

**Request for genIC Approval**  
**CDC/ATSDR Assessing Respirator Perceptions, Experiences, and Maintenance**  
**0920-1378**

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**CIO:** The Centers for Disease Control and Prevention (CDC), National Institute for Occupational Safety and Health (NIOSH), National Personal Protective Technology Laboratory (NPPTL)

**PROJECT TITLE:** Assessing Respirator Perceptions, Experiences, and Maintenance

**PURPOSE AND USE OF COLLECTION:**

The Centers for Disease Control and Prevention (CDC), National Institute for Occupational Safety and Health (NIOSH), National Personal Protective Technology Laboratory (NPPTL) seeks approval from the Office of Management and Budget (OMB) to conduct research around the perceptions, experiences, and maintenance of respiratory protection from both an individual user and organizational standpoint.

NIOSH NPPTL has a need to collect data to evaluate the use of approved respiratory protective devices under 42 CFR 84 CFR to pinpoint areas where improvements in respirators and complementary Respiratory Protection Programs (RPPs) are necessary. The combination of major shifts in the U.S. economy and an increase in alternative or non-traditional work arrangements represents the potential for a drastic change in how respirators are used and managed in the workplace. Additionally, to fulfill recommendations made by the National Academies of Sciences, Engineering, and Medicine, an integrated research effort is needed to fill in the gaps around respirator use and maintenance as well as organizational programs that reduce barriers surrounding these topics. Such research activities occur across NPPTL projects to understand barriers to respirator use and integration as well as the development of programs and best practices in the workplace.

A primary goal of this generic package is to identify patterns in respiratory protection use, as well as health and safety programs including practices and directives that are missing in RPPs. This includes workplaces whose use of an RPP framework both is and is not under the Occupational Safety and Health Administration (OSHA) for enforcement purposes. In other words, it can include workers in nontraditional work arrangements such as contractors. None of the studies proposed under the auspices of this generic IC intend to produce results that can be generalized beyond the scope of each study. The types of information collection activities included in this generic package include qualitative interviewing or focus groups for exploratory and formative research purposes, perception and knowledge-based surveys, qualitative fit testing, and physiological monitoring while wearing a respirator.

The objective of this request is to enable NIOSH to engage in information collection activities that are focused on assessment and will result in the development of interventions, new or improved respirator designs and adoption of respiratory protection/best practices, and concept development and/or product development and testing and decrease burden to the public. Outcomes will inform new content for improved respirator training, management, and use.

This study may appear similar to a previous survey conducted in 2001 to understand respirator use across industries. However, there are substantive differences:

1. Industry changes from 2001 to now do not permit direct comparison between the two information collections.

*The U.S. economy has seen significant changes since 2001, minimizing the ability to compare data between the two efforts. For example, in 2017, the healthcare and social assistance industry sector employed more U.S. workers than the manufacturing sector (Thompson, 2018). This is in stark contrast to 2000, where there were 7 million more workers in the manufacturing sector and 2.4 million more in the retail sector than in healthcare (Thompson, 2018). These major shifts in the U.S. economy since the previous survey represent the potential for a drastic change in how respirators are used and the inability to compare prevalence between survey results in 2001 and the current survey.*

2. The limited number of industries being sampled and the substantially lower sample size in the 2023 survey do not allow for generalizability.

*In 2001, the Bureau for Labor Statistics (BLS) used their nationally representative databases (i.e., CFOI and SOII) to stratify and recruit the sample, utilizing a database of over 619,000 possible establishments. This current survey is being completed by a contractor that does not have access to the BLS databases, prompting the need for an entirely new sampling strategy that is hoping to contact 30,000 establishments with the expectation that only 3,000 of these will qualify to respond (i.e., use respirators). Thus, the expected sample size for the 2023 survey is two orders of magnitude smaller than the 2001 survey. The smaller sample size and exclusion of various industries prevents NIOSH from generalizing the data beyond the scope of the study. This study does not permit NIOSH to generalize the results to industries not included in the study. Additionally, NIOSH is not able to generalize the results within the industries from which this data is being collected with high levels of confidence given the limited sample size.*

*Therefore, even if the industry sector changes described above were not present, this 2023 survey would not be able to determine with high levels of certainty the prevalence of worker exposure and respirator use. Therefore, the 2023 survey can only identify types of respirators being used but cannot claim with certainty that no other respirators are in use. The same applies for how and for what hazards respirators are being used and how employees manage respirator use in the workplace.*

Although the 2023 dataset will not be as robust as the 2001 dataset, it will provide important inferences that NIOSH may use to inform its respirator approval program and research activities. The information obtained from this survey will be used to help NIOSH improve the likelihood that: 1) workers are properly protected when wearing respirators; 2) they are provided with correct and needed respirators; 3) have the knowledge and training to effectively use respirators provided to them. Specific objectives of this 2023 surveillance effort include:

1. Obtain a reasonable estimate as to the prevalence of worker exposure to hazardous atmospheres

2. Obtain a reasonable estimate as to the prevalence of respirator use among various industries
3. Identify the type of respirators being used and what types of contaminants they are being used to mitigate
4. Identify how respirators are used in the workplace and whether employers manage use according to their RPP to ensure maximum worker protection
5. Inform opportunities for improving respirator technologies

While the research community may understand the nuances between sample size, sample makeup, and generalizability, members of the public may be confused by important distinctions (such as “determines” versus “obtains a reasonable estimate”) when notifying them about this survey. Therefore, while this genIC request acknowledges that generalizability is not possible with this 2023 survey, press releases and other recruitment materials that require plain language techniques will not be subject to these important technical nuances (e.g., the word “determine” would be preferred over “obtains a reasonable estimate” when this study is discussed in that type of modality and for a public audience). However, any research articles or other scholarly materials that are produced to share the results of the survey will maintain these distinctions. Additionally, while this 2023 survey is not as robust as the 2001 survey, the 2023 dataset, although limited, will be used to inform the activities of NIOSH’s respirator approval program and research activities in a similar manner. For that reason, and because many members of industry are familiar with the 2001 effort, press releases and recruitment materials will reference the 2001 survey.

#### **DESCRIPTION OF RESPONDENTS:**

Respondents are key informants from companies that represent specific subpopulations that are reflective of the full spectrum of U.S. industries that rely heavily on respiratory protection to protect workers (e.g., healthcare and social assistance and public safety and emergency response). Expected respondent job roles include industrial hygienists, occupational health professionals, infection control professionals, and others who oversee the RPP for their establishment. Respondents may also include those who work at smaller businesses that employ fewer than 10 people and therefore, are not held to the same RPP requirements. Because respondents will be recruited from a variety of industries, it is expected that the respondent pool will vary in gender, age, races/ethnicities, persons residing in rural and/or urban locations, and/or in specific regions or health jurisdictions.

#### **CERTIFICATION:**

I certify the following to be true:

1. The collection is voluntary.
2. The collection is low-burden for respondents and low-cost for the Federal Government.
3. The collection is non-controversial and does not raise issues of concern to other federal agencies.
4. Information gathered will not be used to substantially inform influential policy decisions.
5. The study is not intended to produce results that can be generalized beyond its scope.

Name: Emily Haas

To assist review, please answer the following questions:

**Personally Identifiable Information:**

1. Is personally identifiable information (PII) collected?  Yes  No
2. If Yes, is the information that will be collected included in records that are subject to the Privacy Act of 1974?  Yes  No
3. If Applicable, has a System or Records Notice been published?  Yes  No

**Gifts or Payments:**

Is an incentive (e.g., money or reimbursement of expenses, token of appreciation) provided to participants?  Yes  No

**BURDEN HOURS**

Category of Respondent	Form Name	Number of Respondents	Number of Responses per Respondent	Average Hours Per Response	Total Response Burden (Hours)
Respondents for companies that use Respirators	Survey of respirator use and practices (informed consent and survey)	3,000	1	1	3,000
Respondents for companies that do not use Respirators	Survey of respirator use and practices (informed consent and survey)	27,000	1	0.30	8,100
Total		30,000			11,100

**FEDERAL COST:** The estimated annual cost to the Federal government is \$2,000,000.

**If you are conducting a focus group, survey, or plan to employ statistical methods, please provide answers to the following questions:**

**The selection of your targeted respondents**

1. Do you have a customer list or something similar that defines the universe of potential respondents and do you have a sampling plan for selecting from this universe?  Yes  No

If the answer is yes, please provide a description of both below (or attach the sampling plan)?

Refer to attached sampling plan for this information, which also highlights the consent process to inform potential participants of the private and voluntary nature of the study and provide general information about the study, the topics to be covered in the study, potential risks, and the token of appreciation available for completing the study. Screening questions may be asked; the screener includes questions to assess eligibility.

### **Administration of the Instrument**

1. How will you collect the information? (Check all that apply)

Web-based or other forms of Social Media

Telephone

In-person

Mail

Other, Explain

2. Will interviewers or facilitators be used?  Yes  No

**Please make sure all instruments, instructions, and scripts are submitted with the request.**

## Instructions for completing genIC Request for Approval for CDC/ATSDR Formative Research and Tool Development

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**TITLE OF INFORMATION COLLECTION:** Provide the name of the collection that is requested.

**PURPOSE and USE:** Provide a brief description of the purpose of this collection and how it will be used. If this is part of a larger study or effort, please include this in your explanation.

**DESCRIPTION OF RESPONDENTS:** Briefly describe the targeted group/groups for this collection.

**CERTIFICATION:** Please read the certification carefully. If you incorrectly certify, the collection will be returned as improperly submitted or it will be disapproved.

**Personally Identifiable Information:** Provide answers to the questions.

**Gifts or Payments:** If you answer yes to the question, please describe the incentive and provide a justification for the amount.

**BURDEN HOURS:**

**Category of Respondents:** Identify who you expect the respondents to be in terms of the following categories: (1) Individuals or Households; (2) Private Sector; (3) State, local, or tribal governments; or (4) Federal Government. Only one type of respondent can be selected.

**Form:** Provide the title of the information collection form.

**No. of Respondents:** Provide an estimate of the Number of respondents.

**Participation Time:** Provide an estimate of the amount of time required for a respondent to participate (e.g. fill out a survey or participate in a focus group).

**Burden in Minutes:** Multiply the Number of responses and the participation time and divide by 60.

**FEDERAL COST:** Estimate the annual cost to the Federal government for this collection.

**If you are conducting a focus group, survey, or plan to employ statistical methods, please provide answers to the following questions:**

**The selection of your targeted respondents.** Please provide a description of how you plan to identify your potential group of respondents and how you will select them. If the answer is yes, to the first question, you may provide the sampling plan in an attachment.

**Administration of the Instrument:** Identify how the information will be collected. More than one box may be checked. Indicate whether there will be interviewers (e.g. for surveys) or facilitators (e.g., for focus groups) used.