

Decades of Expert Recommendations on Respirable Crystalline Silica

Experts in the federal government and private industry have repeatedly stressed the hazard of respirable silica and counseled the Department of Labor (DOL) to adopt more stringent protections for silica exposure over the course of *more than 50 years*:

- **1974:** The National Institute for Occupational Safety and Health (NIOSH) first recommended to DOL that it should slash the Permissible Exposure Limit (PEL) for silica from 100 $\mu\text{g}/\text{m}^3$ to 50 $\mu\text{g}/\text{m}^3$.¹
- **1987:** The International Agency for Research on Cancer (IARC) concluded that crystalline silica is *probably carcinogenic to humans*.²
- **1991:** The U.S. National Toxicology Program (NTP) concluded that silica is *reasonably anticipated to be a human carcinogen*.³
- **1995:** NIOSH reiterated its 1974 recommendation.⁴
- **1996:** IARC concluded more definitively that silica is *carcinogenic*.⁵
- **1996:** A DOL advisory committee recommended that MSHA should adopt separate standards for coal dust in general and silica specifically, and it also urged a decrease in allowable exposure to respirable silica.⁶
- **1999:** The NTP concluded that respirable silica is a *known human carcinogen*.⁷
- **2000:** The American Conference of Governmental Industrial Hygienists (ACGIH) listed respirable silica as a *suspected human carcinogen* and lowered its threshold limit value (TLV) to 50 $\mu\text{g}/\text{m}^3$.⁸
- **2006:** ACGIH lowered its TLV to 25 $\mu\text{g}/\text{m}^3$.⁹
- **2011:** NIOSH repeated its 1995 recommendations.¹⁰
- **2016:** The Occupational Safety and Health Administration (OSHA) adopted a final rule lowering the PEL for respirable silica in non-mine workplaces from 100 $\mu\text{g}/\text{m}^3$ to 50 $\mu\text{g}/\text{m}^3$.¹¹
- **2020:** DOL's Inspector General reported that MSHA is not sufficiently protecting coal miners from exposure to respirable silica because its current standards are out of date, its sampling protocols are too infrequent to detect mines creating excessive silica risks for miners, and it lacks a standalone silica standard enabling it to cite silica exposures independent of coal mine dust.¹²

¹ NAT'L INST. FOR OCC. SAFETY & HEALTH, HEW PUB. NO. (NIOSH) 75-120, CRITERIA FOR A RECOMMENDED STANDARD: OCCUPATIONAL EXPOSURE TO CRYSTALLINE SILICA 19 (1974)

² Occupational Exposure to Respirable Crystalline Silica, 81 Fed. Reg. 16286, 16294-16295 (Mar. 25, 2016) [hereinafter OSHA Final Rule].

³ *Id.* at 16295.

⁴ NAT'L INST. FOR OCC. SAFETY & HEALTH, DHSS (NIOSH) PUB. NO. 95-106, CRITERIA FOR A RECOMMENDED STANDARD: OCCUPATIONAL EXPOSURE TO RESPIRABLE SILICA (1995).

⁵ OSHA Final Rule, *supra* note 2, at 16295.

⁶ REPORT OF THE SECRETARY OF LABOR'S ADVISORY COMMITTEE ON THE ELIMINATION OF PNEUMOCONIOSIS AMONG COAL MINERS (Oct. 1996).

⁷ OSHA Final Rule, *supra* note 2, at 16295.

⁸ *Id.* at 16295.

⁹ *Id.*

¹⁰ OFF. OF INSP. GEN., U.S. DEP'T OF LAB., REP. NO. 05-21-001-06-001, MSHA NEEDS TO IMPROVE EFFORTS TO PROTECT COAL MINERS FROM RESPIRABLE SILICA 5 (Nov. 12, 2020) [hereinafter OIG REPORT].

¹¹ OSHA Final Rule, *supra* note 2.

¹² OIG REPORT, *supra* note 10.