



BEACON HILL

MEDICAL CONSULTING

Esteban González Burchard, M.D., M.P.H.

Distinguished Endowed Professor Emeritus of Medicine and Pharmacy
University of California, San Francisco
Board Certified in Internal Medicine and Pulmonary Medicine
Fellowship Trained in Pulmonary and Critical Care Medicine

415-741-7690

Esteban.Burchard@
beaconhillmedicalconsulting.com
beaconhillmedicalconsulting.com

September 19, 2026

California Division of Occupational Safety and Health
Research and Standards Branch

Re: September 16, 2026, Discussion Draft, Proposed Section 5204.1

Dear Research and Standards Branch:

I am Esteban G. Burchard, M.D., M.P.H., a physician-scientist trained in pulmonary and critical care medicine and epidemiology. I practiced pulmonary and critical care medicine for 26 years at San Francisco General Hospital and spent more than two decades on the faculty at the University of California, San Francisco, where I taught in the Schools of Medicine and Pharmacy and led research programs in genetics, pharmacogenetics, respiratory disease, and population health. I also served on the NIH Precision Medicine Initiative Working Group, which developed the framework for the national research program now known as the All of Us Research Program. I currently provide medical consultations and disability evaluations and am the founder of Beacon Hill Medical Consulting, LLC.

I support California's efforts to prevent artificial-stone silicosis. In response to Cal/OSHA's request for public input, I offer recommendations to complement the proposed occupational controls and improve their effectiveness in real-world working conditions.

Silicosis is irreversible and may progress even after exposure ends. By the time a patient requires advanced pulmonary care or a disability evaluation, primary prevention has failed. The consequences then extend beyond the original workplace to patients and their families, health care systems, disability programs, employers, insurers, and public resources.

A technically sound occupational health intervention is most effective when it also anticipates the conditions under which it will be implemented.

1. Hazard identification should follow the material.

Residential remodeling may involve homeowners, general contractors, subcontractors, small crews, and individual workers. The homeowner may simply request a kitchen remodel and may not know who will ultimately cut, drill, grind, polish, remove, or otherwise disturb artificial stone. The worker performing the task may likewise have limited information about the material or its hazards.

Prevention should therefore follow the hazardous material and the silica-generating activity rather than depend entirely on information passing successfully through each level of the contracting chain.

From a clinical standpoint, the relevant event is inhalation of respirable crystalline silica. **The lung does not distinguish between silica generated in a fabrication shop and that generated while modifying a countertop in a residential kitchen.**

2. New artificial stone should be clearly identified.

Artificial stone used in California may be manufactured outside the state or outside the United States. Regardless of its origin, the public-health objective should be the same: artificial stone entering California workplaces should be clearly identifiable as a silica hazard before a worker fabricates, installs, modifies, or otherwise disturbs it.

California should determine the appropriate point in the supply chain for durable hazard identification and which entity or entities bear that responsibility.

The important principle is that the warning remains physically associated with the material rather than depending exclusively on paperwork or on information transmitted through a series of commercial and employment relationships.

3. Legacy artificial stone poses an ongoing prevention challenge.

A prospective prohibition will not eliminate artificial stone already installed throughout California. These materials will remain in homes and buildings for decades and will eventually be modified, repaired, removed, or demolished.

Legacy material poses a fundamentally different problem than new artificial stone. Its manufacturer and composition may be unknown, records may no longer exist, and the homeowner, contractor, and worker may have no reliable way to determine what the material contains before work begins.

From a clinical and public health perspective, this creates a persistent exposure risk long after restrictions on new artificial stone take effect. Protection cannot realistically depend on an individual worker recognizing the material, questioning a supervisor, or stopping the work. Nor can it be assumed that a homeowner or small contractor will recognize the hazard before an existing countertop is cut, drilled, ground, polished, or removed.

I raise this as an important implementation issue rather than propose a specific occupational-control strategy. Determining the appropriate approach to unidentified legacy material requires expertise in industrial hygiene, construction practices, enforcement, and regulatory implementation. I encourage Cal/OSHA to explicitly address this continuing exposure pathway as the regulation is finalized.

4. Establish a standardized, durable silica hazard identifier for new artificial stone.

Biohazard and radiation warnings illustrate the principle. A readily recognizable hazard identifier communicates danger without requiring the person encountering it to know who manufactured the material, where it originated, who installed it, or who currently owns it.

New artificial stone should include hazard identification that is similarly durable and readily recognizable. A warning could combine a standardized hazard symbol with concise language such as:

WARNING: SILICA HAZARD

Cutting, drilling, grinding, polishing, or otherwise disturbing this material may release respirable crystalline silica. Inhalation can cause irreversible lung disease, including silicosis and lung cancer.

The precise symbol, wording, placement, durability standard, and responsibility for applying the identifier should be established through appropriate regulatory and technical review.

The identifier should supplement, not replace, existing requirements for exposure control, respiratory protection, training, hazard communication, and employer responsibility. Its purpose is different. It provides a warning that remains associated with the hazardous material even when the people and institutions surrounding it change.

5. Clarify the intended function of the 1% threshold.

The proposed prohibition sets a crystalline-silica threshold of more than 1%. However, existing section 5204 defines specified processing of artificial stone containing more than 0.1% crystalline silica as a high-exposure trigger task that requires enhanced protections.

The final regulation should distinguish the 1% regulatory threshold from a biological safety threshold. Bulk crystalline silica content and airborne respirable crystalline silica exposure are not equivalent measures.

The regulation should not imply that mechanically processing material containing 1% or less crystalline silica is necessarily free of clinically meaningful risk. This distinction is also relevant when determining which materials should carry durable silica hazard identification.

Conclusion

Neither worker protection nor homeowner protection should depend on a homeowner's understanding of the occupational hazards created by individual tasks performed during a kitchen remodel. Likewise, worker protection should not depend on an individual worker recognizing the material, questioning a supervisor, or stopping the work.

Manufacturers, importers, distributors, contractors, property owners, and workers may change over the useful life of artificial stone. The prevention strategy should account for this reality.

For new artificial stone, California workplaces should include durable hazard identification. Workers should be able to identify the hazard before fabricating, installing, modifying, or otherwise disturbing the material.

Legacy artificial stone presents a distinct and more challenging implementation challenge. Previously installed material will remain in California homes and buildings for decades, often without reliable information about its composition. I encourage Cal/OSHA to explicitly address this ongoing exposure pathway and to develop an appropriate strategy, informed by industrial hygiene, construction, enforcement, and other relevant experts.

By the time a patient with advanced silicosis reaches a physician for treatment or disability evaluation, primary prevention has failed. The objective should be to implement prevention before exposure, under the conditions in which workers work.

Respectfully,



Esteban González Burchard, M.D., M.P.H.

Founder

Beacon Hill Medical Consulting, LLC

beaconhillmedicalconsulting.com

Selected References

1. California Division of Occupational Safety and Health. *Emergency Rulemaking to Prohibit the Fabrication of Engineered Stone Countertops Containing More than One Percent Crystalline Silica. September 16, 2026, Discussion Draft.* California Department of Industrial Relations.
2. California Code of Regulations, Title 8, §5204. *Occupational Exposures to Respirable Crystalline Silica.*
3. Heinzerling A, Flattery J, Cummings KJ, et al. Silicosis among workers fabricating engineered stone (“quartz”) countertops in California, 2019–2026. *NEJM Evidence.* 2026;5(9). doi:10.1056/EVIDpha2600187.
4. Gandhi SA, Liu GY, Fazio JC, et al. Silicosis in the artificial stone countertop industry: An Official American Thoracic Society Workshop Report. *Ann Am Thorac Soc.* Published online June 26, 2026. doi:10.1093/annalsats/aaog176.