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### List of APPENDICES in separate document:

1. WC vs SOII Comparison
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1. Introduction and background

The Bureau of Labor Statistics (BLS) and participating states conduct the annual Survey of Occupational Injuries and Illnesses (SOII) to produce estimates of non-fatal workplace injuries and illnesses in both public and private industries. Many organizations place considerable value on the results provided by the survey as an overall indicator of workplace injury rates in each state and across the nation. National and state policy makers use the rates to track workplace safety trends across different industries as well. Consequently, survey data accuracy and completeness are of significant concern to stakeholders and the accuracy of SOII data remains under much scrutiny regarding sampling, data collection, and employer reporting methods.

Recent studies have suggested that the SOII produces unreliable counts of workplace injuries and illnesses and that there is a significant “undercounting” by the SOII when compared with other data sources, such as workers’ compensation (WC) claims records. For example, capture-recapture work by Kenneth Rosenman (2006) and Les Boden (2008) found differences between SOII estimates and state workers’ compensation systems, including events reported in one system, but not the other. Depending on the work cited, the extent of these differences between systems – the “undercount” – ranges from high to relatively low (Rosenman et al. 2006; Boden and Ozonoff, 2008).

Collectively those efforts and the subsequent work by the BLS, Boden, Nestoriak, and Pierce (2010) as well as Phipps and Moore (2010) indicate that differences between SOII estimates and measures from other health systems may be a function of multiple influences. These findings have spurred interest in further evaluating factors and scenarios contributing to the observed differences in SOII estimates and the prevalence of injuries and illnesses indicated by workers’ compensation data.

In response to these published findings, the BLS partnered with several states to do a series of investigative studies commonly referred to as the “SOII Undercount Research” from 2009-2011. The BLS studies revealed additional areas of research needed and in June of 2012, the BLS invited state agencies to submit grant applications for a new two year research study that involved contacting previous SOII respondents and conducting phone interviews to learn about the decisions they make when processing workers’ compensation claims, recording cases on the OSHA 300 log, and reporting data to the SOII. The Oregon Department of Consumer and Business Services (DCBS) responded to the BLS application request and submitted a research study proposal. The study is of interest to DCBS because of the department’s long-time participation in the SOII program and because Oregon OSHA (OR-OSHA - also within DCBS) uses the incidence rates generated from the SOII in enforcement programs and includes the total case incidence rate as an outcome performance measure for the DCBS budget process. Thus, DCBS, and OR-OSHA in particular, has a vested interest in how well the SOII rates represent the prevalence of injuries and illnesses in Oregon workplaces and how they are distributed by size and industry.

The DCBS proposal was accepted and the department entered into a cooperative agreement with the BLS as a participant in the SOII undercount research project. The proposal outlined a plan for conducting an analysis using interviews of SOII participants to collect information about their injury and illness recordkeeping and reporting practices. The overall research objectives were to:

1. Evaluate decisions employers make when reporting cases to workers’ compensation programs and recording them on the OSHA logs used to report injuries and illnesses to the BLS, including examining any differences found in decisions according to certain employer characteristics such as size (number of employees) and industry.
2. Increase understanding of how employers manage workplace injuries and illnesses as it relates to treatment, safety incentive programs, and other related interests.

Additionally, the BLS requested that each state develop a particular research focus aligned to interests within that state. In Oregon, there is an interest in how reliance upon workers’ compensation (WC) records for completing the OSHA log and BLS survey may vary by employer establishment characteristics. Oregon is also interested in the knowledge and understanding of OR-OSHA laws and regulations by small businesses. A primary goal of this research is to identify potential markers for OSHA 300 log and SOII competencies among employers that indicate areas needing focused education and training.

Finding a high degree of reliance on WC records for completing the OSHA log and reporting to BLS might suggest possible reasons for a SOII undercount, such as late reporting on the log because of waiting for a claim to be accepted by the insurer, or a decision to only record “disabling” claims as days-away-from-work-cases. However, differences between WC law and OSHA recordkeeping and BLS reporting requirements must be considered to fully understand differences in the data, and make this type of analysis much more complex. Such analysis must include evaluation of what constitutes an injury or illness and therefore a “case”, what constitutes a subject or non-subject worker, and what the criteria are for recording or counting a case. While the current research does not attempt such an in-depth evaluation, refer to the tables in the Appendices that provide a comprehensive comparison between the rules and regulations of the Oregon’s WC system and the SOII as well as some of the differences between them. One of the tables also highlights several factors that may affect the comparability of Oregon WC claims with SOII days away from work cases. Several of these items coincide with findings noted by Phipps and Moore (2010).

2. Methods

Sample design and creation

Oregon’s use of a large sample stratified by employer size and industry allows producing estimates of reliance on WC records across strata for several of the core set of questions at a greater level of confidence. Oregon’s sample was also stratified by employer ownership (state govt., local govt., and private sector) in order to use the BLS’ SOII weights in the response estimation. Additionally, Oregon combined several questions to develop composite indicators for assessing OSHA knowledge and respondent reliance on WC information.

The sample frame was comprised of Oregon employers who had recently participated in the SOII, with stratification by employer size (4 ranges) and industry (19 super-sectors). The Oregon study design called for 1,200 completed employer interviews. That figure does not reflect the actual number of employers needed in the sample to achieve 1,200 responses. Due to the large sample size, the sample was drawn from two years’ of SOII data, which made for a more complex sample design. Sample stratification and selection methods were further refined after discussions with the BLS and other participating states.

SOII years 2010 and 2011 were the most recent and complete at the time of sample selection. Participants were sampled equally from each year since the number of SOII participants was balanced across the two years. When the survey sample was created, it was further stratified by employer size as defined by DCBS (see Table 1) and by industry (19 super-sectors).

The stratification by employer size and industry along with a large sample size were both highlighted features of the Oregon study design. For employer size, the study adopted the BLS’ size classes. However, the two largest BLS size classes (4 and 5) were merged into a single study size group (see Table 1).
Table 1: Employer size groups

<table>
<thead>
<tr>
<th>BLS size code</th>
<th>Study size group</th>
<th>BLS description</th>
<th>SOII participants (2010-2011)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1-10 employees</td>
<td>1,109</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>11-49 employees</td>
<td>2,479</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>50-249 employees</td>
<td>2,668</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>250-999 employees</td>
<td>1,048</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>1,000 or more employees</td>
<td>1,109</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td><strong>7,304</strong></td>
</tr>
</tbody>
</table>

The original study design also stratified by 20 industry sectors, which was later, revised to 19. These industry sectors are identified by their 2-digit NAICS code (“NAICS” data element in the BLS dataset) in Table 2. Railroad and mining industries were excluded from the study sample since they are governed by federal programs other than federal OSHA.

Table 2: NAICS super-sectors (2-digit level)

<table>
<thead>
<tr>
<th>2-digit code</th>
<th>Super-sector description</th>
<th>SOII participants (2010-2011)</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Agriculture, forestry, fishing, and hunting</td>
<td>260</td>
</tr>
<tr>
<td>22</td>
<td>Utilities</td>
<td>66</td>
</tr>
<tr>
<td>23</td>
<td>Construction</td>
<td>523</td>
</tr>
<tr>
<td>31-33</td>
<td>Manufacturing</td>
<td>1,052</td>
</tr>
<tr>
<td>42</td>
<td>Wholesale trade</td>
<td>381</td>
</tr>
<tr>
<td>44-45</td>
<td>Retail trade</td>
<td>1,027</td>
</tr>
<tr>
<td>48-49</td>
<td>Transportation and warehousing</td>
<td>286</td>
</tr>
<tr>
<td>51</td>
<td>Information</td>
<td>127</td>
</tr>
<tr>
<td>52</td>
<td>Finance and insurance</td>
<td>136</td>
</tr>
<tr>
<td>53</td>
<td>Real estate and rental and leasing</td>
<td>127</td>
</tr>
<tr>
<td>54</td>
<td>Professional, scientific, and technical services</td>
<td>219</td>
</tr>
<tr>
<td>55</td>
<td>Management of companies and enterprises</td>
<td>91</td>
</tr>
<tr>
<td>56</td>
<td>Admin. and support and waste management</td>
<td>437</td>
</tr>
<tr>
<td>61</td>
<td>Educational services</td>
<td>290</td>
</tr>
<tr>
<td>62</td>
<td>Health care and social assistance</td>
<td>878</td>
</tr>
<tr>
<td>71</td>
<td>Arts, entertainment, and recreation</td>
<td>132</td>
</tr>
<tr>
<td>72</td>
<td>Accommodation and food services</td>
<td>725</td>
</tr>
<tr>
<td>81</td>
<td>Other services (except public administration)</td>
<td>265</td>
</tr>
<tr>
<td>92</td>
<td>Public administration</td>
<td>282</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>7,304</strong></td>
</tr>
</tbody>
</table>

After modifications to the study design, the final sample stratification was by four employer size groups and 19 industry groups, resulting in 76 sampling cells (4 X 19 = 76). Discussions with the BLS statistical staff resulted in further refinements to the sample selection process; that of randomly drawing employers for each cell separately from each SOII year and employer ownership combination, according to their distributions in the sampling frame. Because the SOII years were equally balanced, each year was drawn from evenly. The distribution of employer ownership (private and public) was the same in both SOII years: 90 percent and 10 percent, respectively, and was sampled with the same distribution. The result was four sampling frames (2010/govt., 2010/private, 2011/govt., and 2011/private) with a maximum of 76 cells each.

The study design indicated a need for 1,200 collected employer interviews. An a priori response rate was not proposed. Oregon’s pilot testing demonstrated that a 50 percent response rate could be obtained with
minimal follow-up. After discussions with the BLS and other participating states about response rates achieved in prior studies, the expected response rate was increased to 60 percent.

Lastly, repeated random sample tests with Oregon SOII 2010-2011 data showed that, on average, 3.5 percent of employer establishments randomly selected in each year would be duplicates when merged into the multi-year pool. The sample would need to be increased by the same percentage to allow for those unique employer establishments to be combined into one interview while still obtaining the desired 1,200 responses. See Table 3 for an overview of the sample creation in each of the four sample frames.

Table 3: Employer sample creation

<table>
<thead>
<tr>
<th></th>
<th>Desired total responses</th>
<th>Mailed (60% response rate)</th>
<th>Mailed + 3.5% duplicates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,200</td>
<td>2,000</td>
<td>2,070</td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Govt.</td>
<td>600</td>
<td>1,000</td>
<td>1,035</td>
</tr>
<tr>
<td>Private</td>
<td>540</td>
<td>900</td>
<td>931.5</td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Govt.</td>
<td>600</td>
<td>1,000</td>
<td>1,035</td>
</tr>
<tr>
<td>Private</td>
<td>540</td>
<td>900</td>
<td>931.5</td>
</tr>
<tr>
<td>Total</td>
<td>1,200</td>
<td>2,000</td>
<td>2,070</td>
</tr>
</tbody>
</table>

BLS statistical staff provided the participating states with formulas for calculating the number of employer establishments needed in each cell of their strata (employer size and industry for Oregon) for each SOII year and each ownership group (govt. and private). This included retaining a minimum of two establishments in each cell where possible; some cells only contained one employer for that size and industry, although this was mostly confined to governmental employers.

Table 4 provides an overview of how the 2,072 employer establishments shown in Table 3 were ultimately allocated to their cells, including how some cells within each SOII year (“survey year” in the BLS dataset) and/or ownership type (“ownership” in the BLS dataset) were increased to account for distribution variation within the four sample frames (e.g. minimum cell requirements).

Table 4: Employer allocation

<table>
<thead>
<tr>
<th></th>
<th>SOII participants (2010-2011)</th>
<th>Calculated</th>
<th>Final Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Govt.</td>
<td>370</td>
<td>104</td>
<td>105</td>
</tr>
<tr>
<td>Private</td>
<td>3,259</td>
<td>932</td>
<td>932</td>
</tr>
<tr>
<td></td>
<td>3,629</td>
<td>1,036</td>
<td>1,037</td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Govt.</td>
<td>365</td>
<td>104</td>
<td>105</td>
</tr>
<tr>
<td>Private</td>
<td>3,310</td>
<td>932</td>
<td>935</td>
</tr>
<tr>
<td></td>
<td>3,675</td>
<td>1,036</td>
<td>1,040</td>
</tr>
<tr>
<td>Total</td>
<td>7,304</td>
<td>2,072</td>
<td>2,077</td>
</tr>
</tbody>
</table>

Following approval of the sampling methodology, unique employer establishments were randomly selected for each of the 76 employer size/industry cells (using the survey identification number “LDB_number” in the BLS dataset) within each SOII year/ownership group pairing. After reconciling establishments randomly selected in both SOII years (e.g. duplicate LDB numbers), there were 1,991
unique employer establishments selected to receive recruitment letters and follow-up telephone calls requesting interviews. The following table provides the distribution of employer establishments for each employer size and industry cell.

Table 5: Employer size and industry stratification

<table>
<thead>
<tr>
<th>NAICS super-sector</th>
<th>Size group 1</th>
<th>Size group 2</th>
<th>Size group 3</th>
<th>Size group 4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>11: Agriculture, forestry, fishing, and hunting</td>
<td>6</td>
<td>34</td>
<td>30</td>
<td>6</td>
<td>76</td>
</tr>
<tr>
<td>22: Utilities</td>
<td>8</td>
<td>8</td>
<td>10</td>
<td>3</td>
<td>29</td>
</tr>
<tr>
<td>23: Construction</td>
<td>42</td>
<td>60</td>
<td>42</td>
<td>7</td>
<td>151</td>
</tr>
<tr>
<td>31-33: Manufacturing</td>
<td>37</td>
<td>72</td>
<td>120</td>
<td>57</td>
<td>286</td>
</tr>
<tr>
<td>42: Wholesale trade</td>
<td>18</td>
<td>44</td>
<td>37</td>
<td>8</td>
<td>107</td>
</tr>
<tr>
<td>44-45: Retail trade</td>
<td>36</td>
<td>92</td>
<td>121</td>
<td>25</td>
<td>274</td>
</tr>
<tr>
<td>48-49: Transportation and warehousing</td>
<td>12</td>
<td>21</td>
<td>33</td>
<td>16</td>
<td>82</td>
</tr>
<tr>
<td>51: Information</td>
<td>8</td>
<td>11</td>
<td>18</td>
<td>6</td>
<td>43</td>
</tr>
<tr>
<td>52: Finance and insurance</td>
<td>12</td>
<td>13</td>
<td>7</td>
<td>10</td>
<td>42</td>
</tr>
<tr>
<td>53: Real estate and rental and leasing</td>
<td>18</td>
<td>13</td>
<td>9</td>
<td>2</td>
<td>42</td>
</tr>
<tr>
<td>54: Professional, scientific, and technical services</td>
<td>20</td>
<td>26</td>
<td>15</td>
<td>3</td>
<td>64</td>
</tr>
<tr>
<td>55: Management of companies and enterprises</td>
<td>4</td>
<td>4</td>
<td>7</td>
<td>11</td>
<td>26</td>
</tr>
<tr>
<td>56: Admin. and support and waste management</td>
<td>18</td>
<td>36</td>
<td>51</td>
<td>22</td>
<td>127</td>
</tr>
<tr>
<td>61: Educational services</td>
<td>8</td>
<td>11</td>
<td>20</td>
<td>11</td>
<td>50</td>
</tr>
<tr>
<td>62: Health care and social assistance</td>
<td>31</td>
<td>79</td>
<td>90</td>
<td>32</td>
<td>232</td>
</tr>
<tr>
<td>71: Arts, entertainment, and recreation</td>
<td>8</td>
<td>13</td>
<td>16</td>
<td>8</td>
<td>45</td>
</tr>
<tr>
<td>72: Accommodation and food services</td>
<td>19</td>
<td>124</td>
<td>52</td>
<td>6</td>
<td>201</td>
</tr>
<tr>
<td>81: Other services (except public administration)</td>
<td>31</td>
<td>28</td>
<td>18</td>
<td>4</td>
<td>81</td>
</tr>
<tr>
<td>92: Public administration</td>
<td>4</td>
<td>6</td>
<td>11</td>
<td>12</td>
<td>33</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>340</strong></td>
<td><strong>695</strong></td>
<td><strong>707</strong></td>
<td><strong>249</strong></td>
<td><strong>1,991</strong></td>
</tr>
</tbody>
</table>

**IRB Approval**

The original Oregon proposal did not include provision for institutional review board (IRB) approval. However, it was later determined that IRB approval would be necessary for Oregon’s response data to be merged with other states’ data for analysis and publication. Since there is no single designated IRB for Oregon state agencies, Oregon partnered with the state of Washington and joined into their existing IRB application for approval as a second site. Oregon staff completed IRB-mandated training as part of the approval process and all needed IRB approvals were obtained for each stage of the study.

**Interview Questionnaire**

Oregon collaborated with the other participating states in creating, pilot testing, and implementing a survey questionnaire that contained a core set of questions for interviewing employers. This provided the opportunity for a cooperative analysis of the data once it was collected. (See Appendices)
A questionnaire from a previous Washington survey was used as a starting template and questions were added and removed to fit the purpose of this study as appropriate. The interview questions were organized into sections according to six major topic areas:

1. COMPANY
2. EMPLOYEE ROLES
3. INJURY REPORTING AND PROCESSING
4. OSHA RECORDKEEPING
5. SOII RECORDKEEPING
6. WORKPLACE PRACTICES AND RECORDING

State specific questions for Oregon
Each state had the option of creating state-specific questions for its survey. Oregon added one question at the request of Oregon OSHA as an attempt to gauge stakeholder perceived value of their efforts in maintaining the OSHA 300 Log.

OR Q1) Do you think your OSHA 300 log is an accurate indicator of worker safety at your facility?
YES/NO/DK

Questions with comments, examples, and “Other” categories
Several questions requested that the respondent provide an example or additional explanation after a Yes, No, or “Other” response. Analyzing these responses proved challenging when it was found that for some questions, the text response conflicted with a previous response given. Additionally, on some questions where the “Other” category was selected, it was obvious from the comment provided that one of the preceding response options could have been selected instead of “Other”.

Knowledge-based questions
The last portion of the questionnaire consisted of four questions that “tested” the respondent’s knowledge of OSHA 300 log recordkeeping. Respondents were not provided with answers or direction when answering them. Interviewers were not supplied with the correct answers, although the SOII staff who conducted several of the interviews likely knew the answers from previous experience. A composite score was generated using these questions to help compare respondent knowledge with other factors of interest such as employer characteristics and reliance on WC information.

Final number of questions
The total number of questions in the final questionnaire, including the Oregon specific question, came to 48. Some concern was expressed by Oregon and the other states about the length of the survey and the potential for either not gaining cooperation from employers at the onset or having them stop the interview mid-process and thus not answer all of the questions. As a result, the group decided to conduct pilot studies to test the interview questions on a handful of establishments prior to the actual survey starting.

Pilot testing
Each state conducted a pilot survey to test the wording of the questions and to estimate the expected interview time. The candidates for Oregon were chosen from the study sample. Although not all of the employers responded to the pilot survey, none of the employers selected for the Oregon pilot were out-of-business. This is not surprising considering the sample size of the pilot (20 establishments).
Due to a delay in IRB approval, Oregon SOII staff conducted only five of the pilot interviews. They found that most could be conducted within 20 minutes. They also discovered a few questions that needed clarification. The four states compared results from the pilot tests and adjustments were made to improve understanding of the questions as much as possible.

**Staff assignment and training**

Two full-time temporary staff were hired through an external agency to work on the survey, primarily to conduct the interviews. Other duties included preparing mailings, data entry, and response tracking to document their progress. SOII staff were brought in to the study later to help with the calls in an effort to achieve the desired response rate.

All staff received IRB training before conducting interviews or working on the study. The temporary staff were familiarized with the survey instrument, the SOII survey, and the OSHA 300 log. All staff received training on how to avoid leading the interview and guarding against bias when paraphrasing questions as well as reluctance training on persuading employers to participate.

Additional training was provided to staff on documenting each contact attempt and its outcome on a cell tracking sheet (See Appendices). These sheets were critical in assuring uniform contact distribution among all cells and for staff to track call progression in multiple cells at one time. More detail is provided below in the discussion of the data collection process.

Frequent meetings were held throughout the data collection period to discuss and resolve issues as needed. This also insured mutual understanding regarding processes and approaches to obtaining interviews.

**Data collection process**

**Cell organization and assignment**

The cells were divided by industry and size (See Appendices). Given the number of cells in Oregon’s large sample and multiple interview staff, a cell tracking process was created using multiple spreadsheets that all staff could utilize to work through the cells as notifications were mailed, employers contacted, and responses obtained. There was a main spreadsheet for tracking overall mailings, call progress, and response rates.

**Pre-notification**

Each employer in a cell was mailed a notification letter informing them of the survey and the coming interview call approximately three days before they were contacted (See Appendices for the letter and verbal consent form). The notifications were mailed in batches of 150-200 throughout the data collection period based on the number of employers that could be reasonably contacted within that timeframe. This prevented excessive time from passing between the date of employer notification and the initial interview call.

If notifications were returned by the Post Office, Oregon staff searched for new addresses in the 2012 Oregon SOII database, departmental employer databases, or the Oregon Secretary of State’s business database. If the employer establishment was identified as out-of-business during this process, then the establishment was recorded as “out of business”. If no address could be determined and the establishment was not out of business, it was considered undeliverable and categorized as a “Full follow-up (see Table 6). The same process was used when interviewers had difficulty reaching the contact with the BLS-provided phone number.
**Phone interviews**

Interviewers were assigned a cell approximately three business days after the letters for that cell were mailed. They did not begin calling newly assigned employer establishments until those previously assigned had already received at least one phone call attempt (see definition of attempt below). This enabled callers to move quickly through all establishments in a cell and allowed mailings to continue on a consistent basis.

Staff were each equipped with basic headsets to allow for hands-free calling. This also enabled them to handle the paperwork and capture the responses and their notes on a paper copy of the survey form. Each caller also had a dedicated phone line in order to receive incoming return calls directly.

The interview time was estimated to be approximately 20 minutes based on the pilot. However, the interview length actually ranged from 15-25 minutes, depending on the complexity of the responses, with the average interview taking around 17 minutes. This average was actual interview question time only and did not include the time taken to initiate the call, introduce the survey, gain cooperation to participate, and read the verbal consent form.

If there was confusion over a question, general paraphrasing was allowed to restate the question with careful instructions not to “lead” the person being interviewed. For quality control purposes and to decrease the likelihood of the interviewer leading the respondent or introducing bias, the principal investigator monitored several calls as they were being made and provided feedback as needed to the interviewers.

**Repeated attempts**

What constituted a recruitment attempt and how much time should elapse between multiple attempts were topics that required frequent discussions and ultimately, detailed procedures to insure a consensus among the interviewers. It was critical to the response rate that calls were not all hastily recorded as attempts when contact remained elusive. For example, dialing a number three times and not getting an answer could be defined as an attempt by one person, but not another. After lengthy discussion, a common procedure was established across the board for all as described below.

An interview call was considered to be a first attempt when contact was made with the listed employer representative by either speaking to them or leaving a voicemail specifically for that person. When the contact was not available for an extended period of time or the person had left the company, the interviewer was instructed to seek a person who currently filled the listed contact’s responsibilities. This was done using scripted questions (see Appendices) to ensure that each caller was using the most effective and uniform technique. If the phone number was for a main or shared line (such as a general office line or a receptionist that takes messages) and there were alternative phone numbers (see out-of-business below), then the interviewer was allowed to leave a message and consider that the first attempt.

When first calls were unsuccessful, second attempts were made when at least two business days had passed since the first attempt. Third attempts were made when at least three business days had passed since the second attempt. This prevented all three attempts from occurring within the same week. Although fourth attempts were originally considered an option, they were found to be unnecessary because of the high response rate achieved with only three attempts.

**Multiple establishments**

There were many cases where the sample included multiple establishments for the same employer. If more than one establishment was selected, the contact could receive multiple recruitment letters. In order to reduce the recruitment calls to the same contact, a single interviewer was assigned the task of
contacting all multi-establishment contacts. All employers with a contact representing more than one
establishment were identified in the cell tracking sheets.

The first time a cell with a multi-establishment employer was assigned, the interviewer responsible for
calling the contact attempted to interview that person for all the establishments linked to that contact,
even those in cells not yet assigned. The interviewer was instructed to determine whether the employer’s
business practices for all the establishments were similar enough to allow a single interview to represent
all of the employer’s sampled establishments. If not, the interviewer was instructed to solicit as many
separate interviews as the contact was willing to provide. A script was provided to facilitate this process.

Some employers in the Oregon sample also had establishments selected in one or more of the other
participating state’s samples and the respondent received letters and/or calls from each state. In this
situation, the state that acquired the first response provided the survey responses to the other state(s), with
the permission of the survey respondent.

**Data entry of survey responses**

A web-based data entry tool was developed in Cold Fusion by the department for entering the completed
survey responses. Responses were stored in an Oracle database, which is protected by secure firewalls.
Each staff member on the study team had access to enter the survey responses. The tool also allowed for
entering interviewer comments at the end of the data entry.

The data was entered using a checkbox system for each response, including questions with multiple
responses. The tool was carefully designed to accommodate the complex skip patterns within the survey.
A text field at the end enabled entry of question comments and any additional comments made at the
conclusion of the survey (See Appendices for a screenshot example of the data entry procedures and
screens).

**Quality assurance and data preparation**

The principal investigator used statistical analysis software (SAS v9.4) to access and review the survey
response data that was stored in the Oracle database. Each paper survey form was reconciled to the
corresponding data entry values stored in the database and all data was reviewed for outliers or unusual
placement. Data entry errors were fixed directly in the database prior to any analysis. Questions that
solicited open-ended comments were reviewed by staff and assigned into groups for categorization.

Weights were calculated for all responses to generate estimates for all Oregon employer establishments.
Weights were constructed by combining Horvitz–Thompson stratified weights for the undercount survey
with SOII final survey weights for selected SOII years. A non-response adjustment factor was included as
well. For employer locations that were randomly selected in both SOII years, weights were calculated for
both years.

Where:

\[ W_i = UW_i \times SW_i \times NR_i \times OS_i \times MY_i \]

\( W_i \) is the **Final Weight** to use in estimation for establishment \( i \).

\( UW_i \) is **Undercount Survey Weight**. Specifically, \( \frac{1}{P(\text{Select establishment } i \text{ from SOII participants})} \) for
establishment \( i \). This weight is the familiar Horvitz-Thompson weight used in a simple random sampling setting.
\[
SW_i = SW_i^{2010} \cdot I_{Y_{2010}} + SW_i^{2011} \cdot I_{Y_{2011}}
\]

Where:

\[SW_i^y\] is the BLS provided SOII Final Survey Weight for establishment \(i\) in year \(y\) (the field called “summary_final_state_weight”).

\(Y_y\) is the set of all establishments selected by the state for the undercount survey in year \(y\).

\[I_{Y_y} = \begin{cases} 1 & \text{if establishment } i \text{ is in the set } Y_y \\ 0 & \text{otherwise} \end{cases}\]

\(NR_i\) is the Non-response Adjustment Factor. It is computed thus:

\[NR_i = \frac{\sum_{i\in S} U W_i OS_i}{\sum_{i\in U} U W_i OS_i}\]

Where \(S\) is the set of all establishments that were sampled, and \(U\) is the set of all establishments that participated.

\(OS_i\) is an Oversampling Adjustment Factor. If your state did not oversample, \(D_i = 1\), otherwise this factor may be computed following earlier guidance from the SDG and in particular example two from associated spreadsheets.

\(MY_i\) is the Multi-year Adjustment Factor.

3. Results and key findings

Response Rate

Oregon had a higher than anticipated final response rate of 65 percent overall. Furthermore, excluding establishments that were found to be out of business (\(n=121\)) increased the response rate to 69.3 percent. As mentioned, an \textit{a priori} response rate was not known, although the piloting suggested a strong response could be expected. The final response rate was especially strong for a voluntary survey that often lasted 15-20 minutes and occasionally lasted 30-45 minutes.

<table>
<thead>
<tr>
<th>Status</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response</td>
<td>1,295</td>
<td>65.0%</td>
</tr>
<tr>
<td>Refusal</td>
<td>330</td>
<td>16.6%</td>
</tr>
<tr>
<td>Full follow-up</td>
<td>220</td>
<td>11.0%</td>
</tr>
<tr>
<td>Out-of-business</td>
<td>121</td>
<td>6.1%</td>
</tr>
<tr>
<td>Communication barrier</td>
<td>9</td>
<td>0.5%</td>
</tr>
<tr>
<td>Did not finish</td>
<td>16</td>
<td>0.8%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,991</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

As the following table shows, response rates varied according to employer size and industry. The response rate rose as the employer’s size increased, a difference of over 40 percent between the smallest and largest employer sizes. Among the various industry groups response rates ranged between 53 and 93
percent. Willingness to participate may have been a function of availability, with larger employers more likely to have personnel available to provide a response compared to smaller employers.

The two most responsive industries were ‘Utilities (22)’ and ‘Public Administration (92)’. The two least responsive were ‘Professional, Scientific, and Technical Services (54)’ and ‘Accommodation and Food Services (72).’

Table 7: Response rate by employer size and industry (including OOBs)

<table>
<thead>
<tr>
<th>NAICS super-sector</th>
<th>Size group 1</th>
<th>Size group 2</th>
<th>Size group 3</th>
<th>Size group 4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>11: Agriculture, forestry, fishing, and hunting</td>
<td>50.0%</td>
<td>61.8%</td>
<td>60.0%</td>
<td>50.0%</td>
<td>59.2%</td>
</tr>
<tr>
<td>22: Utilities</td>
<td>100.0%</td>
<td>75.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>93.1%</td>
</tr>
<tr>
<td>23: Construction</td>
<td>47.6%</td>
<td>56.7%</td>
<td>61.9%</td>
<td>100.0%</td>
<td>57.6%</td>
</tr>
<tr>
<td>31-33: Manufacturing</td>
<td>37.8%</td>
<td>51.4%</td>
<td>75.8%</td>
<td>77.2%</td>
<td>65.0%</td>
</tr>
<tr>
<td>42: Wholesale trade</td>
<td>66.7%</td>
<td>70.5%</td>
<td>59.5%</td>
<td>87.5%</td>
<td>67.3%</td>
</tr>
<tr>
<td>44-45: Retail trade</td>
<td>38.9%</td>
<td>63.0%</td>
<td>82.6%</td>
<td>92.0%</td>
<td>71.2%</td>
</tr>
<tr>
<td>48-49: Transportation and warehousing</td>
<td>50.0%</td>
<td>76.2%</td>
<td>69.7%</td>
<td>62.5%</td>
<td>67.1%</td>
</tr>
<tr>
<td>51: Information</td>
<td>75.0%</td>
<td>81.8%</td>
<td>61.1%</td>
<td>66.7%</td>
<td>69.8%</td>
</tr>
<tr>
<td>52: Finance and insurance</td>
<td>66.7%</td>
<td>61.5%</td>
<td>71.4%</td>
<td>50.0%</td>
<td>61.9%</td>
</tr>
<tr>
<td>53: Real estate and rental and leasing</td>
<td>55.6%</td>
<td>38.5%</td>
<td>77.8%</td>
<td>100.0%</td>
<td>57.1%</td>
</tr>
<tr>
<td>54: Professional, scientific, and technical services</td>
<td>60.0%</td>
<td>57.7%</td>
<td>33.3%</td>
<td>66.7%</td>
<td>53.1%</td>
</tr>
<tr>
<td>55: Management of companies and enterprises</td>
<td>50.0%</td>
<td>75.0%</td>
<td>71.4%</td>
<td>90.9%</td>
<td>76.9%</td>
</tr>
<tr>
<td>56: Admin. and support and waste management</td>
<td>55.6%</td>
<td>47.2%</td>
<td>70.6%</td>
<td>63.6%</td>
<td>60.6%</td>
</tr>
<tr>
<td>61: Educational services</td>
<td>75.0%</td>
<td>81.8%</td>
<td>70.2%</td>
<td>72.7%</td>
<td>74.0%</td>
</tr>
<tr>
<td>62: Health care and social assistance</td>
<td>48.4%</td>
<td>67.1%</td>
<td>71.1%</td>
<td>81.3%</td>
<td>68.1%</td>
</tr>
<tr>
<td>71: Arts, entertainment, and recreation</td>
<td>75.0%</td>
<td>76.9%</td>
<td>81.3%</td>
<td>75.0%</td>
<td>77.8%</td>
</tr>
<tr>
<td>72: Accommodation and food services</td>
<td>52.6%</td>
<td>48.4%</td>
<td>69.2%</td>
<td>66.7%</td>
<td>54.7%</td>
</tr>
<tr>
<td>81: Other services (except public administration)</td>
<td>51.6%</td>
<td>67.9%</td>
<td>55.6%</td>
<td>50.0%</td>
<td>58.0%</td>
</tr>
<tr>
<td>92: Public administration</td>
<td>100.0%</td>
<td>83.3%</td>
<td>100.0%</td>
<td>83.3%</td>
<td>90.9%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>53.5%</strong></td>
<td><strong>59.9%</strong></td>
<td><strong>71.7%</strong></td>
<td><strong>76.3%</strong></td>
<td><strong>65.0%</strong></td>
</tr>
</tbody>
</table>

**Response Analysis**

Response estimates and standard errors for questions were generated at the same level as sample selection (SOII year, ownership, size group, and NAICS group). Pooled response estimates and pooled standard errors were generated for aggregate tabulations as well for employer size group and NAICS group cross-tabulations. Figures A and B show the aggregate distribution of the employer size and industry weights for all Oregon employers. Proportional estimates used in the following analysis are based upon this weighted distribution.
To simplify the analysis of so many employer size and industry combinations, the participating states are all reporting results using 15 NAICS super-sectors. The 19 sectors that Oregon sampled are collapsed into these 15. This was done by merging several industrial sectors:

- ‘Finance and insurance (52)’ and ‘Real estate and rental and leasing (53)’ into ‘Financial Activities (52-53)’
- ‘Professional, scientific, and technical services (54)’, ‘Management of companies and enterprises (55)’, and ‘Admin. and support and waste management (56)’ into ‘Professional Business Srvs (54-56)’
- And ‘Arts, entertainment, and recreation (71)’ and ‘Accommodation and food services (72)’ into ‘Leisure and Hospitality (71-72)’

**Findings**

Respondents were invited to provide open-ended responses to several questions. These comments were reviewed and categorized by DCBS staff. Considering the subjective nature of categorical assignment, categories and assignment were peer-reviewed for appropriateness. The distribution of the response categories for these questions is not weighted to all Oregon employer establishments. Instead the distributions reflect the number of unique establishment responses.
For the purpose of Oregon’s analysis, pooled proportional estimates for the following questions are provided for at the aggregate, employer size, or industry detail level. Additionally detailed data tables do not meet BLS publication criteria.

**Questions 1 through 4** asked respondents to verify employer and employee information. **Questions 5 and 6** asked about temporary workers hired through a temporary help agency and about leased workers.

**Question 7** asked respondents about union or collective bargaining presence and **question 7a** asked those who indicated the presence of a union or collective bargaining about the degree of employee coverage. Overall, respondents indicated that one-fifth of employers have unions or collective bargaining agreements. As Figure 1 shows, the likelihood increases with employer size. Still looking at employer size, when there is a union or bargaining agreement it covers over 50 percent of employees in over half of the locations across sizes.

**Figure 1: Question 7, by employer size**

<table>
<thead>
<tr>
<th>Employer Size</th>
<th>Yes (%)</th>
<th>No (%)</th>
<th>DK (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: 1-10 ee</td>
<td>7%</td>
<td>93%</td>
<td>0%</td>
</tr>
<tr>
<td>2: 11-49 ee</td>
<td>11%</td>
<td>88%</td>
<td>1%</td>
</tr>
<tr>
<td>3: 50-249 ee</td>
<td>28%</td>
<td>71%</td>
<td>1%</td>
</tr>
<tr>
<td>4/5: 250+ ee</td>
<td>39%</td>
<td>59%</td>
<td>2%</td>
</tr>
</tbody>
</table>

**Figure 2: Question 7a, by employer size**

<table>
<thead>
<tr>
<th>Employer Size</th>
<th>LESS THAN 25%</th>
<th>25-49%</th>
<th>50-74%</th>
<th>75% OR MORE</th>
<th>DK</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: 1-10 ee</td>
<td>2%</td>
<td>8%</td>
<td>21%</td>
<td>63%</td>
<td>6%</td>
</tr>
<tr>
<td>2: 11-49 ee</td>
<td>30%</td>
<td>12%</td>
<td>28%</td>
<td>26%</td>
<td>4%</td>
</tr>
<tr>
<td>3: 50-249 ee</td>
<td>11%</td>
<td>4%</td>
<td>25%</td>
<td>46%</td>
<td>15%</td>
</tr>
<tr>
<td>4/5: 250+ ee</td>
<td>12%</td>
<td>4%</td>
<td>16%</td>
<td>40%</td>
<td>28%</td>
</tr>
</tbody>
</table>

**Question 8** asked respondents if their company sought contracts that ask for injury rates. Overall, respondents indicated that 12.5 percent of employers do. Construction (43%) and Transportation & Warehousing (36%) were the industries most likely to seek contracts that used injury rates.

**Question 9** asked respondents to identify their WC insurer type and their selections indicate that half of Oregon employers are covered by SAIF (State Accident Insurance Fund - Oregon’s state fund). The distribution of the responses mirrors the known distribution of carriers in Oregon. An interesting note is that many small, group self-insured’s chose “Other” and had to be re-cast back as ‘Group self-insurance’. As expected, as employer size rose, so did the share of employers with self-insurance (SI), with that WC
Insurer type being the largest group amongst large employers. Figures 3 and 4 below show distributions of responses by employer size and by industry.

**Figure 3: Question 9, by employer size**

![Bar chart showing distributions by employer size](chart1)

**Figure 4: Question 9, by industry**

![Bar chart showing distributions by industry](chart2)

**Question 10** asked respondents whether a third party administrator (TPA) assists with WC claims management and responses indicate that 58 percent of employers have no assistance. However, this varied with employer size. Among smallest employers 74 percent indicated no, but among largest employers, over half indicated yes. It is possible that among group SI employers the TPAs have a closer relationship; this possibility is worth further investigation.

**Question 11** asked about available on-site medical treatment. **Questions 12 through 18** asked about the respondents’ roles in workplace injury and illness reporting, primarily the degree of their involvement in OSHA 300 log recordkeeping, WC claims processing, and responding to the SOII.
Question 19 asked respondents whether they had received any formal training on OSHA recordkeeping. Responses indicate that half had no training while nearly half (46%) indicated yes. Training varied greatly by employer size (see Figure 5); 70 percent of small employer respondents indicated no training, but 80 percent of large employer respondents indicated training. Formal training also varied greatly by industry (see Figure 6).

**Figure 5: Question 19, by employer size**

<table>
<thead>
<tr>
<th>Employer Size</th>
<th>Yes</th>
<th>No</th>
<th>DK</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: 1-10 ee</td>
<td>22%</td>
<td>72%</td>
<td>4%</td>
</tr>
<tr>
<td>2: 11-49 ee</td>
<td>35%</td>
<td>61%</td>
<td>3%</td>
</tr>
<tr>
<td>3: 50-249 ee</td>
<td>52%</td>
<td>41%</td>
<td>7%</td>
</tr>
<tr>
<td>4/5: 250+ ee</td>
<td>80%</td>
<td>20%</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Figure 6: Question 19, by industry**

<table>
<thead>
<tr>
<th>Industry Category</th>
<th>Yes</th>
<th>No</th>
<th>DK</th>
</tr>
</thead>
<tbody>
<tr>
<td>11: Agriculture, Forestry, Fishing and…</td>
<td>42%</td>
<td>54%</td>
<td>3%</td>
</tr>
<tr>
<td>22: Utilities</td>
<td>37%</td>
<td>59%</td>
<td>4%</td>
</tr>
<tr>
<td>23: Construction</td>
<td>37%</td>
<td>58%</td>
<td>5%</td>
</tr>
<tr>
<td>31-33: Manufacturing</td>
<td>52%</td>
<td>45%</td>
<td>3%</td>
</tr>
<tr>
<td>42: Wholesale Trade</td>
<td>51%</td>
<td>39%</td>
<td>9%</td>
</tr>
<tr>
<td>44-45: Retail Trade</td>
<td>45%</td>
<td>40%</td>
<td>13%</td>
</tr>
<tr>
<td>48-49: Transportation and Warehousing</td>
<td>69%</td>
<td>28%</td>
<td>3%</td>
</tr>
<tr>
<td>51: Information</td>
<td>61%</td>
<td>34%</td>
<td>4%</td>
</tr>
<tr>
<td>52-53: Financial Activities</td>
<td>61%</td>
<td>34%</td>
<td>4%</td>
</tr>
<tr>
<td>54-56: Professional Business Srvs</td>
<td>47%</td>
<td>71%</td>
<td>6%</td>
</tr>
<tr>
<td>61: Educational Services</td>
<td>55%</td>
<td>45%</td>
<td>0%</td>
</tr>
<tr>
<td>62: Health Care and Social Assistance</td>
<td>55%</td>
<td>45%</td>
<td>0%</td>
</tr>
<tr>
<td>71-72: Leisure and Hospitality</td>
<td>20%</td>
<td>77%</td>
<td>3%</td>
</tr>
<tr>
<td>81: Other Services (except Public…</td>
<td>29%</td>
<td>37%</td>
<td>0%</td>
</tr>
<tr>
<td>92: Public Administration</td>
<td>63%</td>
<td>71%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Question 20 asked respondents who took training when they last received it. Responses indicate that about one-quarter was provided within the past year, another quarter was during the past 1-3 years, and another quarter was more than 5 years ago. The distribution was similar across employer sizes; there is larger variation across industries. Recall bias may cause leakage across the categorical boundaries in this question reducing the precision of estimates.

Question 21 asked respondents who provided their training. Responses indicate that OSHA was the most common source of training (41% overall) and rose in likelihood as employer size increased (see Figure 7). However, among small employers, TPAs/insurance companies were the largest source of training. Perhaps this reflects the availability of staff to take training as well as the format of training (web-based vs. conference); further investigation could provide insight into how avenues of training may differ upon employer size. Utilities and Public Administration received training from OSHA most often among
industries (69% and 76%, respectively); Education Services obtained it from TPA/insurance companies most often (43%), which may be due to the high degree of self-insurance within this industry.

**Figure 7: Question 21, by employer size**

<table>
<thead>
<tr>
<th>Employer Size</th>
<th>OSHA</th>
<th>TPA/InsCo</th>
<th>Trade assoc.</th>
<th>College/University</th>
<th>PrivCo/Consultant</th>
<th>DK</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: 1-10 ee</td>
<td>25%</td>
<td>20%</td>
<td>11%</td>
<td>5%</td>
<td>8%</td>
<td>6%</td>
<td>25%</td>
</tr>
<tr>
<td>2: 11-49 ee</td>
<td>46%</td>
<td>3%</td>
<td>10%</td>
<td>3%</td>
<td>7%</td>
<td>17%</td>
<td>12%</td>
</tr>
<tr>
<td>3: 50-249 ee</td>
<td>39%</td>
<td>5%</td>
<td>13%</td>
<td>7%</td>
<td>2%</td>
<td>6%</td>
<td>17%</td>
</tr>
<tr>
<td>4/5: 250+ ee</td>
<td>51%</td>
<td>6%</td>
<td>10%</td>
<td>3%</td>
<td>5%</td>
<td>4%</td>
<td>10%</td>
</tr>
</tbody>
</table>

**Question 22** asked respondents how they tracked workplace injuries and illnesses, with multiple selections allowed. The “paper form” option was the most often selected (64%). “Electronic spreadsheet” was next (24%), followed by “specialized software” (22%). Seven percent of respondents indicated that they do not track injuries/illnesses at all.

Use of paper forms was common across employer sizes, but electronic spreadsheet use rose with size and software use was significantly higher amongst large employers (see Figure 8). Not tracking/DK was substantially higher among small employers (27%).

**Figure 8: Question 22, by employer size**

<table>
<thead>
<tr>
<th>Employer Size</th>
<th>Paper form</th>
<th>Electronic spreadsheet</th>
<th>Software</th>
<th>Other</th>
<th>Don’t track/DK</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: 1-10 ee</td>
<td>58%</td>
<td>75%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>2: 11-49 ee</td>
<td>27%</td>
<td>63%</td>
<td>8%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>3: 50-249 ee</td>
<td>27%</td>
<td>32%</td>
<td>27%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>4/5: 250+ ee</td>
<td>51%</td>
<td>51%</td>
<td>35%</td>
<td>43%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Employers commonly used paper forms in Agriculture, Forestry, Fishing and Hunting (see Figure 9). Electronic spreadsheets were common in Public Administration. Software was common in Retail Trade and Transportation & Warehousing (perhaps due to the high proportion of nation-wide employers in these two industries). Lastly, Financial Activities responded the most often with not tracking/DK.
Of those who indicated the use of software, over four-fifths (81%) of respondents entered all their injuries (question 23a) and 80 percent indicated that staff (vs. the software) had the final say concerning OSHA 300 log recordability determination (question 23b).

Question 24 is a checkpoint. Respondents who did not keep an OSHA 300 log during their SOII year (question 16) nor typically keep a log when not participating in the SOII (question 17) skipped to question 34. Respondents who did either were asked questions 25-33 and analysis of those questions excludes those that skipped past them.

Question 25 asked respondents how they decide whether to record an injury on the OSHA 300 log. Responses indicate that half of employers follow OSHA criteria, 17 percent record all injuries and illnesses that require medical treatment and 12 percent record all injuries. Only 4 percent recorded injuries based upon filed WC claims. Notably, 13 percent indicated “other” or did not respond. Figure 10 shows that using OSHA criteria becomes more common as employer size increases and using other criteria declines. About one-fifth of small employers had no response, perhaps because they had never had an injury to record before.
Figure 10: Question 25, by employer size

<table>
<thead>
<tr>
<th>Employer Size</th>
<th>All Injuries</th>
<th>All Injuries That Require Medical Tx</th>
<th>All Filed WC Claims</th>
<th>Follow OSHA Criteria</th>
<th>All Accepted WC Claims</th>
<th>Computer Software Decides</th>
<th>Other</th>
<th>No Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: 1-10 ee</td>
<td>10%</td>
<td>6%</td>
<td>0%</td>
<td>40%</td>
<td>0%</td>
<td>4%</td>
<td>23%</td>
<td></td>
</tr>
<tr>
<td>2: 11-49 ee</td>
<td>15%</td>
<td>21%</td>
<td>19%</td>
<td>42%</td>
<td>1%</td>
<td>6%</td>
<td>13%</td>
<td></td>
</tr>
<tr>
<td>3: 50-249 ee</td>
<td>12%</td>
<td>6%</td>
<td>16%</td>
<td>55%</td>
<td>4%</td>
<td>2%</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>4/5: 250+ ee</td>
<td>5%</td>
<td>4%</td>
<td>14%</td>
<td>68%</td>
<td>7%</td>
<td>2%</td>
<td>20%</td>
<td></td>
</tr>
</tbody>
</table>

**Question 26** asked respondents where they obtained the information needed to complete an OSHA 300 log entry, with multiple selections allowed. Responses indicate that over four-fifths (80.4%) of employers receive the information from a company report, 23 percent indicated a WC-related report, and 11 percent indicated a doctor’s report.

Use of company reports, WC reports, and doctor’s reports appear to increase with employer size. The ability to generate (company report) and/or obtain information (WC/doctor’s reports) may increase with the size of an organization (see Figure 11).

Figure 11: Question 26, by employer size

<table>
<thead>
<tr>
<th>Employer Size</th>
<th>Company Report</th>
<th>WC Report</th>
<th>Doctor's Report</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: 1-10 ee</td>
<td>68%</td>
<td>13%</td>
<td>9%</td>
<td>4%</td>
</tr>
<tr>
<td>2: 11-49 ee</td>
<td>77%</td>
<td>21%</td>
<td>9%</td>
<td>3%</td>
</tr>
<tr>
<td>3: 50-249 ee</td>
<td>85%</td>
<td>26%</td>
<td>11%</td>
<td>2%</td>
</tr>
<tr>
<td>4/5: 250+ ee</td>
<td>90%</td>
<td>30%</td>
<td>20%</td>
<td>6%</td>
</tr>
</tbody>
</table>

**Question 27** asked respondents if they obtained any information needed to complete an OSHA 300 log entry from their WC insurer/TPA; responses indicate that only 10 percent do so. **Question 27a** asked those who do obtain information what was provided, with multiple selections allowed. Nearly all (91%) indicated obtaining days away from work information, about half indicated injury date, injury type, and worker’s name, and about a third indicated injury location and treatment location.

**Question 28** asked respondents how long after the injury/illness was reported did they record it on the OSHA 300 log. Overall, responses indicate that half of employers record them within one day of injury,
another 20 percent do within one week, and another 6 percent within one month. About 9 percent of employers record them at the end of the year.

**Question 29** asked respondents where they usually get their days away from work number for their OSHA 300 log. Overall, responses indicate 41 percent of employers use payroll data and 27 percent use WC timeloss data. Figure 12 shows how, as employer size increases, payroll data is sourced less often and WC timeloss data more often. Also, other sources make up nearly a quarter for large employers. About one-fifth of small employers had no response; again, perhaps because they had never had an injury to record before.

**Figure 12: Question 29, by employer size**

<table>
<thead>
<tr>
<th>Employer Size</th>
<th>Payroll Data</th>
<th>WC Timeloss Data</th>
<th>Calendar</th>
<th>Supervisor</th>
<th>Other</th>
<th>No Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: 1-10 ee</td>
<td>54%</td>
<td>9%</td>
<td>12%</td>
<td>13%</td>
<td>21%</td>
<td></td>
</tr>
<tr>
<td>2: 11-49 ee</td>
<td>43%</td>
<td>23%</td>
<td>2%</td>
<td>8%</td>
<td>11%</td>
<td>14%</td>
</tr>
<tr>
<td>3: 50-249 ee</td>
<td>38%</td>
<td>37%</td>
<td>5%</td>
<td>6%</td>
<td>9%</td>
<td>5%</td>
</tr>
<tr>
<td>4/5: 250+ ee</td>
<td>30%</td>
<td>32%</td>
<td>7%</td>
<td>7%</td>
<td>24%</td>
<td>1%</td>
</tr>
</tbody>
</table>

**Question 29a** asked respondents if their number of days away from work included all calendar days or was limited scheduled days. Overall, responses indicate that 38 percent of employers use calendar days and 44 percent use scheduled days. Nine percent had no response. However, as Figure 13 shows, large employers were over three times more likely to correctly use calendar days than small employers. Also, once again, about one-fifth of small employers had no response.

**Figure 13: Question 29a, by employer size**

<table>
<thead>
<tr>
<th>Employer Size</th>
<th>Calendar Days</th>
<th>Scheduled Shifts/Days</th>
<th>DK</th>
<th>Other</th>
<th>No Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: 1-10 ee</td>
<td>18%</td>
<td>52%</td>
<td>9%</td>
<td>1%</td>
<td>20%</td>
</tr>
<tr>
<td>2: 11-49 ee</td>
<td>29%</td>
<td>50%</td>
<td>8%</td>
<td>0%</td>
<td>13%</td>
</tr>
<tr>
<td>3: 50-249 ee</td>
<td>43%</td>
<td>43%</td>
<td>10%</td>
<td>1%</td>
<td>14%</td>
</tr>
<tr>
<td>4/5: 250+ ee</td>
<td>70%</td>
<td>24%</td>
<td>6%</td>
<td>0%</td>
<td>1%</td>
</tr>
</tbody>
</table>
Questions 30a, 30b, 30c, 31, and 32 asked respondents about differences in their OSHA log and WC claims reporting.

- Q30a asked if they ever put any cases on the OSHA 300 log that are not WC claims.
- Q30b asked if they keep cases on the OSHA 300 log that have been denied WC benefits.
- Q30c asked if they ever had an accepted WC claim that was not included on their OSHA 300 log.
- Q31 asked if they ever added cases to a previous year’s 300 OSHA log.
- Q32 asked if they ever updated the number of days away from work on a previous year’s OSHA 300 log.

Looking at Figure 14, responses indicate that employers are more likely to put non-WC claims on the OSHA 300 log as the employer size increases. The same goes for their likelihood of keeping a denied claim on their OSHA 300 log. Large employers were less likely to not have had a denied claim and more likely to have an accepted WC claim that was not on their OSHA log. The same went for adding cases to a previous year or updating the numbers of days away from work.

Figure 14: Questions 30a, 30b, 30c, 31, and 32, by employer size

However, the impact of employer size is attenuated if the affirmative responses for the questions are combined with those that did not respond. This is also the case for Q30b employers when combined with the no denials. Smaller employers were far more likely to not respond to these questions, probably because they have not had these scenarios occur. Figure 15 shows how the difference across employer size is greatly reduced and suggests that the behavior of small and large employers may actually be similar.
Question 33 asked respondents to identify any recordkeeping resources or contacts they had used before. Overall, responses indicate that 58 percent of employers have used OSHA’s recordkeeping website, 48 percent have used an insurer/TPA, one-third have used an OSHA state contact (likely Oregon OSHA in this case), 21 percent have used a BLS contact, and 10 percent have used an OSHA federal contact. Reported use of OSHA (state and federal) contacts and OSHA recordkeeping and BLS websites increases with employer size. Insurer/TPA resource use remains consistent across employer sizes.

Questions 34 and 35 ask about the respondents’ role in workplace injury and illness reporting, primarily the degree of their involvement in SOII recordkeeping.

Question 36 asked respondents how they decide what cases to report in the SOII. Responses indicate that half of employers use criteria that are “same as the OSHA 300 Log” and seven percent indicated they report all injuries. Another 11 percent indicated they follow OSHA criteria. Although 12 percent reported “Other”, reviewing the comments show that many did not know (nearly half of categorized comments), or had no injuries to report in the SOII (30 percent of categorized comments). Lastly, 13 percent had no response.

Figure 16 shows the distribution by employer size. The figure shows that as employer size increases, the OSHA 300 log becomes the most used source for SOII cases. Following OSHA criteria also becomes much more common, while the “all injuries” criteria for the SOII cases declines quickly.
Questions 37, 38, and 38a ask about injury information sources for completing the SOII.

Question 39 asked respondents if they have ever been informed of an injury too late to include in the SOII. Responses indicate that only four percent of employers have been informed too late. As employer size increases (see Figure 17), employers are more likely to be informed too late, although this may be a result of having more injuries in the first place. Once again, about one-fifth of small employers had no response.

Questions 40 and 41 ask respondents if they include temporary agency workers (Q40) and leased workers (Q41) on their OSHA 300 log and SOII. Respondents were only asked these questions if they indicated hiring temporary workers (Q5, 33% of employers) or leased workers (Q6, 3% of employers).

As employer size increases employers become more likely to include temporary workers on their OSHA 300 log and report them on the SOII. Since respondents indicated so few employers leasing workers, the responses for Q41a and Q41b are more volatile (some industries are not even present in the response data).
Questions 42 through 45 asked respondents about workplace safety performance practices.

Oregon question 1 was provided only to Oregon respondents and asked them if they thought the OSHA 300 log was an accurate indicator of their workplace safety. Overall responses indicate a strong proportion believes so, and this proportion is consistent across employer sizes and industries.

Composite questions

Questions 46a, 46b, 46bi, 46bii, 46c, 46d, and 46di posed several workplace injury scenarios to respondents to assess their OSHA recordkeeping knowledge.

Oregon generated an overall knowledge-based composite score using one point for each correct response to the seven parts, with seven points indicating all responses correct.

The knowledge-based (KB) question is composed of four sub questions to question 46. Correct responses are indicated.

**Q46. 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)

i) [IF YES] Would you record any days away from work? (YES/NO/DK)

ii) [IF YES] How many? (2)

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)

Other participating states are considering a composite score for this question; however, there are several approaches to how the score can be weighted. Oregon has decided to weight each of the seven parts equally with a point for each. A score is only generated if the respondent attempted to answer at least five of the seven parts (Q45a, Q45b, Q45c, Q45d, and Q45di). This was to make sure that a score was only generated for respondents who truly attempted to respond to the question.

Most respondents attempted to answer all parts of the question. As Figure 19 shows, a score was able to be generated for 93 percent of Oregon employers. Four percent of employers received a full seven points. Another 13 percent received six points. It should be noted that since many employers appear to use “all injuries” as their recordkeeping criteria, Q46a would easily permit an incorrect response by the respondent who might go on to get the rest of the questions correct.

To facilitate analysis, the scores were assigned based on a three-point scale: low (0-3), medium (4-5), and high (6-7). In Figures 19 and 20, composite scores increase with employer size and vary greatly by industry.

**Figure 19: KB score range, by employer size**

<table>
<thead>
<tr>
<th>Employer Size</th>
<th>Low (0-3)</th>
<th>Medium (4-5)</th>
<th>High (6-7)</th>
<th>No score</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL</td>
<td>26%</td>
<td>45%</td>
<td>22%</td>
<td>6.7%</td>
</tr>
<tr>
<td>1: 1-10 ee</td>
<td>33%</td>
<td>42%</td>
<td>14%</td>
<td>11%</td>
</tr>
<tr>
<td>2: 11-49 ee</td>
<td>28%</td>
<td>48%</td>
<td>16%</td>
<td>8%</td>
</tr>
<tr>
<td>3: 50-249 ee</td>
<td>23%</td>
<td>48%</td>
<td>24%</td>
<td>5%</td>
</tr>
<tr>
<td>4/5: 250+ ee</td>
<td>21%</td>
<td>36%</td>
<td>38%</td>
<td>5%</td>
</tr>
</tbody>
</table>

Legend: Low, Medium, High, No score
Comparing the KB composite score against survey questions can yield other dimensions of information. This can be done by cross-tabulating KB scores against different questions and performing chi-squared tests using raw unweighted response data.

A chi-squared test to determine independence between KB score and employer size yields a p-value significant enough ($p < .0001$) to reject independence and shows more high scores than expected for the larger size groups. Comparing KB score and industry yields another significant p-value and rejects independence again; however, with 16 industries, interpretation is difficult.

Comparing KB score to employers with no other sites in Oregon or out-of-state (e.g. self-identified as single-site vs. multi-site) yields another significant p-value ($p < .0001$) that rejects independence and shows that single-sites have fewer than expected high scores.

Comparing KB score to WC carrier type and use of a TPA for WC claim assistance also shows a significant lack of independence ($p < .0001$). The chi-squared results indicate that self-insured employers (group and individual SI) scored better than employers with other carrier types. Self-insured employers had a higher proportion of high scores on the KB composite than private and SAIF employers. Employers who are assisted by TPAs with their WC claims management also show more high scores than expected compared to those that indicate no TPA assistance, which have fewer than expected.

Of employers who scored high in the KB composite, over 69 percent indicated they received training (vs. 25% who had not). One-third of those with training scored high compared to only 13 percent of those with no training. A chi-squared test showed lack of independence ($p < .0001$) with those reporting training having more high scores than expected (and those without training having fewer than expected).

Comparing KB score to time elapsed since training yields a significant lack of independence ($p < .0056$). However there are minimal difference between observed high scores compared to expected across the timeframes (the raw unweighted distribution is similar to the pooled estimated distribution).
A chi-squared test comparing KB score to source of OSHA recordkeeping training yields a non-significant \( p \)-value and indicates independence (the raw unweighted distribution is similar the pooled estimated distribution).

Comparing KB score to workplace injury tracking options yields interesting results. Looking at employers who selected “paper forms” (vs. those that did not indicate their use) shows that there is a significant \( p \)-value (\( p < .0001 \)) and more low and middle scores than expected. However, for employers who selected “electronic spreadsheets” or “specialized software” there are both significant \( p \)-values (\( p = .0127 \) and \( p < .0001 \), respectively) and more high scores than expected (vs. those that did not indicate their use). This may indicate that employers who use those injury tracking options may have more accurate recordkeeping and that “paper forms” may introduce confusion and reduce accuracy.

Employers who indicate training also show a similar pattern with injury tracking options. Comparing employers who indicate training to the three recordkeeping options yields significant chi-squared statistics across all three options (\( p < .0001 \) for all three tests). Again, those who selected paper forms have a lower likelihood of having had training, while those who selected spreadsheets and software are more likely to have had training than those that did not select those recordkeeping options.

Comparing the KB score to recordkeeping criteria yields another significant chi-squared statistic (\( p < .0001 \)) and employers who report using WC claims or injuries as OSHA 300 log recording criteria have fewer than expected high scores while those that report using OSHA criteria or software have more high scores than expected.

Reviewing the sources of days away from work shows a significant chi-squared statistic (\( p < .0001 \)) with respect to KB scores, and that employers using payroll data as a source have more low scores than expected and fewer high scores. Those using calendar days or WC timeloss data have more high scores than expected. Also, employers who correctly use calendar days have more high scores than expected compared to those that use scheduled days. Those using scheduled days have fewer high scores and more low scores than expected.

Lastly, comparing the KB score to responses to the five questions (Q30a, Q30b, Q30c, Q31, & Q32) asking about differences between OSHA recordkeeping and WC claims reporting and whether they update their prior year OSHA 300 logs, shows that employers who reported in the affirmative to those questions all had higher scores than expected; as indicated by significant chi-squared statistics (all \( p < .0001 \)). This may be an artifact of employers answering “yes” having more injuries than those who did not and simply being more familiar and well-versed in OSHA 300 log recordkeeping rules.

4. Discussion

The effect of employer size is a dominant finding of this study. As employer size increases many indicators of recordkeeping proficiency also increase: KB score, reported training, and use of a spreadsheet or software for recordkeeping are just some of the examples where this occurs. However, large employers (50+ employees) make up a very small portion of Oregon employers in this study’s population, about five percent. Small employers (10 or fewer) appear to have a different set of injury reporting and recordkeeping options in their toolbox compared to larger employers. The ability to use formalized company reports and more complex data systems such as electronic spreadsheets or injury software to aid recordkeeping are often not available to small, single-site employers. So while larger employers demonstrate greater recordkeeping knowledge, smaller employers have a different environment that may lead to their being less proficient.
Determining days away from work remains an area of confusion for employers. Correctly using calendar days vs. scheduled days is more common among large employers but remains a concern across all employer sizes. With several sources to choose from (payroll data, WC timeliness data, calendar days or scheduled days) employers with few injuries may experience confusion over which source to correctly use. The large number of small employers who did not respond to questions regarding OSHA log recordkeeping questions (Q25-32) suggests that having few injuries with limited severity or no injuries at all might be a larger barrier to understanding OSHA recordkeeping rules. A simple lack of an ongoing injury experience may prevent smaller employers from having the needed context to understand the difference between calendar and scheduled days.

Oregon began this study with an interest in how reliance on WC reporting may influence OSHA recordkeeping and SOII reporting. However, responses to Q25 and Q36 indicate that WC claims (filed and/or accepted) are very rarely the source for recording cases on the OSHA 300 log or reporting for the SOII. Also, responses to Q30a, Q30b, and Q30c show that employers of all sizes might record cases on the log in a similar way when the full breadth of their responses are taken into account. The same attenuation occurs across employer sizes when looking at Q31 and Q32. Taken all together it appears that WC claims reporting has minimal effect upon OSHA 300 log recordkeeping and SOII reporting.

Lastly, the results of this study indicate that training matters. This not unexpected and it is easy to understand why smaller employers may lack the time and desire to engage in training that is voluntary and may not be used for some time due to few injuries. However the impact of training seen through higher KB scores and better understanding of days away from work reporting requirements should not be underestimated. The responses related to how long it had been since training was last received are less clear. They may indicate that training has a more persistent effect than assumed, or that the question was unable to distinguish an actual diminishing effect.

5. Future research

Further research is needed to determine how individuals tasked with workplace injury recordkeeping in well-resourced establishments compare to individuals with the same responsibility in less-resourced establishments. The ability to have the time and means to access information and resources may differ as well as the avenues of access to those resources. Larger employers who have staff solely tasked with reviewing, tracking, and recording workplace injuries need to be considered against the many more numerous small employers who likely have the owner or office staff trying to make the right recordkeeping decision when the occasional injury occurs.

Survey respondents often expressed a desire to accurately record workplace injuries. There is an opportunity to engage them as partners and try to determine optimal times and means to provide them with recordkeeping training and tools. Efforts should be made to enroll SOII participants into annual cohorts with accessible, web based options to test the efficacy of various delivery mechanisms for training and recordkeeping tools. As the results of this study have suggested, recordkeeping training does correlate with higher KB scores. It may also lead employers to implement more effective injury recording in their workplaces overall.

Finally, there needs to be the recognition that employers of different sizes may differ in the need for or acceptance of assistance; research with targeted pilots may yield results that can be optimized to niche employers or scaled up for others.
6. Outreach Activities

DCBS staff who assist the BLS in conducting the SOII in Oregon often get questions from employers, many of whom are confused about OSHA recordkeeping. The results from this study will assist in providing better responses to requests for assistance and aid in providing clearer recordkeeping instruction.

Several respondents requested a return call for answers to specific questions and other recordkeeping assistance. These requests were recorded by interviewers in the “Comments” section of the questionnaire. Oregon intends to do a thorough review of the comments, identify these employers, and utilize the knowledgeable SOII staff to make return calls. Additionally, staff will identify and summarize common confusion areas reported in “Comments” and prepare a list of recommendations for OR-OSHA to highlight in future trainings and employer interactions.

The department will also create a guideline sheet to thank employers who participated in the study and insert a document listing the answers to the questions, links to the published study and recordkeeping guidelines document, and a document “Understanding the Difference Between OSHA 300 log recordkeeping and Workers’ Compensation in Oregon” (this document has not yet been created).

Study staff will provide a presentation to OR-OSHA with study findings and discuss opportunities for inspectors and consultants to use the findings to increase OSHA 300 log recordkeeping instruction effectiveness during workplace visits.

Acknowledgments:
Special thanks goes to Christina Hayford and Mario Molina for assisting with table formatting and review, Edna Raines and Vicky Lobue for conducting phone interviews and data entry, Denise Ricketts for data entry support, and to Penny Rusco for her patience and persistence in obtaining numerous phone interviews.
SOII and Oregon Workers’ Compensation Comparison

<table>
<thead>
<tr>
<th>Definition</th>
<th>SOII</th>
<th>Oregon Workers’ Compensation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work-related</td>
<td>Any event/exposure occurring in the work environment. The work environment is defined as the location where employees working or are present as a condition of employment. Specific exclusions: • General public not employee • Voluntary participation in recreational or wellness activities; • Personal tasks (eating, drinking, grooming); • Intentional self-harm; • Common cold/flu; • Mental illness (unless diagnosed as work-related).</td>
<td>“Arising out of and in the course of employment” (ORS 656.005). Specific exclusions: • Assaults or combats which amount to a deviation from customary duties; • Recreational or social activities primarily for the worker’s personal pleasure; • Injuries arising from consumption of drugs or alcohol.</td>
</tr>
</tbody>
</table>

| Recordable injury or disease | Injuries or illnesses resulting in death, days away from work, days of work restriction or job transfer, medical treatment beyond first aid, or loss of consciousness. Work-related cases involving cancer, chronic irreversible disease, bone fractures, or a punctured eardrum must always be recorded, regardless of meeting other criteria. | A accidental injury (or accidental injury to prosthetic appliances) requiring medical services or resulting in disability or death. A compensable injury or disease must be established by medical evidence supported by objective findings and must be the major contributing cause of consequential condition(s). |

| Cases involving days away from work | Days away from work (DAFW) cases are those in which the employee is away from work at least one day after the date of injury. | Disabling claims are those that extend beyond the first three calendar days after the employee leaves work as a result of the injury or disease, unless the worker is a hospital inpatient or dies as a result of the injury. |

| Reported cases | SOII respondents submit summary totals for all work-related cases recorded on their calendar year OSHA 300 log. Additional worker information is collected for cases involving days away or restriction. If a case is still in process at the time of the submission it must be included on the log; employers predict the outcome and future time loss. Fatalities are not counted. | Only accepted disabling claims (ADCs) are reported to DCBS by the insurer. All denied claims are reported to DCBS as well. Accepted nondisabling claims are not reported to DCBS. |

| Filing schedule | The SOII begins in January of the year following the recording period. Respondents are instructed to respond within 30 days. Summary collection ends in July and the database is frozen. Responses after this are not counted. | Insurer accepts or denies claim within 60 days of notification of the claim. ADCs and denied claims are reported to DCBS within 14 days of insurer decision. |

| Nonsubject populations | The SOII excludes employers that are not covered by the OSHA act of 1970, including: • Farms with fewer than 11 employees • Federal government employees • Self-employed workers • Household workers/private households | Workers not subject to WC coverage dictated by ORS 656.027 or covered by other compensation, including: • Federal employees • Self-employed/independent contractors • Out-of-state employees covered by other state WC • Portland police and fire employees |
## SOII and Oregon Workers’ Compensation Differences

<table>
<thead>
<tr>
<th>Event</th>
<th>SOII</th>
<th>Oregon Workers’ Compensation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Commuting to/from work</strong></td>
<td>Not recordable until the work commute ends. However, injuries arising from motor vehicle accidents that occur on a company parking lot or access road while commuting to and from work are also not recordable.</td>
<td>Not compensable unless the worker is reimbursed for travel expenses or receives payment for commuting time.</td>
</tr>
<tr>
<td><strong>Public employers</strong></td>
<td>Oregon SOII has always included state and local government statistics. All states started reporting on public sector starting in 2008.</td>
<td>State and local government employers are subject to the same workers' compensation requirements as all other industries. The only specific exclusion is Portland police and fire employees, as they are covered by a separate disability fund.</td>
</tr>
<tr>
<td><strong>Agricultural employers</strong></td>
<td>A agricultural employers with an average employment of less than 11 employees are not included in the SOII.</td>
<td>A agricultural employers are subject to the same workers' compensation requirements as all other industries.</td>
</tr>
<tr>
<td><strong>Temporary employees</strong></td>
<td>Injuries or illnesses occurring to temporary employees are recorded on the log of the supervising employer and must be reported to SOII.</td>
<td>Temporary employees are covered by the temporary staffing agency that employs them.</td>
</tr>
<tr>
<td><strong>Leased employees</strong></td>
<td>Same criteria as temporary employees. See above.</td>
<td>Employee leasing is an arrangement where employers enter into a contract with a worker leasing company, commonly known as a Professional Employer Organization (PEO), to manage the administrative functions of their work force. Leased employees may be covered by either the leasing client or the leasing company, but not by both.</td>
</tr>
<tr>
<td><strong>Contractors/Subcontractors</strong></td>
<td>The employer responsible for day-to-day supervision is responsible for recording injuries and illnesses. If the contractor's employees are under the day-to-day supervision of the contractor, the contractor is responsible for recordkeeping.</td>
<td>Primary contractors are responsible for the claims of a subcontractor's employees if the subcontractor does not have coverage when work commences on the project. In construction, the primary contractor is not required to carry coverage for the subcontractor's workers if the subcontractor is actively licensed with the Construction Contractors Board (CCB) or if the subcontractor has active coverage in place when the work commences.</td>
</tr>
<tr>
<td><strong>Responsibility in illness or cumulative trauma</strong></td>
<td>The supervising employer is required to record all injuries and illnesses that occur to workers under their control.</td>
<td>Last injurious exposure rule imposes full responsibility on the last employer, from the time of the onset of the disability, if the claimant was exposed there to working conditions that could have caused the type of disease suffered by the claimant.</td>
</tr>
</tbody>
</table>
As I mentioned earlier, everything we discuss today is confidential and your participation is voluntary. There are six sections to this interview. 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**
First I have a few questions about the company and the location selected for this survey:

**BLS1)** The location we selected for this survey was for *(UNIT DESCRIPTION)*. We show the *(2010/2011)* annual average employment at this location as *(EMPLOYMENT SIZE)*. Does that sound correct?

- [ ] YES
- [ ] NO – specify reason: ________________________________

**BLS2)** Are the workers at *(UNIT DESCRIPTION)* or does the employment number include workers at other locations?

1) [ ] SAMPLED UNIT DESCRIPTION
   [ ] OTHER/MULTIPLE LOCATIONS

**BLS3)** Do you have additional locations in Oregon?  [ ] YES  [ ] NO

**BLS4)** Do you have locations in other states?  [ ] YES  [ ] NO

**BLS5)** Does your company use temporary workers hired through a temporary help agency?

- [ ] YES - 5.a. Are they normally supervised by staff within your company?  [ ] YES  [ ] NO  [ ] DK
- [ ] NO
- [ ] NOT NOW, BUT HAS IN PAST
- [ ] DK

**BLS6)** Does your company lease workers?

- [ ] YES - 6.a. Are they normally supervised by staff within your company?  [ ] YES  [ ] NO  [ ] DK
- [ ] NO
- [ ] NOT NOW, BUT HAS IN PAST
- [ ] DK

**BLS7)** Are any employees covered by a union or collective bargaining agreement?

- [ ] YES - 7.a. Approximately what percent of employees are covered?
  - [ ] LESS THAN 25%
  - [ ] 25-49%
  - [ ] 50-74%
  - [ ] 75% OR MORE
  - [ ] DK
- [ ] NO
- [ ] DK

**BLS8)** Does the company compete or apply for contracts or subcontracts that ask for injury rates?

- [ ] YES – BLS8a) 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
- [ ] NO
- [ ] DK
What type of workers’ compensation insurance does your company have? (CHECK ONE)

☐ STATE FUND (SAIF)/ASSIGNED RISK PLAN
☐ PRIVATE INSURANCE COMPANY
☐ INDIVIDUAL SELF-INSURANCE
☐ GROUP SELF-INSURANCE
☐ LEASING COMPANY
☐ OTHER, specify:___________________________________________
☐ DK

Does a Third Party Administrator assist you with workers’ compensation claims management?

☐ YES
☐ NO
☐ DK

Do you have on-site medical treatment staff available for injuries that require more than first aid?

☐ YES
☐ NO
☐ DK

NOTE: Question 12 was an optional question that Oregon chose not to use

EMPLOYEE ROLES

Now, let’s move on to the people who deal with workplace injury and illness reporting for this location:

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
b. Workers compensation claims ☐ YES ☐ NO
c. BLS survey of occupational injuries and illnesses ☐ YES ☐ NO
d. Any other injury or illness recordkeeping ☐ YES - Specify: _______________ ☐ NO

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

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

☐ RESPONDENT (go to Q15a)
☐ OTHER COMPANY SAFETY AND HEALTH EMPLOYEE, specify: _______________ (go to Q15a)
☐ TPA, OTHER EXTERNAL CLAIMS MGR (skip Q15a and go to Q16)
☐ OTHER, specify: ___________________________________________ (go to Q15a)

Are you, or the individual, located at the (sampled location) work site?

☐ YES ☐ NO ☐ MOVES FROM SITE TO SITE

Did you keep an OSHA 300 log during (2010/2011)? ☐ YES ☐ NO ☐ DK

When you are not participating in the BLS survey, do you keep an OSHA 300 log? ☐ YES ☐ NO ☐ DK

How long have you been an OSHA recordkeeper? ________YEARS
BLS19) Have/has (you/the person with primary responsibility in Q15) received formal training on OSHA recordkeeping, such as classes, seminars, or on-line courses?
- ☐ YES (go to Q19)
- ☐ NO (go to Q21)
- ☐ DK (go to Q21)

BLS20) [IF YES on Q19] When did (you/the person with primary responsibility in Q15) last receive OSHA recordkeeping training?
- ☐ Within the past 12 months
- ☐ 1-3 years ago
- ☐ 4-5 years ago
- ☐ more than 5 years ago
- ☐ DK

BLS21) [IF YES on Q19] Who provided that OSHA recordkeeping training to (you/the person with primary responsibility in Q15)?
- ☐ COMPANY STAFF
- ☐ OSHA
- ☐ OTHER STATE/LOCAL GOVERNMENT AGENCY
- ☐ TPA/INSURANCE COMPANY/RETRO
- ☐ TRADE ASSOCIATION
- ☐ COLLEGE/UNIVERSITY
- ☐ PRIVATE COMPANY/CONSULTANT
- ☐ DK
- ☐ OTHER, specify: ________________________________

------------------------------------------------------------------------------------------------------------------------------------

INJURY REPORTING AND PROCESSING
Now I have a few questions on how your company keeps track of injuries:

BLS22) What do you use to track your workplace injuries and illnesses on? (CHECK ALL THAT APPLY)
- ☐ PAPER FORM
- ☐ ELECTRONIC SPREADSHEET
- ☐ SPECIALIZED INJURY SOFTWARE PROGRAM (go to Q23)
- ☐ OTHER, SPECIFY: ________________________________
- ☐ DON'T TRACK
- ☐ DK

BLS23) [IF INJURY SOFTWARE PROGRAM selected in Q22 above]:

a. What injuries/illnesses are entered into the program?
- ☐ ALL INJURIES
- ☐ ALL WC CLAIMS
- ☐ CASES WITH MEDICAL CARE
- ☐ OSHA 300 LOG
- ☐ OTHER, specify: ________________________________

b. [If YES in Q15a] Do/Does (you/the person with primary responsibility) determine, 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

NOTE: Question 24 was an interview checkpoint

INTERVIEWER CHECKPOINT: ☐ CHECK BOX IF NO LOG IS KEPT IN Qs 16 & 17 then SKIP TO Q34
OSHA RECORDKEEPING

Now I have a few questions about OSHA recordkeeping:

BLS25) 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 a worker does not go to the doctor? Would that include cases that do not end up as a WC claim?)
- ALL FILED WC CLAIMS (801/827)
- ALL ACCEPTED WC CLAIMS
- ALL INJURIES AND ILLNESSES THAT REQUIRE MEDICAL TREATMENT (FOLLOW UP QUESTION TO CLARIFY: Would that include cases that do not end up as a WC claim?)
- FOLLOW OSHA CRITERIA (recordable only)
- COMPUTER SOFTWARE DECIDES
- OTHER, specify: ___________________________________________

BLS26) Where do you get the information needed to complete an OSHA 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: ___________________________________________

BLS27) 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

BLS28) How long after the injury or illness is reported to you do you record it on the OSHA 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 CLAIM IS FILED
- OTHER, specify: _________________________________

BLS29) Where do you usually get the number of days away from work for the OSHA 300 log? (CHECK ONE)

- PAYROLL DATA
- WC TIME LOSS DATA
- 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: _________
OR1) Do you think your OSHA 300 log is an accurate indicator of worker safety at your facility?

☐ YES  ☐ NO  ☐ DK

BLS30) 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 - Can you give me an example? ________________________________

☐ NO

☐ DK

b. Do you keep cases on the OSHA log that have been denied workers’ compensation benefits?

☐ YES - Can you give me an example? ________________________________

☐ NO

☐ NO DENIED CLAIMS

☐ DK

c. Have you ever had an accepted WC claim for your company that was not included on your OSHA log?

☐ YES – Can you give me an example? ________________________________

☐ NO

☐ DK

BLS31) Have you ever added cases to a previous year’s OSHA log?

☐ YES – Can you give me an example? ________________________________

☐ NO

☐ DK

BLS32) Have you ever updated the number of days away from work on a previous year’s log?

☐ YES

☐ NO – Is there a reason why not? ________________________________

☐ DK

BLS33) Have you used any of the following recordkeeping resources or contacts?

(READ EACH ONE and CHECK ALL THAT APPLY)

☐ OSHA state contact

☐ OSHA federal contact

☐ OSHA recordkeeping website

☐ BLS contact or hotline

☐ Insurer/TPA

☐ Other, specify: ________________________________

☐ None

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SOII RECORDKEEPING

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

BLS34) Was (2010/2011) the first time you’ve personally completed the BLS Survey of Occupational Injuries and Illnesses?

☐ YES  ☐ NO  ☐ DID NOT COMPLETE SURVEY  ☐ DK  ☐ Other, specify: _______________

BLS35) [IF MULTI-UNIT (not ALL OREGON EMPLOYEES)] Are you responsible for completing the survey for any other company location?

☐ YES  ☐ NO
BLS36) How do you decide what cases to include on the BLS survey? (CHECK ONE)
- SAME AS OSHA 300 LOG
- ALL INJURIES
- ALL FILED WC CLAIMS (801/827)
- ALL ACCEPTED WC CLAIMS
- ALL INJURIES AND ILLNESSES REQUIRING MEDICAL TREATMENT
- FOLLOW OSHA CRITERIA
- COMPUTER SOFTWARE DECIDES
- OTHER, specify: ________________________________

BLS37) 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) (801)
- DOCTOR’S REPORT (827)
- OTHER SOURCE, specify: ________________________________

BLS38) 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?
- PAYROLL DATA
- WC TIME LOSS DATA
- CALENDAR (PAPER OR COMPUTER)
- OTHER, specify: ________________________________

BLS39) Have you ever been notified of an injury or illness that was reported too late to include in the BLS survey?
- YES – Can you give me an example? ________________________________
- NO
- DK

BLS40) [IF YES IN Q5] Would you ever include a temp agency work on your:

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

BLS41) [IF YES IN Q6] 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.

BLS42) Does your company use any safety incentives or rewards?
☐ YES - a. Can you tell me a little about your programs (general description, award/prize, and approximate value): ______________________________
☐ NO
☐ DK

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: ______________________________
☐ DK

BLS43) a. Are worker safety performance measures used in rating YOUR job performance?
☐ YES - What is performance based on? (CHECK ALL THAT APPLY)
☐ OSHA RECORDABLE CASES
☐ WC CLAIMS (TL CASES, CLAIM $, EXP. FACTOR)
☐ OTHER: ______________________________
☐ DK
☐ NO
☐ DK

b. Are worker safety performance measures used in rating FRONTLINE SUPERVISOR job performance?
☐ YES - What is performance based on? (CHECK ALL THAT APPLY)
☐ OSHA RECORDABLE CASES
☐ WC CLAIMS (TL CASES, CLAIM $, EXP. FACTOR)
☐ OTHER: ______________________________
☐ DK
☐ NO
☐ DK

c. [IF MULTI-UNIT (not ALL OREGON EMPLOYEES)] Are worker safety performance measures used to compare worksites?
☐ YES - What is used to evaluate or compare worksites? (CHECK ALL THAT APPLY)
☐ OSHA RECORDABLE CASES
☐ WC CLAIMS (TL CASES, CLAIM $, EXP. FACTOR)
☐ OTHER: ______________________________
☐ DK
☐ NO
☐ DK

BLS44) Does your company have a policy or practice of disciplining workers for certain unsafe practices (for example, not wearing protective gear or not notifying management of near-miss incidents)?
☐ YES    ☐ NO    ☐ DK

BLS45) 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)? ☐ YES    ☐ NO    ☐ DK
BLS46) 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
   i) [IF YES] Would you record any days away from work? ☐ YES ☐ NO ☐ DK
   ii) [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

BLS47) Is there anything you would like to comment on that would add to our understanding of how employers track workplace injuries and illnesses?

Specify: ________________________________

Thank you so much for your time and patience. Do you have any questions?

If we have any questions, we might call you back briefly for a clarification.
Oregon’s Recruitment Letter

The Oregon Department of Consumer and Business Services (DCBS) 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 Oregon’s workplaces safer and healthier.

The Research Unit at DCBS 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 with you about your thoughts and experiences with the BLS Survey, OSHA logs, and workers’ compensation claims. The phone interview will last between 20 and 30 minutes. Your participation is entirely voluntary.

Although OSHA log recording practices are discussed, this is not 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 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 OR-OSHA inspection or consultation services, we will be able to provide you with resources and refer you to an OR-OSHA consultant. The information we collect will not be shared with OR-OSHA inspection or consultation personnel.

These interviews are part of a larger study being conducted by multiple states in partnership with the 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 within a couple weeks to discuss this research further and schedule a time to talk in greater detail.** If you wish to contact us in the interim, please call 503-947-7030. We thank you for your time and consideration.

Regards,

Nathan Johnson
Study Coordinator

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The United States Department of Labor Bureau of Labor Statistics, 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 October 31, 2013. Without OMB approval and this number, we would not be able to conduct this study.
<table>
<thead>
<tr>
<th>Cell #</th>
<th>Interviewer</th>
<th>Mailed</th>
<th>Date assigned</th>
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</thead>
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<th>Attempts</th>
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<td>Done</td>
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</table>

[Table continues with multiple rows for data entry]
Establish contact with the person who completes the SOII and make sure it’s a good time to conduct the interview.

Hi, my name is <INTERVIEWER NAME>, and I work with the Research Unit at the Oregon Department of Consumer and Business Services.

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.
[IF NO] Can I tell you a little about our study?

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 20-30 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 Oregon Occupational Safety and Health.

Are you willing to participate in the interview? □ Yes □ No

[If NO, List reason for refusal] ________________________________

[If YES] Would now be a good time or is there another day or time that I may call you back? □ Yes □ No

[If NO, List preferred day/time] ________________________________

[If YES] 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.
Oregon’s Verbal Consent Form

(Read immediately prior to conducting the interview. Also sent with notification mailing so the participant could follow along.)

Read the statement in the box below before proceeding:

Before we begin, I am 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. This survey is being conducted under OMB Control Number 1220-0045. This control number expires on October 31, 2013. 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 at 503-947-7030 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.

Date verbal consent obtained: ______ /_______ /________

____________________________________________  _______________________________________________

Interviewer Name     Interviewer Signature
Oregon’s Voicemail Scripts

(VM, has person’s name)

First message:
Hello Bill, this is [your name] with the State of Oregon. I am following up on a recent letter that was mailed to your company regarding record keeping processes for work related injuries. Please return my call at 503-947-[ext].

Second message:
Hello Bill, this is [your name] with the State of Oregon. I left a voice mail on [date of 1st vm] regarding a research study on work related injury record keeping practices. This study will help to improve the quality of the data collected and your input is very important. I would like to schedule a phone interview at a time that is convenient for you. Please call me at 503-947-[ext].

Third message:
Hello Bill, this is [your name] with the State of Oregon. This is a follow up to the message I left on [prior date, 2nd vm]. You were randomly selected from a pool of employers who successfully completed the survey for Occupational Injuries and Illnesses. Due to your experience in record keeping of work related injuries and previous occupational injury surveys your participation is important to this current study. Please return my call as soon as possible at 503-947-[ext].
Voicemail Scripts (you have reached someone other than the person you were calling)

I think there are a lot of variables for this kind of message. For one, if the person you are calling is available the receptionist will probably send you to VM in which case you could leave one of the messages from above or use the following message below. If they are no longer with the company, then you can ask for the person who took his/her place or the person who oversees the recording of work-related incidents. Then you would proceed with your message. So with that said, I would start with a header such as:

Receptionist Transfer you to VM  (Person is still with company)

Hello, this is [your name] with the State of Oregon, Department of Consumer and Business Services. I am calling for Bill Smith. Is he available? Yes, voice mail will be fine.

Hello Bill, this is [your name] with the State of Oregon, Department of Consumer and Business Services. A letter was recently mailed to your company from the Federal agency, Bureau of Labor Statistics, for your company participation in a research study of record-keeping practices. This is a follow-up call to that letter. Would you please return my call at 503-947-[your extension].

Receptionist Transfer you to VM  (Person no longer with company)

Hello, this is [your name] with the State of Oregon, Department of Consumer and Business Services. I am calling for Bill Smith is he available. Can you tell me who is now in charge of recording work-related injuries or illnesses? Thank you, could you please transfer me to their VM (or) Yes, voice mail will be fine.

Hello [person’s name], this is [your name] with the State of Oregon, Department of Consumer and Business Services. A letter was recently mailed to your company from the Federal agency, Bureau of Labor Statistics, for your company participation in a research study of record-keeping practices. This is a follow-up call to that letter. Would you please return my call at 503-947-[ext]. Thank you.

First message:

This is [your name] with the State of Oregon Department of Consumer and Business Services. I am calling for Bill Smith or the person who oversees the recording of work-related injuries. A letter was recently mailed to your company from the Federal agency, Bureau of Labor Statistics, for your company participation in a research study of record-keeping practices. Please have Bill Smith or the appropriate personnel return my call at 503-947-[ext] as soon as possible. Thank you.

Second message:

Hello, this is [your name] with the State of Oregon Department of Consumer and Business Services. I am calling for Bill Smith or the appropriate personnel to follow up on a recent letter that was mailed to your company requesting your participation in a research study of record-keeping practices for work-
related injuries. Your company’s participation is very important, please call me at 503-947-[ext]. If Bill Smith is no longer with the company, please let me know. Thank you.

**Third message:**

This is [your name] with the State of Oregon Department of Consumer and Business Services. I am calling for Bill Smith or the appropriate personnel to follow up on a recent letter that was mailed to your company requesting your participation in a research study of record-keeping practices for work-related injuries. Your company’s participation is very important, please call me at 503-947-[ext]. Thank you.
The data entry tool was developed to easily enter surveys into our data table for future analysis.

**Screen Layout:**

![Screen Layout Image](image)

*Checkpoint question:*

**In Survey:**

*Checkpoint - If no log is kept in Qs 15 & 16 then skip to Q32 (answer is optional)*

**In Data Entry Tool:**

Checkpoint exist in the survey and the data entry tool to allow the system to create a skip pattern so you do not have to manually skip each question. For all survey questions, please carefully choose the answers checked on the paper survey.
### BASIC CRITERIA (there are 4 types of recordable cases)

- Only record work-related injuries & illnesses that result in at least one of the following:
  - Death (column G)
  - Days away from work (column H)
  - Days of work restriction or job transfer (column I)
  - Medical treatment beyond first aid or loss of consciousness (column J)*

### OTHER CRITERIA (regardless of the basic criteria)

- Work-related conditions below:
  - Cancer
  - Chronic irreversible diseases
  - Fractured or cracked bones/teeth
  - Punctured eardrum
  - Needle sticks or cuts from potentially contaminated material
  - Medical removal under the OSHA standard
  - Positive TB test from exposure to TB at work
  - Hearing loss that results in a 25-dB shift in hearing

### COLUMN J INJURIES:

Column J is for work-related cases that do NOT result in death, days away from work or days of work restriction/transfer. These cases are only recordable if at least one of the following occurs:

- They are listed in the “Other Criteria” category
- They result in a loss of consciousness, or
- Administration of medical treatment beyond first aid.
  - MEDICAL TREATMENT is any treatment NOT on the first aid list below.
- Recommendation for medical treatment beyond first aid from a medical provider, regardless of actual treatment administered or accepted by the injured/ill worker. (for example, if the worker chooses not to fill a prescription from the provider, it would still be considered medical treatment and be recorded in column J if no other criteria was met)

*Note: If a column J injury ends up as a case resulting in death, days away or days of work restriction/job transfer, it must be revised and updated to the appropriate column to reflect the most serious result. The check would be removed from column J to the new column. Only one column (G-J) is checked for each case.

### FIRST AID LIST

*(For determining recordability of column J injuries/illness)*

The procedures listed below are NOT considered medical treatment for OSHA recording purposes. A work-related case resulting in any of these treatments must have actual medical treatment not on this list or meet the other recording criteria listed above.

- Visits to a medical provider solely for observational or diagnostic procedures
- Using non-prescription medication at non-prescription strength
- Tetanus immunizations (other immunizations are medical treatment)
- Cleaning, flushing or soaking wounds
- Using wound coverings such as bandages, butterfly bandages, (sutures and staples are medical treatment
- Hot or Cold therapy
- Non rigid means of support such as elastic bandages
- Temporary immobilization to transport accident victims (neck brace, slings etc)
- Drilling a fingernail/toenail or draining fluid from a blister
- Removal of foreign bodies in the EYE using only irrigation or cotton swabs (removal from the eye with tweezers is Medical Treatment)
- Removal of foreign bodies NOT in the EYE with tweezers or cotton swabs
- Simple eye patches or finger guards
- Massages (physical therapy or chiropractic visits are Medical Treatment)
- Drinking fluids for heat relief