

NIOSH Miner Health Partnership

Breakout session summary 11.17.2021

In attendance:

54 individuals from: Mining companies, Academia, Trade Associations, Unions, Consulting, Supporting Industry, Healthcare, Government

Summary to core question discussions

Note: Questions 2 and 3 were addressed by 3 and 2 out of 5 groups, respectively

Q1: In your experience, what are the most pressing workplace health and exposure issues that you face?

- Data (on the health and exposures of mine workers)
 - Monitoring employee health over time
 - Data sharing challenges
 - Real-time detection and monitoring
 - Machine learning applications
 - Best practices for how to use and apply solutions to mining
 - Reliance on international data for mine worker health (e.g., Gates Foundation) ... domestic data are missing, inconsistent
- Health status & outcomes
 - Hypertension, CVD, obesity, fatigue (and scheduling), heat stress, hearing loss, arthritis, chronic MSDs, mental health, stress, ergonomics, cumulative impact of head trauma, obstructive lung disease, metabolic syndrome
- Health exposures
 - Dust (particularly silica)
 - Controls are lacking considering increasing exposures
 - Behavioral interventions are needed, but difficult
 - Whole body vibration
 - Noise exposure
 - Vapors, fumes, gases (and resulting lung function effects)
 - Welding exposures
- Health behaviors
 - Opioids & substance use, inactive (sedentary) workforce, diet quality, smoking
 - Elevated health risk behaviors
 - COVID vaccination status in workplaces
- Organization of work
 - Shift work
 - Medical leave challenges considering health outcomes
 - Remoteness of sites – challenges in access, availability and timeliness of resources (including medical providers)
 - Methods to overcome challenges to establish wellness programs
- Controlling exposures
 - Improvements of controlling several IH exposures need to be highlighted
 - More work around embedding technology into dust suppressants (especially outdoor)

Q2: How are you hoping to benefit from the partnership?

- Learn what others are doing (to address a health-related issue)
 - Establish common approaches/methodologies (when appropriate)
 - To benchmark an understanding of current health & exposures for monitoring progress
- Sharing of information
 - Can this serve as a clearinghouse for best practices?
 - Provide direct information and content to share (e.g., safety shares, infographics, tools, programs, etc.)
- Establishing collaborations – to share and implement multiple approaches
- Communicating awareness of concerns or emerging issues
- Strengthening internal programs
- To begin communications that could lead to new processes or policies (e.g., setting of international standards)
- Prevention planning, especially for infectious disease and pandemic-like events give mine workers often designated as critical infrastructure workers

Q3: Are you aware of, or involved with, any unique, innovative workplace approaches to promote health that you can share with the network?

- Example 1: New standard that was developed for cabin enclosures for dust control. Good results from a pilot project on two pieces of equipment at one of quarries. Looking to see how this might apply elsewhere, e.g., not just to vehicles?
- Example 2: health insurance program where if miners meet certain metrics, they receive reduction in insurance premiums

Topics about strategies to overcome barriers:

- Topic 1: Can partnership address regulatory issues given Jerry's comments [e.g., partnership is not a rule making body]?
 - Stated regulatory issues has to be addressed at some point especially if talking about innovative approaches.
 - Experienced reluctance to employ innovative approaches out of concern about how regulatory authorities will view those in light existing regulations
 - That can be a deterrent to implementation and dissemination to innovative approaches
 - Would be useful if partnership can tackle this issue, i.e., barriers that serve as deterrents to the introduction of innovative approaches to improve miner health?
- Topic 2: Similar to Topic 1, but less applicable to innovation needs. Example of vaccination rates for flu and COVID vaccinations in mining. What are other factors that impede organizations and individuals from doing things that keep workers healthy. What are barriers that are keeping them from being healthy?
- Topic 3: What can we do to establish wellness programs? There is a struggle to establish wellness programs established with additional backlash from unions.