

WASHINGTON STATE DEPT. OF LABOR AND INDUSTRIES  
SHARP PROGRAM

# SOII Undercount Research: Telephone Interviews with SOII Respondents, Washington

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## FINAL REPORT

Prepared for the  
U.S. Department of Labor, Bureau of Labor Statistics

**August 30, 2014**

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This report was supported in part by Cooperative Agreement OS-23109-13-75-J-53 from the US Department of Labor (DOL). The contents are solely the responsibility of the authors and do not necessarily represent the official views of the Bureau of Labor Statistics and the DOL.

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## EXECUTIVE SUMMARY

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### Objectives

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This study aims to quantify occupational injury and illness recordkeeping practices identified in previous interview studies and produce findings generalizable to a representative population. The objectives of the study were to describe and measure the frequency of injury and illness recordkeeping practices among SOII respondents for Washington establishments, and to assess variation in the injury and illness recordkeeping practices, if any, by employer and respondent characteristics, business practices, and WC laws. Similar studies were conducted in Minnesota, New York, and Oregon so that findings could be compared across states.

### Methods

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Using a questionnaire developed with researcher collaborators from Minnesota, New York, and Oregon, we conducted a telephone interview with injury and illness recordkeepers from Washington establishments that participated in the 2011 SOII. The questionnaire covered the following topics: establishment and company characteristics; participant's role in workplace injury and illness recordkeeping; company's workplace injury and illness reporting process; establishment's OSHA recordkeeping and SOII reporting practices; and company use of workplace injury and illness data. The survey also included a set of hypothetical injury scenarios and questions relevant to the OSHA recordkeeping regulations.

Establishments were stratified by ownership, industry, and establishment size and randomly selected within each sample stratum. To increase our sample size among high hazard industries, we oversampled establishments in Agriculture, Forestry, Fishing and Hunting, Utilities, Construction, Manufacturing, Wholesale Trade, and Transportation and Warehousing.

Trained interviewers attempted to contact the sampled establishments, using the contact information from the 2011 SOII data. Interviewers went through the process of informed consent with each participant prior to administering the survey. Interviews were conducted between June 2013 and April 2014.

Responses were weighted so that inference on the state population of establishments could be made. Sample weights were constructed with guidance from BLS. We used chi-squared tests to examine associations between survey items and establishment characteristics including industry, size, and injury rates (above or below the average DAFW or DART rate for establishments in a given ownership, size class, and industry sector in 2011). We also examined associations among survey items.

Analyses were conducted using SAS 9.3 and the software package's survey procedures.

## Results

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### Injury and Illness Recordkeeping

Based on responses from 701 establishments (response rate of 49.5%), establishments that maintained OSHA logs while participating in the SOII represented 43% of all BLS-covered establishments in the state. Logs were more likely to be absent in smaller establishments, Educational Services, Professional and Business Services, Finance Activities, Transportation and Warehousing, Health Care and Social Assistance, Leisure and Hospitality Services, and from establishments with DAFW and DART rates below the average rates for establishments of the same size and industry. Although not all establishments maintained an OSHA log during the survey year, most establishments (an estimated 80%) did track workplace injuries and illnesses. The most common method of tracking was on a paper form (48%), followed by an electronic spreadsheet (19%), and specialized injury software (5%).

Of establishments that did maintain OSHA injury and illness records, most do not comply with the OSHA recordkeeping regulations. Among establishments with OSHA logs maintained by the interview participant, an estimated 28% followed the OSHA case criteria when determining which incidents to record on the log. Responses varied by establishment characteristics; larger establishments were more likely to follow the OSHA case criteria while smaller establishments recorded all injuries (regardless of severity), or WC claims. To determine duration of disability, an estimated 29% of WA establishments correctly counted calendar days while 54% counted scheduled shifts. Again, compared to larger establishments, smaller establishments were more likely to incorrectly count scheduled shifts. Of the establishments that used (and supervised) temporary workers hired through a temp help agency, an estimated 23% would record temp worker injuries on the establishment's OSHA log. An estimated 46% would not record a temp worker injury on the OSHA log, 20% did not know whether they would record, and an additional 10% did not maintain an OSHA log. Smaller establishments were less likely to record temp worker injuries compared with larger establishments.

Responses suggested that establishment's OSHA cases were highly correlated with their WC claims. More than three out of four establishments recorded all accepted WC claims, and almost two out of three recorded nothing but WC claims. This suggests that many establishments do not use a definition of an OSHA recordable case that differs in any way from an accepted WC claim.

Adding cases to a previous year's log was uncommon; among establishments that kept logs maintained by the interviewed respondent an estimated 13% of establishments had done so. In establishments where OSHA logs were kept only when participating in SOII, adding cases to old logs almost never occurred, likely because logs did not exist for previous years and OSHA recording activities ceased once the SOII survey year ended. Less than 2% of establishments had been notified of an injury or illness too late to include in SOII. Late notification was greater among larger establishments, as high as 17% among establishments with 250 or more employees.

### OSHA recordkeeping knowledge

Respondents displayed a range of OSHA recordkeeping knowledge when presented with the four hypothetical recordkeeping scenarios. For each question, correct answers were more often provided by respondents from larger establishments and establishments with above average DAFW rates.

Questions that elicited the highest percentage of correct answers included: whether to record an injury involving horseplay (70% of establishments correctly answered yes); recording a case with stitches but no missed work (68%); and updating a log entry to record a work absence that occurred sometime after the initial injury (65%). Approximately half of establishments would record a case where the worker's prescribed days off occurred over a weekend (when he was not scheduled to work). Questions with the least number of correct responses were: recording a case where a worker had an X-ray but nothing was found to be broken – only 17% of estimated establishments correctly indicated that they would leave the injury off the log; and 15% would correctly record the weekend work restriction as a DAFW case.

Responses indicate that establishments have the potential of both under- and over-reporting injuries. Only counting absences on days when the employee was scheduled for work likely fails to capture workers with short-term disability, or workers with sporadic work schedules. Recording injuries for which a medical visit was limited to diagnostic procedures and no treatment provided overstates the number of OSHA-recordable cases.

### Company use of injury and illness data

Use of safety incentives or rewards varied by establishment characteristics. These programs were present in an estimated 7% of WA establishments that employed an estimated 18% of WA workers, although extended to over 40% of workers in Manufacturing and Transportation and Warehousing. The measure of safety performance differed among the estimated 9,288 WA establishments with safety incentive programs (from most common measure to least): 2,727 establishments (29% of establishments with safety incentive programs) measured performance as *any* work-related injury, 2,029 (22%) tied it to WC claims metrics, 739 (8%) utilized OSHA recordable case data, and 312 (3%) measured safety as hazard identification and/or mitigation. Over half of establishments with safety incentives used some other metric including: safe behavior, participation in the company's safety program, and all accidents (whether or not they resulted in worker injury).

## INTRODUCTION

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The US Bureau of Labor Statistics (BLS) provides annual estimates of nonfatal occupational injuries and illnesses. The national and state estimates are based on approximately 230,000 employer reports of OSHA recordable cases collected through the Survey of Occupational Injuries and Illnesses (SOII) (US Department of Labor, 2012). According to the BLS, SOII is the nation's largest occupational injury and illness surveillance system.

Increasingly, evidence suggests that the BLS does not accurately estimate the true burden of occupational injuries and illnesses through the annual survey of employers, although estimates of the BLS undercount vary widely (Boden and Ozonoff, 2008; Leigh et al., 2004; Oleinick and Zaidman, 2010; Rosenman et al., 2006). In response to the most recent concerns of underreporting injuries and illnesses on employer OSHA logs and in the SOII, the federal government undertook efforts to better understand employer recordkeeping. The US Government Accountability Office evaluated OSHA's audit procedures used to verify the workplace injury and illness data collected through OSHA's Data Initiative (US Government Accountability Office, 2009); OSHA initiated a national emphasis program for recordkeeping (US Department of Labor, 2009); and BLS, in addition to undertaking its own studies, funded extramural research projects to examine the nature of the observed undercount (Ruser, 2010).

As part of the BLS-sponsored undercount research, the Safety and Health Assessment and Research for Prevention (SHARP) Program at the Washington State Department of Labor and Industries received funding to conduct telephone interviews with recent SOII establishments to assess employer-based recordkeeping practices for work-related injuries and illnesses.

### Research aims of interviews with establishments' injury and illness record keepers

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For some years, BLS has explored injury and illness recordkeeping practices at SOII-surveyed establishments to identify reasons for discrepancies between SOII injury data and cases identified in other data sources. In 2008, researchers at BLS piloted qualitative interviews among Washington DC area 2007 SOII respondents. In 2009, BLS expanded those data collection efforts by conducting additional interviews in Kentucky and through an extramural study of qualitative interviews among Washington State respondents. Findings from the semi-structured interviews conducted in Washington from 2009 through 2011 included (Wuellner and Bonauto, 2014):

- SOII data is highly dependent on WC claims data, challenging the assumption that SOII estimates are comparable across states.
- Misunderstandings of OSHA recordkeeping rules are widespread among Washington employers.
- Because of the misunderstood recordkeeping rules, injuries among temp workers are often not recorded on OSHA logs.
- WC claims are more likely to go unreported when injury and illness rates were used to evaluate the job performance of the person responsible for maintaining workplace injury records.

Given the number of establishments and states that participated in the interviews and the selection process of establishments, findings were not generalizable to the general SOII-eligible population of establishments. To quantify the characteristics identified in the qualitative interviews and produce findings generalizable to a representative population, BLS again funded research projects, this time in four states. The objectives of the current telephone interview project were to:

1. Describe and measure the frequency of injury and illness recordkeeping practices among SOII respondents for WA establishments. Components of recordkeeping practices include:
  - Who is responsible for/involved in injury and illness recordkeeping
  - What is considered an OSHA recordable case

- What data sources are used to complete OSHA forms/SOII
  - When do injuries become cases, when are they recorded on OSHA forms
  - Where does recordkeeping take place (centralized location vs. worksite)
2. Assess variation in the injury and illness recordkeeping practices, if any, by employer and respondent characteristics (including partial exemption status from OSHA recordkeeping requirements), business practices (including centralized or off-site recordkeeping, utilization of a temporary staffing agency to supplement the workforce, and use of injury and illness data in workplace safety competitions), and WC laws (that vary by state).

In addition to participating in the interviews conducted in multiple states, Washington State conducted expanded interviews with establishments in the 2012 SOII that failed to report all eligible WC claims in SOII based on a data match between reported SOII cases and compensable WC claims. In these interviews, respondents were asked about the specific claims that were not reported in SOII and the reason for the omission. These interviews are referred to as 'Real Time Interviews'. The goal of the Real Time Interviews was to generate additional hypotheses on why one might observe differences between a surveyed employer's report of day away from work cases and WC claims assigned to the employer. For a detailed description of the Real Time Interview study and findings from the study, see separate report titled *SOII Undercount Research: Real Time Interviews with SOII Respondents, Washington*.

### Occupational Injury and Illness Data in Washington

In Washington, two major sources of occupational injury and illness data are BLS SOII data and the Washington Workers' Compensation (WC) data.

#### BLS SOII Data

BLS administers SOII annually in partnership with participating states to estimate the incidence of nonfatal OSHA-recordable work-related injuries and illnesses. SOII includes both public and private sector employment except for federal employees, private household workers, farms with fewer than 11 employees, and the self-employed. Each year, establishments are randomly sampled from the Longitudinal Establishments Database (LDB) which consists of unemployment insurance (UI) account information collected by state employment security agencies<sup>1</sup>.

Prior to the survey year, BLS mails a letter to sampled establishments instructing them to record all injuries and illnesses that occur during the survey year in accordance with OSHA recordkeeping regulations. Establishments otherwise exempt from OSHA recordkeeping requirements based on industry or employment size are eligible for participation in SOII and are required to maintain OSHA injury and illness recordkeeping forms, like the non-exempt establishments, for the duration of the survey year. After the survey year has ended, participating establishments provide the BLS with two types of injury and illness data: 1. aggregate numbers of OSHA recordable cases and 2. detailed worker and incident information on injuries and illnesses occurring in the survey year that resulted in one or more calendar days away from work (DAFW) beyond the day of injury. Case reports are then coded to classify the event, source, body part, and nature of the reported injury or illness.

Based on these employer reports, BLS publishes estimates of the total number and rates of occupational injuries and illnesses.

<sup>1</sup> Mining and railroad establishments are not sampled from the LDB; instead, injury and illness data in these industries are submitted to BLS by MSHA and FRA, respectively.



## Washington WC Data

Washington State mandates workers' compensation insurance for all employers in Washington State except those covered by alternative workers compensation system (e.g. Harbor and Longshore worker, Federal workers – Office of Workers Compensation Programs) or are specifically exempt from requirements for mandatory insurance (e.g. self-employed, family member younger than 18 working on family farms, and other specific occupations or employment arrangements). Elective workers compensation insurance is made available for self-employed workers. Inclusions and exclusion from coverage are defined in Washington State statute.<sup>2</sup>

Washington employers are required to purchase workers' compensation insurance from the Washington State Fund (SF) unless they are able to self-insure (SI). Companies must meet specific requirements for self-insurance and the SI program has significant oversight and reporting requirements to the Washington State Department of Labor and Industries (L&I).<sup>3</sup> The Washington State Fund is administered by L&I. Of the approximately 160,000 Washington State employer workers compensation accounts, 99.75% are insured through the State Fund and this covers approximately 70% of employed workers in WA. The remaining workers' compensation accounts (approximately 400) are self-insured and typically represent large employers (e.g. Boeing, Weyerhaeuser, Microsoft). As the insurance provider for more than 99% of the state's employer's, researchers at L&I have access to extensive WC data.

A workers' compensation claim is initiated in WA State by an injured or ill worker seeking medical care from a health care provider. The injured worker and health care provider complete a report of accident form which is sent to either the state fund or the self-insured employer or the self-insured employer's third party administrator. The employer does not initiate a workers compensation claim in Washington, and while a worker is required to report an injury to his employer, he may not do so. Regardless, the employer is always notified by L&I of a workers compensation claim.

Workers compensation claims are accepted and rejected as work-related by trained claims managers in accordance with Washington State statutes, rules, and case law. Medical treatment, wage replacement benefits and all other billed services by date of service are linked to the claim identification number and maintained in L&I databases. In Washington, the waiting period for wage replacement eligibility is three days after the date of injury. The date of injury is not counted towards any part of the waiting period for wage replacement eligibility. If the worker remains disabled at 14 days, the first three days of time loss are paid.

The number of time loss days paid and duration of disability are captured in these databases as are employer protests, formal legal appeals by the employer, timing of claim adjudication processes (e.g. disability determination, assignment of total permanent disability), and employer apportionment of occupational disease. State funded claims also have the date of the first medical visit, the date the claimant was first unable to perform the job of injury (disability date), and the date the department made the initial payment for wage replacement (first time loss payment date). All compensable claims (State Fund and self-insured) are coded for nature of injury, body part, event or exposure, and source according to the Occupational Injury and Illness Classification System 2007 (OIICS). Accepted non-compensable State Fund claims are also coded; accepted non-compensable self-insured claims are not.

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<sup>2</sup> See Revised Code of Washington, Title 51.12 'Employments and Occupations Covered' - <http://apps.leg.wa.gov/RCW/default.aspx?cite=51.12>

<sup>3</sup> See Revised Code of Washington, Title 51.14 'Self-Insurers' - <http://apps.leg.wa.gov/RCW/default.aspx?cite=51.14>

## METHODS

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### Data Sources

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To conduct the telephone interviews with SOII participants from Washington establishments, BLS provided us with SOII establishment summary data and the respondent contact information. Our study population was defined as 2011 SOII establishments.

### Survey tool

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The questionnaire was developed over the course of eight months through extended discussions with research collaborators from Minnesota, New York, and Oregon. We pilot tested a version of the questionnaire in April, 2013 among a convenience sample of 2011 SOII establishments. To reach respondents with a range of recordkeeping knowledge and experiences, establishments with the following characteristics were selected: manufacturing; health care; 1-10 employees; 250 or more employees; and establishments partially exempt from recordkeeping requirements. Twenty-one establishments participated in the pilot.

The questionnaire was modified once more in collaboration with the research partners following the pilot interviews. Based on the experiences of the pilot interviews, questions and response options were added, removed, or re-worded. The final survey consisted mostly of yes/no and multiple choice questions covering the following topics: establishment and company characteristics; participant's role in workplace injury and illness recordkeeping; company's workplace injury and illness reporting process; establishment's OSHA recordkeeping and SOII reporting practices; and company use of workplace injury and illness data. The survey also included a set of hypothetical injury scenarios and questions relevant to the OSHA recordkeeping regulations. These were included to elicit the respondent's knowledge of the regulations independent of their recordkeeping practice. It took approximately 30 minutes to administer the survey. See Appendix C for the final survey.

To standardize data collection, interviewers underwent a training that included background on the undercount issue, findings from the in-person study, a question-by-question review of the questionnaire, and mock-interviews with experienced research staff.

### Sample selection

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Washington establishments that participated in the 2011 SOII and whose SOII data was documented as 'useable for estimation' were eligible for selection in the full (post-pilot) study. Establishments that did not report directly to SOII (establishments in the mining and railroad industries), were excluded from the study. Establishments that participated in the pilot survey were again eligible for selection.

We selected establishments based on guidance from BLS, which allowed us to use SOII survey weights to make inferences on the population of establishments in Washington. Establishments were stratified by ownership (state and local governments were grouped together, separate from private sector employers), industry (all twenty NAICS sectors except Mining, 19 in total), and size using BLS's five categories of original employment, and randomly selected within each sample stratum. For most strata, the sampled distribution by ownership, industry, and size was proportional to distribution among the SOII establishments; the exception was among specific industries and employer size groups from which we oversampled compared to their distribution in the SOII sample. We chose to oversample establishments across all sizes in Construction, Manufacturing<sup>4</sup>, and Transportation and Warehousing. These industries were selected based on findings from our previous interview study which suggested

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<sup>4</sup> The exception was for manufacturing establishments with 50-249 employees; this group was composed of a large number of establishments and was therefore not oversampled.

that business practices generally thought to be associated with recordkeeping irregularities are common in such environments. These practices include sponsoring workplace safety competitions and including injury and illness data in bid packages for contracted or subcontracted work. Additionally, we oversampled establishments with 10 or fewer employees among the Agriculture, Forestry, Fishing and Hunting, Utilities, and Wholesale Trade industries. These establishments were oversampled because they are in high hazard industries and, based on our experience with previous establishment surveys, have a greater refusal rate when asked to participate in voluntary studies.

In total, 1506 establishments were selected for the study.

### Recruitment and interview protocol

An introductory letter was sent to selected establishments via postal mail or email, using the contact information from the 2011 SOII data. To stagger recruitment, letters were sent in batches to establishments selected randomly from among the entire 1506 sampled establishments. The following week, an interviewer called the respondent and attempted to either complete the survey at that time or schedule the interview for some time in the near future. If the respondent could not be reached, the interviewer left a message explaining the reason for the call and asking the respondent to return the call. This was repeated once a week for a total of four weeks (with no message left during the third week) or until the interview was completed, whichever occurred first.

Interviewers went through the process of informed consent with each participant prior to administering the survey. Respondents were informed that the participation in the research was voluntary and that their responses would not be revealed in an identifiable manner. Respondents were also informed of the study's OMB approval. The Washington State Institutional Review Board (WSIRB) also approved the study.

Interviews were conducted between June 2013 and April 2014.

### Data analysis

Responses were weighted so that inference on the state population of establishments could be made. Sample weights were constructed with guidance from BLS. Sample weights were then used to estimate various survey items. We used chi-squared tests to examine associations between survey items and establishment characteristics including industry (15 categories defined by NAICS sector or groups of sectors), size (four size classes based on the number of employees at the establishment at the time of sampling for the 2011 SOII: 1-10 employees, 11-49 employees, 50-249 employees, and 250 or more employees), and two measures of injury rates (above or below the average DAFW or DART rate for establishments in a given ownership, size class, and industry sector in 2011). We also examined associations among survey items.

Analyses were conducted using SAS 9.3 and the software package's survey procedures.

## RESULTS

### Participants

Of the 1506 establishments sampled for the study, 701 completed the survey (Table 1). Response rates differed by class size ( $p=0.0005$ ) and industry sector ( $p<0.0001$ ). Larger establishments (250 employees or more), Public Administration, and Educational Services had higher rates of participation and lower rates of refusals. Retail Trade had a lower rate of participation and higher rates of refusal and out of business establishments. Response rates were no different among establishments above and below the size class and industry-specific DAFW rate ( $p=0.9$ ) or DART rate ( $p=0.2$ ). After excluding establishments out of business by the time the interview was attempted, the response rate for the study was calculated at 49.5%.

Table 1. Participation by establishment characteristics. Data shown are establishment counts and row percentages, Washington participants.

	Sampled		Responded		Declined/ Refused		Interview not completed		Out of Business		p-value
Total establishments	1506	100%	701	47%	329	22%	387	26%	89	6%	
Establishment size											0.0005
1-10 employees	242	100%	103	43%	63	26%	58	24%	18	7%	
11-49 employees	453	100%	200	44%	111	25%	116	26%	26	6%	
50-249 employees	499	100%	217	43%	114	23%	133	27%	35	7%	
250-999 employees	228	100%	126	55%	33	14%	62	27%	7	3%	
1000+ employees	84	100%	55	65%	8	10%	18	21%	3	4%	
Industry (NAICS code)											<0.0001
Ag, Forestry, Fishing, Hunting (11)	43	100%	14	33%	11	26%	16	37%	2	5%	
Utilities (22)	20	100%	11	55%	[]	[]	[]	[]	[]	[]	
Construction (23)	213	100%	100	47%	52	24%	48	23%	13	6%	
Manufacturing (31-33)	216	100%	96	44%	38	18%	64	30%	18	8%	
Wholesale Trade (42)	75	100%	34	45%	20	27%	18	24%	3	4%	
Retail Trade (44-45)	174	100%	55	32%	56	32%	48	28%	15	9%	
Transportation, Warehousing (48-49)	103	100%	49	48%	27	26%	22	21%	5	5%	
Information (51)	28	100%	14	50%	8	29%	6	21%	.		
Finance Activities (52-53)	54	100%	26	48%	10	19%	12	22%	6	11%	
Professional, Business svcs (54-56)	118	100%	50	42%	30	25%	32	27%	6	5%	
Educational Services (61)	76	100%	48	63%	11	14%	17	22%	.		
Health Care, Social Assistance (62)	154	100%	85	55%	25	16%	38	25%	6	4%	
Leisure and hospitality (71-72)	139	100%	57	41%	24	17%	49	35%	9	6%	
Other Services (except PA) (81)	40	100%	19	48%	12	30%	4	10%	5	13%	
Public Administration (92)	53	100%	43	81%	2	4%	8	15%	.		
Establishment DAFW Rate											0.905
Above ave	432	100%	200	46%	91	21%	113	26%	28	6%	
Below ave	1074	100%	501	47%	238	22%	274	26%	61	6%	
Establishment DART Rate											0.175
Above ave	464	100%	226	49%	91	20%	113	24%	34	7%	
Below ave	1042	100%	475	46%	238	23%	274	26%	55	5%	

[] Data do not meet publication guidelines.

Of the 701 completed interviews, 92% (unweighted percent) were conducted with the individual who completed the 2011 SOII for the sampled establishment. In 87% of establishments interviewed (610 of 701), the interview participant had access to WC claim information. No logs were maintained in 108 of the 701 interviewed establishments, and in 56 establishments, someone other than the interviewee maintained the OSHA log. In 537 establishments, the interviewee completed or assisted in completing the OSHA log. Analysis of questions about OSHA recordkeeping practices were limited to the 537 respondents who were involved in maintaining OSHA logs for the establishment.

### Recordkeeping practices

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Establishments that maintained OSHA logs while participating in the SOII represented 42.5% of all BLS-covered establishments in the state (Table 2). Logs were more likely to be absent in smaller establishments, Educational Services, Professional and Business Services, Finance Activities, Transportation and Warehousing, Health Care, and Leisure and Hospitality Services. Logs were more likely absent from establishments with DAFW and DART rates below the average rates for establishments of the same size and industry. Establishments with below average DAFW or DART rates that did not keep a log during the survey year represented an estimated 40% of WA establishments, while log-less establishments with above average rates represented an estimate of less than 10% of WA establishments ( $p < 0.0001$ ). Respondents who had received OSHA recordkeeping training were more likely to have kept an OSHA log during the survey year, although compliance was less than complete; almost one in four establishments where the respondent had received training within the past 3 years kept no OSHA log during the SOII survey year. Among establishments where the respondent had received no training, an estimated 40% kept an OSHA log during the survey year while 43% did not.

Although not all establishments maintained an OSHA log during the survey year, most establishments did track workplace injuries and illnesses (an estimated 79.9% of WA establishments). The most common method of tracking was on a paper form (48.4%), followed by an electronic spreadsheet (18.5%), and specialized injury software (5.1%) (Table 3). An estimated 5% of establishments used some other method, which was generally described as being a collection of paper files compiled for each injury, or a company database.

Paper forms were common in all size groups except the largest establishments, where electronic spreadsheets and specialized injury software were more common. Industries relying on paper forms included approximately 90% of establishments in Agriculture, Forestry, Fishing, and Hunting, and Other Services and 75% of establishments in Construction. Specialized injury software was used in one-third of establishments in the Utilities industry and in one-fifth of establishments in Wholesale Trade. Specialized injury software was used in fewer than one in five establishments among all other industry groups.

Establishments less likely to engage in any form of injuries or illnesses tracking included: establishments with 1-10 employees, Professional and Business Services, Leisure and Hospitality, Wholesale Trade, and Transportation and Warehousing. Eighteen percent of establishments with DAFW rates below the average rate for their size and industry did not track injuries, compared with 11% of establishments with rates above average, although the difference is not statistically significant.

To aid in workplace injury and illness recording duties, an estimated 20% of establishments turned to the OSHA recordkeeping website as resource. Over half of all establishments used no resources to assist with workplace injury and illness recordkeeping (Table 4). Establishments with below average DAFW rates were more likely to use no recordkeeping resources compared with establishments with above average DAFW rates ( $p < 0.0001$ ). Compared with smaller establishments, larger establishments were more likely to call a state OSHA contact, BLS, or WC contact as a recordkeeping resource. The OSHA recordkeeping website was the most frequently reported resource among Construction,

Manufacturing, Finance Activities, Professional and business services, Health Care and Social Assistance, and Public Administration. WC insurer or TPA was the most popular resource among Agriculture, Forestry, Fishing and Hunting, Utilities, Wholesale Trade, Transportation and Warehousing, Information, and Educational Services. For Retail Trade and Leisure and Hospitality, the OSHA state contact was a popular resource, while Other Services relied more often on the BLS contact than any other resource. Establishments that maintained OSHA injury and illness records each year, regardless of participation in SOII reported greater use of each recordkeeping resource compared with establishments that maintained no logs outside participation in SOII. An estimated 72.5% of establishments that did not keep an OSHA log when not participating in SOII used no recordkeeping resources. The most common resource used by the group was the OSHA recordkeeping website, reported by an estimated 6.8% of establishments whose OSHA log maintenance was limited to SOII participation.

Table 2. Q16: Did you keep an OSHA log during 2011?

Data shown are weighted estimates of establishments and row percentages, Washington participants.

	Weighted N	Yes		No		DK		Missing		p-value
		%	SE	%	SE	%	SE	%	SE	
<b>All (Establishment weights)</b>	137,354	42.1	(5.1)	39.7	(5.7)	17.2	(4.1)	1.0	(0.5)	
<b>Establishment size</b>										<0.0001
1-10 employees	93,323	29.8	(7.1)	49.9	(8.1)	19.4	(5.9)	0.9	(0.7)	
11-49 employees	34,130	62.6	(4.6)	22.0	(3.8)	14.3	(3.2)	1.1	(0.9)	
50-249 employees	8,858	87.2	(3.1)	4.3	(1.9)	7.4	(2.5)	1.1	(1.1)	
250+ employees	1,044	91.3	(1.1)	1.4	(0.7)	2.0	(0.8)	5.3	(0.1)	
<b>Industry</b>										NA
Ag, Forestry, Fishing and Hunting (11)	1,418	75.3	(24.7)	24.7	(24.7)	.	.	.	.	
Utilities (22)	274	80.5	(2.8)	.	.	19.5	(2.8)	.	.	
Construction (23)	7,634	68.1	(10.3)	26.8	(10.3)	1.2	(0.7)	3.8	(3.0)	
Manufacturing (31-33)	2,803	76.2	(5.8)	12.4	(5.0)	11.5	(4.9)	.	.	
Wholesale Trade (42)	6,352	77.7	(10.4)	16.5	(9.0)	5.8	(6.0)	.	.	
Retail Trade (44-45)	17,805	65.4	(12.7)	25.0	(12.4)	9.6	(7.7)	.	.	
Transportation, Warehousing (48-49)	2,332	24.7	(3.9)	30.1	(24.6)	19.3	(18.1)	25.8	(24.6)	
Information (51)	2,382	65.9	(3.7)	30.1	(4.0)	4.0	(0.2)	.	.	
Finance Activities (52-53)	15,888	44.8	(29)	52.9	(29.1)	2.3	(2.3)	.	.	
Professional, business services (54-56)	25,581	20.5	(6.4)	68.0	(8.9)	11.0	(8.3)	0.6	(0.4)	
Educational Services (61)	1,469	25.9	(4.4)	70.1	(3.0)	4.0	(3.1)	.	.	
Health Care and Social Assistance (62)	17,149	39.8	(17.6)	40.1	(20.0)	20.1	(17.5)	.	.	
Leisure and hospitality (71-72)	21,478	37.2	(10.9)	38.7	(12.8)	22.8	(10.9)	1.4	(1.4)	
Other Services (except PA) (81)	14,296	18.0	(11.5)	18.9	(16.8)	63.2	(19.4)	.	.	
Public Administration (92)	492	67.5	(16.5)	31.7	(16.7)	0.8	(0.6)	.	.	
<b>Establishment DAWF rate</b>										<0.0001
Below ave	123,928	37.1	(5.4)	43.1	(6.2)	18.8	(4.5)	1.0	(0.6)	
Above ave	13,427	88.1	(4.2)	8.3	(3.5)	3.3	(2.2)	0.3	(0.3)	
<b>Establishment DART rate</b>										<0.0001
Below ave	122,078	36.1	(5.5)	43.8	(6.3)	19.0	(4.6)	1.1	(0.6)	
Above ave	15,277	89.6	(3.6)	7.2	(3.1)	2.9	(2.0)	0.3	(0.3)	
<b>Respondent's OSHA recordkeeping training</b>										NA
No training	76,748	39.9	(7.6)	43.0	(8.8)	16.3	(5.7)	0.8	(0.5)	
Trained within the last 3 years	12,440	75.8	(18.8)	24.1	(18.9)	0.1	(0.1)	.	.	
Trained more than 3 years ago	14,823	98.5	(0.9)	0.9	(0.7)	.	.	0.5	(0.4)	
DK	1,485	54.3	(17.4)	22.9	(16.5)	22.7	(16.8)	.	.	
Non-response	31,858	7.3	(4.5)	56.5	(13.8)	34.1	(13.0)	2.1	(1.9)	

Table 3. Q22: What do you use to track your workplace injuries and illnesses on?

Data shown are weighted estimates of establishments and row percentages, Washington participants. Categories are not mutually exclusive.

	Weighted N	Paper Form		Electronic Spreadsheet		Specialized injury software		Other		Doesn't track		DK	
		%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
<b>All (Establishment wts)</b>	137,354	48.4	(5.7)	18.5	(4.2)	5.1	(1.0)	5.4	(2.8)	17.2	(5.2)	2.9	(1.4)
<b>Establishment size</b>													
1-10 employees	93,323	49.6	(8.3)	16.4	(5.9)	1.0	(1.0)	4.4	(3.9)	20.3	(7.6)	2.6	(1.9)
11-49 employees	34,130	47.1	(4.8)	21.0	(4.0)	9.9	(2.7)	8.0	(2.6)	12.8	(3.2)	4.1	(2.0)
50-249 employees	8,858	44.9	(4.0)	27.6	(3.5)	25.3	(3.2)	5.4	(2.1)	4.0	(1.7)	1.9	(1.3)
250+ employees	1,044	16.1	(3.0)	43.6	(4.5)	46.6	(4.5)	2.5	(0.6)	5.3	(0.1)	.	.
<b>Industry</b>													
Agriculture, Forestry, Fishing and Hunting (11)	1,418	89.3	(3.8)	8.2	(3.4)	2.5	(2.5)	2.5	(2.5)	.	.	.	.
Utilities (22)	274	25.5	(6.1)	41.8	(7.7)	33.8	(9.5)	.	.	.	.	.	.
Construction (23)	7,634	74.4	(7.6)	12.9	(4.7)	2.8	(1.1)	1.6	(1.0)	4.0	(3.0)	0.1	(0.1)
Manufacturing (31-33)	2,803	62.1	(6.8)	27.3	(5.6)	8.5	(2.8)	7.0	(3.6)	10.0	(4.3)	.	.
Wholesale Trade (42)	6,352	30.3	(10.7)	14.9	(7.7)	21.1	(13.7)	5.3	(3.7)	26.0	(13.6)	3.2	(3.2)
Retail Trade (44-45)	17,805	47.1	(12.5)	41.8	(12.4)	7.2	(3.3)	5.6	(3.6)	12.1	(7.8)	2.7	(2.7)
Transportation and Warehousing (48-49)	2,332	16.7	(3.8)	11.1	(3.4)	7.4	(2.5)	16.1	(17.6)	25.8	(24.6)	.	.
Information (51)	2,382	73.0	(13.8)	12.3	(12.9)	12.2	(0.7)	.	.	2.5	(0.1)	.	.
Finance Activities (52-53)	15,888	7.9	(3.3)	26.8	(23.4)	0.0	(0.0)	23.5	(23.2)	3.8	(2.8)	12.3	(12.9)
Professional and business services (54-56)	25,581	39.3	(23.7)	6.0	(2.7)	3.1	(1.3)	1.3	(1.0)	43.8	(24.4)	0.4	(0.4)
Educational Services (61)	1,469	25.5	(15.7)	14.9	(5.3)	4.3	(2.4)	15.4	(15.4)	3.0	(3.0)	38.7	(1.6)
Health Care and Social Assistance (62)	17,149	66.6	(17.1)	5.3	(1.8)	4.8	(1.5)	1.2	(1.2)	5.4	(2.2)	1.2	(1.2)
Leisure and hospitality (71-72)	21,478	39.1	(13.3)	19.3	(10.6)	7.6	(2.9)	3.3	(2.0)	27.1	(13.1)	1.8	(1.5)
Other Services (except PA) (81)	14,296	94.8	(3.9)	23.0	(18.6)	0.0	(0.0)	.	.	0.3	(0.3)	0.5	(0.1)
Public Administration (92)	492	58.9	(12.2)	27.7	(9.6)	13.4	(6.5)	11.9	(6.3)	.	..	.	.
<b>Establishment DAFW rate</b>													
Below ave	123,928	48.9	(6.3)	17.9	(4.6)	4.2	(1.0)	4.9	(3.0)	17.9	(5.7)	3.2	(1.6)
Above ave	13,427	43.8	(8.1)	23.7	(5.1)	13.7	(3.9)	9.4	(4.6)	11.0	(6.8)	.	.
<b>Establishment DART rate</b>													
Below ave	122,078	48.7	(6.3)	17.8	(4.7)	3.9	(1.0)	4.9	(3.1)	18.2	(5.8)	3.2	(1.6)
Above ave	15,277	46.1	(7.3)	24.1	(4.9)	14.7	(3.7)	9.3	(4.1)	9.9	(6.0)	.	.



Table 4. Q33: Have you ever used any of the following recordkeeping resources or contacts?

Data shown are weighted estimates of establishments and row percentages, Washington participants. Categories are not mutually exclusive.

	Weighted N	OSHA state contact		OSHA fed contact		OSHA recordkeeping website		BLS contact		Insurer/TPA		Other		None	
		%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
<b>All (Establishment wts)</b>	137,354	12.1	(2.5)	1.5	(0.5)	20.1	(4.2)	8.0	(2.5)	12.3	(2.0)	5.0	(1.0)	54.8	(4.8)
<b>Establishment size</b>															
1-10 employees	93,323	7.3	(3.4)	0.0	(0.0)	13.5	(5.9)	4.5	(3.4)	5.3	(2.4)	1.1	(0.5)	64.0	(6.8)
11-49 employees	34,130	20.5	(4.0)	2.9	(1.9)	30.0	(4.3)	12.2	(3.3)	21.1	(3.7)	14.2	(3.7)	40.3	(4.6)
50-249 employees	8,858	27.6	(3.5)	10.7	(2.2)	48.7	(4.3)	26.2	(3.6)	48.1	(3.9)	9.7	(2.4)	19.6	(3.6)
250+ employees	1,044	34.9	(4.0)	7.6	(3.5)	48.7	(4.9)	32.6	(4.6)	48.2	(5.2)	18.5	(4.4)	14.3	(3.0)
<b>Industry</b>															
Ag, Forestry, Fishing, Hunting (11)	1,418	36.4	(25.1)	2.5	(2.5)	34.8	(25.0)	4.1	(3.0)	63.6	(25.1)	5.1	(3.4)	1.5	(1.5)
Utilities (22)	274	20.1	(5.7)	4.9	(4.9)	18.4	(5.6)	13.2	(1.9)	51.8	(9.6)	14.7	(2.3)	40.8	(11.7)
Construction (23)	7,634	14.8	(5.4)	2.5	(1.0)	28.8	(8.6)	2.4	(1.0)	11.3	(3.2)	4.1	(3.2)	50.6	(10.6)
Manufacturing (31-33)	2,803	18.9	(4.2)	2.8	(1.8)	42.0	(6.7)	10.7	(4.4)	26.6	(4.8)	7.3	(3.0)	31.2	(6.5)
Wholesale Trade (42)	6,352	12.5	(7.1)	1.5	(0.9)	17.7	(8.0)	4.8	(3.2)	28.9	(10.6)	12.3	(7.5)	44.9	(14.2)
Retail Trade (44-45)	17,805	30.9	(10.6)	3.4	(1.0)	20.6	(7.5)	15.0	(7.1)	17.9	(7.2)	7.3	(4.3)	48.5	(11.6)
Transp, Warehousing (48-49)	2,332	11.6	(3.3)	3.2	(1.8)	9.0	(2.3)	5.5	(2.4)	14.9	(3.7)	1.2	(0.7)	75.6	(3.9)
Information (51)	2,382	13.8	(13.0)	0.2	(0.0)	48.4	(2.9)	18.1	(16.9)	55.2	(3.1)	12.2	(12.9)	2.5	(0.1)
Finance Activities (52-53)	15,888	2.6	(2.3)	.	.	40.9	(28.7)	3.3	(2.4)	14.9	(13.4)	.	.	33.0	(20.8)
Professional, business svcs (54-56)	25,581	11.6	(6.0)	3.2	(2.5)	12.2	(6.0)	4.9	(1.3)	5.3	(1.4)	6.4	(2.6)	80.5	(6.4)
Educational Services (61)	1,469	5.3	(2.5)	.	.	9.1	(3.9)	1.8	(0.6)	15.3	(4.6)	3.5	(2.4)	60.4	(16.0)
Health Care, Social Assistance (62)	17,149	5.3	(1.7)	0.5	(0.3)	26.0	(17.6)	4.3	(1.5)	5.5	(1.5)	2.5	(1.7)	62.4	(17.6)
Leisure and hospitality (71-72)	21,478	12.4	(10.5)	0.0	(0.0)	11.5	(2.8)	3.1	(1.6)	8.6	(2.7)	5.6	(1.5)	55.4	(13.2)
Other Services (except PA) (81)	14,296	2.3	(2.0)	.	.	4.5	(3.9)	25.6	(20.4)	4.7	(3.9)	3.9	(3.8)	53.1	(22.1)
Public Administration (92)	492	31.6	(13.1)	0.7	(0.5)	51.8	(15.1)	13.1	(6.3)	24.7	(8.5)	4.7	(2.5)	41.4	(16.0)
<b>Establishment DAFW rate</b>															
Below ave	123,928	10.2	(2.5)	1.2	(0.5)	17.0	(4.4)	6.7	(2.7)	10.5	(2.1)	3.8	(1.0)	58.4	(5.2)
Above ave	13,427	29.9	(8.5)	3.8	(1.3)	49.3	(8.0)	20.1	(5.8)	28.6	(6.1)	16.6	(4.7)	21.6	(5.8)
<b>Establishment keeps OSHA log when not in SOII</b>															
Yes	46,401	28.2	(5.5)	4.4	(1.5)	45.3	(6.2)	14.0	(3.2)	29.8	(5)	13.5	(2.9)	20.8	(4.7)
No	69,867	3.2	(2.1)	.	.	6.8	(5.3)	1.3	(0.8)	3.1	(0.8)	0.1	(0.1)	72.5	(5.5)
DK	19,833	6.4	(6.4)	.	.	9.4	(7.1)	18.2	(14.1)	4.6	(3.3)	2.8	(2.8)	70.8	(15.1)
Non-response	1,253	.	.	.	.	.	.	.	.	.	.	.	.	76.2	(22.4)

## OSHA recordkeeping practices by establishment and respondent characteristics

Among establishments where the respondent was involved in maintaining the establishment's OSHA records, 28% followed the OSHA criteria when determining what to record on the log (Table 5). Twenty-one percent recorded any incident that required medical treatment (in a subset of 64 Washington respondents, 98% indicated that this category included any case where the worker goes to the doctor, regardless of the treatment provided.) Sixteen percent of establishments recorded all injuries (regardless of severity), and 15% recorded WC claims (8.2% recorded all filed claims, 6.8% recorded all accepted claims). Over 11% percent of establishments fit into none of the available responses; in most of these cases, the respondent was unable to provide an answer because someone else within the company decided which cases were recorded on the log.

Both Information and Utilities establishments that kept OSHA logs maintained by the interviewed participant had high estimated proportions of employees recorded on the logs according to the OSHA case criteria (89.2% and 82.1%, respectively). In Agriculture, Forestry, Fishing and Hunting, less than 20% of employees were recorded according to the OSHA criteria and in Other Services, almost no one was recorded according to the OSHA criteria. Instead, employees in these two industries were recorded on logs based on WC claims. The greatest percent of employees covered by the practice of recording all injuries (regardless of severity) was observed among Finance Activities (20.6%) and Construction (16.6%), although the percentages are lower compared with other case definitions employed within these industries. More employees in Finance Activities were recorded based on needing medical treatment (36.6%) and in Construction, 48.0% of the estimated worker population was recorded in accordance with the OSHA criteria.

Formal training for OSHA recordkeeping was associated with an increased likelihood of using the OSHA criteria ( $p < 0.01$ ). In log-maintaining establishments where the respondent was involved in completing the OSHA log and had received formal training on OSHA recordkeeping, an estimated 53% of employees were recorded according to the OSHA case criteria. Where the respondent had not been trained, an estimated 32% of workers were recorded according to the OSHA criteria. Workers in establishments where OSHA logs were maintained even when not participating in SOII were more likely to be recorded according to the OSHA case definition; whereas establishments that maintained logs only when participating in SOII favored a different case definition, recording as cases workers who sought medical attention for injuries.

Relying on computer software to decide which injuries to record on the OSHA was rare, practiced in an estimated 2% of establishments. Establishments that deferred to the computer software tended to be larger, have above average DAFW and DART rates, and in the Health Care and Social Assistance industry.

In most establishments that kept logs maintained by the interviewed respondent, injuries were recorded within OSHA's mandated 7 day deadline: 33% recorded within 1 day and an additional 32% recorded within 1 week of finding out about the injury. Approximately one in ten establishments waited until the end of the year to record injuries on the log. A greater portion of establishments with above average DART rates recorded injuries at the end of the year compared with establishments with below average DART rates (17% compared with 7%).

Most establishments counted days of missed work incorrectly. Among establishments that kept logs maintained by the interviewed respondent, 29% correctly counted calendar days; 54% counted scheduled shifts (Table 6). The portion of establishments correctly counting days increased with establishment size, with 70% of establishments with 250 or more employees counting calendar days. Relatedly, almost half of all workers worked at an establishment that counted days correctly; while 42%

worked at an establishment that counted scheduled shifts. High rates of counting scheduled shifts were reported in Other Services (92% of workers), Agriculture, Forestry, Fishing and Hunting (83% of workers), Finance Activities (75% of workers), and Wholesale Trade (62% of workers). Employees at establishments where logs were maintained routinely or where the respondent received OSHA recordkeeping training were more likely to have days of missed work counted correctly.

Adding cases to a previous year's log was uncommon; among establishments that kept logs maintained by the interviewed respondent an estimated 13% of establishments had done so (Table 7). More than three out of four establishments had never added cases, and approximately 10% did not answer the question – the preferred response among participants who would have answered 'DK' if given the option. The greatest portion of employees at establishments that had added cases were in Utilities (65% of workers), Transportation and Warehousing (65% of workers), and Public Administration (60% of workers). Rates were lowest in Agriculture, Forestry, Fishing and Hunting, where an estimated two percent of employees worked for an establishment that had recorded injuries on a previous year's log. In establishments where OSHA logs were kept only when participating in SOII, adding cases to old logs almost never occurred, likely because logs did not exist for previous years and OSHA recording activities ceased once the SOII survey year ended.

The percent of establishments that had ever updated the number of days away from work on a previous year's log was similar to the percent that had ever added cases. An estimated 14% of establishments that kept logs maintained by the interviewed respondent had updated the number of days away from work on a previous year's log (Table 8). Updating was more common among larger establishments, trained recordkeepers, and those that kept OSHA records annually. In two industries, more than half the employees worked at an establishment that updated days: Utilities (99%) and Transportation and Warehousing (59%). It should be noted that many respondents indicated they had never added cases or updated days away from work because they had never been faced with a situation that required such action.

Table 5. Q25: How do you decide whether to record a worker injury on your OSHA log?

Data shown are weighted estimates of establishments, employees, and row percentages, Washington participants. Totals are limited to establishments with OSHA logs completed by the respondent.

	Weighted N	Follow OSHA criteria		All I/I that requires med trmt		All injuries		All filed WC claims		All accepted WC claims		Computer software decides		Other		Missing	
		%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
<b>All (Establishment weights)</b>	49,687	27.8	(5.2)	20.9	(4.0)	16.3	(5.7)	8.2	(2.1)	6.8	(5.8)	2.0	(0.3)	11.4	(5.0)	6.6	(3.0)
<b>Establishment size</b>																	
1-10 employees	21,245	23.7	(10.6)	12.5	(6.2)	20.3	(12.5)	2.8	(1.8)	14.8	(12.7)	.	.	17.6	(10.8)	8.3	(6.6)
11-49 employees	20,543	25.3	(5.4)	28.5	(5.6)	15.6	(4.2)	12.3	(4.1)	0.2	(0.2)	4.2	(0.3)	7.4	(3.8)	6.5	(2.6)
50-249 employees	6,966	43.9	(4.5)	24.9	(4.0)	8.0	(2.8)	12.1	(3.0)	2.6	(1.3)	1.0	(0.6)	5.3	(1.7)	2.3	(1.5)
250+ employees	934	53.2	(5.2)	17.3	(4.6)	4.2	(2.0)	12.9	(2.3)	2.9	(1.8)	5.2	(2.3)	3.2	(0.7)	1.1	(0.3)
<b>Establishment DAFW rate</b>																	
Below ave	39,724	28.6	(6.4)	21.0	(4.7)	18.3	(7.0)	6.3	(2.1)	8.2	(7.1)	0.1	(0.0)	10.4	(5.6)	7.1	(3.7)
Above ave	9,963	24.5	(5.9)	20.5	(7.1)	8.5	(5.1)	16.0	(5.5)	1.3	(0.7)	9.6	(1.7)	15.1	(11.0)	4.4	(3.1)
<b>Establishment DART rate</b>																	
Below ave	38,241	27.1	(6.5)	21.2	(4.9)	18.1	(7.3)	6.9	(2.2)	8.6	(7.4)	0.1	(0.0)	10.7	(5.8)	7.4	(3.9)
Above ave	11,446	29.9	(6.1)	20.2	(6.4)	10.6	(4.9)	12.8	(4.6)	0.9	(0.5)	8.4	(1.3)	13.5	(9.7)	3.9	(2.7)
<b>All (Employee wts)</b>	1,944,037	44.0	(3.5)	19.9	(2.5)	7.4	(1.4)	11.6	(1.8)	2.8	(1.5)	5.0	(2.2)	6.0	(1.3)	3.3	(0.8)
<b>Industry</b>																	
Ag, Forestry, Fishing and Hunting (11)	75,947	19.0	(6.6)	28.2	(12.2)	2.4	(2.4)	47.6	(12.2)	.	.	.	.	2.7	(2.8)	.	.
Utilities (22)	12,741	81.3	(9.4)	11.2	(8.9)	.	.	.	.	.	.	.	.	7.5	(0.5)	.	.
Construction (23)	80,363	48.0	(6.7)	17.8	(4.8)	16.6	(6.0)	6.8	(2.7)	3.2	(2.4)	.	.	3.5	(1.5)	4.1	(2.9)
Manufacturing (31-33)	135,821	54.8	(7.8)	23.8	(6.7)	3.8	(2.3)	15.1	(5.8)	0.2	(0.2)	.	.	1.6	(0.9)	0.8	(0.8)
Wholesale Trade (42)	103,328	45.4	(12.6)	28.3	(12.5)	7.8	(7.5)	10.7	(6.1)	.	.	3.4	(3.4)	.	.	4.5	(3.2)
Retail Trade (44-45)	275,409	28.8	(7.6)	28.3	(7.5)	5.6	(3.3)	12.5	(5.6)	1.7	(1.7)	4.5	(2.1)	12.9	(5.4)	5.7	(4.0)
Transportation, Warehousing (48-49)	54,718	58.7	(11.5)	5.6	(4.1)	3.4	(2.0)	6.1	(3.4)	3.8	(3.8)	8.1	(4.3)	11.4	(10.6)	2.9	(2.8)
Information (51)	139,643	89.2	(7.3)	1.6	(0.7)	6.7	(6.8)	0.5	(0.2)	.	.	.	.	.	.	2.1	(0.8)
Finance Activities (52-53)	58,763	35.1	(15.9)	36.6	(16.3)	20.6	(12.5)	0.1	(0.1)	7.5	(6.7)	.	.	.	.	.	.
Professional, Business Services (54-56)	244,181	49.2	(10.9)	21.0	(8.1)	2.8	(2.6)	12.9	(6.9)	.	.	.	.	7.3	(4.9)	6.8	(2.3)
Educational Services (61)	91,021	53.1	(10.9)	6.5	(4.7)	10.5	(5.5)	25.9	(10.1)	1.9	(2.0)	.	.	2.2	(2.2)	.	.
Health Care and Social Assistance (62)	323,737	42.3	(10.3)	10.4	(5.0)	10.8	(4.1)	14.0	(4.8)	2.2	(1.5)	15.6	(12.3)	4.1	(2.2)	0.6	(0.6)
Leisure and hospitality (71-72)	198,130	37.0	(10.2)	26.4	(8.6)	11.3	(6.5)	.	.	.	.	13.7	(2.8)	3.4	(3.3)	8.3	(4.6)

Other Services (except PA) (81)	57,070	0.3	(0.1)	35.0	(26.2)	3.4	(3.8)	5.2	(6.1)	48.3	(28.6)	.	.	7.9	(6.6)	.	.
Public Administration (92)	93,165	37.7	(9.6)	21.5	(8.8)	1.1	(1.0)	11.2	(6.0)	4.3	(3.2)	.	.	24.1	(9.6)	0.0	(0.0)
<b>Respondent received OSHA recording training</b>																	
Yes	1,098,448	53.2	(4.6)	17.2	(3.3)	4.3	(1.4)	12.6	(3.0)	1.3	(0.6)	6.2	(3.8)	4.3	(1.3)	0.9	(0.5)
No	801,201	31.8	(4.9)	24.3	(3.9)	11.0	(2.6)	10.9	(2.6)	5.0	(3.4)	3.7	(0.8)	7.8	(2.4)	5.5	(1.5)
DK	26,517	40.5	(23.5)	.	.	35.1	(26.1)	.	.	.	.	.	.	24.4	(21.3)	.	.
Non-response	17,871	33.1	(25.1)	14.4	(14.6)	.	.	.	.	.	.	.	.	.	.	52.5	(30.0)
<b>Establishment keeps OSHA log when not in SOII</b>																	
Yes	1,775,968	47.1	(3.6)	18.9	(2.5)	7.6	(1.5)	12.2	(1.9)	1.5	(0.5)	5.5	(2.4)	5.6	(1.3)	1.6	(0.4)
No	89,941	16.5	(8.8)	33.0	(11.6)	8.5	(6.1)	4.0	(3.0)	.	.	.	.	10.1	(6.7)	27.9	(10.2)
DK	78,127	4.3	(4.2)	26.0	(19.0)	2.2	(1.9)	6.3	(6.6)	35.3	(24.9)	.	.	11.4	(11.2)	14.6	(12.3)
Non-response	0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table 6. Q29A: Does the number of days away from work include all calendar days or is it limited to days of missed work or scheduled shifts? Data shown are weighted estimates of establishments, employees, and row percentages, Washington participants. Totals are limited to establishments with OSHA logs completed by the respondent.

	Weighted N	Calendar days		Scheduled shifts		Other		DK		Missing	
		%	SE	%	SE	%	SE	%	SE	%	SE
<b>All (Establishment wt)</b>	49,687	29.0	(6.0)	53.8	(6.4)	0.6	(0.3)	5.7	(3.5)	10.9	(3.7)
<b>Establishment size</b>											
1-10 employees	21,245	26.5	(13.0)	48.8	(14.0)	0.1	(0.1)	8.6	(7.9)	16.0	(8.4)
11-49 employees	20,543	24.2	(5.2)	63.0	(5.5)	0.3	(0.2)	3.6	(2.0)	8.9	(3.0)
50-249 employees	6,966	45.5	(4.2)	45.4	(4.3)	3.2	(2.0)	3.8	(2.0)	2.0	(1.1)
250+ employees	934	69.9	(3.7)	24.9	(3.7)	2.2	(1.1)	1.9	(1.1)	1.1	(0.4)
<b>Establishment DAFW rate</b>											
Below ave	39,724	28.3	(7.3)	53.7	(7.8)	0.8	(0.4)	6.7	(4.3)	10.5	(4.4)
Above ave	9,963	31.8	(6.7)	53.9	(8.3)	0.1	(0.0)	1.8	(1.2)	12.4	(6.3)
<b>Establishment DAFW rate</b>											
Below ave	38,241	28.2	(7.5)	54.0	(8.0)	0.8	(0.4)	6.1	(4.5)	10.9	(4.5)
Above ave	11,446	31.8	(6.1)	53.0	(7.6)	0.1	(0.0)	4.4	(2.9)	10.8	(5.5)
<b>All (Employee wts)</b>	1,944,037	48.9	(3.2)	42.4	(3.2)	1.2	(0.5)	3.8	(1.3)	3.7	(0.8)
<b>Industry</b>											
Ag, Forestry, Fishing and Hunting (11)	75,947	14.3	(6.1)	83.0	(6.1)	2.7	(2.8)	.	.	.	.
Utilities (22)	12,741	89.2	(2.3)	10.8	(2.3)	.	.	.	.	.	.
Construction (23)	80,363	48.2	(7.2)	40.2	(6.6)	1.4	(1.4)	0.8	(0.8)	9.4	(3.9)
Manufacturing (31-33)	135,821	60.1	(7.7)	36.5	(7.6)	0.0	(0.0)	0.6	(0.5)	2.7	(2.1)
Wholesale Trade (42)	103,328	33.5	(12.0)	62.0	(12.2)	.	.	.	.	4.5	(3.2)
Retail Trade (44-45)	275,409	43.0	(7.8)	40.7	(7.7)	.	.	11.2	(6.1)	5.0	(3.5)
Transportation and Warehousing (48-49)	54,718	70.5	(10.0)	29.4	(10.0)	0.1	(0.1)	.	.	.	.
Information (51)	139,643	54.5	(23.5)	43.4	(24.3)	.	.	2.1	(0.8)	.	.
Finance Activities (52-53)	58,763	5.0	(1.0)	74.5	(12.2)	.	.	20.5	(12.8)	.	.
Professional, Business services (54-56)	244,181	55.1	(8.4)	35.8	(8.5)	4.5	(3.2)	.	.	4.6	(0.6)
Educational Services (61)	91,021	56.9	(10.2)	39.2	(10.1)	.	.	1.8	(1.8)	2.2	(2.2)
Health Care and Social Assistance (62)	323,737	57.5	(8.6)	38.1	(8.4)	.	.	2.3	(2.3)	2.1	(1.2)
Leisure and hospitality (71-72)	198,130	44.5	(9.5)	33.9	(7.6)	1.8	(1.8)	8.8	(6.1)	11.0	(5.2)
Other Services (except PA) (81)	57,070	8.2	(6.6)	91.8	(6.6)	.	.	.	.	.	.
Public Administration (92)	93,165	76.3	(6.2)	17.0	(5.4)	6.3	(3.1)	0.3	(0.2)	0.0	(0.0)

**Respondent received OSHA recording training**

Yes	1,098,448	61.1 (5.1)	33.2 (5.1)	0.8 (0.5)	4.2 (1.8)	0.8 (0.5)
No	801,201	32.3 (4.8)	55.6 (4.6)	1.9 (0.9)	3.5 (1.8)	6.7 (1.6)
DK	26,517	59.7 (23.5)	40.3 (23.5)	. .	. .	. .
Non-response	17,871	23.0 (22.9)	24.5 (17.2)	. .	. .	52.5 (30.0)

**Establishment keeps OSHA log when not in SOII**

Yes	1,775,968	52.2 (3.3)	40.5 (3.4)	1.0 (0.4)	4.2 (1.4)	2.1 (0.5)
No	89,941	19.2 (8.0)	50.0 (11.3)	6.0 (5.7)	. .	24.8 (9.5)
DK	78,127	6.7 (5.4)	78.4 (13.9)	. .	0.4 (0.3)	14.6 (12.3)
Non-response	0	. .	. .	. .	. .	. .

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Table 7. Q31: Have you ever added cases to a previous year's OSHA log?

Data shown are weighted estimates of establishments, employees, and row percentages, Washington participants. Totals are limited to establishments with OSHA logs completed by the respondent.

	Weighted N	Yes		No		Missing	
		%	SE	%	SE	%	SE
<b>All (Establishment wts)</b>	49,687	13.2	(3.3)	76.2	(4.7)	10.6	(3.7)
<b>Establishment size</b>							
1-10 employees	21,245	7.6	(5.3)	76.3	(9.5)	16.0	(8.4)
11-49 employees	20,543	16.6	(5)	76.1	(5.4)	7.3	(2.8)
50-249 employees	6,966	17.6	(3.1)	77.3	(3.5)	5.1	(2.2)
250+ employees	934	33.0	(3.9)	65.8	(3.9)	1.2	(0.5)
<b>Establishment DAFW rate</b>							
Below ave	39,724	12.8	(3.9)	76.6	(5.5)	10.6	(4.4)
Above ave	9,963	14.9	(4.8)	74.3	(7)	10.8	(5.8)
<b>Establishment DART rate</b>							
Below ave	38,241	13.0	(4.1)	76.0	(5.8)	11.0	(4.5)
Above ave	11,446	14.0	(4.3)	76.6	(6.2)	9.4	(5.1)
<b>All (Employee wts)</b>	1,944,037	25.2	(2.8)	70.0	(2.9)	4.8	(1.2)
<b>Industry</b>							
Agriculture, Forestry, Fishing and Hunting (11)	75,947	2.4	(2.5)	97.6	(2.5)	.	.
Utilities (22)	12,741	64.7	(12.1)	35.3	(12.1)	.	.
Construction (23)	80,363	22.0	(5.6)	70.8	(6.2)	7.2	(3.2)
Manufacturing (31-33)	135,821	34.5	(7.6)	64.7	(7.5)	0.8	(0.8)
Wholesale Trade (42)	103,328	18.5	(8.6)	77.0	(9.4)	4.5	(3.2)
Retail Trade (44-45)	275,409	27.2	(6.8)	56.5	(8)	16.2	(6.8)
Transportation and Warehousing (48-49)	54,718	64.9	(10.6)	33.3	(10.4)	1.7	(1.7)
Information (51)	139,643	6.7	(6.8)	93.3	(6.8)	.	.
Finance Activities (52-53)	58,763	8.2	(6.9)	91.8	(6.9)	.	.
Professional and business services (54-56)	244,181	15.7	(10.1)	79.8	(9.8)	4.6	(0.6)
Educational Services (61)	91,021	33.7	(10.6)	64.2	(10.6)	2.2	(2.2)
Health Care and Social Assistance (62)	323,737	34.8	(9.4)	63.1	(9.4)	2.1	(1.2)
Leisure and hospitality (71-72)	198,130	15.3	(7.8)	76.4	(8.3)	8.3	(4.6)
Other Services (except PA) (81)	57,070	7.9	(6.6)	92.1	(6.6)	.	.
Public Administration (92)	93,165	59.6	(9.5)	40.4	(9.5)	0.0	(0)
<b>Respondent received OSHA recording training</b>							
Yes	1,098,448	32.5	(4.6)	64.0	(4.6)	3.5	(1.6)
No	801,201	15.0	(3.8)	79.5	(3.9)	5.5	(1.4)
DK	26,517	35.3	(26.1)	59.5	(25.6)	5.2	(5.6)
Non-response	17,871	23.0	(22.9)	24.5	(17.2)	52.5	(30)
<b>Establishment keeps OSHA log when not in SOII</b>							
Yes	1,775,968	27.5	(3)	69.1	(3.1)	3.4	(1.1)
No	89,941	2.5	(2.5)	72.6	(9.7)	24.8	(9.5)
DK	78,127	.	.	85.4	(12.3)	14.6	(12.3)
Non-response	0	.	.	.	.	.	.



Table 8. Q32: *Have you ever updated the number of days away from work on a previous year's log?*  
 Data shown are weighted estimates of establishments, employees, and row percentages, Washington participants. Totals are limited to establishments with OSHA logs completed by the respondent.

	Weighted N	Yes		No		Non-response	
		%	SE	%	SE	%	SE
<b>All (Establishment wts)</b>	49,687	14.0	(2.8)	75.3	(4.7)	10.7	(3.7)
<b>Establishment size</b>							
1-10 employees	21,245	3.5	(2.2)	80.5	(8.9)	16.0	(8.4)
11-49 employees	20,543	19.2	(5.1)	73.4	(5.5)	7.3	(2.8)
50-249 employees	6,966	26.6	(3.4)	67.7	(3.8)	5.7	(2.2)
250+ employees	934	42.7	(5.2)	56.1	(5.2)	1.2	(0.5)
<b>Establishment DAFW rate</b>							
Below ave	39,724	13.2	(3.3)	76.1	(5.5)	10.7	(4.4)
Above ave	9,963	16.9	(4.8)	72.3	(7.3)	10.8	(5.8)
<b>Establishment DART rate</b>							
Below ave	38,241	11.3	(3.1)	77.6	(5.6)	11.1	(4.5)
Above ave	11,446	22.7	(5.5)	67.9	(7.0)	9.4	(5.1)
<b>All (Employee wts)</b>	1,944,037	33.5	(3.3)	61.5	(3.3)	5.0	(1.2)
<b>Industry</b>							
Agriculture, Forestry, Fishing and Hunting (11)	75,947	27.8	(12.8)	72.2	(12.8)	.	.
Utilities (22)	12,741	99.0	(1.0)	1.0	(1.0)	.	.
Construction (23)	80,363	31.3	(6.4)	60.6	(6.8)	8.1	(3.2)
Manufacturing (31-33)	135,821	46.9	(7.7)	50.3	(7.6)	2.8	(2.2)
Wholesale Trade (42)	103,328	42.6	(11.9)	52.9	(12.2)	4.5	(3.2)
Retail Trade (44-45)	275,409	26.1	(6.8)	57.7	(8.0)	16.2	(6.8)
Transportation and Warehousing (48-49)	54,718	58.6	(11.5)	39.7	(11.3)	1.7	(1.7)
Information (51)	139,643	41.3	(25.1)	58.7	(25.1)	.	.
Finance Activities (52-53)	58,763	6.6	(2.0)	93.4	(2.0)	.	.
Professional and business services (54-56)	244,181	33.0	(10.5)	62.4	(10.4)	4.6	(0.6)
Educational Services (61)	91,021	35.0	(10.4)	62.9	(10.5)	2.2	(2.2)
Health Care and Social Assistance (62)	323,737	41.5	(6.7)	56.4	(6.7)	2.1	(1.2)
Leisure and hospitality (71-72)	198,130	15.8	(6.6)	75.9	(7.8)	8.3	(4.6)
Other Services (except PA) (81)	57,070	0.5	(0.3)	99.5	(0.3)	.	.
Public Administration (92)	93,165	43.1	(11.3)	56.9	(11.3)	0.0	(0.0)
<b>Respondent received OSHA recording training</b>							
Yes	1,098,448	41.5	(5.1)	55.0	(5.0)	3.5	(1.6)
No	801,201	22.7	(4.3)	71.3	(4.4)	6.0	(1.4)
DK	26,517	32.3	(22.3)	62.5	(23)	5.2	(5.6)
Non-response	17,871	24.5	(17.2)	23.0	(22.9)	52.5	(30.0)
<b>Establishment keeps OSHA log when not in SOII</b>							
Yes	1,775,968	36.5	(3.5)	60.0	(3.5)	3.6	(1.1)
No	89,941	3.0	(2.6)	72.1	(9.7)	24.8	(9.5)
DK	78,127	.	.	85.4	(12.3)	14.6	(12.3)
Non-response	0	.	.	.	.	.	.

## SOII reporting practices by establishment and respondent characteristics

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Participants provided a range of responses for what cases they reported in SOII. To quantify, we combined responses from the SOII case question (Q36), with the OSHA case question (Q25), and also categorized SOII case responses grouped in 'Other'. The resulting response values were: Follow OSHA Criteria; follow BLS instructions (identified among 'Other, specify' responses); all injuries and illnesses requiring medical treatment; all injuries; all WC claims (combined filed claims with accepted claims); computer software decides; other; and don't know (identified among 'Other, specify' responses).

An estimated 18% of establishments used the OSHA criteria to determine which cases to report in SOII (Table 9). An additional 6% followed the BLS instructions (without mentioning OSHA case criteria). Eleven percent reported all injuries and illnesses that required medical treatment and a similar percentage reported all injuries, regardless of severity. Eight percent reported their WC claims. Over 45% used some other case criteria, replied that they did not know, or did not provide a response. The diversity of responses and the large portion of non-responses indicate that the question was difficult for many participants to answer. One in three respondents, representing 47% of Washington establishments, did not remember completing the SOII (despite all but 22 participants having completed the SOII in 2011 or more recently), making it difficult to discuss their reporting practices. It is unclear whether the categories are truly distinct and how respondents defined an "injury".

Less than 2% of establishments had been notified of an injury or illness too late to include in SOII (interestingly, an estimate that is less than the 13% percent of establishments that added cases to a previous year's OSHA log). Late notification was greater among larger establishments, as high as 17% among establishments with 250 or more employees (Table 10). Industries with the lowest rates of late notification, based on employee estimates include: Other Services (0%), Finance Activities (0%), Information (1.4%), and Leisure and hospitality (1.5%). Industries with higher rates of late notification include: Utilities (54%); Transportation and Warehousing (27%); and Educational Services (23%).

Table 9. Q36: How do you decide what cases to include on the BLS survey?

Data shown are weighted estimates of employees and row percentages, Washington participants.

	Weighted N	Follows OSHA criteria		Follows BLS instructions		All I/I requiring med trtmt		All injuries		WC Claims		Computer software decides		Other		DK		Non-response	
		%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
<b>All (Establishment wts)</b>	137,354	18.4	(5.3)	5.5	(2.2)	10.7	(3.2)	10.6	(3.0)	7.8	(2.1)	1.0	(0.2)	20.4	(6.0)	6.2	(2.8)	19.4	(4.5)
<b>Establishment size</b>																			
1-10 employees	93,323	18.3	(7.7)	4.3	(3.2)	8.7	(4.5)	10.9	(4.3)	4.5	(2.8)	.	.	23.1	(8.7)	5.2	(4.0)	25.0	(6.5)
11-49 employees	34,130	16.7	(3.7)	8.5	(2.5)	15.1	(3.7)	11.6	(2.8)	15.0	(3.2)	3.6	(0.9)	14.9	(3.4)	8.0	(2.8)	6.7	(2.4)
50-249 employees	8,858	25.7	(3.6)	5.2	(1.8)	15.1	(2.9)	4.5	(1.7)	14.3	(3)	1.7	(1.2)	13.6	(2.9)	9.0	(2.7)	11.1	(2.6)
250+ employees	1,044	26.6	(4.8)	15.4	(2.9)	6.2	(1.6)	3.5	(1.7)	8.1	(2.6)	3.5	(1.9)	17.1	(3.5)	13.9	(2.7)	5.7	(3.3)
<b>Establishment DAFW rate</b>																			
Below ave	123,928	18.3	(5.9)	5.4	(2.5)	10.3	(3.5)	10.6	(3.2)	6.2	(2.0)	0.4	(0.3)	21.6	(6.6)	6.7	(3.1)	20.5	(4.9)
Above ave	13,427	19.4	(5.3)	5.7	(2.3)	14.7	(5.3)	10.6	(6.5)	22.1	(8.5)	6.9	(1.1)	9.0	(3.4)	1.8	(0.7)	9.6	(4.8)
<b>Establishment DART rate</b>																			
Below ave	122,078	17.8	(6.0)	5.3	(2.5)	10.4	(3.6)	10.4	(3.3)	6.3	(2.0)	0.4	(0.3)	21.9	(6.7)	6.7	(3.1)	20.8	(5.0)
Above ave	15,277	23.6	(5.3)	6.8	(2.5)	12.8	(4.6)	11.7	(5.9)	19.7	(7.6)	6.1	(0.9)	8.1	(3.0)	2.4	(0.8)	8.8	(4.2)
<b>Participant was 2011 SOII contact</b>																			
Yes	131,567	19.2	(5.6)	5.7	(2.3)	11.1	(3.4)	11.0	(3.1)	8.1	(2.2)	0.4	(0.2)	21.3	(6.3)	6.1	(2.9)	17.1	(4.4)
No	5,787	2.1	(1.4)	.	.	0.8	(0.8)	0.1	(0.1)	0.2	(0.2)	15.1	(7.1)	0.1	(0.1)	8.9	(5.7)	72.7	(13.3)
<b>All (Employee wts)</b>	2,770,274	24.5	(3.0)	9.3	(1.7)	10.4	(1.6)	6.6	(1.2)	11.4	(1.6)	2.4	(0.5)	15.8	(1.8)	8.2	(1.5)	11.5	(2.0)
<b>Industry</b>																			
Ag, Forestry, Fishg, Huntg (11)	75,947	9.8	(5.3)	17.0	(12.5)	16.7	(10.3)	2.4	(2.4)	24.3	(18.9)	.	.	.	.	29.9	(20.8)	.	.
Utilities (22)	13,326	14.6	(4.2)	39.8	(2.6)	10.7	(8.6)	.	.	.	.	.	.	.	.	14.0	(0.9)	20.8	(12.4)
Construction (23)	100,108	30.3	(6)	6.4	(3.5)	14.8	(4.4)	10.4	(4.3)	14.3	(3.9)	2.5	(2)	8.0	(4.6)	5.0	(2.2)	8.1	(3)
Manufacturing (31-33)	147,775	30.0	(6.9)	14.4	(3.9)	15.1	(5.7)	3.5	(2.1)	18.1	(5.7)	.	.	12.5	(5.3)	2.9	(1.3)	3.4	(2.6)
Wholesale Trade (42)	136,384	27.2	(9.3)	8.7	(5.3)	13.3	(6.3)	10.0	(6.9)	7.1	(4.4)	2.6	(2.6)	3.8	(2.5)	5.8	(4.3)	21.5	(10.6)
Retail Trade (44-45)	349,622	29.9	(6.8)	8.4	(4.4)	12.5	(4.6)	7.3	(3.8)	9.9	(4.4)	3.2	(2.3)	12.3	(4)	12.3	(5)	4.3	(3.3)
Transp, Warehousing (48-49)	67,899	41.9	(9.5)	5.6	(4)	6.2	(2.8)	7.2	(4.1)	14.0	(5.2)	2.7	(2.1)	17.1	(9.5)	1.4	(1)	3.8	(2)
Information (51)	153,031	37.7	(24.1)	.	.	1.4	(0.6)	0.5	(0.2)	.	.	.	.	52.2	(21.4)	6.7	(7.1)	1.5	(0.5)
Finance Activities (52-53)	124,530	16.6	(9.9)	.	.	37.6	(15.9)	9.8	(5.6)	14.8	(7.2)	.	.	13.3	(10.1)	8.0	(7.2)	.	.
Prof, Business svcs (54-56)	379,433	26.3	(9.1)	2.0	(1.6)	6.0	(4.4)	1.4	(0.9)	14.5	(5.6)	.	.	21.7	(6.5)	14.3	(3.7)	13.7	(5.4)
Educational Services (61)	158,400	15.5	(6.5)	17.4	(8.1)	.	.	2.6	(1.9)	15.8	(6.2)	.	.	24.3	(6.8)	9.4	(5.2)	14.9	(4.9)

Health Care, Social Asst. (62)	420,788	33.5	(9.7)	15.4	(6.9)	4.1	(2)	7.0	(2.9)	8.1	(3.1)	1.2	(1.2)	11.2	(4.5)	3.7	(1.9)	15.8	(6.6)
Leisure, hospitality (71-72)	407,452	17.4	(5.9)	5.9	(3.8)	10.1	(3.8)	12.0	(5.1)	8.2	(4.4)	10.2	(2.7)	16.7	(6.2)	7.5	(5.4)	12.1	(5.9)
Other Services (81)	139,906	0.1	(0)	13.8	(11.8)	23.9	(13.1)	9.8	(8.9)	9.7	(7.4)	.	.	3.2	(2.2)	.	.	39.6	(17.6)
Public Administration (92)	95,675	10.0	(4.9)	24.9	(9.5)	6.7	(4.1)	7.3	(3.7)	25.0	(8.7)	.	.	14.1	(8.3)	5.5	(3.8)	6.5	(4.3)
<b>Respondent received OSHA recording training</b>																			
Yes	1,200,170	37.9	(5.1)	9.1	(1.9)	7.5	(2)	3.5	(1.2)	11.2	(2.4)	1.7	(0.7)	15.4	(2.4)	9.7	(2.7)	4.0	(1.5)
No	1,289,027	17.3	(3.1)	8.1	(2.4)	14.4	(2.9)	8.1	(1.9)	11.8	(2.2)	3.4	(0.9)	13.8	(2.4)	6.8	(1.8)	16.2	(3.4)
DK	35,653	1.9	(2)	5.8	(6)	.	.	.	.	30.7	(18.7)	.	.	39.3	(21.2)	.	.	22.3	(16.8)
Non-response	245,423	.	.	17.3	(8.2)	4.8	(2.6)	14.8	(7.5)	7.8	(5.8)	.	.	24.2	(8.8)	9.2	(2.4)	21.9	(9.8)
<b>Establishment keeps OSHA log when not in SOII</b>																			
Yes	1,962,327	33.0	(3.8)	10.2	(2)	7.8	(1.3)	6.1	(1.3)	12.3	(1.9)	2.9	(0.7)	14.6	(1.9)	7.7	(1.9)	5.3	(1.4)
No	520,992	5.6	(2.8)	5.7	(2.9)	18.7	(5.7)	9.1	(3.9)	8.8	(2.9)	.	.	25.6	(5.9)	7.8	(3.3)	18.8	(6.8)
DK	253,955	1.2	(1.2)	11.3	(7.2)	14.2	(7.5)	2.4	(1.2)	11.6	(6.6)	.	.	6.5	(3.3)	7.3	(3.3)	45.7	(11.2)
Non-response	33,001	.	.	.	.	.	.	28.0	(21.4)	.	.	22.6	(18.9)	.	.	47.6	(16.8)	1.8	(1.9)
<b>Establishment kept OSHA log during SOII</b>																			
Yes	2,046,695	32.2	(3.7)	9.8	(1.9)	9.3	(1.5)	5.6	(1.2)	12.2	(1.8)	2.8	(0.6)	15.2	(1.9)	7.8	(1.8)	5.2	(1.3)
No	383,101	3.9	(2.7)	7.9	(4.2)	18.7	(6.8)	11.3	(4.9)	11.5	(3.9)	.	.	26.9	(7.5)	8.5	(4)	11.3	(5.4)
DK	304,134	1.2	(1)	8.3	(6)	5.9	(3.6)	7.6	(3.8)	7.9	(5)	.	.	7.6	(3.2)	6.5	(2.9)	55.1	(9.9)
Non-response	36,344	5.3	(5.3)	5.5	(5.5)	20.3	(16.8)	3.5	(3.6)	.	.	20.5	(16.9)	.	.	43.2	(13)	1.7	(1.7)

Table 10. Q39: Have you ever been notified of an injury or illness that was reported too late to include in the BLS survey? Data shown are weighted estimates of establishment, employees and row percentages, Washington participants.

	Weighted N	Yes		No		DK		Non-response	
		%	SE	%	SE	%	SE	%	SE
<b>All (Establishment wts)</b>	137,354	1.7	(0.8)	75.2	(4.3)	2.2	(0.7)	21.0	(4.2)
<b>Establishment size</b>									
1-10 employees	93,323	1.4	(1.1)	70.7	(6.2)	1.1	(0.5)	26.8	(6.1)
11-49 employees	34,130	0.7	(0.6)	86.5	(3.3)	5.0	(2.3)	7.8	(2.5)
50-249 employees	8,858	6.7	(1.5)	79.2	(3.3)	2.2	(0.9)	11.8	(2.9)
250+ employees	1,044	17.0	(3.1)	74.2	(3.4)	6.1	(2)	2.7	(1.2)
<b>Establishment DAFW rate</b>									
Below ave	123,928	1.4	(0.9)	74.4	(4.7)	1.9	(0.7)	22.2	(4.6)
Above ave	13,427	3.6	(1.6)	82.0	(5.8)	4.8	(3.5)	9.6	(4.8)
<b>Establishment DART rate</b>									
Below ave	122,078	1.4	(0.9)	74.0	(4.8)	2.0	(0.7)	22.5	(4.7)
Above ave	15,277	3.3	(1.4)	84.4	(5.1)	3.6	(3.1)	8.7	(4.2)
<b>All (Employee wts)</b>									
2,770,274		7.6	(1.3)	76.5	(2.4)	3.9	(0.9)	12.0	(2)
<b>Industry</b>									
Agr, Forestry, Fishing and Hunting (11)	75,947	2.4	(2.4)	97.6	(2.4)	.	.	.	.
Utilities (22)	13,326	53.8	(3.5)	17.7	(2.2)	7.6	(8.1)	20.8	(12.4)
Construction (23)	100,108	8.2	(5.1)	77.5	(5.7)	6.5	(2.4)	7.8	(3)
Manufacturing (31-33)	147,775	12.4	(5.2)	73.1	(7.1)	10.6	(5.8)	3.9	(2.6)
Wholesale Trade (42)	136,384	3.8	(2.8)	73.1	(10.4)	1.7	(1.7)	21.5	(10.6)
Retail Trade (44-45)	349,622	4.1	(2.3)	79.0	(5.6)	7.9	(3.5)	9.0	(4.5)
Transportation and Warehousing (48-49)	67,899	26.7	(11.6)	66.5	(11.4)	3.3	(2.3)	3.5	(1.9)
Information (51)	153,031	1.4	(0.5)	95.2	(1.8)	1.9	(0.7)	1.5	(0.5)
Finance Activities (52-53)	124,530	.	.	93.7	(6.2)	.	.	6.3	(6.2)
Professional and business services (54-56)	379,433	5.2	(0.3)	85.7	(4.4)	.	.	9.1	(4.4)
Educational Services (61)	158,400	22.6	(7.6)	53.8	(8.8)	12.3	(7.1)	11.4	(4.9)
Health Care and Social Assistance (62)	420,788	14.9	(6.9)	66.4	(8.7)	1.4	(1.4)	17.3	(5.9)
Leisure and hospitality (71-72)	407,452	1.5	(0.9)	81.3	(6.8)	3.4	(3.1)	13.8	(6.3)
Other Services (except PA) (81)	139,906	.	.	60.4	(17.6)	.	.	39.6	(17.6)
Public Administration (92)	95,675	10.1	(6.6)	72.1	(8.9)	11.3	(5.9)	6.5	(4.3)

Respondents displayed a range of OSHA recordkeeping knowledge when presented with the four hypothetical scenarios (seven recordkeeping questions in total). Overall, respondents from Wholesale Trade, Utilities, and Manufacturing scored highest on the set of questions (Table 11). For each question, correct answers were more often provided by respondents from larger establishments and establishments with above average DAFW rates (Table 12).

Questions that elicited the highest percentage of correct answers included: whether to record an injury involving horseplay (70% of establishments correctly answered yes); recording a case with stitches but no missed work (68%); and updating a log entry to record a work absence that occurred sometime after the initial injury (65%). Approximately half of establishments would record a case where the worker’s prescribed days off occurred over a weekend (when he was not scheduled to work). Questions with the least number of correct responses were: recording a case where a worker had an X-ray but nothing was found to be broken – only 17% of estimated establishments correctly indicated that they would leave the injury off the log; and 15% would correctly record the weekend work restriction as a DAFW case.

Responses indicate that establishments have the potential of both under- and over-reporting injuries. Only counting absences on days when the employee was scheduled for work likely fails to capture workers with short-term disability, or workers with sporadic work schedules. Recording injuries for which a medical visit was limited to diagnostic procedures and no treatment provided overstates the number of OSHA-recordable cases.

Table 11?. Q46: What OSHA recordkeeping decisions would you make in the following situations... (seven questions in total). Data presented are mean number of correct answers provided by industry, Washington participants. Possible number of correct answers ranged from 0 to 7.

Industry	Mean	SE
Wholesale Trade (42)	4.9	0.5
Utilities (22)	4.6	0.4
Manufacturing (31-33)	4.5	0.3
Agriculture, Forestry, Fishing and Hunting (11)	4.2	0.1
Public Administration (92)	4.2	0.2
Other Services (except PA) (81)	4.0	0.9
Information (51)	3.8	0.2
Educational Services (61)	3.6	1.0
Construction (23)	3.5	0.4
Transportation and Warehousing (48-49)	3.4	0.9
Finance Activities (52-53)	3.3	0.2
Leisure and hospitality (71-72)	3.1	0.5
Retail Trade (44-45)	2.9	0.3
Health Care and Social Assistance (62)	2.8	0.7
Professional and business services (54-56)	1.3	0.3

Table 12. Q46: What OSHA recordkeeping decisions would you make in the following situations... (seven questions in total).

Data presented are row percentages for **correct answers**, Washington participants.

	Weighted N	A. Diagnostic		B. Weekend DAFW recordable		B.i. Recordable as DAFW		B.ii. Record 2 days		C. Horseplay		D. Stitches		D.i. Update log	
		%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
<b>All (Establishment wts)</b>	137,354	15.5	(2.6)	47.0	(4.5)	12.4	(2.4)	12.0	(2.3)	64.5	(4.4)	59.5	(4.2)	62.6	(4.4)
<b>Establishment size</b>															
1-10 employees	93,323	11.0	(3.4)	34.1	(6.3)	6.2	(3.1)	6.0	(3.1)	57.0	(6.3)	50.4	(6.1)	55.7	(6.3)
11-49 employees	34,130	22.3	(4)	73.6	(4.3)	22.9	(4.1)	22.9	(4.1)	79.6	(3.9)	77.6	(4.2)	75.9	(4.2)
50-249 employees	8,858	33.9	(3.6)	77.9	(3.9)	31.6	(3.7)	28.7	(3.6)	82.5	(3.5)	83.2	(3.2)	82.1	(3.5)
250+ employees	1,044	44.0	(3.4)	76.5	(4.3)	52.4	(4.6)	51.7	(4.6)	83.0	(3.1)	81.1	(2)	77.4	(3.2)
<b>Industry</b>															
Ag, Forestry, Fishing and Hunting (11)	1,418	12.7	(4)	97.5	(2.5)	5.1	(3.4)	5.1	(3.4)	100.0	(0)	100.0	(0)	100.0	(0)
Utilities (22)	274	73.6	(6.2)	41.8	(10.5)	36.9	(12.2)	36.9	(12.2)	95.1	(4.9)	100.0	(0)	80.5	(2.8)
Construction (23)	7,634	30.4	(10.1)	63.0	(10.7)	22.8	(8.6)	19.9	(8.3)	72.5	(10.5)	70.2	(10.6)	70.5	(10.7)
Manufacturing (31-33)	2,803	31.3	(5.9)	85.2	(5.0)	34.8	(6.5)	30.0	(6.4)	81.3	(5.5)	85.8	(5.2)	87.4	(4.7)
Wholesale Trade (42)	6,352	35.2	(14.1)	82.0	(9.2)	34.6	(14.1)	33.9	(14.2)	86.3	(7.5)	84.2	(8.8)	86.7	(7.6)
Retail Trade (44-45)	17,805	35.6	(11.6)	44.0	(11.5)	11.9	(4.3)	11.9	(4.3)	70.3	(12.3)	53.0	(12.1)	63.8	(12)
Transportation, Warehousing (48-49)	2,332	38.4	(24.3)	38.0	(20.0)	26.1	(18.8)	26.0	(18.8)	64.7	(24.5)	67.2	(24.5)	66.6	(24.5)
Information (51)	2,382	10.7	(0.6)	97.2	(0.2)	22.7	(13.5)	22.7	(13.5)	51.1	(2.8)	89.5	(0.6)	83.3	(0.9)
Finance Activities (52-53)	15,888	2.3	(2.3)	28.6	(15.1)	0.4	(0.3)	0.1	(0.1)	99.8	(0)	97.7	(2.3)	97.7	(2.3)
Professional, Business services (54-56)	25,581	9.4	(2.9)	19.7	(2.7)	4.5	(2.5)	4.4	(2.5)	24.7	(6.3)	26.9	(6.3)	25.2	(6.3)
Educational Services (61)	1,469	2.2	(0.6)	77.8	(15.8)	17.6	(15.4)	17.3	(15.4)	75.0	(15.6)	77.7	(15.8)	77.4	(15.9)
Health Care and Social Assistance (62)	17,149	6.5	(2.0)	40.6	(17.5)	10.3	(2.6)	10.1	(2.5)	59.8	(20)	42.0	(17.5)	56.7	(20.1)
Leisure and hospitality (71-72)	21,478	16.9	(10.7)	47.2	(13.4)	10.3	(3.1)	10.3	(3.1)	60.9	(13.3)	52.3	(13.3)	53.4	(13.3)
Other Services (except PA) (81)	14,296	2.7	(2.2)	79.7	(17.1)	21.0	(18.4)	21.0	(18.4)	79.4	(17.1)	79.4	(17.1)	79.4	(17.1)
Public Administration (92)	492	9.5	(5.1)	93.7	(2.8)	32.1	(13.6)	32.1	(13.6)	82.4	(11.9)	80.4	(11.6)	86.0	(11.6)
<b>Respondent received OSHA recording training</b>															
Yes	27,853	21.7	(4.9)	76.8	(10.5)	24.7	(5.5)	24.0	(5.4)	88.5	(4.1)	81.9	(10.2)	93.3	(2.4)
No	76,748	12.3	(3.1)	46.6	(6.3)	6.9	(1.6)	6.5	(1.5)	69.0	(7.3)	63.3	(7.2)	64.9	(7.3)
DK	894	21.5	(19.4)	95.6	(4.8)	33.2	(25.5)	33.2	(25.5)	58.0	(25.6)	95.6	(4.8)	74.5	(20)
Non-response	31,858	17.7	(8.8)	20.7	(9.1)	14.1	(8.6)	14.1	(8.6)	32.7	(12.1)	29.5	(11.6)	29.8	(11.6)

**Establishment keeps OSHA log when not in SOII**

Yes	46,401	33.1	(5.3)	78.1	(4.4)	25.9	(4.2)	24.9	(4.1)	93.0	(1.7)	84.6	(4.3)	82.9	(4.3)
No	69,867	8.2	(3.6)	27.1	(5.8)	2.2	(0.8)	2.2	(0.8)	48.9	(7.3)	44.1	(6.6)	50.8	(6.9)
DK	19,833	1.1	(0.8)	47.6	(13.4)	17.4	(12.7)	17.3	(12.7)	53.5	(14.3)	55.5	(14.4)	57.3	(14.4)
Non-response	1,253	.	.	.	.	.	.	.	.	48.0	(29.5)	48.0	(29.5)	48.0	(29.5)

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## Incentives to record injuries

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Use of safety incentives or rewards was rare, with an estimated 7% of WA establishments participating in such programs, although participation varied by establishment characteristic. Larger establishments were more likely to have safety incentive programs compared with smaller establishments ( $p < 0.0001$ ). Establishments with above average DAFW and DART rates were more likely to have a safety incentive program compared to establishments with below average DAFW and DART rates. Establishments with safety incentive programs employed an estimated 18% of WA workers. Based on the proportion of workers employed at an establishment with incentive programs, establishments with the highest rates of participation included: Manufacturing (48% of workers); Transportation and Warehousing (47%); and Retail Trade (33%) (Table 13).

The measure of safety performance differed among the estimated 9,288 WA establishments with safety incentive programs (from most common measure to least): 2,727 establishments (29% of establishments with safety incentive programs) measured performance as *any* work-related injury, 2,029 (22%) tied it to WC claims metrics, 739 (8%) utilized OSHA recordable case data, and 312 (3%) measured safety as hazard identification and/or mitigation. Over half of establishments with safety incentives used some other metric including: safe behavior, participation in the company's safety program, and all accidents (whether or not they resulted in worker injury). Some establishments reported using more than one metric. Compared with smaller establishments, a greater portion of larger establishments used OSHA recordable cases, any injury, or some other metric (Table 14). The portion of establishments that used WC claims to measure performance for safety incentive or reward programs was similar across all size classes (just under 5% of all WA establishments within each size class), except for the smallest establishments (0%). Hazard identification was a measure used almost exclusively in establishments with 250 or more employees. Program metrics also varied by recordkeeping practices. Based on the estimated number of employees, where OSHA log cases were defined as WC claims, WC claims data was the preferred measure of performance for safety incentive programs. In establishments that record any injury that results in a doctor's visit, the preferred measures were WC claims and any injury. For those who reported using the OSHA case criteria, some other metric was used (again, based on respondents' descriptions of these included safe behavior, participation in the company's safety program, and accidents). Those who used the OSHA case criteria also had a greater portion of workers measured using hazard identification compared to establishments that used other definitions of an OSHA recordable case.

An estimated 7% of establishments included worker safety metrics as a component of the *respondent's* job performance evaluation. This practice was most common among establishments with 50-249 employees (20%), and establishments in Manufacturing (16%), Retail Trade (15%), and Leisure and Hospitality (15%). There was no association between safety metrics as a component of the respondent's job performance evaluation and DAFW or DART rates above or below average.

Ten percent of establishments use worker safety measures to evaluate *supervisors'* job performance. This practice varied by industry ( $p < 0.001$ ), where it was more common among Agriculture, Forestry, Fishing and Hunting (found in 30% of establishments in this industry) and Retail Trade (28%). Size was not associated with this practice ( $p = 0.15$ ).

Among firms with multiple sites, 20% compared worksites using worker safety measures (extending to an estimated 37% of employees from multi-site firms). This practice was more common among establishments with 50 or more employees, and establishments in Utilities, Educational Services, Agriculture, Forestry, Fishing and Hunting, and Retail Trade, where, within each industry, more than 40% of multi-site establishments used worker safety measures to compare worksites. Of the estimated 11,361 multi-site establishments that used worker safety performance measures to compare worksites,

21% used OSHA log data, 30% used WC claims data, and 67% used some other metric. Establishments with fewer than 11 employees used some other measure almost exclusively, while larger establishments used either WC data and/or OSHA recordables in addition to other measures. Metrics appear to differ by industry (Health Care and Social Assistance relies on WC data while Utilities uses OSHA data), although the numbers are very small.

An estimated 44% percent of establishments (employing 58% of workers) discipline workers for unsafe practices. By establishment, this ranged from 39% among establishments with 1-10 employees, to 66% among establishments with 50-249 employees (Table 15). More than two-thirds of establishments in Manufacturing, Agriculture, Forestry, Fishing and Hunting, Construction, and Utilities disciplined workers. Establishments with above average DAFW rates were more likely to have a discipline policy or practice compared to establishments with below average rates (62% compared to 42%,  $p=0.01$ ).

Approximately one-third of establishments had a policy of drug testing employees after injury incidents (Table 16). This varied by industry: nearly all utility establishments had such a policy as did 74% of Wholesale Trade establishments. These policies existed in approximately half of the establishments in Manufacturing, Educational Services, Construction, and Retail Trade. Again, establishments with above average DAFW rates were more likely to have a post-incident drug test policy compared to establishments with below average rates (56% compared to 32%,  $p=0.001$ ).

Table 13. Q42: Does your company use any safety incentives or rewards? Data presented are row percentages, Washington participants.

	Weighted N	Yes		No		DK		Non-response	
		%	SE	%	SE	%	SE	%	SE
<b>All (Establishment wts)</b>	137,354	6.8	(1.0)	90.6	(1.2)	2.3	(0.7)	0.4	(0.2)
<b>Establishment Size</b>									
1-10 employees	93,323	1.9	(0.8)	96.6	(1.2)	1.6	(0.8)	.	.
11-49 employees	34,130	15.8	(3.4)	79.0	(3.7)	4.1	(1.8)	1.0	(0.9)
50-249 employees	8,858	19.8	(2.8)	76.4	(3.5)	2.1	(1.7)	1.7	(1.2)
250+ employees	1,044	36.0	(4.4)	59.1	(4.2)	4.9	(1.8)	.	.
<b>Establishment DAFW Rate</b>									
Below ave	123,928	5.2	(1.0)	92.0	(1.3)	2.4	(0.8)	0.4	(0.3)
Above ave	13,427	21.0	(5.8)	77.8	(5.8)	0.9	(0.5)	0.3	(0.3)
<b>Establishment DART Rate</b>									
Below ave	122,078	4.8	(1.0)	92.4	(1.3)	2.5	(0.8)	0.4	(0.3)
Above ave	15,277	22.5	(5.4)	76.5	(5.4)	0.7	(0.4)	0.3	(0.3)
<b>All (Employee wts)</b>	2,770,274	17.5	(1.7)	77.7	(2.0)	3.9	(1.1)	0.9	(0.5)
<b>Industry</b>									
Agriculture, Forestry, Fishing, Hunting (11)	75,947	20.7	(12.5)	67.8	(12.1)	11.5	(11.4)	.	.
Utilities (22)	13,326	25.8	(3.1)	60.6	(11.7)	13.6	(12.8)	.	.
Construction (23)	100,108	21.6	(5.0)	71.7	(5.6)	3.4	(2.2)	3.3	(2.1)
Manufacturing (31-33)	147,775	47.7	(7.4)	52.3	(7.4)	.	.	.	.
Wholesale Trade (42)	136,384	20.3	(7.9)	79.7	(7.9)	.	.	.	.
Retail Trade (44-45)	349,622	32.7	(6.1)	65.8	(5.9)	1.5	(1.6)	.	.
Transportation, Warehousing (48-49)	67,899	46.8	(9.2)	41.8	(8.4)	11.4	(8.7)	.	.
Information (51)	153,031	.	.	100.0	(0)	.	.	.	.
Finance Activities (52-53)	124,530	[]	[]	[]	[]	[]	[]	[]	[]
Professional, Business services (54-56)	379,433	17.3	(4.9)	79.5	(5.4)	0.7	(0)	2.5	(2.5)
Educational Services (61)	158,400	[]	[]	[]	[]	[]	[]	[]	[]
Health Care and Social Assistance (62)	420,788	13.3	(3.9)	85.0	(4.0)	1.2	(0.8)	0.5	(0.5)
Leisure and hospitality (71-72)	407,452	15.5	(5.5)	71.4	(7.7)	10.9	(6.0)	2.3	(2.3)
Other Services (except PA) (81)	139,906	[]	[]	[]	[]	[]	[]	[]	[]
Public Administration (92)	95,675	9.2	(6.6)	76.8	(9.5)	14.0	(8.3)	.	.
<b>Establishment keeps OSHA log when not in SOII</b>									
Yes	1,962,327	24.1	(2.4)	71.5	(2.6)	4.2	(1.4)	0.2	(0.1)
No	520,992	1.9	(1.1)	95.8	(2.0)	1.9	(1.7)	0.4	(0.4)
DK	253,955	0.4	(0.4)	93.1	(4.2)	2.8	(2.0)	3.8	(3.7)
Non-response	33,001	.	.	47.6	(16.8)	24.4	(18.7)	28.0	(21.4)

[] Data do not meet publication guidelines.

Table 14. Q42b: How is safety performance measured for [the safety incentives or rewards] programs?

Data presented are row percentages, Washington participants. Categories are not mutually exclusive.

	Weighted N	OSHA recordable cases		WC claims		Any injury		Hazard identification		Other metric		DK		Uses no safety incentives or rewards	
		%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
<b>All (Establishment wts)</b>	137,354	0.5	(0.1)	1.5	(0.5)	2.0	(0.6)	0.2	(0.1)	3.0	(0.7)	2.9	(0.8)	90.6	(1.2)
<b>Establishment size</b>															
1-10 employees	93,323	0.1	(0.0)	.	.	1.5	(0.8)	0.1	(0.1)	0.9	(0.5)	1.6	(0.8)	96.6	(1.2)
11-49 employees	34,130	0.2	(0.1)	4.6	(2.2)	2.6	(1.2)	.	.	8.2	(2.6)	5.7	(2.3)	79.0	(3.7)
50-249 employees	8,858	5.5	(1.4)	4.8	(1.4)	3.7	(1.3)	0.9	(0.4)	4.0	(1.2)	6.0	(2.5)	76.4	(3.5)
250+ employees	1,044	7.4	(3.5)	4.5	(1.7)	9.2	(2.6)	12.2	(3.8)	17.2	(4.0)	9.3	(3.0)	59.1	(4.2)
<b>All (Employee wts)</b>	2,770,274	2.9	(0.7)	3.8	(0.9)	3.8	(0.7)	2.5	(0.7)	6.9	(1.2)	6.2	(1.3)	77.7	(2.0)
<b>How do you decide what cases to record on your OSHA log?</b>															
All injuries (regardless of severity)	143,773	2.0	(2.0)	6.3	(3.8)	5.5	(3.8)	.	.	.	.	3.8	(3.7)	84.9	(6.2)
WC claims	279,826	1.1	(1.1)	12.8	(5.0)	6.8	(3.4)	0.5	(0.5)	9.7	(4.5)	6.5	(3.7)	64.0	(7.4)
All injuries that require medical trtmt	386,477	4.1	(2.0)	8.1	(3.8)	7.0	(3.1)	1.1	(0.8)	6.6	(2.8)	4.6	(2.8)	73.7	(5.7)
Follow OSHA criteria	855,486	4.8	(1.7)	2.3	(1.2)	3.8	(1.2)	5.2	(2.1)	13.9	(3.1)	6.5	(2.3)	71.2	(4.2)
Computer software decides	97,846	6.3	(4.7)	4.9	(4.3)	9.6	(7.7)	3.7	(3.9)	.	.	.	.	86.4	(8.8)
Other	116,644	.	.	.	.	.	.	.	.	0.1	(0.1)	17.0	(8.0)	83.0	(8.0)
Someone else decides	240,163	3.1	(1.7)	1.6	(1.3)	1.8	(1.2)	5.9	(3.0)	6.3	(3.0)	6.7	(3.8)	78.6	(6.0)
No logs	586,074	0.8	(0.8)	0.2	(0.2)	0.9	(0.8)	.	.	0.2	(0.2)	6.8	(4.0)	90.5	(4.3)
Non-response	63,986	.	.	.	.	2.0	(2.0)	.	.	6.5	(4.7)	.	.	91.5	(5.2)

Table 15. Q44: Does your company have a policy or practice of disciplining workers for unsafe practices?  
Data presented are row percentages, Washington participants.

	Weighted N	Yes		No		DK		Non-response	
		%	SE	%	SE	%	SE	%	SE
<b>All (Establishment wts)</b>	137,354	44.1	(5.1)	51.2	(5.1)	4.3	(1.1)	0.4	(0.2)
<b>Establishment size</b>									
1-10 employees	93,323	38.8	(7.2)	58.1	(7.3)	3.2	(1.3)	.	.
11-49 employees	34,130	52.5	(4.5)	39.2	(4.3)	7.3	(2.6)	1.0	(0.9)
50-249 employees	8,858	65.6	(3.9)	28.9	(4.1)	3.8	(1.8)	1.7	(1.2)
250+ employees	1,044	60.5	(4.7)	24.8	(4.5)	14.7	(2.5)	.	.
<b>Industry</b>									
Agriculture, Forestry, Fishing, Hunting (11)	1,418	70.2	(24.9)	29.8	(24.9)	.	.	.	.
Utilities (22)	274	66.8	(4.7)	.	.	33.2	(4.7)	.	.
Construction (23)	7,634	67.6	(10.8)	30.8	(10.8)	0.9	(0.6)	0.7	(0.5)
Manufacturing (31-33)	2,803	71.7	(6.0)	25.2	(6.0)	3.1	(2.9)	.	.
Wholesale Trade (42)	6,352	58.6	(14.2)	17.5	(8.0)	23.9	(14.0)	.	.
Retail Trade (44-45)	17,805	57.6	(12.6)	36.3	(12.5)	6.0	(4.0)	.	.
Transportation and Warehousing (48-49)	2,332	22.0	(3.9)	32.5	(24.5)	45.5	(23.7)	.	.
Information (51)	2,382	75.6	(16.5)	18.2	(16.9)	6.2	(0.4)	.	.
Finance Activities (52-53)	15,888	20.4	(14.2)	79.6	(14.2)	.	.	.	.
Professional and business services (54-56)	25,581	22.8	(8.4)	76.5	(8.5)	0.3	(0)	0.4	(0.4)
Educational Services (61)	1,469	29.1	(16.0)	63.8	(16.1)	7.1	(4.7)	.	.
Health Care and Social Assistance (62)	17,149	51.0	(20.1)	47.8	(20.1)	1.0	(0.3)	0.2	(0.2)
Leisure and hospitality (71-72)	21,478	52.1	(13.2)	39.3	(13.3)	7.2	(3.3)	1.4	(1.4)
Other Services (except PA) (81)	14,296	43.4	(21.9)	56.6	(21.9)	0.0	(0)	.	.
Public Administration (92)	492	47.9	(13.4)	50.5	(13.2)	1.6	(1.1)	.	.
<b>Establishment DAFW rate</b>									
Below ave	123,928	42.1	(5.5)	53.8	(5.6)	3.7	(1.0)	0.4	(0.3)
Above ave	13,427	62.2	(8.0)	27.6	(6.6)	9.9	(6.5)	0.3	(0.3)
<b>Establishment DART Rate</b>									
Below ave	122,078	41.7	(5.6)	54.4	(5.7)	3.6	(1.0)	0.4	(0.3)
Above ave	15,277	63.1	(7.2)	26.2	(5.9)	10.4	(6.0)	0.3	(0.3)

Table 16. Q45: Does your company have a policy or practice of testing workers for alcohol or drugs after their involvement in injury-causing incidents (aside from any driving accidents)?

Data presented are row percentages, Washington participants.

	Weighted N	Yes		No		DK		Non-response	
		%	SE	%	SE	%	SE	%	SE
<b>All (Establishment wts)</b>	137,354	34.1	(4.4)	61.7	(4.4)	3.8	(1.8)	0.4	(0.2)
<b>Establishment size</b>									
1-10 employees	93,323	29.4	(6.2)	67.1	(6.3)	3.5	(2.5)	.	.
11-49 employees	34,130	41.7	(4.2)	53.4	(4.2)	3.9	(1.9)	1.0	(0.9)
50-249 employees	8,858	53.7	(3.8)	38.8	(4.2)	5.8	(2.3)	1.7	(1.2)
250+ employees	1,044	49.3	(4.6)	42.3	(4.6)	8.4	(1.1)	.	.
<b>Industry</b>									
Agriculture, Forestry, Fishing, Hunting (11)	1,418	18.3	(3.8)	81.7	(3.8)	.	.	.	.
Utilities (22)	274	99.5	(0.1)	0.5	(0.1)	.	.	.	.
Construction (23)	7,634	50.7	(10.6)	47.1	(10.6)	1.5	(0.9)	0.7	(0.5)
Manufacturing (31-33)	2,803	54.1	(6.5)	45.9	(6.5)	.	.	.	.
Wholesale Trade (42)	6,352	74.3	(10.2)	25.7	(10.2)	.	.	.	.
Retail Trade (44-45)	17,805	50.8	(11.9)	45.7	(11.7)	3.5	(2.8)	.	.
Transportation and Warehousing (48-49)	2,332	15.0	(3.7)	56.8	(24.2)	28.2	(24.6)	.	.
Information (51)	2,382	39.0	(3.5)	61.0	(3.5)	.	.	.	.
Finance Activities (52-53)	15,888	4.0	(2.8)	95.7	(2.8)	0.3	(0.3)	.	.
Professional and business services (54-56)	25,581	32.4	(8.3)	67.0	(8.3)	0.2	(0)	0.4	(0.4)
Educational Services (61)	1,469	53.3	(4.7)	43.3	(3.6)	3.4	(3)	.	.
Health Care and Social Assistance (62)	17,149	25.6	(17.6)	73.2	(17.6)	0.9	(0.4)	0.2	(0.2)
Leisure and hospitality (71-72)	21,478	32.8	(13)	49.8	(13.3)	16.0	(10.8)	1.4	(1.4)
Other Services (except PA) (81)	14,296	32.5	(20)	67.5	(20)	0.0	(0)	.	.
Public Administration (92)	492	30.0	(9.3)	56.6	(14.2)	13.4	(11.5)	.	.
<b>Establishment DAFW rate</b>									
Below ave	123,928	31.8	(4.9)	63.8	(4.9)	4.1	(2)	0.4	(0.3)
Above ave	13,427	55.8	(7.6)	42.6	(7.4)	1.3	(0.6)	0.3	(0.3)
<b>Establishment DART Rate</b>									
Below ave	122,078	31.3	(4.9)	64.2	(5)	4.1	(2)	0.4	(0.3)
Above ave	15,277	57.2	(6.8)	41.4	(6.7)	1.1	(0.5)	0.3	(0.3)

## Reliance on WC data by establishment characteristics

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Of establishments that kept an OSHA log by the respondent, an estimated 18% have recorded on their OSHA log a case that was not a WC claim (Table 17). Based on the examples of such cases provided by respondents, many of the non-WC cases recorded were for incidents in which the worker did not seek medical treatment, had no work restrictions and did not meet the OSHA recordable case criteria. Many of these incidents were slips, trips, and falls or incidents described as “first aid cases”. In other words, these establishments were over-reporting injuries. Less common examples were those that met OSHA recordability criteria but the worker chose not to file a claim. A number of respondents mentioned these being hearing loss cases. Recording only WC claims on the OSHA log was a much more common practice reported by respondents involved in maintaining OSHA logs, with an estimated two out of three establishments limiting their recorded cases to injuries that were WC claims.

Among establishments with OSHA logs maintained by the respondent, an estimated 26% of establishments with OSHA logs keep denied claims on the log (Table 18). Again, based on the examples provided by respondents, many of these incidents appear not to meet the OSHA criteria as a recordable case – many examples cited were claims denied by the insurance company because they were deemed not to be work-related. A similar portion of establishments (26%) would remove denied claims from the log. This practice varied by industry; more than two out of three establishments in Agriculture, Forestry, Fishing and Hunting establishments removed denied claims from the log.

Most establishments included all accepted claims on their OSHA logs; among establishments with a respondent-maintained OSHA log, over three-quarters recorded all accepted claims on the log. An estimated 8% of establishments with logs had accepted WC claims that were not recorded on the OSHA log (Table 19). When asked for an example of such a case, some respondents demonstrated a high level of understanding of the differences between the OSHA case criteria and the WC eligibility: claims in which the only medical attention provided was diagnostic services; injuries that occurred during optional company functions; injuries in parking lots. Other respondents provided examples that suggested recording practices that differed somewhat from the OSHA regulations: injuries reported to the company late; injuries never reported directly to the company; and accepted claims with no time loss payments were not included on the company’s OSHA log. The practice of omitting from the log accepted WC claims was greatest among establishments in Wholesale Trade where 36% of establishments with a respondent-completed OSHA log did not include all accepted WC claims on the log.

Overall, the majority of establishments indicated a high degree of overlap between the cases on the log and the company’s accepted WC claims. 76% of establishments recorded all accepted WC claims, and 64% recorded nothing but WC claims. This suggests that many establishments do not use a definition of an OSHA recordable case that differs in any way from an accepted WC claim.

Table 17. Q30A: Have you ever put any cases on the OSHA log that are not WC claims?

Data shown are weighted estimates of establishments and row percentages, Washington participants.

Totals are limited to establishments with OSHA logs completed by the respondent.

	Weighted N	Yes		No		DK		Non-response	
		%	SE	%	SE	%	SE	%	SE
<b>All (Establishment wts)</b>	49,687	17.5	(3.2)	63.6	(5.8)	8.9	(3.8)	10.0	(3.6)
<b>Establishment size</b>									
1-10 employees	21,245	1.6	(1.5)	71.5	(11.4)	10.9	(8.2)	16.0	(8.4)
11-49 employees	20,543	31.8	(5.4)	52.7	(6.1)	8.4	(3.5)	7.1	(2.8)
50-249 employees	6,966	21.7	(3.1)	72.1	(3.7)	5.0	(2.3)	1.3	(0.8)
250+ employees	934	32.6	(3.3)	62.7	(3.4)	4.0	(1.4)	0.7	(0.3)
<b>Industry</b>									
Agriculture, Forestry, Fishing, Hunting (11)	1,418	.	.	72.8	(24.8)	27.2	(24.8)	.	.
Utilities (22)	229	17.1	(0.4)	53.8	(6.0)	29.1	(5.9)	.	.
Construction (23)	5,400	15.1	(7.2)	56.4	(12.5)	10.6	(9.5)	17.9	(11.2)
Manufacturing (31-33)	1,955	32.1	(6.6)	67.2	(6.6)	0.6	(0.2)	0.1	(0.1)
Wholesale Trade (42)	2,802	11.4	(7.6)	75.9	(10.8)	.	.	12.7	(8.7)
Retail Trade (44-45)	10,181	11.7	(7.0)	60.5	(14.1)	3.9	(3.9)	24.0	(13.6)
Transportation and Warehousing (48-49)	436	27.3	(11.6)	68.1	(11.7)	4.6	(3.4)	.	.
Information (51)	732	79.9	(8.0)	20.1	(8.0)	.	.	.	.
Finance Activities (52-53)	3,694	10.2	(10.9)	27.2	(17.3)	62.6	(20.4)	.	.
Professional and business services (54-56)	4,952	41.1	(14.6)	56.7	(14.9)	1.9	(2.0)	0.3	(0.2)
Educational Services (61)	213	16.5	(6.6)	83.5	(6.6)	.	.	.	.
Health Care and Social Assistance (62)	6,586	14.8	(8.2)	74.6	(12.8)	6.3	(4.6)	4.3	(3.7)
Leisure and hospitality (71-72)	6,737	17.6	(7.3)	67.3	(13)	1.8	(1.8)	13.3	(8.1)
Other Services (except PA) (81)	4,013	6.8	(8.4)	93.2	(8.4)	.	.	.	.
Public Administration (92)	340	33.0	(11.3)	59.8	(12.3)	5.5	(2.8)	1.8	(0.3)
<b>Establishment DAFW rate</b>									
Below ave	39,724	16.3	(3.7)	62.9	(7.0)	10.5	(4.7)	10.2	(4.3)
Above ave	9,963	22.1	(5.1)	66.4	(7.4)	2.4	(1.5)	9.1	(5.8)
<b>Establishment DART Rate</b>									
Below ave	38,241	15.2	(3.7)	63.3	(7.3)	10.8	(4.9)	10.6	(4.5)
Above ave	11,446	25.1	(5.1)	64.7	(6.9)	2.4	(1.4)	7.9	(5.0)



Table 18. Q30B: Do you keep cases on the OSHA log that have been denied by your WC benefits?  
 Data shown are weighted estimates of establishments and row percentages, Washington participants.  
 Totals are limited to establishments with OSHA logs completed by the respondent.

	Weighted N	Yes		No		No denied claims		DK		Non-response	
		%	SE	%	SE	%	SE	%	SE	%	SE
<b>All (Establishment wts)</b>	49,687	25.8	(6.1)	26.1	(4.4)	34.7	(6.7)	3.4	(1.1)	10.0	(3.6)
<b>Establishment size</b>											
1-10 employees	21,245	24.7	(13.4)	13.5	(6.9)	45.8	(14.1)	.	.	16.0	(8.4)
11-49 employees	20,543	23.5	(5.1)	35.0	(5.7)	30.1	(5.5)	4.2	(2.3)	7.1	(2.8)
50-249 employees	6,966	32.7	(3.7)	36.9	(4.5)	18.5	(3.6)	10.7	(3.1)	1.3	(0.8)
250+ employees	934	50.0	(5.6)	35.2	(5.7)	5.5	(1.6)	8.4	(2.5)	0.9	(0.4)
<b>Industry</b>											
Ag, Forestry, Fishing, Hunting (11)	1,418	6.6	(3.7)	68.7	(25)	24.7	(24.7)	.	.	.	.
Utilities (22)	229	15.8	(0.4)	52.6	(6.1)	30.3	(6)	1.3	(0)	.	.
Construction (23)	5,400	11.7	(6.2)	24.1	(9.2)	45.3	(12.3)	1.1	(0.9)	17.9	(11.2)
Manufacturing (31-33)	1,955	37.9	(6.8)	19.4	(5.2)	42.3	(7.2)	0.3	(0.2)	0.1	(0.1)
Wholesale Trade (42)	2,802	5.9	(2.8)	42.5	(14.1)	38.6	(14.2)	0.3	(0.3)	12.7	(8.7)
Retail Trade (44-45)	10,181	8.5	(4.9)	30.8	(9.7)	28.7	(13)	8.2	(4.4)	24.0	(13.6)
Transportation, Warehousing (48-49)	436	48.6	(13.1)	19.2	(9.3)	6.7	(4.3)	25.2	(12.1)	0.4	(0.4)
Information (51)	732	99.8	(0.2)	0.2	(0.2)	.	.	.	.	.	.
Finance Activities (52-53)	3,694	77.1	(15.7)	11.1	(11.2)	11.8	(11.3)	.	.	.	.
Professional, business srvc (54-56)	4,952	26.9	(13.8)	50.4	(15.8)	17.6	(11.9)	4.9	(3)	0.3	(0.2)
Educational Services (61)	213	35.0	(15.9)	34.9	(15.9)	28.5	(16)	1.6	(1.2)	.	.
Health Care, Social Assistance (62)	6,586	69.2	(15.1)	18.0	(9.7)	2.3	(1.5)	6.2	(4.5)	4.3	(3.7)
Leisure and hospitality (71-72)	6,737	5.0	(4.8)	22.5	(10.6)	59.2	(15.4)	.	.	13.3	(8.1)
Other Services (except PA) (81)	4,013	1.1	(1.3)	1.1	(1.2)	97.8	(2)	.	.	.	.
Public Administration (92)	340	46.4	(12)	15.6	(6.4)	31.7	(14.7)	4.6	(2)	1.8	(0.3)
<b>Establishment DAFW rate</b>											
Below ave	39,724	28.5	(7.5)	20.9	(4.2)	37.4	(8.1)	3.0	(1.3)	10.2	(4.3)
Above ave	9,963	15.1	(3.5)	46.9	(8.9)	24.0	(5.9)	5.0	(1.9)	9.1	(5.8)
<b>Establishment DART Rate</b>											
Below ave	38,241	27.6	(7.7)	20.4	(4.3)	38.2	(8.3)	3.1	(1.3)	10.6	(4.5)
Above ave	11,446	19.7	(4.5)	45.1	(8.2)	23.0	(5.4)	4.3	(1.9)	7.9	(5)

Table 19: 30C: Have you ever had an accepted WC claim that was not included on your OSHA log?  
 Data shown are weighted estimates of establishments and row percentages, Washington participants.  
 Totals are limited to establishments with OSHA logs completed by the respondent.

	Weighted N	Yes		No		DK		Non-response		
		%	SE	%	SE	%	SE	%	SE	
<b>All (Establishment wts)</b>	49,687	7.6	(2)	75.6	(4.9)	6.9	(3)	10.0	(3.6)	
<b>Establishment size</b>										
1-10 employees	21,245	3.4	(2.3)	70.2	(11)	10.3	(6.6)	16.0	(8.4)	
11-49 employees	20,543	8.3	(3.6)	79.4	(4.8)	5.2	(2.6)	7.1	(2.8)	
50-249 employees	6,966	16.4	(3)	81.1	(3.1)	1.2	(0.7)	1.3	(0.8)	
250+ employees	934	19.1	(3.5)	73.7	(3.8)	6.5	(2.2)	0.7	(0.3)	
<b>Industry</b>										
Agriculture, Forestry, Fishing, Hunting (11)	1,418	5.1	(3.4)	94.9	(3.4)	.	.	.	.	
Utilities (22)	229	16.5	(0.4)	83.5	(0.4)	.	.	.	.	
Construction (23)	5,400	4.6	(1.8)	60.2	(12.6)	17.3	(11)	17.9	(11.2)	
Manufacturing (31-33)	1,955	17.5	(5.2)	82.2	(5.2)	0.2	(0.2)	0.1	(0.1)	
Wholesale Trade (42)	2,802	35.7	(12.8)	51.6	(13.1)	.	.	12.7	(8.7)	
Retail Trade (44-45)	10,181	2.6	(1)	69.4	(13.7)	4.0	(3.9)	24.0	(13.6)	
Transportation and Warehousing (48-49)	436	10.2	(5.2)	75.3	(10.1)	14.4	(9.2)	.	.	
Information (51)	732	0.2	(0.2)	99.8	(0.2)	.	.	.	.	
Finance Activities (52-53)	3,694	0.1	(0)	99.9	(0)	.	.	.	.	
Professional and business services (54-56)	4,952	12.7	(11.6)	61.4	(18.8)	25.6	(19.5)	0.3	(0.2)	
Educational Services (61)	213	4.9	(1.9)	85.4	(6.1)	9.6	(5.2)	.	.	
Health Care and Social Assistance (62)	6,586	5.0	(3.3)	85.1	(8.3)	5.6	(4.4)	4.3	(3.7)	
Leisure and hospitality (71-72)	6,737	6.5	(5.3)	75.7	(11.3)	4.5	(4.6)	13.3	(8.1)	
Other Services (except PA) (81)	4,013	7.9	(9)	92.1	(9)	.	.	.	.	
Public Administration (92)	340	7.3	(4.2)	83.9	(7.5)	7.0	(6)	1.8	(0.3)	
<b>Establishment DAFW rate</b>										
Below ave	39,724	7.3	(2.3)	78.1	(5.4)	4.4	(2)	10.2	(4.3)	
Above ave	9,963	8.7	(3.4)	65.8	(10.4)	16.4	(11.1)	9.1	(5.8)	
<b>Establishment DART Rate</b>										
Below ave	38,241	6.1	(2.2)	79.0	(5.5)	4.3	(2.1)	10.6	(4.5)	
Above ave	11,446	12.6	(4.1)	64.2	(9.1)	15.4	(9.8)	7.9	(5)	

## State specific questions:

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### Temporary workers

An estimated 12,495 establishments (9%) currently use temporary workers hired through a temp help agency. The percent of establishments utilizing temp help increased with establishment size (Table 20). Industries with higher rates of temp use included: Utilities (68% of Utility establishments were using temp workers hired through a temp help agency at the time of the interview); Public Administration (40%); Wholesale Trade (38%); Manufacturing (33%); and Construction (20%). Establishments with above average DAFW or DART rates were more likely to use temp workers compared to establishments with below average DAFW or DART rates ( $p < 0.01$ ).

Of the estimated 12,495 establishments currently using agency-hired temporary workers, half were from one of three industries: Wholesale Trade (20% of all estimated establishments currently using temp workers); Retail Trade (16%); and Professional and Business Services (15%) (Table 21).

The maximum number of temps working at any one time ranged from 1 to 2,000 workers. Of establishments currently using temp help, an estimated 25% hired a maximum of 1-2 temp workers while 4% hired a maximum of 50 or more temporary workers (Table 22). Approximately 58% of establishments currently using temps hired temp help for labor or labor and office tasks, 27% of establishments hired temp help for exclusively for office work, and 14% hired temps for undescribed tasks. Establishments that hired temporary workers for office tasks tended to hire larger numbers of temp workers at one time (50 or more temporary workers), while those who used temp help for labor or production hired smaller groups of temp workers.

Over 95% of the establishments that used temporary workers also supervised the work of the temps. Of the establishments that supervise temp workers, only 23% said they would record temp worker injuries on the establishment's OSHA log. An estimated 46% would not record a temp worker injury on the OSHA log and an additional 10% did not maintain an OSHA log (Table 22). Over 20% of establishments that supervise temp workers did not know whether they would record such injuries or did not provide a response. Smaller establishments were less likely to record temp worker injuries compared with larger establishments ( $p = 0.0002$ ) (Table 23). More than three quarters of establishments in Wholesale Trade and almost no establishments in Retail Trade recorded temp injuries on the log. Recordkeeping practices also differed by tasks assigned to temps; 61% of establishments that hired temps for labor or production tasks reported that they would not record temp worker injuries on the OSHA log compared with 37% of establishments that hired temps exclusively for office work.

Table 20. Q5: Does your company currently use temporary workers hired through a temp help agency?\*

	Weighted N	Yes		No		DK	
		%	SE	%	SE	%	SE
<b>All (Establishment wts)</b>	137,354	9.1	(1.4)	90.5	(1.4)	0.4	(0.2)
<b>Establishment size</b>							
1-10 employees	93,323	4.3	(1.8)	95.7	(1.8)	.	.
11-49 employees	34,130	14.8	(2.7)	84.7	(2.7)	0.4	(0.2)
50-249 employees	8,858	33.8	(3.4)	62.6	(3.9)	3.5	(2)
250+ employees	1,044	39.6	(2.6)	51.7	(4.4)	8.7	(3.6)
<b>Industry</b>							
Agriculture, Forestry, Fishing and Hunting (11)	1,418	7.6	(3.8)	92.4	(3.8)	.	.
Utilities (22)	274	67.8	(4.6)	32.2	(4.6)	.	.
Construction (23)	7,634	20.1	(7.5)	79.0	(7.6)	0.9	(0.7)
Manufacturing (31-33)	2,803	32.7	(6)	65.9	(6)	1.4	(1.4)
Wholesale Trade (42)	6,352	37.5	(14)	62.5	(14)	.	.
Retail Trade (44-45)	17,805	11.4	(8)	88.0	(8)	0.6	(0.5)
Transportation and Warehousing (48-49)	2,332	10.5	(3.4)	87.0	(3.6)	2.5	(1.7)
Information (51)	2,382	10.5	(0.6)	89.3	(0.6)	0.2	(0)
Finance Activities (52-53)	15,888	7.0	(3.2)	93.0	(3.2)	.	.
Professional and business services (54-56)	25,581	7.5	(1.5)	92.4	(1.5)	0.1	(0.1)
Educational Services (61)	1,469	4.2	(3.1)	95.5	(3.1)	0.4	(0.4)
Health Care and Social Assistance (62)	17,149	8.0	(2.1)	91.6	(2.1)	0.4	(0.1)
Leisure and hospitality (71-72)	21,478	0.4	(0.3)	98.9	(0.8)	0.7	(0.7)
Other Services (except PA) (81)	14,296	0.9	(0.3)	99.1	(0.4)	0.0	(0)
Public Administration (92)	492	39.5	(14)	58.1	(13.8)	2.4	(1.2)
<b>Establishment DAFW rate</b>							
Below ave	123,928	8.1	(1.5)	91.6	(1.6)	0.3	(0.1)
Above ave	13,427	18.7	(4.4)	80.2	(4.6)	1.1	(0.7)
<b>Establishment DART rate</b>							
Below ave	122,078	7.7	(1.6)	92.0	(1.6)	0.3	(0.1)
Above ave	15,277	20.4	(4.3)	78.4	(4.4)	1.2	(0.6)

\*Responses 'No' and 'Not now, but has in past' combined.

Table 21. Establishments currently using temporary workers hired through a temp agency by industry, Washington participants.

	Weighted N	%	SE
Wholesale Trade (42)	2,382	19.1	(7.0)
Retail Trade (44-45)	2,028	16.2	(9.7)
Professional and business services (54-56)	1,906	15.3	(3.5)
Construction (23)	1,535	12.3	(4.1)
Health Care and Social Assistance (62)	1,369	11.0	(3.1)
Finance Activities (52-53)	1,110	8.9	(3.8)
Manufacturing (31-33)	917	7.3	(1.7)
Information (51)	251	2.0	(0.3)
Transportation and Warehousing (48-49)	244	2.0	(0.7)
Public Administration (92)	195	1.6	(0.8)
Utilities (22)	186	1.5	(0.4)
Other Services (except PA) (81)	123	1.0	(0.4)
Agriculture, Forestry, Fishing and Hunting (11)	108	0.9	(0.4)
Leisure and hospitality (71-72)	80	0.6	(0.5)
Educational Services (61)	61	0.5	(0.4)
Total (Establishment wts)	12,495	100.0	

Table 22. QWA2b: What is the max number of temp workers that your company would use at one time? Asked of establishments that currently use temporary workers hired through a temp help agency. Data presented are establishment weights and row percentages, Washington participants.

	Weighted N	1-2 temps		3-9 temps		10-49 temps		50+ temps		DK	
		%	SE	%	SE	%	SE	%	SE	%	SE
<b>All (Establishment wts)</b>	12,495	24.5	(6.2)	30.9	(6.6)	15.9	(7.1)	3.5	(1.0)	25.3	(9.1)
<b>Temps supervised by client/host company</b>											
Yes	11,882	24.0	(6.4)	32.1	(7.0)	16.7	(7.5)	3.7	(1.0)	23.5	(9.6)
No	546	36.7	(28.3)	0.9	(1.0)	.	.	.	.	62.4	(28.2)
DK	8	.	.	.	.	.	.	.	.	100.0	(0.0)
Non-response	58	.	.	67.7	(26.9)	.	.	.	.	32.3	(26.9)
<b>Tasks usually assigned to temps</b>											
Labor, with or w/o office	7,289	23.5	(7.8)	36.0	(8.3)	26.5	(10.8)	1.5	(0.9)	12.5	(5.0)
Office work only	3,408	35.9	(11.9)	34.8	(12.0)	0.4	(0.2)	9.6	(2.9)	19.2	(9.0)
Unknown tasks	1,798	6.4	(6.0)	2.9	(3.2)	2.0	(2.5)	.	.	88.7	(9.5)

Table 23. Q40a: Would you ever include a temp agency worker on your OSHA log?

Asked of establishments that supervised current temporary workers. Data shown are establishment weights and row percentages, Washington participants.

	Weighted N	Yes		No		No log		DK		Non-response	
		%	SE	%	SE	%	SE	%	SE	%	SE
<b>All (Establishment wts)</b>	11,882	22.7	(5.7)	46.4	(8.5)	9.8	(4.2)	18.4	(9.9)	2.7	(1.8)
<b>Establishment size</b>											
1-10 employees	4,019	10.3	(8.4)	46.5	(21.4)	7.2	(7.5)	36.0	(23.5)	.	.
11-49 employees	4,531	27.1	(10.4)	43.6	(10.9)	14.8	(7.9)	9.1	(7.7)	5.4	(4.5)
50-249 employees	2,958	31.8	(5.7)	51.7	(6.6)	6.7	(3.8)	9.8	(3)	.	.
250+ employees	374	31.5	(3.8)	36.4	(4.9)	3.0	(2.1)	9.9	(1.4)	19.2	(2.4)
<b>Industry</b>											
Ag, Forestry, Fishing, Hunting (11)	108	33.3	(28.9)	66.7	(28.9)	.	.	.	.	.	.
Utilities (22)	186	80.6	(4.1)	0.8	(0.2)	.	.	18.7	(3.9)	.	.
Construction (23)	1,535	25.5	(18)	50.8	(19.9)	19.8	(17.1)	3.9	(3.5)	.	.
Manufacturing (31-33)	914	34.7	(10)	53.2	(11.2)	.	.	12.1	(10.4)	.	.
Wholesale Trade (42)	2,173	21.8	(13.9)	76.0	(14.5)	.	.	2.2	(2.4)	.	.
Retail Trade (44-45)	2,028	0.1	(0.1)	19.5	(20.7)	14.3	(15.9)	66.2	(27.1)	.	.
Transp, Warehousing (48-49)	244	49.3	(19.1)	15.7	(8.6)	18.0	(16.4)	.	.	17.0	(14.8)
Information (51)	251	100.0	(0)	.	.	.	.	.	.	.	.
Finance Activities (52-53)	1,110	32.4	(28.3)	13.1	(9)	21.8	(19)	32.4	(28.3)	0.2	(0.1)
Professional, business svcs (54-56)	1,707	26.0	(14.7)	63.3	(15.3)	5.6	(5.6)	1.8	(0.4)	3.2	(0.7)
Educational Services (61)	61	.	.	9.5	(7.4)	90.5	(7.4)	.	.	.	.
Health Care, Social Assistance (62)	1,206	11.3	(6.4)	57.5	(15.7)	3.5	(3.6)	10.5	(6.2)	17.1	(15.1)
Leisure and hospitality (71-72)	80	.	.	91.7	(10.2)	.	.	.	.	8.3	(10.2)
Other Services (except PA) (81)	84	.	.	100.0	(0)	.	.	.	.	.	.
Public Administration (92)	195	9.9	(10.7)	0.8	(0.9)	47.9	(26.1)	39.0	(22)	2.4	(2.6)
<b>Tasks usually assigned to temps</b>											
Labor, production	6,737	23.1	(6.8)	61.4	(8.9)	9.7	(5.6)	2.1	(1.0)	3.7	(3.1)
Office work	3,369	30.6	(11.8)	36.9	(10.0)	11.2	(8.1)	19.6	(10.5)	1.8	(1.7)
Unknown tasks	1,776	6.4	(6.0)	7.4	(6.6)	7.9	(8.1)	77.9	(17.8)	0.5	(0.5)
<b>Max number of temps used at once</b>											
1-2 temps	2,855	31.2	(12.4)	46.4	(13.8)	11.9	(9.6)	10.5	(5.1)	.	.
3-9 temps	3,816	24.6	(10)	38.4	(10.9)	18.9	(9.3)	11.3	(8.7)	6.9	(5.2)
10-49 temps	1,981	13.8	(7.6)	83.7	(8.9)	0.3	(0.3)	.	.	2.2	(2.2)
50+ temps	437	67.2	(14.7)	32.2	(14.8)	.	.	0.7	(0.7)	.	.
DK	2,794	10.9	(8.3)	33.0	(18.8)	3.6	(3.8)	52.0	(24.5)	0.4	(0.3)

### OSHA compatible electronic recordkeeping system

Interest in an electronic recordkeeping system for injury and illness recordkeeping that was compatible with OSHA recordkeeping regulations was high, with almost two-thirds of all Washington establishments estimated to be likely or very likely to use such a system. Interest was similar across size groups, except for the largest establishments, 42% of whom were already using such a system (Table 24). In three industry groups, over 75% of establishments were likely or very to use such as system: Agriculture, Forestry, Fishing and Hunting (96%); Education (87%); and Retail Trade (76%). Establishments in Health Care and Social Assistance and Information Services were less interested, with 40% and 49% of establishments in the respective groups indicating that they were unlikely or very unlikely to use an OSHA-compatible recordkeeping system.

Likelihood of use differed by DAFW and DART rates. Establishments with above average DAFW or DART rates were more likely to already use an electronic recordkeeping system than establishments with below average DAFW or DART rates ( $p < 0.01$ ).

Among respondents who found the OSHA log useful, 80% were likely or very likely to use an OSHA-compatible electronic recordkeeping system; 63% of establishments that did not find the log useful were interested in such a system. Nearly 20% of establishments that did not find the OSHA log useful were already using an electronic system. Establishments least interested in an OSHA-compatible recordkeeping system were those who didn't know whether they found the OSHA log useful – 39% of these establishments said they were unlikely or very unlikely to use such a system.

Table 24. QWA3: How likely would you be to use an electronic system for injury and illness recordkeeping that was compatible with OSHA recordkeeping regulations? Data presented are establishment weights and row percentages, Washington participants.

	Weighted N	Very likely		Likely		Unlikely		Very unlikely		Already using such a system		Non-response	
		%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
<b>All (Establishment weights)</b>	137,354	27.5	(4.0)	35.4	(4.4)	16.4	(4.6)	7.7	(2.7)	5.0	(1.0)	8.0	(3.2)
<b>Establishment size</b>													
1-10 employees	93,323	25.7	(5.6)	36.4	(6.3)	19.9	(6.6)	7.1	(3.8)	1.0	(1.0)	9.9	(4.6)
11-49 employees	34,130	32.1	(4.5)	33.5	(4.3)	9.4	(2.3)	10.6	(3.0)	10.7	(2.9)	3.7	(2.0)
50-249 employees	8,858	28.2	(3.6)	34.5	(3.9)	7.1	(1.9)	4.7	(2.3)	21.2	(2.8)	4.3	(1.6)
250+ employees	1,044	33.1	(4.6)	14.5	(3.0)	3.3	(1.3)	1.6	(0.9)	42.2	(4.9)	5.3	(0.1)
<b>Industry</b>													
Agriculture, Forestry, Fishing and Hunting (11)	1,418	54.5	(24.9)	41.5	(25.0)	.	.	.	.	4.1	(3.0)	.	.
Utilities (22)	274	6.3	(5.0)	36.0	(5.1)	24.3	(6.0)	.	.	33.3	(9.5)	.	.
Construction (23)	7,634	35.2	(9.9)	33.6	(10.3)	16.4	(8.5)	3.9	(3.0)	3.2	(1.3)	7.6	(6.8)
Manufacturing (31-33)	2,803	31.6	(6.5)	29.4	(7.0)	21.1	(5.6)	7.9	(3.5)	7.9	(2.7)	2.1	(1.5)
Wholesale Trade (42)	6,352	16.8	(7.9)	32.1	(11.7)	18.5	(13.8)	3.0	(3.0)	23.2	(13.8)	6.5	(6.0)
Retail Trade (44-45)	17,805	27.5	(12.3)	48.2	(12.3)	5.8	(5.9)	.	.	11.0	(4.1)	7.5	(7.5)
Transportation and Warehousing (48-49)	2,332	35.2	(24.5)	26.7	(18.9)	25.8	(24.6)	0.6	(0.6)	8.1	(2.5)	3.5	(2.4)
Information (51)	2,382	30.4	(13.9)	20.5	(16.7)	.	.	48.9	(2.8)	0.2	(0.1)	.	.
Finance Activities (52-53)	15,888	62.4	(20.2)	8.0	(3.4)	27.3	(21.5)	2.3	(2.3)	.	.	.	.
Professional and business services (54-56)	25,581	9.1	(3.0)	59.2	(8.0)	7.5	(5.4)	13.8	(8.6)	1.5	(0.9)	8.8	(8.2)
Educational Services (61)	1,469	26.9	(16.1)	59.7	(15.7)	4.0	(3.1)	.	.	7.0	(3.0)	2.4	(2.4)
Health Care and Social Assistance (62)	17,149	28.4	(17.6)	27.4	(17.6)	21.4	(17.5)	18.5	(16.8)	3.6	(1.3)	0.7	(0.4)
Leisure and hospitality (71-72)	21,478	33.2	(13.0)	22.0	(10.8)	18.1	(10.9)	6.5	(3.0)	7.0	(2.8)	13.1	(10.5)
Other Services (except PA) (81)	14,296	6.9	(3.9)	42.1	(22.2)	26.4	(18.4)	2.1	(2.1)	0.0	(0.0)	22.4	(18.6)
Public Administration (92)	492	58.8	(13.5)	8.3	(4.7)	19.2	(15.2)	0.9	(1.0)	12.8	(6.4)	.	.
<b>Establishment DAFW rate</b>													
Below ave	123,928	27.2	(4.4)	37.2	(4.8)	15.1	(4.9)	8.4	(3.0)	3.7	(1.0)	8.3	(3.5)
Above ave	13,427	30.3	(6.2)	18.3	(4.8)	27.5	(9.4)	1.6	(1.0)	17.2	(5.0)	5.1	(3.9)
<b>Establishment DART rate</b>													
Below ave	122,078	27.1	(4.5)	37.5	(4.9)	15.2	(4.9)	8.5	(3.0)	3.3	(1.0)	8.4	(3.5)
Above ave	15,277	30.7	(5.7)	18.8	(4.5)	25.7	(8.6)	1.4	(0.9)	18.9	(4.7)	4.5	(3.4)



## KEY RESEARCH FINDINGS

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### Research Findings

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#### Injury and Illness Recordkeeping

Based on responses from 701 establishments (response rate of 49.5%), establishments that maintained OSHA logs while participating in the SOII represented 43% of all BLS-covered establishments in the state. Logs were more likely to be absent in smaller establishments, Educational Services, Professional and Business Services, Finance Activities, Transportation and Warehousing, Health Care and Social Assistance, Leisure and Hospitality Services, and from establishments with DAFW and DART rates below the average rates for establishments of the same size and industry. Although not all establishments maintained an OSHA log during the survey year, most establishments (an estimated 80%) did track workplace injuries and illnesses. The most common method of tracking was on a paper form (48%), followed by an electronic spreadsheet (19%), and specialized injury software (5%).

Of establishments that did maintain OSHA injury and illness records, most do not comply with the OSHA recordkeeping regulations. Among establishments with OSHA logs maintained by the interview participant, an estimated 28% followed the OSHA case criteria when determining which incidents to record on the log. Responses varied by establishment characteristics; larger establishments were more likely to follow the OSHA case criteria while smaller establishments recorded all injuries (regardless of severity), or WC claims. To determine duration of disability, an estimated 29% of WA establishments correctly counted calendar days while 54% counted scheduled shifts. Again, compared to larger establishments, smaller establishments were more likely to incorrectly count scheduled shifts. Of the establishments that used (and supervised) temporary workers hired through a temp help agency, an estimated 23% would record temp worker injuries on the establishment's OSHA log. An estimated 46% would not record a temp worker injury on the OSHA log, 20% did not know whether they would record, and an additional 10% did not maintain an OSHA log. Smaller establishments were less likely to record temp worker injuries compared with larger establishments.

Responses suggested that establishment's OSHA cases were highly correlated with their WC claims. More than three out of four establishments recorded all accepted WC claims, and almost two out of three recorded nothing but WC claims. This suggests that many establishments do not use a definition of an OSHA recordable case that differs in any way from an accepted WC claim.

Adding cases to a previous year's log was uncommon; among establishments that kept logs maintained by the interviewed respondent an estimated 13% of establishments had done so. In establishments where OSHA logs were kept only when participating in SOII, adding cases to old logs almost never occurred, likely because logs did not exist for previous years and OSHA recording activities ceased once the SOII survey year ended. Less than 2% of establishments had been notified of an injury or illness too late to include in SOII. Late notification was greater among larger establishments, as high as 17% among establishments with 250 or more employees.

#### OSHA recordkeeping knowledge

Respondents displayed a range of OSHA recordkeeping knowledge when presented with the four hypothetical recordkeeping scenarios. For each question, correct answers were more often provided by respondents from larger establishments and establishments with above average DAFW rates.

Questions that elicited the highest percentage of correct answers included: whether to record an injury involving horseplay (70% of establishments correctly answered yes); recording a case with stitches but no missed work (68%); and updating a log entry to record a work absence that occurred sometime

after the initial injury (65%). Approximately half of establishments would record a case where the worker's prescribed days off occurred over a weekend (when he was not scheduled to work). Questions with the least number of correct responses were: recording a case where a worker had an X-ray but nothing was found to be broken – only 17% of estimated establishments correctly indicated that they would leave the injury off the log; and 15% would correctly record the weekend work restriction as a DAFW case.

Responses indicate that establishments have the potential of both under- and over-reporting injuries. Only counting absences on days when the employee was scheduled for work likely fails to capture workers with short-term disability, or workers with sporadic work schedules. Recording injuries for which a medical visit was limited to diagnostic procedures and no treatment provided overstates the number of OSHA-recordable cases.

#### Company use of injury and illness data

Use of safety incentives or rewards varied by establishment characteristics. These programs were present in an estimated 7% of WA establishments that employed an estimated 18% of WA workers, although extended to over 40% of workers in Manufacturing and Transportation and Warehousing. The measure of safety performance differed among the estimated 9,288 WA establishments with safety incentive programs (from most common measure to least): 2,727 establishments (29% of establishments with safety incentive programs) measured performance as *any* work-related injury, 2,029 (22%) tied it to WC claims metrics, 739 (8%) utilized OSHA recordable case data, and 312 (3%) measured safety as hazard identification and/or mitigation. Over half of establishments with safety incentives used some other metric including: safe behavior, participation in the company's safety program, and all accidents (whether or not they resulted in worker injury).

#### Suggestions for future research

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Future recordkeeping studies might consider supplementing telephone survey data with copies of establishment logs and SOII data, in part to help validate the responses provided by participants. It might also facilitate a conversation that more accurately captures the establishment's recordkeeping practices by providing documented incidents as opposed to asking the respondent to discuss cases from memory. Discussing recordkeeping was difficult for many respondents, as evident in the large percentages of 'Don't Know' and non-responses. Having actual injury and illness records to reference during the interview many increase unequivocal responses, moving respondents who would have answered 'don't know' into a more meaningful response category.

Our industry specific estimates were often accompanied by large standard errors, the result of small samples within many industry groupings. To calculate more stable estimates of recordkeeping practices within certain industries, additional studies among select groups would need to be done.

This study identified industries most likely to use safety incentive programs, but it was not designed to assess the impact of such incentive programs on the underreporting of occupational injuries and illnesses. A worker survey would be one approach to evaluating the relationship of workplace safety incentive programs and an individual's decision to report a work-related injury to his or her employer as well as his or her decision to file a WC claim.

## OUTREACH ACTIVITIES

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We gave one presentation on the BLS Undercount Telephone Study at the 2014 Council for State and Territorial Epidemiologists (CSTE) annual conference, held June 22 – 26, 2014 in Nashville, Tennessee. Wendy Lu presented a poster on the relationship between OSHA recordkeeping training, knowledge, and practice. Recordkeeping training was associated with better compliance with the OSHA recordkeeping regulations including determining case eligibility, recording cases within the required timeframe, and calculating disability duration. Based on these findings, providing formal OSHA recordkeeping training may help employers improve OSHA recordkeeping practices, and can be considered as one strategy to help address concerns about inaccuracies in the SOII data.

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## Appendix A: Recruitment Letter

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**STATE OF WASHINGTON**  
**DEPARTMENT OF LABOR AND INDUSTRIES**  
PO Box 44330 • Olympia WA 98504-4330

Dear \_\_\_\_\_,

The Department of Labor and Industries would like to thank you for your response to the 2011 Bureau of Labor Statistics (BLS) Survey of Occupational Injuries and Illnesses. We appreciate your assistance in the collection of accurate information in the effort to make Washington's workplaces safer and healthier.

The Safety and Health Assessment and Research for Prevention (SHARP) program at L&I is conducting interviews with businesses across the state to gather information about work-related injury and illness recordkeeping practices and policies for workplace safety. We would like to schedule a time to speak and discuss your thoughts and experiences with the BLS Survey, OSHA logs, and workers' compensation claims. The one-time phone interview will last approximately thirty minutes. Your participation is entirely voluntary.

Although OSHA log recording practices are discussed, this is in no way an investigation, or audit. All information provided during the phone interview is confidential and will not be shared with anyone other than the research personnel and the US Bureau of Labor Statistics. Identifiers (your name, work address, or phone number) will not be included with your responses to the questions. If you do have questions about DOSH inspection or consultation services, we will be able to provide you with resources and refer you to a DOSH consultant. The information we collect will not be shared with DOSH inspection or consultation personnel.

These interviews are part of a larger study being conducted in multiple states in partnership with the United States Department of Labor Bureau of Labor Statistics. We hope you will participate in this study and help to refine efforts to accurately reflect the recordkeeping experiences of employers like yourself.

**We will contact you by telephone in about one week to discuss this research further and schedule a time to talk in greater detail.**

We thank you for your time and consideration,

Sara Wuellner  
Study Coordinator

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The BLS, its employees, agents and partner statistical agencies will use the information you provide for statistical purposes only and will hold the information in confidence to the full extent permitted by law. In accordance with the Confidential Information Protection and Statistical Efficiency Act of 2002 (Title 5 of Public Law 107-347) and other applicable Federal laws, your responses will not be disclosed in identifiable form without your informed consent.

This survey is being conducted under OMB Control Number 1220-0045. This control number expires on September 30, 2016. Without OMB approval and this number, we would not be able to conduct this study.

## Appendix B: Consent Script

### MATCHING BLS DATA TO WORKERS' COMPENSATION CLAIMS: RECORDKEEPING PRACTICES TELEPHONE INTERVIEW COVER SHEET

<input type="checkbox"/> Completed	<input type="checkbox"/> Refused	<input type="checkbox"/> Not Conducted, Reason _____
Interview Date __/__/____	Interviewed By _____	

#### NOTES TO INTERVIEWER

- All instructions are in bold and should not be read as a part of the script.

#### INTRODUCTION AND VERBAL CONSENT

Hi, my name is \_\_\_\_\_, and I work with the SHARP Program at the Department of Labor and Industries.

I'm calling because your business recently completed the Bureau of Labor Statistics' Survey of Occupational Injuries and Illnesses and we're working on a study comparing the BLS injury data to other sources of workplace injury data. I'm following up on a letter we sent about a week ago that describes interviews we're doing with businesses across the state to discuss workplace injury recordkeeping practices. Do you recall seeing the letter?

**[IF YES]** Great **[Continue with script, NOT including text box below]**

**[IF NO]** Can I tell you a little about the study? **[Continue with script, including text box below]**

We'd like to talk about your experiences with the BLS survey, OSHA logs, workers' compensation claims, and other workplace injury recordkeeping practices which may help to explain some of the differences between the BLS Survey's estimates of occupational injuries and the workers' compensation data on injuries. Your experiences with injury recordkeeping may help improve the quality of injury data collected and better inform workplace safety programs.

The interview should take about 30 minutes. Participation in this research is voluntary. There will be no penalties for refusing to participate or, if you wish, to skip questions or stop the interview at any time. All of the information you share will be confidential. Furthermore, none of the information you provide will be shared with workers' compensation claim managers or with L&I's Department of Occupational Safety and Health (or DOSH).

**[IF NO LETTER]** I am also required to inform you that The BLS, its employees, agents and partner statistical agencies will use the information you provide for statistical purposes only and will hold the information in confidence to the full extent permitted by law. In accordance with the Confidential Information Protection and Statistical Efficiency Act of 2002 (Title 5 of Public Law 107-347) and other applicable Federal laws, your responses will not be disclosed in identifiable form without your informed consent. Also, this survey is being conducted under OMB Control Number 1220-0045. This control number expires on September 30, 2016. Without OMB approval and this number, we would not be able to conduct this study.

If you have questions about the research, you can call me toll free at 1-888-667-4277 or if you have questions about your rights as a research participant or concerns about the study you can call the Washington State Institutional Review Board at 1-800-583-8488.

Are you willing to participate in the interview?  Yes  No

[If NO] Is there another day or time that I may call you back?  Yes  No

[If YES, List preferred day/time] \_\_\_\_\_

[If NO, List reason for refusal] \_\_\_\_\_

Date verbal consent obtained: \_\_/\_\_/\_\_\_\_

\_\_\_\_\_  
Interviewer Name

\_\_\_\_\_  
Interviewer Signature

## Appendix C: Questionnaire

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Interviewer: \_\_\_\_\_ Start Time \_\_\_\_\_  
Date: \_\_\_\_\_ End Time \_\_\_\_\_

*[INTERVIEWER: Read introduction if interview is not conducted at the same time consent is obtained.]*

Thank you for agreeing to participate in the BLS study of workplace injury and illness processing. Our goal is to learn more about how companies handle injury and illness recordkeeping and how you use that information.

Everything we discuss today is strictly confidential and your participation is voluntary. If at any point you don't understand a question, feel free to ask for clarification. Do you have any questions for me before we get started?

### COMPANY

**Ok, first I have a few questions about your company and the business location identified for this survey:**

- 1) The location we selected for this survey is (unit description and/or address). We show the (2011/2012) annual average employment at this location is (employment #). Does that sound correct?  YES  NO, specify:
- 2) Are all of those workers at (sampled address or "one location") or at multiple locations.  
 ONE LOCATION  MULTIPLE LOCATIONS
- 3) Do you have additional locations in Washington? (additional to the sampled locations)  YES  NO
- 4) Do you have locations in other states?  YES  NO
- 5) Does your company use temporary workers hired through a temp help agency?  YES  NO  
 NOT NOW, BUT HAS IN PAST  DK
  - a. [IF YES] Are they normally supervised by staff within your company?  YES  NO  DK
- 6) Does your company lease workers?  YES  NO  NOT NOW, BUT HAS IN PAST  DK
  - a. [IF YES] Are they normally supervised by staff within your company?  YES  NO  DK

**WA1)** Are there multiple shifts at the worksite?  YES  NO

- 7) Are any workers covered by a union or collective bargaining agreement?  YES  NO  DK
  - a. [IF YES] approximately what percent of employees are covered?  
 LESS THAN 25%  25-49%  50-74%  75% OR MORE
- 8) Does your company compete or apply for contracts or subcontracts that ask for injury rates?  YES  
 NO  DK
  - a. [IF YES] Are any of the following injury or illness measures included in any bid submissions or applications for contracts/subcontracts?
    - i. OSHA total recordable injury rate or DART rate  YES  NO  DK
    - ii. WC experience factor/modifier  YES  NO  DK
    - iii. Do you include any other measures? Specify: \_\_\_\_\_  YES  NO  DK

9) What type of workers' compensation insurance does your company have?  INDIVIDUAL SELF-INSURANCE  GROUP SELF-INSURANCE  STATE FUND/ASSIGNED RISK PLAN  PRIVATE INSURANCE CO.  LEASING CO.  OTHER, specify: \_\_\_\_\_

10) Does a Third Party Administrator assist with your company's workers' compensation claims management?

YES  NO  DK

11) OPTIONAL: Do you have on-site medical treatment available for injuries that require more than first aid?

YES  NO

12) OPTIONAL: Do you recommend a specific clinic, facility, or treatment provider to your employees if they are injured?  YES  NO  DK

## EMPLOYEE ROLES

Now, let's move on to employees who deal with workplace injury and illness reporting for this location:

13) First, I have a question about your role in workplace injury and illnesses reporting. Do you typically complete or assist with the:

a. OSHA 300 log  YES  NO  DK

b. Workers compensation claims  YES  NO  DK

c. BLS survey of occupational injuries and illnesses  YES  NO  DK

d. Any other injury or illness recordkeeping  YES  NO  DK

Specify: \_\_\_\_\_

e. WA) Do you have access to information about employees' workers' compensation claims? (worker name, date of injury, description of injury, time loss days)  YES  NO  DK

14) Do other persons complete or assist with the:

a. OSHA 300 log  YES  NO  DK

~~b.~~ Workers compensation claims  YES  NO  DK

c. BLS survey of occupational injuries and illnesses  YES  NO  DK

d. Any other injury or illness recordkeeping  YES  NO  DK

15) Who has primary responsibility for completing the OSHA 300 log? CHECK ONE.

RESPONDENT

OTHER COMPANY SAFETY AND HEALTH EMPLOYEE, specify: \_\_\_\_\_

TPA, OTHER EXTERNAL CLAIMS MGR

OTHER, specify: \_\_\_\_\_

a. **[IF NOT TPA/EXTERNAL]:** Is that individual located at the (sampled location) work site?

YES  NO  MOVES FROM SITE TO SITE  AT HQ/ MAIN OFFICE

b. **[WA only-IF NOT RESPONDENT]** Does that person have access to specific information about individual workers' compensation claims?  YES  NO  DK

**WA2) [IF NOT SAFETY & HEALTH EMPLOYEE IN 15]** Are you or a co-worker employed as an Occupational Safety

& Health Professional?  Respondent  Co-worker  Both  No-one  DK

a. **[IF NOT INDICATED IN 15]** Is this person located on site?

Yes  No  MOVES FROM SITE TO SITE  DK  AT HQ/MAIN OFFICE

16) Did you keep an OSHA 300 log during (2011/2012)?  YES  NO  DK



- 17) When you are not participating in the BLS survey, do you keep an OSHA 300 log?  YES  NO  
 DK
- 18) How long have you been an OSHA recordkeeper? \_\_\_\_\_YEARS
- 19) Have/has (you/person with primary responsibility from 15) received formal training on OSHA recordkeeping, such as classes, seminars, or on-line courses?  YES  NO (GO TO WA3)  DK (GO TO WA3)
- 20) [IF YES], When did (you/person with primary responsibility from 15) last receive OSHA recordkeeping training?  
 Within the past 12 months  1-3 years ago  4-5 years ago  more than 5 years ago?  DK
- 21) Who provided that OSHA recordkeeping training to (you/person with primary responsibility from 15)?  
 COMPANY STAFF  OSHA (includes Fed OSHA & State OSHA (DOSH and L&I))  OTHER STATE/LOCAL GOVERNMENT AGENCY  TPA/INSURANCE COMPANY/RETRO  TRADE ASSOCIATION  COLLEGE/UNIVERSITY  PRIVATE COMPANY/CONSULTANT  DK  OTHER, specify: \_\_\_\_\_

## INJURY REPORTING AND PROCESSING

Ok, thank you. Now I have a few questions on how your company keeps track of injuries:

**WA3)** How are you usually notified that a workplace injury or illness has occurred?

- From employee/supervisor  
 From WC/TPA  
 From health care provider  
 Other, specify:

**WA3a.)** [IF FROM EMPLOYEE/SUPERVISOR] How do you usually get the information from them?

- Directly from employee/supervisor (incl. in person, phone, email)  
 Internal reporting form received directly from employee/supervisor  
 Internal reporting form received indirectly (e.g. through office mail, in-box,etc.)  
 Electronic Injury Reporting System  
 Other, specify:

**WA3b.)** Typically, how soon after an injury occurs are you notified about it?  
 [TRY TO HAVE RESPONDENT TO COMMIT TO A TIME FRAME]

- Within 1 day of injury  
 Within 1 week of injury  
 Within 1 month of injury  
 End of year  
 Other, specify:

- 22) What do you use to track your workplace injuries and illnesses on (CHECK ALL THAT APPLY)?  
 PAPER FORM  
 ELECTRONIC SPREADSHEET  
 SPECIALIZED INJURY SOFTWARE PROGRAM  
 OTHER, SPECIFY: \_\_\_\_\_  
 DON'T TRACK  
 DK

23) [IF INJURY SOFTWARE PROGRAM in Q22 above]:

- a. What injuries/illnesses are entered into the program?  ALL INJURIES  ALL WC CLAIMS  
 CASES WITH MEDICAL CARE  OSHA log  OTHER, specify: \_\_\_\_\_
- b. Do (you/person with primary responsibility from 15) or does the program determine if an injury/illness is recordable on the OSHA log?  YOU/OTHER PERSON  PROGRAM

**[IF PROGRAM determines recordability:]**

- i. Do you ever over-ride the computer's decision?  Yes  No

24) INTERVIEWER CHECKPOINT:  CHECK BOX IF NO LOG IS KEPT IN Q16/17, THEN SKIP TO Q33

## OSHA RECORDKEEPING

25) [IF NO IN Q 23bi, SKIP TO Q26] How do you decide whether to record a worker injury on your OSHA log? (TO CLARIFY, IF NECESSARY: final or official log) (CHECK ONE)

- ALL INJURIES (FOLLOW UP QUESTION TO CLARIFY: Would that include injuries and illnesses where worker does not go to the doctor? Would that include cases that do not end up as a WC claim?)
- ALL FILED WC CLAIMS
- ALL ACCEPTED WC CLAIMS
- ALL INJURIES AND ILLNESSES THAT REQUIRE MEDICAL TREATMENT (FOLLOW UP QUESTION TO CLARIFY: Is that any case where the worker goes to the doctor? (circle one) Yes No  
Would that include cases that do not end up as a WC claim?)
- FOLLOW OSHA CRITERIA
- COMPUTER SOFTWARE DECIDES
- OTHER, specify \_\_\_\_\_

26) Where do you get the information needed to complete an OSHA 300 log entry (CHECK ALL THAT APPLY)?:  COMPANY REPORT COMPLETED BY EMPLOYEE/SUPERVISOR  WC REPORT OF ACCIDENT OR OTHER CLAIM/INSURER INFORMATION (INCLUDING INFO FROM TPA)  
 DOCTOR'S REPORT  OTHER, specify:

27) Do you get any information for the OSHA log from your [insurance company, TPA, or WC]?  YES  
 NO

a. [IF YES] What information is provided (CHECK ALL THAT APPLY)?

- DATE OF INJURY  NUMBER OF DAYS AWAY FROM WORK  INJURY TYPE  
 WORKER NAME  INJURY LOCATION  TREATMENT LOCATION  NONE

28) How long after the injury or illness is reported to you do you record it on the OSHA 300 log (CHECK ONE)?  WITHIN 1 DAY OF INJURY  WITHIN 1 WEEK OF INJURY  WITHIN 1 MONTH OF INJURY  END OF YEAR  WHEN CLAIM DECISION IS MADE  WHEN A CLAIM IS FILED  OTHER, specify: \_\_\_\_\_

29) Where do you usually get the number of days away from work for the OSHA log? (CHECK ONE)  
 PAYROLL DATA  WC TIME LOSS DATA (INCLUDING INFO FROM TPA)  CALENDAR (PAPER OR COMPUTER)  SUPERVISOR  OTHER, specify: \_\_\_\_\_

- a. Does the number of days away from work include all calendar days or is it limited to days of missed work or scheduled shifts? CHECK ONE:  
 CALENDAR DAYS  SCHEDULED SHIFTS/DAYS  DK  OTHER, specify:

- 30) Now, I have a few questions on differences between the OSHA log and workers' compensation reporting.
- Have you ever put any cases on the OSHA log that are not workers' compensation claims?  
 YES  NO  DK  
 i. [IF YES] Can you give me an example? \_\_\_\_\_
  - Do you keep cases on the OSHA log that have been denied by your workers' compensation benefits?  
 YES  NO  DK  NO DENIED CLAIMS  
 i. [IF YES] Can you give me an example? \_\_\_\_\_
  - Have you ever had an accepted WC claim for your company that was not included on your OSHA 300 log?  YES  NO  DK  
 i. [IF YES] Can you give me an example? \_\_\_\_\_
- 31) Have you ever added cases to a previous year's OSHA log?  YES  NO
- IF YES, can you give me an example?
- 32) Have you ever updated the number of days away from work on a previous year's log?  YES  NO
- IF NO, why not? \_\_\_\_\_

WA9. Have you ever had a physician recommend job modifications or restrictions to work activity for a workplace injury?  YES  NO  DK

- [IF YES]** Are you able to accommodate the recommended restrictions?  
 ALWAYS  SOME OF THE TIME  NEVER  
 i. **[IF ALWAYS or SOMETIMES]**  
 When you are able to accommodate the restrictions  
 A. Do you record the case on the OSHA log?  YES  NO  
 B. How do you record the case?  DAFW  DJTR  OTHER, specify \_\_\_\_\_
- [IF SOMETIMES or NEVER]**  
 When you **are not able** to accommodate the restrictions  
 A. Do you record the case on the OSHA log?  YES  NO  
 B. How do you record the case?  DAFW  DJTR  OTHER, specify \_\_\_\_\_

- 33) Have you used any of the following recordkeeping resources or contacts?  OSHA state contact  
 OSHA federal contact  OSHA recordkeeping website  BLS contact or survey hotline   
 Insurer/TPA  other, specify: \_\_\_\_\_  NONE

WA4. In your estimation, how many hours each month do you spend on all OSHA recordkeeping activities? \_\_\_\_\_

## SOII RECORDKEEPING

Now I have a few questions on the BLS Survey of Injuries and Illnesses.

WA5. Do you remember completing the BLS survey for (survey year)?  Yes  No  DK

- 34) Was (SURVEY YEAR) the first time you've personally completed the BLS Survey of Occupational Injuries and Illnesses?  YES  NO  DID NOT COMPLETE SOII  DK  OTHER, specify
- 35) **[IF MULTI-UNIT in either Q3 or Q4]:** Are you responsible for completing the survey for any other company location?  
 YES  NO
- 36) How do you decide what cases to include in the BLS survey (CHECK ONE)?

[IF RESPONDENT SAYS "TIME LOSS CASES" ASK TO CLARIFY] Do you mean "workers comp time loss CLAIMS" or "any injury with missed work, regardless of WC claim status"?

- SAME AS OSHA 300 LOG
- ALL INJURIES
- ALL FILED WC CLAIMS
- ALL ACCEPTED WC CLAIMS
- ALL WC TL CLAIMS
- ALL INJURIES AND ILLNESSES REQUIRING MEDICAL TREATMENT
- FOLLOW OSHA CRITERIA
- ALL INJURIES WITH MISSED WORK, REGARDLESS OF CLAIM STATUS  COMPUTER SOFTWARE DECIDES
- OTHER, specify

37) Where do you get the injury and illness information needed to complete the BLS Survey? (CHECK ALL THAT APPLY)  OSHA 300 LOG  OSHA 301 FORM  COMPANY REPORT COMPLETED BY EMPLOYEE/SUPERVISOR  WC REPORT OF ACCIDENT OR OTHER CLAIM INFORMATION (INCLUDING INFO FROM TPA)  DOCTOR'S REPORT  OTHER SOURCE, specify: \_\_\_\_\_

38) Are days away from work on the BLS survey the same as what was reported on the OSHA log?  
 YES  NO  DID NOT USE OSHA LOG

a. [IF NO OR DID NOT USE OSHA LOG] What information or source do you use to determine the number of days away from work for the BLS survey? (CHECK ONE)  PAYROLL DATA  WC TIME LOSS DATA  CALENDAR (PAPER OR COMPUTER)  OTHER, specify:  
\_\_\_\_\_

39) Have you ever been notified of an injury or illness that was reported too late to include in the BLS survey?  
 YES  NO  DK

a. Can you give me an example? \_\_\_\_\_

40) [IF YES IN Q5- Has temp workers], Would you ever include a temp agency worker on your:

- a. OSHA log?  YES  NO  DK
- b. BLS survey?  YES  NO  DK

41) [IF YES IN Q6- Has leased workers], Would you ever include a leased worker on your:

- a. OSHA Log?  YES  NO  DK
- b. BLS survey?  YES  NO  DK

## WORKPLACE PRACTICES AND RECORDING QUESTIONS

We're almost done. We have a few more questions on your company's workplace performance practices.

42) Does your company use any safety incentives or rewards?  YES  NO  DK

a. [IF YES AND OPTIONAL] Can you tell me a little about your programs (general description, award/prize, and approximate value): \_\_\_\_\_

b. How is safety performance measured for these programs? (CHECK ALL THAT APPLY)  
 OSHA RECORDABLE CASES  WC CLAIM  ANY INJURY  HAZARD IDENTIFICATION/MITIGATION  OTHER, specify:

43)

- a. Are worker safety performance measures used in rating **Your** job performance  YES  NO  DK
- i. [IF YES] What is performance based on(CHECK ALL THAT APPLY)?  
 OSHA RECORDABLE CASES  WC CLAIMS (TL CASES, CLAIM \$, EXP. FACTOR)  
 OTHER: \_\_\_\_\_
- b. Are worker safety performance measures used in rating **Frontline Supervisor** job performance?  
 YES  NO  DK
- i. [IF YES] What is performance based on?  
 OSHA RECORDABLE CASES  WC CLAIMS (TL CASES, CLAIM \$, EXP. FACTOR)  
 OTHER: \_\_\_\_\_
- c. [IF MULTI-UNIT in either Q3 or Q4]: Are worker safety performance measures used to compare worksites?  
 YES  NO  DK
- i. What is used to evaluate or compare worksites?  
 OSHA RECORDABLE CASES  WC CLAIMS (TL CASES, CLAIM \$, EXP. FACTOR)  
 OTHER: \_\_\_\_\_
- 44) Does your establishment have a policy or practice of disciplining employees for certain unsafe practices?  
 YES  NO  DK
- 45) Does your establishment have a policy or practice of testing employees for alcohol or drugs after their involvement in injury-causing incidents (aside from any driving accidents)?  
 YES  NO  DK
- 46) What OSHA recordkeeping decisions would you make in the following situations:.
- a. An employee injured his ribs at work, and went to have an X-ray. The rib was not broken and he had no further medical care.  
 Is this an OSHA-recordable injury?  YES  NO  DK
- b. An employee cut his arm at work on Friday. His doctor recommended he take two days off from work. He was not scheduled to work the weekend, and he returned to work on Monday.  
 Is this an OSHA-recordable injury?  YES  NO  DK  
 [IF YES] Would you record any days away from work?  YES  NO  DK  
 [IF YES] How many? \_\_\_\_\_
- c. A worker was engaged in horseplay at work while stacking some boxes and fell, resulting in days away from work.  
 Is this an OSHA-recordable injury?  YES  NO  DK
- d. A worker cut her thumb and had stitches, but did not miss any time away from work.  
 Is this an OSHA-recordable injury?  YES  NO  DK
- i. A week later, the same worker ended up missing 7 days when the thumb became infected. Would you:  Record as new injury  Update old injury  Not record  DK

**WA6) [WA ONLY TEMP SECTION: IF TEMP] You indicated earlier that your company uses temporary workers. I just have a few extra question on that topic:**

- a. How often does your company use temp workers? ...  Daily  Weekly  Monthly  Regularly throughout the year (<monthly, >once a year)  Once a year  For special projects (<1/yr)
- b. What is the maximum number of temporary workers that your company would use at one time? \_\_\_\_\_

- c. How often does the company hire temp workers on as permanent employees? Would you say  it's the primary means of hiring permanent employees  not the primary means of hiring permanents but do consider it on a case by case basis  Never
- d. Are temp employees and new permanent employees assigned the same tasks?  Yes  No
- i. [IF YES] What Tasks do they usually do? \_\_\_\_\_
- ii. [IF NO] How are their Tasks different? \_\_\_\_\_

**WA7)** How likely would you be to use an electronic system for injury and illness recordkeeping that was compatible with OSHA recordkeeping regulations?

Very likely      Likely      Unlikely      Very unlikely      Already using

a. **[IF V. LIKELY OR LIKELY]** Would you prefer a web-based application or a stand-alone program?

Web-based      Stand-alone      No preference

**WA8)** Do you find the OSHA log useful?  Yes  No  Don't use OSHA log

**WA8a.** [If yes] how is it useful?

47) OPTIONAL: Is there anything you would like to comment on that would add to our understanding of how employers track workplace injuries and illnesses?

Ok, I think that covers it. Thank you so much for your time. Do you have any questions? We will process your responses within the next few days and if we have any questions, we might call you back briefly for a clarification.