COVID-19 variant and coronavirus awareness are recent events in the eyes of the general public, but human strains of coronavirus have long been identified as causes of upper respiratory infections, a.k.a. “colds.”

Disease and illness associated with civilization are older than written history. In public health parlance we have gone through the “epidemiologic transition,” defined as the statistical switch from the “untreatable” contagions and the great historic calamitous pandemic plagues of our ancestors (such as bubonic plague, smallpox, cholera, dysentery, typhus, syphilis, poliomyelitis, etc.) to the “modern” problems of deterioration and aging: cancer, heart disease, lung disease, dementia, metabolic diatheses, and physical accidents, among others. The public has seen infectious events as treatable and soluble, and this may explain why COVID-19 is so frightening: a brand new infectious agent that transmits quickly and efficiently, and threatens to engulf us.

Coronaviruses are suspected of causing diarrheal and other gastrointestinal illnesses in humans in addition to the common cold. They have a singular talent for recombination, for absorbing stray bits of genetic material. In 2003, Dr. Susan Baker, a virologist at Loyola University in Chicago, observed that “with high frequency recombination, you always have potential for a new virus to emerge.” She was referring at that time to SARS, linked to the coronavirus family, determined to be of Chinese origin, with a lethality of five to ten percent. One day, virologists warned, the recombination tendency of coronavirus family might suddenly turn a benign coronavirus into a deadly one.

Foundations of Current Public Health Law

The events of late 2001 revealed our nation’s vulnerability to the threats of biological, chemical, nuclear, and radiological assaults. Consequent extensive efforts to prepare for such contingencies became the focus of the Department of Homeland Security. Preparation addressing the threat of modified infectious diseases (such as anthrax or smallpox as weapons) became the responsibility of the Department of Health and Human Services, as discussed by Anthony Fauci and coauthors in 2004. Emphasis was to be on surveillance, plus activities to promote public health awareness, led by the Centers for Disease Control and Prevention (CDC) and the National Institutes of Health (NIH), particularly the National Institute of Allergy and Infectious Diseases (NIAID).

Preparation for a potential infectious disease event is directed by assorted public health agencies, federal and state, using epidemiological methods such as mandated reporting of PUI (Persons Under Investigation) by “providers” to LHDs (Local Health Departments). Isolation and quarantine were supposed to provide an adequate response to an infectious event.

The threat of a pandemic and the legacy of the post-9/11 anthrax attacks changed U.S. public health regulations. The responsibility for public health is a primary defined duty and responsibility of the states, and has been since the republic’s founding. At that time, in ratifying our Constitution, the former colonies delegated powers to the federal government while they retained the authority to protect the public’s health and safety, referred to as the state’s “police powers.” Thus, the federal government affects the public’s health and safety through its constitutional authority to spend money, regulate commerce, and provide for the national defense.

Congress established the Public Health Service and CDC with federal money and used its authority under the Commerce Clause of the Constitution to establish the Food and Drug Administration (FDA). Creation of these federal agencies, however, did not alter or preempt the states’ responsibilities for public health. The post-9/11 anthrax attacks did.

Driven by concern over use of weaponized microbes, such as anthrax or smallpox or plague, broadly described as “bio-terrorism,” and under the aegis of the CDC as the coordinating agency to develop our responses to bioterrorist activity, the CDC developed the Interim Smallpox Response Plan and Guidelines. This provided direction to state and local health officials for “responding” to an intentional infectious event, such as smallpox. In their own words: “the document… (defined) the CDC’s strategies and approaches for responding (CDC emphasis) to a smallpox emergency.” The plan calls for post-exposure vaccination and monitoring of a “ring” of people around each identified case (of smallpox) and thereby preventing the spread of disease.

Experts predicted that deployment of a contagious infectious agent upon an unprotected public would result in medical and social chaos. They predicted that physicians and hospitals would bear the brunt of the health nightmare. Mass casualties and the “worried well” would swamp hospitals and medical clinics that can barely cope with normal demand. Confusion and fear would dominate physicians called upon to respond. “Contaminated” hospitals, ERs, doctors’ offices, and clinics would suddenly close to the public under quarantine rules. Isolation hospitals and clinics would be created as designated by local or state health authority. Vaccination clinics would need to be opened in school gymnasias or armories. Supplies of antibiotics and equipment would likely be rapidly used up. Efforts to treat the sick and control contagion would be hampered by shortages of competent trained and vaccinated personnel. Public order would be imperilled. Local and state police supported by militia would enforce restrictions on public travel and access.

The COVID-19 public health response is based on law and concepts developed to address an act of bioterrorism. In the
absence of a specific treatment or vaccine for an identified patient with COVID-19, this is fundamentally a statistical approach to preserve the general healthy population rather than address the needs of the individual patient.

Public Health Law and Individual Liberty

Often neglected in thinking about the threats an infectious agent might pose to public health is the foundation that law provides for effective public health activities. Any pandemic constitutes a grave threat to each and every citizen, rich or poor, empowered or enfeebled, but it also constitutes a grave threat to the role that law plays in regulating public and private behavior. The very bedrock of freedoms we so identify as “American freedoms” would be, if not destroyed, then at least suspended, for in effect every infected or exposed citizen’s rights would evaporate in the public health paradigm to protect the remaining well. This would in effect turn all patients or potential patients into enemies of the state, along with their husbands or wives or children or friends or business associates. Would the soccer mom who wanted to pick up her daughter at school be detained for trying to enter a containment zone or school declared “contaminated”?

National emergencies challenge the rule of law: the concept that laws, and not the arbitrary exercise of power beyond the principal of “fairness” or equity, govern us. History and war favor the notion that rules must be made to serve the majority interests. Examples abound. The precedent of suspending the writ of habeas corpus (guarantee against unlawful detention or restraint) brought Abraham Lincoln into direct confrontation with Chief Justice Roger B. Taney, a Marylander, in April 1861. Lincoln could simply not allow the state of Maryland to secede from the Union at the onset of the Civil War, thus isolating the federal capital from what remained of the Union. A contemporary newspaper stated that “no power in executive hands can be too great, no discretion too absolute, at such moments as these.” Many citizens of Maryland were arrested for suspicion of harboring Confederate sympathies, just as 80 years later at the onset of World War II, Japanese-Americans were incarcerated after Pearl Harbor was attacked.

The COVID-19 pandemic calls for legal responses to circumstances that have limited precedent in America. Public health law seeks to protect the unaffected by isolating the sick, identified either by virtue of a positive test or symptom profile. Since antiviral treatment or vaccines are not offered or are unavailable, the ethics of isolation and containment of those who are ill to “benefit the healthy well” is questionable. Existing legal frameworks exacerbate pressure on governments to take drastic actions that might sweep away the rule of law in the midst of panic or uncertainty, such as requiring physicians or providers to act as police and report patients as “PUI” while limiting autonomous medical treatment decisions, such as by restrictions in prescribing medications.

The COVID-19 pandemic has caused death and disease on a large scale, provoking mass disruption. It is transmitted from person to person; lacks effective or available vaccines, treatments, or antidotes; and spreads as an aerosol constituting a threat to public health that differs from any other threat to public health in recent experience. All levels of government, state and federal, have responsibilities in dealing with COVID-19. What must be established with regard to these responsibilities amounts to a task worthy of the wisdom of the Founding Fathers, for not only is the health and safety of the public at risk; so too are all the rights and duties of citizens as potential victims. What can be said of the ethics of quarantine of an unprotected and poorly informed public that is twice victimized: once, by the disease, then subsequently by its own public officials?

Let us examine the crisis management. States and agencies have evoked declarations of “health emergency” to enforce sheltering-in-place, to control travel and public behavior, and to influence personal comportment and hygiene, all in the setting of inadequate or unavailable screening tests, and limited and/or rationed treatment options.

Public health statutes exacerbate these circumstances. They are derivative of public health law as developed from the Model State Emergency Health Powers Act and its offspring, the Turning Point Model State Public Health Act. In effect, once an emergency is declared, the law allows the public health authority to control treatment decisions; enforce travel restrictions; commandeer, ration, and otherwise control water, food, and medication supplies; and use medical and/or public facilities as deemed necessary to manage the crisis. The language and recommendations derive from Lawrence Gostin’s Model State Emergency Health Powers Act.

The Act permits the governor to declare a “state of public health emergency,” and this declaration, in turn, gives the state public health officials authority to take over all health care facilities in the state, order physicians to act in certain ways, and order citizens to submit to examinations and treatment. Those who refuse to do so are subject to quarantine or criminal punishment. Public health officials and those working under their authority are immune from liability for their actions, including actions that cause permanent disability or death; the only exceptions are in cases of gross negligence or proven willful misconduct. A public health emergency is defined as “an occurrence or imminent threat of an illness or health condition, caused by bioterrorism, epidemic or pandemic disease, or a novel and highly lethal infectious agent or biological toxin, that poses a substantial risk of a significant number of human fatalities or incidents of permanent or long-term disability.”

The Act permits the governor to suspend state regulations, change the functions of state agencies, and mobilize the militia. Public health personnel are issued special identification badges, to be worn “in plain view,” that “shall indicate the authority of the bearer to exercise public health functions and emergency powers.” Public health personnel may compel “a health care facility to provide services or the use of its facilities if such services or use are reasonable and necessary for emergency response...including the transfer of...the health care facility to the public health authority.”

According to the Act, failure of physicians and citizens to follow the orders of the public health authority is a crime. Section 502 of the act states:

Any person refusing to submit to the medical examination and/or testing is liable for a misdemeanor. If the public health authority is uncertain whether a person who refuses to undergo medical examination...
and/or testing may have been exposed to an infectious agent or otherwise poses a threat to public health, the public health authority may subject the individual to quarantine or isolation…. Any (health care provider) refusing to perform a medical examination or test as authorized herein shall be liable for a misdemeanor…. An order of the public health authority given to effectuate the purposes of this subsection shall be immediately enforceable by any peace officer.14

Many of the Act’s provisions, especially those giving public health officials blanket authority over physicians and hospitals, seem based on the assumption that neither physicians nor citizens are likely to cooperate with the public health authority in a pandemic. The high level of cooperation on the part of professionals and the public during the current COVID-19 pandemic certainly argues against such an arbitrary assumption.

In the opinion of George Annas,14 there are several problems. First, public health law should respond to real problems. It is not clear what problem the Act is intended to solve. Second, the authority to respond to a new epidemic that the model act provides is much too broad, granting carte blanche authority to public health functionaries in non-emergency conditions as diverse as annual influenza epidemics, SARS, or the AIDS epidemic.15

Annas’s third concern is arbitrary use of governmental authority by public health or elected officials (who enjoy legal immunity from liability) to exercise control over civil liberties. Such actions are incompatible with medical ethics, constitutional principles, and basic democratic values. Although it may make sense to put public health officials in charge of responding to a pandemic, it may not make sense to place them in charge without oversight of all possible scenarios. The state’s public health department has the role of limiting the public’s exposure to the agent, but not to limit autonomous medical decisions, or informed consent, or treatment options. Taking away one’s civil liberties because he or she has the misfortune of becoming infected cannot be construed as ethical.

But the task of identifying affected persons, of maintaining the clinical index of suspicion in diagnosis, then reporting those suspicions, then trying to treat them, plus taking preventive actions, will all be performed by physicians, nurses, emergency medical personnel, and hospitals. The primary role of public health authorities should be to provide guidance to the public and other government officials in identifying and dealing with the disease, and to provide laboratory facilities where exposure can be evaluated and diagnoses definitively established.16

There is absolutely no compelling evidence either from the Sep 11 attack, from the anthrax episode or, now, the COVID-19 pandemic, that physicians, nurses, or members of the public are in any way unwilling or reluctant to cooperate in the response to the event or are reluctant to take recommended medications or vaccines. Indeed, medical personnel in affected areas volunteer their time and expertise to help victims. And the public demands testing for COVID-19, and help and information to deal with the disease, to such an extent that the CDC has recommended limitations on testing and specific guidelines for medication use, such as for hydroxychloroquine.

Coronavirus is spread from person to person. It has recently been reported that transmission of novel coronavirus (SARS-CoV-2) can occur before symptom onset occurs clinically in a vector, thus confounding efforts to limit spread.17 The key to an effective public health response is identifying and helping those exposed. Clearly, quarantine in a new kind of pandemic requires an educated and prepared public. A defined treatment strategy for those likely to be “sheltered in place” and/or “isolated and contained” should not be withheld or obfuscated by the public health bureaucracy.

There exists federal quarantine law based on the Constitution’s Commerce Clause, with special provisions mentioning cholera, plague, smallpox, typhus, and yellow fever. Congress could examine and update it to deal with pandemics.18

Governors and the assorted public health agencies have developed policy or issued administrative orders that currently place limitations on prescribing and/or dispensing medications, establishing protocol for sheltering in place, public comportment (social distancing, use of masks, hand washing), hospitalization rules, school closings, and designation of “essential” or “non-essential” businesses, etc.

For example, the State of New Jersey Department of Law and Public Safety, Division of Consumer Affairs, has issued “Limitations on Prescribing and Dispensing Medications for Treatment of COVID-19”19 defining what, when, where, and why (including documentation requirements) any prescription(s) for infected patients are allowable. Pretexts include concerns of the governor and the director of consumer affairs (the professional licensing agency in NJ) about hoarding and an impact on medication availability based on the CDC’s therapeutic guidelines.20 Neither official has any formal medical training. The use of a declaration of public health emergency status that effectively eliminates physician and patient autonomy, as well as informed consent, represents a fundamental and serious ethical breach.

Civil Liberties, the Concept of Autonomy, and Public Health Emergencies

The public health law assumes a trade-off between the protection of civil rights and effective public health interventions, and that a threatened public may not cooperate or is inherently not educable about key issues of crisis management. Precedent is cited: Jacobson v. Massachusetts, 1905, involving a state statute requiring smallpox vaccination when “deemed necessary for the public health or safety.”21 At that time, when hospitals, medication, technology, and physicians were neither universally trusted, universally available, nor necessarily effective, such trade-offs between civil liberties (right to refuse treatment) and public health interventions (mandatory vaccinations) somehow seemed reconcilable.

The Constitution gives the government wide latitude to respond in times of crisis and war. But is such paternalism and arbitrariness consistent with 21st-century science and knowledge? As Annas inquires, “Can we not rely upon Americans to follow reasonable instructions issued by knowledgeable and trustworthy experts?”22

Medicine and constitutional laws have evolved in the 115 years since Jacobson. Today we accept the right of a
The science of epidemiology is inherently retrospective. Data analysis is necessarily post event. For naturally occurring diseases, epidemiology has been the foundation for nearly all modern medical advances. But can a physician and clinician be satisfied that quarantine automatically and arbitrarily accords with the best standard of patient care, as well as with the greater societal good? Such an approach deserves the closest of scrutiny and professional and intellectual criticism, since it appears to be singularly narrow in perspective.

Conclusion

The primary roles of public health authorities are to provide guidance to the public, health professionals, and government authorities in identifying and dealing with diseases, including provision of laboratory facilities where exposure can be evaluated, diagnoses definitively established, and treatment plans proposed. That is what the public seeks and expects, and it has shown itself as clearly engaged in cooperating with public health authorities.

Use of public health law to dominate the spectrum of clinical decisions, to modify professional behavior, to control the public’s comportment, to dominate all commerce and interpersonal interactions, and to ration or control medication choices, needs clear thinking and apotential judgment based on objective factual determinations and ethical standards. Public health authorities should respond to the mechanics of the pandemic in a global sense, while at the same time respecting and permitting professional judgment of the medically trained caregiver to operate at the bedside, unencumbered by arbitrary, centralized decisions.

Limiting legitimate clinical patient treatment choices before they are even made denies autonomy to both clinician and patient, serving neither the patient nor the general good. Public health regulations, advanced with the goals of “protecting the health, safety, and welfare” of Americans, should abide by the same ethical standards to which all the healing arts are held.