Swine flu: Why such a huge response to so few cases?

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In recent days, the world has taken far-reaching steps to brace itself against the swine flu: The World Health Organization has raised its pandemic alert level to 5 on a six-point scale, the United States secretary of Homeland Security has declared a public-health emergency, and federal officials have released a stockpile of vaccines to state and local public-health providers.

The US has recorded 109 confirmed cases and one death related to this new variant of the flu. Yet in a typical flu season, the Centers for Disease Control and Prevention (CDC) estimate, some 36,000 people die in America alone because of complications from the illness.

Given the relatively small footprint of the disease so far, why has the US and the world community responded so overwhelmingly?

The answer: caution in the face of what scientists and public-health officials say they don't know about the virus.

"This situation is evolving rapidly, and it's filled with uncertainty," said Richard Besser, acting head of the CDC in Atlanta, during a press briefing.

In situations like these, public-health officials walk a fine line between taking what they see as prudent precautions and triggering what some specialists call excessive fear.

Year to year, scientists see small genetic variations in the flu virus, but not enough to raise doubts about individuals' immunity to them or the effectiveness of existing vaccines. But the new virus raises questions that scientists have not yet been able to answer fully.
"We're seeing a big change" in the virus's genetic makeup, says Theodore Cohen, a communicable-disease specialist at Brigham and Women's Hospital in Boston. Until these changes can be understood, the response is discretion.

Dr. Besser noted that reports are beginning to trickle in to the CDC of cases in which the individual involved is outside the cluster of cases so far where people had traveled to Mexico. That's where the outbreak originated.

Getting a clearer bead on the details of the agent and the evolution of the outbreak will allow public-health officials to tailor their responses more specifically, he said. Indeed, some biomedical researchers have taken an initial look at the agent's genetic makeup and infer that the outbreak could be relatively tame.

In addition, part of the challenge has to do with the evolving meaning of the term "pandemic," notes David Roepik, who heads Roepik & Associates, a Boston-based risk communication consulting firm.

Throughout much of the second half of the 20th century, pandemics came and went, but they often involved diseases for which vaccines or other medications were available, at least in the developed world.

But the outbreaks of SARS in 2003 and the on-and-off recurrence of certain strains of bird flu have changed the public-health community's perception about how it should respond to a potential pandemic. A 2006 avian outbreak involved only 115 reported cases, but 69 percent ended in fatalities. There were no effective medical treatments for either SARS or bird flu, and no general immunity among humans, Mr. Roepik notes.

The WHO's current warning level and the responses associated with it have their roots in these outbreaks.

"We are now thinking of 'pandemic' in those terms," says Roepik.

So far, he says, governments in the main have been doing an effective job in avoiding excessive fear. A few, however, have gone to extremes unsupported by existing scientific evidence. The Egyptian parliament on Wednesday reportedly ordered the death of every pig in the country, even though public-health officials say the problem is not related to the presence of pigs or consumption of pork products.

Even in the US, there have been "teachable moments," said Besser of the CDC. Vice President Joe Biden's advice Thursday that people not travel by airplanes or subways required a more nuanced clarification from Besser later in the day: "If you're ill, don't get on an airplane." For everyone else, "airplanes are safe; subways are safe. People should go out and live their lives."
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The cracks opened up by the flu; Mexico

As the swine-flu outbreak appears to subside, Mexico is left to contemplate the cost and to ponder the authorities' response

AFTER almost a fortnight of high alert and a five-day shutdown of ghostly calm, Mexico City this week began gingerly to return to its normal metropolitan bustle. Fears that swine flu might be a deadly epidemic have subsided: testing has shown that it was responsible for fewer than 50 of the 159 deaths that it was reported to have caused in Mexico. So far it seems to be barely more contagious than normal influenza, and is treatable with antiviral drugs. On May 6th Mexico City's municipal government lifted a weeklong ban on restaurants seating customers. The national government allowed universities, high schools, churches and museums to reopen from the following day, while primary schools will do so on May 11th. Mexicans are dispensing with their face masks, and breathing a sigh of relief.

As they do so an inquest is starting into the authorities' handling of what has turned out thus far to be a fairly mild bug. To some, the official reaction was both tardy and excessive. The first patient known to have had swine flu, Edgar Hernández, a small boy in a village in the eastern state of Veracruz, saw a doctor on April 2nd. The first confirmed death—Adela María Gutiérrez, a 39-year-old woman in the southern state of Oaxaca—occurred on April 13th. But the authorities did not send samples abroad for genomic analysis, the process that eventually identified the new virus, until April 22nd. They did not acquire the technology to test for themselves for another week. "They should have analysed the samples immediately," says Laura Moreno Altamirano, a professor of public health at the National Autonomous University of Mexico. "Then they would have known that the virus wasn't so aggressive, and they wouldn't have had to implement all these measures."

Those measures included closing schools, football stadiums, gyms, cinemas, bars and nightclubs; cancelling concerts, plays, festivals and church services; limiting restaurant services to takeaway and delivery; and augmenting a public holiday by a day to create the five-day shutdown.

This shutdown hit the economy hard. Because of its close links with America's economy, and especially its crippled car industry, Mexico had already slid into a deep and worsening recession. In February output shrank by 10.8% compared with the same month last year, the worst number since these figures began to be collected in 1993.
Agustín Carstens, the finance minister, said that the swine-flu outbreak will lop an extra 0.3% from GDP this year. Some private estimates are much higher.

The government has announced $1.3 billion in tax breaks and spending to help offset these losses, which will be financed with borrowing. But the damage to Mexico's image abroad, and therefore to its tourism industry and food exports, may be long-lasting.

Hotel occupancy has fallen to single digits. Several airlines have stopped flying to the country. Eight countries, including China and Russia, have banned some Mexican farm products. (China this week allowed a plane chartered by the Mexican government to pick up 71 Mexican citizens whom it had quarantined, although they had no flu symptoms.)

The episode has also exposed inequalities in Mexico's health services. Many patients, particularly those in poor rural areas, receive dubious care or no care at all. Poorer people often prefer to buy drugs at a pharmacy instead of losing a day's work dealing with the public-health bureaucracy, says Verónica Baz of CIDAC, a think-tank in Mexico City.

Local media reported several cases of ambulance drivers refusing to transport patients, and of hospitals lacking antiviral drugs. Rogelio Pérez Padilla, the director of the National Institute for Respiratory Diseases, admits there were "time lapses in distribution" from the government's strategic reserve of 1.8m doses. But in a big developing country of 110m people, "some delays were to be expected," he said.

The critics, of course, enjoy perfect hindsight. Miguel Ángel Lezana, the government's chief epidemiologist, notes that between 1,500 and 1,800 Mexicans typically die of flu each year during March and April. There was no reason to suspect a new virus, he says, until a spike in cases among the young and healthy appeared towards the end of the flu season in early April. The subsequent fall in the number of cases is because of the government's decisive action to impede the spread of the infection, according to José Ángel Córdova, the health minister.

Public opinion seems to agree. Polls show that around 70% of respondents approve of President Felipe Calderón's handling of the swine-flu outbreak and of his overall performance. His government will soon be held to account, in a mid-term Congressional election on July 5th. The sickly economy, and doubts about whether Mr Calderón is winning a battle to tame violent drug-trafficking gangs, have given the opposition plenty of ammunition.

But the polls show his conservative National Action Party starting to cut what was a double-digit lead for the formerly ruling, centrist Institutional Revolutionary Party to around five points. It is a Mexican instinct to rally round the leader at a time of trial. As normality returns, Mr Calderón will have to persuade his people that his government's actions saved lives.
A Spotty Response to the Flu Threat

The sudden emergence of a new swine flu virus has posed the first real test of new preparations to control novel influenza strains that might spread rapidly around the world and, if sufficiently virulent, kill millions of people. The global response has been mixed -- sluggish at the start but increasingly sure-footed as the new strain has spread from Mexico to the United States and other nations. We are fortunate that the initial illnesses in most countries have been mild, no worse than the standard seasonal flu that we endure every year without panic.

A big advance in this emerging epidemic is that no nation seems to have covered up the problem as China did in 2002-2003 when its secrecy slowed the response to SARS, or severe acute respiratory syndrome. International experts have praised Mexico for its openness once it understood the new threat.

Even so, there appears to have been serious glitches in detection and information sharing. The World Health Organization did not issue its first warning until three weeks or more after the first cases emerged in Southern California and Mexico. By that time the slim hope had vanished that a fast-moving virus like influenza could be contained in a small area of a single country.

The causes of the delays are not yet clear, but the United States itself may have fumbled at the start. The first two cases of the new illness in this country were detected in late March in Southern California. Special diagnostic tests being tested in the state showed them to be an unusual influenza strain. But it was not until April 17 that the Centers for Disease Control and Prevention identified the cause as a novel swine flu virus. Officials will need to explain why it took so long and whether such gaps can be reduced in the future.

Meanwhile, Mexican authorities were slow to grasp the significance of an increase in pneumonia and respiratory illness, largely because it was submerged in a statistical sea of normal flu cases. As the case load mounted in April, Mexico, which lacks the sophisticated tests that identify a new flu strain, sent samples to a Canadian laboratory that quickly identified the new swine flu virus. Mexico bypassed the C.D.C. for fear of getting slowed by paperwork, a complaint that needs investigation.

Once the alarm had been sounded, the response in this country was vigorous, thanks to advanced planning and stockpiling of medicines and equipment during the Bush
administration. The federal government, which had 50 million treatments of antiviral drugs, distributed a fourth of that to states and localities, many of which had created federally subsidized stockpiles. If anything, this enormous array of antiviral medications and other medical supplies was overkill given the relatively small number of cases and the mildness of the disease so far in this country. But it was reassuring evidence that a defense could be mounted against a nastier virus.

Many experts believe serious gaps remain in our defenses. Budget cuts and layoffs at state and local health departments during the recession seem likely to crimp protection efforts. It is not clear that most state and local health departments could distribute the medications fast enough for them to be effective. And almost all hospitals lack the "surge capacity" for the horde of patients that might result from a pandemic, a problem that may be almost inescapable for financial reasons.

The scramble to keep up with the new flu strain has underscored how wrong some Republicans were to eliminate $870 million for pandemic flu preparedness from the stimulus package on the grounds that it was not relevant to creating jobs or stimulating the economy. President Obama was wise to come back with a request for $1.5 billion to supplement medication stockpiles, develop a vaccine, improve monitoring and diagnostic capabilities and assist global efforts to stem the outbreak. Such spending would not only help protect against the flu, it would help keep Americans at work rather than bedridden with swine flu should the virus spread widely.
In 2005, amid fears of bioterrorism or a deadly bird-flu outbreak, President George W. Bush proposed the $7 billion National Strategy for Pandemic Influenza, meant to boost the availability of antivirals, ventilators and vaccines. Bush's plan was never fully funded; $870 million for flu-pandemic preparedness was actually dropped from the stimulus bill earlier this year. Still, it allowed the CDC to send diagnostic tests to labs around the country to track the flu's spread, while 11 million courses of Tamiflu were made available. "We are seeing a much more clear and cogent response than in the past," says Laurie Garrett, senior fellow for global health at the Council on Foreign Relations.

Obama may also have been helped by a higher tolerance for calamity. After a winter of market mayhem, job losses and pirate attacks, our panic reflex may have toughened up a bit. We are always on alert now: the threat level is forever orange; the Internet fizzes with warnings and advice. This time, thousands of students stayed home from school in Texas, disrupting a day of standardized state tests, while in New York City, pharmacies reported a run on Tamiflu.

While some measures may turn out to have been extreme, we have contingency plans for a reason. We still don't know how long this will last or how bad it will get. With any luck, this outbreak will let us know where our defenses need strengthening--without forcing us to rely on them.

A swine-flu scare tempered by early planning and a high threshold for panic

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Asking for More Funding, U.S. Steps Up Flu Response

BYLINE: By LIZ ROBBINS and DONALD G. McNEIL Jr.; Reporting was contributed by Anahad O'Connor and Anne Barnard from New York; Nicholas Confessore from Albany; David Stout from Washington; Marc Lacey from La Gloria, Mexico; Alan Cowell from London; Ian Austen from Ottawa; and Keith Bradsher and Mark McDonald from Hong Kong.

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State and federal officials intensified their response to the swine flu outbreak on Tuesday, with President Obama asking Congress for $1.5 billion in supplemental funding.
The global response included more restrictions on travel to and from Mexico, identified as the likely origin of the outbreak and the only country to have reported deaths from swine flu. Officials there shut down schools across the country and limited restaurant service in Mexico City in an effort to curb transmission of the virus, which is suspected in the deaths of 159 people.

Israel confirmed its first two cases of swine flu, which is now in at least seven countries. Ten others, including China and Russia, which were set to quarantine passengers suspected of having the flu, are investigating possible cases.

Dr. Richard E. Besser, the acting director of the Centers for Disease Control and Prevention, termed the early days of swine flu in the United States as a "prepandemic period" and was blunt about the potential impact of this influenza. "As this moves forward," he said, "I fully expect that we will see deaths from this infection."

He said that five people confirmed to have swine flu had been hospitalized in the United States -- two in Texas and three in California, where Gov. Arnold Schwarzenegger declared a state of emergency. But the nation's highest number of cases continued to be in New York City, where 45 people were confirmed to have swine flu.

In Washington, Congressional hearings addressed the seriousness of the outbreak.

"I really think we need to be prepared for the worsening of the situation," Rear Adm. Anne Schuchat, the C.D.C.'s interim science and public health deputy director, told a Senate Appropriations health subcommittee. "It's more of a marathon than a sprint," she said, echoing what Dr. Besser had said on Sunday, when the country first declared swine flu a public health emergency.

Senator Tom Harkin, the Iowa Democrat who heads the subcommittee, noted that "there's a lot of anxiety right now across the country."

Still, that anxiety is not on the same scale as in Mexico, where the number of people believed to have been sickened was about 2,500 on Tuesday.

The economic response to the health crisis rippled from Mexico throughout the globe. Cuba canceled all flights to and from Mexico and Argentina banned all flights from Mexico. Carnival Cruise Lines said it had canceled Mexico stops for three of its cruise ships because of the swine flu alert, according to Reuters. So far, nine countries have some kind of ban on pork imports: China, Croatia, Indonesia, Lebanon, Russia, South Korea, Thailand, Ukraine and Ecuador.

Mexico City, meanwhile, was looking increasingly like a ghost town. On Tuesday morning, the city government ordered all restaurants, except those that serve take-out food, closed until May 6 to large gatherings of people. About 30,000 restaurants are affected. Movie theaters, bars and discos have also been shut.
But the city has yet to make the decision to shut down public transportation, a move that would freeze most economic activity in the capital. Schools all over the country were closed Tuesday, affecting some 33 million students, and many tourist sites were put off limits.

Citigroup's Mexican subsidiary, Banamex, ran a newspaper ad asking customers to wear their masks and wash their hands. At bank branches, where employees have been told to wash their hands every hour, antiseptic gel dispensers were being installed. Banamex also asked customers to do as much banking by phone and Internet as possible.