Quarantine in the 21st Century: To Be Effective, Public Health Policies Must Be Inclusive

See also Ferrer, p. 1156; and Rothstein and Coughlin, p. 1179.

The article in this issue by Rothstein and Coughlin (p. 1179) is timely and important given the challenges posed by infectious disease outbreaks in the United States and globally. I recall when it seemed modern medicine had more or less controlled infectious diseases with the growing number and use of safe and effective vaccinations, improved surveillance and reporting, antibiotics and antiviral medications, and effective treatment in hospitals for those with severe complications. Of course, this was a fantasy: we never had "control" of the ever-changing microorganisms that cause disease and death and health professionals are repeatedly humbled and challenged in our efforts to control outbreaks and treat the illnesses they cause.

Quarantines (restriction of movement of persons suspected of exposure to a communicable disease) are one of the oldest public health tools to control infectious disease outbreaks. They date back to the 14th century in Europe with efforts to prevent the spread of plague epidemics (https://bit.ly/2CrgKY9). Although centuries would pass before it was known that germs were the cause of many illnesses and fatal diseases, the benefits from limiting the mobility of people and populations, and the isolation of infected individuals, were apparent and likely saved untold numbers of lives.

The history of quarantine in the United States dates to at least 1738, when Bedloe's Island (now home of the Statue of Liberty) was set up as a quarantine station owing to concerns about smallpox and yellow fever.[1] Quarantine stations were subsequently established in most seaport cities and were eventually managed by the federal government under authority granted by the National Quarantine Act of 1878. The number of these stations and the resources allotted to efforts to limit the numbers of immigrants with communicable diseases entering our country have waxed and waned over time, but today there are 18 such stations managed by the Division of Global Migration and Quarantine of the Centers for Disease Control and Prevention (CDC).

QUARANTINE AND ISOLATION STATUTES

The federal government's role, however, is limited to international and interstate migration and to providing technical assistance to states, which have responsibility for most quarantine activities. All states have quarantine and isolation statutes that vary in their scope and "police powers."[2] I was the Utah state health officer from 2005 to 2011, and when I assumed my post I was issued an official badge (similar to those used by police officers to identify themselves in the process of executing their duties) that I was to use if necessary to execute my authority as the executive director of the Utah Department of Health. According to our state statute, I did have police-like powers—I could shut down places of commerce and limit travel, and I could even impose a quarantine if I deemed it necessary to protect the public's health (https://bit.ly/2X4VaTv).

Fortunately, I did not have to use such authority during my tenure as the state's health officer. However, officials in the state's 13 local health departments routinely use their authority in citing certain businesses, restaurants, swimming pools, child care facilities, and so forth (in some instances even shutting them down) when they are in violation of public health regulations. But to impose a quarantine is another level of government control altogether. As Rothstein and Coughlin state in their article, it is "the quintessential ethical challenge of public health because it involves balancing the interest of the population in avoiding exposure to virulent disease and respecting the right of asymptomatic individuals (most of whom are not infected) to be free from governmentally-imposed restrictions of their liberty. Consequently, quarantine has an unavoidable 'political component.' "(p. 1179)[3]

We live in a time where there is significant distrust and disapproval of government, writ large, among many in our country. We have an unpopular president (approval rating of 42%) and an even lower opinion of Congress (approval rating of 23%) according to recent Gallup Poll data.[4] We have an unprecedented gap between the political views of those identifying as Republican and Democrat, as conservative and liberal, and each group views their position as morally correct.[5] So, understanding this context, how do we best address the inevitable public health challenges that will come our way?

PUBLIC HEALTH CHALLENGES

It might seem trite to simply say that public health officials

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must work across the political spectrum to promote polices and seek sufficient resources to do their respective jobs, but that is precisely what they must do, with vigor and with nonpartisan messaging. In their article, Rothstein et al. wisely point out that if public health officials consider it necessary to impose a quarantine to protect the public, we need to be aware in advance of particular categories of people who likely would not or could not comply with the quarantine requirements: the homeless, run-away kids, unauthorized immigrants, those with criminal backgrounds, the mentally ill, and so forth. This is particularly problematic because if a quarantine is to be effective, it should achieve 90% compliance among those who are suspected of being exposed and possibly infected.[6]

Rothstein et al. call for sweeping legislation that would facilitate more effective quarantines by creating safe harbors for those categories of people they identify as not being able or willing to comply with the required limits on movement or on their personal freedoms. The range of provisions in their proposed legislation is ambitious and comprehensive: new policies related to public health, legal, and social issues, including employment protection and income relief. Such legislation would be costly and difficult to achieve in the current political climate. However, it is important that, at a minimum, public health officials should review our current legal authorities and the logistics of using quarantines as a public health tool. This should be done with an eye toward revisions to ensure the state's lawmaking and regulations more effective and inclusive. This could be complimented by undertaking an education campaign to make the general public aware of the time-proven benefits of quarantines and isolation in addressing infectious disease epidemics.

INCLUSIVE POLICIES

We are living in strange times, but politics has often been tumultuous in our democracy. As mentioned, there is widespread low regard for government at present, but I take heart that respondents to public opinion polls have consistently ranked the CDC at or near the top in terms of their opinion of federal agencies, with no partisan (Democrat or Republican) differences.[7] The pubic heath community needs to continually make its case to policymakers and the public for sound, science-based policies to the benefit of all, including imposing quarantines when deemed necessary. Moreover, we must ensure that our policies are inclusive and that we reach out to those who are disenfranchised. AJPH

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CONFLICTS OF INTEREST

The author declares no conflicts of interest.

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