WASHINGTON STATE DEPT. OF LABOR AND INDUSTRIES
SHARP PROGRAM

SOII Undercount Research: "Real Time" Interviews with SOII Respondents about Unreported WC Claims, Washington

FINAL REPORT

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CONTENTS

CONTENTS 1
EXECUTIVE SUMMARY 1
Objectives 1
Methods 1
Results 1
INTRODUCTION 3
Research aims of "Real Time" Interviews 3
METHODS 4
Data Sources 4
BLS SOII Case and Demographic Data 4
Washington Workers Compensation Data 4
Washington Unemployment Insurance Data 6
Record Linkage 6
Recruitment and Interview Protocol 7
Coding Claim Specific Questions for Qualitative Analysis 7
RESULTS 9
Participants 9
Reasons for Observed Differences between SOII Reports and Assigned WC Claims 12
Primary Code 1: Inaccurate OSHA log 12
Primary Code 2: Inaccurate SOII 15
Primary Code 3: Difficulty Harmonizing Workers' Compensation and SOII Data 16
Reasons for WC-SOII Case Discrepancy by Establishment and Claim Characteristics 17
Limitations 18
KEY RESEARCH FINDINGS 19
AREAS FOR FUTURE RESEARCH 20
OUTREACH ACTIVITIES 20
REFERENCES 21
APPENDIX A: Recruitment Letter 22
APPENDIX B: Introduction and Verbal Consent 23
APPENDIX C: Questionnaire 24
APPENDIX D: Unreported Claim Query Flow Chart 31
APPENDIX E: Detailed Reasons Grouped by Primary and Secondary Code 32

EXECUTIVE SUMMARY

Objectives

Previous research exploring the reasons for discrepancies between BLS Survey of Occupational Injuries and Illnesses (SOII) data and other sources of workplace injury and illness data was focused at the establishment level, and addressed the overall injury recordkeeping practices of SOII respondents. In this study, we attempted to identify the underlying reasons why workers' compensation (WC) claims are not included in case report data submitted to the BLS by asking respondents about specific claims omitted from their most recent SOII data. The objective of this study was to generate additional hypotheses about observed discrepancies between the day away from work cases reported by employers to the BLS and the claims assigned to them in the workers' compensation system.

Methods

We received establishment and case data from BLS for Washington establishments sampled for the 2012 SOII. Using a previously developed method, the BLS sampled establishments were identified in Washington workers' compensation data. Compensable WC claims from the survey year were identified for the SOII establishments and matched to the case data provided by BLS. Establishments with compensable WC claims not represented in the case data were identified for study recruitment. The sample was restricted to establishments for which their entire Washington workforce was sampled for the 2012 SOII. This was done to ensure that information about WC claimants would not be disclosed to individuals who may not have otherwise had access to it.

SOII respondents from establishments with unlinked claims were recruited for participation in a semi-structured telephone interview. Interviewers administered a previously developed survey tool that included questions about the company and respondent, injury and illness recordkeeping and reporting, and recordkeeping training and knowledge. The interview concluded with an open ended question about the unreported claim or claims. Respondents were asked if the claim had been recorded on the establishment OSHA log, how it had been classified, and if they recalled why the injury had not been included in their SOII.

A three-tiered hierarchical coding structure was developed over the course of the study to organize participants' responses regarding the unreported WC claims. A team of three researchers coded the narrative responses about unlinked claims to each of the three levels: (1) detailed subcodes for the specific explanations given by respondents, (2) broader secondary codes describing causative factors or circumstances leading to non-report and, (3) primary codes determined to be the principal reason for discrepancy between data sources. Recruitment ended when the frequency of unique responses being given by respondents had substantially diminished.

Results

SOII respondents from 103 establishments were surveyed, and 171 unreported claims were discussed. By industry group, Construction (n=20) had the greatest number of respondents, followed by Manufacturing (n=17) and Health Care and Social Assistance (n=15). Inaccurate records on company

OSHA logs and errors in SOII reporting accounted for the majority (60%) of the unlinked claims in our sample. For establishments, creating and maintaining accurate injury and illness records often involves multiple employees, departments and data sources. A breakdown in any part of the system can easily result in inaccurate recordkeeping and reporting. Simple data entry errors also contributed to incomplete case reporting.

Both OSHA recordkeeping and SOII reporting requirements continue to be misunderstood. OSHA recordkeeping rules that were misunderstood included those dictating how to classify injury severity or record days away from work. Injuries that were classified incorrectly as having had no days away from work, or those that were left off of the log completely, were subsequently left out of SOII case reporting. Some respondents reported mistakenly equating the lack of WC wage replacement with the absence of OSHA reportable days away from work. SOII reporting misunderstandings often involved confusion over which employees or worksites were included in the SOII sample. Some respondents did not maintain OSHA 300 logs or any other injury tracking system during the survey year and failed to recall all SOII eligible injuries that had occurred.

In over a third of the cases that we had identified as unlinked, respondents determined that the injury did not meet SOII reporting criteria. According to respondents, this included: injuries that were covered conditions under WC but were not OSHA recordable cases; missed work that did not occur until after the individual separated from the employer and was no longer employed at the establishment; and injuries the respondent believed to be unrelated to work. These findings underscore the difficulty in identifying SOII eligible cases in workers' compensation data.

INTRODUCTION

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 interviews with recent SOII establishments to discuss workers' compensation (WC) claims that were not reported in the SOII.

Research aims of "Real Time" Interviews

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:

- 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.
- 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.

One fundamental aspect of the SOII-WC data comparison not addressed in the earlier interviews was a discussion of the injuries found in the establishment's WC data that were absent from the SOII data. The "Real Time" interview project was undertaken to ask SOII respondents about unreported WC claims, soon after they submitted their SOII data. In these interviews, respondents were asked about the specific claims not reported in SOII and the reason for the omission. The goal of the Real Time Interviews was to generate additional hypotheses as to why there are discrepancies between a surveyed employer's report of day away from work cases and WC claims assigned to the employer.

METHODS

Data Sources

To accomplish the record linkage match between reported SOII cases and WA WC claims, SOII data, WA WC claims data, and WA Unemployment Insurance data were used.

BLS SOII Case and Demographic 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.[1]

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 numbers and rates of occupational injuries and illnesses.

To link SOII and WC records, two types of SOII data were obtained:

1. Establishment files that include characteristics such as industry, size, address, and aggregate totals of OSHA recordable injuries that occurred during the survey year; and
2. The case and demographic data for DAFW injuries and illnesses that includes worker name date of injury, description of the injury, number of days of missed and restricted work, and other case characteristics.

BLS supplied data for Washington establishments for survey years 2012.

Washington Workers Compensation Data

Washington mandates workers' compensation insurance for all employers operating in the state except those covered by an alternative workers compensation system (e.g. Harbor and Longshore worker, Federal workers – Office of Workers Compensation Programs)[2] or are specifically exempt from requirements for mandatory insurance as listed in state statute.[3] Elective workers compensation insurance is available for self-employed workers.

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[1] 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.

[2] See Revised Code of Washington, Title 51.12 'Employments and Occupations Covered' http://apps.leg.wa.gov/rcw/default.aspx?cite=51.12

[3] Employments excluded from mandatory workers compensation coverage include: the self-employed; family members younger than 18 working on family farms; domestic servants; sole proprietors, partners or corporate

Washington employers are required to purchase workers' compensation insurance from the Washington State Fund unless they are able to self-insure. The Washington State Fund is administered by L&I. Of the approximately 160,000 Washington employer workers' compensation accounts, 99.75% are insured through the State Fund, covering approximately 70% of all workers in the state. The remaining workers' compensation accounts (approximately 400) are self-insured and typically represent large employers (e.g. Boeing, Microsoft). Companies must meet specific requirements to self-insure and the self-insurance program has significant oversight and reporting requirements to L&I.[4]

Each employer in Washington State has a workers' compensation policy. The policy may cover one or more accounts, and each account may comprise one or more business locations. Workers compensation accounts are associated with the employer's Uniform Business Identifier (UBI). The UBI is a Washington State specific employer identifier that links an employer across state government administrative databases (e.g. the Washington State Department of Labor and Industries, the Washington State Employment Security Department, and the Washington State Department of Revenue). A workers' compensation policy, account and business location each has an assigned address within the workers' compensation system.

In Washington, a workers' compensation claim is initiated 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. Differing from many WC systems operating in other states, 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. The statute of limitations for filing a workers' compensation claim for an occupational injury is one year after the injury.[5] For an occupational disease the statute of limitations is two years after the written notification from a health care provider for eligibility to file a claim.[6]

Workers compensation claims are accepted and rejected as work-related by trained claims adjudicators in accordance with Washington State statutes, rules, and case law. Every filed claim is retained in the L&I database, whether eligible for wage replacement, accepted for medical-aid only, or rejected. Medical treatment, wage replacement benefits and all other billed services are linked to the claim identification number and maintained in L&I databases. In Washington, the waiting period for wage replacement eligibility is three calendar 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 is 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.

Claimant (worker) identifiers include name, date of birth, sex, and social security number. Each claim has a date of injury and a date in which the department received the claim (claim established date). Claims may be assigned a date of injury based on adjudication and legal proceedings associated with the claim. 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

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officers; jockeys; newspaper vendors or delivery persons; contract musicians, and insurance brokers. See Revised Code of Washington, Title 51.12.020 'Employments excluded' http://apps.leg.wa.gov/rcw/default.aspx?cite=51.12.020

[4] See Revised Code of Washington, Title 51.14 'Self-Insurers' http://apps.leg.wa.gov/RCW/default.aspx?cite=51.14

[5] See Revised Code of Washington, Title 51.28.050 – 'Time limit for filing application or enforcing claim for injury' http://apps.leg.wa.gov/RCW/default.aspx?cite=51.28.050

[6] See Revised Code of Washington, Title 51.28.055 – 'Time limitation for filing claim for occupational disease ' http://apps.leg.wa.gov/RCW/default.aspx?cite=51.28.055

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.

Washington Unemployment Insurance Data

The Washington State Employment Security Department (ESD) collects and maintains unemployment insurance (UI) data on Washington employers subject to UI coverage. Employers are assigned an account, which may be divided into individual locations or 'units' designated by a reporting unit number. Employers are required to file employment and wage information for their UI account with ESD. For each active UI account, employers submit quarterly reports that include the name, social security number, total hours worked, and wages paid for each individual employed that quarter. Note that worker data are reported at the level of the UI account and not the more granular reporting unit. ESD also assigns industry codes based on the establishment's primary economic activity.

UI data bridges the SOII and WC data. UI data, submitted to BLS for the Quarterly Census of Employment and Wages, is used to populate the LDB which serves as the sample frame for SOII. UI data can be linked to WA WC data through the Washington State UBI number. WC claims among a SOII sampled workforce can be identified by linking WC claims data to UI data through worker names and social security numbers.

Washington UI data are available to SHARP researchers through an agreement with ESD.

Record Linkage

First, we restricted the 2012 SOII sample to establishments sampled at the level of the UI account. This was done to protect against disclosing claimant information to a respondent who was not already informed of the claim. Next, we identified individuals employed by SOII respondents during the survey year using the UI account information current at the time of the survey. Worker identifiers for individuals reported in at least one of the four quarters of the survey year among SOII-participating UI accounts were extracted from the Washington UI database. Then, using the social security numbers reported in UI data among SOII-participating UI accounts, we extracted SOII-eligible WC claims among the sampled workforce with an injury date in the survey year in which the establishment participated. WC claims were considered eligible for SOII as a DAFW case if they: had a WC injury date in 2012, were compensable claims (State funded claims that received payments for missed work, were designated 'Kept on Salary'[7], or self-insured claims classified as eligible for time loss payments[8]), and had a WC disability date that did not exceed 2012. Among establishments instructed by BLS to submit a subsample of cases, claims were required to have an injury date within the subsample frame to be considered eligible for inclusion in the SOII.

Research staff developed SAS code to deterministically link records through an iterative process, altering the linking criteria of one or more variables in each successive attempt. SOII cases linked to WC claims based on the following data elements: worker first name, last name, date of birth or age at injury, and date of injury.

[7] 'Kept on salary' is a practice in which the employer can lower their WC claim costs by retaining the injured worker on the company's payroll. For the limited period of time the attending health care provider has recommended work restrictions, the worker continues to receive their full pay from the employer in lieu of receiving indemnity benefits.

[8] No lost time payment information, such as total days missed or total amount awarded for missed work, is captured for self-insured claims, only their status as eligible for time loss payments.

Recruitment and Interview Protocol

Beginning in May, 2013, BLS sent periodic extracts of the current summary establishment data considered useable for estimation and cases of injuries and illnesses reported by each establishment. Extraction of Worker's Compensation data for matching occurred in March 2013.

Establishments with unlinked claims were recruited in batches, following the order of the periodic extracts sent by BLS. Recruitment letters (Appendix A) were sent via postal mail or email to the name and address provided in the SOII contact data. Interviewers phoned the prospective participant the following week in attempt to complete or schedule the interview. We required that the interview be completed with the individual listed as the SOII contact in the data provided by BLS, as the contact would be the most appropriate individual with whom to discuss the process that led to the inclusion or omission of specific claims. After confirming that they were speaking to the 2012 SOII respondent, interviewers read through an introduction and verbal consent script (Appendix B) explaining the nature of the survey and that we would also like to ask about specific instances when case information on the BLS survey did not match completely with workers' compensation claim information. At this point, the interviewer would ask the respondent if they had access to specific information about individual workers' compensation claims. We required that the respondent have access workers' compensation claim information to ensure that we did not disclose sensitive claim information to someone who would not otherwise have access to identifiable WC data as part of their job.

After obtaining informed consent from the respondent, the interviewer administered the questionnaire (Appendix C) to gather information on recordkeeping knowledge and practices, and business practices that may impact recordkeeping. The interviews concluded with an open-ended question about the unreported claim or claims. The interviewer described the injury including the worker's name, date of injury, nature of injury, body part, event or exposure, and number of days of wage replacement paid by WC. The interviewer then asked the respondent if the injury had been recorded on the establishment's OSHA 300 log, what they had classified as the most serious outcome for the injury or illness (i.e., days away from work, days of job transfer or restriction, or other recordable case), did they know if the worker had missed any time from work due to the injury, and if they recalled why the injury was not reported in the SOII. Responses were recorded as narrative text. Interviewers followed a general flow chart during the claims conversations (Appendix D), but would also deviate from the script and ask follow-up questions as necessary to get as much information as possible about the reason the claim was not reported. We allowed respondents to give us any information they wished. On a number of occasions, a respondent contacted the interviewer to provide more information that they had remembered or found in company records after completion of the survey.

Interviews were conducted between July 11, 2013 and March 19, 2014. Recruitment ended when we determined that the frequency of unique reasons for unreported claims had substantially diminished.

The study was approved by the Washington State Institutional Review Board (WSIRB).

Coding Claim Specific Questions for Qualitative Analysis

Respondents related dozens of unique explanations for not reporting specific WC claims to the SOII. We developed a hierarchical coding structure that would allow us to explore the range of reasons given by respondents, as well as relationships and broader themes supported by the narratives. The codes and coding structure evolved through an iterative process over the course of the study as narratives were gathered and common themes emerged. Narrative responses to claim specific questions were ultimately coded to three levels for descriptive analysis: (1) detailed subcodes for the specific explanations given by respondents, (2) broader secondary codes describing causative factors or circumstances leading to non-report and, (3) primary codes that we determined to be the principal

reason for discrepancy between data sources. Collaborative coding of new responses was done on a weekly basis by a team of three researchers as interviews were conducted. Secondary information about the claim from available workers' compensation administrative data was often used to obtain a clearer picture of a claim including: copies of medical records; the medical provider's documentation authorizing days away from work and physical activity restrictions; and claim correspondence between the employer, injured worker, or health care provider, and the claim manager.

As noted, the initial level of coding consisted of labeling and grouping into detailed subcodes the reasons given by respondents for not reporting specific claims on their 2012 SOII. Occasionally, respondents would relate more than one reason, or a number of possible explanations, for an unreported injury. In these cases, we would record and code all reasons for claim non-report that the respondent deemed likely, thus it was possible for a single claim to be assigned more than one subcode. In our sample, we identified 41 unique detailed subcodes from the responses.

Subcodes were grouped into 11 distinct secondary codes. The majority of claims were then coded to one of three primary codes (Appendix E). There were eight claims for which we did not receive enough information to make a primary code determination. Each claim received only one primary and secondary code, but again, subcodes were not necessarily mutually exclusive.

As an example, one respondent told us that the claim in question had been reported through the correct company channels, but it had not been recorded on the OSHA log because there had been another similar injury to a worker with the same last name within a week of the claim injury. The prior injury was already on the OSHA log. The respondent saw this injury listed and assumed the claim in question had been recorded. She did not record the new claim, and because it was not on the OSHA log at the time the SOII was completed, the claim was not reported to the BLS. The coding hierarchy for this claim would be:

1. **Detailed subcode**- There were multiple similar injuries, one of which had already been recorded on the OSHA log. Respondent assumed case had already been recorded.
2. **Secondary code**- Data entry error by respondent
3. **Primary code**- Inaccurate OSHA 300 log

RESULTS

Participants

The matching protocol resulted in a total of 695 unreported compensable claims from 387 aggregate establishments in the 2012 BLS SOII. Recruitment letters were sent to 258 aggregate establishments with unmatched WC claims.

Of the 258 letters sent, 39 (15%) establishments were deemed ineligible for participation either because the establishment was out of business, the 2012 SOII respondent was no longer employed at the establishment, or the respondent did not have the necessary access to WC claim information. There were only three establishments for which we were unable to determine eligibility (Table 1). Of the remaining 216 establishments with an eligible respondent, 103 (40%) completed the survey. The response rate was 47.1%, calculated in accordance with the American Association of Public Opinion Researchers. The interview completion rate was 60.5%. (Centers for Disease Control and Prevention, 2013).

Eligibility factor (EF): EL/(EL+IN) = 216/(216+39)= .85
Response rate: (CO/(EL+(EF*UK)))*100 = (103/(216+(.85*3)))*100 = 47.1%
Interview Completion Rate: (CO/(CO+RF))*100 = (103/(103+67))*100 = 60.6%

Table 1. Eligibility of sampled establishments.

Disposition	Eligibility	n	%
Completed (CO)	Eligible (EL)	103	40%
Refused (RF)	Eligible (EL)	67	26%
No contact after 4 calls-Respondent still with establishment	Eligible (EL)	46	18%
Respondent no longer at establishment	Ineligible (IN)	30	12%
Establishment out of business	Ineligible (IN)	3	1%
Respondent has no access to Workers' Compensation info.	Ineligible (IN)	6	2%
No contact after 4 calls-Respondent employment status unknown	Unknown (UK)	3	1%
	Total Letters Sent	**258**	**100%**

We contacted the largest number of establishments in the Construction industry, followed by Manufacturing and Health Care (Table 2). Respondents from Public Administration, Educational Services and Construction were the most likely to agree to be surveyed when contacted. We had the highest refusal rates in Agriculture, Forestry, Fishing and Hunting, and Leisure and Hospitality. We had the most difficulty reaching respondents in employed in Retail Trade, and Leisure and Hospitality.

We surveyed 2012 SOII respondents from 103 establishments and discussed 171 unlinked WC claims (Table 3). By industry group, Construction (n=20) had the greatest number of respondents, followed by Manufacturing (n=17) and Health Care and Social Assistance (n=15). The majority of the claims we discussed were from establishments insured through the state fund (87% of claims). Eighteen establishments had not reported any DAFW cases to the BLS in 2012, nine of whom had multiple unlinked claims. The majority of the establishments (n=67) had only one unlinked claim in WC for the survey year.

Table 2. Participation by selected establishment characteristics (n=258), presented as number of establishments and row percentages (Percentages may not add to 100% due to rounding).

Industry (2-digit NAICS code)	Establishments Contacted	Survey Complete (Eligible)		Refused (Eligible)		No Contact After 4 Calls-Respondent Still With Establishment (Eligible)		Ineligible		Unknown	
Agriculture, Forestry, Fishing and Hunting (11)	26	5	19%	12	46%	6	23%	2	8%	1	4%
Construction (23)	34	20	59%	5	15%	4	12%	4	12%	1	3%
Manufacturing (31-33)	42	17	40%	8	19%	10	24%	7	17%	0	0%
Wholesale Trade (42)	16	7	44%	3	19%	4	25%	2	13%	0	0%
Retail Trade (44-45)	12	3	25%	3	25%	4	33%	2	17%	0	0%
Transportation and Warehousing (48-49)	16	7	44%	4	25%	2	13%	3	19%	0	0%
Information; Real Estate; Professional, Scientific, and Technical Services (51-54)	11	2	18%	4	36%	0	0%	4	36%	1	9%
Administrative and Support and Waste Management and Remediation Services (56)	21	6	29%	8	38%	2	10%	5	24%	0	0%
Educational Services (61)	15	9	60%	3	20%	1	7%	2	13%	0	0%
Health Care and Social Assistance (62)	34	15	44%	8	24%	6	18%	5	15%	0	0%
Leisure and Hospitality (71-72)	18	4	22%	8	44%	6	33%	0	0%	0	0%
Other Services (except Public Administration) (81)	8	4	50%	1	13%	1	13%	2	25%	0	0%
Public Administration (92)	5	4	80%	0	0%	0	0%	1	20%	0	0%
Size											
1-10 employees	4	3	75%	1	25%	0	0%	0	0%	0	0%
11-49 employees	26	7	27%	12	46%	5	19%	2	8%	0	0%
50-249 employees	137	45	33%	35	26%	29	21%	26	19%	2	1%
250-999 employees	73	36	49%	15	21%	12	16%	9	12%	1	1%
1000+ employees	18	12	67%	4	22%	0	0%	2	11%	0	0%
DAFW Cases											
No DAFW Case Reports	64	18	28%	18	28%	15	23%	12	19%	1	2%
1+ DAFW Case in 2012	194	85	44%	49	25%	31	16%	27	14%	2	1%

Table 3. Number of unlinked claims discussed during interviews by establishment characteristics.

Industry Group (2-digit NAICS codes)	Establishments	Claims
Construction (23)	20	37
Manufacturing (31,32,33)	17	23
Health Care and Social Assistance (62)	15	21
Wholesale and Retail Trade (42,44,45)	10	22
Educational Services (61)	9	12
Transportation and Warehousing (48,49)	7	12
Admin, Support, Waste Mgmt., Remediation Svcs. (56)	6	9
Agriculture, Forestry, Fishing and Hunting (11)	5	15
Public Administration (92)	4	9
All Others (53,54,71,72,81)	10	11
Number of Employees		
1-49	10	10
50-249	45	63
>250	48	98
Claim Liability		
L&I	91	148
Self-insured	12	23
DAWF cases reported in 2012 SOII		
≥1 cases	85	138
0 cases	18	33
Number of Unlinked WC Claims		
One	67	67
Multiple	36	104

The majority of interview respondents (94%, n=97) indicated that their establishment kept an OSHA 300 log during the survey year. Respondents had a high level of knowledge about their establishments' OSHA log practices; 92% (n=95) of respondents told us that they typically completed or assisted with the OSHA 300 log, and 78% (n=80) reported that they had primary responsibility for completing the OSHA 300 log for their establishment. Of those respondents with primary responsibility for their establishment's OSHA log, 59% (n=47) indicated that they had received formal training on OSHA recordkeeping, such as classes, seminars or online courses. Of respondents who completed or assisted with the OSHA log, over half had more than five years of experience as an OSHA recordkeeper (Table 4). Thirty-four percent of all respondents (n=35) answered that 2012 had been the first time that they had personally completed the SOII.

Table 4. Reported years as OSHA recordkeeper.

Years as an OSHA Recordkeeper	n	%
1 year or less	6	6%
2-5 years	34	33%
6-10 years	29	28%
More than 10 years	25	24%
No answer	1	1%
Not an OSHA recordkeeper	6	6%
Don't Know	2	2%
TOTAL	103	100%

Reasons for Observed Differences between SOII Reports and Assigned WC Claims

Our conversations with SOII reporters suggested that the majority of the omitted WC claims were not reported to the BLS because of inaccuracies in either OSHA recordkeeping or SOII reporting (60% of discussed claims). Over a third of the unlinked claims appeared to be instances in which the injury was not SOII reportable, despite information in the WC system suggesting otherwise. For five percent (n=8) of the claims, respondents were unable to provide enough information to allow for a primary code determination. A number of the secondary codes grouped within both the Inaccurate OSHA log and the Inaccurate SOII primary codes (Figure 1).

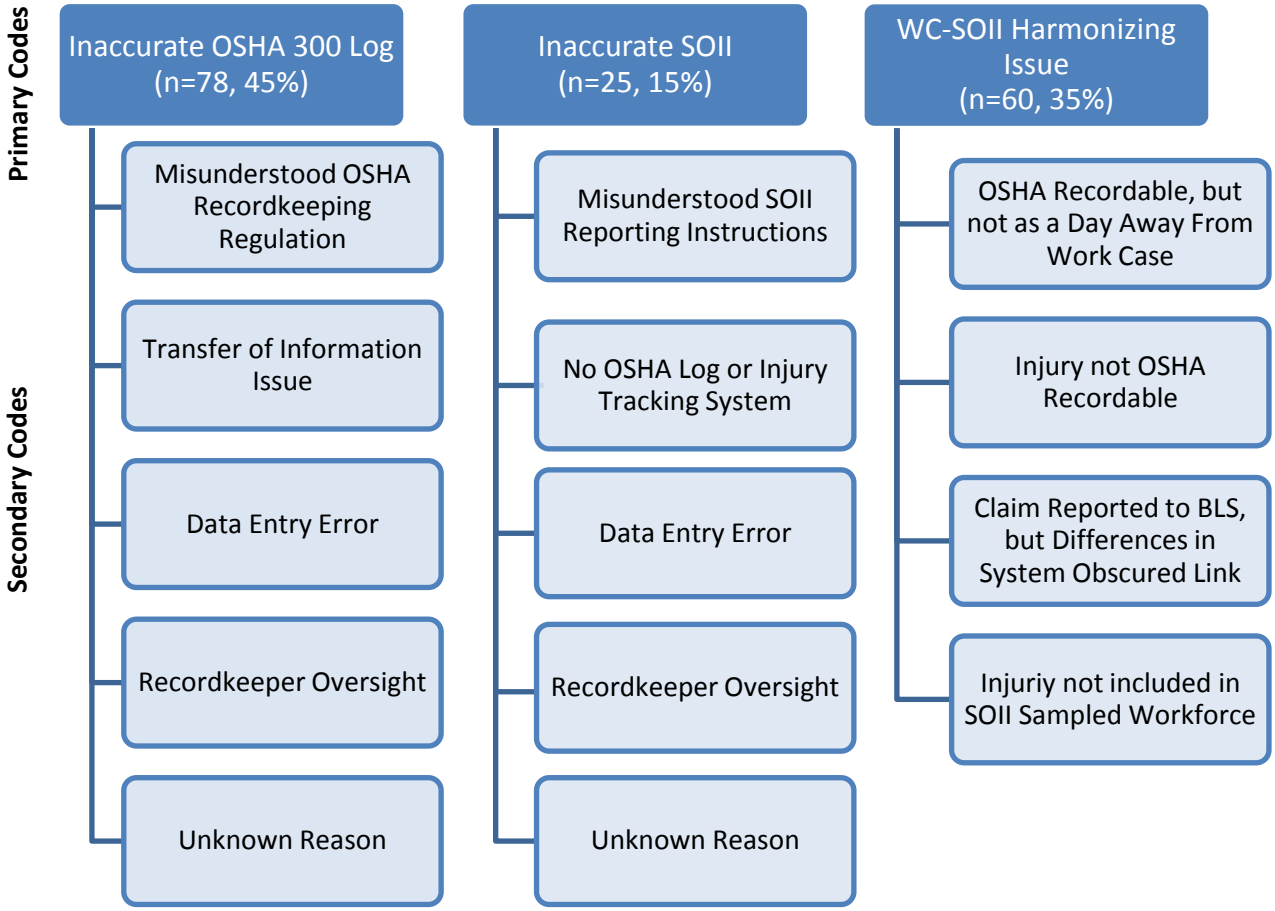


Figure 1. Secondary code grouping within primary codes.

Primary Code 1: Inaccurate OSHA log

Forty-five percent (45%) of unreported claims were grouped into the primary code **Inaccurate OSHA 300 Log**. In these cases, the establishment maintained an OSHA log, but the unreported claim had either not been recorded on the establishment's OSHA log for the survey year, or it had been recorded incorrectly, making it appear as though the injury was not eligible for inclusion in the SOII. Five secondary codes clustered under the Inaccurate OSHA 300 Log category: Misunderstood OSHA Recordkeeping Criteria; Transfer of Information Issue; Data Entry Error by the Respondent; Recordkeeper Oversight; and Unknown Reason.

1.1 Classification Errors Due to Misunderstood OSHA Recordkeeping Criteria

For some claims, it was apparent that the misclassification of a claim on the establishment's log was due to a misunderstanding of OSHA recordkeeping criteria.

- Injured worker experienced both days away from work and days of job transfer or restriction due to their injury or illness. In these instances, if the number of days of modified duty was greater than the days of missed work, respondent would classify these injuries as job transfer or restriction cases on the OSHA log instead of day away from work, contrary to OSHA regulation.
- Respondent felt that supervisors responsible for tracking DAFW misunderstood the rule for counting DAFW, counting scheduled shifts instead of calendar days, and that this differentially affected claims for part-time employees who may not be scheduled to work during the physician recommended time away from work.
- Despite a recommendation of days away from work from a health professional, the worker had returned to the job the day following the injury. Respondent did not record the case on the establishment's OSHA log, though OSHA regulations dictate this to be recordable as a DAFW case.
- When no WC wage replacement was paid, respondent did not consider claim recordable as a DAFW case.
    - Injured worker was paid full salary via vacation leave. There was no WC wage replacement, so DAFW were not recorded.
    - In WA State, employers have the option of paying injured workers 100% of their regular salary during the period of disability in exchange for employer WC premiums not being adversely affected, a practice known as Kept on Salary (KOS). Respondent did not consider claims where worker was kept on salary as recordable for DAFW because worker did not miss any days of pay.

1.2 Transfer of Information or Recordkeeping System Issues

Some reasons given for failure to include eligible WC claims in the SOII could be categorized as issues with systematic transfer of information. These were instances in which, at the time of the survey, the respondent was working with incomplete injury records due to a failure of their injury and illness tracking system.

- The injury was not reported through the company system, therefore the OSHA log entry process was not triggered.
- Respondent believed that the injury was reported after SOII submission.
- Respondent believed that the worker had not reported their injury to the company due to a policy of mandatory drug testing following all workplace injuries.
- Current days away from work were not provided by the employee or company department responsible for conveying that information (e.g. the injured worker's supervisor or the company health and safety representative), leading the respondent to believe at the time of the SOII that the injury was not a DAFW case.
- Respondent had no record of DAFW for the injury, with no explanation.
- Respondent was aware of the claim, but 'lost touch' with the employee immediately after the injury.
- There was a breakdown of some kind in the recordkeeping system, information transfer did not occur as it should have, but the respondent could not be sure of the cause.
    - Injury occurred around the time a new injury tracking software system was implemented
    - Injury occurred during a period of company "turmoil"

In other instances, injuries had been reported, but established recordkeeping practices were to blame for the unreported claims.

- Establishment had a practice of waiting for an injured worker to return to work before recording DAFW and the field was still blank at the time of SOII completion.
- Respondent waits for the resolution of a WC claim before recording the number of DAFW on the OSHA log, which resulted in respondent not recognizing the DAFW case as such at survey time.

1.3 Data Entry Error by Respondent

For other claims, a data entry error by the respondent was responsible for the OSHA log inaccuracy that led to claim non-report.

- Respondent incorrectly recorded the date of injury so that a claim did not appear to be SOII eligible.
- Respondent did not record the case on the OSHA log because it was similar in many aspects to one that was already recorded.
- Respondent inadvertently left the number of days away from work blank on OSHA log and thus did not report it in the SOII.

1.4 Recordkeeper Oversight

Respondent was aware of the injury, but could give no reason for leaving the claim off of the OSHA log. Respondent felt that this was simply a case of oversight.

- Respondent said, “I just missed it.”

1.5 Unknown Reason

For many of the claims in the Inaccurate OSHA log category, respondents were unable to give us an explanation for the incorrect records or a reason why the injury was not reported in the SOII. In these cases, the secondary code was marked as “Unknown”. Approximately one quarter of these were not recorded on the establishment’s OSHA log, and the remaining cases were recorded on the log with a severity other than “Days Away from Work”. A number of respondents told us that the date of injury for the unreported claim occurred before their employment with the establishment, and that recording the injury on the OSHA log would have been the responsibility of a prior recordkeeper. In one third of the ‘Unknown’ instances, respondents told us that they had no record of any days work due to the injury or illness.

Further investigation into the WC claim information revealed that for a subset of these cases with a secondary code of ‘Unknown’, a health care professional had determined that restricted or modified duty was appropriate for the worker from injury onset, however, the employer was either unable to accommodate the restricted duty, or job modifications took a number of days to put in place. Workers missed several days of work, and were paid WC time loss wage replacement, but the establishment OSHA logs reflected only the physician recommended job transfer or restriction days. This may be indicative of a recordkeeping system with inadequate information transfer, a reliance on WC documentation (i.e. forms filed by the health care provider regarding recommended work restriction), or a misunderstanding of OSHA regulations (it may be counterintuitive to the employer to record something other than what was recommended by the healthcare professional).

Primary Code 2: Inaccurate SOII

Another 15% of claims were given a primary code of **Inaccurate SOII.** In these cases, an error in SOII reporting itself was the reason that no DAFW case report had been sent to the BLS for these injuries. Five secondary categories also emerged for claims within this code: Misunderstood SOII Reporting Instructions; No OSHA Log or Injury Tracking System at Establishment; Data Entry Error by the Respondent; Recordkeeper Oversight; and Unknown Reason.

2.1 Misunderstood SOII Reporting Instructions

Reasons coded to this category described instances in which the respondent misunderstood SOII reporting criteria and, as a result, did not report an eligible injury.

- Although the SOII sample was intended to include all workers within the sampled UI account, respondent omitted cases from some worksites. (Some respondents told us that they readily had access to the OSHA logs for the other worksites, but they did not believe that they were required to report for them.)
- Confusion about which of the company's multiple UI accounts was sampled and to which account the injured worker was assigned led respondent to believe the claim was not SOII eligible.
- Respondent did not include a claim for carpal tunnel syndrome in the SOII, believing only acute injuries to be SOII eligible.

2.2 Having No OSHA Log or Injury Tracking System Proved Problematic

Some establishments did not keep OSHA logs or systematically track injuries in any way. Clearly, when the SOII is filled out completely from memory, the chance for claim omission exists.

- The claim had not been reported because when it came time to do the SOII, the respondent just chose "a couple of injuries" from among the company accident report forms to include on the SOII case forms. The unreported claim had not been one of the reports chosen.

2.3 Data Entry Error by Respondent

Data entry errors on the actual SOII were responsible for some unlinked claims.

- One employee had two similar DAFW cases on the OSHA log. Respondent believed that mistakenly only one was included in the SOII.
- Claim was reported in the SOII, but the date of injury was reported incorrectly by the respondent; the claim appeared to be unlinked because the injury date in SOII was more than two months different from the injury date in WC.

2.4 Recordkeeper Oversight

Again, there were a number of claims that went unreported seemingly due to oversight on the part of the SOII respondent.

- Respondent reported that the claim was on the establishment OSHA log, and felt that it was "just missed" when completing the SOII.

2.5 Unknown Reason

These were claims for which, based on the information given, the establishment's OSHA log seemed to be accurate, but the respondent was not able to give us any reason why they had not included the injury in the SOII.

Primary Code 3: Difficulty Harmonizing Workers' Compensation and SOII Data

Approximately one-third of the claims discussed during the interviews appeared to be unreported due to what we termed **Harmonizing Issues**. These were occupational injuries and illnesses that were eligible for WC wage replacement during the survey year, but for a variety of reasons, were not considered OSHA recordable DAFW injuries for the establishment during that timeframe. These claims did not meet SOII reporting criteria, or employers had determined that the injury was not work related, despite information in the WC system suggesting otherwise. These findings underscore the difficulties reconciling one system's case definition within another unrelated system, or objectively validating an employer's rationale for determining inclusion or exclusion on an OSHA log.

3.1 The Injury Was OSHA Recordable, but Not as a DAFW Case During the Survey Year

Some of the injuries were OSHA recordable, but not as DAFW injuries for the establishment during the survey year.

- The only time away from work due to the injury was for attending a medical visit.
- Injured worker refused available physician recommended modified duty and stayed home (the claim was designated as KOS in WC).
- There were no DAFW due to the injury.
  - Worker received WC wage replacement for modified duty or work hours that resulted in a reduction of pay, but no time away from the job.
  - The employer indicated to the WC claim manager that they would pay the worker regular wages in the event they missed days due to the injury, but no work absence ever occurred. These claims were classified in the WC system as KOS claims.
- Cases in which all days away from work occurred after the injured worker was no longer employed at the establishment. Provided the injury was not the reason the employee left the company, per OSHA criteria, the establishment need not classify the injury as a DAFW case on their OSHA logs. Workers' compensation still pays wage replacement for the days the injured worker would not be able to work due to the injury, and the employer is still responsible for the claim.
  - Time loss was not prescribed until the claimant underwent surgery for the injury, which occurred post-employment.
  - The employer was able to accommodate modified duty while the worker was with the company. After the worker separated from the company, he or she received WC wage replacement.
  - The worker filed the claim after they were no longer with the company.

3.2 The Injury Was Not OSHA Recordable

These were claims that met WC eligibility for time loss wage replacement, but were not considered OSHA recordable based on the regulations.

- Injury occurred outside of the "work environment"
  - Motor vehicle accident in a company vehicle on the way to the worksite
  - Injury occurred while in travel status on a layover
- Injury occurred on international flights, outside of OSHA jurisdiction.
- Injury determined by the respondent (or someone else within the company) to be not 'work-related'.

3.3 The Injury Was Not Included in the SOII Sampled Workforce

For these claims, administrative information differed between WC and establishment records. Based on employer records, these claims fell outside of the SOII sample.

- Worker was a vocational training client, not a standard employee, working onsite at the establishment. Respondent reported being instructed by a state BLS contact to leave clients out of the SOII data.
- The injury did not occur at the sampled establishment, but at a separate establishment under the same ownership. The injury was recorded on the OSHA log at the worksite where the injury took place, in accordance with the OSHA recordkeeping regulations.

3.4 The Injury Was Reported in the SOII

Some unlinked claims had been reported in the SOII during the survey year, but differences in the linking variables obscured the link.

- Injury date for non-acute conditions differed between SOII and WC by more than two months
- First name, last name, and injury date differed between SOII and WC

Reasons for WC-SOII Case Discrepancy by Establishment and Claim Characteristics

For seven of our ten industry groupings, an inaccurate OSHA log was the most frequent reason recorded for unlinked claims (Table 5). Establishments in Construction, Wholesale and Retail Trade, and Administrative and Support and Waste Management and Remediation Services had higher proportions of claims coded as Harmonizing Issues. For both Trade and Administrative and Support industry groups, the majority of the discrepancy in determining eligibility for SOII occurred because, according to the respondent, the worker had not actually missed any work time due to the injury, or because all missed time had occurred after the worker was no longer employed at the establishment. In the Construction group, however, half of the claims coded as Harmonizing Issues were not recorded on establishment OSHA logs because employers had determined that the injuries were not work related. This subset included ten claims from six establishments.

Table 5. --Primary code of claims by industry. Number of claims and row percent.

Industry Group (2-digit NAICS code)	Inaccurate OSHA Log		Inaccurate SOII		Harmonizing Issue		Unknown Reason	
Construction (23)	12	32%	5	14%	20	54%	0	0%
Manufacturing (31,32,33)	13	57%	5	22%	4	17%	1	4%
Wholesale and Retail Trade (42,44,45)	10	45%	2	9%	10	45%	0	0%
Health Care and Social Assistance (62)	13	62%	2	10%	6	29%	0	0%
Agriculture, Forestry, Fishing and Hunting (11)	10	67%	0	0%	1	7%	4	27%
Educational Services (61)	6	50%	2	17%	3	25%	1	8%
Transportation and Warehousing (48,49)	5	42%	3	25%	4	33%	0	0%
Public Administration (92)	6	67%	1	11%	1	11%	1	11%
Administrative and Support and Waste Management and Remediation Services (56)	1	11%	1	11%	7	78%	0	0%
All Others (53,54,71,72,81)	2	18%	4	36%	4	36%	1	9%

In our sample, more claims from mid-size and larger employers were unreported due to inaccurate OSHA logs than any other reason (Table 6). Any patterns among smaller employers must be viewed with much reservation due to the small number of responses.

Table 6. Number of claims within each primary code by establishment size.

Number of Employees	Primary Code							
	Inaccurate OSHA Log		Inaccurate SOII		Harmonizing Issue		Unknown Reason	
1-49	3	30%	4	40%	2	20%	1	10%
50-249	32	51%	11	17%	20	32%	0	0%
>250	43	44%	10	10%	38	39%	7	7%

Of the 171 claims discussed with respondents, the majority (n=96) were reported as recorded on establishment OSHA logs; 59 claims were not recorded; and for 16 claims the OSHA log status was unknown (Table 7).

Table 7. Unlinked WC claims by OSHA log presence, severity classification (gray box) and primary code.

	Primary Code				
OSHA Log Status	**Inaccurate OSHA Log**	**Inaccurate SOII**	**Harmonizing Issue**	**Unknown Reason**	**Total**
Recorded on log	46	14	35	1	96
DAFW	3	13	4	0	20
DJTR	25	1	20	0	46
Other Recordable	10	0	8	0	18
"Non-recordable"*	1	0	0	0	1
None	2	0	0	0	2
Unknown**	5	0	3	1	9
Not recorded OSHA Log	32	4	23	0	59
Status Unknown	0	7	2	7	16
Total	78	25	60	8	171

*Designation within software program that produces OSHA log
**Respondent conveyed that claim was recorded on OSHA log but did not indicate how it was classified

Limitations

Although this research was meant to be hypothesis generating in nature, a number of factors may have limited our ability to capture some reasons for unreported WC claims on the SOII. We only included establishments that had had their entire Washington State workforce sampled for the SOII. It is possible that reasons for unreported claims may differ among unit sampled establishments. We also did not include temporary staffing agencies in our sample as we are unable to identify unlinked WC claims for temporary workers using our linking procedures, due to the fractional responsibilities of WC claim and OSHA recordkeeping split between the temporary agency and the client agency. It is also unknown whether the reasons for unlinked claims reported by establishments willing to participate in our survey differ from those of establishments which either refused to participate or we were unable to contact. Many respondents were able to discuss the claims with great detail, suggesting that respondents' memory of unreported claims was generally good; however, the lapse of time between SOII completion and the interview could have potentially led to poor or imprecise recollection of the injury and recording details. In addition, the sensitive nature of the subject matter may also have led to issues regarding honesty in responses. It is possible that some respondents would have revised their accounts to conform to perceived researcher expectations.

KEY RESEARCH FINDINGS

Inaccurate records on company OSHA logs and errors in SOII reporting accounted for the majority of the unlinked claims in our sample. For establishments, creating and maintaining accurate injury and illness records often involves multiple employees, departments and data sources. A breakdown in any part of the system can easily result in inaccurate recordkeeping and reporting. OSHA recordkeeping may be one step in a process; if an injury is not reported according to procedure, the chain of events leading to OSHA reporting may never properly begin. Information not properly relayed from one department to another was another major factor that led to incomplete information transfer to the OSHA recordkeepers we surveyed.

It was also clear that some claims were not reported to the SOII due to employer or respondent misunderstandings of OSHA recordkeeping requirements. Injuries that were classified incorrectly as having had no days away from work, or those that were left off of the log completely, were subsequently left out of SOII case reporting. Some respondents reported mistakenly equating the lack of WC wage replacement with the absence of OSHA reportable days away from work. Other misunderstandings involved severity classification of injuries and rules for counting the number of days away from work for part-time employees. Some of these injuries were recorded on establishment OSHA logs, but as 'job transfer or restriction' cases or 'other recordable' cases. These injuries would likely be represented in the SOII summary section, but left out of DAFW case reports.

Misunderstandings regarding SOII recordkeeping and reporting requirements were also described. Some respondents did not maintain OSHA 300 logs or any other tracking system during the survey year, leading to the omission of claims in the SOII. Reporting misunderstandings also involved confusion over which employees or worksites were included in the SOII sample, despite being instructed to report on 'All Washington State Employees'.

Approximately one-third of the claims discussed during the interviews appeared to be unreported due to what we termed Harmonizing Issues and underscore the difficulties reconciling one system's case definition within another unrelated system. These were occupational injuries and illnesses that were eligible for WC wage replacement during the survey year, but for a variety of reasons, were not considered OSHA recordable DAFW injuries for the establishment during that timeframe. These claims did not meet OSHA case criteria, did not result in missed work, or resulted in missed work only after the worker's employment at the establishment ended. Additionally, some employers determined that the injury was not work related, despite information in the WC system suggesting otherwise. The OSHA case definition allows for employer determination of work relatedness; Washington workers' compensation does not. In our sample, there were some claims that employers did not include on their OSHA logs, regardless of workers' compensation eligibility, because they did not believe the injuries to be work related. Interestingly, in this sample, most of these claims were from the construction industry. This suggests that reasons for unreported day away from work claims may vary by industry or establishment characteristics.

AREAS FOR FUTURE RESEARCH

In light of the finding that many claims in our sample went unreported due to respondent misunderstandings of SOII reporting or OSHA recordkeeping criteria, further research into the nature of these errors is warranted. Some of these mistakes may differ by state if due to a reliance on workers' compensation definitions. The development and evaluation of intervention materials could be undertaken to ascertain whether misunderstandings could be corrected and reporting improved through respondent training.

Insurance programs to mitigate time loss compensation may impact OSHA recordability, especially if workers compensation data are used for OSHA recordkeeping. Future research studies using workers compensation data to assess estimates of underreporting in the BLS SOII might further evaluate claims identified as being 'Kept on Salary' or with 'Loss of Earning Potential.' Similarly, OSHA recordkeeping requirements are deficient for those workers who suffer disability from employment following the end of an employment arrangement. These suggest workers in temporary employment arrangements may be significantly underrepresented in OSHA records and the SOII. A survey of temporary workers or collaborative research with temporary employment agencies may estimate the magnitude of such underreporting.

OUTREACH ACTIVITIES

Christina Rappin gave a presentation on the "Real Time" interview results at the 2014 Council for State and Territorial Epidemiologists (CSTE) annual conference, held June 22 – 26, 2014 in Nashville, Tennessee. The presentation focused on primary reasons for unreported claims, detailed reasons for non-report given by respondents and observed differences between industry groups.

REFERENCES

Boden, LI, Ozonoff, A. 2008. Capture-recapture estimates of nonfatal workplace injuries and illnesses. Ann Epidemiol 18: 500-506.

Centers for Disease Control and Prevention. 2013. Behavioral Risk Factor Surveillance System, 2012 Summary Data Quality Report. Accessed at http://www.cdc.gov/brfss/annual_data/2012/pdf/SummaryDataQualityReport2012_20130712.pdf on June 30, 2013.

Leigh, JP, Marcin, JP, Miller, TR. 2004. An estimate of the U.S. Government's undercount of nonfatal occupational injuries. J Occup Environ Med 46: 10-18.

Oleinick, A, Zaidman, B. 2010. The law and incomplete database information as confounders in epidemiologic research on occupational injuries and illnesses. American Journal of Industrial Medicine 53: 23-36.

Rosenman, KD, Kalush, A, Reilly, MJ, Gardiner, JC, Reeves, M, Luo, Z. 2006. How much work-related injury and illness is missed by the current national surveillance system? J Occup Environ Med 48: 357-365.

Ruser, JW, 2010. Allegations of Undercounting in the BLS Survey of Occupational Injuires and Illnesses, Paper presented at: 2010 Joint Statistical Meetings, Vancouver, BC, Canada.

US Department of Labor. 2009. Occupational Safety and Health Administration: Injury and illness recordkeeping national emphasis program. Accessed at http://www.osha.gov/OshDoc/Directive_pdf/CPL_02_09-08.pdf on March 20, 2013

US Department of Labor, Bureau of Labor Statistics. 2012. BLS Handbook of Methods, Chapter 9. Occupational Safety and Health Statistics. Accessed at http://www.bls.gov/opub/hom/pdf/homch9.pdf on March 20, 2013

US Government Accountability Office. 2009. Workplace Safety and Health: Enhancing OSHA's records audit process could improve the accuracy of worker injury and illness data. GAO-10-10. Accessed at http://www.gao.gov/products/GAO-10-10 on March 20, 2013

APPENDIX A: Recruitment Letter

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

Dear [Contact Name],

The Department of Labor and Industries would like to thank you for your response to the 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

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: Introduction and Verbal Consent

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

☐Completed ☐Refused ☐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]**
[**IF NO]** Can I tell you a little about the study? [**Continue with script]**

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.

We'd also like to ask about specific instances when case information reported on the BLS survey doesn't match up completely with workers' compensation claim information.

Do you have access to specific information about individual workers' compensation claims?

☐ No **[IF NO]** Since the interview includes questions about specific WC claims, we won't take up any more of your time. Have a nice day.

☐ Yes **[IF YES]** 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 1220-0141. This control number expires on February 28, 2015. 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

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. though 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.

a. 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?_____

b. 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?_____

c. 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

a. 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

a. 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

a. **[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_____

ii. **[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? _____

WA) [REAL TIME SECTION] Great, thanks. Now I have a few questions about some/a specific workers' compensation claims/claim from the past year. Again, this is not an audit. We're just trying to better understand the kind of information that is and is not included in the BLS survey. And the relationship between BLS survey data and WC data.

[FOR ACCEPTED CLAIMS UNMATCHED TO BLS CASE]:
It looks like [employee name] had a [nature of injury + body part] on [DOI].
Do you remember this injury? Do you remember the reason it wasn't included on the BLS survey?

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?

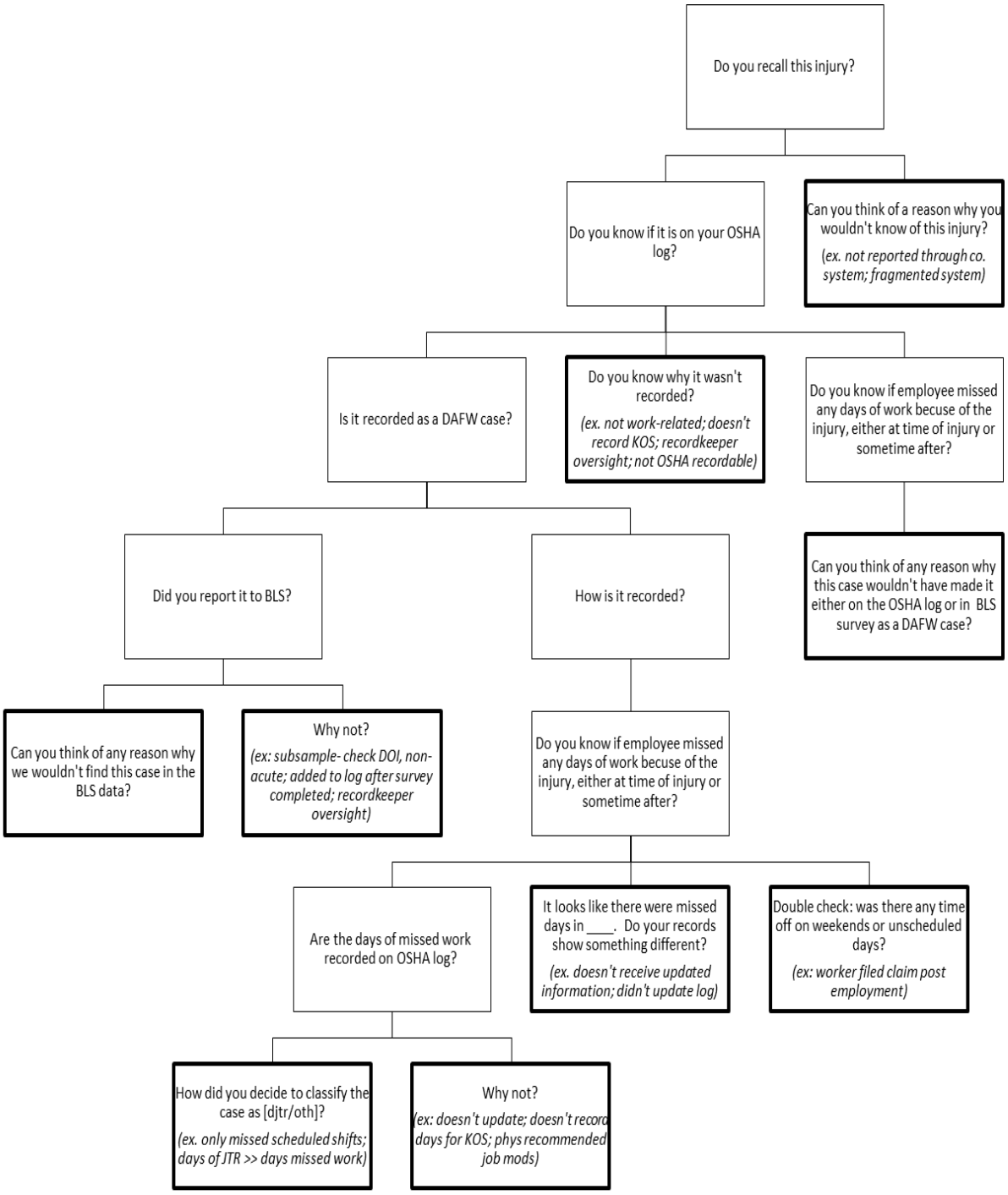
Web-based Stand-alone No preference

WA8) Do you find the OSHA log useful? ☐ Yes ☐ No ☐ Doesn'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.

APPENDIX D: Unreported Claim Query Flow Chart



APPENDIX E: Detailed Reasons Grouped by Primary and Secondary Code

Inaccurate OSHA 300 Log

- **Misunderstood OSHA Recordkeeping Regulation**
  - Establishment does not record KOS claims with missed work as DAFW cases on OSHA log
  - Non-full time workers treated differently on records
  - Injury resulted in both DAFW and DJTR, respondent chooses severity category with greater number of days
  - Injured worker paid full salary via vacation leave. There was no WC wage replacement, DAFW were not recorded
  - Physician recommended DAFW, but injured worker returned to work
- **Transfer of Information Issue**
  - Injury was not reported through company system, was not put on OSHA log
  - Break down in recordkeeping system, information transfer did not occur as it should have
  - Employer policies suppressed reporting of injury (mandatory post-injury drug screen)
  - Waiting on LNI for resolution of claim before recording on OSHA log, or before recording DAFW
  - Waits to record DAFW until injured worker returns to work
  - Employer "lost touch" with worker immediately after the injury, no DAFW recorded
  - Current DAFW not provided to respondent by others within company
  - Respondent has no record of DAFW for this claim
  - Notified of injury after the SOII was completed
- **Data entry Error (OSHA)**
  - A date of injury difference between the SOII and WC led to the discrepancy
  - Classified as DAFW, but number of days on OSHA log was left blank or zero days away were recorded
  - Multiple similar cases caused confusion
  - Injury erroneously recorded on previous year's OSHA log
- **Recordkeeper Oversight (OSHA)**
  - Respondent was aware of injury, felt discrepancy was due to recordkeeper oversight -"Just missed it"
- **Unknown Reason (OSHA)**
  - Respondent was aware of injury, but did not know why there was a discrepancy - "I DK why"
  - Responsibility of prior recordkeeper
  - Employer cannot accommodate physician recommended job modifications (based on claim information, not information provided by respondent)
  - Respondent has no record of DAFW for this claim
  - Respondent had no knowledge of injury

Inaccurate SOII

- **Misunderstood SOII Reporting Instructions**
  - Confusion about the establishment's business structure led respondent to believe the claim was not SOII eligible
  - Respondent believes non-acute injuries are not SOII reportable
  - Reported cases for some company sites, but not all
- **No OSHA Log or Injury Tracking system**
  - Respondent had no knowledge of injury
  - SOII completed from memory, no injury tracking system
  - Respondent was aware of the injury, but keeps no OSHA logs

    - Randomly selected subset of cases for inclusion in the SOII
- **Data Entry error (SOII)**
    - A date of injury difference between the SOII and WC led to the discrepancy
    - Multiple similar cases caused confusion
- **Recordkeeper Oversight (SOII)**
    - Respondent was aware of injury, felt discrepancy was due to recordkeeper oversight -"Just missed it"
- **Unknown Reason (SOII)**
    - Respondent was aware of injury, but did not know why there was a discrepancy - "I DK why"

Harmonizing Issue

- **OSHA Recordable, but not as a Day Away From Work Case**
    - All DAFW occurred when worker was no longer employed at the establishment
    - The injury did not result in any missed work
    - Employee refused modified duty from employer and stayed home
    - DAFW were for a medical visit only
- **Injury not OSHA Recordable**
    - Employer incredulous of injury's relation to work
    - Injury occurred outside OSHA jurisdiction
    - Considered outside work environment per OSHA regulation
- **Claim Reported to BLS, but Differences in System Obscured Link**
    - A date of injury difference between the SOII and WC led to the discrepancy
    - Injured worker's name differed between the SOII and WC, link was obscured
- **Injuries was not Included in the SOII Sampled Workforce**
    - Based on recorded characteristics, respondent did not believe the case fell into the requested BLS workforce
    - The injury did not occur at establishment worksite; on OSHA log at other site