## **NOSH** Respiratory Health Program

May 2016

#### 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 useful 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 through early disease detection 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 Program by responding to requests for evaluations of potential respiratory hazards and providing recommendations for solutions.
- Make high quality respiratory health screening tools available to employers and workers. We:
  - Certify courses that train technicians to perform spirometry (a type of lung function testing).
  - Provide training and certification testing to physicians who classify chest radiographs for findings of pneumoconiosis using the International Labour Organization's classification system.

### What have we accomplished?

- Implemented new requirements of the Mine Safety and Health Administration's Respirable Coal Mine Dust Rule for adding surface miners and spirometry to NIOSH's Coal Workers' Health Surveillance Program. After the first year of implementation, 60% of surface mines had approved surveillance plans and NIOSH directly provided mobile screening services to more than 1000 miners.
- Published an authoritative NIOSH publication, Promoting Health and Preventing Disease and Injury Through Workplace Tobacco Policies. It contains new recommendations on emerging practices and e-cigarettes and has already influenced stakeholders to restrict e-cigarette use in nonsmoking areas.
- Identified occupations and industries that most need special programs and policies to reduce

- smoking in several publications.
- Identified several emerging hazards through surveillance and the Health Hazard Evaluation program:
  - Silica exposures and associated disease risks (silicosis, lung cancer, chronic obstructive pulmonary disease) from manufactured countertops, and
  - Diacetyl exposure / obliterative bronchiolitis risk associated with coffee roasting and grinding in coffee production facilities.
- Coordinated a NIOSH-wide project that continued efforts to build the case for including industry/occupation information in electronic health records. Developed knowledge bases and decision logic for three clinical decision support modules.

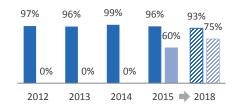
#### What's next?

- Implement new mandates of the Respirable Coal Mine Dust rule, which requires substantial infrastructure development. A major focus in 2016 will be on implementing spirometry services.
- Conduct workplace investigations to better characterize occupational exposures to diacetyl
- and other flavoring chemicals associated with coffee roasting and grinding in coffee production facilities
- Update physician training and competency evaluation in classifying chest radiographs for findings of pneumoconiosis in partnership with the American College of Radiology.

#### At-A-Glance

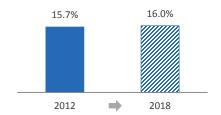
The Respiratory Health Program mission is to provide national and international leadership to prevent work-related respiratory diseases and optimize workers' respiratory health. This snapshot shows recent accomplishments and upcoming work.

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



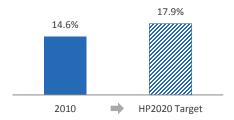
Source: NIOSH program records. The recent MSHA rule mandating health surveillance be provided to surface coal miners became effective 8/1/2014. Surface mines portion of the graph does not include combined underground/ surface mines.

## Estimated percent with asthma caused or made worse by their current job among adults with current asthma



Source: BRFSS Asthma Call Back Survey. Due to recent methodological changes, 2012 is used as a baseline. We anticipate that increased awareness of work-related asthma might paradoxically lead to an apparent increase in the measure.

# Proportion of adults with current asthma who have discussed with their doctor whether their asthma was work related



Source: Healthy People 2020. Follow-up data projected to be collected in 2018.

