

Methods of Improving Establishment Recruitment by Converting Soft Refusals

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Abstract

A recent survey of Los Angeles County restaurants was conducted to evaluate public health practices that were in place ahead of a new law intended to decrease food-borne illness. The sample frame was provided by the Environmental Health Division from a list of restaurant contacts. The size of the sample frame and time allotted for study completion were based upon a faulty assumption that establishments would be as responsive toward independent survey researchers as they are toward officials with whom they must comply. Recruiters were frequently obstructed from being able to recruit restaurants by being told the owner or manager was unavailable and to call back later. With little time to make broad changes to the recruitment methods or apply more thorough non-response reduction techniques recruiters attempted to improve the response rate. These additional efforts increased the number of recruited and complete restaurants by almost 44 percent.

Key Words: Public Health, Food Service Workers, Recruitment

1. Background

The literature indicates that over half of restaurant acquired, food-borne disease outbreaks are associated with ill restaurant workers handling food (Hedberg, 2006). Due in part to concerns that restaurant workers were coming to work while ill because they did not have paid sick leave, a law signed by California Governor Brown mandating paid sick leave for all employees in California became effective on July 1, 2015. The new law required that employees working in California accrue paid sick leave at the rate of one hour per every 30 hours worked.

The Los Angeles (LA) County Department of Public Health intended to survey restaurant employees before the new law went into effect. The survey instrument investigated whether any paid sick leave policies were already in place, whether employees had worked while ill, and details about why they had worked while ill and what, if anything, they had done differently when ill.

The objective was to recruit 305 restaurants, 20 from 15 LA County jurisdictions plus another 5 for pilot testing. At each of these recruited restaurants one manager or owner and two employees, who were ideally both food preparers would be interviewed. All of these interviews were to be completed before the law went into effect. The sample frame contained 954 restaurants and was received approximately 7 weeks before the law went into effect giving fewer than two months to recruit restaurants and conduct interviews.

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1.1 Data Collection Methods Plan

The sample frame was provided by the health department from the Environmental Health Division's list of inspected restaurants. Restaurants were to all be recruited by telephone. Interviews at approximately 50 restaurants would need to be completed each week to finish data collection prior to the law becoming effective. The size of the sample frame presumed a 32 percent completion rate. Given the short study timeframe and the need to pre-arrange a time for in-person interviews limiting to telephone recruitment was determined to be the quickest and most effective way of reaching restaurants.

This study was kept independent from routine health inspections. Given that the survey included questions about employees potentially handling food while ill with vomiting, diarrhea, cough, or sneezing, it was believed that individuals could be less honest about these practices when asked by a health inspector. Since the survey was not part of the mandated county health inspections participation was voluntary, but the department of health believed that by saying we were calling on their behalf owners or managers would agree to speak with recruiters. To recruit a restaurant, the owner or a manager needed to agree to a time when an interviewer could go to the restaurant and speak with a manager and two employees. Recruiters were expected to go through the sample frame sequentially only replacing a restaurant if the management refused to participate, the restaurant was determined to be ineligible, or if the restaurant was unreachable after three attempts. Restaurants were considered ineligible if they had too few eligible staff or had been open less than 6 months. Eligible staff needed to be at least 18 years old, have worked at the restaurant for at least 6 months, and be able to speak with an interviewer in English, Spanish, or Mandarin Chinese. Restaurants were considered unreachable if recruiters could not speak with an owner or manager about the survey. Each interview took approximately 10-15 minutes and the respondents were each given a \$20 gift card for participating.

1.2 Piloting Testing

The pilot testing phase took longer than anticipated. Given the short study timeframe, pre-selected pilot testing sites were supposed to be delivered with the sample frame. Instead, pilot testing locations needed to be called and selected from the sample frame. This recruitment process for pilot testing took time and cut into the already short study timeframe. After two weeks we had completed pilot testing, revised the survey and began fielding the final instrument leaving us five weeks to complete in-person interviews at 300 restaurants. At this point it became obvious from the recruitment efforts so far that the assumption that restaurants would be as responsive as if the health department was calling was incorrect. Most of the time recruiters could not even get an owner or manager on the telephone. During pilot testing, recruiters made an average of 3.8 calls to restaurants, but had only been able to talk with owners or managers at a third of the restaurants called. Based on this information every restaurant that would likely be reachable would have to agree to participate to meet the study goals. Given this was unrealistic the first change we made to the recruitment plan was to request a larger sample. The Department of Health increased the sample frame to 2,393 restaurants; an increase of about 150 percent, or an average of 96 more restaurants per jurisdiction.

2. The Problem Defined

2.1 Barriers to Recruitment

Part of the assumption that management would be as responsive as if the health inspectors themselves had been calling was the assumption that three call attempts would be sufficient. Of the 2,393 restaurants in our sample frame only 93, or about four percent, that agreed and were interviewed were recruited in three or fewer call attempts. After making at most three calls, 364 restaurants, about 15 percent of the sample frame were identified as refusals or ineligible. That left a large proportion of the sample frame that were unreachable or not locatable. Often these restaurants were too busy for an owner or manager to come to the phone or may have been soft refusals; owners or managers that were intentionally avoiding the recruiters so they would not have to actively refuse participation.

Additionally, the study design presented its own barrier. The survey instrument was developed to collect information that restaurants would be unlikely to openly admit directly to health inspectors. To achieve honest response, the study staff wanted to make it obvious the survey was separate from their health inspection. To that end, the Environmental Health Division did not uniformly communicate to all the individual health officers that the study was occurring. As time went on we came to realize that some owners and managers were calling their health officer to ask about the study and were not being encouraged to participate. We do not have information about how many restaurants declined to speak with us or call back because of this, but in one instance, thinking the survey was a scam, the police were called.

2.1.1 Possible solution

The initial estimated completion rate of about 32 percent was not unrealistic, but assumed all restaurants would respond as if the health department was calling. In the end only about a fifth of restaurants were that responsive. With a design that changed the way in which local health officers were engaged from the start we may have been more successful, but given the realities of the current recruitment barriers there was not enough time to recruit 305 restaurants before the law went into effect and we would need to make more calls than only three to recruit the average restaurant.

One possible solution to increase recruitment was to increase the sample frame again. Another option was to continue to mine the sample frame, trying to get owners or managers on the phone and convert non-respondents, as the recruiters were currently doing. Either option was going to require the recruiters to make additional efforts beyond their anticipated level of effort. A new sample might need to contain over a thousand restaurants in order to make up the difference in the sample size in the time allowed. Given the low response rate we also requested to extend the timeframe to be able to make these additional efforts.

We chose not to request another additional sample frame for a couple reasons. First, it was possible that the additional sample frame may not be available until the very end of the fielding efforts. Second, even with an additional sample frame we would have less time to reach out to the restaurants and would only be recruiting the easier to reach restaurants. Since recruiters had already established themselves with the current sample frame, we believed that focusing our remaining time on efforts pursuing owners or managers at those restaurants that had not already given hard refusals might be more effective than starting over with another new sample. To aid this effort we drafted refusal

conversion letters for restaurants and informational letters for the district health officers. The refusal conversion letters were printed on LA County Public Health letterhead, indicated the interviews only took approximately ten minutes, that contractors were acting on the behalf of the department of health, and that no information would be reported about the restaurant individually. The informational letter for the district health officers asked for their encouragement if restaurant owners and managers called them, explained who the recruiters were, and why the study would be beneficial to their work.

3. Changes and Outcome

3.1 Outcome of Additional Efforts

We were granted a three-week extension to continue recruiting and complete interviews. Before this extension we officially increased call attempts from three to five, but recruiters continued on beyond this when they thought recruitment was likely. In addition, refusal conversion letters were sent to 199 restaurants that had either previously agreed to participate then withdrew before interviews were conducted or were considered soft refusals.

At the conclusion of the study, 246 restaurants, only a little over 10 percent of the sample frame, had been recruited and completed the survey. Approximately 30 percent of these restaurants required some additional efforts in order to recruit them to participate. Table 1 shows the number of completed restaurants by additional efforts implemented.

Table 1: Number of Completed Restaurants by Additional Calls and Refusal Letters Mailed

Additional efforts used		Recruitment Outcome	
		Complete	Not complete
Additional efforts used	5 or fewer call attempts and no refusal letter	171	1024
	6 or more call attempts, but no refusal letter	63	936
	5 or fewer call attempts and mailed a refusal letter	3	88
	6 or more call attempts and mailed a refusal letter	9	99

Almost a third of the recruited restaurants, 31 percent, completed interviews during the extended timeframe after the law went into effect. This includes every restaurant that completed after receiving the letters since those were mailed two days before the law went into effect. It is worth mentioning that the letters were more effective at converting those restaurants that had at one time agreed and then withdrawn from participation compared to soft refusers that were sent letters. 13 percent of those restaurants that had agreed, but then withdrew converted in an average of 7.8 total recruitment call attempts compared to a little more than four percent of soft refusals in an average of 9.1 total recruitment attempts.

3.2 Conclusion

When attempting to recruit for establishment surveys it is important to be mindful of non-response and soft refusals. The sample size should be sufficiently large to account for this. The study design made a false assumption about the expected response rate and the initial sample frame was too small. For the same reason, the number of recruitment call attempts should have been at least five from the start. If recruiters had adhered to the initial study design of making only three contact attempts, only about four percent of the sample frame would have been eligible and agreed to participate and the sample frame would have needed to be much larger. By simply increasing contact attempts from three to five the completion rate increased from about four to about seven percent. The extra efforts to mine the sample to improve the response rate also paid off. Given that almost a third of the surveys were completed during the extended timeframe appears to indicate that simply having more time for more call attempts and reminders is effective. More calls provide more attempts to reach someone who may be intentionally avoiding recruiters so that they do not have to refuse participation. Once reached and assuming they do not give a hard refusal, establishments that later retract their participation could be considered a still likely recruitable population. Letters attempting to convert establishments that had been recruited before withdrawing and extra calls to this targeted, likely recruitable, population will minimize the added effort needed for recruitment if the sample is not large enough. The extra efforts increased the number of completed restaurants from 171 to 246 or an increase of completed restaurants by almost 44 percent. Mining the sample frame in this way also increases the representativeness of the data by including a larger proportion of those in the sample frame that would have otherwise been omitted.

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