STATE

As black lung surged, federal delays risked toxic dust buildup in Appalachia

By **Austin R. Ramsey**

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In November 2010, Bruce Maggard called up to the top at an underground coal mine in Perry County to alert them that a car was coming back up the mine shaft. Jonathan Palmer *Herald-Leader File Photo*

Key Takeaways

AI-generated summary reviewed by our newsroom.

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It isn’t lost on Brandon Crum that the coal dust never really left him or his family.

A fourth-generation miner who dug coal in Appalachia since he was a teen, Crum, now a radiologist, sits in Eastern Kentucky exam rooms, studying X-rays and lung scans, diagnosing the same disease that has shadowed him and his family for decades.

What changed, he says, is not the dust, but who is finally being asked to answer for it.

“You can’t depend on a system that’s failed over and over again,” Crum said.

Central Appalachian coal miners were exposed to toxic levels of rock dust known to cause black lung disease, cancer and silicosis while federal regulators dragged their feet enforcing stricter protections last year, federal Mine Safety and Health Administration data reveals.

One in five U.S. coal mines sampled in 2025 exceeded caps on silica dust that were already in place for almost every other regulated sector — except mines — according to an analysis of that data by the Appalachian Citizens' Law Center.

Yet, President Donald Trump's Labor Department said it would not enforce a Biden-era rule designed to put the coal mining industry on par with a decade-old Occupational Safety and Health Administration standard last year, citing cuts the Trump administration was already making to the federal government's black lung screening program. An appeals court blocked the rule days later, and revised standards are reportedly in the making.

You can't depend on a system that's failed over and over again. Something has to

Pike County radiologist

Roger Cook of Letcher County died in September 2016 at age 61. He was an underground coal miner for 32 years but had to retire in 2010 when he was diagnosed with black lung. Charles Bertram *Herald-Leader File Photo*

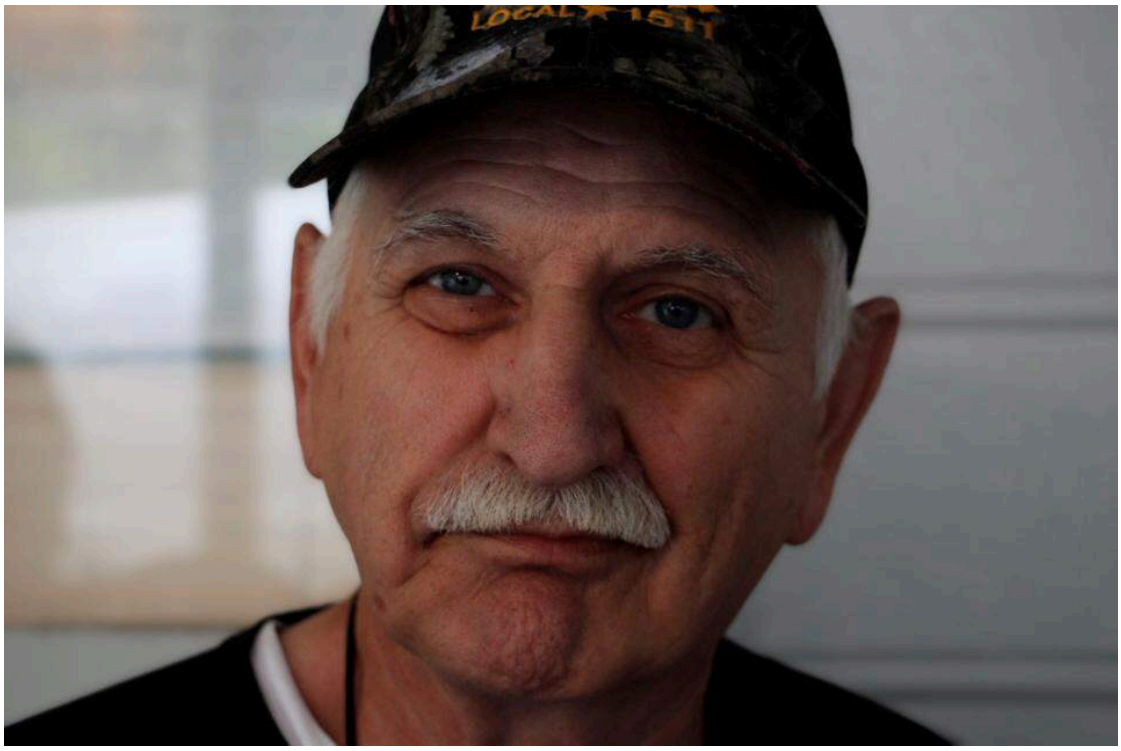
In Central Appalachia, ground zero for a resurgence in diseases linked to coal dust and aerosolized silica, that delay has had life-and-death consequences. Roughly 15% of the cases Crum is diagnosing in Pikeville, are in severe, irreversible stages known as complicated black lung that carry an average life expectancy of fewer than 13 years.

“Even though we don’t have as many miners as we did 20 years ago, there’s a higher percentage of the ones that are working that are getting black lung,” Crum said.

Eastern Kentucky, a region scarred by more than a century of heavy mining, is yielding less and less coal. Operators are digging deeper and contending with narrower seams, meaning they cut through more rock to get less coal. The result: Miners working at or near active drilling, cutting or blasting zones are spending eight-hour shifts breathing Appalachian sandstone chock-full of silica.

MSHA under former President Joe Biden estimated that the now-delayed rule would have saved more than 1,000 miners lives and avoided 3,700 new cases of silica-related illnesses. One in five underground coal miners with 25 years of experience or more in West Virginia, Kentucky and Virginia have evidence of black lung disease, according to the Centers for Disease Control and Prevention.

“I’ve got 40-year-olds who are needing lung transplants, and that’s not what we should be dealing with,” said Maeve Macmurdo, a staff physician at the Cleveland Clinic specializing in occupational lung diseases, including black lung. “We know that coal mine dust is bad for you. We know that silica is bad for you. This isn’t new information.”



Gene Hale, 71, of Pike County, Ky., who worked in underground coal mines for more than 20 years, said he vividly remembers the feeling of rock dust in his throat and lungs. Austin R. Ramsey *aramsey@herald-leader.com*

The dust never settles in Appalachia

Time spent hauling coal can be measured in breaths, said Gene Hale, 71, of Pike County, who worked in underground mountain coal mines for more than 20 years. You can feel the dust particles coat the back of your throat and the pressure it puts on your lungs to choke them down, he said.

“You’ll cough it up for weeks,” Hale said. “It’s just the way it is down there.”

Hale has lived around coal mines his entire life. He goes to church in rural Pike

Hale and the other old-timers at Heenon Church of Christ huddled under a covered patio on a rainy day in early May struggling to make their voices heard over the dull moan at Excel Mining's new No. 5 mine near Piso.

The No. 5 mine is one of 16 in the U.S. where MSHA collected silica dust samples in 2026 above the eight-hour 50 microgram-per-cubic-meter limit that would trigger emergency respirator use and immediate corrective action under the 2024 silica rule. But the rule isn't in effect, and life has gone on as usual at No. 5.

A sister slope mine nearby, also owned by Excel, exceeded 100 micrograms per cubic meters last year in one sample, violating existing silica standards.

The company declined to comment when reached by the Herald-Leader by phone last week.

Early data from unannounced MSHA inspections this year track with last year's numbers; 20% of U.S. mines reported silica dust levels that would be out of compliance with the new rule. All but four of those mines are located in Kentucky and West Virginia.

A coal surge pile sits waiting for transport near the Excel Mining headquarters in Pike County, Ky. Austin R. Ramsey *aramsey@herald-leader.com*

The Appalachian Citizens' Law Center collected MSHA silica test data from April 2025 to last month to gauge what the compliance landscape would look like if the rule was being enforced by the Trump administration.

"What we want to do is show people what is going on," said ACLC Director of Policy Rebecca Shelton. "The longer there's a delay, the more people's health is going to be impacted. This is not inconsequential, and it's also not rare. These overexposures are not rare."

MSHA is required to inspect each underground coal mine four times a year and

agency has completed all mandatory first-quarter inspections, ACLC's analysis shows.

Mines are dusty work environments. It's impossible to carefully extract narrow seams of coal, for example, without grinding up rocks around them. To lower the risks, mine operators hang curtains and use ventilation blowers to control the direction of airflow away from miners and out of underground shafts.

But ex-miners the Herald-Leader interviewed, like Hale, said it is not uncommon for operators to deprioritize mine safety compliance when MSHA inspectors aren't around. A federal appeals court ruled against a Western Kentucky coal operator in 2022 for tipping off miners before inspectors reached their work sites.

"What I've heard from former coal miners is that they, and, you know, they are sorry for this, but they played a part in sort of goosing the operations," said Quenton King, government affairs specialist for nonprofit environmental group Appalachian Voices. "If you do it right, it might slow coal mining down, but you're saving lives by doing it."

A blocked Pike County coal train is pictured Tuesday, Jan. 14, 2020. Ryan C. Hermens *rhermens@herald-leader.com*

New standards could be on their way

Regulators sent a revised mine silica dust rule to the White House for review earlier this month. That signals that a break to the yearlong delay in toughened rock dust standards could be on its way, but it also sets the stage for a renewed fight over what those new standards should be.

Most coal operators say they support lower exposure limits for silica dust, but they want to retain more options for reducing those risks.

The Biden-era rule heavily prioritized costly engineering controls like ventilation

or administrative shifts like staffing changes. That's been a major point of contention in the appeals court battle challenging the delayed rule.

"Consistent with recognized industrial hygiene practices utilized by OSHA, and elsewhere, we believe MSHA should allow for the use of administrative controls and personal protective equipment for compliance with the standard to supplement and enhance engineering controls," said Ashley Burke, a spokesperson for the National Mining Association in a statement to the Herald-Leader.

But respirators fail and coal operators with fewer miners on staff don't always have the flexibility to move workers around, said Gary Hairston, president of the National Black Lung Association. Hairston is a retired West Virginia miner with black lung disease who now spends his time advocating on behalf of his former colleagues in their fight with coal companies to secure state and federal black lung benefits.

Trump's willingness to rework the silica rule after pushback from the mining industry proves where the administration's priorities lie, Hairston said. Since he was first elected in 2016, Trump has pledged to secure American energy dominance by reinvigorating the battered coal industry, framing it around what he calls "beautiful, clean coal."

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>
> **Gary Hairston**
> President, National Black Lung Association

Ray Sizemore operated a loader to load coal on a truck at a Pine Branch Coal Sales surface mine near Chavies, Ky., Friday, December 19, 2008. Charles Bertram *Herald-Leader File Photo*

“The promises ain’t to the coal miners; it’s to the coal companies,” Hairston said. “That’s the sad thing about it. They say coal keeps the lights on, but it’s the coal miners that keep the lights on. The coal miners don’t get no kind of respect or really any say-so about anything.”

The irony is difficult to ignore in Central Appalachia, where miners continue operating under older standards that critics say are inadequate against modern silica-heavy mining conditions. And the proof is in the surge of black lung cases. One Southwest Virginia clinic identified more than 650 complicated black lung cases in just a six-year period, according to a 2024 CDC study.

MSHA did not provide the Herald-Leader with a statement prior to publication.

Alice Hayes, 64, of Letcher County, lost her husband Douglas to black lung in 2019 after he worked 24 years in the mines. She said she remembers the way current and former miners would talk about the looming specter of relying too much on oxygen therapy — how they believed that “once you go on it, you’ll never come off.”

“The last few years were horrible,” Hayes said. “They would call it an exasperation, but it was, I believe, usually pneumonia. There would be a hospitalization, and then he would bounce back, but he was getting progressively worse.”

But Douglas Hayes was never bitter, Alice said. He accepted early on that the battle he was facing was one he would ultimately lose and vowed to enjoy the life he had

Appalachian coal country, Hayes said she's alarmed by younger and younger miners turning into a statistic.

"It scares me to think that loopholes on paper are playing games with people's health," Alice Hayes said. "It makes you wonder just how much does the coal miner even matter anymore? It scares me. I worry about them."

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Austin R. Ramsey covers Kentucky's eastern Appalachian region and environmental stories across the commonwealth. A native Kentuckian, he has had stints as a local government reporter in the state's western coalfields and a regulatory reporter in Washington, D.C. He is most at home outdoors.