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Conditions for Justifying Vaccination Mandates: Public Health, Proportionality, and Individual Liberty

Qingyin Feng*

Wuxi Big Bridge Academy, No. 9 Linghu Avenue, Xinwu District, Wuxi, Jiangsu Province 214000, China

**Corresponding author: Qingyin Feng.*

Abstract

This article examines when governments may justifiably require vaccination during a serious public health threat. It uses policy analysis of effectiveness, proportionality, public trust, exemptions, less restrictive alternatives, and the distribution of risk to distinguish the benefits of the relevant institutions from the costs created by their design and distribution. The article treats compulsion as a conditional last resort rather than as either an automatic violation of liberty or a universal solution. Rather than treating the prompt as a binary choice, the discussion identifies the mechanisms through which advantages and burdens are allocated, the assumptions that make those mechanisms appear neutral, and the circumstances in which the initial judgment should be qualified. The central finding is that a mandate can be justified when the disease is grave, the vaccine is safe and effective, voluntary measures are inadequate, and the rule is proportionate, transparent, and subject to fair exceptions. The article therefore argues for an assessment based on institutional conditions, affected groups, and realistic alternatives rather than on intention, symbolism, or aggregate outcomes alone. This approach preserves the strongest evidence on each side while making the normative conclusion explicit. It also clarifies which conclusions follow from the cited evidence and which remain interpretive judgments. The result is a conditional answer that can guide further debate without presenting historical contingency or contested values as settled fact.

Keywords

vaccination mandate, public health, proportionality, liberty, policy design

1. Introduction

Vaccination should be mandatory only when a disease poses a serious threat to life or health, the vaccine is demonstrably safe and effective, voluntary uptake is inadequate, and the restriction is proportionate to the risk. Governments have a duty to protect the public, but they must also respect individual liberty and avoid burdens that fall unfairly on particular groups. The COVID-19 pandemic showed why this balance matters: low uptake can intensify pressure on hospitals and increase preventable harm, while coercive policy can damage trust if it is poorly explained or broadly enforced. A mandate is therefore justified neither by public anxiety nor by administrative convenience. It requires evidence that compulsion will address a defined danger, that less restrictive measures are insufficient, and that medical exemptions, review procedures, and fair implementation are in place.

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A mandate does not automatically extinguish personal freedom. Public policy regularly limits conduct when one person's choice creates a substantial risk for others, but the limit must be tied closely to that external risk. Vaccination rules are strongest in settings where exposure is sustained and the potential victims are especially vulnerable, such as health care. They are weaker when applied indiscriminately to activities that create little additional danger. Policy makers should define the protected population, explain the evidence, state how long the rule will last, and review whether it remains necessary. These requirements turn proportionality into an operational test rather than a general appeal to emergency.

The justification for compulsory vaccination is most clearly related to effectiveness. Mills and Rüttenauer [5] found that for some countries, the enactment of mandatory COVID-19 certificates increased vaccination rates. When being vaccinated was seen as a means to gain access to public spaces or certain activities, the more people chose to get vaccinated, said their study. This reinforces the idea that mandates should be considered when voluntary campaigns have run their course and are not effective. Likewise, Mello, et al, (2022) suggest that mandates should be evaluated with regards to "target-group effectiveness" and "population effectiveness". That is, a mandate is effective when it results in higher vaccination rates among the mandated population and promotes the overall health security of the population.

There is a clear example of a public health crisis such as COVID-19 where a requirement for vaccination was warranted. As the pandemic has progressed, many governments have experienced increasing hospital admissions, as well as staffing deficits and high mortality rates. In these situations, vaccination was not only an individual health decision but also a protection of health system and minimisation of preventable harms. It was particularly justifiable for those in health services roles, and for the staff of care homes who spent time with vulnerable individuals, such as older people and patients with underlying health conditions, or those who are immunocompromised. Gur-Arie, Jamrozik and Kingori [2] argue that healthcare workers' mandatory vaccination has ethical grounds, based on the principle of avoiding harm to patients, but note that this policy could have a negative effect on trust if poorly executed. This implies that there should be clear communication, medical exemptions and fair procedures to support mandates. The case of COVID-19, therefore, demonstrates that mandates are most effective if they are applied to high-risk environments and not if they are applied on a wide scale without any clear reason. A specific mandate for health workers is more proportional than a general mandate for all citizens since it is linked to the occupational risk and the protection of patients. Thus, when health systems and vulnerable populations are in serious jeopardy, mandatory vaccination can be a reasonable and necessary public policy response to COVID-19.

Nonetheless, governments should not consider these the initial policy response to be considered mandatory. The political powers should start by investing in education, transparent communication, making vaccines easily accessible, providing paid time off, and engaging with hesitant communities. Punishment is not a good idea if people are not immunized due to lack of access or reliable information. It is important to remember that vaccine mandates must be considered in the context of how they are being implemented and how they are being received by the public, as pointed out by Attwell, Rizzi and Paul [1]. A command which does not take social inequality into account could make society more skeptical, particularly among the communities that may already be skeptical of government or health programs.

But the public support is also essential. According to the authors of Koenig et al. [3], people are more likely to agree to more stringent vaccine policies when vaccines are viewed as effective. The significance lies in the fact that public policy is oriented towards legitimacy. Governments are more likely to have their restrictions accepted when they are evidence-based and appear to be protective. Thus, governments should make it clear why a mandate is needed, offer evidence, who it applies to, and when it is due to expire. Any policy, even those scientifically sound, may be politically harmful if it is not transparent.

Proportionality is also a requirement for compulsory vaccination. According to Savulescu [6], there are certain circumstances in which compulsory vaccination is justifiable. For example, when the public health risk is serious, vaccines are safe and effective; there are no better alternatives available and the penalties are proportionate. This serves as a good policy test. Proportionality, for instance, means that if the COVID-19 wave is very severe, it could be reasonable to require healthcare staff to be vaccinated, but not everyone else. Medical exemptions, appeal procedures and reasonable alternatives should be part of the policy if applicable.

The World Health Organization (WHO) backs the cautious launch.WHO [7] recommends pre-harmonizing vaccination before taking measures, addressing the need and proportionality, safety, effectiveness and public

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trust. It's an even more serious reminder to maintain that mandates - especially ones meant for emergency purposes - should be a temporary solution and not a permanent one. During the public health emergency release or retrofit the requirements, or even remove them once the emergency ends, and/or when the efficacy of immunization in preventing transmission is lessened.

2. Designing a Proportionate Mandate

A defensible mandate must specify its objective and its endpoint. A rule aimed at protecting hospital capacity may require different coverage, duration, and enforcement from one aimed at protecting workers in high-risk settings. Governments should publish the evidence used to define the threshold, review the rule at regular intervals, and end it when the relevant threat falls below that threshold. These safeguards prevent an emergency measure from becoming an open-ended transfer of power.

The design of exemptions is equally important. Medical exemptions should be accessible and assessed through a consistent process. Where a mandate applies to employment or education, decision makers should consider testing, remote participation, or reassignment when these options can achieve comparable protection. Penalties should be proportionate to the risk created and should not make essential services inaccessible to disadvantaged groups.

Trust is not a substitute for effectiveness, but it affects whether a policy can remain effective. Clear communication should acknowledge uncertainty, explain adverse-event monitoring, and distinguish changing evidence from institutional inconsistency. Compensation for rare serious injuries can also express reciprocity: when the public asks individuals to accept a small risk for collective protection, the public should share the cost when that risk materializes.

These conditions narrow the case for compulsion. They require governments to show that a mandate addresses a concrete danger, that less restrictive measures are insufficient, and that enforcement does not create harms greater than those it prevents. Under those conditions, a temporary mandate may protect liberty in its social dimension by reducing avoidable exposure. Without them, compulsion becomes both ethically weaker and less likely to command durable cooperation.

Policy makers must also distinguish among settings. A requirement for workers who have sustained contact with medically vulnerable people is easier to justify than a universal requirement imposed regardless of exposure. The relevant unit of analysis is the risk created by a specific activity. Narrow tailoring connects the restriction to that risk and reduces the chance that punishment will replace prevention as the policy’s practical purpose.

Equity should be tested before enforcement begins. A nominally uniform rule can impose unequal burdens when appointments, transport, paid leave, identity documents, or trustworthy medical advice are unevenly available. Governments should remove these barriers and collect evidence on who remains unvaccinated and why. If noncompliance reflects access rather than refusal, penalties are poorly matched to the problem and may deepen the vulnerability that public health policy is supposed to reduce.

Enforcement should be administratively reviewable. Individuals need notice of the rule, a clear record of their status, an opportunity to correct errors, and an appeal that can operate before an irreversible penalty occurs. These procedural protections matter because large emergency programs inevitably produce mistakes. A policy cannot claim proportionality if its safeguards exist only in principle or if correcting an error requires resources unavailable to the people most affected.

Finally, the government should compare the mandate with a defined set of alternatives. Education, convenient access, targeted outreach, testing, protective equipment, and temporary limits on high-risk activities can sometimes achieve much of the same benefit. The point is not to exhaust every imaginable option, but to show why the chosen restriction adds enough protection to justify its burden. That comparison turns necessity from a slogan into an evidence-based judgment.

A further qualification follows from the article’s central question about when governments may justifiably require vaccination during a serious public health threat. A sound judgment must identify the relevant comparison, the affected group, and the period over which consequences appear. Without those elements, evidence of benefit can coexist with an unexamined burden, while evidence of harm can be detached from the

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alternatives actually available. Making the comparison explicit improves both the factual analysis and the fairness of the conclusion.

The same standard clarifies the scope of the argument. The conclusion that a mandate can be justified when the disease is grave, the vaccine is safe and effective, voluntary measures are inadequate, and the rule is proportionate, transparent, and subject to fair exceptions does not imply that every case has the same outcome. It identifies the conditions that should guide evaluation and the reasons a simple yes-or-no answer can mislead. New evidence could alter the balance, especially when institutions, bargaining power, or available alternatives change. The claim is therefore substantive but conditional rather than universal.

3. Conclusion

Mandatory vaccination is justified only in a narrow set of circumstances. The public health threat must be serious, the vaccine must be safe and effective, voluntary and less restrictive measures must be inadequate, and the rule must be targeted, temporary, and open to review. Governments should provide accessible vaccination, reliable information, medical exemptions, and reasonable alternatives when those alternatives can protect others. A mandate designed in this way can reduce avoidable harm while respecting liberty as far as the emergency permits. A policy that lacks these safeguards risks deepening inequality and mistrust, which can undermine both its ethical basis and its practical effectiveness.

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Conflicts of Interest

The authors declare no conflict of interest.

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