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Testing Remains Scarce as Governors Weigh Reopening States

In both red and blue states, governors, health departments and hospitals are finding innovative ways to cope, but still lack what experts say they need to track and contain outbreaks.

By Sheryl Gay Stolberg, Farah Stockman and Sharon LaFraniere

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WASHINGTON — About a week after the first report of a Covid-19 case at a meatpacking plant in southwest Kansas in early April, the state's governor, Laura Kelly, issued a pointed warning to President Trump: Without test kits to separate the well from the sick, a fast-moving outbreak could idle facilities that produce roughly one-quarter of the nation's meat supply.

Within three days, 80 blue-and-white boxes of test kits and testing machines arrived, and two Black Hawk helicopters from the Kansas National Guard whisked them to the afflicted region. As the test results came in last week, the costs of the delay became clear: 250 workers in six plants were already infected.

In Albany, Ga., a hot spot for the disease, a hospital finally figured out a way to run its own coronavirus tests, rather than relying on limited state capacity or outsourcing the work to slow-moving private labs. But it still struggles to run as many tests as it would like because of a shortage of components.

In Ohio, a research institution in Columbus is teaming up with a plastics company to churn out nasal swabs on 3-D printers for use in the state. But when Mysheika W. Roberts, the city's health commissioner, offered test kits to local health centers, she learned they lacked the protective gear they needed to put them to use.

As governors decide about opening their economies, they continue to be hampered by a shortage of testing capacity, leaving them without the information that public health experts say is needed to track outbreaks and contain them. And while the United States has made strides over the past month in expanding testing, its capacity is nowhere near the level Mr. Trump suggests it is.

There are numerous reasons. It has proved hard to increase production of reagents — sensitive chemical ingredients that detect whether the coronavirus is present — partly because of federal regulations intended to ensure safety and partly because manufacturers, who usually produce them in small batches, have been reluctant to invest in new capacity without assurance that the surge in demand will be sustained.

Some physical components of test kits, like nasal swabs, are largely imported and hard to come by amid global shortages. Health care workers still lack the protective gear they need to administer tests on a wide-scale basis. Labs have been slow to add people and equipment to process the swelling numbers of tests.

On top of all that, the administration has resisted a full-scale national mobilization, instead intervening to allocate scarce equipment on an ad hoc basis and leaving production bottlenecks and shortages largely to market forces. Governors, public health officials and hospital executives say they are still operating in a kind of Wild West economy that has left them scrambling — and competing with one another — to procure the equipment and other materials they need.

“You are using a free-market model in a public health emergency,” Governor Kelly, a Democrat, said an interview, “and I’m not sure those two go together particularly well.”

The United States conducted about 1.2 million tests from April 16 to April 22, up from about 200,000 tests from March 16 to March 22, according to data from the Covid Tracking Project.

But as states begin to reopen, the nation is far from being able to conduct the kind of widespread surveillance testing that health experts say would be optimal. Many states are still struggling to conduct much more urgent testing of patients with symptoms, or those in high-risk groups. Few have the money or the personnel to also check on the presence of the virus in the general population or to reach out to people who have been in contact with those confirmed to be ill.

“We are not in a situation where we can say we are exactly where we want to be with regard to testing,” Dr. Anthony S. Fauci, the nation’s leading infectious disease expert, said this week in an interview with Time.

The three-phase White House plan, Opening Up America Again, does not detail a national testing strategy or provide numerical benchmarks for how much testing is necessary. It says states should have a “downward trajectory of positive tests” or a “downward trajectory of documented cases” over two weeks, while conducting robust contact tracing and “sentinel surveillance” testing of asymptomatic people in vulnerable populations, such as nursing homes.

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Congress is pushing the administration to give states more guidance. The $484 billion relief package passed last week included $25 billion to expand testing and required the administration to come up with a strategic testing plan to support the states.

In the meantime, a flurry of research groups, professors and other experts have stepped in with proposals. On the low end, the liberal Center for American Progress estimates that eight-tenths of one percent of the national population must be tested each week to contain the virus. On the high end, a group from Harvard has put the figure at as much as 21 percent.

Most states — including Georgia, where nonessential businesses have been allowed to start reopening — fall far short of even the lowest estimates.

In Ohio, Gov. Mike DeWine announced a deal with Massachusetts-based Thermo Fisher Scientific on Friday that would begin providing the state with 7,200 tests a day by Wednesday and scale up to 22,000 a day by the end of May. That trajectory is enough, he said in an interview, to make him feel comfortable about taking the first steps toward reopening businesses on Monday.

That type of entrepreneurial response by some states is all well and good, said Thomas R. Frieden, a former director of the Centers for Disease Control and Prevention, but it does not help other states that are still struggling.

"It's great to have innovation from academia and the private sector to come up with new ways to do things as efficiently as possible," he said, "but on the other hand we do need national coordination."

Mr. Trump continues to insist that the current approach is adequate.

"America's testing capability and capacity is fully sufficient to begin opening up the country, totally," he said at one point this month. At another, he said, "We are doing more testing I think than probably any of the governors even want."

That is not true.

Kansas: 'There Will Be Death.'

After getting 2,000 tests kits to southwest Kansas and assessing the scale of the outbreak there, Ms. Kelly decided it was not necessary to close the meatpacking plants.

But she said the tortuous path to freeing up even minimal supplies for testing remains the biggest reason she was reluctant to lift the stay-at-home order she imposed on March 28.

"We are nowhere near where we need to be with testing supplies," she said on Thursday. "I'm looking down a lot of rabbit holes trying to figure out how we are going to get those test kits here. It's imperative if we are going to be able to lift that stay-at-home order."

Kansas has one of the lowest Covid-19 testing rates in the nation. Dr. Lee A. Norman, the state's top health official, estimated that Kansas needed tens of thousands more testing kits.

The state is so short of plastic test swabs that he has appealed to dentists to manufacture them in their offices by modifying 3-D printers used to make dental models.

Since March 20, Kansas has sent the Federal Emergency Management Agency nine requests for medical supplies, including for 235,000 testing swabs, 60,000 kits to transport samples and 178,200 kits to analyze them. As of Wednesday, the agency had sent "nothing," said Jonathan York, the state's coordinating officer. Federal officials told him that other states were in more desperate shape.

In mid-April, the federal government delivered 273,000 surgical masks, the kind needed to protect medical workers who administer tests. But Dr. Norman said the masks, which had been privately donated, "were so substandard they wouldn't even make a good coffee filter."

Late Friday, the Centers for Disease Control and Prevention, which has helped the state obtain some supplies, told officials it intended to ship at least 25,000 of the 80,000 test kits it had requested.

State officials have had no luck trying to buy supplies themselves. Dr. Norman said Kansas had standing requests with private suppliers for $43 million in equipment, a "staggering" sum equivalent to nearly a third of his department's annual public health budget.

“But the pipelines have pretty much dried up,” he said.

Kansas is still dealing with the hangover of seven years of draconian budget cuts under former Gov. Sam Brownback, a Republican. Ms. Kelly said the state health department “had been pretty much decimated” by the time she became governor in 2018, with the laboratory that now processes many Covid-19 tests resembling “something out of the past.”

The state plans to rely heavily on volunteers to create a corps of 400 workers to monitor the contacts of people who test positive.

Although the state is far from meeting the broad guidelines for testing capacity the White House has recommended for reopening, Ms. Kelly is under growing pressure to allow her stay-at-home order to expire as scheduled on May 3. The Republican-controlled state legislature has moved to curb her emergency powers, and protesters gathered on Thursday on the statehouse grounds.

“What is an acceptable level of risk?” Dr. Norman asked. “We cannot get it down to zero, so how can we guarantee that people won’t get sick?”

Whatever the course of action, he said, “there will be death.”

Georgia: ‘It’s Not Gone.’

As Phoebe Putney Memorial Hospital in Albany, Ga., began filling up last month with gasping patients, Scott Steiner, the hospital system’s president, immediately encountered the ways in which a lack of testing capacity left the region vulnerable.

He wanted to test as many patients and staff members as he could, but the state’s laboratory had set criteria so strict that few people qualified. When he turned to LabCorp, a private company, results took as many as 10 days to come back. With no way to know if patients were positive, doctors and nurses burned through precious protective equipment until the results came in.

So Mr. Steiner decided the hospital had no choice but to develop the capacity to test on its own. He and his staff considered buying a testing machine from Abbott Laboratories, a company that had been praised by Mr. Trump, but worried about competing with the federal government over scarce supplies.

Finally, they decided to buy $400,000 worth of equipment from Cepheid, a diagnostic company based in California.

Now, the hospital tests every patient who is admitted, even those coming in for unrelated procedures, as well as outpatients who have symptoms. The number of cases has fallen, as has the percentage of patients testing positive, to 25 percent in April from about 40 percent in March.

But doctors cannot run as many tests as they would like. Mr. Steiner said he requested enough materials from Cepheid for 1,500 tests a week, but the company has sent enough to do only 400 to 900.

“We didn’t get any last week,” he said. “We heard that there were other government agencies that took the supply.”

So far he has been unable to get tests for antibodies, which help show how many people have already contracted the virus, and the county health department’s efforts to conduct contact tracing are at a very early stage.

Mr. Steiner has seen both the devastation of the virus and also the increasing risks of the shutdown for patients who have had to delay surgeries, including breast cancer patients awaiting mastectomies. The hospital, which gets most of its income from elective surgeries, could resume those procedures in a few weeks.

But nearly 100 Covid-positive patients remain in the hospital. And on a single day this week, eight more patients were admitted.

“It’s not gone,” Mr. Steiner said.

Ohio: ‘Are We Testing Enough People?’

Although Mr. DeWine, a Republican, has been one of the most aggressive governors in addressing the crisis, testing has been a concern from the start.

On April 1, the state’s health director, Amy Acton, ordered hospitals to stop sending coronavirus tests to private laboratories because a huge backlog had created delays of up to 10 days in processing. (This week, Mr. DeWine lifted the order, saying the labs had caught up.)

But by March 31, Ohio State University’s Wexner Medical Center and Battelle, a nonprofit research institute, had developed their own test that produced results within five hours. Ohio State now processes slightly more than 1,000 tests a day, with a capacity of 4,500 per day, said Harold L. Paz, the chief executive of Wexner Medical Center.

Facing a shortage of nasal swabs, the medical center teamed up with a plastics maker to produce swabs on 3-D printers; it has received 15,000 swabs, with another 100,000 expected soon.

Yet the health commissioner in Columbus, Dr. Roberts, was struggling to keep up with the demand. While she supervises a staff of 450 people with a budget of $45 million, she said she and her team probably spent 20 percent of their time searching for necessary test kits and supplies.

A little over a week ago, the state shipped her 1,000 test kits. She will distribute them judiciously, she said, focusing on nursing homes and other hot spots or high-risk groups.

“I worry, are we testing enough people?” she said. “And how do we get the tests to the right people and make sure that we don’t have something brewing that we failed to pay enough attention to and it becomes a huge fire.”

Ohio’s testing capacity has been limited by a shortage of reagents, the compounds needed to process the tests. Mr. DeWine complained privately to Vice President Mike Pence that the Food and Drug Administration was moving too slowly to approve a new reagent made by Thermo Fisher Scientific. Last Sunday, Mr. DeWine repeated his plea for faster action on NBC’s “Meet the Press.”

The pressure campaign worked; on Tuesday, Mr. DeWine announced the F.D.A. had granted approval, clearing the way for his announcement on Friday about expanded testing.

Mr. DeWine said Ohio would now have enough capacity to do intensive testing in hot spots and to test the contacts of those infected, helping guide him through “gut-wrenching decisions” about the balance between getting the economy going again and keeping people from spreading the virus.

“Frankly,” he said, “I feel a lot better than a few days ago when I didn’t have this.”

Sheryl Gay Stolberg and Sharon LaFraniere reported from Washington, and Farah Stockman from Cambridge, Mass. Kitty Bennett contributed research.

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- **When will this end?**
  This is a difficult question, because a lot depends on how well the virus is contained. A better question might be: “How will we know when to reopen the country?” In an American Enterprise Institute report, Scott Gottlieb, Caitlin Rivers, Mark B. McClellan, Lauren Silvis and Crystal Watson staked out four goal posts for recovery: Hospitals in the state must be able to

safely treat all patients requiring hospitalization, without resorting to crisis standards of care; the state needs to be able to at least test everyone who has symptoms; the state is able to conduct monitoring of confirmed cases

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