

**Artificial Stone Countertops: Exposures, Controls, Surveillance, &  
Translation (Information Collection Request – OMB # XXXX)**

**Request for Office of Management and Budget Review and  
Approval for Federally Sponsored Data Collection**

**Section A**

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## Attachments

- Att.1 – Authorizing Legislation
- Att.2 – 60-Day FRN
- Att.3 – Workplace Survey
- Att.4 – Project Informational Brochure for Potential Workplaces

Goal of the project: The purpose of the proposed collection is to conduct a survey with artificial stone countertop fabrication facilities to better understand (1) work practices and controls related to respirable crystalline silica, (2) barriers or facilitators to implementation of medical and exposure monitoring requirements, (3) identify areas for potential intervention, and (4) identify countertop fabrication facilities willing to participate in future NIOSH exposure and health research.

Intended use of the resulting data: Findings from the evaluation will help identify areas for intervention and inform strategies for communication of future NIOSH recommendations and exposure and health research.

Methods to be used: An online survey will be used to collect data from respondents either online or through telephone calls with trained interview staff.

The subpopulation to be studied: Countertop fabrication facilities using artificial stone products.

How the data will be analyzed: Data will be summarized using descriptive statistics methods including means, quantiles, variance or dispersion, standard deviation, univariate analysis, and regression models.

Recently, AS silicosis cases have been reported from Italy, Australia, and Belgium. As of 2010, there were an estimated 8,694 establishments and 96,366 employees in the AS countertop fabrication industry in the United States.

Many AS countertop fabrication shops in the United States are small businesses. Currently the industry is not well-defined, and the potential silica exposure risk, need for control measures, and obligation to monitor worker health might not be known or understood. In this project, we will enumerate AS fabrication facilities in the United States and describe the range of workplace processes and practices. We will assess current medical monitoring practices and fabrication processes by facilities so we can better understand needed areas for increased education on medical testing or exposure mitigation methods. We will ask questions about whether employers have written respiratory protection programs, perform fit testing for workers wearing respirators, or whether they perform any initial or annual medical lung function testing or medical evaluations for workers. This data will help identify whether workplaces have medical monitoring practices in place, perform any type of routine air sampling for silica, or have written respiratory protection programs in place. Understanding current health and safety practices at countertop fabrication facilities will help identify areas for increased awareness, such as sharing information about requirements for respiratory protection fit testing. Along with the tools developed to gather information from facilities, we will distribute educational materials, hazard alerts, and health communication documents to workplaces to educate them on this emergent issue and provide currently available public health information. Furthermore, we will use this outreach to identify workplaces willing to participate in the exposure assessments as well as the pilot enhanced respiratory surveillance planned for future NIOSH research.

This critical study aspect will translate research findings and enhance our understanding of potential exposure and health risks, allowing us to identify and mitigate hazards, ultimately preventing disease. Presently, understanding potential silica exposure in countertop fabrication, associated health risks, and considerations for exposure mitigation seem to vary across industry. We are trying to better understand industry's educational needs by identifying current practices and procedures. Outreach materials will include materials for management and workers on hazard communication, health monitoring, and control technology. Material formats may include

but are not limited to: short training videos, infographics, posters, blogs, and social media. Dissemination of this critical, novel exposure and health information will be coordinated through industry collaborations and state-partners. Data collected as part of this survey will be reviewed and evaluated to better understand current industry product use and practices and present knowledge gaps or educational needs, and then used develop targeted communication and education materials for industry to help increase awareness on potential health and exposure risks and possible methods for exposure mitigation. This data collection is in accordance with NIOSH's mission to develop new knowledge in the field of occupational safety and health and to transfer that knowledge into practice.

## ***A.2 Purpose and use of information collection***

The data collected from this study will be summarized using descriptive statistics methods to include means, quantiles, variance or dispersion, standard deviation, univariate analysis, and regression models and will be used to supplement future industrial hygiene and medical monitoring countertop fabrication and silicosis exposure research conducted by NIOSH. To conduct the study, NIOSH will use a Science and Technical Support Services contract to enumerate the AS countertop manufactures in the United States The contractor will conduct surveys, developed by NIOSH, with workplaces willing to participate. Information collected through the developed survey will include company characteristics such as general work practices, materials used, and knowledge of application silica recommendations or regulations. The survey tool will also be used as a mechanism to distribute educational materials, hazard alerts, and health communication documents to workplaces to educate them on this emergent issue and provide currently available public health information regarding the current state of the science surrounding this emerging public health threat. Companies willing to participate in the survey will be invited to participate in future industrial hygiene and medical monitoring research.

With the goal of preventing future cases of silicosis and other work-related lung disease among AS countertop workers, we will use data collected on exposure and health to develop a large-scale public health campaign to translate Research to Practice (r2p) and enhance industry awareness and understanding of the risks associated with AS countertop manufacturing. Education and understanding on exposures and health hazards associated with AS countertop fabrication and practical recommendation for effective exposure control is essential for providing a better understanding to manufacturers, employers, workers, and the general public that might be unaware of potential risks. We will pursue this advanced public health campaign during the final two years of our research, after much of the data collection and analyses have been performed that will inform the public health campaign. This comprehensive public health campaign will approach the problem from several angles to maximize effectiveness and promote change to protect workers. We will deploy contract agreements for development of public health training and educational materials and outreach, that will include a variety of materials for different audiences. Outreach materials will include Safety Advisories, fact sheets, training videos, infographics, posters, NIOSH blog posts, social media, and press releases. With the public health campaign deliverables described below, we will continue to engage stakeholders from industry and state agencies to distribute the materials to the appropriate audiences.

Outreach materials will be tailored to each audience (e.g., managers, workers, safety professionals, physicians), and follow objectives of the CDC/ATSDR Action Plan to improve health literacy using plain language and appropriate literacy levels to develop and disseminate resource materials that are accurate, accessible, and actionable. To ensure outreach materials are

disseminated to audiences in their native languages, we will develop translated materials that match the industry demographics.

### ***A.3 Use of improved information technology and burden reduction***

#### ***REDCap Survey***

Surveys will be conducted using the REDCap secure web application. REDCap is specifically geared to support online and offline data capture for research. Using the REDCap tool to allow respondents to either answer survey questions online themselves or through telephone calls with trained interview staff asking the survey questions is anticipated to substantially reduce the time required to collect survey responses and aggregate responses. Skip patterns will be applied where appropriate to avoid asking non-applicable questions. Virtual Volumes will be used for data collected in REDCap.

### ***A.4 Efforts to identify duplication and use of similar information***

To our knowledge there are no previous surveys assessing utilization of respirable silica recommendations or regulations or surveys that attempt to determine if there are any barriers to the implementation of respirable silica recommendations or regulations. Therefore, existing data are not able to meet the current needs to understand whether current respirable silica recommendations are utilized by countertop fabrication facilities, identify if there are any barriers or facilitators to the implementation of recommendations, and subsequently inform any necessary changes to communication strategies of respirable silica recommendations or identify further needed research.

### ***A.5 Impact on small businesses or other small entities***

This collection of information is voluntary. It involves talking directly to workplaces that fabricate artificial stone countertop products and does not have a disproportionate impact on small businesses.

### ***A.6 Consequences of collecting the information less frequently***

Respondents identified as the appropriate point of contact (management or safety and health representative) for AS countertop fabrication facilities will only be asked to complete the questionnaire one time. Currently the industry is not well-defined, and the potential silica exposure risk, need for control measures, and obligation to monitor worker health might not be known or understood. If interviews were not conducted, NIOSH would not capture data needed to accurately improve our understanding on countertop fabrication workplace practices and understanding of potential exposure hazards. These data are needed to raise awareness of the factors contributing to exposure and illness. The lack of data could negatively impact development and improvement of targeted and effective interventions.

### ***A.7 Special circumstances relating to the guidelines of 5 CFR 1320.5***

This request fully complies with the regulation 5 CFR 1320.5.

## ***A.8 Comments in response to the Federal Register notice and efforts to consult outside the agency***

- A. The 60-Day Federal Register Notice (Att.2—60-Day FRN was published on June 02, 2022, vol. 87, No. 106, pp 33488-33490. No comments were received.
- B. The survey was reviewed and discussed with internal NIOSH researchers with expertise in developing surveys to collect information on workplace practices, as well as external reviewers with knowledge of the countertop fabrication industry. Consultations on the type of information to be collected began in 2019 and have continued throughout project planning and protocol development. Collaborators from California Department of Public Health include Kristin Cummings (Kristin.Cummings@cdph.ca.gov), Amy Heinzerling (Amy.Heinzerling@cdph.ca.gov), and Robert Harrison (Robert.Harrison@ucsf.edu).

## ***A.9 Explanation of any payment or gift to respondents***

This study does not provide a payment or gift to the respondents.

## ***A.10 Protection of the privacy and confidentiality of information provided by respondents***

ISSO determined in conjunction with the CDC Privacy Office that the Privacy Act is not applicable. The collection contains PII with demographic information in the survey (i.e., name, phone number, work email address).

Research Electronic Data Capture (REDCap) and NIOSH Edge Computing Platform (NCEP) include the in-place technical, physical, or administrative controls (safeguards).

Research Electronic Data Capture (REDCap) and NIOSH Edge Computing Platform (NCEP) System Security Plan (SSP) defines the process for handling security incidents. The system's team and the Cybersecurity Program Office (CSPO) share the responsibilities for event monitoring and incident response. Direct reports of suspicious security or adverse privacy related events to the component's Information Systems Security Officer (ISSO), CDC helpdesk, or to the CDC Security Incident Response Team (CSIRT). The CDC CSPO reports to the HHS Computer Security Incident Response Center (CSIRC), which reports incidents to US-CERT as appropriate.

The survey is included in Att.3—Workplace Survey.

## ***A.11 Institutional Review Board and Justification for sensitive questions***

IRB approval is not required.

## ***A.12 Estimates of annualized burden hours and costs***

### ***A.12.A Estimates of annualized burden hours***

The estimate of burden hours is based on an internal pilot test of the survey instrument. In the internal pilot test, 10 simulated interviews were conducted and the average time for reviewing instructions, gathering mock information, and completing the survey was between 10-30 minutes. Based on these results, the estimated time range for actual respondents to complete the

survey is 10-30 minutes. For the purposes of estimating burden hours, the median time to complete the survey is used. There are approximately 8,694 countertop fabrication establishments in the United States. There are screening questions at the beginning of the survey, so some respondents might not participate. An estimated 8,600 respondents are anticipated to participate in the survey. The annual respondent burden is estimated to be 2,150 hours for this census of countertop fabrication establishments.

**Estimated Annualized Burden Hours**

<b>Respondents</b>	<b>No. of Respondents</b>	<b>No. of Responses per Respondent</b>	<b>Average Burden per Response (in hours)</b>	<b>Total Burden (in hours)</b>
<b>Managers/Owners</b>	<b>8,600</b>	<b>1</b>	<b>15/60</b>	<b>2,150</b>

***A.12.B Estimates of annualized burden costs***

Based on the U.S. Department of Labor’s Occupational Employment Statistics survey, the updated annual average wage for first-line supervisors of construction trades and extraction workers is \$75,060 and their mean hourly wage is \$36.09.

**Estimated Annualized Burden Hours**

<b>Type of Respondent</b>	<b>Total Burden Hours</b>	<b>Hourly Wage Rate</b>	<b>Total Respondent Costs</b>
<b>Managers/ Supervisors</b>	<b>2,150</b>	<b>\$36.09</b>	<b>\$77,593.50</b>

***A.13 Estimates of other total annual cost burden to respondents or record keepers***

The only costs to respondents are described in item 12 above. All record keepers are federal government contractors. Thus, estimated cost burden to them is included in item 14 below.

***A.14 Annualized cost to the government***

The annualized cost to the government for this four-year study is estimated to be \$270,427.38. After data collection ends, project staff will continue to analyze data and finalize study products. Cost of interviews is inclusive to all funding received by NIOSH to hire contracted survey staff who perform surveys and enter and submit survey data into REDCap.

***A.15 Explanation for program changes or adjustments***

This is a new data/information collection.

**A.16 Plans for tabulation and publication and project time schedule**

We plan to publish study results in both peer reviewed and non-peer reviewed journals. Our projected timeline for the four-year project is detailed in table A.16-1 below.

<b>A.16.1 Project Time Schedule</b>	
<b>Activity</b>	<b>Time Schedule</b>
Begin data collection	0-2 weeks after approval of OMB expiration.
Regular monitoring/quality assurance of incoming data	0-2 weeks after approval of OMB expiration
Finalize dataset	13-14 months after approval of OMB expiration
Analyses	15-20 months after approval of OMB expiration
Publication ready for submission to peer-review journal	25-26 months after approval of OMB expiration
Product ready for dissemination to countertop industry stakeholders	28-29 months after approval of OMB expiration

**A.17 Reason(s) display of OMB expiration date is inappropriate**

The display of the OMB expiration date is not inappropriate.

**A.18 Exceptions to certification for Paperwork Reduction Act submissions**

There are no exceptions to the certification.



