

November 2021 Issue



A resident of Skid Row, in Los Angeles, holding crystal methamphetamine, in August 2021 (Rachel Bujalski for The Atlantic)

SCIENCE

# 'I DON'T KNOW THAT I WOULD EVEN CALL IT METH ANYMORE'

Different chemically than it was a decade ago, the drug is creating a wave of severe mental illness and worsening America's homelessness problem.

By Sam Quinones

OCTOBER 18, 2021

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**I**N THE FALL OF 2006, law enforcement on the southwest border of the United States seized some crystal methamphetamine. In due course, a five-gram sample of that seizure landed on the desk of a 31-year-old chemist named Joe Bozenko, at the Drug Enforcement Administration lab outside Washington, D.C.

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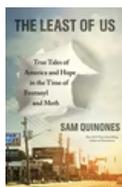
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Organic chemistry can be endlessly manipulated, with compounds that, like Lego bricks, can be used to build almost anything. The field seems to breed folks whose every waking minute is spent puzzling over chemical reactions. Bozenko, a garrulous man with a wide smile, worked in the DEA lab during the day and taught chemistry at a local university in the evenings. “Chemist by day, chemist by night,” his Twitter bio once read.

Bozenko had joined the DEA seven years earlier, just as the global underworld was veering toward synthetic drugs and away from their plant-based cousins. Bozenko’s job was to understand the thinking of black-market chemists, samples of whose work were regularly plopped on his desk. He analyzed what they produced and worked out how they did it. In time, Bozenko began traveling abroad to clandestine labs after they’d been seized. His first foreign assignment was at a lab that had made the stimulant MDMA in Jakarta, Indonesia. He saw the world through the protective goggles of a hazmat suit, sifting through the remains of illegal labs in three dozen countries.

Meth was the drug that Bozenko analyzed most in the early years of his job. Large quantities of it were coming up out of Mexico, where traffickers had industrialized production, and into the American Southwest. All of the stuff Bozenko analyzed was made from ephedrine, a natural substance commonly found in decongestants and derived from the ephedra plant, which was used for millennia as a stimulant and an anti-asthmatic. A Japanese researcher had first altered the ephedrine molecule to synthesize crystal methamphetamine in 1919. During World War II, it was marketed

in Japan as *hiropon*, a word that combines the Japanese terms for “fatigue” and “fly away.” *Hiropon* was given to Japanese soldiers to increase alertness.



## The Least Of Us: True Tales Of America And Hope In The Age Of Fentanyl And Meth

SAM QUINONES,  
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In the early 1980s, the ephedrine method for making meth was rediscovered by the American criminal world. Ephedrine was the active ingredient in the over-the-counter decongestant Sudafed, and a long boom in meth supply followed. But the sample that arrived on Bozenko’s desk that day in 2006 was not made from ephedrine, which was growing harder to come by as both the U.S. and Mexico clamped down on it.

There was another way to make methamphetamine. Before the ephedrine method had been rediscovered, this other method had been used by the Hell’s Angels and other biker gangs, which had dominated a much smaller meth trade into the ’80s. Its essential chemical was a clear liquid called phenyl-2-propanone—P2P. Many combinations of chemicals could be used to make P2P. Most of these chemicals were legal, cheap, and toxic: cyanide, lye, mercury, sulfuric acid, hydrochloric acid, nitrostyrene. The P2P process of making meth was complicated and volatile. The bikers’ cooking method gave off a smell so rank that it could only be done in rural or desert outposts, and the market for their product was limited.

Bozenko tinkered with his sample for two or three days. He realized it had been made with the P2P method, which he had not seen employed. Still, that was not the most startling aspect of the sample. There was something else about those few grams that, to Bozenko, heralded a changed world.

Among the drawbacks of the P2P method is that it produces two kinds of methamphetamine. One is known as d-methamphetamine, which is the stuff that makes you high. The other is l-methamphetamine, which makes the heart race but does little to the brain; it is waste product. Most cooks would likely want to get rid of the l-meth if they knew what it was. But separating the two is tricky, beyond the skills of most clandestine chemists. And without doing so, the resulting drug is inferior to ephedrine-based meth. It makes your heart hammer without offering as potent a high.

Bozenko's sample contained mostly d-methamphetamine. Someone had removed most of the l-meth. "I've taken down labs in several continents," Bozenko told me years later. No one in the criminal world, as far as he and his colleagues knew, had ever figured out how to separate d-meth from l-meth before.

## RECOMMENDED READING

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How DEA Agents Took Down Mexico's Most Vicious Drug Cartel

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Back in the late '80s and '90s, when the ephedrine method had taken over, the market for meth had grown because of ephedrine's availability—and because the substance could be transformed into meth with ease and efficiency. All you had to do was tweak the ephedrine molecule, and doing that required little more than following a recipe. But you had to have ephedrine.

The P2P method offered traffickers one huge advantage: The chemicals that could be used to make it were also used in a wide array of industries—among them racing fuel, tanning, gold mining, perfume, and photography. Law enforcement couldn't restrict all these chemicals the way it had with ephedrine, not without damaging legitimate sectors of the economy. And a trained organic chemist could make P2P, the essential ingredient, in many ways. It was impossible to say how many methods of making P2P a creative chemist might come up with. Bozenko counted a dozen or so at first. He put them up in a large diagram on his office wall, and kept adding Post-it Notes with new ones as they appeared.

As Bozenko dissected that sample in 2006, its implications hit him. Drugs made in a lab were not subject to weather or soil or season, only to chemical availability: With this new method and full access to the world's chemical markets through Mexican

shipping ports, traffickers could ramp up production of P2P meth in quantities that were, effectively, limitless.

Even so, Bozenko couldn't have anticipated just how widely the meth epidemic would reach some 15 years later, or how it would come to interact with the opioid epidemic, which was then gaining force. And he couldn't know how strongly it would contribute to related scourges now very much evident in America—epidemics of mental illness and homelessness that year by year are growing worse.



Joe Bozenko at the DEA Special Testing and Research Laboratory in Virginia (Gabriella Demczuk for *The Atlantic*)

A FEW MONTHS after Bozenko's discovery, on December 15, 2006, in a town named Tlajomulco de Zúñiga in the central-Mexican state of Jalisco, a methamphetamine lab exploded. Firefighters responded to the blaze, at a warehouse where plastic dinnerware had once been made. No one was hurt in the fire, nor was anyone arrested. But a fire chief called the local DEA office.

Abe Perez supervised the DEA's Guadalajara office back then. The warehouse stood on a cul-de-sac at the end of a house-lined street, Perez, who is now retired, remembered years later. Residents "knew something was going on; the smells were giving them headaches," Perez told me. But they were afraid to say anything. So they lived with it as best they could until the warehouse exploded, most likely because of a worker's carelessness.

Perez and his agents urged Mexican police and prosecutors to obtain a search warrant for the building. The process was slow, and the day ended with no warrant. That night another fire erupted, at a warehouse across the street that, the agents learned, contained chemicals in blue plastic barrels and in bags neatly stacked on pallets. "The traffickers came in the middle of the night with gasoline and burned it, burned all the evidence," Perez said. "But we were able to get photos of the place."

Eduardo Chávez, another DEA agent, flew in from Mexico City the next afternoon. He and Perez stood outside the second smoldering warehouse. Each man had spent the early part of his career busting meth labs in rural California—Chávez in the area around Bakersfield, Perez in northeastern San Diego County.

That had been a different era, and each had gotten a rare view into it. Bakersfield was Chávez's first assignment, in 2000, and to his surprise, it was a hotbed of meth production. Southern California was where the ephedrine-based method had been rediscovered, largely due to the efforts of an ingenious criminal named Donald Stenger. Stenger died in 1988, in custody in San Diego County, after a packet of meth he'd inserted in his rectum broke open. But the ephedrine method had by then become more widely known and adopted by Mexican traffickers moving up and down the coast between Mexico and California.

From the January/February 2016 issue: How DEA agents took down Mexico's most vicious drug cartel

The Mexican meth industry had been pioneered in that earlier time by two brothers, Luis and Jesús Amezcua. They came to California illegally as kids, and eventually ran an auto shop near San Diego. The story goes that a local meth cook dropped by their shop in about 1988, asking Jesús if he could bring in ephedrine from Mexico. Jesús at the time was smuggling Colombian cocaine. But he brought ephedrine north and,

with that, became attuned to the market that had been opened by Stenger's innovation.

Ephedrine was then an unregulated chemical in Mexico. Within a few years, the Amezcuas were importing tons of it. Jesús traveled to India and Thailand, where he set up an office to handle his ephedrine exports. Later, his focus shifted to China and the Czech Republic.

The Amezcuas' meth career lasted about a decade, until cases brought against them landed them in a Mexican prison, where they remain. But the brothers marked a new way of thinking among Mexican traffickers. They were more interested in business deals and alliances than in the vengeance and endless shoot-outs so common to the previous generation of smugglers, who had trafficked mostly in marijuana and cocaine. The Amezcuas were the first Mexican traffickers to understand the profit potential of a synthetic drug, and the first to tap the global economy for chemical connections.

At first, the brothers ran labs on both sides of the border. They set up many in California's rural Central Valley—Eduardo Chávez's territory—making use of an existing network of traffickers among the truckers and migrant farmworkers that stretched up from San Diego. At one bust, agents found a man in protective garments with an air tank on his back. He turned out to be a veterinarian from Michoacán who said he came up for four-month stints to teach the workers to cook.

Hell's Angels cooks took three days to make five pounds of meth. Mexican crews soon learned to arrive at cook sites like NASCAR pit crews, with premeasured chemicals, large vats, and seasoned workers. They produced 10 to 15 pounds per cook in 24 hours in what came to be known as "super labs." Soon the biker gangs were buying their meth from the Mexicans.

But toward the end of Chávez's Bakersfield assignment, in 2004, the cooks and workers who'd been coming up from Mexico began to vanish. His informants told him that they were heading home. In California, law enforcement had made things hard; the job was getting too risky, the chemicals too hard to come by. The meth-cook migration would accelerate after Chávez left the state in 2004. Meth-lab seizures in the United States withered—from more than 10,000 that year to some 2,500 in 2008. Today in the United States, they are rare, and "super labs" are practically nonexistent. In Mexico, however, it was a different story.

The burned-down lab being surveyed by Chávez and Perez at the end of 2006 had been designed to produce industrial quantities of meth. Like many other labs that had been popping up in Mexico, it reflected the union of substantial capital and little concern for law enforcement. It used expensive equipment and stored large

inventories of chemicals awaiting processing. Notes found on the scene suggested that the cooks typically got about 240 pounds per batch.

Like Joe Bozenko, the agents standing at the edge of the smoke and the stench that afternoon felt that they were glimpsing a new drug world. What struck them both was what they were not seeing. No ephedrine. The lab was set up exclusively to make P2P meth.

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Working through all the chemicals on hand, by Bozenko's estimation, the lab could have produced 900 metric tons of methamphetamine.

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What's more, this lab was not hidden up in the mountains or on a rural ranch. Tlajomulco de Zúñiga lies just 15 miles south of Guadalajara, one of Mexico's largest cities, and serves as home to the city's international airport. The area has everything needed to be a center of meth manufacturing: warehouses, transportation hubs, proximity to chemists. Trucks rumble through the area daily from the shipping ports in Lázaro Cárdenas, in the state of Michoacán, and Manzanillo, in the state of Colima.

The ephedrine method was still very much in use in 2006; Mexico, which had been reducing legal imports of ephedrine, wouldn't ban them outright until 2008; even after that, some traffickers relied on illegal shipments for a time. And despite all the advances when it came to making P2P, in at least some respects the traffickers "didn't know what they were doing yet," Chávez told me. The explosion showed that. Nonetheless, years later he thought back on that moment and realized that it was almost as if they were witnessing a shift right then, that week.

About five years after the Tlajomulco lab exploded, in June 2011, Mexican authorities discovered a massive P2P meth lab in the city of Querétaro, just a few hours north of Mexico City. It was in a warehouse that could have fit a 737, in an industrial park with roads wide enough for 18-wheelers; it made the Tlajomulco lab look tiny. Joe Bozenko and his colleague Steve Toske were called down from Washington to inspect it, and they wandered through it in awe. Bags of chemicals were stacked 30 feet high.

Hundreds of those bags contained a substance neither Bozenko nor Toske had ever thought could be used to make P2P. Bozenko often consulted a book that outlined chemicals that might serve as precursors to making methamphetamine, but this particular substance wasn't in it. Well-trained organic chemists were clearly

improving new ways to make the ingredients, expanding potential supply even further.

Working through all the chemicals in the plant, by Bozenko's estimation, the lab could have produced 900 metric tons of methamphetamine. Against a wall stood three 1,000-liter reactors, two stories tall.

Nothing like this had been achieved with ephedrine, nor could it have been; no one could have imagined the accumulation of 900 metric tons of the chemical. Later, Mexican investigators would report that of the 16 workers arrested at the Querétaro lab, 14 died over the next six months from liver failure—presumably caused by exposure to chemicals at the lab.



Meth and paraphernalia (*above*) inside a tent on Skid Row, in Los Angeles. The area encompasses about 50 square blocks of the city; tents (*below*) line many of its streets. (Rachel Bujalski for *The Atlantic*)

Methamphetamine was having a cultural moment in the U.S.—“meth mouth” had become an object of can’t-look-away fascination on the internet, and *Breaking Bad* was big. The switch from ephedrine-based labs to ones using the P2P method was even a plot point in the series. But few people outside the DEA really understood the consequences of this shift. Soon, tons of P2P meth were moving north, without any letup, and the price of meth collapsed. But there was more to the story than higher volume. Ephedrine meth tended to damage people gradually, over years. With the switchover to P2P meth, that damage seemed to accelerate, especially damage to the brain.

**O**NE NIGHT IN 2009, in Temecula, California, partway between San Diego and L.A., a longtime user of crystal meth named Eric Barrera felt the dope change.

Barrera is a stocky ex-Marine who’d grown up in the L.A. area. The meth he had been using for several years by then made him talkative and euphoric, made his scalp tingle. But that night, he was gripped with paranoia. His girlfriend, he was sure, had a man in her apartment. No one was in the apartment, she insisted. Barrera took a kitchen knife and began stabbing a sofa, certain the man was hiding there. Then he stabbed a mattress to tatters, and finally he began stabbing the walls, looking for this man he imagined was hiding inside. “That had never happened before,” he told me when I met him years later. Barrera was hardly alone in noting a change. Gang-member friends from his old neighborhood took to calling the meth that had begun to circulate in the area around that time “weirdo dope.”

[Read: A former meth addict talks about his experience with drug court](#)

Barrera had graduated from high school in 1998 and joined the Marine Corps. He was sent to Camp Lejeune, in North Carolina, where he was among the few nonwhite Marines in the platoon. The racism, he felt, was threatening and brazen. He asked for a transfer to Camp Pendleton, in San Diego County, and was denied. Over the next year and a half, he said, it got worse. Two years into his service, he was honorably discharged.

After the September 11, 2001, terrorist attacks, Barrera was filled with remorse that he hadn’t stuck it out in the Corps. He was home now, without the heroic story he’d imagined for himself when he joined the Marines. The way he tells it, he drank and used meth to relieve his depression.

He'd sometimes stay up on meth for four or five days, and he had to make excuses for missing work. But until that point, he'd held his life together. He worked as a loan processor, then for an insurance company. He had an apartment, a souped-up Acura Integra, a lot of friends.

But as the meth changed around 2009, so did Barrera's life. His cravings for meth continued, but paranoia and delusions began to fill his days. "Those feelings of being chatty and wanting to talk go away," he told me. "All of a sudden you're stuck and you're in your head and you're there for hours." He said strange things to people. He couldn't hold a job. No one tolerated him for long. His girlfriend, then his mother, then his father kicked him out, followed by a string of friends who had welcomed him because he always had drugs. When he described his hallucinations, "my friends were like, 'I don't care how much dope you got, you can't stay here.'"

By 2012, massive quantities of meth were flowing into Southern California. That same year, 96 percent of the meth samples tested by DEA chemists were made using the P2P method. And, for the first time in more than a decade of meth use, Barrera was homeless. He slept in his car and, for a while, in abandoned houses in Bakersfield. He was hearing voices. A Veterans Affairs psychologist diagnosed him with depression and symptoms of schizophrenia.

Even many years later, when I spoke with him, Barrera didn't know how the drug he was using had changed and spread, or why. But as a resident of Southern California, he was among the first to be affected by it. Over the next half-dozen years or so, the flood of P2P meth would spread east, immersing much of the rest of the country, too.

**M**ENTION DRUG-RUNNING, and many people will think of cartels. Yet over the past decade, meth's rising availability did not result from the dictates of some underworld board of directors. Something far more powerful was at work, particularly in the Sinaloa area: a massive, unregulated free market.

By the time Eric Barrera's life began to collapse, something like a Silicon Valley of meth innovation, knowledge, skill, and production had formed in the states along Mexico's northern Pacific Coast. The deaths of kingpins who had controlled the trade, in the early 2010s, had only accelerated the process. "When the control vanishes, all these regional fiefdoms spring up," said a DEA supervisor who pursued Mexican trafficking organizations during these years. (He, like some other DEA agents I spoke with, asked that his name not be used, because of the dangerous nature of his work.) "We just started seeing more and more labs springing up everywhere." The new labs weren't all as enormous as the Querétaro lab that Bozenko had seen in 2011. But they multiplied quickly.

Beginning in about 2013 and continuing for the next several years, meth production expanded geometrically; the labs "just escape all limits," a member of the Sinaloan

drug world told me. “In a five-square-kilometer area outside Culiacán [Sinaloa’s capital city], there were, like, 20 labs. No exaggeration. You go out to 15 kilometers, there’s more than a hundred.”

Listening to traffickers on wiretaps, one DEA agent told me, made it clear just how loose the confederations of meth suppliers were by then. The cartels had not vanished, and many of these suppliers were likely paying one or another of them off. But the wires nonetheless revealed a pulsing ecosystem of independent brokers, truckers, packagers, pilots, shrimp-boat captains, mechanics, and tire-shop owners. In the United States, the system included meat-plant workers, money-wiring services, restaurants, farm foremen, drivers, safe houses, and used-car lots. The ecosystem harnessed the self-interest of each of these actors, who got paid only when deals got done.

“We’d waste hours listening on the wire,” the agent told me, “to people wasting their time calling around doing the networking as brokers, trying to set up drug deals, because they wanted to make money. There’s a huge layer of brokers who are the driving force [in Mexican drug trafficking]. Maybe they own a business or restaurant in Mexico or in the U.S.—this is something they do to supplement income. A large percentage of drug deals at this level don’t happen. But it’s like salesmen—the more calls you make, the more people you know, the more sales you get. So four or five people will be involved in getting 50 kilos to some city in the United States. This guy knows a guy who knows a guy who has a cousin in Atlanta ... And with the independent transporters operating at the border, there’s no cartel allegiance. They’re all just making money.”

From 2015 to 2019, the Mexican military raided some 330 meth labs in Sinaloa alone. But arrests were rare, according to a person involved in targeting the labs. Far from being a deterrent, the raids showed that no one would pay a personal price, and more people entered the trade as a result. At one point in 2019, DEA intelligence held that, despite all the raids, at least 70 meth labs were operating in Sinaloa, each with the capacity to make tons of meth with every cook.

With labs popping up everywhere, the price of a pound of meth fell to nearly \$1,000 for the first time on U.S. streets by the late 2010s—a 90 percent drop from a decade earlier in many areas. Yet traffickers’ response to tumbling prices was to increase production, hoping to make up for lower prices with higher volume. Competition among producers also drove meth purity to record highs.

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Methamphetamine damages the brain no matter how it is derived. But P2P meth seems to create a higher

## order of cerebral catastrophe.

Pot was part of this story too. As some American states legalized marijuana, Mexican pot revenue faltered. Many producers switched to making meth and found it liberating. Marijuana took months to grow, was bulky, and could rot. “But with crystal meth,” the member of the Sinaloa drug world told me, “in 10 days you’ve made it. It’s not as bulky as pot, so in two weeks you’re crossing the border with it. Within two or three months, you’re big.”

In the Southwest, the drug quickly became more prevalent than ever. And supply kept flowing east, covering the country in meth all the way to New England, which had almost none before the mid-2010s. Since late 2016, the Midwest and South have seen an especially dramatic shift. Mexican traffickers had never been able to get their hands on enough ephedrine to cover those regions, but now that was no longer an issue. In place after place, they made alliances with local dealers to introduce their product.



*Left:* A man inside his encampment on a Skid Row sidewalk, after taking a puff of meth. *Right:* Another resident of the same encampment, who attributes his homelessness to a cycle of meth use he cannot break. (Rachel Bujalski for *The Atlantic*)

The Louisville, Kentucky, area is one example. For years, Louisville had a paltry meth market. A pound of it sold for \$14,000. Then Wiley Greenhill went to prison. Greenhill was a minor drug dealer in Detroit who had come to Louisville in 1999, attracted by Kentucky’s vibrant street market for pain pills, which were fetching five times what they sold for in Detroit.

He eventually landed at the Roederer Correctional Complex, north of Louisville, where he struck up a friendship with an inmate from California. The inmate’s father, a businessman from Southern California named Jose Prieto, had gotten into debt with

the wrong people from Sinaloa. The Sinaloans told Prieto that to settle his debt, he had to sell their meth. Greenhill was given the opportunity to buy it.

By 2016 Greenhill was out of prison, and the meth began to flow. At first Prieto sent small quantities through the mail. Soon the loads reached 50 to 100 pounds a month, driven east by women Greenhill hired.

Prieto proved eager to get his product out. He fronted Greenhill hundreds of thousands of dollars' worth of meth on the promise that he would be repaid. Tim Fritz, a DEA agent who investigated the Prieto-Greenhill ring, told me, "Jose Prieto would say, 'Whatever you need, we got it. Whatever you buy, I'll double it. You want 10 pounds, I'll give you 20—pay me later.'"

As months passed, the Louisville meth market expanded beyond anything the region had seen before. The trade spread to southern Indiana and nearby counties in Kentucky as the number of customers grew. Other local traffickers began to import meth as well. The price of a pound of meth fell to about \$1,200, less than a tenth of what it had been just a few years earlier.

At the MORE Center, a Louisville clinic set up to treat pain-pill and heroin addicts, patients started coming in on meth. Before the Prieto-Greenhill connection, only two of counselor Jennifer Grzesik's patients were using meth. Within three years, almost 90 percent of new patients coming to the clinic had meth in their drug screen. "I don't remember having any homeless people in my caseload before 2016," she told me. But 20 percent of her clients now are homeless.

Greenhill and Prieto were arrested in 2018 and 2019, respectively, and are now serving lengthy federal-prison terms. They left behind a transformed market. Primed by the new supply, meth demand has exploded, in turn drawing more dealers who have found their own supply connections. The price of a pound of meth remains low. To compete, some Louisville meth dealers now offer free delivery; others offer syringes already loaded with liquid meth so users can immediately shoot up. Similar partnerships, arrangements, and retail innovations have transformed regional drug markets across the U.S.

**H**ABITS, ONCE ENTRENCHED, are difficult to change. If they weren't, more Americans would have quit smoking soon after 1964, when [the U.S. surgeon general issued his first report on its risks](#). American nicotine addicts kept smoking because nicotine had changed their brain chemistry, and cigarettes were everywhere. We stopped people from smoking, argues Wendy Wood, a psychologist at the University of Southern California and the author of a book on habituation, by adding "friction" to the activity—making it harder to do or limiting access to supply. We removed cigarette vending machines, banned smoking in public spaces. By adding

friction to smoking, we also removed cues that prompted people to smoke: bars where booze, friends, and cigarettes went together, for example.

Something like the opposite of that has happened with P2P methamphetamine. “Meth reminds me of what alcoholics go through,” Matt Scharf, the director of recovery programs at Midnight Mission, a Los Angeles treatment center, told me. “There’s alcohol everywhere. Meth is now so readily available. There’s an availability to it that is not the case with heroin or crack. It’s everywhere.”

All of that meth has been pushed into a market already softened up by the opioid epidemic. That should not have mattered: Historically, meth and opioid users had been separate groups with different cultures, and the drugs affect the brain’s reward pathways differently. But as large supplies of P2P meth began to arrive, many opioid addicts already feared for their life. Fentanyl, a dangerous synthetic opioid, was also spreading quickly. For many, Suboxone—which blocks opiate receptors and hence eliminates opioid cravings—was a lifesaver. They use it daily, the way a heart patient uses daily blood thinners to stay alive. Yet the counseling and continuum of care required to support the broader life changes necessary for addiction recovery are often absent.

[From the May 2019 issue: Sam Quinones on how physicians get addicted too](#)

Thus, as P2P meth spread nationwide, an unprecedented event took place in American drug use: Opioid addicts began to shift, en masse, to meth. Meth overdoses have risen rapidly in recent years, but they are much less common than opioid ODs—you don’t typically overdose and die on meth; you decay. By 2019, in the course of my reporting, I was routinely coming into contact with people in Kentucky, Ohio, Indiana, Tennessee, and West Virginia who were using Suboxone to control their opiate cravings from long-standing addiction to pain pills and heroin, while using methamphetamine to get high. Massive supplies of cheap P2P meth had created demand for a stimulant out of a market for a depressant. In the process, traffickers forged a new population of mentally ill Americans.

**O**VER THE PAST YEAR and a half, I’ve talked with meth addicts, counselors, and cops around the country. The people I spoke with told me stories nearly identical to Eric Barrera’s: P2P-meth use was quickly causing steep deterioration in mental health. The symptoms were always similar: violent paranoia, hallucinations, conspiracy theories, isolation, massive memory loss, jumbled speech. Methamphetamine is a neurotoxin—it damages the brain no matter how it is derived. But P2P meth seems to create a higher order of cerebral catastrophe. “I don’t know that I would even call it meth anymore,” Ken Vick, the director of a drug-treatment

center in Kansas City, Missouri, told me. Schizophrenia and bipolar disorder are afflictions that begin in the young. Now people in their 30s and 40s with no prior history of mental illness seemed to be going mad.



Eric Barrera, now an outreach worker to homeless military veterans on Skid Row, had used meth for years before the flood of P2P meth hit. His mental health took a sharp downward turn. (Rachel Bujalski for *The Atlantic*)

Portland, Oregon, began seeing the flood of meth around 2013. By January 2020, the city had to close its downtown sobering station. The station had opened in 1985 as a place for alcoholics to sober up for six to eight hours, but it was unequipped to handle people addicted to P2P meth. “The degree of mental-health disturbance; the wave of psychosis; the profound, profound disorganization [is something] I’ve never seen before,” Rachel Solotaroff, the CEO of Central City Concern, the social-service nonprofit that ran the station, told me. Solotaroff was among the first people I spoke with. She sounded overwhelmed. “If they’re not raging and agitated, they can be completely noncommunicative. Treating addiction [relies] on your ability to have a connection with someone. But I’ve never experienced something like this—where there’s no way in to that person.”

From the April 2015 issue: The irrationality of Alcoholics Anonymous

On Skid Row in Los Angeles, crack had been the drug of choice for decades. Dislodging it took some time. But by 2014 the new meth was everywhere. When that happened, “it seemed that people were losing their minds faster,” a Los Angeles Police Department beat officer named Deon Joseph told me. Joseph had worked Skid Row for 22 years. “They’d be okay when they were just using crack,” Joseph said. “Then in 2014, with meth, all of a sudden they became mentally ill. They deteriorated into mental illness faster than I ever saw with crack cocaine.”

Susan Partovi has been a physician for homeless people in Los Angeles since 2003. She noticed increasing mental illness—schizophrenia, bipolar disorder—at her clinics around the city starting in about 2012. She was soon astonished by “how many severely mentally ill people were out there,” Partovi told me. “Now almost everyone we see when we do homeless outreach on the streets is on meth. Meth may now be causing long-term psychosis, similar to schizophrenia, that lasts even after they’re not using anymore.”

I called James Mahoney, a neuropsychologist at West Virginia University who had studied the effects of ephedrine meth on the brain in the early 2000s at UCLA. The psychosis he saw then was bad, he said, but it frequently appeared to be the result of extended sleep deprivation. In 2016, Mahoney took a job as a drug researcher and specialist in WVU’s addiction clinic. Less than a year later, the P2P crystal meth from Mexico started showing up. Mahoney was inundated with meth patients who came in ranting, conversing with phantoms. “I can’t even compare it to what I was seeing at UCLA,” he told me. “Now we’re seeing it instantaneously, within hours, in people who just used: psychotic symptoms, hallucinations, delusions.”

In community after community, I heard stories like this. Southwest Virginia hadn’t seen much meth for almost a decade when suddenly, in about 2017, “we started to see

people go into the state mental-hospital system who were just grossly psychotic,” Eric Greene, then a drug counselor in the area, told me. “Since then, it’s caused a crisis in our state mental-health hospitals. It’s difficult for the truly mentally ill to get care because the facilities are full of people who are on meth.”

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Symptoms could fade once users purged the drug, if they did not relapse. But while they were on this new meth, they grew antisocial, all but mute. I spoke with two recovering meth addicts who said they had to relearn how to speak. “It took me a year and a half to recover from the brain damage it had done to me,” one of them said. “I couldn’t hardly form sentences. I couldn’t laugh, smile. I couldn’t think.”

I spoke with Jennie Jobe, from rural Morgan County, in eastern Tennessee. Jobe had spent 20 years working in state prisons when she started a drug court and associated residential treatment center in 2013.

For its first few years, Jobe’s court handled meth addicts who got their drugs from local “shake and bake” manufacturers—small-batch cooks using Sudafed, and usually producing just a few grams of the drug at a time. These meth users were gaunt, she remembers, and picked at their skin. But they were animated, lucid, with memories and personalities intact when they arrived at her facility, detoxed after months in jail.

By 2017, however, people were coming to her treatment center stripped of human energy, even after several months spent detoxing from the drug in jail. “Normal recreational activities where guys talk trash and have fun—there’s none of that. It’s like their brain cannot fire.”

Treating them was daunting. Despite years of research, science has found no equivalent of methadone or Suboxone to help subdue meth cravings and allow people addicted to the drug a chance to break from it and begin repairing their life. And, like many others I spoke with, Jobe found that the human connection essential to successful drug treatment was almost impossible to establish. “It takes longer for them to actually be here mentally,” Jobe said. “Before, we didn’t keep anybody more than nine months. Now we’re running up to 14 months, because it’s not until six or nine months that we finally find out who we got.” Some can’t remember their life before

jail. “It’s not unusual for them to ask what they were found guilty of and sentenced to,” she said.

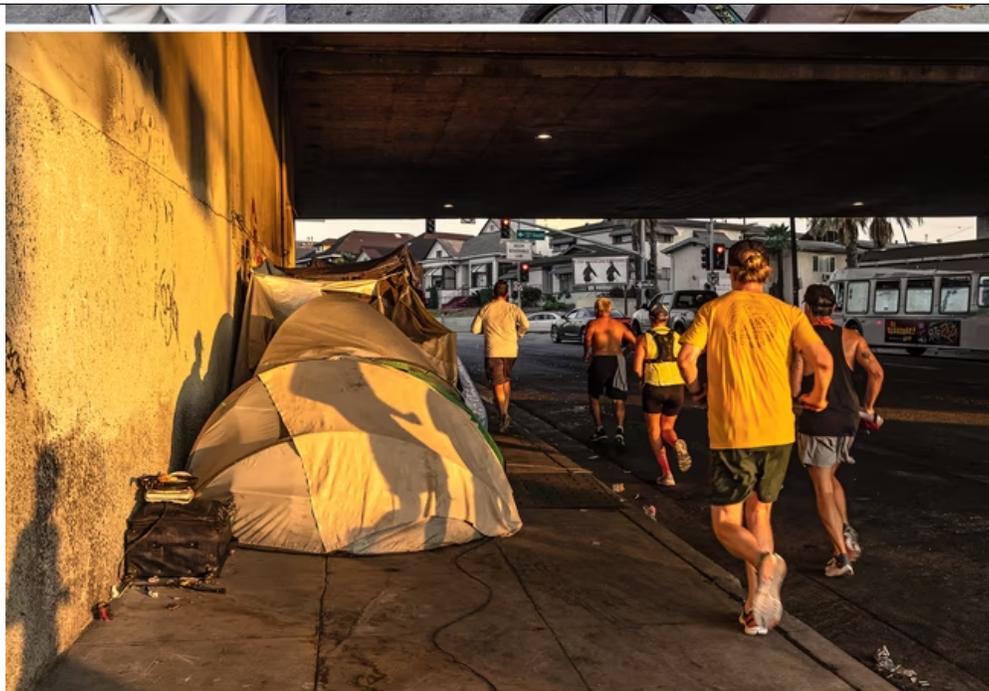
Why is P2P meth producing such pronounced symptoms of mental illness in so many people? No one I spoke with knew for sure. One theory is that much of the meth contains residue of toxic chemicals used in its production, or other contaminants. Even traces of certain chemicals, in a relatively pure drug, might be devastating. The sheer number of users is up, too, and the abundance and low price of P2P meth may enable more continual use among them. That, combined with the drug’s potency today, might accelerate the mental deterioration that ephedrine-based meth can also produce, though usually over a period of months or years, not weeks. Meth and opioids (or other drugs) might also interact in particularly toxic ways. I don’t know of any study comparing the behavior of users—or rats for that matter—on meth made with ephedrine versus meth made with P2P. This now seems a crucial national question.

**O**NCE YOUR EYES are open to the scale and human consequences of the P2P-meth epidemic, it’s hard to miss its ramifications in many areas of American public life.

Perhaps the most significant is homelessness.

In 2012, a Los Angeles Superior Court judge, Craig Mitchell, founded L.A.’s Skid Row Running Club. Every Monday, Thursday, and Saturday, 20 to 50 people—recovering addicts, cops, public defenders, social workers—meet around dawn in front of a local shelter to run for an hour through the greatest concentration of homeless people in the United States. The club’s broader mission is to support the area’s homeless community through mentorship and a focus on wellness.





*Top: Barrera, distributing socks on Skid Row. Bottom: The Skid Row Running Club—recovering addicts, cops, social workers—seeks to support the area’s homeless through mentorship and a focus on wellness. (Rachel Bujalski for *The Atlantic*)*

Los Angeles has long been the nation’s homelessness capital, but as in many cities—large and small—the problem has worsened greatly in recent years. In the L.A. area, homelessness more than doubled from 2012 to 2020. Mitchell told me that the most visible homelessness—people sleeping on sidewalks, or in the tents that now crowd many of the city’s neighborhoods—was clearly due to the new meth. “There was a sea change with respect to meth being the main drug of choice beginning in about 2008,” he said. Now “it’s the No. 1 drug.”

Remarkably, meth rarely comes up in city discussions on homelessness, or in newspaper articles about it. Mitchell called it “the elephant in the room”—nobody wants to talk about it, he said. “There’s a desire not to stigmatize the homeless as drug users.” Policy makers and advocates instead prefer to focus on L.A.’s cost of housing, which is very high but hardly relevant to people rendered psychotic and unemployable by methamphetamine.

Addiction and mental illness have always been contributors to homelessness. P2P meth seems to produce those conditions quickly. “It took me 12 years of using before I was homeless,” Talie Wenick, a counselor in Bend, Oregon, who began using ephedrine-based meth in 1993 and has been clean for 15 years, told me. “Now within a year they’re homeless. So many homeless camps have popped up around Central Oregon—huge camps on Bureau of Land Management land, with tents and campers and roads they’ve cleared themselves. And almost everyone’s using. You’re trying to help someone get clean, and they live in a camp where almost everyone is using.”

Eric Barrera is now a member of Judge Mitchell's running club. Through the VA, he got treatment for his meth addiction and found housing; without meth, he was able to keep it. The voices in his head went away. He volunteered at a treatment center, which eventually hired him as an outreach worker, looking for vets in the encampments.

Barrera told me that every story he hears in the course of his work is complex; homelessness, of course, has many roots. Some people he has met were disabled and couldn't work, or were just out of prison. Others had lost jobs or health insurance and couldn't pay for both rent and the surgeries or medications they needed. They'd scraped by until a landlord had raised their rent. Some kept their cars to sleep in, or had welcoming families who offered a couch or a bed in a garage. Barrera thought of them as invisible, the hidden homeless, the shredded-safety-net homeless.

But Barrera also told me that for a lot of the residents of Skid Row's tent encampments, meth was a major reason they were there and couldn't leave. Such was the pull. Some were addicted to other things: crack or heroin, alcohol or gambling. Many of them used any drug available. But what Barrera encountered the most was meth.

Tents themselves seem to play a role in this phenomenon. Tents protect many homeless people from the elements. But tents and the new meth seem made for each other. With a tent, the user can retreat not just mentally from the world but physically. Encampments provide a community for users, creating the kinds of environmental cues that the USC psychologist Wendy Wood finds crucial in forming and maintaining habits. They are often places where addicts flee from treatment, where they can find approval for their meth use.

In Los Angeles, the city's unwillingness, or inability under judicial rulings, to remove the tents has allowed encampments to persist for weeks or months, though [a recent law allows for more proactive action](#). In this environment, given the realities of addiction, the worst sorts of exploitation have sometimes followed. In 2020, I spoke with Ariel, a transgender woman then in rehab, who had come to Los Angeles from a small suburb of a midsize American city four years before. She had arrived hoping for gender-confirmation surgery and saddled with a meth habit. She eventually ended up alone on Hollywood's streets. "There's these camps in Hollywood, on Vine and other streets—distinct tent camps," she said, where women on meth are commonly pimped. "A lot of people who aren't homeless have these tents. They come from out of the area to sell drugs, move guns, prostitute girls out of the tents. The last guy I was getting worked out by, he was charging people \$25 a night to use his tents. He would give you girls, me and three other people. He'd take the money and we'd get paid in drugs."

Megan Schabbing, a psychiatrist and the medical director of emergency psychiatric services at OhioHealth, in Columbus, Ohio, later described to me how meth use and this sort of suffering can reinforce each other. Schabbing spends much of her time on the job digging into the underlying causes of drug use among those who end up in the ER. Often there was trauma: beatings, molestation, rape, war deployment, childhood chaos, neglect. For many of these patients, she discovered, the delusions fueled by meth became the point—the drug’s attraction. “Many would tell me, ‘I can stay out of reality on the street’” by using meth, she said. “When they come to us, it takes them days to figure out who and where they are. But some patients have told me that’s not a bad thing if you’re on the street.”

If P2P meth pushed her patients toward homelessness, it also helped them bear it.

**H**OW COULD THIS crisis emerge so quietly and remain, in many ways, invisible to most Americans? One reason, perhaps, is the national focus on the opioid epidemic, which was itself ignored for a long time. In recent years, the headlines have been about pain-pill or heroin overdoses, then fentanyl overdoses, and the funding has followed. Besides, deaths, however tragic, allow for memorials, a chance to remember the deceased’s better days. Meth doesn’t kill people at nearly the same rate as opioids. It presents, instead, the rawest face of living addiction. That part of addiction, one counselor told me, “people don’t want to touch it.”

There is no central villain in the P2P-meth story—no Purdue Pharma, no dominant cartel. There’s no single entity to target, either. So the issue is often enveloped in a willful myopia. Advocates for homeless people seem reluctant to speak out about the drug, for fear that the downtrodden will be blamed for their troubles.



*Left:* A couple sits on a Skid Row sidewalk while a man sleeps next to them. *Right:* A woman near her tent in L.A., holding a wooden heart she found while searching for recyclables. She wants to kick her meth habit, she says, but cannot stop using. (Rachel Bujalski for *The Atlantic*)

The spread of P2P meth is part of a larger narrative—a shift in drug supply from plant-based drugs such as marijuana, cocaine, and heroin to synthetic drugs, which can be made anywhere, quickly, cheaply, and year-round. Underground chemists are continually seeking to develop more potent and addictive varieties of them. The use of mind-altering substances by humans is age-old, but we have entered a new era.

Drug demand is important in this new era. People need to understand what these drugs will ultimately do to them, and those who are using will need substantial help getting off them.

But it must be said: The story of the meth epidemic (like the opioid epidemic before it) begins with supply. In a previous era, most Vietnam vets kicked heroin when they got home and were far from war and the potent supplies they were used to in Southeast Asia. Today, supplies of meth are vast and cheap throughout much of the country.

Crystal meth is in some ways a metaphor for our times—times of anomie and isolation, of paranoia and delusion, of communities coming apart. Meth is not responsible for these much wider social problems, of course. But the meth epidemic is symptomatic of them, and also contributes to them.

If you spend time among meth users, you'll notice certain habits and tics: fixations on flashlights, for instance, and on bicycles, which are endlessly disassembled and assembled again. Hoodies are everywhere. The hoodie is versatile—cheap, warm, functional. But as opioids, then meth, spread across America, the hoodie also became, for many, a hiding place from a harsh world. “When we put up that hood,” one recovering addict told me, “we’re making the choice to separate ourselves from everyone else—instead of someone pushing us out. I think it’s our way to hide from the world that doesn’t accept us. The hood is the refuge. It’s our safe place.”

Perhaps the best defense against epidemics like this one lies in choosing to look more closely and more sympathetically at the people in those hoods—to put a higher priority on community than we’ve done in recent years. America has made itself more vulnerable to scourges, even as those scourges grow more potent. But scourges are also an opportunity: They call on us to reexamine how we live. Until we begin to look out for the most vulnerable among us, there’s no reason to expect them to abate.

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*This article is adapted from Sam Quinones’s new book, [The Least of Us: True Tales of America and Hope in the Time of Fentanyl and Meth](#). It appears in the [November 2021](#) print edition with the headline “[The New Meth](#).” When you buy a book using a link on this page, we receive a commission. Thank you for supporting The Atlantic.*

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## The Least Of Us: True Tales Of America And Hope In The Age Of Fentanyl And Meth

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Sam Quinones is a Los Angeles–based journalist and the author of four books of narrative nonfiction, including his latest, *The Least of Us: True Tales of America and Hope in the Time of Fentanyl and Meth*.

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