



AMERICAN COLLEGE OF
OCCUPATIONAL AND
ENVIRONMENTAL MEDICINE

November 7, 2019

Occupational Safety and Health Administration
U.S. Department of Labor
Room N-3653,
200 Constitution Avenue NW,
Washington, DC 20210

Re: Docket No. OSHA-H005C-2006-0870

To Whom It May Concern:

The American College of Occupational and Environmental Medicine (ACOEM) would like to thank the Occupational Safety and Health Administration for the opportunity to comment on this proposed revision to the beryllium rule.

ACOEM is a national medical society representing more than 4,000 occupational and environmental medicine physicians and other health care professionals devoted to preventing and managing occupational injuries

We strongly support OSHA's proposal to include both construction and shipyard workers under the rule.

ACOEM has long supported protecting construction and shipyard workers. In comments submitted to OSHA in 2017, ACOEM encouraged OSHA to retain the medical surveillance, medical removal, and other ancillary standards for both construction and shipyard workers whenever airborne or dermal exposure to beryllium is a significant possibility, as defined in the OSHA standard in other industries.

ACOEM has several concerns regarding the NPRM that we encourage OSHA to consider. Some of the changes now being proposed will diminish health protection for workers exposed to beryllium, compared to the final rule that OSHA promulgated on January 9, 2017.

Separating the term “beryllium sensitization” from the definition of “confirmed positive”

The 2017 OSHA beryllium standard uses the term “confirmed positive” as the criteria for the definition of “beryllium sensitization.” However, in the current construction and maritime proposal, OSHA has proposed separating the term “beryllium sensitization” from the definition of “confirmed positive.” At the same time, it has offered a new, less precise, definition for beryllium sensitization: “Beryllium sensitization means a response

in the immune system.” It further states that beryllium sensitization is not related to any physical symptoms, illness or disability, but is required for development of Chronic Beryllium Disease (CBD).

ACOEM oppose these changes. The definition of beryllium sensitization has always been two abnormal, one abnormal and one borderline, or three borderline LPT results. This is consistent with the research literature and is consistent with the manner in which the term is used in clinical practice and in beryllium medical surveillance programs.

Separating the definition of “confirmed positive” from the definition of beryllium sensitization is confusing, unnecessary, and contradicts the accepted terminology and definitions employed in the fields of immunology, beryllium medical research, and clinical practice for nearly 45 years. It also creates confusion and misalignment with existing legislation, including the Energy Employee Occupational Illness Compensation Program Act (1999) and the US Department of Energy’s beryllium rule. Additionally, changing this terminology is internally inconsistent: OSHA’s proposed definition of CBD makes reference to beryllium sensitization. In clinical practice, it will add significant confusion, to the detriment of workers and patients. The medical community is not accustomed to diagnosing a patient’s medical condition as “confirmed positive.” We refer to patients as being “beryllium sensitized” in our records, our discussions with patients, our referrals, and our workers’ compensation reporting, predicated on the presence of confirmed positive BeLPTs. “Confirmed Positive” is the criterion for Beryllium Sensitization and should remain so in the OSHA rule.

30-Day Cycle for Beryllium Lymphocyte Proliferation Testing.

OSHA is proposing that a worker’s confirmatory Beryllium lymphocyte proliferation test (BeLPT) must be “offered” within 30 days of the worker’s first positive or borderline test. While this change of wording from “conducted” to “offered” provides additional time in which a worker can return for a second, or in some cases, third, test, this is impractical, often infeasible, and has no basis in clinical practice, workplace beryllium surveillance practice, or published research. It is unnecessarily restrictive. It increases the likelihood that beryllium sensitized workers will not fall in the time window to be accurately diagnosed with beryllium sensitization, and thus increases the likelihood that they will not benefit from protections and medical care under the Rule.

Additionally, while the original 2017 rule set no time restrictions for the timing and completion of confirmatory BeLPTs, the current OSHA proposal would require testing be completed as part of a “30-day cycle,” excluding the possibility that a worker’s confirmatory tests (e.g. second positive BeLPT) might occur several years after the first positive or borderline test result, stating that this will reduce the chance of false positives. There is no scientific or medical justification for this assertion. There is no justification or need for a restrictive time limit for the occurrence of confirmatory tests. For example, it has been established that the combination of tests that meets the requirements for beryllium sensitization can take even as much as 10 years to occur from the time of the first abnormal test results. Many cases of both beryllium sensitization and even CBD have been reported in which the confirmatory test(s) occurred years after the first abnormal or borderline test result. Some workers, rather

than having their confirmatory test performed within a “30-day cycle” elect to have their test repeated when they next qualify for a company’s beryllium surveillance exam, often 2 years later. If a person with a single positive test gets a confirmatory test 2 years later, the OSHA requirement would exclude them from being considered “confirmed positive” or beryllium sensitized. This places an unfair pressure on the worker to subject to additional testing at a time when they would otherwise choose to wait. As ACOEM has previously stated: “OSHA has stated no compelling rationale or scientific basis for making this change other than the concern of false positives which are less common than true positives.” If, as a practical matter, OSHA caps the time frame between first abnormal or borderline test, we concur with the American Thoracic Society that three years or longer should be allowed for repeat testing to identify confirmed positive results.

Addition of the word “granulomatous” to the definition of Chronic Beryllium Disease

ACOEM opposes addition of the word “granulomatous” to the definition of CBD. OSHA has proposed adding the word “granulomatous” to lung disease in the definition of CBD, suggesting that it lends greater specificity. ACOEM opposes this change, for two reasons. First, it is well established in the medical literature that the lung pathology found in CBD does not always include the presence of granulomas. Lung pathology may consist of “mononuclear cell interstitial infiltrates.” There are many cases of CBD in which transbronchial lung biopsies do not detect granulomas, either due to the practical limitation in obtaining multiple lung biopsies, or due to the patient being at a stage of disease at which cells of the immune system have accumulated in the lungs in reaction to beryllium, but have not yet formed into clusters called granulomas. Presence of beryllium sensitization (as measured in BeLPT using either blood or lung cells) lends specificity to the diagnosis. Thus, the addition of the word granuloma is unnecessarily proscriptive. Addition of the word “granulomatous” may result in some workers being excluded from appropriate medical care under the OSHA rule, and may affect their ability to receive workers’ compensation, due to the overly narrow definition that is being proposed.

Modification of personal protective equipment and housekeeping requirements for construction workers and maritime workers

OSHA has proposed removing protections against dermal contact. OSHA’s justification is based on a faulty assumption that these workers will only be exposed abrasive blasting and that apart from the abrasive itself, the workers’ exposures will contain only trace amounts of beryllium. These workers can be exposed to beryllium greater than trace levels. Notably, many construction workers participate in decommissioning and demolition work. Such “dust disturbing” work has been shown in the published medical research literature to be sufficient to cause beryllium sensitization, placing workers at risk for the development of CBD.

As we wrote in our comments to OSHA in 2017, “The experience of the Department of Energy facilities has clearly demonstrated that individuals in the building trades can be affected by beryllium. Multiple studies have demonstrated risk for workers who are considered so-called dust disturbers, including those involved in demolition and building

repairs in structures where beryllium dust has accumulated. Research has also shown that the risk applies to individuals across the full range of beryllium forms, including beryllium oxides, alloys, and salts, as fumes and as dust. It makes no sense to diminish the protections for certain employment sectors against beryllium disease.”

ACOEM urges OSHA to provide construction and maritime workers with the same protections that it provides to all other workers covered under the General Industry elements of the 2017 final beryllium standard.

Please contact me or Patrick O’Connor, ACOEM’s Director of Government Affairs, at 703/351-6222 if we can be of assistance.

Sincerely,

A handwritten signature in black ink that reads "Steve Frangos". The signature is written in a cursive, flowing style.

Stephen A. Frangos, MD, MPH, FACOEM
President