http://www.Allsup.com or visit Allsup on Facebook at http://www.facebook.com/Allsupinc.