

# Board 2 - Health conditions among male workers in mining and other industries that rely on manual labor occupations: National Health Interview Survey, 2007-2018

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Tuesday, November 8, 2022



3:00 PM - 4:00 PM



BCEC - Exhibit Hall A, PS Area 3

**Session:** Poster: Barriers to health equity for essential workers and the public

**Program:** Occupational Health and Safety

## Abstract

**Background and Objective(s).** Mining is an industry with diverse, demanding occupational exposures. The prevalence of chronic health conditions in currently working miners is an area of active research. Of particular interest is how the prevalence of health conditions in miners compares to that of workers employed in other industries with a high proportion of manual labor occupations. Additional comparisons to nonmanual labor groups may also further elucidate health conditions associated with manual labor.

**Methods.** The National Health Interview Survey public data were analyzed for years 2007–2018. Six industry groups with a high proportion of manual labor occupations were identified (mining; oil and gas extraction; construction; manufacturing; transportation and warehousing; and agriculture, forestry, fishing, and hunting).

Female workers were excluded. The prevalence of chronic health outcomes was calculated for each group and compared to nonmanual labor industries.

**Results.** Miners (N [weighted]=164,867), even when compared to industries with similar proportions of manual labor occupations, have increased prevalences of many health conditions. Currently working male miners showed the highest increased prevalence of hypertension (in those < 55 years of age), hearing loss, lower back pain, leg pain progressing from lower back pain, and joint pain, compared to nonmanual labor industries workers. Construction workers also demonstrated high prevalences of pain.

**Conclusion(s).** Work exposures that could contribute to hypertension include stress, shift work, and high noise. Chronic pain is damaging and can lead to other health conditions including opioid misuse, a crisis in the mining and construction

industries. Mining employers should continue to identify and minimize work factors that cause injury and ergonomic hazard, and also provide an environment where workers feel comfortable discussing pain management and substance use. Future studies that also include more robust information on workplace exposures are needed.

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## Presenter

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