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July 15, 2014

Ann Soiza, Assistant Director
Division of Occupational Safety and Health
Washington State Department of Labor & Industries
P.O. Box 44000
Olympia, Wash. 98504-4000

Dear Ms. Soiza:

At the request of Dr. Todd Schoonover, with the Safety & Health Assessment & Research for Prevention (SHARP) program, I am writing to share some suggestions for updating the Washington Administrative Code (WAC) related to occupational standards for lead. Dr. Schoonover spoke with Dr. Steve Whittaker on our staff, and it is my understanding that the Department of Labor & Industries will be convening a panel to review the current occupational standards for lead.

In September 2013, I wrote to Governor Inslee, asking that his administration look at updating the two standards that are designed to protect workers from occupational exposures to lead. Those are:

- WAC 296-62-07521: General industry lead standard
- WAC 296-155-176: Lead in construction standard

Washington State's current occupational standards for lead are based on the level of scientific knowledge about lead toxicity available in the 1970s and do not reflect our current understanding of lead's health effects.

Under current standards, workers can legally be exposed to lead when their blood lead levels (BLLs) are as high as 60µg/dl. Numerous recent studies have demonstrated negative health consequences related to lead exposure at BLLs well below 60 µg/dl. The CDC's "Healthy People 2020" national public health goal is to eliminate BLLs in all adults that are higher than 10 µg/dl.

It is notable that in March 2014, the Washington State Board of Health adopted a revised case definition for an adult BLL to be consistent with these CDC guidelines, reducing the level of concern for adults from 25µg/dl to 10µg/dl.

Recognizing the severe health consequences associated with relatively low-level lead exposures, the California Department of Public Health is currently working with Cal/OSHA to revise its General Industry Lead Standard and Lead in Construction

Standard. To the best of our knowledge, no other states have undertaken this issue—giving Washington State an opportunity to further its reputation as a national leader in worker health and safety.

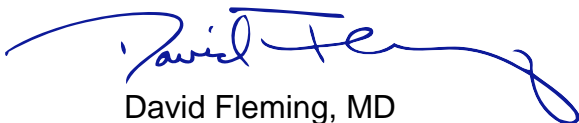
While the issue of adjusting Washington State’s occupational standards for lead was moved to the forefront for us following recent worker exposures in a King County firing range, this issue is not new. Several years ago, the Washington State Department of Ecology’s 2009 Washington State Lead Chemical Action Plan suggested one way to reduce adult lead exposure in the workplace was to “[u]pdate standards by adopting the comprehensive recommendations for lead workers put forward by the 2007 Association of Occupational and Environmental Clinics”.

I appreciate that the Department of Labor & Industries’ Division of Occupational Safety and Health is convening a panel to consider rulemaking to update Washington’s occupational standards for lead. Please find attached a summary table that describes our recommendations, which are based on those developed by the California Department of Public Health. Although we do not specifically address the Permissible Exposure Limit (PEL) for lead in these recommendations, we also request that the Department of Labor and Industries’ Division of Occupational Safety and Health evaluate the feasibility of adopting the health-based PELs recommended by the California Department of Public Health.

I would be happy to make myself available to discuss this issue with you in greater detail or to answer any questions you may have. You may also reach out directly to Steve Whittaker, PhD, Public Health Researcher with the Local Hazardous Waste Management Program, at 206-263-8499 or steve.whittaker@kingcounty.gov.

I appreciate your consideration on this issue.

Sincerely,

A handwritten signature in blue ink that reads "David Fleming". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

David Fleming, MD
Director and Health Officer

Public Health-Seattle & King County: Proposed updates to Washington State's occupational lead standards

Requirement	General Industry standard (WAC 296-62-07521)	Construction standard (WAC 296-155-176)
Medical surveillance	<ul style="list-style-type: none"> • Trigger tasks not applicable 	<ul style="list-style-type: none"> • All employees to be assigned to areas where level 2 or 3 trigger tasks^a are performed must receive a baseline medical exam.
	<ul style="list-style-type: none"> • Medical surveillance, including blood lead level (BLL) testing, must be provided to all employees with potential for lead exposure and should not be dependent on personal airborne lead level measurements. • After the initial series of BLLs, time intervals between sampling must reflect the importance of maintaining BLLs below 10 µg/dL, with testing intervals decreasing once BLLs are above 10 µg/dL. • Examination of teeth and gums is obsolete and should be deleted. • All employees with the potential for lead exposure must be provided an annual blood pressure measurement and a brief questionnaire regarding medical conditions that might increase the risk of adverse health effects of lead exposure. • Routine ZPP testing should be deleted. 	
Medical Removal Protection	<ul style="list-style-type: none"> • Workers must be removed from lead exposure if a single blood lead concentration is at or above 30 µg/dL or if two successive blood lead concentrations measured over a four-week interval are at or above 20 µg/dL. Employees who have been medically removed may return to work when two blood lead tests taken four weeks apart are less than 15 µg/dL. 	
Protective Work Clothing	<ul style="list-style-type: none"> • Employers must provide protective work clothing and shoes to all employees exposed to lead at or above the AL. 	<ul style="list-style-type: none"> • Employers must provide protective work clothing and shoes to all employees performing level 1, 2, or 3 trigger tasks^a or exposed to lead at or above the AL.
Hygiene	<ul style="list-style-type: none"> • More health protective hygiene practices and policies must be in place to eliminate ingestion of lead. • Employers must regularly test surfaces in eating areas and change areas and to clean more frequently when lead is found. A quantitative limit for lead on surfaces must be set and acceptable sample collection and analysis methods specified. 	
Training	<ul style="list-style-type: none"> • Employee training must be conducted quarterly. • Training must be provided in a format that is accessible to employees. Specifically, training must be in a language understandable to workers and the methods used must be appropriate for employees with no or low literacy skills. Training must maximize the use of participatory and hands-on methods. 	
Warning Signs	<ul style="list-style-type: none"> • Employers must post a warning sign in areas where lead is present. The sign must be in a language understandable to workers 	
Engineering and Work Practice Controls	<ul style="list-style-type: none"> • Minimum engineering and work practice controls must be defined and required unless the employer can demonstrate that such controls are not feasible. • Certain high risk work practices are not allowed. 	

^a**Trigger tasks:**

- Level 1:** a) where lead containing coatings or paint are present: manual demolition of structures (e.g., dry wall), manual scraping, manual sanding, heat gun applications, and power tool cleaning, grinding, or sanding with HEPA dust collection systems; b) spray painting with lead paint.
- Level 2:** a) using lead containing mortar; lead burning and b) where lead containing coatings or paint are present: rivet busting; power tool cleaning without dust collection systems; cleanup activities where dry expendable abrasives are used; and abrasive blasting enclosure movement and removal.
- Level 3:** abrasive blasting, welding, cutting, and torch burning.