

THE MINE SAFETY AND HEALTH ADMINISTRATION'S SILICA EXPOSURE STANDARD MUST BE STRENGTHENED TO HELP PREVENT BLACK LUNG DISEASE IN U.S. MINERS

Coal miners and their communities are facing a black lung disease epidemic.

Since 2000, after decades of decline, the number of U.S. coal miners diagnosed with black lung disease has dramatically increased. In Central Appalachia, 1 in 5 veteran miners have the disease and the rate of miners being diagnosed with the most severe form of the disease – Progressive Massive Fibrosis (PMF) – is the highest ever recorded.¹ These cases of PMF are being diagnosed in miners with as little as 8 years of experience, who are as young as 38, and even in those that have only worked in surface mines.² This resurgence of black lung disease is being driven in large part by miners' increased exposure to silica dust as changes in mining practices require miners to cut through more rock for longer periods of time.³

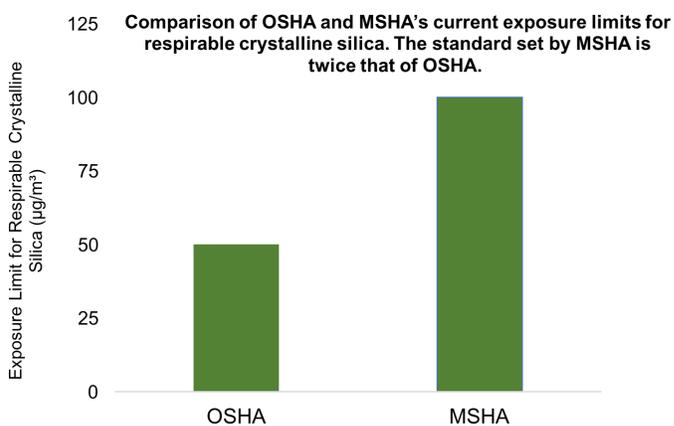
Black lung disease, caused by exposure to coal and silica dust, is entirely preventable but the current crystalline silica exposure limit for miners is twice the limit recommended by the National Institute for Occupational Safety and Health (NIOSH).⁴

In 1995, NIOSH found that crystalline silica constituted a particular lung hazard to coal miners and recommended that the exposure limit be reduced from 100 $\mu\text{g}/\text{m}^3$ to 50 $\mu\text{g}/\text{m}^3$.⁵ The Mine Safety and Health Administration

(MSHA) initiated a process to revise the standard during the previous administration but that process was not completed. Under the current administration, MSHA has to date shown no willingness to strengthen it. Thus, the silica standard for miners has not been updated since 1985.⁶ This lack of action has resulted in working conditions that continue to put miners at exacerbated risk for developing black lung disease.

Congress should direct MSHA to lower the silica standard and prevent the spread of this incurable, but preventable, disease.

In support of the petition submitted in June 2019 by the United Mine Workers of America and the United Steel Workers Union, Congress should direct MSHA to develop a new, stronger silica standard. In 2016 the Occupational Safety and Health Administration (OSHA) established a reduced silica standard that matches the NIOSH recommendation and allows exposure to a concentration of 50 $\mu\text{g}/\text{m}^3$ of silica over an eight-hour shift.⁷ MSHA must promulgate a new rule that matches, or is lower than OSHA's standard. It is unacceptable and unconscionable that our nation provides miners less protection than any other group of workers when they are most at risk of developing black lung disease.



¹ Blackley, D.J. et al. (2018) Continued Increase in Prevalence of Coal Workers' Pneumoconiosis in the United States, 1970–2017. *Am J Public Health*. 108:1220-1222.

² Blackley, D.J. et al. (2018) Progressive Massive Fibrosis in Coal Miners From 3 Clinics in Virginia. *JAMA*. 319(5):500–501.

³ Kreiss, K. & Boguang, Z. (1996). Risk of Silicosis in a Colorado Mining Community. *Am Journal Ind Med*, 30: 529-539.; Cohen, R.A. et al. (2016). Lung Pathology in U.S. Coal Workers with Rapidly Progressing Pneumoconiosis Implicates Silica and Silicates, *Am J Resp Crit Care*. 193(6): 673-680; Laney, A.S. et al. (2010). Pneumoconiosis among underground bituminous coal miners in the United States: is silicosis becoming more frequent?, *Occup Environ Med*. 67:652-656; Boyles, S. (2018). CDC: Coal Workers With Black Lung Disease Are Dying Earlier. Available from:

www.medpagetoday.com/pulmonology/generalpulmonary/74405.

⁴ NIOSH. (1996). Preventing Silicosis and Deaths in Construction Workers. Available from:www.cdc.gov/niosh/docs/96-112/default.html; National Academies of Sciences; Committee on the Study of the Control of Respirable Coal Mine Dust Exposure in Underground Mines. Monitoring and Sampling Approaches to Assess Underground Coal Mine Dust Exposures. Washington (DC): National Academies Press (US); 2018 Jun 28. Appendix G. Mandatory Airborne Dust Standards for U.S. Underground Coal Mines. Available from:

www.ncbi.nlm.nih.gov/books/NBK531848/

⁵ NIOSH (1995). Criteria for a Recommended Standard: Occupational Exposure to Respirable Coal Mine Dust. Available

from:www.cdc.gov/niosh/docs/95-106/pdfs/95-106.pdf?id=10.26616/NIOSH/HPUB95106

⁶ Available from:

www.reginfo.gov/public/do/eAgendaViewRule?pubId=201604&RIN=1219-AB36

⁷ See: OSHA.OSHA's Respirable Crystalline Silica Standard for Construction. Available from: www.osha.gov/Publications/OSHA3681.pdf; OSHA. OSHA's Respirable Crystalline Silica Standard for General Industry and Maritime. Available from: www.osha.gov/Publications/OSHA3682.pdf