

Respiratory Health Program PPOP

What are our priorities?

The National Institute for Occupational Safety and Health (NIOSH) Respiratory Health Program works with a diverse range of partners in industry, labor, trade associations, professional organizations, academia, and other governmental agencies. The program focuses on:

- Protecting workers from respiratory diseases that are caused or made worse by work exposures
- Improving workers' respiratory health

What do we do?

The program works with partners to conduct research, share information, provide services, and transfer research findings into practice. Listed below are key program activities.

- Providing summaries of national data tracking the burden of work-related respiratory disease and the types and amounts of hazardous workplace respiratory exposures.
- Providing health screening and surveillance services to U.S. coal miners under a program mandated by Federal law called the Coal Workers' Health Surveillance Program (CWHSP). We help individual miners by detecting disease early and providing group data to guide broader prevention activities.
- Conducting multidisciplinary research needed to identify respiratory hazards; characterize their risks; and design, validate, and disseminate effective interventions.
- Contributing to the NIOSH Health Hazard Evaluation (HHE) Program by responding to U.S. workplace requests for evaluations of potential respiratory hazards and providing recommendations for solutions
- Certifying courses that train technicians to perform spirometry (a type of lung function testing).
- Providing training and certification testing to physicians who classify chest x-rays for findings of pneumoconiosis (a chronic lung disease caused by inhaling dust) using the International Labour Office classification system.

What have we accomplished?

- Facilitated COVID-19 vaccination efforts at mines in West Virginia.
- [Reported](#) on COVID-19 cases in workers at 115 meat or poultry processing facilities in 19 states during April 9-27, 2020, as part of the CDC response to the pandemic.
- Reported HHEs on key contemporary work-related respiratory health issues such as [exposures and health concerns in a dental clinic](#), [exposures at a coffee roasting, flavoring, and packaging facility](#), and [exposures and health concerns at a law enforcement building](#).
- Led an effort to assess the feasibility of a US mesothelioma patient registry. In 2020 NIOSH:
 - funded an academic medical center to develop and test a questionnaire and clinical information collection tool with mesothelioma patients
 - funded a state public health department to assess rapid mesothelioma case identification through electronic pathology reporting to a central cancer registry
- [Identified](#) work-related respiratory health outcomes at a machine manufacturing facility that had previously experienced a cluster of a novel lung disease, B-cell bronchiolitis, alveolar ductitis, and emphysema (BADE).
- [Determined](#) that overexposures to respirable dust containing quartz continue to occur at U.S. surface coal mines, particularly among miners in drilling occupations. Enhanced efforts to control quartz exposures is warranted.

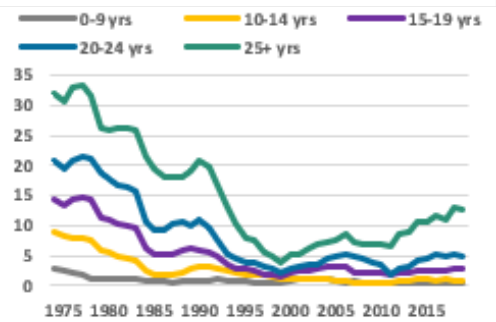
What's next?

- Facilitate COVID-19 vaccination efforts at mines.
- Conduct surveillance for COVID-19 cases and vaccination by occupation.
- Evaluate potentially hazardous exposures and workers' respiratory health in a variety of settings, such as shipbuilding, artificial stone countertop manufacturing, dental clinics, and plastic manufacturing.
- Evaluate novel virtual and blended platforms for spirometry training courses as alternatives to in-class settings.
- Engage clinical organizations to pilot the collection and use of work information in electronic health records and implementation of electronic case reporting for silicosis to public health agencies.

At-A-Glance

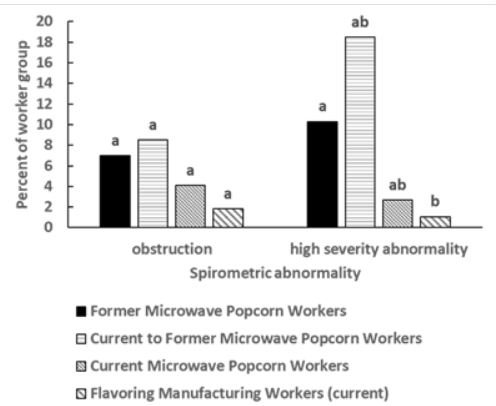
The Respiratory Health Program mission is to provide national and international leadership to prevent work-related respiratory diseases and improve workers' respiratory health. This snapshot shows recent accomplishments and upcoming projects.

Percentage of examined underground miners with coal workers' pneumoconiosis (ILO category 1/0+) by tenure in mining, 1974-2018*



Source: Coal Workers' Health Surveillance Program
* Percentages are 5-year moving averages.

Spirometric abnormalities at last spirometry testing in former & current microwave popcorn workers & flavoring manufacturing workers adjusted for BMI & smoking*



Source: Cox-Ganser et al, 2020 * a and b: Within each spirometric abnormality, bars with the same letter are not statistically different at $P \leq 0.05$. Current microwave popcorn workers at first test & former workers at last test.

To learn more, visit
www.cdc.gov/niosh/programs/resp
October 2021



Centers for Disease Control
and Prevention
National Institute for Occupational
Safety and Health

Mention of any company or product does not constitute endorsement by the National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention.