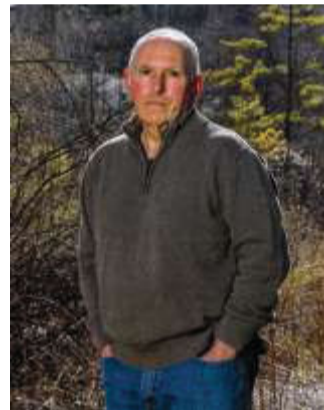
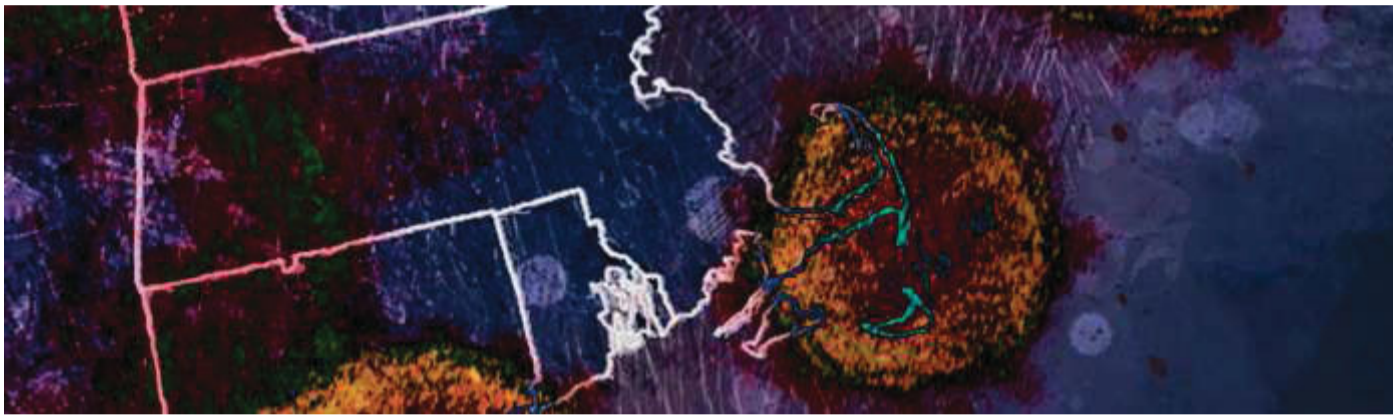


Boston Sunday Globe

MAY 31, 2020

A STATE OF EMERGENCY

■ TESTING RATES VARY B1 ■ SHAUGHNESSY ON QUIET GAMES C1



The story of the coronavirus here is a story of people like (clockwise from top left) Dr. Michael Mina, Dr. Sandra Smole, Joe Ramirez, Governor Charlie Baker, Dr. Monica Bharel, Rick Bua, Gladys Vega, and Dr. Clarisse Kilayko.

THE VIRUS'S TALE

Track the pandemic here to its roots and you find a story driven by heroics, ingenuity, error, suffering, and a hard question: How famous for health care excellence have suffered such a vast loss of human life?

STORY BY NEIL SWIDEY, EVAN ALLEN, AND BOB HOHLER | GLOBE STAFF
PHOTOS BY ERIN CLARK | GLOBE STAFF

Why are you calling us?" the state epidemiologist asked on the phone.

Dr. Clarisse Kilayko, alone on the western edge of Massachusetts in an empty corner of a nursing unit at Berkshire Medical Center in Pittsfield, tried again to explain.

Her patient had all the symptoms of the novel coronavirus she had read about in studies out of Wuhan and Washington: pneumonia, fever, dry cough, exhaustion, and lung scans that glowed white and hazy. She had to test him.

No. It's just not possible, the epidemiologist said. It had to be something else.

Kilayko didn't know the voice on the

other end of the line. But she knew the woman's role. This on-call epidemiologist for the state Department of Public Health's hotline was a gatekeeper. And according to the state of Massachusetts on Tuesday, March 3, the virus had scarcely arrived here. Outbreaks in China and Italy were raging, but there were just over 100 official cases dotting the US, most of them a continent away in Washington and California. There had been two sick people identified in Massachusetts, but both were infected overseas and both were quickly isolated. As far as the state was concerned, the novel coronavirus was still a faraway problem.

Kilayko's patient was a 66-year-old
VIRUS, Page A6

THE PRESIDENT

A role Trump mostly eschews: consoler

By Jess Bidgood and Liz Goodwin
GLOBE STAFF

WASHINGTON — When dusk falls in Franklin Township, N.J., blue lights on the town gazebo pierce the darkness, one for every person in

town who has died from the coronavirus: 118 so far.

To Michael Steinbruck, 54, a resident of the community of 70,000 who keeps up this makeshift memorial with his family, it is a small gesture to mark a collective loss and a

sign of support for grieving families, even if he does not know whose name belongs to each light. There are too many.

"We want each family who does know the name to know that we as a town don't for-

get," said Steinbruck.

On Wednesday, the same day Steinbruck's wife, Kim, hung three new bulbs on the gazebo, the country recorded its 100,000th death from the virus, a devastating milestone
TRUMP, Page A13

Leaders urge calm, brace for unrest

Minn. activates National Guard amid protests

YVONNE ABRAHAM
COMMENTARY

By John Eligon, Matt Furber, and Campbell Robertson
NEW YORK TIMES

MINNEAPOLIS — The nation was rocked again Saturday night as demonstrators clashed with police from outside the White House gates to the streets of more than two dozen besieged cities, as outrage over the death of George Floyd in Minneapolis traversed a razor's edge between protest and civic meltdown.

Governor Tim Walz of Minnesota activated thousands of National Guard troops — up to 13,200 — to control protesters in Minneapolis who turned out in droves for the fifth consecutive night Saturday after burning buildings to the ground, firing guns near the police and overwhelming officers the night before. But he declined the Army's offer to deploy military police units.

Rallies, looting, and unrest expanded far beyond Minneapolis, with protesters destroying

The fire this time

Who gets to breathe free in this America?

Not your tired, your poor, your huddled masses, demonized by the president and his acolytes as invaders, infectors, and rapists. Not the wretched refuse of other teeming shores, countries he has derided in one scatological swoop.

Not the wretched souls of our own, either. Black Americans are entering a fifth century of miseries, the shackles that held those first generations replaced by less overt restraints, with locks that snap shut in courtrooms, schools, legislative chambers, and the nondescript offices of bank managers and election officials. Tired doesn't even begin to capture it.

Not George Floyd, his neck

PROTESTS, Page A4

ABRAHAM, Page A4



A demonstrator raised a fist Saturday near the White House.

HANDS TO HEAL, HANDS TO KILL

He was a surgical superstar, but darkness trailed Dr. Ingolf Tuerk, too, darkness that one violent evening turned to night

By Hanna Krueger and Tonya Alanez
GLOBE STAFF

When Ingolf Tuerk was a young doctor at Charité Hospital in Berlin, a few years after the wall fell, audiences gathered to watch him operate, astonished by his skill. A star athlete turned star surgeon, Tuerk would shape the field of urology through his discipline and determination, pioneering several breakthrough techniques.

"He was a master of the craft," Steffan Loening, then-chair of urology at Charité, recalled of his star protege, who once swiftly repaired a hemorrhaging artery during a radical procedure before a packed gallery that erupted in applause when Tuerk was done. "He must have completely fallen apart."

Tuerk, 58, is now accused of murdering his estranged wife, Kathleen McLean, 45, in a violent attack culminating months of alleged abuse.

Prosecutors say that Tuerk, the former head of urology at St. Elizabeth's Medical Center, has admitted to strangling McLean in the midst of a bitter divorce and dumping her
SURGEON, Page A14



VOL. 297, NO. 152

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Monday: Cooler. Some sun.

Complete report, **B16**.
Deaths, **C15-32**.

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the 1,000-bed residence hall? What if this turns into a full-blown outbreak on campus?

But none of that came to be. The response of campus, city, and state officials was textbook effective. There would be no known transmissions of the virus from this UMass student to anyone else.

It seemed like a triumph — the first known case on the East Coast now successfully extinguished — and an affirmation of the power of a public health response.

“We were very pleased with how well it went,” said Larry Madoff, medical director of the DPH’s bureau of infectious disease.

Yet that commendable performance came with a hidden cost: It appears to have lulled state leaders into believing that containing other cases would be just as straightforward.

In the weeks that followed, as cases around the country increased, state officials repeatedly assured the public: We are prepared.

Pomales realized they had gotten lucky with this particular student, who had been unusually conscientious. He hadn’t taken the T, hadn’t hung out with friends, hadn’t even stopped by CVS or the campus center. As soon as he’d woken up with symptoms, he had driven directly from his apartment to the student health center.

The real test was coming. It would not present itself with such tidiness.

On Feb. 3, Harvard Medical School Dean George Daley was on a video conference call, learning how bad things might get.

On the call were Chinese scientists and doctors. They had come to Daley by way of China Evergrande Group, a real estate giant and important Harvard donor that had reached out to the university days earlier. They needed Harvard’s help to combat the virus. They asked for help obtaining drugs in clinical trials, and wanted to tap into Harvard’s scientific and medical prowess.

Now, the clinicians and scientists painted a grim picture of the devastation in their intensive care units. The number of patients was far higher, they said, than what they had experienced in the 2003 outbreak of SARS, another deadly coronavirus variant.

Daley heard the desperation in their voices. He had watched from afar the lightning spread of the virus overseas and the brutal impact on its victims. It had seemed clear to him well before now that it was just a matter of time before it spread widely in the world, and erupted in Massachusetts. He was already aiming to do what he could. But after that day, he was more determined than ever.

Some of the world’s brightest scientific minds were right here in his backyard, at the universities and biotech companies along the Charles River. In the coming weeks, Daley would recruit as many as he could for a group whose combined firepower might take on this virus.

The Marriott Long Wharf hotel was bustling on the last Tuesday night in February as Danni Askini made her way into the bright warmth of the lobby. She was excited to meet far-flung friends who had traveled to attend a Biogen leadership conference at the distinctive hotel jutting out into Boston Harbor.

One hundred and seventy-five executives from all over the world were streaming in, wrapping each other in bear hugs, clapping each others’ backs, kissing each others’ cheeks. Some ordered beers at the bar and leaned in across high-top tables to hear each other over the crowd, faces close. An executive from Biogen’s Italian operation chatted with colleagues near the reception desk. One of them was surprised to hear that this executive had apparently sailed through airports in Milan and Boston, despite a devastating eruption of the coronavirus in his part of the country.

Askini hugged her friends, and they headed out into the night, to the North End, where they sat shoulder to shoulder, four of them sharing an Italian dinner. She had

Evening light fell across a farm in the small community of Clarksburg, home of Rick Bua, the first person to receive a positive test for the coronavirus in Western Massachusetts.

►VIRUS

Continued from Page A1

grandfather from a woodsy town of 1,700 people, who had gone to church, the doctor, the grocery store, the dump, and a couple of high school basketball games. He hadn’t recently traveled to China or Italy, and hadn’t, that he knew of, had contact with anyone who was infected. Under federal guidelines, that meant he didn’t qualify for testing.

As Kilayko hung up, she was surprised to feel a flicker of relief. The epidemiologist sounded so sure. And when it came right down to it, Kilayko wanted to be wrong. As an infectious disease specialist, she knew what it would mean if her hunch was right. If Rick had the virus, the virus was probably everywhere, and hundreds, perhaps thousands, of lives would be lost.

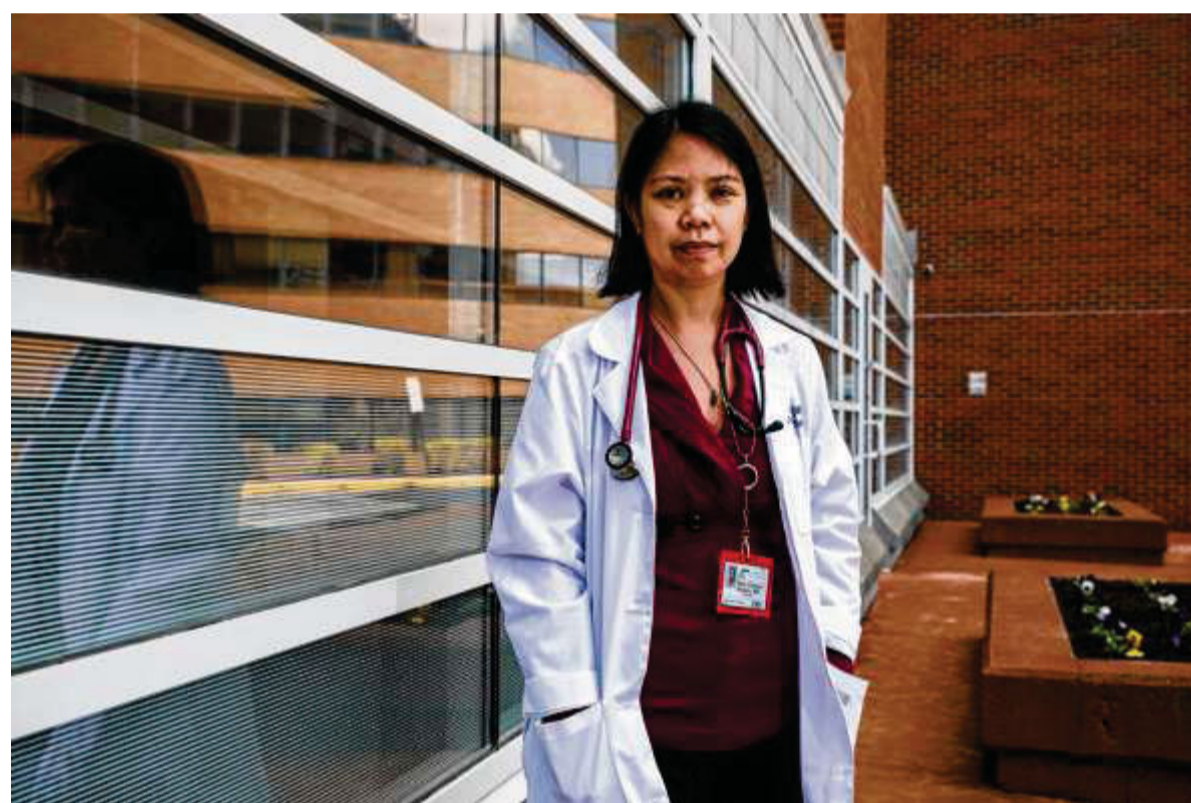
On the radio during her drive into work that morning, Kilayko had heard about an ominous development from over the border: New York announced its first presumptive case of community transmission — a dreaded marker in any outbreak, evidence that the virus was moving quickly and quietly from person to person instead of traveling in from far away.

When Kilayko looked in on Rick the next day, he wasn’t any better. A new X-ray showed a shadow spreading across his lungs. She called the state hotline again and got a different epidemiologist but the same answer: No. Kilayko knew there were other, more plausible possibilities. Rick had just finished chemotherapy for Hodgkin lymphoma, and his oncologist suspected drug toxicity. It could be another virus. If her instincts were wrong, all she was doing by pressing for the test was delaying his treatment.

Rick was wan but smiling in his hospital bed, his wife of 44 years, Debbie, at his side like always. “You know, doc, I think I feel better today,” he told Kilayko. He and his wife didn’t think he had the coronavirus. They weren’t even entirely sure what the coronavirus was. But Kilayko had also begun seeing more patients presenting like Rick — people with hazy lung scans and no history of travel. Doubt and worry wrestled in her stomach.

Then, during morning rounds on Thursday, March 5, Debbie stopped Kilayko. She wanted to tell her something she had discovered, in case it was important.

Two of their friends were also patients at the hospital, Debbie



Dr. Clarisse Kilayko, an infectious disease specialist at Berkshire Medical Center, sought a coronavirus test for her patient Bua multiple times before it was granted.

said. Both had been at the same basketball game Rick had attended a couple weeks earlier.

“They have the same symptoms,” Debbie said.

Kilayko had been thinking of each of her patients as unconnected, stars scattered across the sky. Suddenly, she saw the constellation. All of these cases had to be linked.

Finally, on her next call, the state epidemiologist said yes.

It was a hard-fought win, but precious days had been lost: The call was Kilayko’s third time describing her patient to the state and the state’s third chance to recognize the danger he represented.

The plight of Rick and his two ailing friends, the earliest apparent cases of community transmission in Massachusetts, could have triggered quick and aggressive action to slow or shut down public life. Even hours mattered in those critical days. The math was well known and simple: The faster governments act after learning of community transmission, the better their chance of slowing the disease before it spins out of control, the smaller the number who die.

Three states — Washington, California, and Maryland — had already declared states of emergency, and just next door, Vermont was informing its residents that widespread community transmission was possible. In Massachusetts, Dr. Kilayko’s warnings — and other alarming developments, like the cluster of cases after an international business gathering in Boston — triggered no proportionate sense of urgency.

At the very least, public health officials might have warned the public. Instead, the next day, Friday, March 6, Governor Charlie Baker faced news cameras and

told the people of Massachusetts not to worry. His Health and Human Services secretary brushed off the very idea of community spread, and insisted there were plenty of testing kits and personal protective equipment on hand. Boston Mayor Martin J. Walsh, when asked if the St. Patrick’s Day Parade would be canceled, waved his hand and said, “No. We’re not there yet.”

“Massachusetts is home to world renowned hospitals and leading health care experts that are planning and preparing our communities,” Baker said. “The general public in Massachusetts remains at low risk.”

After the news conference ended, the governor headed to the airport with his family. They had six days of vacation scheduled and a timeshare in Park City, Utah. Pristine snow and wide open skies beckoned.

Those early days of March 2020 may turn out to be among the most consequential in modern Massachusetts history, a time when the state’s vaunted public health infrastructure hesitated for a full seven days, a fateful lost week against an unprecedented enemy.

Globe reporters retraced the devastating path of the virus through the state and followed the elected officials, bureaucrats, health care workers, and researchers who faced a crisis not seen in our lifetimes. The result is a portrait of early misjudgments and hesitations as the warnings grew louder, and of a fierce battle against long odds to bring it back under control.

It begins with the virus’s first known appearance in Boston on a Wednesday morning in late January, about 9:00, when a student

Deaths: 0

The World Health Organization declares the virus “a global emergency.”

US Health and Human Services Secretary Alex Azar declares the virus a public health emergency.

JANUARY

FEBRUARY

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A UMass Boston student arrives at Logan Airport from Wuhan, China.

Student goes to the student health center with mild COVID-19 symptoms.

The UMass Boston student tests positive, becoming the first announced case in the state. The case is also the first on the East Coast and eighth in the US.

Harvard Medical School Dean George Daley learns during a video conference with a university donor in China how much worse the epidemic might become. He reaches out to Dr. Anthony Fauci, then begins to coordinate Boston’s university, medical, biotech, and pharma leaders.

met two of her friends in Seattle, where Askini, who has not worked for Biogen, had lectured on public health at the University of Washington. The conversation turned to the coronavirus. It was only a matter of time, they agreed, until America was threatened. They reminisced about playing a board game called Pandemic, where they were members of an elite disease control team and the infection traveled and bloomed with every draw from a deck of cards. They had lost.

"It's hard to beat a pandemic," Askini said, some two weeks before the World Health Organization officially declared COVID-19 a pandemic.

The conference spanned two days. Attendees packed into the hotel elevators and onto its escalators, handed tongs and serving spoons back and forth at every buffet meal, gripped the levers of the self-serve coffee dispensers that got a workout during every break.

On Wednesday night, the action moved to a dinner in the glittering State Room perched atop 60 State Street, looking out at the Boston skyline through the floor-to-ceiling windows. Afterward, a group of eight Biogen colleagues took the long way back to the Marriott, stopping at a bar that boasted an extensive collection of fine whiskeys.

"You have to try this one," one executive told another, holding his glass aloft to offer a sip.

By the weekend, word began to trickle around that people who attended the conference were falling sick, spiking fevers, losing their sense of smell and taste. One of Askini's friends was ill, and all four would be diagnosed with COVID-19.

On Saturday morning, Askini woke with sharp pain in her chest and a fever of 103. She could barely breathe. Her condition would rapidly deteriorate, and the state would twice refuse to screen her for COVID-19 before she eventually tested positive.

On the morning of Tuesday, March 3, the very day, as it happened, that Dr. Kilayko made her first call from the Berkshires, it was clear something was very wrong. Biogen's chief medical officer, Dr. Maha Radhakrishnan, called the state's Department of Public Health.

"There was a meeting of [175] people from all countries and 50 of them are symptomatic," wrote the epidemiologist who took the call. "Caller has questions."

But the initial answer to whether any of them could be tested was "No," Biogen officials say.

Another alarm missed, and time for action squandered.

By then, the Biogen meeting had been over for days. Its attendees had roamed the city and then dispersed to every corner of the state and the globe, going to house parties, hugging family members, sending children to school with a kiss on the forehead. New infections tied to Biogen would soon spring up in Boston, in Cambridge, in Wellesley, in Norwood. On Wednesday, March 4, Baker and other state officials, after meeting with front-line medical workers, reiterated that the risk posed by the virus was low — a stance they would maintain for several more days, despite ominous signs of the Biogen cluster spreading. They said the state was prepared.

Halfway to the Harvard Medical School conference room, Dr. Michael Mina realized he had left his suit jacket in a colleague's lab. He ran back to retrieve it. By the time he returned and entered the elegant, wood-paneled conference room, he was glad to be wearing it. Inside, he found a well-dressed crowd of 80 distinguished researchers — lots of blazers, lots of gray hair. Scanning the group, Mina, a 36-year-old epidemiologist and Harvard assistant professor with closely cropped brown hair, thought, I must be the youngest person in this room.

They were many of the best and most accomplished of the research, biotech, and medical worlds, people that George Daley and a group of others had spent



much of February enlisting for what they envisioned as a massive scientific blitz on the virus. A team of Chinese scientists and physicians attended by way of video.

It was Monday, March 2, a moment when the storm in Massachusetts was gathering force but still hidden from view. The group's plan was to make sure that the state was prepared for the onslaught, on many fronts. The only way Daley saw to avoid the fate Chinese doctors had described to him, of hospitals overrun and soaring death rates, was to prepare now. Above all, that meant testing — prolific and immediate testing for all people who think they might be infected. And not just that. There had to be widespread testing in any community where the virus popped up. Without it, the health system would fail to detect and react to hot spots before it was too late. A few sparks would quickly become a forest fire.

Mina, a virology lab director at Brigham and Women's Hospital in addition to his role at Harvard was grateful to be included in this gathering. He had been sounding alarms for weeks, in private conversations and public comments. But he had been frustrated. He sometimes wondered if his junior status caused people to take his warnings less seriously.

As far back as late January, after watching the news out of China, he had been pushing to develop a COVID-19 test at the hospital. His boss supported his effort, but Mina had come to believe that was not nearly enough. Testing had to be available on a much larger scale than any one institution could muster.

Mina could see disaster approaching, "like I had binoculars and I was watching a tidal wave rushing toward us."

Mina took a seat near the back. Larry Madoff rose to speak. Madoff, a lecturer at Harvard in addition to his role as the infectious disease chief at DPH, had good news: After weeks of federal delays and missteps, the state public health lab had finally developed a reliable process of its own for producing COVID test results. Now the DPH lab in Jamaica Plain was able to process specimens from the swabs taken from patients instead of having to ship them off to Atlanta, shaving several days off the turnaround time.

But then Madoff said something that startled many in the room. The process was so laborious that if Massachusetts was hit with a big spike, the state lab would most likely not be able to keep up.

"Larry, can I stop you there for a minute?" Daley interjected. "Do you mean we don't have enough testing capacity?"

Mina shook his head in dismay. He was worried, too, but he already knew state labs weren't

built to meet the high volume of testing during a pandemic. They needed reinforcements — hospitals and private labs and manufacturing plants to help pick up the work that the government couldn't do on its own.

Normally, the Centers for Disease Control and Prevention in Atlanta developed the test for emerging viruses. Then, state public health agencies tested them out and recruited hospitals and private labs to make them at the necessary scale. But the system didn't work this time. The test kits the CDC initially sent were defective, producing false positives in some patients. As a consequence, states, including Massachusetts, could do no testing until the CDC supplied reliable tests at the end of February.

Now the state was way behind schedule, with little hope for help mass producing tests because of big delays at another federal agency, the Food and Drug Administration.

Mina knew all this and a week earlier had unleashed his frustration in a volley of tweets.

"How to know if COVID-19 is spreading here if we are not looking for it?" he said in one.

He left the meeting racking his brain. There had to be some way to ramp up capacity so the state could process thousands of tests a day, and do it fast. Had to be.

Dr. Monica Bharel, the state's public health commissioner, spoke reassuringly to the state senator chairing the legislative hearing, convened on March 4 to assess the threat of the virus and the state's readiness.

On this Wednesday afternoon, the commissioner offered repeated reminders about proper hand washing. Discussing the public's risk of getting sick, she seemed not to know that just the day before a doctor in the Berkshires had begun calling about a patient who

Kelsea Hindley of Cohasset tests positive for COVID-19, the first woman and first full-time resident of the state to do so. A French teacher, she had gone on a February vacation trip to Europe with students and staff from St. Raphael Academy in Rhode Island.

More than 80 researchers and clinicians meet at Harvard Medical Center, with a video link to medical specialists in China. Dr. Larry Madoff, medical director of the state Bureau of Infectious Disease and Laboratory Sciences, says that although the state lab can now process COVID tests, it might not be able to keep up with a big spike in cases.

Biogen's chief medical officer, Maha Radhakrishnan, e-mails employees who had been at the February conference to report that a small number of attendees have indicated they are currently ill, with some exhibiting flu-like symptoms.

Rick Bua, who will become the state's first confirmed case of community transmission, is admitted to Berkshire Medical Center.

appeared to be a possible case of community spread. "On the West Coast, they do have community level transmission," Bharel said. "At this point, we don't have evidence of that here in Massachusetts. That's why the risk in Massachusetts remains low."

Lawmakers on the panel pressed Bharel and Larry Madoff, who testified alongside her, about why more people in the state weren't being tested. The state lab's hands were tied, they said. The CDC had effectively restricted testing to people who had traveled to high-risk areas or people who had symptoms and known contact with someone who had tested positive.

An hour into the hearing, the senator chairing it interrupted the proceedings to say that an aide had just alerted her to breaking news: The CDC was easing its requirements for testing. "Anyone with symptoms and a doctor's approval can get one," state Senator Jo Comerford said. Then she added, "But there may not be enough tests yet."

At Massachusetts General Hospital, staff swarmed an ambulance bay and parking garage, converting them into a solution to their mounting COVID problem.

By Friday, March 6, the hospital was in full emergency response mode, following two days of mounting tensions around the Biogen outbreak.

It had started on Wednesday, after Biogen announced that two conference attendees tested positive following their return home to Europe. Five rattled Biogen employees soon showed up at the MGH emergency room, demanding to be tested. The hospital still had to defer to DPH for testing, and DPH still deferred to the CDC's restrictive criteria, limiting tests to people who had traveled to certain foreign locations or had a direct link to someone infected, or had severe pneumonia. DPH determined that just three of the five qualified.

On Thursday came news that another Biogen attendee had tested positive after returning home to Tennessee. Panic among Biogen workers got so bad that the company's Global Security Operations Center sent out an urgent e-mail telling employees to refrain from showing up at Mass. General "to demand to be tested for the Coronavirus."

Dr. Clarisse Kilayko at Berkshire Medical Center calls the state Department of Public Health's hotline for the first time seeking a test for her patient Rick Bua, a 66-year-old grandfather, with COVID-like symptoms. The state says no.

DPH receives its first call about the Biogen outbreak. Biogen officials say they are initially told the cases do not satisfy requirements for testing.

The CDC announces it has eased testing requirements.

Biogen leaders inform DPH that two of its executives who attended the February conference tested positive for COVID after returning home to Germany and Switzerland.

Five people connected to the February Biogen conference show up at Massachusetts General Hospital seeking tests for the virus.

The state again denies a COVID test for **Rick Bua** in the Berkshires.

"You will not be tested," the e-mail read, adding that such demands by Biogen employees "are overwhelming the emergency room." Ominously, the company's warning concluded with this sentence: "Hospital leaders have warned Biogen that they may need to have the Hospital Police Department intervene to prevent Biogen employees from entering the emergency room."

Although hospital officials would later say they were never overrun, they knew that if Biogen was any indication of the trouble ahead, they needed a better system. The elaborate site they stood up that day in the ambulance bay would allow them to deal with patients needing to be tested in an orderly way that didn't risk spreading the virus to others waiting in the crowded emergency room. Here, they could control how people came and went.

Brigham and Women's Hospital had set up a similar operation in its ambulance bay across town. With the federal restrictions on who qualified for testing now eased, the hospitals had more discretion. MGH and the Brigham divided between them a list of Biogen employees provided by the state. Each employee was assigned a time to show up. Their every move was to be choreographed, from arrival to departure, to limit the risks of spreading the virus.

On Friday, results came back on the three Biogen employees tested on Wednesday. All were positive.

MGH officials, recognizing the possibility of an imminent onslaught, met that day to begin the extraordinary transfer of power from the top executives to a special emergency management team, a wartime footing designed to facilitate fast, life-saving decisions.

Extraordinary actions were taking shape at other major institutions, too. Harvard University

Harvard Medical School Dean George Daley (above) was instrumental in gathering specialists from many medical and research fields to battle the coronavirus here.

The evening sun set on the Boston Marriott Long Wharf (left), where a Biogen conference at the end of February helped spread the coronavirus.

Continued on next page

In the Berkshires, Kilayko calls DPH again, now reporting symptoms in multiple patients who know each other. **Rick Bua** receives a COVID-19 test.

Biogen sends an urgent e-mail telling employees to stop showing up at Mass. General and demanding to be tested because those demands "are overwhelming the emergency room."

A \$115 million collaboration, involving 80 Boston researchers, is announced to tackle COVID-19.

DPH officials and Harvard epidemiologist Dr. Michael Mina testify at a state legislative hearing. DPH continues saying the risk is low. Mina knows otherwise.

The results of the three Biogen employees whom Mass. General had swabbed two days earlier are back: All three are positive.

Mass. General converts one of its parking garages and ambulance bays into a massive testing site. Brigham and Women's does something similar.

Mass. General officials, recognizing the possibility of an imminent onslaught, begin the transfer of power at the hospital from the top executives to a special emergency management team, a wartime footing.

Governor Charlie Baker leaves for Utah ski vacation.

Rick Bua's COVID test comes back positive. Berkshire Medical Center begins trying to determine how many staff members were exposed. Within the next few days, as the number of positive cases grows, almost 70 workers wind up quarantined.



Governor Charlie Baker, who cut short a family trip as the coronavirus tightened its grip, became frustrated with struggles to acquire medical supplies.

Continued from preceding page president Larry Bacow was firming up plans to shut down campus and move all instruction online. During a meeting administrators convened on Friday, there was agreement that it would be unsafe for students to return from spring break.

“Every dorm is a potential Diamond Princess,” said Michael Mina at the meeting, referring to the cruise ship that had become an infamous floating hot zone.

At the end of his workday that Friday, Governor Baker boarded a plane at Logan Airport for Utah and six days of vacation.

Dr. Clarisse Kilayko was at home in the Berkshires the next day when the call came from the state lab. Her patient Rick Bua had tested positive for COVID-19.

“You have a good day, doctor,” the epidemiologist said.

Stunned, Kilayko started making phone calls, and drove to the hospital in a fog. She began ordering tests for other patients who had symptoms, and the hospital rushed to determine how many of its staff had been exposed as they had waited for permission to test patients. Within a few days, as more patients tested positive, almost 70 workers would be quarantined.

Before heading home to start her own quarantine, Kilayko walked to the hospital lab to look up the hometowns of all the patients now suspected of having COVID. She was hoping to find a geographic cluster. There was no pattern. They were from all over the region.

In Boston the next day, the director of the state public health lab, Dr. Sandy Smole, was conferring with her staff about the batch of tests they’d just run on Biogen employees before she handed the report over to DPH epidemiologists.

On one test plate, they had specimens from 11 patients. Of those, the staff members told Smole, seven came back positive. That rate was higher than any of them had expected.

Smole felt a pit in her stomach. Trying to get a handle on what they might be up against with the Biogen outbreak, she looked up the total number of positives and the places where the patients lived.

She was expecting, hoping, to see them clustered around Greater Boston. Instead, she discovered that many lived far from Boston. “Oh, my God,” she thought. “Look how many fingers this now has across the state.”

Inside the memory care unit at the Holyoke Soldiers’ Home, certified nursing assistant Joe Ramirez watched a 78-year-old Navy veteran shuffle out of the lunch room and lurch into a recliner by the television. The old man’s breathing was fast and shallow.

At the end of this first week in March, the veterans were still shaking off the last rattles of the winter flu, so the odd cough rumbling through the common room didn’t even register. But something was wrong with Harry MacDonald.

Walking toward him, Ramirez

Baker declares a state of emergency.

Public health officials announce community spread in Berkshire County and say their focus now shifts from containing the virus to mitigating it.

The number of cases statewide more than doubles to 92.

Harvard and MIT announce their decisions to close their campuses and switch to online education for the rest of the semester. Many other Massachusetts colleges and universities soon follow.

Baker assigns Marylou Sudders, state secretary of Health and Human Services, to manage a newly created COVID-19 Command Center.

Baker activates the National Guard. In a phone call with President Trump, Baker says states are being outbid on medical supplies. The Mass. Medical Society says the “scarcity” of PPE in the state is “a dire predicament.”

At Mass. General, Dr. Eric Rosenberg and his team’s COVID-19 test — developed in-house — is ready to go.

Boston Mayor Martin J. Walsh declares a public health emergency. Baker announces closure of all restaurants and bars and a three-week emergency closure of schools beginning March 17. He also limits visitor access to assisted living facilities and hospitals, and bans non-emergency surgeries.

DPH announces first death, a man in his 80s from Suffolk County.

DPH announces second death, a woman in her 50s from Middlesex County.

Under Baker’s order, all nonessential businesses close by noon. Massachusetts becomes the 13th state with a stay-at-home advisory in effect.

Holyoke Soldiers’ Home sees its first death, 86-year-old Ralph Gamelli.

Baker extends school closures through May 4.

Baker issues an emergency order closing nonessential businesses and a stay-at-home advisory, not at noon.



asked, “Hi, Harry, how are you?” MacDonald had fought the relentless creep of Alzheimer’s with stubborn cheerfulness, greeting staff every morning by name. But now he stayed silent, hunched and wheezing.

“You’re not feeling good today, huh?” Ramirez said. “I hope you feel better.”

MacDonald didn’t look up. Ramirez, a gentle 47-year-old who called the residents “my veterans,” had worked in nursing homes for a decade, and he knew the signs of Alzheimer’s-related decline. People would forget how to walk or eat. This seemed different — faster, more physical than mental. Still, MacDonald’s direct caretakers were monitoring him, and sometimes, people just got sick. As Ramirez took the elevator back up to the second-floor memory unit where he worked, he shook his head.

“Poor Harry,” he thought. “His time is coming up.”

Marty Walsh gazed out the window in his expansive City Hall office overlooking Quincy Market. On this first Friday evening in March, the marketplace was bustling. The voice of Vertex CEO Jeff Leiden was coming from his speakerphone. It was 5:30 p.m., and it had already been a long day for Boston’s mayor, starting with the press conference he had held with the governor and top public health officials to reassure the public. The more Leiden spoke, however, the less confident Walsh became in all the reassurance he had been doling out. Leiden wasn’t just the CEO of a biotech-pharmaceutical heavyweight. He was also a physician who had a

Baker issues an emergency order banning most gatherings of more than 250 people and activates the state emergency operations center.

Baker announces the COVID-19 Response Command Center has been activated.

Massachusetts doctors say a severe shortage of tests is hindering efforts to control the outbreak.

Baker administration releases new guidelines to health care providers that significantly relax rules on who can be tested.

At Mass. General, Dr. Eric Rosenberg and his team’s COVID-19 test — developed in-house — is ready to go.

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PhD in virology. And he was someone whose counsel the mayor had come to value. “It’s coming here,” Leiden told Walsh. “There’s no way to avoid that.” The coronavirus threat was much higher than many people believed, Leiden said. There was very clear human-to-human transmission, and the death toll in China appeared to be far higher than the government was reporting. Massachusetts had to try to get ahead of things, before the deaths mounted here.

Walsh pressed Leiden for details on how he knew about that underreporting. The Vertex CEO said he and his team had been speaking with their collaborators in China. The widening outbreak at the Biogen conference was a stark indicator of just how infectious this virus was, Leiden said. Vertex had been planning to fly in executives from around the world for its own leadership conference earlier that week. But days before Biogen had its first positive test result, Leiden had pulled the plug on the company gathering and told Vertex staffers to attend other conferences virtually. The mayor was stunned.

This was Walsh’s second conversation with a respected local leader who warned him that the coronavirus represented a growing danger. Days earlier, Federal Reserve Bank of Boston president Eric Rosengren had declined to shake his hand at their meeting, saying he’d sworn off that kind of contact. The coronavirus, he said, had the potential to be devastating. Now, after hanging up with Leiden and reeling from this pair of stark warnings from leaders in science and finance, the mayor steeled himself for what he would need to do. “We’re going to have to shut everything down,” he told himself.

In the three days and nights since Baker had arrived in Park City, his family ski getaway had turned into a string of increasingly troubling phone calls with his aides back in Massachusetts. His timeshare on the mountain was part of the Marriott’s Summit Watch Resort, but he found himself focusing a lot more on another Marriott, the one on Boston Harbor where the Biogen outbreak began. Though he had been briefed about the cluster before he departed Boston, the governor was beginning to grasp

its potential magnitude. “My God,” he said to himself. “This thing is really contagious.”

On Monday, Baker booked a flight back home. At 6 p.m. on that same day in early March, Mayor Walsh announced a decision he had waved off just three days earlier. He was canceling the St. Patrick’s Day Parade. Like Baker, Walsh had been taking a cautious approach. But now he was through waiting. He had seen enough.

The red-eye delivered the governor to Logan at 6:01 a.m., the city lights twinkling in the pre-dawn darkness, a peaceful scene belying a new truth: His state was under siege.

The governor appeared to be losing the early rounds to the contagion, and now he was playing catch-up. The best he could hope for was to limit the enormity of the outbreak — the number of infections and deaths — and avert the disaster of hospitals so besieged by patients that they couldn’t keep up.

The state’s total number of confirmed and presumptive COVID cases — just eight when he left for Utah — had reached 92 by the time Baker returned from his long weekend. Ten days had passed since the CDC warned of a possible widespread national outbreak. COVID-19 cases had been recorded up and down the Eastern Seaboard. Ten governors, from California to Rhode Island, had already declared states of emergency. No longer could Baker reasonably assure the state’s 6.9 million residents that their risk of contracting the potentially lethal virus was low. The question now was how many would die?

By the time Baker reached his Beacon Hill office that Tuesday morning, he knew he was facing the greatest leadership challenge of his career. In the state’s war against the novel coronavirus, there was now an Eastern and a Western front. The Biogen cluster had sent the virus coursing through Eastern Massachusetts. In the Berkshires, it had gained a foothold and was aggressively on the move.

No community was safe, and Baker, in one of the gravest understatement of his career, said at a press conference that Tuesday afternoon, “I would have to say that the risk has increased.”

On the afternoon of his first

day back from the mountain, the governor declared a state of emergency. The following night, the World Health Organization declared COVID-19 a pandemic. America’s cultural, educational, and sports institutions were shuttering.

Baker, now fully engaged in the struggle, assigned Marylou Sudders, his secretary of Health and Human Services, to manage a newly created COVID-19 Command Center. Baker had deep trust in Sudders, having worked with her in the administrations of Governors Bill Weld and Paul Cellucci. After Baker was elected in 2014, he had tapped her to run the biggest slice of the state enterprise, a sprawling, now \$24 billion operation whose responsibilities include defending the Commonwealth against infectious diseases.

Sudders was a smart, decisive leader, but her training was in social work — she had no experience managing a major infectious disease crisis. Neither did Dr. Monica Bharel, the internist Sudders had recruited in 2015 to serve as the state’s public health commissioner.

On Sunday, March 15, two days after the Boston Marathon was postponed, Baker joined other governors across the country who were mobilizing more aggressively against the threat. He announced that all schools would be closed for three weeks. He also limited visitor access to assisted living facilities and hospitals and banned elective surgeries. That same day, after troubling photos from the previous night showed throngs of rowdy patrons gathered outside Boston pubs in advance of St. Patrick’s Day, the governor ordered

Baker gives an emotional press conference about being outbid by the federal government on safety supplies. He asks the federal government for a major disaster declaration.

DPH Commissioner Dr. Monica Bharel, experiencing symptoms, including a fever, is tested for COVID.

The state has now reported 35 total deaths.

Harry MacDonald, the first veteran to get sick at the Holyoke Soldiers’ Home, dies. Heartbroken staff store his body in a refrigerated truck. By late May, 76 residents of the home would be dead.

Holyoke Mayor Alex Morse alerts Lieutenant Governor Karyn Polito that patients at the Holyoke Soldiers’ Home have died of COVID.

Bharel announces she tested positive for COVID. Sudders is tested. The result is negative.

The state has now reported 3,240 total cases.

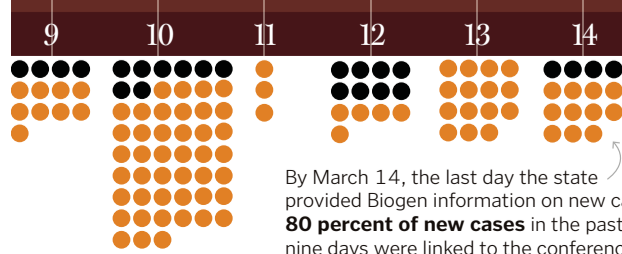
Boston cancels the St. Patrick’s Day parade. Industry executives cancel conventions.

The second positive case as a result of community spread is reported in the Berkshires.

Baker leaves Utah on the last flight out, a red-eye home.

Dr. Michael Mina chats with a colleague at Brigham and Women’s Hospital, Dr. Deborah Hung, about involving the Broad Institute in testing solutions. Within two weeks, Massachusetts would have a high-volume diagnostic center up and running.

WHO declares COVID-19 a pandemic.



By March 14, the last day the state provided Biogen information on new cases, 80 percent of new cases in the past nine days were linked to the conference.



the shutdown of the state's restaurants and bars for everything except takeout, starting March 17. His vacation now a fleeting memory, Baker was working day and night, scrambling to regain lost ground.

Jean Remy waited in his cab at Logan Airport for the few fares still trickling off the planes. He was afraid.

For 30 years, he had worked seven days a week, 16 hours a day. Sundays, holidays — it didn't matter. He was in his cab.

It was a hard life. As he drove the city streets, he called family to complain: He made so little money, his passengers were so rude. "I suffer because of the cab!"

He didn't see a way out. He was 55 years old, renting a room in a beat-down apartment in Brockton. He had kids. He had a wife. He sent money home to Haiti. He had just upgraded his cab to a 2017 model with low mileage. It cost \$250 a week to rent, whether or not he made enough in fares to cover that. Right now, he wasn't even coming close. What could he do but drive?

All the cabbies who drove for Metro Cab, the radio association Remy belonged to that dispatched his calls, were wearing masks and gloves and scrupulously scrubbing the partitions that separated them from their passengers. But they were also driving doctors and nurses and patients to and from the hospitals. Who knew what hung in the air when they opened their passengers' doors? Remy tried to stick with the airport runs, but Logan was a desert. On March 16, he logged just two trips.

He had diabetes, a risk factor for COVID. And he was a big man; the man who rented him his cab remembers wondering how he fit inside. Remy started telling his ex-wife and sister that he was done with the taxi business.

"You know what, I am going to stay home," he would say. But every day, he got back in his cab.

The state's first confirmed COVID-related death came on Friday, March 20. Alphonse Ambrosino of Win-

Sudders places the Holyoke Soldiers' Home superintendent Bennett Walsh on administrative leave, installs new management, and enlists the National Guard to help stabilize the situation amid a burgeoning scandal.

Mass. death toll increases by 33, the biggest one-day jump yet, to a total of 122.

Baker extends business closures and the stay-at-home advisory until May 4.

Kraft plane delivers desperately needed supplies.

Mass. Public Safety Secretary Tom Turco tests positive for COVID. Baker and Polito are tested. Results negative.

Jean Remy dies at home of COVID-19.

Mass. General is able to move 26 COVID-19 patients off ventilators, a welcome development that had seemed unlikely just one week earlier.



throp was in his 80s and, DPH noted in its press release, "had pre-existing health conditions that put him at higher risk." By now, state releases had been scrubbed of their once standard line about the risk being low, replaced with a new line: "COVID-19 activity is increasing in Massachusetts."

The next day, Dr. Peter Slavin, the president of Mass. General, and Dr. Tim Ferris, the CEO of the Mass. General Physicians Organization, conducted rounds together throughout the hospital's emergency room, intensive care units, and patient floors.

They learned that recovery time in the ICU was long — once COVID patients went on ventilators, it was really hard to take them off. There were concerns this would start to create a patient "stacking" problem in intensive care.

Slavin and Ferris have a close working relationship, with Slavin overseeing the hospital's 25,000 employees and Ferris overseeing its nearly 3,000 physicians and researchers, across every imaginable specialty. Right now, though, they were both still getting used to the new "wartime footing."

Slavin had been on national television a few days earlier talking about the possibility of an unmanageable flood of patients around the country and saying "we need to think about this in almost a warlike stance." He and

Ferris had sent out a joint letter to all hospital employees, explaining the transition to an emergency command structure. The hospital had made this switch before, notably during the 2013 Boston Marathon bombings. But that war was brief. This one was sure to stretch a lot longer, though nobody had the faintest idea of how long.

Ferris saw it as his job to put out fires and provide political cover for the emergency leaders temporarily in charge of the hospital so they could do whatever needed to be done. This kind of artful path-clearing came easily to Ferris, who had long worn his influence lightly.

Despite all his management duties, Ferris continued to see patients once a week, and many of them had no idea he was anything other than a primary care doctor. After seeing one of his patients, who had been at the Biogen conference and whose first test came back inconclusive, Ferris had to self-quarantine. Until the retest came back negative, Ferris had to do his path-clearing from home.

As COVID-related admissions began rising at hospitals across the state, there were sudden shortages of everything from ventilators to masks, gowns, gloves — even cotton swabs in some places.

Without clear leadership from Washington, hospitals were being subjected to price-gouging by suppliers, and states were being thrust into bidding wars with each other and the federal government. It was the kind of irrational, state-vs.-state business and political climate that had persuaded the Founding Fathers to dump the loose Articles of Confederation in favor of centralized federal power under the Constitution.

Mayor Walsh, wearing a face mask, calls for a curfew and urges everyone to wear non-medical-grade face coverings in public.

Gladys Vega, trying to address the escalating crisis in Chelsea, the state's main COVID hot spot, distributes food to 250 needy people who have waited hours in the rain for help.

The repurposed Boston Convention and Exhibition Center, temporarily renamed Boston Hope, is ready to fill up to 1,000 beds.

Mass. confirmed cases top 20,000.

Peak admissions at MGH: 58 patients admitted who tested positive for COVID-19.

Chelsea city and medical leaders send a plea for help to the state.

Mass. General's director of materials management, Ed Raeko, was scouring the planet for PPE. Despite all his efforts, he felt sick to his stomach at one point when the Partners hospitals were down to a one-week's supply of their most widely used N95 surgical mask.

People all over the hospital were starting to panic, for different reasons.

By March 23, Ed Ryan, Mass. General's director of Global Infectious Diseases, found himself losing sleep. He'd been nervously watching Mass. General's daily census of patients and even started tracking them on a blackboard in his kitchen, which his family normally used to write notes to each other. The numbers were doubling about every 72 hours. If that rate continued, Ryan calculated, the 1,000-bed hospital would reach capacity with 960 patients on April 9. By April 12 or so, it would hit nearly 2,000, meaning it would "go over the cliff"

That afternoon, the state announced four new COVID-19 deaths and 133 new cases. In coming weeks, the numbers would skyrocket. The disease was rapidly spreading, but there was another reason for the increase, one that represented a major breakthrough in the battle to slow its advance: After weeks of frustration, medical minds around Boston had devised ways to start testing on a much bigger scale.

At Mass. General, a team figured out a way to adapt COVID tests so that they could be processed on faster equipment they had in the lab. Initially, after the delay-plagued FDA had made it possible for Mass. General to begin processing tests, the hospital had been getting by with a jury-rigged system that could produce no more than 30 tests results a day. Now, using the faster equipment, they could process 300. Soon, it would be 1,100.

Meanwhile, an idea that had struck Michael Mina and a few colleagues a couple weeks earlier — to adapt a sophisticated Cambridge genomics research center, the Broad Institute, into a COVID test processing center for the state — had worked. Crews had constructed new walls in the center's cavernous interior and adjusted equipment. Almost overnight, the

center was transformed and could now pump out thousands of test results a day.

And Governor Baker visited a private Quest Diagnostics lab in Marlborough that promised an "enormous increase" in testing.

The governor made his most dramatic move on Monday, March 23, announcing that, effective at noon the following day, all nonessential businesses in the state would be closed. He also issued a stay-at-home advisory urging all residents to avoid leaving their residences. By the time the order took effect, Massachusetts was the 13th state to do this. Baker received criticism in both directions, from those who called it an economy-killing over-reaction, and from those who said he blunted the public health benefit by issuing an advisory rather than an order. To Baker, it was the sensible path. "I do not believe I can or should order US citizens to be confined to their homes for days on end," he said.

Just the advisory, though — and the social pressure to take it seriously — would quickly break the daily rhythms of life for people statewide, including the governor. Baker would be largely confined to his home and office. His Sunday kickboxing workouts with his wife, Lauren, were over. He had played his last game of recreational basketball. Gone, too, were the pleasures of politics. No more head-shaving for charity, hand-shaking, or baby-cradling. Most painful, given his close relationship with his father: He could no longer visit the 91-year-old in his retirement community.

Meanwhile, it became evident that the governor's public health officials, after repeatedly pledging that the state was adequately supplied for whatever the virus wrought, had been terribly wrong. Only after many lives had been lost did they explain that their idea of being adequately supplied meant they had enough critically vital PPE to last for three days — until federal supplies and other shipments were due to arrive.

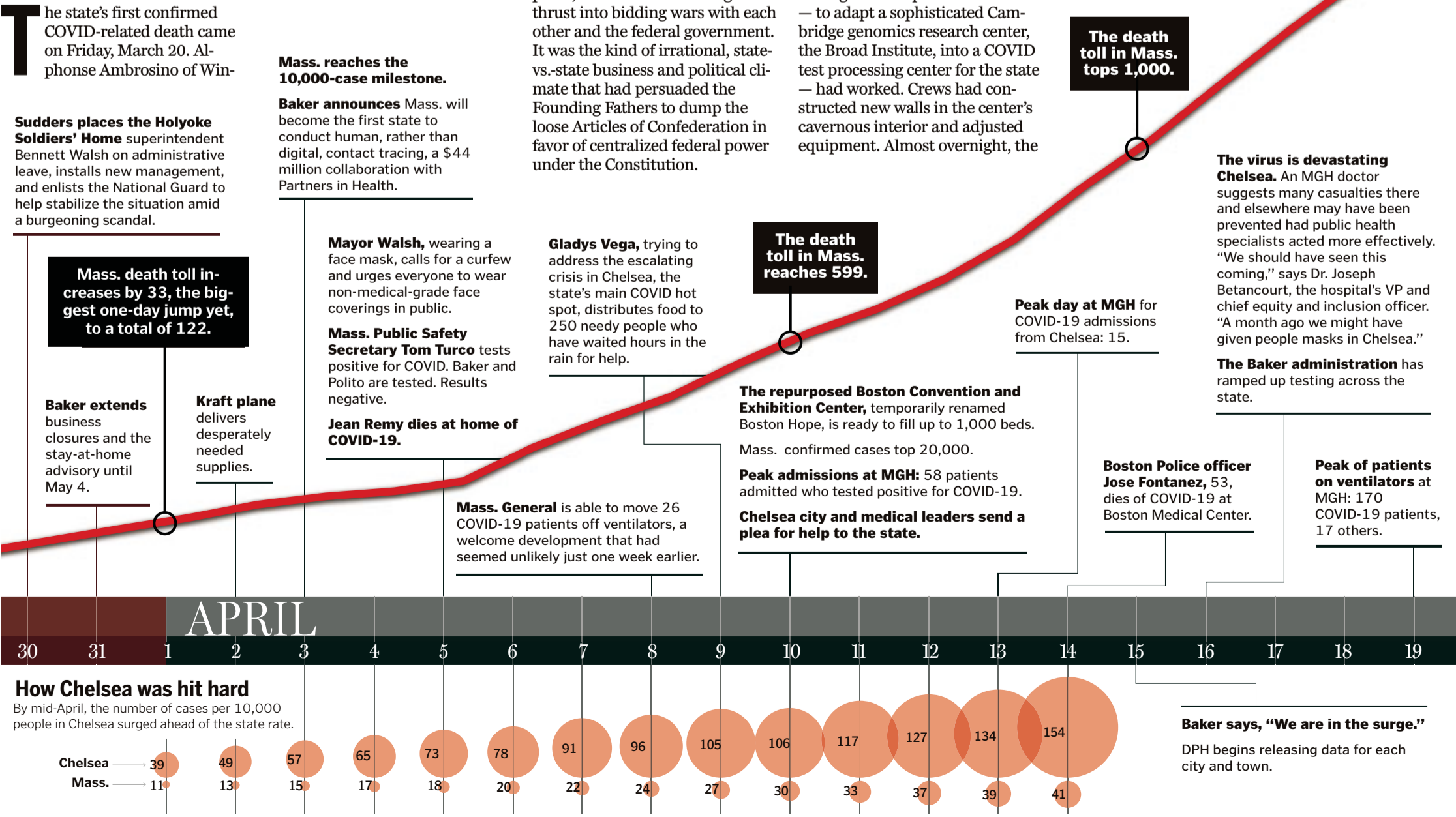
During a press conference later that week, Baker grew uncharacteristically emotional as he described being outbid by the federal government while trying to procure urgently needed safety gear. "I stand here as someone who has had confirmed orders for millions of pieces of gear evaporate in front of us," the governor said, "and I can't tell you how frustrating it is." Describing how his team could no longer trust even completed orders to come through, he caught himself as he was about to swear. "Until the godd—, until the thing shows up here in the Commonwealth of Mass., it doesn't exist."

Three times the state ordered massive shipments, only for federal agencies to divert them elsewhere. When Baker finally managed to broker an arrangement with the owners of the Patriots to deliver a major shipment from China, his staff instructed the National Guard and State Police to block any federal attempt to seize the shipment when the plane landed at Logan. And once the supplies were secure, the governor stood on the tarmac, choking back

Continued on next page

Military personnel stepped out of a tent set up at the back entrance to the Holyoke Soldiers' Home, where the virus would run rampant.

Joe Ramirez, a CNA at the soldiers' home, spent months at the bedsides of dying soldiers who tested positive for the coronavirus. He also became ill with COVID-19.



Adrianna Vega leaned up against her aunt Gladys Vega (right) while they took a break from running yet another food drive in downtown Chelsea.



Continued from preceding page
tears of exhaustion and relief.

Massachusetts was experiencing far more death and despair than Baker's administration had anticipated, much of it afflicting the state's most vulnerable residents: the elderly, the poor, immigrants, and the homeless — and, it would soon be cruelly clear, the residents of a home for infirm veterans in Western Massachusetts.

When CNA Joe Ramirez arrived for his shift at the Soldiers' Home in Holyoke on Tuesday, March 24, he found 86-year-old Ralph Gamelli dying in his bed. "What happened?" Ramirez asked him quietly. "What happened, my friend?"

A little more than two weeks after Ramirez had watched another veteran, Harry MacDonald, stumble into a recliner on the first floor, the virus was engulfing the memory care unit. Veterans lay gray and listless on recliners and in wheelchairs; staff members had begun calling in sick with fevers and trouble breathing. The home was run by the state, yet until just a few days earlier, management had been limiting use of masks, reserving gear for staffers who hadn't gotten their flu shots or who were caring for sick veterans. One staffer who wore a gown and mask anyway was disciplined. Vet-

four days later. By then, the home was ablaze with infection. Ten veterans and two staff members had officially tested positive, and more were showing symptoms. The home was already chronically short-staffed, but now, so many workers had called in sick with COVID that management had directed staff to combine the first- and second-floor memory care units. They put the veterans who seemed healthy in the dining room. They put the veterans with COVID symptoms in rooms with six beds each.

And they brought in a refrigerated truck to store the bodies.

That was where Harry MacDonald ended up. A nursing assistant wheeled his body, and that of his roommate, into the truck. Inside, all she could hear was the whirring of the cooling system. She spent her break sobbing. The

her, it felt like a punch in the gut.

From her Cambridge home, Sudders convened a late night call with Walsh, the superintendent of the soldiers' home, as well as two other state officials. Sudders' husband watched her engage in a tense conversation with Walsh, before she quickly decided Walsh had to go. He was placed on administrative leave the next morning, pending an investigation. Walsh has denied any wrongdoing, and his lawyer has cited e-mails that show Walsh provided state officials daily updates in late March about the COVID-19 outbreak, contradicting members of the Baker administration who have indicated they were blindsided by news of problems at the soldiers' home.

Baker had activated the National Guard 11 days earlier. With Walsh

answer her questions. Call 911, she told him, but he said he had already driven himself to the hospital in his cab. The wait was too long, he told her. He had left.

"Mona," he cried, "I cannot live!"

The tiny, delicate air sacs in Jean Remy's lungs filled steadily with fluid as the coronavirus replicated relentlessly in his body. Each breath he took grew smaller, delivering less and less oxygen into his bloodstream. He boiled honey, ginger, and garlic, an old Haitian remedy, and refused one last plea from his sister to go back to the hospital.

Remy died at home on April 5. In the video his wife recorded while she waited for help, he lay on a bed on his back, inhaler at his side. Out the window, the sounds of sirens rose from the street, louder and closer and too late. Her wails filled the room. "Baby, baby, baby, baby, baby!"

been standing in the rain for more than two hours, waiting for food that was not coming.

"Please!" she cried as she stepped out onto Washington Avenue in Chelsea from inside the cafe where she had organized a pop-up food bank. Suddenly, her pop-up had no food because the donation she was counting on hadn't shown up. "I promise you, as soon as I get anything, we will take your name down. We will take it out to you! Even if I finish at midnight! Please don't wait here!"

But no one moved. Vega scanned their tired faces. She knew these people — had grown up with them ever since she'd arrived in Chelsea from Puerto Rico at age 9. She had learned English with them, shaken off the sting of being called "jibara" — country girl — by being their girl instead. She had dedicated more than 30 years of her life to helping them at the nonprofit Chelsea Collaborative, which she now ran, and she knew a leader wasn't supposed to cry, but she didn't know what to do.

A man stepped out of line and

he was crying, too. He had two children and no food, he told her. "I can't go home," he said.

It was April 9, and it was about to get worse.

The coronavirus was spreading unchecked in this tightly packed city of 40,000, where about 65 percent of residents are Latino and many live paycheck to paycheck in crowded, multigenerational apartments, taking public transportation to low-wage jobs they can't do from home and can't afford to quit.

Chelsea was already the epicenter of the state's outbreak, with an infection rate almost four times that of the Massachusetts average, a catastrophe that would ultimately spur city and medical leaders to send a plea for help to the state on April 10. But on this day, that letter had yet to be sent. The only place Vega could think to turn was to God. She went back inside the cafe and knelt alone in the kitchen.

"Please, God, you're the only one that can do this for me," she prayed, sobbing. "I need help. I told people I was going to feed them, and I don't have anything for them."

Vega didn't believe in miracles. But when she stood up 10 minutes later, she saw that her phone was ringing. On the line was a man she had never met who told her he was bringing her 150 boxes of chicken. "I'm around the corner," he said. And then the man she had originally been expecting to deliver a big donation called to say he had run out of volunteers to help him with the delivery. But he was on his way, too, bringing it himself, crossing the Tobin Bridge.

The next day, city leaders delivered their letter, and three days after that, COVID admissions to Mass. General Hospital from Chelsea hit their peak — 15 in just one day. The National Guard was called in to Chelsea, and the state sent tests and food and set up emergency shelters.

About 40 percent of the COVID patients at Mass. General were Spanish-speaking. "Chelsea is on fire," Dr. Joseph Betancourt, the hospital's chief equity and inclusion officer, told the Globe. "We should have seen this coming."

And Vega kept working her 16-hour days, all of them filled with the same hope and fear she felt as she wept, wet and cold, on the kitchen floor. So many people losing their jobs, getting sick, standing in food lines that swelled on days that rent or other bills were due. "Today we do food, tomorrow mattresses," Vega told her staff, because she knew that homelessness would follow hunger. Once, a teenager in a dress shirt brought her vegetables he had salvaged from the trash, and at the same moment, a woman appeared at her side with crumpled bills in her hands asking for help buying baby formula. Every day seemed to be like this — kindness mixed with



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calamity, sudden bounty overwhelmed by bottomless need. At night, Vega lay in bed, asking God to send the needy to her door. At one point, her staff discovered a 13-year-old girl taking care of a 6-month-old baby while her mother was in the hospital with COVID. The family was undocumented, and the girl's mother told her daughter to keep silent about their struggle, for fear of immigration officials or child protective services. How many others like her might be out there? Vega asked herself. "Who am I missing?"

During his five years as governor, Charles D. Baker 4th has developed the persona of a capable and generally genial technocrat — "a data guy," Sudders calls him. He is rarely given to emotional musings. But from the moment he returned from Utah to a state in the early throes of a catastrophe, Baker has expressed sorrow not only for the dead but for those who have been unable to visit elderly, sick, and vulnerable loved ones because of his public health restrictions. In Baker's own case, that is his father.

At 91, Charles D. Baker 3rd, a businessman who served in the administrations of Presidents Richard Nixon and Ronald Reagan, lives in a retirement community outside Boston that has been infiltrated by COVID-19. The governor's mother, Betty, died in 2016, and while he has led the fight in Massachusetts against the pandemic, Baker has worried about his father and gained a deeper appreciation of the example he set for him.

Since early March, Baker has delivered daily updates on the death toll in Massachusetts, which now exceeds 6,500. That's more fatalities than any state except New York and New Jersey. As a percentage of overall population, Massachusetts has lost nearly 10 times more people to COVID-19 than California. And Boston's loss has come at a rate nearly 20 times higher than San Francisco's. Public health officials attribute those stark differences at least in part to Massachusetts and Boston taking longer to ramp up social distancing and other measures to combat the virus.

It is impossible to calculate the precise number of lives that might have been saved and the number of serious hospitalizations that might have been prevented had the state and federal government attacked COVID earlier and more effectively. The Biogen cluster and the community spread out in the Berkshires first surfaced on March 3, but a state of emergency was not declared until a week later. One study by Columbia University researchers estimates that 36,000 lives could have been saved nationally — and 2,207 deaths could have been prevented in Massachusetts — had social distancing begun March 8 rather than March 15, the date Baker began announcing schools and businesses would close.

The governor says that he made each decision during the crisis using the best information available at the time. In the early weeks, he recalls, "There was a lot of messaging and a lot of signaling that was saying a lot of different things, which made it very hard to figure out where the truth was." Some members of Boston's elite medical research community may have seen more clearly the calamity that was coming, but Baker found himself making major policy decisions based on inconclusive data.

Baker knows now, even as new information about the virus continues to surface daily, that there will be lessons to be learned by everyone who had a hand in responding to the pandemic. One lesson could also be accompanied by sanctions. There is still much to uncover about the tragedy at the Holyoke Soldiers'

Home, where, as of Friday, a total of 76 residents who tested positive for COVID-19 have died. Baker has yet to personally contact the families of the deceased veterans, as he awaits an investigative report he ordered to explain what led to the deaths. State and federal prosecutors have also opened inquiries, as has the state inspector general. Meanwhile, people keep dying, and Baker keeps consoling. What

the governor has wanted to say during the crisis is that he hopes others who have been walled off from the people they love have found ways to strengthen those bonds, as he has with his father. Their relationship has become a treasured source of comfort, helping to sustain him until the first signs of hope have surfaced.

In a note to the Globe after an interview for this story, Baker wrote of his father, "I realized that no matter what happens he already gave me everything I could have ever asked for. . . . He has given me the greatest gift I could ever get as his son. A gift that this time apart has helped me to reflect on and cherish in these strange times."

Rick Bua, the first confirmed case of community spread in the state, also gained new perspective on life from the ravages of the virus. Back at home in Clarksburg with his wife, Debbie, his cough is gone. He walks a little farther and feels a little more like himself every day. He and Debbie are still sorting through the meaning of what happened to them, but they are practical people, optimistic people, and if COVID changed them, it was for the better. They're blessed. They're stronger. They're not afraid.

If current trends hold, the worst of the first wave of the pandemic in Massachusetts has passed. So, too, has the greatest desperation. The state's stockpile of protective gear and test kits, once frightfully barren, has improved, though some hospitals still struggle. Anxiety has eased over the possibility of hospitals running out of beds.

And Greater Boston's research and biotech industry has mobilized to attack the virus with many promising developments on the horizon. Cambridge-based Moderna has reported encouraging results in preliminary trials aimed at developing a vaccine. And a lab at Beth Israel has released promis-

ing findings from monkey studies suggesting that getting the virus once could offer some protection from getting it again. Mass. General has begun the transition back to its normal command structure, to something closer to peacetime-footing. Businesses have started to reopen, if tentatively. People are going back to work. Children have started playing together again, many wearing masks with logos of their favorite professional teams. Those teams may also soon return to action. From the Berkshires to Boston, ghost towns are slowly coming back to life.

Yet there are miles to go, and care to be taken that reopening doesn't unleash the virus's fury anew. There are also treatments to develop. There are studies to conduct on the government's response to the pandemic. There are still lives to be saved, bodies to be buried, and dying patients, separated from loved ones, to be comforted.

Father Peter Naranjo put his hand on the dying woman's forehead and felt the heat of her fever through his glove. "God, the father of mercies. . . ." he prayed, standing inside Berkshire Medical Center, and her ventilator clicked from inhale to exhale. The fans whirred, trapping the deadly air inside the room in a long hush. He wished she could feel his skin.

Naranjo had performed the last rites scores of times, but never like this. A month into the COVID fight that would eventually grow from one doctor's hunch about her patient Rick Bua to more than 500 cases across Berkshire County, staff had transformed a corner of the hospital into a COVID ward. All the patients looked the same: still, shrunken, sweating, ventilator hoses taped to their mouths. But most of all, alone.

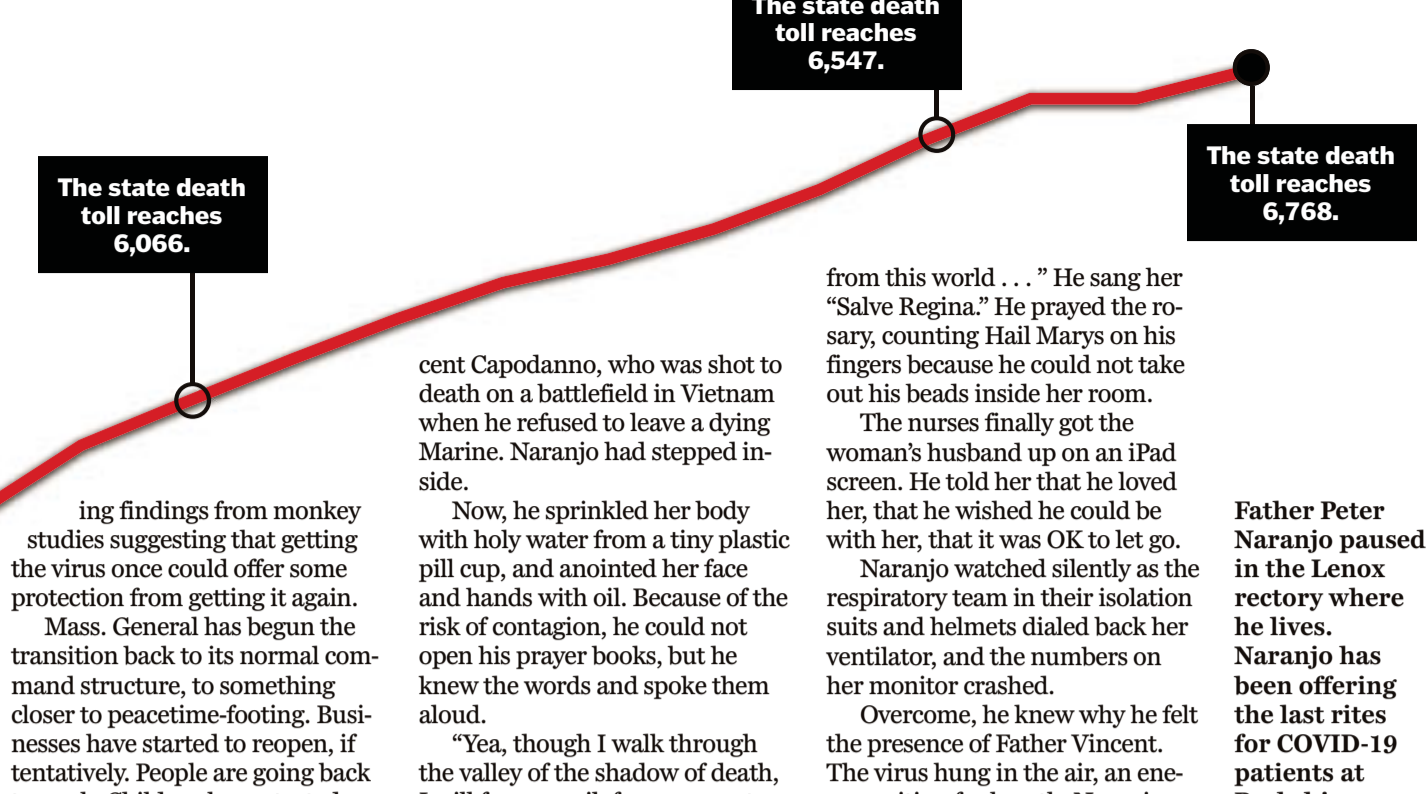
Naranjo had hesitated at the doorway. Even in his layers of protective gear, he knew that to enter was to risk infection. But the nurses couldn't raise this woman's husband for a video chat to say goodbye, the respiratory team was on the way to turn off her oxygen, and he thought suddenly of another Catholic priest, Father Vin-

cent Capodanno, who was shot to death on a battlefield in Vietnam when he refused to leave a dying Marine. Naranjo had stepped inside. Now, he sprinkled her body with holy water from a tiny plastic pill cup, and anointed her face and hands with oil. Because of the risk of contagion, he could not open his prayer books, but he knew the words and spoke them aloud.

"Yea, though I walk through the valley of the shadow of death, I will fear no evil, for you are at my side. . . ."

He held her hand so she would know he was there. Naranjo was 60, and he had returned to Catholicism late in life, after years lost to drugs. He himself had overdosed, and he had never shaken the loneliness of those moments in his bedroom. At the abbey where he lived after his conversion, he had learned to care for the dying, to sit at a bedside and dig a grave, to climb down into the earth and inspect the vault before lowering the casket. He wasn't afraid of death, but in the isolation of the COVID ward, he could not understand God's purpose.

" . . . The former heavens and the former earth had passed away, and the sea was no longer," he recited in the quiet. He moved to the Gospels, Luke and John, and then to the simple prayer that would see this woman safely into the next life. "Go forth, Christian soul,



from this world . . ." He sang her "Salve Regina." He prayed the rosary, counting Hail Marys on his fingers because he could not take out his beads inside her room. The nurses finally got the woman's husband up on an iPad screen. He told her that he loved her, that he wished he could be with her, that it was OK to let go. Naranjo watched silently as the respiratory team in their isolation suits and helmets dialed back her ventilator, and the numbers on her monitor crashed.

Overcome, he knew why he felt the presence of Father Vincent. The virus hung in the air, an enemy waiting for breath. Naranjo thought of the battlefield, of bullets and their indiscriminate flight, of the fallen Marines who did not die alone because of Father Vincent, and of those who did. He thought of all the people whose last moments were coming, who would lie in lonely rooms just like this one, and who would need someone to step close and hold their hand.

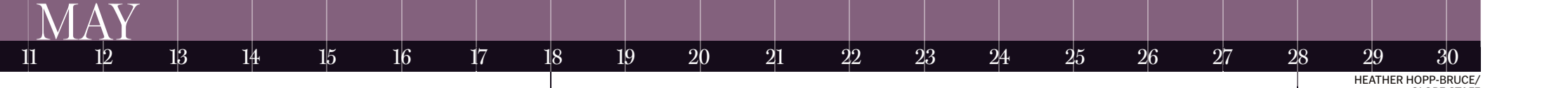
He thought to himself: "We're at war."

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Rick and Debbie Bua in the backyard of their Clarksburg home. They said that since Rick's recovery, they're stronger and not afraid.

Father Peter Naranjo paused in the Lenox rectory where he lives. Naranjo has been offering the last rites for COVID-19 patients at Berkshire Medical Center.

Rick and Debbie Bua in the backyard of their Clarksburg home. They said that since Rick's recovery, they're stronger and not afraid.



Baker details his four-phase plan for reopening the state.

The 2020 Boston Marathon is canceled.

HEATHER HOPP-BRUCE/GLOBE STAFF