



AMERICAN PUBLIC HEALTH ASSOCIATION  
*For science. For action. For health.*

November 22, 2016

Mr. Joseph Main  
Assistant Secretary of Labor for Mine Safety and Health  
U.S. Department of Labor  
201 12th Street South, Suite 401  
Arlington, VA 22202-5450

Re: Docket No. MSHA-2014-0031

Dear Mr. Main:

On behalf of the American Public Health Association, a diverse community of public health professionals who champion the health of all people and communities, I write to comment on the Mine Safety and Health Administration's request for information on miners' exposure to diesel exhaust (81 *Federal Register* 36826).

In 2014, APHA adopted a policy statement entitled Preventing Environmental and Occupational Health Effects of Diesel Exhaust. Among the recommendations, APHA called upon MSHA to review and reconsider its current diesel emission standards in light of recent scientific developments regarding the carcinogenicity of diesel engine exhaust.<sup>1</sup> We therefore commend MSHA for examining the adequacy of its current standards. Technological advances in diesel engine design and emission controls, compelled in part by regulatory changes by the U.S. Environmental Protection Agency, suggest that more protective standards for mine workers are feasible.

In addition to the classification by the International Agency for Research on Cancer of diesel exhaust as a human carcinogen, we wish to bring the following new research to MSHA's attention:

- An analysis of data from the Canadian National Enhanced Cancer Surveillance System which examined the relationship between exposure to diesel emissions and bladder cancer. Men with more than 10 years of exposure to high concentrations of diesel emissions (the category in which underground miners were assigned based on a job-exposure matrix) were at an increased risk of bladder cancer. The increased risk for this group was more than twofold the risk of those with no work-related exposure to diesel exhaust (OR = 2.45, 1.04-5.74).<sup>2</sup>

---

<sup>1</sup> American Public Health Association. Policy Statement No. 20147. Available at: <http://www.apha.org/policies-and-advocacy/public-health-policy-statements/policy-database/2015/01/28/12/14/preventing-health-effects-of-diesel-exhaust>.

<sup>2</sup> Latifovic L, Villeneuve PJ, et al. Bladder cancer and occupational exposure to diesel and gasoline engine emissions among Canadian men. *Cancer Med.* 2015 Dec;4(12):1948-62.

- An analysis of data from the Canadian National Enhanced Cancer Surveillance System examined the relationship between exposure to diesel emissions and incidence of colorectal cancer. The researchers observed an increased risk of rectal cancer (OR = 1.98, 95 % CI = 1.09-3.60) among men with occupational exposure to diesel emissions, in particular among those with more than 10 years of exposure at high concentrations (OR = 2.33 95 % CI = 0.94-5.78; p-trend = 0.02).<sup>3</sup>

The evidence on the serious adverse health effects of diesel exhaust continues to accumulate. This makes more robust protections for mine workers – the most heavily exposed group – vitally important.

The regulations adopted by MSHA in 2001 were crucial in reducing mine workers' exposure to diesel particulate matter. However, the regulations were based on the technological feasibility that existed at that time. In the 15 years since those rules were issued, significant technological advances have been made with respect to diesel engine performance and emission controls. Adopting the latest in technological that are available, to the extent they are feasible, is necessary in the absence of a threshold limit value on DPM. We urge MSHA to examine these advances and act on the opportunity to better protect mine workers from the risk of cancer and other adverse health effects.

We commend MSHA for examining the adequacy of its regulations on diesel exhaust and appreciate the opportunity to offer our comments.

Sincerely,



Georges C. Benjamin, MD  
Executive Director

---

<sup>3</sup> Kachuri L, Villeneuve PJ, et al. Workplace exposure to diesel and gasoline engine exhausts and the risk of colorectal cancer in Canadian men. *Environ Health*. 2016 Jan 14;15:4.