Op-Ed

The Long Struggle to Protect Workers' Lungs Against Silicosis

DAVID ROSNER

THIS PAST FALL, 40 YEARS AFTER IT WAS FIRST RECOMMENDED by the National Institutes of Occupational Safety and Health (NIOSH), the Occupational Safety and Health Administration (OSHA) finally proposed a silica safety standard aimed at protecting construction workers, miners, sand blasters, foundry workers, and stone cutters from silicosis, the deadly lung disease that has choked hundreds of thousands of American workers since the early decades of the past century. The new exposure limit cuts in half the current amount of silica dust allowed in general industry and nearly 90% for construction workers. The proposal would require worker training and medical monitoring when needed.¹

Yet in November, almost immediately after OSHA announced the proposed standard in the *Federal Register*, Lamar Alexander, the Republican senator from Tennessee, and 15 of his fellow Republican senators wrote a letter asking the assistant secretary of labor, David Michaels, and the Obama administration to extend the comment period in order to “provide stakeholders . . . adequate time to fully review this complex proposal and provide valuable feedback.”² They also asked OSHA to “conduct a proper assessment of a proposed rule on workplace silica exposure.” The letter pointed out that the last assessment was made a “full decade ago” and that since the economic situation had changed so dramatically in the interim, the process should begin anew. By calling for a delay in enforcement, the senators have once again prolonged exposure to this devastating material.

Why has it taken more than 40 years for OSHA to finally revise its silica standard? Why does a disease known since the 1930s to be completely preventable still plague American workers? And why is it callous and perhaps cynical for Alexander and his colleagues to propose further delays?

To answer these questions, we should look at the tragic history of this terrible disease. Silicosis is one of the oldest industrial diseases, identified in the United States as an epidemic in Vermont's granite-cutting sheds in the early 20th century. By the 1930s it was considered by insurance companies, medical clinicians, workers, and the government as the "king of occupational diseases," threatening more than 500,000 American workers during the depths of the Depression. When the Occupational Safety and Health Act of 1970 established OSHA and NIOSH, silica was among the first hazards to be addressed, with OSHA issuing the current standard in 1972.

In 1974, NIOSH recommended the new silica standard in the face of enormous opposition by those industries commonly using silica as an abrasive for cleaning the insides of oil storage tanks, pipes, and other equipment used in the oil fields of Texas and Oklahoma; polishing the metal castings produced in the foundries of the Midwest; and removing rust and paint from the hulls of ships, the cables of bridges, and the old paint from buildings throughout the nation.

The response of these industries was immediate and overwhelming. Initially, old-line industry associations, such as the Industrial Health Foundation in Pittsburgh, argued that a new standard should not be issued, since the current standard's effectiveness was uncertain and that without better epidemiology, lowering the exposure limit would be premature.

Soon industry created a whole new organization, cynically called the Silica Safety Association (SSA), which publicly claimed to be organized "to insure the health and safety in the workplace" but which privately, as one of its leaders remarked, was aimed at ensuring "the continued use of sand in abrasive blasting operations." The SSA's true purpose was to stop government's attempt to regulate its signature product: "This NIOSH proposal," the SSA announced in early 1975, "can be whipped if we all pull together."³ And they did. For the next 4 years, the SSA lobbied OSHA, NIOSH, Congress, and other federal agencies to combat scientists who reported the dangers of using silica and to delay and defeat OSHA's efforts—under its esteemed administrator, Eula Bingham—to enact NIOSH's recommendation.

By 1980, SSA's leadership claimed credit for "delaying and diluting OSHA's regulations." The election of Ronald Reagan as president was a boon for the Silica Safety Association and its efforts to defeat NIOSH's proposals. Reagan made "regulatory relief" a centerpiece of his

administration and promised to end the “burden of onerous government regulation.” At OSHA he replaced Eula Bingham with Thorne Auchter, who abandoned more than 100 projects in the first year of his administration and recalled or weakened 8 standards. By 1983, the SSA was taking credit for having saved its members “anywhere between \$150.00 to \$300 [for] every sandblaster you have had working for you each year.” Companies saved money “by not having sandblasters and others working in the area of Abrasive Blasting medically examined and,” what they called, “other unnecessary procedures.” That same year the SSA declared victory: “Federal regulations have been far between; so as we say about sleeping dogs.”³ Within 6 months this “safety” organization had closed its offices and placed its records in storage. Since the 1970s, new research has shown that exposure to silica at the current limit increases the risk of lung cancer as well as silicosis, indicating that the current standard is much too weak.

If history provides any lessons, we can expect that the senators’ letter is only the first salvo in what will likely be an extensive effort to undercut OSHA’s new attempt to protect workers in industries using silica. Joining Alexander and his congressional colleagues, representatives of the US Chamber of Commerce and the American Chemistry Council issued statements questioning the need for a new standard and also held a news conference objecting to that standard. Similarly, the Associated General Contractors of America, a trade association for contractors, argues that the proposed rule is “significantly flawed.” We should see these early objections as what will undoubtedly be another attempt to delay or destroy this reasonable effort to protect workers from this devastating disease.

We may see history repeat itself. NIOSH has never stopped calling for a stronger standard for protecting workers from this completely preventable disease. Let us hope that OSHA and all our elected officials in Washington use both their votes and decades of epidemiological data to finally end this terrible scourge.

References

1. Proposed rules no. 177, 78 *Fed. Reg.* 56273–56504 (September 12, 2013). https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=FEDERAL_REGISTER&p_id=23900. Accessed March 17, 2014.

2. US Senate Committee on Health, Education, Labor and Pensions [press release]. Alexander, GOP colleagues call on administration to conduct proper assessment of proposed rule on silica exposers. <http://www.help.senate.gov/newsroom/press/release/?id=80720fd6-4fab-40c0-b076--6bb3eb5d1227>. Accessed February 26, 2014. The cosigners were Senators Jim Risch (R-ID), James Inhofe (R-OK), Lisa Murkowski (R-AK), David Vitter (R-LA), Orrin Hatch (R-UT), Tom Coburn (R-OK), Johnny Isakson (R-GA), Jerry Moran (R-KS), Tim Scott (R-SC), Mark Kirk (R-IL), Pat Roberts (R-KS), Ron Johnson (R-WI), Marco Rubio (R-FL), Richard Burr (R-NC), and Mike Enzi (R-WY).
3. Markowitz G, Rosner D. The limits of thresholds: silica and the politics of science, 1935 to 1990. *Am J Public Health*. 1995;85:253-262.

Address correspondence to: David Rosner, Columbia University Mailman School of Public Health, 722 West 168th Street, Room 934, New York, NY 10032 (email: DR289@columbia.edu).