https://www.washingtonpost.com/outlook/why-we-should-be-skeptical-of-chinas-coronavirus-guarantine/2020/01/24/51b711ca-3e2d-11ea-8872-5df698785a4e\_story.html

#### Outlook

Perspective

# Why we should be skeptical of China's coronavirus quarantine

As a historian of epidemics, I'm not optimistic it will turn out well



People wearing protective facemasks to help stop the spread of a deadly virus which began in the city stand outside the Wuhan Fifth Hospital in Wuhan. (Hector Retamal/Afp Via Getty Images)



By Howard Markel

Howard Markel is the George E. Wantz distinguished professor of the history of medicine, a professor of pediatrics and communicable diseases, and the director of the Center for the History of Medicine at the University of Michigan. He is the author of "Quarantine!" and "When Germs Travel." Jan. 24, 2020 at 11:57 a.m. EST

The <u>new respiratory coronavirus</u>, first detected in Wuhan, China, last month, is like most germs: It travels. It <u>has jumped</u> to Beijing, Shanghai, Shenzhen, the southern Chinese province of Guangdong (home to SARS in 2003) and across borders to Taiwan, South Korea, Thailand, Japan, and <u>even Seattle and Chicago</u>. At this writing, more than 800 people have contracted it, and 26 have died.

To combat the contagion, the Chinese government has taken the extraordinary step of <u>quarantining the city of Wuhan</u>, as well as neighboring <u>districts and cities</u>. The borders are sealed, and all transportation out is blocked. Officials closed the public transportation systems. Friday morning, more than 35 million people woke up facing aggressive curtailments of their freedom.

Having spent my medical and academic career studying these issues, I am astounded by what is already the single largest quarantine in recorded history. As a physician, I cannot yet give a prognosis of how all this will work out. But as a historian of quarantines and epidemics — one who has read, seen or written similar sad stories too many times — I am not terribly optimistic it will turn out well.

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China is in a real bind. If Beijing doesn't act — or delays reporting on the situation, as officials did for five long months during the SARS (severe acute respiratory syndrome) epidemic of 2002-2003 — then the virus will spread quickly and, if it proves especially lethal, could kill many more people than it already has. China will also incur international blame, economic sanctions or worse. Doing nothing is not an option in an era when information, fear and gossip travel at the speed of electrons and the public invariably demands action from leaders.

On the other hand, by taking the draconian step of closing down densely populated urban areas, China can hope only to diminish the coronavirus's spread, knowing full well that some additional infections, or many, will inevitably occur. It takes just a few cases to spread outside the Chinese quarantine zone before critics say it has failed. As Lawrence O. Gostin, a public health law professor at Georgetown, has, for example, already said, "It's very unlikely to stop the progressive spread."

#### The U.S. has stopped Ebola before. But it may never repeat that success.

It's possible that this coronavirus <u>may not be highly contagious</u>, and it may not be all that deadly. We also do not know yet how many people have mild coronavirus infections but have not come to medical attention, especially because the illness begins with mild to moderate respiratory tract symptoms, similar to those of the <u>common cold</u>, including coughing, fever, sniffles and congestion. Based on data from other coronaviruses, experts believe the incubation period for this new coronavirus is about five days (the range runs from two to 14 days), but we do not yet know how efficiently this coronavirus spreads from infected person to healthy person. And because antibodies for coronavirus do not tend to remain in the body all that long, it is possible for someone to contract a "cold" with coronavirus and then, four months later, catch the virus again.

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The case fatality rate, a very important statistic in epidemiology, is calculated by dividing the number of known deaths by the number of known cases. At present, the virus appears to have a fatality rate of about 3 percent, which mirrors that of the influenza pandemic of 1918.

But what if there are 100,000 Chinese citizens in Wuhan with mild infections that we do not know about? That would lower the case fatality rate to a mere 0.02 percent, which comes closer to seasonal flu death rates. If that's the case, a major disruption like the Chinese quarantine would seem foolish and cost a fortune in terms of public health efforts, interrupted commerce, public dissonance, trust, good will and panic.

Even open societies such as the United States have stringent laws regarding quarantine during epidemics, but they are rarely used because they are so poorly tolerated by citizens. Nevertheless, Americans have a long history of misapplying the quarantine. Russian Jewish immigrants in New York City in 1892, San Francisco's Chinatown in 1900, and more recently gay men and Haitians in the early years of the AIDS epidemic were all stigmatized, isolated and blamed for the spread of contagious diseases. In many instances, some of these "undesirable" groups were inappropriately quarantined; their health needs were routinely ignored; and some even contracted deadly diseases while in isolation.

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## Five myths about outbreaks

None of this is to say that extreme quarantines can't be effective. In 2004, I attended an international meeting focused on examining the public health response to the SARS epidemic the year before. One panel featured the health officers of Singapore, Beijing, Hong Kong and Toronto. Singapore and Beijing had imposed the harshest and most restrictive quarantines and had the best results in terms of decreasing the disease's spread and rates of morbidity and mortality. Hong Kong, and to a much greater extent Toronto — both open societies — applied far more lax containment policies and experienced much greater spread of the disease and more deaths.

But that doesn't necessarily mean autocratic nations, such as China, are better equipped to contain contagious diseases. When the public trusts leaders and health authorities, it is easier to establish wide-scale cooperation, clear lines of communication and appropriate, humane health care. Civic-minded, community-wide, voluntary disease containment and mitigation efforts — such as those adopted in Mexico City during the 2009 H1N1 influenza pandemic, when officials inspired buy-in from the public to enact bans on social gatherings, school closures, isolation of the ill and at-home quarantines for those suspected of having contact with sick people — have been shown to work well. That is certainly the prescription I would write, and it's not one that extreme measures are likely to engender.

Microbes, as agents of illness and death, are the ultimate social leveler. They bind us and, when transmitted through a filter of fear, have the power to divide. China has deemed this contagious disease to be too dangerous, or poorly understood, to take any chances with the public's health. But the country also has a moral imperative to provide safe and compassionate medical care for those confirmed or suspected to be infected by the coronavirus. Equitable and fair attention to adequate housing; individual rights; economic and recreational needs; cultural and religious beliefs and practices; Internet, telecommunications and other connectivity; and the emotional, psychological and social difficulties patients invariably experience in isolation are as essential to a quarantine effort as the hue and cry of rounding up victims. Such human considerations cannot, of course, eradicate the many problems caused by the experience of quarantine, but they can reduce those burdens.

This is the question that will shape the story of this coronavirus outbreak: Not whether China will quarantine other cities or impose still more draconian edicts, but whether it is up to the enormous task of caring for those separated from the rest of society.

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