

October 27, 2022

Mr. Doug Parker Assistant Secretary of Labor Occupational Safety and Health Administration U.S. Department of Labor

RE: Advance Notice of Proposed Rulemaking on blood lead level for medical removal Docket No. OSHA 2018 0004 (87 *Federal Register* 38343, June 28, 2022)

Dear Assistant Secretary Parker:

On behalf of the American Public Health Association, a diverse community of public health professionals that champions the health of all people and communities, we concur that there is an immediate need to update the OSHA lead standard. In 2017, we adopted a policy statement calling on OSHA to strengthen its lead standard. We are pleased to see OSHA taking an initial step in that direction with its advanced notice of proposed rulemaking (87 *Federal Register* 38343) and we support this effort. These comments were developed in collaboration with members of APHA s Occupational Health and Safety Section.

against cardiovascular and reproductive risks associated with blood lead concentrations experienced by workers. As OSHA notes in the ANPRM, California and Washington have invested considerable effort in updating their occupational lead standards. OSHA should show leadership on this matter as well.

We appreciate the opportunity to provide responses to some of the questions posed in the ANPRM.

Ouestion #1 (Lower the blood lead level that prompts medical removal protection)

APHA concurs with OSHA that significant adverse health effects are associated with blood lead

adverse health outcomes in adults.²

pregnancy.³ Lower exposures and corresponding reduced employee blood lead levels are possible to achieve with the substitution of safer materials, engineering controls, stringent housekeeping practices, worker training, and personal protective equipment. For example, lead-free alloys are used by the military and promoted by the Electronics Manufacturers Association to replace lead-based solders.⁴ Improved hygiene practices for employees and the work

disturbing lead-containing materials. Requirements to improve work practices should not solely be triggered by personal air monitoring results.

Question #11 (Notification of blood lead testing results)

APHA recommends that the results of blood lead tests be provided to the employers (as is current practice) but also provided at the same time to employees directly from the laboratory, physician or other licensed health professional. The employer should not serve as the intermediary. Blood lead results provided to workers should be accompanied by information on the harms of lead exposure, control measures that employers need to adopt to address the source of the exposure, rights concerning medical removal and more robust whistleblower protections.

Question #14 and #22 (Need to revise the antiquated OSHA lead standard)

-home lead exposures. ^{2,12,13,14} Because serious health effects of lead at low levels are well documented and lead exposure is preventable, recommends that occupational lead standards: 1) reduce the concentrations of lead in air that trigger regulatory action; 2) lower the blood lead level that prompts medical removal from work; 3) enhance medical monitoring for lead-related health problems; and 4) implement other improvements for protective clothing, hygiene practices, training and education. ¹ An updated OSHA standard should be designed to ensure that a μg/dl.

Occupational lead standards should more fully address reproductive effects. Lead exposure is associated with impaired hormone production and semen quality. Pregnant workers and workers who may become pregnant are particularly vulnerable to the effects of lead as they, their fetuses, and their offspring are at risk of adverse health effects even at low blood lead

appears to be the strongest risk factor for pr $$^{16}\,\text{OSHA}$$ should include additional training requirements for all lead exposed workers, including information on the full

higher blood level levels than non-Hispanic white children.²⁴ The risk of take-home lead dust likely contributes to this disparity. Given the evidence linking workplace exposures to childhood lead poisoning, it is essential that OSHA update the lead standard and acknowledge that exposure reductions in the workplace can contribute to efforts to prevent childhood lead poisoning. A goal of the revised standard should be to eliminate these preventable take-home exposures.

Other potentially vulnerable populations that should be considered from a health equity perspective include workers of color and foreign-born workers. For example, there is evidence that Hispanic and foreign-born workers may be at increased risk of lead exposure likely due to the industries in which they work. The California Occupational Lead Poisoning Prevention Program has found that workers with a Hispanic surname are overrepresented among workers with blood lead level

25 In King County (Seattle) Washington, there is evidence that workers of color experience higher rates of lead poisoning in both general industry and in construction trades.

Question #14 (Reduce the concentrations of lead in air that trigger regulatory action)

concentrations of airborne lead that would trigger regulatory action. Pharmacokinetic modeling conducted by the California

Hazard Assessment indicates that a PEL for lead should not exceed an 8-hour time-weighted average of $2.1~\mu g/m^3$ to ensure blood lead levels remain below $10~\mu g/dl$ in 95% of workers over a working lifetime. Workplace exposure standards should be designed to maintain worker exposures well below levels known to cause serious adverse health effects. Since lead is one of the most extensively studied occupational hazards, and the evidence linking low exposure levels to adverse health effects is strong, it is contrary to public health to permit these risks to persist. OSHA should adopt of PEL of no higher than 5 ug/m^3 and an action level of 2 ug/m^3 .

Compliance Program Plans

statement calls on employers to eliminate the use of lead in workplaces, when possible. Safer alternatives to lead in industrial paints, plastics, ammunition, solder, pigments, and other chemicals are available. This includes at gun ranges where jacketed, lead-

²⁴ Teye SO, Yanosky JD, Cuffee Y, et. al. Exploring persistent racial/ethnic disparities in lead exposure among American children aged 1-5 yeaen a rETQ1T/0et-4(s)]()e792 re69tsN.024 150.26 Tm0 G[lt≯50.26 BT/F1ar0.26 Tm