

## At-A-Glance

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

### 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
- Optimizing workers' respiratory health

### What do we do?

The program works with partners to conduct research, share information (including state-of-the-art recommendations), provide services, and transfer research findings into practice. Examples include:

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

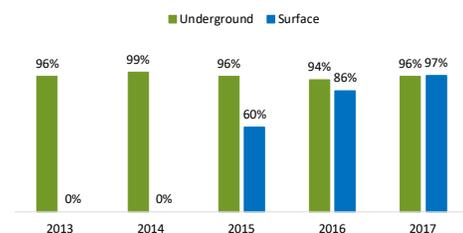
### What have we accomplished?

- Conducted workplace investigations through the HHE Program at 8 coffee production facilities in 2017 to characterize exposures to diacetyl and 2,3-pentanedione, assess respiratory health outcomes, and recommend ways to decrease the risk of respiratory disease. Visit the NIOSH topic page for "[Coffee Roasting and Packaging Facilities](#)" for more information.
- Developed and posted online the spirometry training video "[Learning Curves: Technical Procedures for Spirometry Testing in the Occupational Setting](#)." The video was viewed over 550 times between release in July 2017 and the end of 2017.
- Centers certified by NIOSH conducted over 350 Spirometry Training Courses for nearly 3,800 students in 43 states plus Puerto Rico, Mexico, Columbia, Peru, Trinidad and Tobago, Japan, Germany, and Italy. The number of students has increased 56% since 2013.
- Provided 7,473 chest x-ray screening examinations in 2017 through The Coal Workers' Health Surveillance Program, 27% more than in 2016.
- Developed an information model, including industry/occupation, for health information systems, and submitted it to Health Level Seven International (HL7), a consensus standard-setting organization, for review.
- Published reports on key contemporary work-related respiratory health issues:
  - [Respiratory Symptoms in Hospital Cleaning Staff Exposed to a Product Containing Hydrogen Peroxide, Peracetic Acid, and Acetic Acid](#)
  - [Malignant Mesothelioma Mortality—United States, 1999-2015](#)

### What's next?

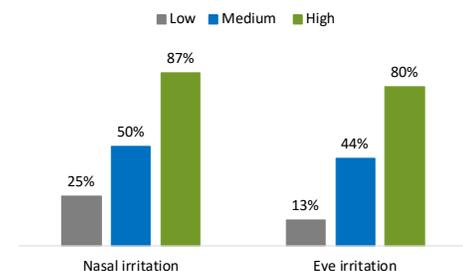
- Summarize what NIOSH has learned about diacetyl and 2,3-pentanedione exposures in coffee production facilities, and evaluate effectiveness of engineering controls.
- Work with the Council of State and Territorial Epidemiologists and selected state health departments (CA, MA, MI, NJ, NY, and WA) to establish a framework for electronic case reporting of silicosis and work-related asthma.
- Revise the 2004 NIOSH Spirometry Training manual to provide updated professional guidance to NIOSH-certified course sponsors.

### Percent active coal mines with health surveillance plans: Underground and Surface



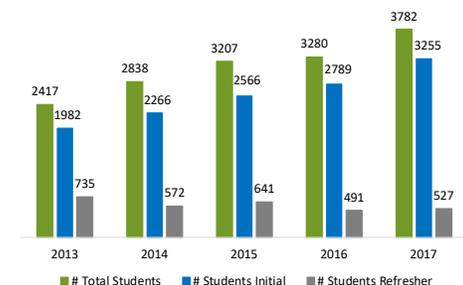
Source: NIOSH program records. The MSHA rule mandating health surveillance for surface coal miners became effective August 2014. The surface mine portion of the graph does not include combined underground/surface mines.

### Percent of hospital cleaning staff with symptoms by level of exposure to mixture of hydrogen peroxide and peracetic acid



Source: HHE Report 2015-0053-3269, January 2017

### Number of spirometry training course attendees, 2013-2017



Source: NIOSH Spirometry Training Program

To learn more, visit  
<https://www.cdc.gov/niosh/programs/resp/>

<https://doi.org/10.26616/NIOSH PUB2018159>  
 DHHS CDC (NIOSH) Publication No. 2018-159

