

## Pilot OSHA Citation Process Increases Employer Responsiveness

DOL Behavioral Interventions Final Project Brief

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### Study background

The Department of Labor Behavioral Interventions (DOL-BI) project was launched to explore the potential of using behavioral insights to improve the performance and outcomes of DOL programs. It is sponsored by the DOL Chief Evaluation Office and draws on insights from behavioral economics, psychology, and related fields.

The mission of the Occupational Safety and Health Administration (OSHA) is to ensure safe and healthy conditions for workers. OSHA estimates that work-related deaths and injuries have fallen by more than 65 percent since the agency's creation in 1970. Still, in 2014, more than 4,800 American workers were killed on the job, and nearly 3 million suffered work-related injuries and illnesses.

Previous research suggests that OSHA inspections can reduce the risks workers face. But for inspections to work as intended, OSHA needs employers to respond promptly when workplace inspections reveal unsafe conditions. Of the roughly 24,000 OSHA citations issued with penalties in 2013, more than 20 percent were ultimately referred to the national office for debt collection after employers failed to resolve the citation.

In 2014, DOL's Chief Evaluation Office contracted with Mathematica Policy Research and ideas42 to examine whether insights from behavioral science can be used to improve outcomes in DOL programs. In this study, we partnered with OSHA to pilot test whether a limited set of changes to the citation process could lead more employers to respond to OSHA after receiving a health and safety citation and reduce the number of employers referred to debt collection. We used a nationwide randomized controlled trial in two phases to test the effect of the changes, and results indicate statistically significant improvements. This brief describes the intervention context, presents the intervention design, discusses key findings and identifies lessons learned from this study.

In the pilot process we tested, OSHA staff (1) gave employers a new handout at the end of each inspection that described how to resolve citations; (2) used a new cover letter for citations; and (3) provided employers with timely reminders about the citation, including a postcard and follow-up phone call. Staff also had access to Spanish-language versions of all materials, which had never before been provided consistently on a national scale.

We conducted two phases of testing. In the first phase, staff at randomly selected OSHA area offices implemented all of the changes described above; in the second phase, they implemented all of the new procedures except the reminder phone call to test whether a less time-consuming version of the changes would yield similar benefits. The changes we tested significantly raised the number of employers who responded to OSHA in each phase and caused referrals to debt collection to decline substantially in the second phase.

### Key findings

Changes to OSHA's citation process informed by behavioral science **increased employers' rate of response to citations by 3.9 percentage points in Phase 1 and 5.4 percentage points in Phase 2.**

In Phase 2, employers under the new process were **4.4 percentage points less likely to be referred to the national office for debt collection.**

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## Study goal

The study aimed to test whether changes to OSHA's citation process would cause more employers to respond to citations and resolve them, thereby reducing referrals to the national office for costly enforcement and debt collection.

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## Intervention context

OSHA has several ongoing efforts to promote employers' compliance with health and safety regulations. Multiple agency initiatives encourage employers to systematically assess and address potential hazards. In addition, a rule that went into effect in 2015 requires employers to report to OSHA any serious injuries resulting in a hospitalization, amputation, or loss of an eye, at which point OSHA may either open an inspection or require employers to respond with how they addressed the hazard that led to the injury. However, until this study, OSHA had not directly tested whether changing elements of the inspection and citation process might boost employers' responsiveness to citations and reduce referrals to debt collection.

**OSHA's citation process.** After an inspection, OSHA's standard citation process involves mailing a written citation package that contains an explanation of the violations, the required corrections and any fines being imposed, and the employer's options for responding to the citation. The employer then has 15 working days after receiving a citation to respond in one of three ways:

- **Accept the citation**, agreeing to abate all the cited health or safety hazards and to pay the full amount of the penalty (or, if eligible, signing an expedited informal settlement agreement and paying a reduced penalty).
- **Meet with a local OSHA official** to negotiate possible modifications to the citation, such as penalty reductions, through an informal settlement agreement. An employer may still contest the citation within the 15-day response period if no agreement is reached.
- **Legally contest** the citation.

All three options require the employer to respond within 15 working days after receiving the citation package. Failure to respond leads to OSHA follow-up that may eventually include referring the case to debt collection.

## Intervention design

**Diagnosing behavioral factors.** The DOL-BI team collaborated with OSHA representatives to identify potential behavioral factors that could lead employers not to engage with OSHA after receiving a citation.<sup>1</sup> (Exhibit 1 at the end of this brief summarizes possible behavioral factors.) Four central themes emerged:



**Complexity.** Employers can struggle to find the information they need to choose a response.



**Misunderstanding.** Employers might not understand why it is important to respond promptly to a citation or that OSHA staff can help them resolve the citation.



**Lack of attention.** Many employers who do not respond to citations operate small firms; their limited time and capacity to address administrative matters could contribute to low rates of response and resolution.



**Procrastination.** Employers might not notice the citation package, delay opening or acting on it, or forget to deal with it.

**Process changes.** To address these barriers, the DOL-BI team, in close consultation with OSHA, developed three changes to the standard citation process, all with Spanish translations available:



**Preview the citation process.** Distribute a new handout to employers during the initial inspection, explaining what they can expect and what their response options are if they receive a citation.



**Simplify the cover letter.** Send a clearer citation cover letter that concisely explains the employer's response options, emphasizes the importance of prompt action, and offers help. (See Exhibit 2 at the end of the brief.)

<sup>1</sup> For citations of research related to the behavioral factors we identified and process changes we designed, please see the full report on this behavioral trial, available at [www.dol.gov/asp/evaluation/BISudy/](http://www.dol.gov/asp/evaluation/BISudy/).



**Provide timely reminders.** Send postcards and make follow-up telephone calls to remind employers about their response options and critical deadlines.

**The trial’s second phase.** OSHA managers found that the reminder phone calls required a substantial amount of staff time to complete. As a result, they decided to test whether a more limited set of changes to the citation process could bring about similar improvements in employers’ responsiveness. In Phase 2 of the trial, beginning in October 2015, the area offices implementing the pilot citation process no longer made reminder phone calls but continued using the handout, revised letter, and reminder postcard.

## Research question

Would employers who were cited for health and safety violations be more responsive—and ultimately more likely to resolve citations and avoid debt collection—if OSHA changed the way it issues and follows up on citations?

## Study design

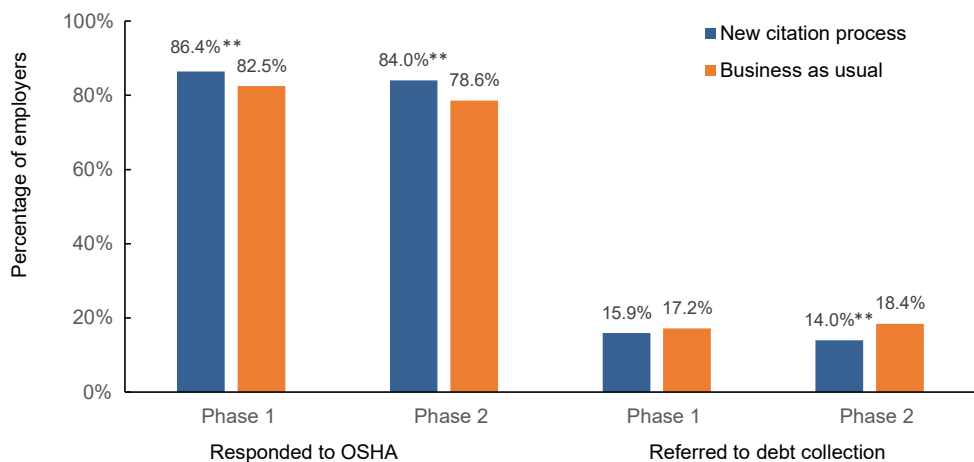
To test the effect of the pilot changes to OSHA’s citation process, we used a randomized controlled trial with two phases. OSHA and the DOL-BI team randomly assigned 69 area offices nationwide to either implement the new citation process or continue using their normal process. In Phase 1, which began in June 2015, randomly selected offices used the inspection handout, revised citation cover letter, and reminder postcard with all inspections resulting in citations, and they made reminder phone calls to all cited employers who were eligible for an expedited informal settlement agreement. In Phase 2, which ran from October 2015 through January 2016, the same offices continued with all changes except the reminder phone call. The research team collected data from OSHA’s administrative systems and used the data to determine whether, as a result of the new citation process, (1) more employers responded to their citations and (2) fewer employers had their citations referred to the national office for debt collection.

## Findings

**The new process caused more employers who received a citation to respond to OSHA.** The employers who experienced the new citation process were more likely to respond to OSHA, by 3.9 percentage points in Phase 1 and 5.4 percentage points in Phase 2. Both of these impacts were statistically significant (Figure 1). Employers could respond to OSHA citations by signing an informal settlement, paying at least some of their fines, or formally contesting their citations. Considering each type of response separately, the new procedures caused statistically significant increases in signing settlement agreements and in making payments, but not in formally contesting the citation, which was not an objective of the changes we designed.

**The new process reduced referrals to debt collection—but only in Phase 2.** The less intensive set of changes tested in Phase 2 had a statistically significant impact of 4.4 percentage points on referrals to the national office for debt collection, the outcome of primary interest to OSHA. The estimated reduction in Phase 1 (1.3 percentage points) was not statistically significant.

**Figure 1. Impact on employers’ responses and referrals to debt collection**



Note: Significance level: \*\*p<0.01. Percentages in the business-as-usual, or control, group are unadjusted; percentages in the group implementing the new process are equal to the control group percentage plus the estimated impact. Asterisks refer to the statistical significance of the estimated impact.

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**The changes we tested did not cause an increase in employers correcting all violations.** We found no impacts on the share of employers in either Phase 1 or Phase 2 that confirmed with OSHA that they had fixed all of the violations noted in their citations. In both trial phases, a large majority of employers—85 percent—confirmed that they had addressed all violations, regardless of whether their OSHA area office was using the new process or normal procedures.

## Implications and next steps

The results of this behavioral trial indicate that a combination of additional information at the inspection closing conference, a clearer citation cover letter, and timely reminders caused more employers to respond to OSHA citations. Results from the trial's second phase provide evidence that these gains in employers' responsiveness translated into lower rates of referral to the national office for debt collection.

**Low-cost changes can generate large benefits.** All of our citation process changes were designed to operate at a low cost and impose low burden on OSHA personnel. Still, the impacts were meaningful. Reducing the proportion of cases referred to debt collection from 18.4 to 14 percent during Phase 2 translates into approximately 1,000 fewer cases referred over the course of a year<sup>2</sup> and represents considerable savings to OSHA in time spent on case follow-up and debt collection.

**The changes we tested are scalable.** Given that our process changes cost little and allowed for integration into OSHA's existing procedures, they would be easy to implement across all OSHA area offices.

**Changes informed by behavioral science can be feasible even within a highly structured, enforcement-oriented program.** We worked with OSHA's national office to identify what could be changed (for example, revising the citation cover letter and sending reminders) and what could not (for example, completely redesigning the full citation package or offering employers new incentives to respond promptly). Even when official policy determines many aspects of an agency's operations and these aspects do not permit changes, there can still be ample opportunities to apply insights from behavioral science.

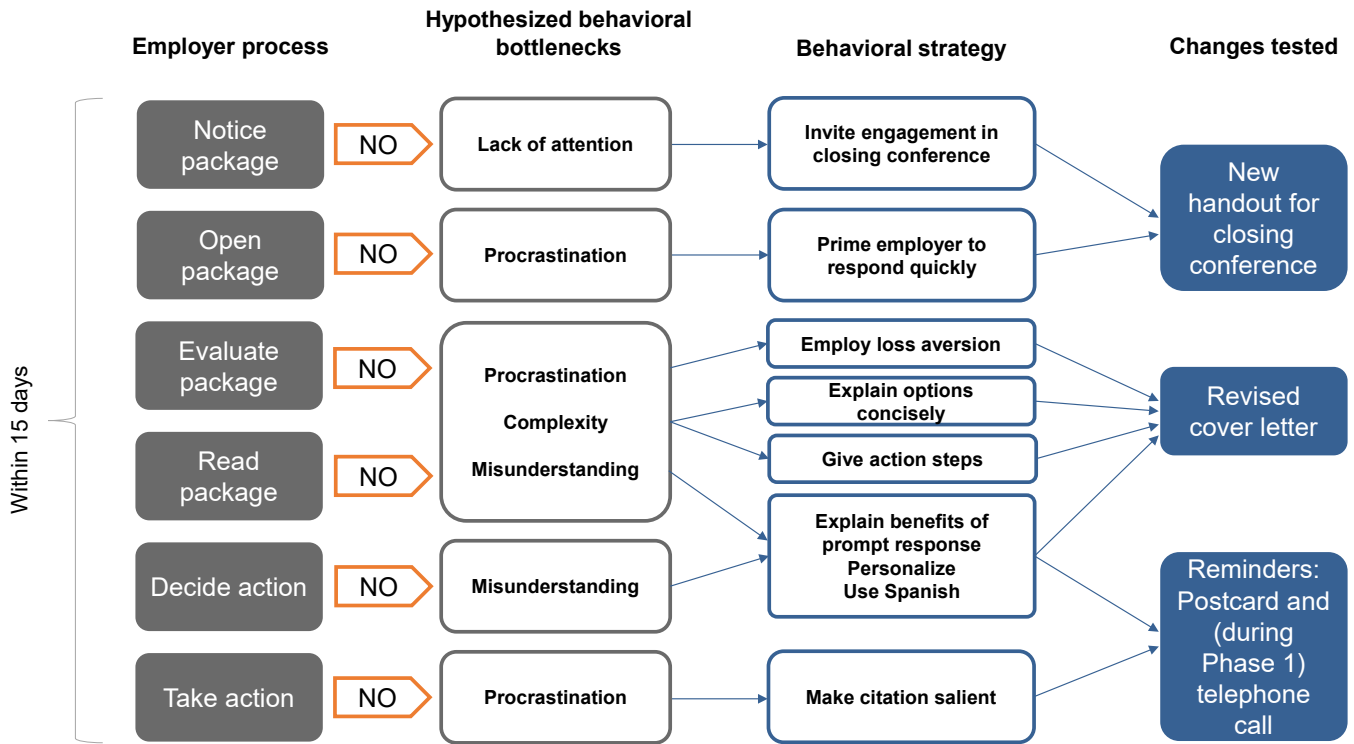
**Investing in multiple rounds of testing can yield important benefits.** This trial was originally designed to be completed in a single, three-month phase. However, the second phase yielded additional, important insights. It showed that a more limited and less burdensome set of citation process changes could produce similar improvements on employers' responsiveness. It also showed that improved responsiveness could translate into reductions in referrals to the national office. These results illustrate the value of iterative testing to build on initial findings.

## Learn more

In addition to the effort described in this brief, the project team has developed interventions and executed trials in partnership with the Employee Benefits Security Administration to increase employees' retirement savings contributions and with the Employment and Training Administration, Michigan Works! Southwest and the W.E. Upjohn Institute to help unemployed workers with their job search efforts. You can access reports, briefs, presentations, and infographics on these trials, as well as additional tools for applying behavioral insights, by visiting [www.dol.gov/asp/evaluation/BIStudy/](http://www.dol.gov/asp/evaluation/BIStudy/). This brief is an updated version of an interim brief published April 2016.

<sup>2</sup> Given the fiscal year 2013 caseload of about 24,000 inspections with citations issued with penalties, a reduction of 4.4 percentage points translates to 1,056 fewer cases referred to the national office.

**Exhibit 1. Behavioral bottlenecks and implications for changes to OSHA’s citation process**



## Exhibit 2. Revised cover letter sent to employers

Este documento es muy importante. Si ud. no habla inglés, busque un traductor o llame al (678) 903-7301.

Provide information in Spanish

U.S. Department of Labor Occupational Safety and Health Administration  
1995 North Park Place Suite 525  
Atlanta, GA 30339  
Phone: (678) 903-7301 Fax: (770) 984-8855



May 28, 2015

Personalize

Dear [Employer Name],

On 05/01/2014, an OSHA compliance officer met with you or your representative as part of an inspection at [Employer Address]. This letter includes the citations for the violations that were found (see summary below). Please choose one of the three options from the box to the right and complete the associated steps found on the following page within 15 working days. Please call us if you have any questions about the enclosed citation and/or penalties; we are here to help you choose the best option to resolve your citation as quickly as possible.

Sincerely,

[Director Name], Area Director

Your Citation Summary	
[Company Name]	
Inspection Number: [Number]	
<b>Total Amount Due:</b>	<b>\$1200.00</b>
<b>Payment Due Date:</b>	<b>15 working days after receipt of this letter</b>
<i>You must correct each violation by the date listed in the Citation and Notification of Penalty. Please see the violations and the correction deadline for each violation starting on page 6.</i>	
<b>Total Number of Violations :</b>	<b>1</b>
<b>Your First Correction Deadline is:</b>	<b>10/14/14</b>

Use simple and clear summary of amount due

Make correction due date salient

### Step 1 – Choose a Response Option and Act within 15 working days

Present a simple list of response options

Respond now before you lose the ability to discuss potential adjustments to penalty amounts and/or due dates. Please choose one option below and complete the steps on the next page.

Explain benefits of prompt response

#### Option #1 – Correct and Pay

I agree with the citation and correction deadlines, and do not contest.

List options in order of OSHA preference

#### Expedited Informal Settlement Agreement (EISA)

Because you have acted in good faith and your inspection revealed no instances of repeat, willful or other high-gravity violations, we can offer to reduce your penalty.

Your REDUCED total penalty is: \$ 800

This is a reduction of 40%

#### Option #2 – Discuss with OSHA

I would like to discuss this citation with an OSHA representative. This may lead to changes in the penalty amount, due date and/or correction deadlines (if appropriate).

#### Option #3 – Contest the Citation

I do not agree with the citation, penalties, and/or correction deadlines, and would like to contest.

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