

Kentucky's 'too low and too slow' response to the nation's worst hepatitis A outbreak

THE COMMONWEALTH'S HEP A OUTBREAK IS THE WORST THIS CENTURY, SICKENING MORE THAN 4,100 AND KILLING 43. AND THE STATE COULD'VE DONE MORE TO CONTROL IT.

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Last spring, Kentucky's infectious disease chief was ringing the alarm.

An outbreak of hepatitis A that already had infected nearly 400 people in Louisville was seeping into Appalachia, where

rampant drug addiction provided fuel for the virus to explode across rural Kentucky.

To contain it, the drug users and homeless largely spreading the disease had to be vaccinated — and quickly.

But the challenges in impoverished rural Kentucky were huge. Drug users were hard to find and vaccinate. Thinly staffed county health departments had seen their budgets shrink. And federal vaccine money for Kentucky had run out.

"Need to move faster," urged Dr. Robert Brawley in an April 2018 email to state health department colleagues obtained by the Courier Journal. "The virus is moving faster than we and (local health departments) are ... immunizing persons (at) risk."

Brawley argued that a powerful state response was needed: \$10 million, including \$6 million for a fusillade of 150,000 vaccines and \$4 million for temporary health workers to help administer them. In an email, he also lobbied for a public health emergency declaration to bolster the case for more federal money.

But a Courier Journal investigation found his urgent pleas went nowhere. And in the months that followed, Kentucky's outbreak metastasized into the nation's largest and deadliest.

The Courier Journal found that Brawley's boss, 31-year-old acting public health Commissioner Dr. Jeffrey Howard, rejected his aggressive recommendations. Amid limited state budgets, county staffing constraints and the availability of more than \$220 million in local health department reserve funds — he stuck instead to a \$3 million state response.

The state ultimately sent \$2.2 million to local departments and declined to declare an emergency. In addition, county health

departments added little to no staff to increase efforts to find and vaccinate drug users and homeless people.

Moreover, Kentucky officials never tried strategies used successfully by some of the other 16 states who fought outbreaks with limited budgets.

Kentucky didn't seek money from the state legislature, like Michigan. It didn't deploy "strike teams" of state health workers to counties, like Indiana.

And it waited much longer to deploy state funds than Tennessee, which earmarked \$3 million after just 25 cases.

The contagious liver disease has taken a heavy toll in Kentucky, sickening 4,162 people, far more than in any other state. It has sent 2,015 Kentuckians to the hospital for costly treatment.

And it has claimed 43 lives, the highest death toll in the U.S. — including people such as former Eastern Kentucky coal miner James Ramey.

Last fall, Ramey's organs failed, one by one, until he struggled so hard to breathe that the blood vessels burst in his neck.

In his last hours, his father raced over two hours from Martin County to his bedside in a Lexington hospital, leaning over his tubes and wires to beg him to hold on.

Ramey's heart gave out as soon as he heard his father's voice and felt his touch. He died Nov. 28, 2018, just over a year after the state declared an outbreak of hepatitis A.

"There's a very good chance James would be alive" had the state done more earlier to educate and vaccinate people in Appalachia, said his sister, Brandy Stafford. "We are desperate for help in these counties. People are crying out.

"Does the state not think these people's lives are worth something?"

A controversial decision debated

Howard defended his decisions, telling the Courier Journal the state used limited money to bolster vaccines in numbers that could actually be administered by small staffs in county health departments — and he was willing to seek more funding if needed.

Nurses were expensive, he said. And even with more vaccines, drug users would remain difficult to find.

None of the counties requested additional staff, he said, and some were slow to spend the state money they did get. Also, counties could pay for vaccines with local tax revenue or Medicaid reimbursements or order vaccine provided by the U.S. Centers for Disease Control and Prevention.

Moreover, state officials consulted with the CDC, which provided more than \$600,000 in cash and \$1.4 million worth of vaccines, he said. And they targeted people where they could efficiently find them: jails, emergency rooms, syringe services programs and drug rehabilitation centers — efforts that public health experts praised.

But he acknowledged that in retrospect he could have done some things differently.

"I would've liked to be more robust in our early response in Eastern Kentucky for sure. I wish I would've been more bold and said, 'Let's move into Eastern Kentucky,' as opposed to waiting, as we did, with the outbreak," said Howard, who grew up in Appalachia.

"As an Eastern Kentucky guy, it's heartbreaking to see this disease spread out in rural Kentucky. And I knew the struggles that they'd have once it started."

Adam Meier, secretary of Cabinet for Health and Family Services, said he stands behind Howard's choices. He said in a statement that the "challenges Kentucky faced were less financial and more logistical in nature as it related to identifying and engaging the at-risk populations.

"While hindsight might provide more context for some things now, in retrospect there's not a single decision that I'm aware of that was made in real time, with the information available at the time, that I would change."

More: [How hep A spread across Kentucky and grew into the nation's largest outbreak](#)



Pharmacist Mindy Howard gives Jennifer Cantrell, pharmacy tech, her second dose of the Hepatitis A vaccine inside Med Zone Pharmacy in Prestonsburg, Ky. on Jan. 9, 2019. Since a statewide outbreak of Hep A was declared in November 2017, the state has had more than 3,500 cases and 22 deaths.

(Photo: Nikki Boliaux)

But Brawley told the Courier Journal that much greater resources were needed to battle Kentucky's spread of

hepatitis A, pointing out that San Diego County in California spent more than \$12 million fighting its 2017 outbreak.

After an early response that an audit deemed too weak, San Diego brought the virus under control by nearly quadrupling the vaccines administered seven months into its outbreak.

By comparison, the state general funds Kentucky spent on its outbreak amounted to less than a quarter as much, Brawley said, even as the virus ultimately infected nearly seven times as many people.

"In comparison, the Kentucky hepatitis A outbreak response has been too low and too slow..." Brawley, who resigned in June, told the Courier Journal.

"Had the state hastened its vaccination efforts, it may have more quickly reduced the risk of the disease's spread and prevented acute cases, hospitalizations for about 50 percent of those cases, deaths and avoided millions of dollars in healthcare expenses for emergency department visits and hospitalizations."

Now, he said, "Kentucky has the worst hepatitis A outbreak in the United States in the 21st century."

'His advice should have been heeded'

Others inside the health department, including nurse Margaret Jones, manager of the state's immunization program, agreed that Brawley's recommendations could have curbed the outbreak faster.

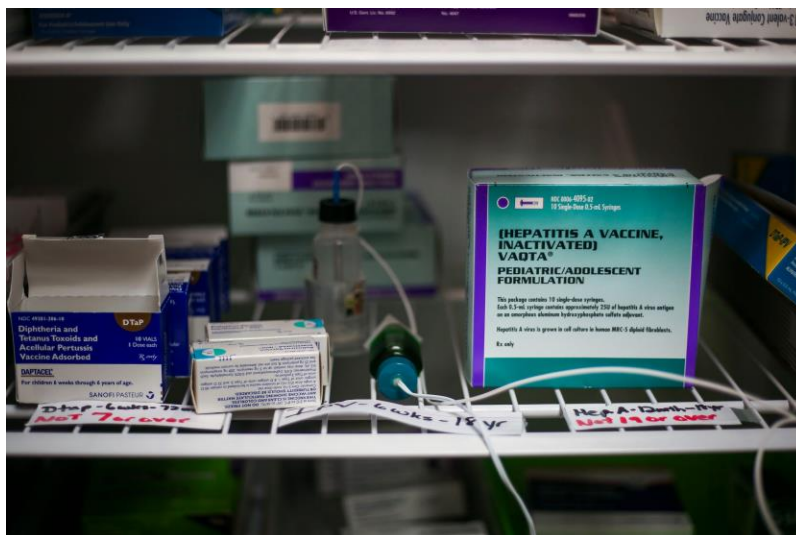
"We should have done more sooner," said Jones, who retired last summer. "If we had been able to get the vaccines out early, we may not have near as many cases or near as many

hospitalizations. ... He knew what to do. I think his advice should have been heeded."

Jones said others were surprised Howard didn't follow the guidance from Brawley, a public health veteran who has been a doctor since 1975, holds specialized degrees in epidemiology and infection control, and retired from the U.S. Navy Medical Corps before joining the department in 2006. Brawley eventually left his job as chief of the state health department's infectious disease branch and now lives in Columbus, Ohio.

Howard graduated medical school in 2014, was named acting commissioner just as the outbreak was declared in November 2017 and received his Kentucky medical license last year.

As recently as 2018, he was working on a public health master's degree at Harvard University and was officially appointed public health commissioner in June.



A hepatitis A vaccination in the Martin County Health Department in Inez, Kentucky, on Jan. 8, 2019.
(Photo: Nikki Boliaux)

Like Jones, others who work in rural Kentucky were dismayed that Brawley's recommendations were ignored.

"It's shocking that decision was made. I'm flabbergasted," said Stacy Usher, manager of a drug prevention program in Wolfe County, which has one of the state's highest rates of hepatitis A.

But Meier emphasized that the state's response, led by the state epidemiologist, was guided by a public health team including epidemiologists, physicians, nurses and scientists. He pointed to county health department reserves and other sources of funding available to help address the outbreak.

Officials at the CDC and in other states haven't criticized Kentucky's spending decisions. For most states, they said, resources dictate public health responses.

Howard echoed that sentiment, saying that while he never had an issue with the amount of money Brawley wanted to send out, the state "had to limit our response based on the capabilities that exist."



Hit hepatitis A hard and fast

Given the challenges and the unpredictability of viral infections, experts said, it's impossible to know the extent to which Kentucky's outbreak would have been minimized with more resources.

But experts say the unprecedented hepatitis A outbreaks that have sickened more than 13,000 Americans are a reminder that states must devote more resources to preventing and controlling disease, despite a national erosion of public health budgets.

If rural health departments nationally were "properly resourced," they might have been able to stop the vaccine-preventable disease before it sickened so many, said Dr. Michael Brumage, an assistant dean at the West Virginia University School of Public Health.

"This is something that happens in Third World nations," Brumage said. "This should not be happening in the First World."



Three Forks Regional Jail in Beatyville, Kentucky, on Jan. 9, 2019. The jail was under quarantine in September 2018 due to hepatitis A.

(Photo: Nikki Boliaux)

Experts agreed that the way to bring hepatitis A under control is to hit it hard and fast. That saves money in the end, they said, because prevention always is less expensive than treatment.

"As soon as there's a few cases, that's the time to throw everything but the kitchen sink at it," said Dr. Nate Smith, president-elect of the Association of State and Territorial Health Officials and director of the Arkansas Department of Health. "Once you've got thousands of cases across the state, it's hard to get the genie back in the bottle."

Howard: Hepatitis A is usually a 'mild disease'

Howard said he appreciates the severity of the outbreak, which has spread to 103 of Kentucky's 120 counties.

But it would be wrong, he said, to compare hepatitis A to other diseases affecting drug users, such as hepatitis C, which afflicts Kentucky at one of the nation's highest rates.

Howard said hepatitis A is different because "for most people that get it, is a fairly mild disease. Your liver enzymes will go up. You'll feel bad for a few days. And it will go away. ... I think it would be a mistake to equate it with HIV, hepatitis C and diseases that cause severe morbidity and mortality."

Officials are hopeful the hepatitis A outbreak has crested. The number of new cases each week is down from 150 in early November 2018, averaging 87 a week this year.

State health officials said their plans in 2019 include working to help local departments vaccinate more regularly at jails, increase vaccinations generally, enlist more federally qualified health centers to administer vaccines, and continue to push out federally funded vaccine to counties.

But even now, too many at-risk drug users and homeless still aren't being reached, said Dr. Martin Gnoni, an infectious disease specialist at Our Lady of Bellefonte Hospital near Ashland, one of the first areas outside of Louisville to be hit last year.

Gnoni said his area could use more epidemiologists and health department staff, as well as outreach teams in vans. To get the virus under control, Louisville's 220-person health department blanketed vulnerable residents, administering 25,000 vaccines.

And it paid off. By May, Louisville's cases declined steadily. [The city's all-out response led to nearly 100,000 vaccinations and was called a "gold standard" by the CDC.](#)

But Appalachian counties have fewer resources and fewer places drug users and homeless people concentrate, which has helped the virus race through the mountains.

In January, Martin County, where Ramey lived and died, recorded some of Kentucky's highest rates of hepatitis A.

"I guess you could have seen it coming," said Stephen Ward, the health department director in Martin County, where more than a third of the 11,000 residents live in poverty and addiction touches nearly every family.

The county gave out around 800 vaccines last year, but never got any of the state money targeted for vaccinations. Howard said he wasn't sure why, although it did receive some federally funded shots.

Regardless, Ward said Martin County didn't get enough resources from the state to combat the outbreak.

"I do understand the budget constraints that the state is under," said Ward, who at times picked up rural residents so they could get vaccinated. "We are easy to ignore. ... But these people bring so much. They deserve to be rescued."

He aches for the Ramey family, who he knows well.

On a cold February morning, Stafford, Ramey's sister, visited the family cemetery in a wooded mountain valley. She stuck cloth flowers into the fresh earth and placed a garden gnome near her brother's grave.

The 40-year-old followed his father into coal mining and struggled with pills, heroin and meth for much of his life. Years of intravenous drug use had given him hepatitis C.

But his family remembers him as a generous prankster, a 6-foot-2 "brute" who loved car racing, riding his four-wheeler and hanging out with his two teen sons.

No one in his family had heard of hepatitis A until his girlfriend got it. Then Ramey contracted the virus, and within weeks he was dead.

His family is still angry Kentucky isn't doing more to save others from the same fate.

"This is very serious, and it needs to be taken more seriously," Stafford said. "Our people are dying."

Editor's note: *This story has been updated to reflect newly released state numbers on hepatitis A infections, hospitalizations and deaths.*

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