Findings from the Survey of Occupational Injuries and Illnesses (SOII), California, 2015

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California Department of Industrial Relations - Office of the Director - Research Unit

Overview

Over 470,000 nonfatal workplace injuries and illnesses were reported by private-sector and publicsector employers in California in 2015. According to estimates from the Survey of Occupational Injuries and Illnesses (SOII) conducted by the US Bureau of Labor Statistics (BLS) and the California Department of Industrial Relations (DIR),¹ California's overall incidence rate of nonfatal occupational injuries and illnesses remains unchanged at 3.8 cases per 100 workers for full-time employees, the lowest rate in over a decade. (See Chart 1.)

CHART 1. INCIDENCE OF NONFATAL OCCUPATIONAL INJURY AND ILLNESS PER 100 FULL-TIME WORKERS IN CALIFORNIA, ALL INDUSTRY SECTORS, 2002-2015



Of the 470,600 recordable cases of occupational injury and illness estimated for California in 2015, 273,500 were lost-time cases,² and 144,000 cases included days away from work. (See Chart 2.)

¹ The estimates are based on injuries and illnesses reported by a sample of 16,000 employers in California. See Appendix: Technical Note.

² In this brief, the term "lost work-time cases" is used synonymously with what the US Bureau of Labor Statistics describes as "cases involving days away from work, job transfer, or restriction" (or DART cases). Job transfer or restriction cases occur when, as a result of a work-related injury or illness, an employer or health-care professional

Of the nonfatal reportable job-related injuries and illnesses in 2015, 77 percent occurred in private industry and 23 percent in state and local government. The total number of injuries and illnesses increased slightly year to year, which correlates to an uptick in the state's employed labor force from 17.4 million in 2014 to 17.8 million in 2015. The statewide all-industry rate of "lost work-time" cases remained constant at 2.2 cases per 100 full-time workers over the last three years surveyed, while the rate of days away from work cases (DAFW) has remained unchanged for the past seven years.



CHART 2. NONFATAL OCCUPATIONAL INJURY AND ILLNESS, CALIFORNIA, 2002-2015 (IN 1,000s)

The estimates indicate that total recordable case (TRC) counts in private industry and local government rose slightly in 2015, while state government cases decreased. Because of greater proportional increases in employment in 2015, TRC incidence rates (cases per worker) dropped slightly for private, state, and local government workers. In the private sector, total case rates rose in some major industry sectors (agriculture, trade, leisure and hospitality), while falling in others (mining, construction, finance and insurance, information services), and staying relatively flat in others (manufacturing, education, and health services).

keeps or recommends keeping an employee from performing 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. Cases involving days away from work are those that require at least one day away from work with or without days of job transfer or restriction.

Injuries and Illnesses Involving Days Away from Work

The Survey of Occupational Injuries and Illnesses includes detailed findings for cases involving DAFW cases (referred to by BLS as case and demographic statistics). The following charts in this report refer to those cases.

Small changes occurred in the number of DAWC between 2014 and 2015. In both years, over 77 percent of reported DAFW injuries and illnesses occurred in private-sector employment; state government accounted for 5 percent of the total and local government 18 percent. (See Chart 3.)





Reported DAFW incidence rates (injuries and illnesses per 10,000 workers) differ substantially between private-sector and government workers, whether state or local. In 2015, the reported rate of DAFW injury or illness among government workers was approximately twice that of private-sector employers. (See Chart 4.)

CHART 4. INCIDENCE RATES OF DAFW INJURY AND ILLNESS PER 10,000 EMPLOYEES, CALIFORNIA, 2015



The DAFW incidence rate for California private sector industries remained at 101.8 case per 10,000 workers, equaling the national rate. About 86,000 DAFW injuries, or 77 percent of those in private industry, occurred in service-sector industries. The remaining 25,000 injuries, or 23 percent, occurred in goods-producing industries.

Gender

In 2015, employer reports for California show that occupational injuries are more prevalent and the rate of injuries per 100 workers are higher among males than among females. Sixty percent of reported cases with days away from work (DAFW) were for male workers, with 40 percent for females. The incidence rate per 100 workers was also approximately 5 percent higher among males than females in 2014 and 9 percent higher in 2015. Compared to 2014, the rates for both working men and women dropped in 2015 in private sector. (See Charts 5 and 6.)

CHART 5. DISTRIBUTION OF REPORTED DAFW WORK INJURIES AND ILLNESSES CASES BY GENDER, CALIFORNIA, ALL OWNERSHIPS, 2015



CHART 6. INCIDENCE RATES BY GENDER OF DAFW INJURY AND ILLNESS PER 10,000 EMPLOYEES, CALIFORNIA, 2015 PRIVATE SECTOR, 2014 vs. 2015



Racial and Ethnic Origin

For private-sector workers, racial or ethnic origin was reported for approximately 54 percent of surveyed lost-time cases in California's 2015 SOII. Prior DIR analyses estimated that approximately 47

percent of the private-sector California workforce in goods-producing and service industries are Hispanic or Latino.³ Of reported DAFW injury and illness cases in the 2015 SOII, Hispanic workers make up 54 percent of the private-sector lost-time total, while whites account for 31 percent and Asian and black workers account for 7 percent and 5 percent, respectively. (See Chart 7.) In goods-producing industries (construction, manufacturing, mining, and natural resources), Hispanic workers comprise approximately 48 percent of the workforce but 68% percent of the total injuries, while in service-sector industries (trade, transportation, utilities, information services, financial activities, etc.), Hispanics account for 46 percent of the workforce and 49 percent of reported injuries. Compared to 2014, in 2015 a smaller share of nonfatal injuries and illnesses with days away from work were incurred by persons of Hispanic or Latino origin, white workers experienced a larger number and share of these injuries and illnesses.

⁴Chart 7. Racial and Ethnic Origin of Reported DAFW Work Injuries and



ILLNESSES, CALIFORNIA, PRIVATE SECTOR, 2015

Length of Service with Employer

In 2015, 28 percent of reported DAFW work injuries in private industry in California occurred among workers with less than a year of tenure. (See Chart 8.) At goods-producing firms in the private sector, nearly 35 percent of DAFW injuries and illnesses occurred within a year of hire. In manufacturing, 25 percent of those injuries occurred within a year of hire; in construction and natural resources, however, 45 percent of those injuries occurred within a year of hire. Notably, in the natural resources and mining sector, nearly one-quarter of DAFW cases occurred during the first three months of work.

³ <u>http://www.dir.ca.gov/DOSH/CFOI/fatalities-hispanic-latino-workers-in-california-2009-2013.pdf</u>. See Table 2 for full-time equivalent estimates for relevant industries.

⁴ Notes: (1) The chart pictured above is for illustrative purposes only and (2) "White only" includes only non-Hispanic whites.

CHART 8. LENGTH OF SERVICE WITH EMPLOYER BEFORE REPORTED DAFW INJURY OR ILLNESS, CALIFORNIA, PRIVATE SECTOR, 2015 vs. 2014



Age

Chart 9A shows the incidence rate of private sector DAFW occupational injury and illness cases by the age of the worker. The highest private-sector injury and illness rate in 2015 is among twenty- to twenty-four-year-olds, with the lowest injury or illness rates at the other end of the age spectrum, those above age sixty-five. (See also Chart 9B.)

CHART 9A. INCIDENCE RATES (PER 10,000 FTE) BY AGE DAFW INJURY OR ILLNESS, CALIFORNIA, PRIVATE SECTOR, 2015



Note: FTE = full-time equivalent.



CHART 9B. INCIDENCE RATES (PER 10,000 FTE) BY AGE DAFW INJURY OR ILLNESS CALIFORNIA, PRIVATE SECTOR, 2014-2015

Compared to 2014, the DAFW injury and illness incidence rate in 2015 for private-sector employers dropped among sixteen- to nineteen-year-olds, twenty-five- to thirty-four-year-olds and for those age forty-five to fifty-four, while it rose or stayed the same for other age groups.

Occupation

Transportation and material-moving occupations, food service workers, building and ground maintenance, and office and administrative support work were the occupational groupings with the largest number of lost-time injuries and illnesses. Service occupations also showed high number of injuries and illnesses with reported days away from work in 2015 (see Chart 10.)

CHART 10. NUMBER OF NONFATAL OCCUPATIONAL INJURIES AND ILLNESSES INVOLVING DAYS AWAY FROM WORK BY MAJOR OCCUPATIONAL GROUP AND MAJOR INDUSTRY SECTOR, ALL OWNERSHIPS, CALIFORNIA, 2015



Cause of Injury and Illness

Among private-sector workers, the highest number of lost-time injuries were caused by overexertion and bodily reaction, by contact with an object or piece of equipment, and by falls, trips, and slips. Other major causes of lost-time injuries and illness included exposure to harmful substances or environments, transportation incidents and workplace violence. (See Charts 11A and 11B.)







CHART 11B. CAUSES PERCENTAGE DISTRIBUTION 2015 vs. 2014, PRIVATE SECTOR

Nature of Injury and Illness

The largest number of injuries and illnesses involving days away from work in the private sector were sprains, strains, and tears, followed by soreness and pain. (See Chart 12.)



CHART 12. NATURE OF DAFW INJURY AND ILLNESS PRIVATE SECTOR, CALIFORNIA, 2015

Part of the Body Injured

In 2015, as in 2014, the upper extremities, trunk, and lower extremities were the body parts with the highest number of injuries and illnesses involving days away from work in private-sector firms. (See Chart 13.)



CHART 13. DAFW INJURY OR ILLNESS BY PART OF BODY INJURED, CALIFORNIA, 2015, PRIVATE SECTOR

Source: U.S. Bureau of Labor Statistics, Survey of Occupational Injury and Illness, in cooperation with the California Department of Industrial Relations.

Conclusion

This brief summarizes reported occupational injury and illness data from the Survey of Occupational Injuries and Illnesses (SOII) program for California for 2015. The annual survey is jointly administered by the U.S. Department of Labor, Bureau of Labor Statistics, and the California Department of Industrial Relations, Office of Policy, Research and Legislation. It is compiled from surveys completed by 16,000 statistically represented California employers and based upon data required to be collected under the Occupational Safety and Health Act. Data for California for 2015 are <u>posted online</u> and include detailed summary tables as well as case and demographic data for private-sector and public-sector employers.

The number and incidence rates of reported occupational injury and illness in 2015 remain at levels markedly lower than those a decade earlier. For cases involving days away from work, the highest number and incidence of workplace injuries are among Hispanic workers: 53 percent of all reported cases and over 54 percent for private-sector workers. In goods-producing industries (construction, manufacturing, mining, and natural resources), over two-thirds of those injured on the job and losing work days are Hispanics. In the service sector, one of every two workers so injured is Hispanic.

Nearly 28 percent of workers whose injury or illness involved days away from work in private industry in 2015 are new hires with tenure of less than a year.

In 2015, the highest number of DAFW occupational injuries or illnesses occurred among workers in transportation and material-moving occupations, followed by those working in food preparation, building and grounds maintenance, offices, production, and protective services.

Sprains, strains, and tears are by far the largest category of DAFW cases by nature of injury. The most prevalent injuries in California's private sector are upper-extremity disorders. Among private-sector workers, the highest number of injuries or illnesses resulting in days away from work are caused by overexertion and bodily reaction, by contact with an object or piece of equipment, and by falls, trips, and slips.

Appendix: Technical Note

Source Data, Use of Data, and Note on Acknowledgment of SOII Undercount

Estimates for the California Survey of Occupational Injuries and Illnesses are derived from a statistical sample of 16,000 employers in the state. The SOII program is administered by the US Bureau of Labor Statistics in cooperation with participating state agencies. Under the Occupational Safety and Health Administration (OSHA) Recordkeeping regulation (<u>29 CFR 1904</u>), covered employers are required to prepare and maintain records of serious occupational injuries and illnesses, using the OSHA 300 Log.

All statements of comparison made herein are considered statistically significant at the 95 percent confidence level. Additional background and methodological information regarding the BLS occupational safety and health statistics program can be found in chapter 9 of the *BLS Handbook of Methods* at www.bls.gov/opub/hom/pdf/homch9.pdf. Employment data in this news release are 2015 annual averages from the BLS Quarterly Census of Employment and Wages (QCEW) program.

According to the BLS, the data are used to identify and correct hazards in the workplace. National and state policy makers use the survey as an indicator of the occupational safety and health conditions across industries and kinds of workers. OSHA uses the statistics to help determine where additional measures are needed to improve safety programs and to gauge the effectiveness of the 1970 act in reducing work-related injuries and illnesses. Both labor and management use the estimates to design and evaluate safety programs. Other users include insurance carriers involved in workers' compensation, industrial hygienists, manufacturers of safety equipment, researchers, and others concerned with job safety and health.

The BLS has long acknowledged that some conditions that often are difficult for employers to relate to the workplace are not adequately recognized and reported during a calendar year (for example, longterm latent illnesses) and are believed to be understated in SOII illness measures. Following several studies in the mid-2000s questioning the completeness of SOII injury and illness counts, the BLS began internal research in 2007 and, at the request of Congress, established an ongoing research program. Initial research conducted between 2009 and 2012 found that the SOII failed to capture some cases but could not determine the magnitude or leading cause of an undercount. Researchers determined that the ability to match injury and illness data across different data sources was affected by various factors, such as establishment type, the time of case filing, and the type of injury. The BLS initiated additional research from 2012 to 2015 that included interviews with employers in four states to learn more about their injury and illness recordkeeping practices and a multiyear match of SOII data to workers' compensation records to analyze matching trends over time. The BLS has funded a nationwide retrospective survey with SOII respondents to learn more about their recordkeeping practices and timing issues that may negatively affect injury and illness reporting to the SOII. The BLS also continues to conduct exploratory research on the collection of occupational injury and illness data directly from employees. For more information on undercount research, please see www.bls.gov/iif/undercount.htm.