

Silica dust levels in coal mines were concealed for years while black lung cases surged

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As the giant machines churned through the deep rock, coal miner Kevin Weikle found a way to conceal the toxic dust that bombarded his lungs for hours at a time.

He stuffed the portable air monitor that he was required to wear deep inside his overalls each shift.

Though he and his fellow workers managed to hide the dangerous levels of dust from federal inspectors for years, he couldn't protect himself.

The 35-year-old father of two young children is now ravaged by the very toxins that he had been concealing all those years in the mines of West Virginia.

He is among the new generation of underground workers who have been inflicted with a virulent form of black lung, an irreversible disease caused by breathing in the silica dust that kicks up inside some of the oldest manmade caverns in the country.

Since his diagnosis a year ago, his breathing has worsened. He can no longer sleep lying flat on his back or he will wake up choking. He struggles to walk short distances and carry out some of the most basic tasks in life.

On some days, "it's like a ticking time bomb," he said.

For decades, miners have come down with the disease after inhaling coal dust. But as the layers of coal became thinner, young workers were forced to dig deeper into quartz rock, which generates the silica dust — a carcinogen that has led to the most dangerous spike of black lung in more than a generation.

As of 2018, one in five central Appalachian miners who had worked at least 25 years were found with the disease, according to a study by the National Institute for Occupational Safety and Health.

The region's miners are eight times more likely to die from the illness than anyone else in the country, the agency says.

Earlier this year, a long-awaited protection was put in place by federal regulators to cut in half the amount of silica dust that miners can be exposed to during a shift — a critical reform that safety experts say could save hundreds of lives.

But veterans like Mr. Weikle say the biggest challenge over the next year will be enforcing those protections.



Kevin Weikle says the biggest challenge facing a federal regulation on cutting in half the amount of silica dust that miners can be exposed to during a shift is enforcing it. (Benjamin B. Braun/Post-Gazette)

Because mine operators are largely responsible for tracking the dust levels to make sure the government's standards are met, much of the burden of upholding the rule will be placed on some of the very companies that spent years hiding the hazards, he said.

"It's insane to let these companies have that much authority," said Mr. Weikle, who entered the mines after graduating from high school in 2007.

The rule, which kicked into effect in June, came after long and often contentious debates over the new protections expected to cost operators tens of millions collectively each year to put into place.

To meet the new limit, many mining companies will have to install engineering controls to suppress, divert or capture dust, and in some cases, improve ventilation systems or put up physical barriers between miners and dust.

Federal regulators estimate the larger mining sector could incur more than \$57 million in costs each year, while industry representatives say some of the sampling alone could cost more than \$100,000 per mine.

'MANY WILL DIE'

While the measure sets up potential clashes between powerful forces in mining — including large operators and labor leaders — the goal was to stem one of the most insidious diseases to ever impact underground workers.

"It's heartbreaking. Many of them will die from this," said Lisa Emery, a respiratory therapist who directs a black lung clinic in Oak Hill, one of the hardest hit areas of West Virginia. "They don't get the respect that they deserve."



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Day after day, Ms. Emery tests the lung function of coal miners to see how the exposure impacts the way they are breathing.

The number of miners diagnosed with progressive massive fibrosis — the severe form of black lung caused by silica dust — has increased at rates she has never seen.

"I had five [cases] in February. I easily get three a month. These are younger miners in their 30s, 40s, and 50s. You cry together. You get to know them and their families. This is not your grandfather's disease."

Though the Centers for Disease Control and Prevention pushed for the new standard on silica starting in 1974 — halving the limits to 50 micrograms per cubic meter — the government didn't impose the reform for coal mines, leaving some workers exposed to levels of toxins far beyond the levels of safety.

Over the years, the combination of the coal and silica dust created conditions, including thick walls of dust, that left thousands of miners vulnerable.

Danny Johnson, 70, a retired West Virginia miner from Mercer County and plagued by advanced black lung, said he'd be so covered with dust after working a shift underground, "you could only see the whites of my eyes."

For Mr. Johnson and others, tiny sharp particles tear into their lungs, creating scarring and a thickening of the inner walls of the tissue that make it much more difficult for the patients to breathe.



One

of Elk Run Coal Company's mines off of Coal River Road in Whitesville, W.Va. (Benjamin B. Braun/Post-Gazette)

As cases of the advanced disease began to increase — the first wave reported in 2005 — safety advocates pressed the Mine Safety and Health Administration to look for ways to crack down and impose new restrictions.

Even when the new rule was unveiled last year — a half century after it was first proposed — MSHA still left it up to the operators to track the dust in their mines.

As it now exists, the operators will collect frequent samples in each mine and must report all cases of overexposure to federal regulators, while the government will monitor underground mines four times a year and collect data.

TAMPERING ARRESTS

The new rule comes after years of fighting over what some leaders of the United Mine Workers of America call longstanding cheating in the industry to avoid violations — allegations that the industry has denied.

An analysis by the Post-Gazette and the Medill Investigative Lab found that at least 103 mines have been slapped with violations for tampering with samples taken from the mines to track dust levels since 2000.

That includes four mines in Pennsylvania, the fifth-largest state for coal production, according to the U.S. Energy Information Administration. Of those, three were owned by Rosebud Mining Co., based in Kittanning.

“Anyone who wants to tamper with samples can simply put the sampling device in a lunch box, and that's the end of it,” said Richard Miller, a former U.S. House labor policy director.

The hotbed for tampering has been Kentucky — more than a third of all violations, according to the data. In the past two years, multiple mine operators there have even faced criminal charges for their roles in sampling fraud.

In 2022, a federal judge sentenced two Armstrong Coal Co. mine managers to six months probation after they repeatedly removed dust monitors off of miners.

And last year, a certified dust examiner at Black Diamond Coal Co. was sentenced to six months in prison, six months of home detention, and a year of supervised release for submitting false samples and “lying to MSHA special investigators,” prosecutors said.

In their own public letters, industry representatives such as the Pennsylvania Coal Alliance continued to reject allegations of widespread manipulation.

“Frankly, as an industry, [we] are weary of the constant accusations that are absent of evidence,” the state’s primary trade group said.

The number of mines that will be impacted by the new rule is formidable.

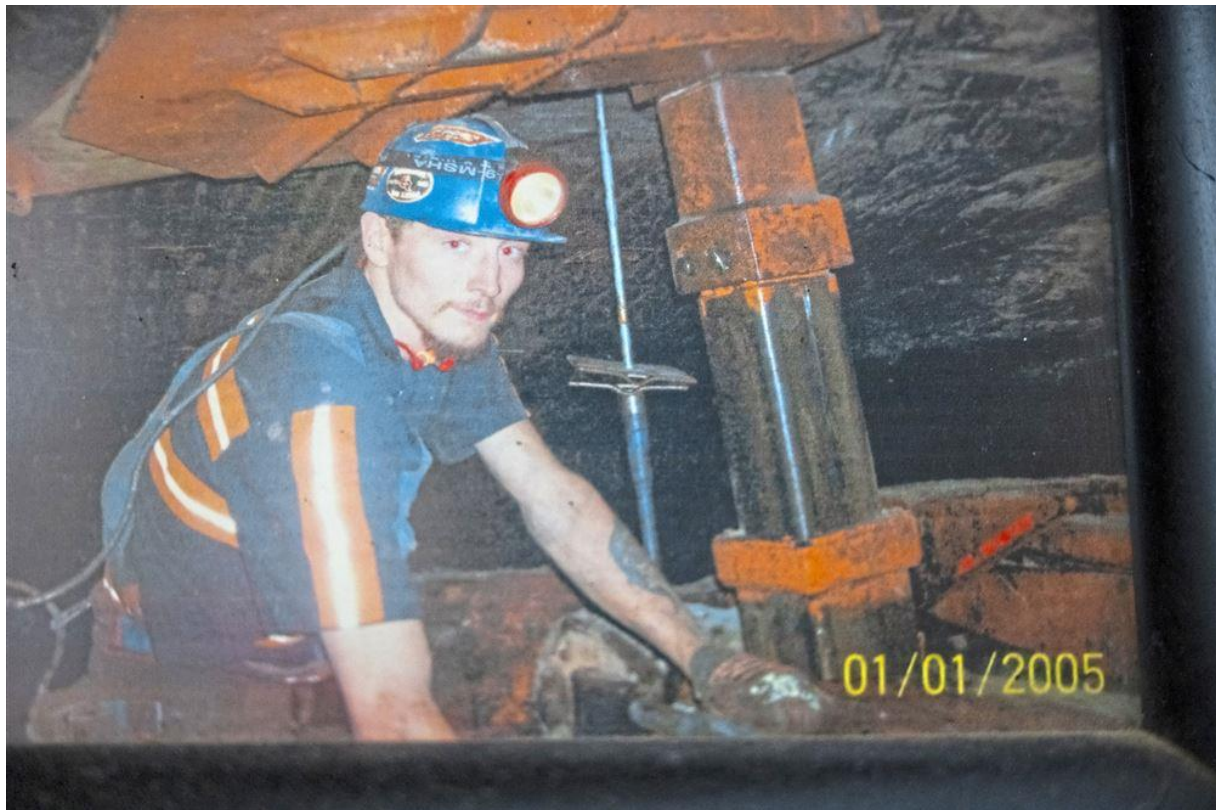
Consider: at least 439 across the country exceeded the limits in sample tests in the last five years and more than half of those mines surpassed even the more lenient former threshold, a Post-Gazette analysis found.

The changes would “impose a tremendous, unnecessary burden on mine operators and miners,” the Silica Safety Coalition, a group of mining companies, wrote in a letter to MSHA last year.

Some companies, which must fully comply with the rule by next June, said they will do what it takes to meet the new standards. One of the largest operators in the nation, Consol Energy, of Cecil, supports the new standard, according to a statement from its vice president of safety, Todd Moore.

"We will continue to rely on a comprehensive use of controls and procedures as well as the use of personal protective equipment to best protect our employees," he said.

Mr. Weikle spent nearly a decade in the deep seams that run through coal country in West Virginia, which includes some of the richest mines in the nation.



By Kevin Weikle's front door hangs a photo of him mining at the age of 19 on Monday, July 15, 2024, in Peterstown, West Virginia. (Benjamin B. Braun/Post-Gazette)

Like so many, he began drilling for coal at 18, at first with Massey Energy and later, Alpha Natural Resources.

While working for both companies, he said he was often expected along with other workers to make sure federal inspectors only read the samples of those pumps placed away from the massive amounts of dust billowing up from the coal and sandstone.

"I would put [the portable dust pump] down into my bib," he said, adding, "or you place them where there is no dust."

Massey Energy was purchased by Alpha Natural Resources in 2011 after one of the nation's worst mining disasters: The Upper Big Branch Mine explosion in West Virginia, where 29 workers were killed in a coal dust explosion.

Alpha Natural Resources was acquired by Contura Energy in 2018 and the company has since been renamed Alpha Metallurgical Resources, headquartered in Tennessee.

KEEPS GETTING WORSE

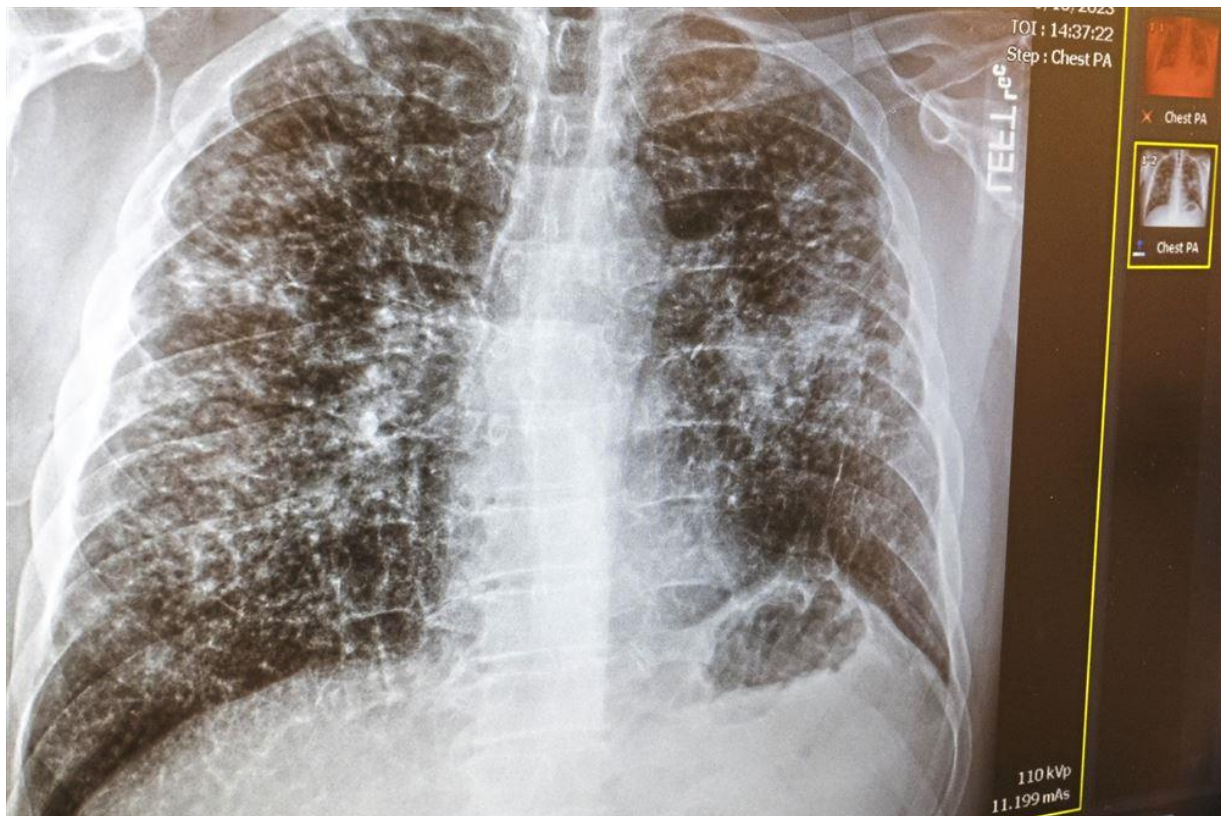
Mr. Weikle, who was diagnosed with black lung disease in July 2023, said that during a meeting earlier this year held by safety advocates and attorneys for miners, he told them that they needed to make sure the companies keep up their end.

He said he believes that if the measure had been in place during his years as a miner, he would not have been exposed to the same level of toxins. After years, "the silica dust cut my lungs all to pieces," he said.

He said he's forced to sleep in a reclined bed, otherwise he chokes on phlegm that drains from his respiratory system. He is unable to walk long distances or uphill without gasping for air.

"It just keeps getting worse and worse," he said.

He said if his lungs continue to deteriorate, he will be placed on the organ transplant list.



An anonymous X-ray shows a coal miner's black lung last week at the New River Black Lung Clinic in Oak Hill, W.Va. (Benjamin B. Braun/Post-Gazette)

Much of his time is now spent with his two children, ages 5 and 12, and driving to the lung clinic in Oak Hill, W.Va., where he goes for check-ups. He said he became angry

recently after learning that some members of the U.S. House tried to stop the government from imposing the protections by cutting off any funding for enforcement.

So far, the House Appropriations Committee has not adopted the amendment that was pushed by U.S. Rep. Scott Perry, R-York, but Mr. Weikle said he fears that the reform — the most sweeping in a generation — will continue to be challenged.

"All they have to do is to do what they're supposed to do," he said.

Mr. Weikle, who lives in Peterstown in southern West Virginia, said much of the burden of ensuring protections are in place will depend on how vigorously MSHA enforces the rule.

Last year, he was interviewed by Ted Koppel on a CBS special about the spike in black lung and about his years in the mines and the toll that it took on he and his family. "My lungs are turning to rock," he said.

He said when he was first diagnosed with advanced black lung, "it was a complete shock to me. Everyone you see who has it is old."

As the disease progressed, he became tired sooner and struggled to take walks with his 5-year-old daughter, Dixie. "She'll be running uphill and say, 'Hurry up, Dad.' I don't think she quite understands."

At times, he says, "it feels like someone is standing on my chest."

He spoke at a black lung conference last month in West Virginia, where he told his story to hundreds of people. The public often hears about the disease from older miners, but "I feel like I can make more of a difference because of my age," he said.

"I don't know what my future holds," he said. "But if I can keep some other little girl's daddy alive so that they can experience life events like being there at her high school graduation, then it's worth it."

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