OSHA’S DIMINISHED ENFORCEMENT LEFT MORE WORKERS AT RISK FOR EXPOSURE TO SILICA
OSHA’s diminished enforcement left more workers at risk for exposure to silica.

September 29, 2021

WHY OIG CONDUCTED THE AUDIT

As part of its efforts to ensure a safe and healthful work environment, the Occupational Safety and Health Administration (OSHA) issued Occupational Exposure to Respirable Crystalline Silica (final rule) on March 25, 2016, after 18 years of required rulemaking. Reducing and eliminating worker exposure to respirable crystalline silica (silica) is vital because silica occurs in many common materials like stone, brick, mortar, and ceramics, and, when inhaled, causes serious, potentially fatal illnesses.

OSHA estimates that 2.3 million workers are at risk for exposure to silica annually. This audit is in response to the number of workers exposed, the seriousness of silica-related illnesses, and congressional concerns around the non-renewal of a silica emphasis program.

WHAT OIG DID

We conducted a performance audit to answer the following question:

To what extent has OSHA protected workers from exposure to respirable crystalline silica?

We reviewed silica inspection and violation data, conducted interviews with OSHA staff, and reviewed evidence for inspector training and documentation for OSHA’s outreach and guidance program.

WHAT OIG FOUND

We found that OSHA’s diminished enforcement efforts left more workers at risk for exposure to silica. After issuing the final rule, OSHA did not fully invoke, via inspection activity, the rule’s greater protections to minimize workers’ exposures to hazardous conditions.

First, OSHA’s inspection data for the two fiscal years after the final rule became enforceable shows OSHA performed an average of 440 inspections annually. In contrast, for the two fiscal years before the final rule became enforceable, OSHA performed an average of 1,054 silica inspections per year. Therefore, after the final rule became enforceable, OSHA performed approximately 600 fewer silica inspections per year, a decrease of more than fifty percent.

Also, inspection data provided by OSHA was inconsistent with data extracted from OSHA’s publicly available database. Last, OSHA did not set clear goals and processes for evaluating whether outreach efforts sufficiently reached covered industries and 2.3 million workers at risk for silica exposure.

We primarily attributed the significant decline in silica inspections following the final rule’s enforceable date to the more than 2-year lapse between silica national emphasis programs. Inconsistencies between OSHA-provided data and publically available data was due to OSHA’s internal limitations when fulfilling data extraction requests.

WHAT OIG RECOMMENDED

We made three recommendations to improve OSHA’s silica emphasis, inspections, data, and outreach processes. OSHA provided a number of comments on the report and agreed that it is important to establish real and meaningful metrics for evaluating outreach conducted following the issuance of new standards.

READ THE FULL REPORT

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The Office of Inspector General (OIG) conducted a performance audit of the Occupational Safety and Health Administration’s (OSHA) efforts to protect workers from potential exposure to respirable crystalline silica (silica). OSHA’s mission is to ensure that employees work in a safe and healthful environment by setting and enforcing standards and by providing training, outreach, education, and assistance.

Setting standards happens through the issuance of rules and regulations, which requires extensive research, public notice, and a lengthy comment resolution period. After more than a decade and a half of the rulemaking process, on March 25, 2016, OSHA issued *Occupational Exposure to Respirable Crystalline Silica; Final Rule* (final rule).¹ When issuing the final rule, OSHA extended the issuance to the compliance period from the standard 60 days to 90 days, meaning it would have been effective June 23, 2016. However, OSHA also extended the dates for full compliance to September 23, 2017, for the construction industry and to June 23, 2018, for general and maritime industries.

When issuing the final rule, OSHA estimated that about 2.3 million workers were at risk of exposure to silica at work. Intended to help protect those more than 2 million workers, the final rule created new standards, including lowering the

permissible levels of silica from 100 to 50 micrograms per cubic meter of air (in an 8-hour time-weighted average) in all industries covered by the rule.

According to OSHA, workers who inhale silica particles, which are at least 100 times smaller than sand, are at risk of serious, potentially fatal illnesses. Because silica exists in materials like sand, stone, and mortar, workers might inhale silica while cutting, sawing, grinding, drilling, or crushing these materials. In addition to silicosis, an incurable lung disease that can lead to disability and death, the risks of serious illness to workers who inhale silica include lung cancer, chronic obstructive pulmonary disease, and kidney disease.

Due to the seriousness of silica-related illnesses, along with the issuance of new silica standards, the OIG had concerns regarding the number of potential workers at risk to exposure from silica. Further, while OSHA had emphasis programs for silica inspections from 1996 to 2017, congressional members had expressed concerns about the 2017 cancellation of OSHA’s emphasis program.

Accordingly, we conducted an audit to answer the following question:

To what extent has OSHA protected workers from exposure to respirable crystalline silica?

We found that OSHA’s diminished enforcement following the enforceable date of the final rule on September 23, 2017, may have left more workers at risk for exposure to silica.

Our audit covered silica inspection and violation data from October 1, 1999, through February 20, 2020. OSHA provided some of the inspection data, and we extracted other data directly from OSHA’s publicly available database. We also conducted interviews with OSHA officials from the national office as well as from Regions 5 and 6.2 Last, we reviewed evidence for inspector training for the new standards and documentation for OSHA’s outreach and guidance program.

RESULTS

OSHA’s diminished enforcement efforts following the final rule left more workers at risk for exposure to silica. Based on our analysis of inspection data, OSHA performed an average of 440 inspections annually for the two fiscal years (FY) after the final rule became enforceable, FYs 2018 and 2019. In contrast, for the

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2 Region 5 includes Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin. Region 6 includes Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.
two fiscal years prior to the final rule, FYs 2016 and 2017, OSHA performed an average of 1,054 silica inspections per year. After issuing the final rule, OSHA did not fully invoke, via inspection activity, the final rule’s greater protections to minimize workers’ exposures to hazardous conditions that could lead to issues including severe illnesses and death. We primarily attributed the significant decline in inspections to the more than 2-year time lapse between silica national emphasis programs (NEP).

We also found silica inspection and violation data provided by OSHA was inconsistent with data we identified from OSHA’s publicly available database. In addition, while OSHA developed a comprehensive outreach program to employers and workers, it did not develop clear goals and processes to demonstrate that its outreach succeeded in reaching covered industries and the 2.3 million workers at risk for silica exposure. Finally, we found that OSHA successfully trained its inspectors to apply the new silica standards.

**OSHA HAS CONDUCTED SIGNIFICANTLY FEWER SILICA INSPECTIONS FOLLOWING THE FINAL RULE’S ENFORCEABLE DATE**

OSHA worked for 18 years to develop and publish the final rule, with standards to protect workers from potential exposure to silica in their workplaces. In FYs 2016 and 2017, before the final rule became enforceable, OSHA performed 2,108 silica inspections. In contrast, after the final rule became enforceable, in FYs 2018 and 2019, OSHA performed only 880 silica inspections, a decline of more than 50 percent.3 See Table 1 for the total number of silica inspections performed in the two FYs before and after the final rule became enforceable.

**Table 1: Silica Inspections Before and After Final Rule**

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Before Final Rule (and during Emphasis)</th>
<th>After Final Rule (and during Emphasis Lapse)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>1,026</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>1,082</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td></td>
<td>466</td>
</tr>
<tr>
<td>2019</td>
<td></td>
<td>414</td>
</tr>
<tr>
<td>Totals</td>
<td>2,108</td>
<td>880</td>
</tr>
</tbody>
</table>

Source: OIG’s analysis of OSHA’s publicly available data

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3 For the five months of FY 2020 before the audit scope ended on February 20, 2020, OSHA performed 85 silica inspections.
HISTORICAL TRENDS IN SILICA INSPECTIONS AND EMPHASIS PROGRAMS

Two decades before issuing the final rule, OSHA recognized the need for focused inspections on the dangers of silica and adopted its first emphasis program for silica. See Figure 1 for a broad timeline of OSHA silica Special Emphasis Program (SEP) and NEP since 1996.

Figure 1: OSHA Silica Emphasis Programs 1996–2020

On May 2, 1996, OSHA issued a memorandum establishing a SEP focused on reducing and eliminating workplace incidences of silicosis resulting from exposure to silica; that memorandum provided inspection-targeting guidance, and its policies were effective immediately. In 2008, OSHA issued a Silica NEP, which:

describe[d] policies and procedures for implementing a National Emphasis Program to identify and reduce or eliminate the health hazards associated with occupational exposure to crystalline silica.

The 2008 Silica NEP applied OSHA-wide and simultaneously cancelled the 1996 SEP as it went into immediate effect.

In contrast, the 2017 memorandum cancelling the 2008 Silica NEP⁴ offered no replacement. As a result, after issuing the final rule, for the first time in two decades, OSHA did not create an emphasis program for silica inspections.

The 2008 Silica NEP had a 2 percent minimum annual inspection threshold, and OSHA exceeded the 2 percent NEP goal of silica inspections for FYs 2008 to 2017. See Figure 2 for a comparison of the number of silica inspections since 2008.

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⁴ Department of Labor, Cancellation of CPL 03-00-007, National Emphasis Program – Crystalline Silica, OSHA Notice CPL 03-00-007 (Washington, DC, 2017).

OCCUPATIONAL EXPOSURE TO SILICA
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From FY 2008 through FY 2017, OSHA exceeded the 2 percent 2008 Silica NEP goal. For the periods immediately following the final rule’s enforceable date, however, FYs 2018 and 2019, while no Silica NEP was in effect, OSHA performed significantly less silica inspections.

NEPs prioritize reducing severe hazards while working with limited resources. The 2008 Silica NEP specifically stated:

The purpose of this NEP is to significantly reduce/eliminate employee overexposures to crystalline silica [(RCS)] and, therefore, control the health hazards associated with such exposures. This goal will be accomplished by a combined effort of inspection targeting, outreach to employers, and compliance assistance. Inspections should be targeted to work sites that likely create high silica exposures. In each [r]egion, at least 2 percent of inspections every year must be silica-related inspections.

Setting an NEP for silica positively affected the number of inspections OSHA conducted, and OSHA met its 2 percent minimum threshold on an annual basis.

Prior to the 2008 Silica NEP, the 1996 Silica SEP was in effect, so that, from 1996 through the 2017 cancellation, OSHA had prioritized reducing or eliminating...
worker exposures to silica, resulting in more than 20 years of continuously focused silica inspections.

However, OSHA then allowed a more than 2-year lapse in conducting silica-focused inspections. After issuing the final rule, OSHA cancelled the 2008 NEP on October 26, 2017, and did not issue another Silica NEP until February 4, 2020, well after the final rule’s enforceable date for the construction industry. Consequently, the more than 2-year lapse in silica emphasis created a gap in OSHA’s enforcement strategy and likely resulted in OSHA conducting approximately 600 less silica inspections per year.

During the lapse, OSHA conducted some silica inspections, but those were unplanned, resulting from complaints. In an interview, an OSHA official stated:

OSHA responded to silica complaints and conducted no programmed silica inspections during that period of time. In FY 2018, the agency temporarily suspended the long-running (since 2008) Silica NEP due to the new RCS standards issued in March 2016. OSHA allowed employers a significant amount of time to become familiar with the new requirements of the RCS standards. In the 2nd quarter of FY 2020, the agency renewed the RCS NEP to reduce or eliminate occupational exposures.

Historically, OSHA has succeeded in meeting its goals for silica inspection, and OSHA’s protracted rulemaking efforts succeeded in enacting new requirements to mitigate worker exposure to silica. However, OSHA’s subsequent lapse in fully enforcing the new requirements, via inspections activity, did not effectively mitigate risks to workers exposed to silica.

**OSHA-PROVIDED SILICA INSPECTION AND VIOLATION DATA WAS INCONSISTENT WITH PUBLICLY AVAILABLE DATA**

The inspection and violation data that OSHA provided to OIG was inconsistent with the inspection data from OSHA’s publicly available Data Catalog. OSHA used the OSHA Information System (OIS)—an automated suite of applications for consultation, compliance assistance, and enforcement—in fulfilling OIG’s data request; however, OSHA was unable to accurately reproduce the data sets OIG had extracted from OSHA’s Data Catalog. As such, we were unable to validate the reliability of inspection data reported publicly by OSHA. It is essential that OSHA develop the ability to extract data from OIS in a consistent manner to support internal decision making, to meet the needs of its users, and to identify
any anomalies in the data structure. When queried about this issue, OSHA responded:

Every time we do a data pull, we get different results, not because the underlying data changes, but because, whenever we build a custom data pull, we invariably design the program to extract the data in different ways. This discrimination on the part of the programmer to extract the data in some kind of readable format invariably causes differences in the readability of the information, but the overall numbers remain the same and the “data” remains the same because [we are] always pulling from the same source.

OSHA also stated the Directorate of Enforcement Programs (DEP) queried OIS data for Federal OSHA only as it does not have the expertise to identify potential coding variations among all State Plan offices. In addition, OSHA stated DEP staff are only able to query records from OIS; records originally entered in its Integrated Management Information System (IMIS) have since been migrated to the OSHA Legacy Database (OLD), which DEP staff are unable to query directly.

OIG recognizes that differences could be attributed to OSHA’s limitation in accessing legacy and state systems. However, in spite of limitations, OSHA should develop the means to readily match the data that is publically available on its website. After the OIG alerted OSHA to the significant differences, OSHA advised that OIG-extracted data for the universe of inspections and violations were accurate. See Table 2 for the data differences OIG identified when attempting to reconcile the various data sets.

Table 2: Silica Inspections and Violations Data Differences, October 1, 1999 – February 20, 2020

<table>
<thead>
<tr>
<th>Data Element</th>
<th>Data Retrieved from OSHA’s Data Catalog by OIG</th>
<th>Data Provided by OSHA</th>
<th>Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Universe of Inspections</td>
<td>2,013,827</td>
<td>1,048,575</td>
<td>965,252</td>
</tr>
<tr>
<td>B. Universe of Violations</td>
<td>4,579,770</td>
<td>3,448,648</td>
<td>1,131,122</td>
</tr>
<tr>
<td>C. Universe of Silica Inspections</td>
<td>24,806</td>
<td>10,272</td>
<td>15,295</td>
</tr>
<tr>
<td>D. Silica Violations Pre Final Rule</td>
<td>19,165</td>
<td>21,069</td>
<td>1,904</td>
</tr>
</tbody>
</table>
The Government Accountability Office (GAO), which prescribes the minimum level of quality acceptable for internal control in government, describes the requirement for relevant data from reliable sources as follows:

Management processes the obtained data into quality information that supports the internal control system. This involves processing data into information and then evaluating the processed information so that it is quality information. Quality information meets the identified information requirements when relevant data from reliable sources are used. Quality information is appropriate, current, complete, accurate, accessible, and provided on a timely basis. Management considers these characteristics as well as the information processing objectives in evaluating processed information and makes revisions when necessary so that the information is quality information.5

Additionally, the Inspector General Act of 1978, as amended, mandates that Inspectors General (IG) have full and timely access to all agency information. However, on occasion, agencies deny IGs needed access to provide robust oversight. In response, on an ad hoc basis, Congress has effectively resolved such denials by including, within subcommittee appropriations acts, a prohibition on an agency’s use of appropriated funds to deny full and prompt IG access.

OSHA’s mission includes outreach, and it offers compliance assistance to employers. We reviewed OSHA’s documentation in support of these efforts and

determined that OSHA had not developed meaningful goals and processes for outreach to demonstrate the number of workers that these programs reach.

OSHA provided compliance activity reports, which indicated that 1.3 million individuals attended outreach events in the approximately 4 years from March 25, 2016, through March 31, 2020. However, with 2.3 million workers annually at risk of exposure to silica and potentially severe consequences resulting from those exposures, OSHA failed to reach many at risk workers. These workers may be unaware of the additional safety precautions prescribed in the final rule. We found OSHA extrapolated attendees into estimates for “affected” workers, but the basis of these estimates was unclear and imprecise and needs to be re-evaluated.

With fluctuations in the number of silica inspections and because OSHA supplements limited inspection coverage with outreach, OSHA’s ability to separately assess and demonstrate whether its outreach is achieving the desired results becomes increasingly vital. With approximately 2.3 million workers potentially exposed to silica on the job each year, OSHA needs to ensure it reaches sufficient numbers of workers with required and vital safety and health information.

OSHA has developed a robust and comprehensive outreach and guidance program that includes:

- developing and posting information and silica-focused publications on its public website;
- responding to questions from individuals who contact the agency using its 1-800 and e-Correspondence options;
- developing, posting, and distributing several consequential publications to assist employers and workers in understanding the new requirements of the standard; and
- coordinating with stakeholders and its Cooperative Program partners to conduct joint public events and to provide information that can be shared with their members and stakeholders directly through their own communications routes (e.g., social media, email blasts, and newsletters).

Since providing outreach and guidance is a component of OSHA’s enforcement strategy and its mission, OSHA should have a mechanism in place to reasonably evaluate outreach events’ effectiveness and at what level critical information is disseminated throughout worksites to workers. In addition, the GAO, in *Standards for Internal Control in the Federal Government*, prescribes that entities
use information from relevant sources and reliable data that is appropriate, current, complete, accurate, accessible, and provided on a timely basis.\(^6\)

OSHA officials stated they provide outreach to employers and rely on them to be well versed on recently enacted rules and to inform workers. Through its inspection activity, OSHA can then assess whether employers have gained a thorough understanding of any new rules.

### OIG’S RECOMMENDATIONS

We recommend that the Acting Assistant Secretary for Occupational Safety and Health:

1. Implement a policy, for future emphasis programs, that minimizes the lapse in enforcement between cancelled, revised or new programs;
2. Provide the OIG with “read-only” access to OIS to facilitate data requests on future audits; and
3. Establish meaningful goals and processes to assess whether OSHA’s outreach events are achieving the desired results in reaching a targeted number of workers at risk of exposure to silica.

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SUMMARY OF OSHA'S RESPONSE

OSHA provided a number of comments on the report and agreed it is important to establish real and meaningful metrics for evaluating outreach conducted following the issuance of new standards.

OSHA deems it appropriate to give employers time to adjust to new mandates including, but not limited to, financial as well as human resource considerations such as training, giving employers an opportunity to perform their own gap analyses between their current processes and the requirements created by new standards. Lastly, OSHA does not anticipate that time will be saved or any benefit would be gained from providing the OIG with access to OIS.

Our work found that, after issuing the final rule, OSHA delayed enforcement to September 23, 2017, to allow employers time to become compliant, then the more than 2-year lapse in focused inspections functionally extended this time period and likely resulted in OSHA conducting approximately 600 less silica inspections per year. Additionally, ongoing “read-only” access to the OIS would facilitate data requests on future audits.

We considered OSHA’s comments and adjusted the report as appropriate including eliminating one recommendation on prioritizing resources. However, nothing in OSHA’s response changed the conclusions in the report.

OSHA’s response to our draft report is included in its entirety in Appendix B.

We appreciate the cooperation and courtesies OSHA extended us during this audit. OIG personnel who made major contributions to this report are listed in Appendix C.

Carolyn R. Hantz
Assistant Inspector General for Audit
SCOPE

OIG reviewed OSHA’s silica enforcement program and analyzed inspection and violation data from October 1, 1999, to September 22, 2017 (Pre Final Rule), and from September 23, 2017, to February 20, 2020 (Post Final Rule).

We performed audit work remotely with personnel from OSHA’s National Office in Washington, DC, and with Region 5 (Chicago) and Region 6 (Dallas) from telework sites in both New York and Florida. Fieldwork also included meeting with various agency staff via Microsoft Teams meetings for follow up as well as question and answer sessions with regional offices.

METHODOLOGY

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

To answer our audit objective, we:

- reviewed OSHA’s procedures to gain an understanding of internal controls considered significant to the audit objective and confirmed our understanding of OSHA’s inspection and violation, outreach and guidance, training processes through interviews, and document reviews;

- selected publicly available inspection and violation for review as well as supplemental data provided directly by OSHA;

- reviewed relevant internal controls for Regions 5 and 6;

- reviewed laws, policies, procedures, documents, audit reports, and 29 CFR Parts 1910, 1915, and 1926: Occupational Exposure to Respirable Crystalline Silica (2016);
• interviewed staff and officials from OSHA’s national office and, virtually, staff from Region 5 (Chicago, IL) and Region 6 (Dallas, TX);

• reviewed OSHA’s comprehensive Outreach and Guidance program presented through various electronic media such as websites and frequently asked questions as well as seminars, trade shows, and inspector guidance provided while performing onsite inspections; and

• analyzed reported performance outcomes for the universe of inspections and violations from October 1, 1999, through February 20, 2020.

We assessed the reliability of computer-processed data provided publicly and directly by OSHA. We did not conduct any testing, but we reviewed the cumulative outcomes of the inspection and violation data OSHA had compiled. We have addressed these issues in our report and made a recommendation to correct these data reliability issues going forward. Refer to finding: “OSHA Provided Silica Inspection and Violation Data Was Inconsistent with Publically Available Data.”

CRITERIA


• Department of Labor, National Emphasis Program – Crystalline Silica, OSHA Instruction CPL 03-00-007 (Washington, DC: Department of Labor, 2008)

• Department of Labor, National Emphasis Program – Respirable Crystalline Silica, OSHA Instruction CPL 03-00-023 (Washington, DC: Department of Labor, 2020)

• OSHA Field Operations Manual (September 2019)


• Inspector General Act of 1978, as amended
September 16, 2021

MEMORANDUM FOR: CAROLYN R. HANTZ
Assistant Inspector General for Audit

FROM: JAMES S. FREDERICK
Acting Assistant Secretary


This memorandum is in the response to your transmittal on August 26, 2021 of the Office of Inspector General’s (OIG) draft report No. 02-21-003-10-105: OSHA’S Diminished Enforcement Left More Workers At Risk For Exposure To Silica. OSHA appreciates the opportunity to provide a response to the draft report.

There are four main points OSHA would like to address related to the conclusions expressed in the report.

Prioritizing Resources
OSHA does not believe it is appropriate for the OIG to provide recommendations nor draw conclusions regarding how OSHA as an agency chooses to prioritize its resources. Prioritizing resources is within the discretion of the Agency, Department and Administration in order to respond to the needs of workers and their commensurate risks of safety and health hazards. OSHA does not believe it is appropriate for another agency to define the level of OSHA resources that should be committed to address a particular hazard. Part of OSHA’s mission is to evaluate hazards and create prioritization schemes to manage those hazards the American workforce faces. Evaluating the most pressing workplace dangers, and where the Agency should focus its efforts, is a major undertaking of OSHA’s safety and health professionals, as well as the Administration leadership, each year.

There are many competing priorities for the Agency at any given time. For example, the current COVID-19 pandemic required the Agency to reallocate resources throughout OSHA. The Agency also needs to carefully balance resources between programmed inspections, as entailed in the silica enforcement NEP, and other similar initiatives, with unprogrammed inspections, which come about due to fatalities, catastrophes, complaints or similar events.

In addition, OSHA believes that not meeting an inspection goal does not equate to not prioritizing nor reducing hazards. The number of inspections alone does not predict whether employers are controlling exposures to health hazards, including those related to silica. Over
exposures, citations, abatement methods, and compliance with the new standards and PELs are more predictive indicators in determining that employees are protected against health (silica) hazards.

**Delay in Rollout of the National Emphasis Program**
As part of its rulemaking efforts, OSHA standards-setting policies generally evaluate an appropriate time between a rule being effective and fully enforced to allow affected employers time to implement controls required by the standard(s). OSHA deems it appropriate to give employers time to adjust to new mandates including, but not limited to financial as well as human resource considerations such as training. This gives employers an opportunity to perform their own gap analyses between their current processes and the requirements created by new standards. OSHA recognizes that employers need this time to prepare their workplaces for new safety and health requirements.

During the interval between the silica NEP rollout and full enforcement of the new silica standards, employers were given an appropriate time to comply with the new standards, including implementing engineering controls to control silica exposures. OSHA believes that during this period there were fewer employee complaints (and thus fewer inspections) as employers began coming into compliance with the new standards. As part of its rollout strategy, the Agency typically allows employers time to implement safety and health controls. It would not be practical to implement an NEP targeting employers when those same employers are allotted time to implement controls to come into compliance with the new standards.

**Characterizing Outreach Efforts**
OSHA agrees that establishing real and meaningful metrics for evaluating outreach conducted pursuant to issuance of new standards is important, and would be a recommendation worthy of OSHA’s consideration. We do not, however, accept the OIG’s contention that OSHA’s silica standard-related outreach should be evaluated in terms of whether it reaches all workers that may face exposures to silica annually. This metric is not only unrealistic, it is misinformed. While OSHA conducts significant, proactive outreach to a variety of stakeholders, including workers and their representatives (e.g., unions and worker centers), outreach to employers and employer representatives (e.g., trade associations), is vitally important and should not be discounted. After all, OSHA’s silica standards are focused on the obligations of employers, who have control over workplace safety and health, and who are legally obligated to comply with the requirements of OSHA standards and provide a workplace free of recognized hazards.

OIG’s draft report mischaracterizes both the audience and scope of OSHA’s silica standards outreach. The report states that OSHA provided data indicating that 1.3 million workers attended outreach events in the approximately 4 years between March 25, 2016 and March 31, 2020. In fact, OSHA’s data indicates that 1.3 million people (as opposed to workers) were directly impacted by OSHA’s outreach activities during that time. As stated above, OSHA conducts outreach to a variety of stakeholders, and in many instances, those individuals are employers or employer representatives. Many more people are likely reached via the trickle-down effects of OSHA’s efforts than can be reasonably quantified by the Agency. In addition, the number noted does not include estimates of the substantial outreach that OSHA conducted through the other activities OIG lists in its report (e.g., downloads of silica-focused guidance materials developed
by OSHA and responses to silica-related questions received via OSHA’s 1-800 number, eCorrespondence options and other mechanisms).

Quantifying the number of people truly reached by OSHA’s outreach activities, as well as the true impact of these activities (e.g., the number of injuries they prevent) is an ongoing challenge not only for OSHA, but for all agencies and entities engaged in these outreach and compliance assistance activities. However, OSHA is committed to creating a mechanism to establish goals and measures to assess whether OSHA’s outreach efforts related to new or revised regulations reach the specific industries, employers, and workers covered by those standards.

Providing Access to the OSHA Information System
OSHA does not anticipate that time will be saved or any benefit would be gained from providing the OIG with access to the OSHA Information System (OIS). As the OIG points out, the data is complex. Understanding the data or even what data are available typically requires extensive explanation. OSHA has several analysts who specialize in understanding and interpreting the available data, and has involved them in translating data responsive to the OIG’s requests to a format that the OIG can utilize. When assisting the OIG with extracting data, OSHA analysts define the scope of inquiry for obtaining data, including identifying relevant codes, appropriate exclusions and a series of other tasks. While the time to run a query is relatively brief, a significant amount of time is spent defining the set of relevant criteria to avoid misunderstanding regarding the data. OSHA’s coding procedures evolve over time in response to new needs and requirements, and it is imperative that users understand what the data does and does not capture for any given time period.

OSHA has successfully explained the data available in its systems, including what those data represent, how OSHA collects data, and what data is not available, to OIG in a number of audits. However, because of the complexity of the Agency’s systems and the changing nature of the coding procedures, among other things, translating the available data for OIG’s data experts’ use (and explaining why specific data is not available) sometimes requires more than one discussion. Moreover, the inevitable learning curve is further complicated by the fact that the OIG analysts assigned to OSHA audits change depending on the needs of the OIG. Thus, even where OSHA has previously explained its systems to OIG, changes in the assigned analysts, the data system, coding, or other factors often mean that even the most expert audit team outside of OSHA could easily misunderstand OSHA’s data or be unable to produce the specific data needed for the audit.

In addition, the OIS database does not include records originally entered into Integrated Management Information System (IMIS), OSHA’s legacy database. Consequently, data requests which go beyond the scope of OIS (which includes data beginning in FY 2013 for Federal OSHA and as late as FY 2016 for some State Plans) would still require a separate query of the OSHA Legacy Database and a reconciliation of the two data systems. This is the reason that OSHA recommends that OIG use the public enforcement data catalogue, which already combines records in IMIS and OIS in a simpler, more user-friendly format.
APPENDIX C: ACKNOWLEDGMENTS

Key contributors to this report were:

Sean Ally, Expert Auditor
Carla Orvis Hunt, Writer-Editor
Eliacim Nieves Perez, Expert Auditor
Eric Rann, Expert Auditor
Mark Schwartz, Audit Director
Charmaine Thorne, Audit Manager
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200 Constitution Avenue, NW
Room S-5506
Washington, DC 20210