

2012 State Report Cards

Methodology

This WLDI report is based on the Survey of Occupational Injuries and Illnesses from the Bureau of Labor Statistics OSHA Form 200, for 2000 and for 2001, and the OSHA Form 300¹ for 2002 through 2009, the most recent year for which complete state-by-state data is available. The Survey of OII is a Federal/State program in which employer reports are collected annually from private industry establishments and processed by state agencies in cooperation with BLS, the principal fact-finding agency for the Federal Government in the field of labor economics and statistics. The Survey of OII, Form 200 and the latest Form 300 also serve in part as a foundation for *Official Disability Guidelines*, which is published by Work Loss Data Institute.

This OSHA database covers all OSHA recordable cases within those states in the program. For the year 2009 there were 44 participating states and territories, and 10 states did not participate. Among those states not participating for the year 2009 were Colorado, Idaho, Massachusetts, Mississippi, New Hampshire, North Dakota, Ohio, Pennsylvania, Rhode Island and South Dakota.

This special report, "State Report Cards for Workers' Compensation," is unique in comparing outcomes among different states using comparable measures, putting each state on a level playing field. Since the Report Cards are based on relative performance among states within the same year, they represent a fair evaluation of the success or failure of individual state workers' compensation systems, to the extent that national trends are having the same relative effect on each state.

Unlike insurance company claims data, the data on which this report is based includes outcomes from self-insured employers, as well as outcomes from employers who have workers' compensation insurance. This is important because the percentage of business that is self-insured may fluctuate significantly from year to year. As insurance premiums go up, large employers tend to self-insure, and when rates go down with the next cycle, they may choose to go with an insurance company again. Furthermore, there are many options for partial self-insurance. Many in the industry think the outcomes from self-insured employers are better than insured employers. Texas represents a unique opportunity to study this because the state offers the ultimate in self-insurance, becoming a non-subscriber, which allows employers to opt out of all the requirements of the Texas

¹ New record keeping rules went into effect on January 1, 2002. OSHA's new record keeping rules were issued on the last day of the Clinton administration. However, the Bush administration put a hold on those rules pending further review. On June 29, 2001, Secretary of Labor Elaine L. Chao announced that the new rules on record keeping would go into effect as originally scheduled on January 1, 2002, with a few minor exceptions. One of the major changes was to the OSHA Form 300 from the Form 200, and now "Days away" and "days restricted or transferred" are counted on a calendar basis rather than scheduled workdays. See [Appendix A](#) for more information.

Department of Insurance Division of Workers' Compensation (TDI-DWC). A WLDI study found that the median disability durations experienced by non-subscribers may be less than 20% of those reporting to TDI-DWC.²

In comparing outcomes, six key variables were looked at in depth for each state.

1) Incidence Rates

Of course, good workers' compensation outcomes start with prevention. Proper attention to safety can minimize the chances of a claim ever happening in the first place. Specifically, we looked at the incidence of claims involving days away from work for each state. [Table A-2009](#) (OSHA rates & counts) shows both OSHA Incidence Rates per 100 full-time workers and OSHA Counts in thousands, for 2009. The Excel file [US Incidence by State 2000-2009](#) provides the same information for the years 2000 through 2009. These tables give rates for Total Cases, Cases Without Lost Work Days, and Lost Work Day Cases, and within the last category it provides rates for Total Lost Work Day Cases (including restricted activity), and for Cases With Days Away From Work. Finally, it provides a state ranking in red based on the incidence of Cases with Days Away From Work for each state. To determine ranking for incidence, the states were sorted first by total recordable cases and then by days away from work. Any ties were recorded as such.

The national incidence for 2009 was 1.1 cases per 100 full-time workers, compared to 1.8 in 2000, reflecting a steady decline in the incidence of cases requiring time out of work. On a national basis, initiatives to improve safety and prevention seem to be working. For 2009 the rate varied there was a low of 0.8 in the District of Columbia, Georgia, Louisiana, Missouri, North Carolina and Texas. When this report was published in 2010 with data up to 2007, the District of Columbia was the only state with a 0.8 incidence rate, so the 2009 data shows a national trend towards prevention. The highs for 2009 were 2.8 in Puerto Rico and 2.1 in Hawaii. Puerto Rico and Hawaii also had the highest incidence in 2007 and 2008, but they show slight improvement in 2009. Still, if the "worst" states

² Since Texas is unique in having a variation on self-insured called non subscribers, these employers can completely ignore any state WC "friction", and employ other options, such as the ability to "direct care" and use treatment guidelines. WLDI compared the outcomes from all Texas employers (using BLS OSHA data that comes from OSHA logs and therefore covers all employers) with outcomes from all cases reported to TWCC (which do not include non subscribers). For the year 2000 the data show:

	BLS for TX	TWCC
median duration	9 days	50 days
% 31+ days	28%	well over 50%

Another significant finding seems to be that state variations in workers comp costs are not necessarily relevant to a self-insured employer with a well-managed program. The down side of this is that, with adverse selection, the workers' compensation insurance costs (for non self-insured's) in the poorly performing states will accelerate their upward spiral. (WLDI Custom Report to the Texas ROC, 12-10-02.)

had controlled incidence as well as the “best” states, their number of lost time cases could be cut to one-third of what they are.

2) Cases Missing Work

When an injury happens, many cases do not require any time off from work and these cases place minimal burden on the system. [Table A-2009](#) also shows OSHA Counts in thousands for each year within each state using the above categories, and calculates a percent of total cases missing work as well as a state ranking in red. To determine ranking for percent missing work, states were sorted by percent to the hundredth decile place and ties were given the same ranking.

For the U.S. as a whole, 29% of OSHA recordable cases required time off from work in 2009, which is around the same number that it’s been for all ten years. In 2009 this percentage varied from a low of 22% in Missouri to a high of 70% in Puerto Rico.

Since [Table A-2009](#) also provides number of cases, it can be used to identify the relative impact of various states. In 2009 there were a total of 965,000 cases requiring lost time for the country as a whole, down from 1,158,900 in 2007 and 1,664,000 in 2000, again reflecting improvements made in safety and prevention. The five states with the most number of cases in 2009 represented about 35% of total cases in the U.S. These states were California (CA) with 103,500 cases, New York (NY) with 77,300 cases, Texas (TX) with 60,200 cases, Florida (FL) with 50,800 cases, and Illinois (IL) with 42,700 cases. These were also the five states with the most number of cases when this report was published last.

3) Median Disability Durations

When a case requires missed work, the longer the case is out the higher the indemnity costs. [Table B-2009](#) (disability durations) shows Days Away From Work by State for 2009, and Percent of Total Cases by Days for 1 day, 2 days, 3 to 5 days, 6 to 10 days, 11 to 20 days, 21 to 30 days, and over 30 days, along with median disability duration for 2009. The Excel file [US Days by State 2009](#) provides the same information for the years 2000 through 2009. The OSHA data from the Form 200 in 2000 and 2001 used workdays, with an average of five workdays counted per calendar week. This changed beginning with the 2002 data, because the new OSHA Form 300 uses calendar days.

For the U.S. as a whole, the median disability duration in 2009 was eight days. The median in all the 10 years falls within 6-8 days. The 2009 data varied from a median low of five days in District of Columbia (DC), Iowa (IA), Maine (ME), Montana (MT), New Mexico (NM), Vermont (VT) and Virginia (VA) to highs of 25 in Puerto Rico (PR), 11 in Illinois (IL) and California (CA), and 10 in Tennessee (TN) and Kentucky (KY).

In fine-tuning our methodology and process for this year's report, we determined that we now have sufficient data over a long enough time frame to differentiate states adequately even while respecting ties on individual measures during any given year. In the past, in an effort to seek more differentiation, secondary measures were used to break ties. The 2000-2007 Median Disability Duration rankings were determined by sorting first on Delayed Recovery Rate and then on Median Disability Duration. That is no longer necessary given the longer time series. Beginning with 2008 data, we have attributed full weight to primary measures, even in the case of ties. A similar change in methodology was made for Delayed Recovery Rate and Low Back. For this reason, overall rankings for 2008 and 2009 will be smaller numbers than past years, but the grades will still reflect each state's performance relative to other states.

4) Delayed Recovery Rate

A key driver of workers' compensation costs is cases that fail to resolve in a relatively short period of time. The frequency of long-term injuries has a huge impact on workers' comp costs. When the injured worker is able to stay at work, or can return within a few days, the average cost of an injury is far less than \$1,000. But injuries that extend beyond as little as 30 days have enormous pressure to increase in costs. They average more than \$50,000, and they consume a vast share of money spent on injured workers.³

[Table B-2009](#) also shows the percentage of cases out of work for more than 30 days for each state, and provides a ranking by state. The Excel [file US Days by State 2009](#) provides the same information for the years 2000 through 2009. For the total U.S., 26.7% of cases were out of work for 31 days or longer, which is up from 21% in 2000. This is an ominous trend that has a significant impact on workers' compensation costs as well as the ability of workers to return to good health and productive endeavor. This statistic ranged from a low of 17.2% in District of Columbia (DC), to high of 45.3% in Puerto Rico (PR), 34.4% in California (CA), 33.2% in Kentucky (KY), and 32.9% in Louisiana (LA).

Similar to the change in process explained above, for Median Disability Duration, the Delayed Recovery Rate ranking was determined for 2008 and 2009 data by sorting only on percentage of cases out of work for more than 30 days. In the past, states were sorted first on median disability duration and then on percentage of cases out of work for over 31 days. As in all years, ties were recorded as such.

5) Key Condition: Low Back Strain

To investigate in depth the different variables in state-by-state workers' compensation outcomes, it is necessary to analyze each condition within each

³ Rousmaniere PF, Denniston PL, "Spiraling workers comp insurance costs: a disturbing trend?", *Risk & Insurance Management*, March, 2003

state. Some states may have worse outcomes because certain conditions are more prevalent, but if we compare outcomes for different states for the same condition, we can focus more directly on the success or failure of the workers' compensation systems in each state.

The standard classification system for healthcare conditions in the U.S. is the ICD9 diagnostic coding system. The OSHA BLS system, based on the OSHA Form 200 and Form 300, does not use the ICD9 coding system, but Work Loss Data Institute has developed a crosswalk program to convert the OSHA claims to an ICD9 based system. OSHA captures Nature of Injury, which is similar to the ICD9 coding structure and in many cases maps directly to the proper ICD9 code. For example, the OSHA Nature code 1241 is "carpal tunnel syndrome," and it maps directly to the ICD9 code 354.0, also "carpal tunnel syndrome." For other codes WLDI uses a combination of the OSHA Nature Code with the OSHA Body Part code to determine ICD9 code. For example, the OSHA Nature code 021, "sprains and strains," when used in combination with the OSHA Body Part code 23 "back," is used to define ICD9 code 847 "back sprains and strains." And, when combined with the OSHA Body Part code 231 "lumbar region" (a subset of 23 "back"), defines ICD9 code 847.2 "lumbar sprains and strains."

Using ICD9 codes, the Excel file below provides disability duration outcome information for each condition in the U.S. for each year 2000 through 2009 in separate worksheets.

[US total ICD9 2000-2009.xls](#)

Separate Excel files provide the same information for each of the 44 states and territories where data is available for the years 2000 through 2009. These files include a total of over 300 spreadsheet file worksheets, and there is a link to each one under the discussion for each state. With these spreadsheets it is possible to identify the number of cases within a state for any condition, and determine the outcomes from the cases, including the median durations and the delayed recovery rates.

In developing State Report Cards we focus on the number one workers' comp condition, which is back sprains and strains (ICD9 847). Back sprains and strains result in over 158,072 cases in the U.S. with lost workdays in the year 2009. This is down from 180,055 in 2008 and 191,128 in 2007, which is a good sign. Still, in addition to being the most common condition, this is also a condition with a great deal of variability in length of disability and utilization of medical services. Back strain is a condition for which there are many commonly used treatment modalities, many of which are not supported by the medical evidence.⁴

⁴ *ODG Treatment in Workers' Comp 2010*, Low Back Problems, "The strongest medical evidence regarding potential therapies for low back pain indicates that having the patient return to normal activities has the best long term outcome. There are many therapies, both invasive and noninvasive, whose purpose is to cure the pain, but

Outcomes for low back strain are also included in the overall outcomes that are also used in grading the different states, so in a sense we are “double counting” for this condition. This is deliberate. As a developer of evidence based guidelines, Work Loss Data Institute has analyzed treatment and return to work outcomes for every condition seen in workers’ comp. For many conditions, such as broken bones, burns, and minor cuts and bruises, there is little variability in treatment and return-to-work because the medical decision-making is fairly clear, and therefore there is little abuse of the system. On the other hand, back pain is not like this at all, and it has been responsible for much of the trend for worsening outcomes as well as abuses. So while there is double counting in the grading system used in this report, this results in increased focus on the drivers of successful outcomes in workers’ comp, and early identification of state systems that are on their way “up” or “down.”

[Table C-2009](#) (back sprains), shows Days Away From Work by State for Back Sprains & Strains (ICD9 847), for the year 2009, and compares state by state outcomes for back sprains and strains, and a state ranking is provided based on median disability duration, plus a ranking for delayed recovery rate (percent of cases out more than 30 days). Only ranking for Median Disability Duration for back strain is averaged into each state’s overall ranking. As opposed to past reports where states were sorted first on median disability duration and then on percentage of cases out of work for over 31 days, the fine tuning of our process determined that we now have sufficient data over a long enough time frame to differentiate states adequately even while respecting ties on individual measures during any given year. In the past, in an effort to seek more differentiation, secondary measures were used to break ties. This report sorts 2008 and 2009 data on only Median Disability Duration for back strain, with ties recorded as such. For this reason, overall rankings for 2008 and 2009 will be smaller numbers than past years, but the grades will still reflect each state’s performance relative to other states.

The Excel file [US Days by State, Back Strains](#) provides disability duration outcome information for back strains in the U.S. for each year 2000 through 2009 in separate worksheets. The overall U.S. trend for back sprains mirrors the trend for all workers’ comp conditions together, in part because it is the most common diagnosis. The median in 2009 was seven days, which was the same as the five preceding years, but in 2000 and 2001 it was 6 days. The delayed recovery rate is back up to its peak of 25.2%, which is what it was in 2004. In 2000 the delayed recovery rate was 20.9%. The five states with the best outcomes for back strain in 2009 (in order with “best” listed first) were Iowa (IA), Minnesota (MN), South Carolina (SC), Nebraska (NE) and Wisconsin (WI). The five worst states (in order with the “worst” listed first) were Puerto Rico (PR), Delaware (DE), Louisiana (LA), Kentucky (KY) and California (CA).

there is no strong evidence that they accomplish this as successfully as therapies that focus on restoring functional ability, without focusing on the pain.” www.odgtreatment.com.