

Data Can Inform Wage Policies On COVID-19 Screening

By **Elizabeth Arnold and Chester Hanvey** (March 10, 2021, 4:11 PM EST)

Due to the ongoing threat of COVID-19, many companies have begun requiring employees to undergo screening activities when they arrive at the workplace.

For hourly employees, the screening often occurs before they clock in for work. Screening activities may include answering health-related questions, undergoing a temperature check, disinfecting hands, putting on a clean mask, and potentially lining up and waiting.

In some circumstances, these activities are considered "integral and indispensable part of the principal activities"[1] and therefore compensable. In these situations, employers may have an obligation to pay employees for this time.

As more businesses begin to open their physical worksites, we anticipate a growing number of employers will implement similar COVID-19 screening procedures.

Given the lack of clarity[2] around the legal compensability of these activities, many companies will benefit from an analysis of the duration of these screenings and the degree to which this varies across employees due to various factors.

Results from a study regarding screening time can aid leadership and external counsel in making informed decisions about how to modify employees' pay, if at all. In the following sections, we describe how to conduct a study in this context, with an emphasis on data collection methods and data analysis.

Data Collection

In most situations, an observational approach is the most effective way to collect data regarding COVID-19 screening activity.

Alternatively, self-report options like interviews and surveys may be applicable in some circumstances; however, these options can suffer from a variety of known biases.

Specific measures must be incorporated into the data collection to avoid impacts on data accuracy.



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Another potential approach is an analysis of electronic data, which may be feasible when, for example, employees swipe a badge as they enter the facility.

In this scenario, electronic data showing building entry times could be compared with clock-in times, and the difference between the two can be computed for each employee, each day.

This approach is possible only when the two systems are synchronized. Also, the analysis contains the inherent assumption that all activities between swiping in at the entrance and clocking in are compensable.

Observational approaches do not suffer from these limitations and typically are preferred in this context.

Employee observations are based on well-established job analysis techniques, such as time and motion observations, to collect detailed data on the timing and sequence of activities in a systematic manner.

Observational approaches commonly are used to address other wage and hour issues, such as Fair Labor Standards Act and state exemptions, employee versus independent contractor status, and other forms of off-the-clock work.

An observation methodology in this context will reveal the specific steps in the screening process, the sequence of those steps, and the duration.

In addition to providing information about the typical screening process, observations also can provide insight into deviations from the typical process, such as the reason for deviation — e.g., equipment malfunction — the frequency of deviations, and the changes to duration as a result of the deviation. There are three observational approaches that we believe are most useful in this context, each is described below.

Live Observation

Live observations involve a trained job analyst, an observer, physically visiting the work location and shadowing employees as they perform their work.

The observer documents each activity and its duration to create a detailed record of the employee's activities. This task-level data then can be aggregated and analyzed to determine how much time is spent on each activity during the COVID-19 screening.

The primary advantage of this method is that live observers can see and hear contextual information that may not be available on video.

For example, the screening may take longer because the observed employee is having a conversation with the screener. It would be useful to know whether this is a friendly conversation about a personal topic or a conversation about something work-related because this differentiation could affect the compensability of the time.

Another consideration is the physical layout of a workplace. Depending on where activities take place, it may be challenging to position cameras to capture the entire screening process. A live observer, however, can move as needed to record all necessary data.

Video Observation

Video-based observation may be an option in some organizations, either in place of or in addition to live observations.

Some businesses have existing security video that enables the viewer to track employees through the COVID-19 screening process. High-resolution video cameras also can be strategically installed if existing cameras are not present, poorly positioned or inadequate. Video footage can be analyzed in a manner similar to a live observation.

The advantage of video is that observers can analyze it from anywhere — i.e., no travel required — and do not need to be physically present in the workplace. In some work environments, having an observer on site may be disruptive. In addition, video can be rewatched as many times as needed to ensure reliability.

Video Analysis Using Artificial Intelligence Technology

An alternative option for video analysis is through the application of artificial intelligence technology, known as computer vision.

This enables researchers to track detailed movements of employees and can be designed to measure the time it takes individuals to pass through the screening process.

The feasibility of this method depends on several factors, such as the physical layout of the screening area, the amount of space between individuals, and the angle of the video.

Assuming the proper conditions are met, the analysis can be done using automation, such that results are generated without the need for a person to physically watch the video. This means that large amounts of data can be generated without a significant incremental cost.

Data collected using this method is typically more limited, as only high-level activities, not detailed task descriptions, will be generated. However, if data showing the frequency of activities performed and the time it takes employees to pass through the screening process is sufficient, this approach may be appropriate.

Data Analysis Considerations

To illustrate the results of an observation record using either the live or video observations, two examples of observation records are shown below.

The observation records show each activity performed by the observed employee, the time that the task began and ended, and the task duration. Additional information, such as whether a task is compensable or noncompensable, can be incorporated once those legal determinations have been made by counsel.

In Example Observation Record 1, the employee arrives just before 5 a.m. and waits in line at multiple points during the screening process. In contrast, the employee in Example Observation Record 2 arrives just before 11 p.m. and does not wait in line or spend time talking to other employees. Thus, the duration of the screening process is significantly longer for the first employee, despite following the same general steps.

Example Observation Record 1

Start	Stop	Duration	Activity
4:55:00	5:00:03	0:05:03	Wait in line at front door
5:00:03	5:00:10	0:00:07	Enter door and answer screening questions asked by employee
5:00:10	5:04:27	0:04:17	Move ahead to temperature check area and wait
5:04:27	5:04:35	0:00:08	Step forward and stand on mat for heatmapping
5:04:35	5:04:44	0:00:09	Step forward and squeeze disinfecting gel onto hand
5:04:44	5:05:26	0:00:42	Step forward, pick up clean mask, and greet employee at table
5:05:26	5:06:31	0:01:05	Continue discussion with employee regarding nonwork topics
5:06:31	5:06:49	0:00:18	Place mask on head
5:06:49	5:06:54	0:00:05	Walk out of screening area
5:06:54	5:06:55	0:00:01	Clock in
		0:11:55	Total Time

Example Observation Record 2

Start	Stop	Duration	Activity
22:59:50	23:00:01	0:00:11	Enter door and answer screening questions asked by employee
23:00:01	23:00:09	0:00:08	Step forward and stand on mat for heatmapping
23:00:09	23:00:23	0:00:14	Step forward and squeeze disinfecting gel onto hand
23:00:23	23:00:32	0:00:09	Step forward and pick-up clean mask
23:00:32	23:00:41	0:00:09	Place mask on head
23:00:41	23:00:53	0:00:12	Walk out of screening area
23:00:53	23:00:57	0:00:04	Clock in
		0:01:07	Total Time

Data from observations such as the two examples above can be aggregated to determine the duration of specific steps in the screening process and the screening process in total.

A common question that this type of study is designed to answer is: How much time does the screening process take?

One way to answer that question is to calculate the average or median time.

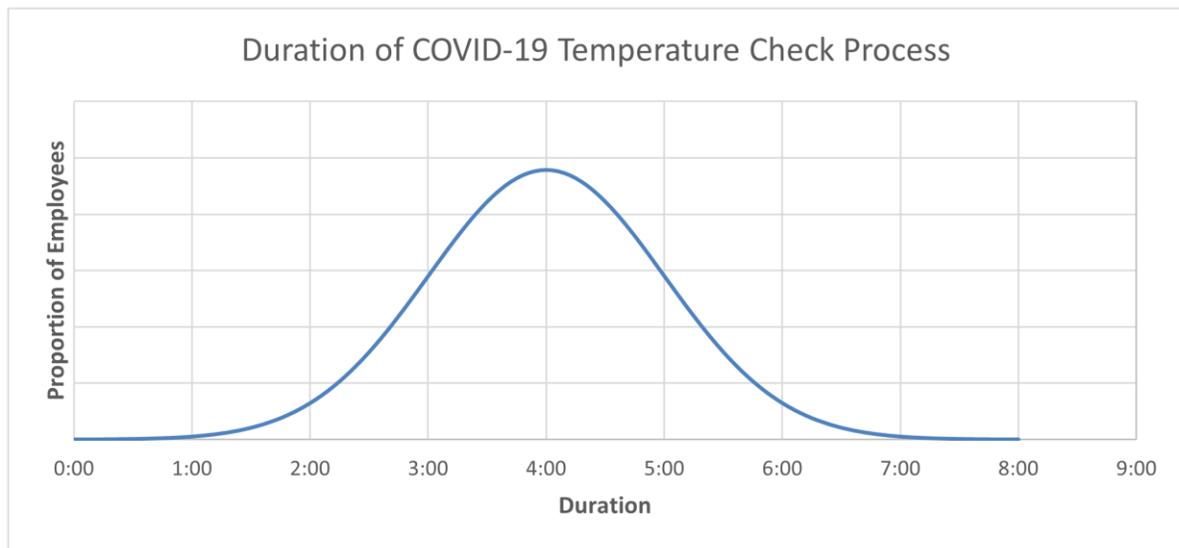
However, while it may be desirable to reduce the data into a single number or average for practical purposes, it also is important to examine the variability within the dataset.

For example, the graph below shows that while most employees go through the COVID-19 screening in 3 to 5 minutes, some individuals go through faster on the left side and slower on the right side.

Examining the shape of the duration distribution and the width of the distribution can provide valuable insight into the difference in experiences for employees. Evaluation of outliers also may provide insight

into factors that have a large impact on screening time.

Example of Employee Time Spent on Temperature Checks During COVID-19 Screening



Another consideration when analyzing the results of a COVID-19 screening study is whether there are predictable patterns to the observed variability.

Data regarding these factors can be collected and used to provide further insight into variability in screening time and the causes of that variability. For example, the study may show that screening takes more time during peak hours or for certain types of employees. Knowing these predictable factors, such as time of day or job title, may have legal implications and can be included in decisions about employee compensation.

Summary

The duration of pre-shift COVID-19 screenings for hourly employees may be critical information for employers to compensate employees appropriately and to mitigate legal risk.

Data can be collated and analyzed from study records to determine what screening activities employees are performing and how much time they spend on them.

The details of the screening process are likely to vary by industry and job, but using the valid methods described above can provide insight into potential exposure for employers and help company leadership to set policy accordingly.

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[1] The FLSA states that activities that are an "integral and indispensable part of the principal activities" of an employee are compensable.

[2] For example, "Legal observers disagree on whether employees should be paid for time spent on temperature checks under federal law" in Smith, P., "Virus-Induced Fever Checks Pose Wage Dilemma for Businesses," Bloomberg Law (April 7, 2020). Retrieved on 3/2/21: <https://news.bloomberglaw.com/daily-labor-report/virus-induced-fever-checks-pose-wage-dilemma-for-businesses>.