

# **The California Janitor Workload Study**

## **Response to Commissioner and Public Comments**

### **April 7, 2025**

#### **Comment 1: Clarity on Scope of Study**

- What were the directives and goals of the study?
- Were they all met?

*Response: The Specific Aims (section 2) summarize the study's goals. Although all aims are addressed in the report, the number of janitors contributing information to each was less than planned. There were extreme challenges with accessing janitors and securing their participation, which were communicated to CHSWC over the study period. Unfortunately, there were numerous challenges and barriers to studying this population of workers. For example, to get onsite to meet with janitors and tell them about the study, the building owner, service company, and union needed to provide consent. Once consent from all three parties was provided in writing, we held recruitment meetings to inform janitors about the study. We had varied participation rates at the sites we visited, with very few participants agreeing to wearable devices that would have provided objective data beyond that extracted from the video.*

#### **Comment 2: Clarity on data**

- 100% of the report is based on subjective comments from the survey respondents
- 0% is based on data
- 0% is based on medical evidence

*Response: This was a workload and ergonomic exposure assessment study. The objectives of this study did not include analysis of workers' compensation data, medical data, or physical examinations. There are three types of results presented in this report.*

- *The first set of results is based on survey data collected using validated questions and statistically analyzed for associations. Some surveys were taken individually online, while others were administered in person.*
- *The second set of results is based on data from qualitative summaries of interviews with workers and managers.*
- *The third set of results is based on objective data collected while observing 24 janitors perform their tasks for up to 4 hours (approximately 88 hours of directly measured data). Direct measurements (distance, force, postures) were made, and time parameters were extracted from the video (up to 4 hours) and collected on each person in the time study.*

#### **Comment 3: Clarity on correlation with OSHA Standards**

- Was there any correlation between the overlap of subjective responses in comparison to OSHA's standards?
- Were respondents compliant with preventative workplace safety protocols?

*Response: The scope of this study never included any comparison to OSHA standards or employer/employee compliance with OSHA Standards.*

#### **Comment 4: Clarity on Study Methods**

- Was the study solely based on survey results?
- Was there any one-on-one interviews or questions asked?

*Response: Please refer to the response to Comment 2.*

**Comment 5: Pain**

- 43% reported severe pain in 4 regions or more of their body
- Was the severe pain due to their job?
- Are the body parts connected (e.g. neck & back, or foot & ankle)? Or not connected?
- Did they seek treatment for this pain?
- How long have they had this pain in relation to their employment?
- Is this pain industrially related? Or due to non-industrial factors or prior injuries?
- Did they file a WC claim?
- Is the Janitorial job their only job? Or do they have other employment that may be contributing to their responses?

*Response: Yes, the question about pain specifically asked about work-related pain (i.e., pain due to their work). The various body regions assessed are in Table 3.4.1.B. The body regions included: (i) neck or shoulder; (ii) Upper Extremity (elbow, forearm, hand, wrist); (iii) Upper or lower Back; and (iv) Lower Extremity (Hips, knees, legs, ankles, feet). We did not ask about workers' compensation claims, medical diagnosis, or treatment since this was beyond the scope of the study's primary purpose: their workload. Twenty-four percent had a second job. These details have been added to the report.*

**Comment 6: Anxiety**

- Is the anxiety due to the essential functions of their janitorial jobs? Or other personal factors?
- Was this temporary during the pandemic due to changes in processes (per the comments made during the presentation)?
- Is this ongoing pre-pandemic, during pandemic and post-pandemic?

*Response: Identifying the cause of the anxiety reported was beyond the scope of this study. We evaluated the prevalence of those who, based on survey screening questions, had signs of anxiety or depression. Given the study's cross-sectional nature and the time frame of the surveys collected (2022), our results can only provide relationships or associations between the work-related exposure measures that we collected data on and the prevalence of anxiety or depression identified using the survey screening tool. Although the causes could be multifactorial (personal, work-related, pandemic-related, etc), some of the factors were work-related, as shown in the positive associations between work-related factors and anxiety or depression.*

**Comment 7: WC Claims**

- 1 in 3 reported having at least one work-related injury
- Does that mean that 2/3 of the study's findings of pain or injury were not industrially related?

*Response: One cannot infer this from those two data results. Pain is an early indicator of an injury. For non-acute musculoskeletal injuries, pain typically occurs first. The pain can resolve without an injury with rest, recovery time, exposure mitigation, and/or first aid treatment. Further, an injury is typically reported and/or treated (either through a workers'*

*compensation claim or one's doctor). Many people with pain may not report it as an injury because they have not seen any medical doctor or provider who has diagnosed it as an injury.*

**Comment 8: Clarity on the type of janitorial classification or industry type**

- 70% were office janitorial workers
- 30% were other venues (malls, event centers, airports)
- None were in public agencies, outdoor settings, etc.

*Response: This is not entirely correct. Please see Table 3.2.2 for the 25 venues represented.*

**Comment: 9 Clarity on the sample size**

- 431 people responded to the survey
- This represents less than 0.00001% of the employee base
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*Response: This report included 718 respondents, although some analyses only included the 431 respondents that fully completed the survey. Surveying the entire employee base of janitors in California was not in the scope of this study; the time and funding provided for this study were not commensurate with surveying the entire janitorial employee base in California. Samples are used in research to answer questions cost-effectively. The results presented are generalizable to the population of janitors represented in the study and may not reflect janitors who are not represented, something addressed in the Limitations section of the report.*

**Comment 10: Clarity that there was no in-person evaluations**

- No on-site evaluations were completed to substantiate the findings

*Response: The study team made 28 visits to 4 venues, including the airport, malls, an office building, and a convention center. 24 workers were observed for up to 4 hours, and direct measurements were taken of every task observed. Detailed analyses were completed to quantify the ergonomic hazards associated with each task.*

**Comment 11: Clarity that only employees were surveyed**

- No employer feedback or discussion of policies or practices in place (good or lacking)

*Response: As presented in Section 4, the qualitative portion of this study included interviews with employer representatives and workers.*

**Comment 12: Clarity on conflict disclosure**

- UC is largely funded by the State for research
- However, it is also largely funded by Labor Unions or other private industries – Does this create an unintended bias or conflict of interest?
- To protect the integrity of the study and work performed, any studies done by an organization partly funded by private organizations directly impacted by the studies should be fully disclosed and any conflicts of interest fully addressed

*Response: This study was solely funded by the Commission on Health and Safety and Workers' Compensation. Some of the students involved in the study were trainees whom the NIOSH Education and Research Center Training Grant supported. There were no other financial contributions to this study. The SEIU and MCTF organizations supported the study by sharing*

*the opportunity to participate and/or connecting us with locations where we could recruit participants. All acknowledgments are included in the report.*

**Comment 13:** Ultimately, the goal is to have an objective study, which may be a combination of subjective and objective methods, so that we can try to identify the issue and appropriate measures to recommend. Meaning we need to strive to fix the right problem versus an anecdotal scenario where we cannot get to the root cause to make recommendations for future implementation.

*Response: This study included self-reported and quantitative data collected by researchers. The workload survey and interviews collected self-reported data, while the time study and task-specific risk assessment included detailed objective measures. Using both data sources, we can integrate our findings into the Development of the Janitors Workload Calculator through a future collaboration with our colleagues at Washington State. Developing a workload calculator that includes task-specific time study and hazard assessment data could be piloted and tested in future studies.*

**Comment 14:** Please define any acronyms used in the report. Not everyone is familiar with all of them, and it helps to inform us in our reviewing the report. (i.e. ISSA)

*Response: A list of terms has been added to the report.*

**Comment 15:** Page 4: The report of pain and need for medication is very important which needs to be enforced going forward if any policy issues arise out of the report.

*Response: Thank you for your comment. In our opinion, this population needs specialized policies, like the Cal/OSHA Hotel Housekeeper Musculoskeletal Injury Prevention Program Standard, that could support employers and janitors by guiding ongoing medical surveillance and management, exposure assessment and mitigation, and training.*

**Comment 16:** Page 5: The same goes for anxiety or depression which likely got reported more among union members who have protection about speaking out on their jobs, where non-union employees face challenges of potential retaliation or job loss if reported.

*Response: Thank you for your comment. We agree that employers and janitors require additional support to improve the work climate. The reports of perceived retaliation, wage theft, and harassment all indicate that more work is needed to improve the work climate.*

**Comment 17:** Page 12: When reviewing the chart, it is helpful to know the Covid vs Non-Covid timeframe, since that had an influence on the results. Since most of the study took place during post-Covid moments, acknowledgment of that is useful.

*Response: A state of emergency was declared in California on March 4, 2020. A mandatory stay-at-home order followed on March 19, 2020, and remained in effect until January 25, 2021. The state's economy was fully reopened on June 15, 2021. Governor Newsom officially ended the COVID-19 State of Emergency in February 2023. Notably, 97% of the surveys included in this report were collected between October 19, 2021, and January 25, 2023—after the economy had reopened but before the state of emergency was lifted.*

**Comment 18:** Page 19: Glad the pain issue reported in bold since the impact can be so severe  
*Response: Thank you.*

**Comment 19:** Page 38: It is worth noting that union protections offer the ability to report higher prevalence regarding pain, since those protections don't exist in non-union jobs  
*Response: Thank you for your comment. We have added this to one of the emphasis boxes.*

**Comment 20:** Page 44: The low wage situation should be in a bolded and highlighted box.

- This is so important for those who just don't understand why there are working poor who have 2-3 jobs to provide for themselves and their families.
- Also, that so many do not report injuries due to fear of retaliation.
- And that many hours are worked without compensation.

*Response: Thank you for your comments. We have added a box to highlight these critical points.*

**Comment 21:** Page 50: Covid impacts that are highlighted in the box is significant. Glad it's there

*Response: Thank you for your comments.*

**Comment 22:** Page 57: Appreciate that solutions are posed, however, it would be good to acknowledge them in the intro, since it informs the reader that attention was paid to not just to the problems, but ideas on how to solve the problems raised.

*Response: Thank you for your comment. We have added recommendations in the executive summary.*

**Comment 23:** Page 76: Paying attention to Ergonomics & Heat by managers can, in fact, lower the incidence of injuries which benefits not only the workers, but the companies who will have less Work Comp claims and injuries to report.

*Response: Thank you for your comment. We have added more information about heat stress and provided some references regarding the association between heat stress and increased risk of injuries.*

**Comment 24:** Page 93: Wage theft is a huge issue and needs a bold box, as well as the suggestion to allow workers to assist in redesigning of their workload. Affirmation that the people who do the work actually know how to make it efficient without a great cost increase or additional injuries is a positive suggestion. Also, that reporting and retaliation must be addressed in the course of solving injury issues.

*Response: Thank you for your comments. We have highlighted these issues as requested.*

**Comment 25:** Can you please acknowledge in writing that this study was as you told us, more of a "survey" and a "Focus Group" and not based on a random sample study please.

*Response: We do acknowledge that this population was a sample of convenience. We have clarified this further in the executive summary, methods, and limitations section of the discussion.*

**Comment 26:** In terms of the things you were not able to cover, it should also be disclosed in your final document to the public that you did have limitations in getting access to the office

buildings you wanted, and that you were unable to or decided not to cross-reference the janitors who were interviewed with filed Workers' Comp claims. For example, the people you interviewed, do you know if any of them filed a Workers' Compensation claim?

*Response: The original scope of work did not include any objectives relative to quantifying the prevalence of workers' compensation claims in this cohort. The primary aim of this study was to understand California janitors' workload. We asked about pain and injuries but did not ask about workers' compensation claims. To encourage participation, we did not collect the names of those who participated in the survey. This was intentional, given this population and the challenges in recruiting participants. Many factors contribute to workers' compensation claims being filed, not just high workloads and pain and injury. To fully understand the relationship between workers' compensation claims, we would need to study many factors that were not in the scope of this study, such as supervisor support, knowledge about how to report pain and how to make a claim, whether they ever considered making a claim and why they did or did not make a claim. We would also need to ask for claim acceptance and reasons for claim denials or acceptance. The claim acceptance, denial, and perceived retaliation for a claim by the participant or their peers would also need to be evaluated. In short, a study with this particular objective must understand the factors associated with workers' compensation claim rates among janitors. The current study aimed to understand the workload of janitors.*

**Comment 27:** I think it would be important to footnote that the people you interviewed represent something like .0018% of the janitorial labor force in California. You can double check these statistics from the Department of Labor in terms of how many people they said workers as janitors in California.

*Response: The original scope of this study was to survey 2,000 respondents that were invited through emails and flyers. Surveying the entire population of Janitors was never proposed nor budgeted for. Unfortunately, only 718 respondents answered enough questions to be included in this analysis. This may have been due to language barriers or barriers in responding to surveys on mobile devices.*

*We have clarified that this was study sample throughout the report and reiterated that the results are generalizable to the population of janitors represented in this study. A much larger study sample would be needed to represent all janitors in California. That would likely be extremely challenging and costly in this group of workers.*

**Comment 28:** Also, it would be helpful if you noted that a further study might be informative in terms of obtaining more of a traditional study, using statistically reliable data, than a survey or focus group.

*Response: The data in this study is reliable for understanding the workload for the Janitors in the survey and others like them (part of SEIU or MCTF and working in the venues included). Numerous peer-reviewed published studies have used survey questions to quantify workload, work-related pain, and the likelihood of anxiety or depression; we include those same questions in this study. Further, the time study and risk assessment data were objectively measured. They included detailed video analysis and direct measurements of posture and force, providing detailed time for task and task-specific exposure measurements. These methods include traditional ergonomic approaches to evaluating workload. Although a convenience sample may not have data that is generalizable to the entire Janitorial population in California, it still provides valuable information about the janitors who were included in the sample and other janitors like them.*

*A more extensive study with a similar approach in additional venues would be needed to increase the generalizability of the study findings to a larger population sample of Janitors. Given the extreme challenges of recruiting janitors for participation, future studies that are meant to be a random sample generalizable to all California Janitors will require a massive collaboration from Unions, Employers, and State Agencies with significant funding levels.*

*Future studies with specific groups of janitors will still be valuable to understanding and solving the numerous issues that this working population faces. Small intervention studies could be implemented to evaluate ergonomic hazard mitigation interventions and approaches to task allocation that reduce individual hazard levels.*

**Comment 29:** The study does not use a statistically reliable sample size for its time and motion study or its survey. For the survey, it is unclear if you counted workers twice if they cleaned multiple times of facilities. For the types of facilities, you only have real data for one office building cleaner, three in airports, seven in malls, and 13 in event centers.

*Response: Please refer to responses for comments 2, 27, and 28, among others that respond to these concerns.*

**Comment 30:** We would value reviewing the full data and report to better understand how these reviews were conducted. Also, limiting your review to two, four-hour shifts is not significant enough to extrapolate cleaning time conclusions.

*Response: The final version, with post-comment-period revisions, includes all data tables and will be available to the public. For privacy reasons, providing raw data to the public is impossible.*

**Comment 31:** We would have advised that you reached out and sought representation from entities like ISSA that have an expertise in proper workloading, ergonomics, cleaning standards, and their complexity.

*Response: We used the standard times published in the 2023 ISSA handbook and the instructions provided to estimate the time allocated for cleaning tasks. We used the estimated times in our study to identify cleaning tasks that tend to underestimate the allocated time and are associated with higher ergonomic risk levels, since those are the tasks that should be prioritized for interventions. Using the ISSA instructions, we applied the ISSA approach to evaluate how it compared with the time taken on tasks in this sample of janitors. The goal was to apply it using the instructions provided as any janitorial service provider would. The cost of the ISSA training is substantial; we understood that the instructions would allow a user to apply the ISSA approach.*

*Identifying simple and non-costly approaches to allocate time to tasks and combinations of functions that optimize janitor safety and health is critical. We hope that entities like ISSA can consider these findings to enhance their approach to time allocation, for example by including ergonomic hazard and risk of injuries in their time allotments.*