VIEWPOINT

COVID-19: BEYOND TOMORROW

# The Ethics of COVID-19 Immunity-Based Licenses ("Immunity Passports")

**Govind Persad, JD, PhD**
Sturm College of Law, University of Denver, Denver, Colorado.

**Ezekiel J. Emanuel, MD, PhD**
Department of Medical Ethics and Health Policy, Perelman School of Medicine, Department of Healthcare Management, The Wharton School, University of Pennsylvania, Philadelphia.

Viewpoint page 2243

Supplemental content

**Corresponding Author:** Ezekiel J. Emanuel, MD, PhD, Department Medical Ethics and Health Policy, Perelman School of Medicine, University of Pennsylvania, 423 Guardian Dr, Blockley Hall, Ste 1412, Philadelphia, PA 19104 (MEHPchair@upenn.edu).

**Chile, Germany, and the UK,** among others, have indicated they will implement certifications that a person has contracted and recovered from coronavirus disease 2019 (COVID-19) or, in the future, has received a COVID-19 vaccine. Such policies have been discussed, but not implemented, in the US. However, if other countries require these certifications for entrance, the US may adopt them to enable travel, generating calls to use them more broadly.

Certifications of immunity are sometimes called "immunity passports" but are better conceptualized as *immunity-based licenses*. Such policies raise important questions about fairness, stigma, and counterproductive incentives but could also further individual freedom and improve public health.

Immunity licenses should not be evaluated against a baseline of normalcy, ie, uninfected free movement. Rather, they should be compared to the alternatives of enforcing strict public health restrictions for many months or permitting activities that could spread infection, both of which exacerbate inequalities and impose serious burdens. This Viewpoint presents a framework for analyzing the ethics of immunity licenses.

## Liberty, Immunity-Based Licenses, and the Least Restrictive Alternative

The ethical values of liberty and autonomy support a presumption that policies should consider immunity to COVID-19 (eTable 1 in the Supplement). This may seem counterintuitive because people who are not immune may have their liberty limited if they hold certain jobs or travel to certain places that require a license. However, public health is committed to protecting liberty and autonomy through the principle of the "least restrictive alternative,"[1] which proscribes measures more restrictive than necessary to achieve public health objectives. In other words, people must be allowed to pursue their life plans unless doing so is incompatible with public health.

The least restrictive alternative principle supports using COVID-19 immunity licenses if available. Current liberty-limiting restrictions on gatherings, work, and travel are justified because infected people may be harmed or die and may harm others by spreading disease or overburdening hospitals. But they are not justified when applied to people at little or no risk of infection. The principle of the least restrictive alternative supports giving people a chance to show that they are immune.

How might individuals be given the opportunity to demonstrate immunity? Driver's and pilot's licenses and similar policies suggest a way forward. Rather than banning risky activities, licensing permits people to participate in these activities but only after evidence of safety, such as through competency tests, has been demonstrated. The same could be true for immunity and risky activities during the COVID-19 pandemic.

The term "immunity-based licenses" is better than "immunity passports." Passports suggest an all-or-nothing permission and endorse categorical denial of access to an entire country. In contrast, licensing requirements are more stringent for drivers of school buses or airplane pilots than for drivers of cars, and are more restrictive for younger drivers or those with conditions that may impair driving. Importantly, these restrictions are ethical and legal even when a person's higher risk or inability to pass a test is outside their control, as with drivers who are visually impaired or have epilepsy. By analogy, in the setting of COVID-19, immunity-based licenses could apply to specific, high-risk activities, such as working in a nursing home, and could permit exceptions and gradations.

The ethical case for immunity-based licenses can be buttressed by working to ensure that licenses do not exacerbate inequality. Driver's license fees unfairly burden lower-income individuals, and transportation for those unable to drive is often inadequate. In contrast, ethically sound immunity licensing policies would reject license fees and would ensure that unlicensed people are not subject to social or economic exclusion, "banned from entering grocery stores, using public services, or traveling," or "confined to their homes for an indefinite period of time."[2] Activities currently permitted under public health orders, like walking outdoors, driving, interacting with household members, and shopping or working remotely or at businesses like grocery stores, should not require immunity licenses. The list of activities that require licenses should change in response to public health needs, as the least restrictive alternative principle requires.

## Immunity-Based Licenses and Ethical Values

The ethics of COVID-19 immunity licenses can be assessed with respect to 3 fundamental ethical values: the maximization of benefit; priority to the least advantaged; and treating people equally (eTable 1 in the Supplement).[3] These values can be consistent with a well-designed implementation of immunity licenses.

First, immunity licenses could maximize benefits by safely enabling patronage of bars and restaurants and in-person attendance of cultural, worship, and sporting events. Permitting these activities without risking infection would increase tax revenues, which could be earmarked to fund COVID-19 response, and reduce social harms caused by unemployment and isolation.

Second, immunity licenses can be consistent with priority to the least advantaged, that is, people who are medically, socially, or economically vulnerable. Under strict public health restrictions, *no one* would be able to perform



© 2020 American Medical Association. All rights reserved.

Downloaded From: https://jamanetwork.com/ by a University of Pittsburgh User on 04/01/2021

in-person social and economic activities. Conversely, if some activities are made conditional on licensure, only people who lack immunity licenses may be disadvantaged in comparison to others. Generally, society avoids policies that "level down": bringing every person down to the least advantaged position does not solve the problem of disadvantage.[4] Meanwhile, although workers with immunity licenses might receive offers so lucrative they would be difficult to refuse, generous offers are not coercive.[5] Further, all workers, including the immune, would retain legal protections against being coerced to work.

More important, just as the work of licensed truckers benefits those unable to drive, the increased safety and economic activity enabled by immunity licenses would benefit the unlicensed. For instance, preferentially hiring immune individuals in nursing homes or as home health workers could reduce the spread of the virus in those facilities and better protect the people most vulnerable to COVID-19. Friends, relatives, and clergy who are immune could visit patients in hospitals and nursing homes.

A third consideration, indeed a major concern, is that immunity licensing might seem to stigmatize people, undermining the value of equal treatment. Are immunity-based licenses like the yellow stars Nazis forced Jews to wear? Will they "split communities in two"[2] and stigmatize those without immunity? The yellow star and similar forms of invidious discrimination divided people based on race, religion, or heritage: all factors that should be irrelevant to social participation. In contrast, vulnerability to COVID-19 is a factor that public health policy already legitimately considers. Any inequalities produced by immunity licenses would not be invidious and would serve the interests of public health and of the disadvantaged. Importantly, refusing to create a regulated licensing program will not avoid stigma and inequality. In the absence of licensing, businesses and individuals may instead elect to use unregulated evidence of immunity, such as test results, or to use assumptions about immunity or vulnerability that are likely to be arbitrary and biased.

## Practical Challenges in Implementation

COVID-19 immunity licenses can be ethical in principle but in practice depend on 4 important questions related to both the actual evidence and effective implementation (eTable 2 in the Supplement). First, serology tests used to determine whether someone has had COVID-19 for licensing purposes must be valid and reliable, with high specificity and sensitivity. This requires a governmental body, such as the FDA, to establish and impose valid, evidence-based certification procedures. Immunity-based licenses can only be introduced if serology testing is accurate. In addition, depending on rigorous evidence regarding the duration of immunity, periodic testing and renewal of immunity licenses at designated intervals based on specific criteria may be necessary, similar to the renewal process for driver's licenses.

Second, immunity-based licensing requires evidence that a positive serology test result indicates immunity. Otherwise, licenses could cause more harm than good by creating a false sense of immunity and facilitating spread. As research into immunity progresses, a guiding principle will be that no certification or test is perfect. Some licensed drivers drive dangerously and some unlicensed ones drive safely, but licensing improves overall safety. A similar trend would likely exist for immunity licenses.

Third, in the absence of a vaccine, the benefits of licenses might encourage uninfected people to relax protective measures or actively seek infection. This is analogous to parents organizing parties to intentionally infect their children with varicella, despite the potential for the very small risk of brain damage or death from infection. Although this incentive exists to some extent even without licensing, it is a concern that must be weighed against the benefits of licensing. It is difficult to completely prevent, particularly in a society that values individual autonomy. One strategy for mitigating this incentive could be to offer licenses first or only to people likely to encounter infection in any event, such as health care workers. Another approach could be to first license members of lower-risk groups, such as university students, who are not being asked to take as many personal protective measures. Yet another approach could be to focus licensing on high-risk groups who are less likely to voluntarily seek infection. A final option might be to have license applicants self-attest that they did not intentionally become infected. These mitigation strategies could be phased in or out depending on whether there is actual evidence that this incentive is producing undesirable outcomes.

Fourth, the benefits of immunity licenses could encourage forgery, illegal markets, or fraud by unethical physicians or testing facilities. These problems underscore the need for careful implementation through strategies like anticounterfeiting designs, cryptographic or biometric features, and reliable chains of verification for tests. But they do not vitiate the advantages of licensing. The possibility of bribed examiners or forged documents has not undermined driver's licenses and passports.

## Conclusions

Immunity-based licenses have the potential to help realize important values, including enhancing the liberty of individuals who have been infected with COVID-19 without worsening the situation of those who have not been infected, maximizing benefits to individuals and society by allowing immune people to engage in economic activity, and protecting the least advantaged by allowing safer care for vulnerable populations. Importantly, immunity-based licenses do not violate equal treatment because the factors used to grant a license are not discriminatory, like race or religion, but instead grounded in relevant evidence. While immunity-based licenses require careful implementation and scientific support to be ethical in practice, nothing makes them unethical in principle.

ARTICLE INFORMATION

**Published Online:** May 6, 2020. doi:10.1001/jama.2020.8102

**Conflict of Interest Disclosures:** Dr Persad reported receiving grants from The Greenwall Foundation. Dr Emanuel reported receiving speaking fees from numerous entities, stock ownership in Nuna, investment partnership in Oak HC/FT, and receipt of grants from Hawaii Medical Service Association and Oscar Health.

REFERENCES

1. Childress JF, Faden RR, Gaare RD, et al. Public health ethics: mapping the terrain. *J Law Med Ethics*. 2002;30(2):170-178.

2. Mullin E. "Immunity passports" could create a new category of privilege: being infected with the virus could come with more freedom. OneZero. Published April 23, 2020. Accessed April 30, 2020. https://onezero.medium.com/immunity-passports-could-create-a-new-category-of-privilege-2f70ce1b905

3. Emanuel EJ, Persad G, Upshur R, et al. Fair allocation of scarce medical resources in the time of Covid-19. *N Engl J Med*. Published online March 23, 2020. doi:10.1056/NEJMsb2005114

4. Parfit D. Equality and priority. *Ratio*. 1997;10(3):202-221. doi:10.1111/1467-9329.00041

5. Hawkins JS, Emanuel EJ. Clarifying confusions about coercion. *Hastings Cent Rep*. 2005;35(5):16-19.



© 2020 American Medical Association. All rights reserved.

Downloaded From: https://jamanetwork.com/ by a University of Pittsburgh User on 04/01/2021