Opinion

A National Action Plan to Eliminate Vaccine Preventable Childhood Diseases

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MEASLES WAS OFFICIALLY ELIMINATED FROM THE UNITED States in 2000, yet it and other childhood diseases (chickenpox, mumps, pertussis) have surged. This year is on track to have the most measles cases since 2000. The reason is dangerously low vaccination rates, often clustered in insular communities. “Herd Immunity” or “community protection” requires 95% vaccine coverage. For “vaccine deniers,” no evidence will change their view. But most “vaccine hesitant” parents are unsure whom to trust, want to do what’s best for their children, and are reachable through honest education. Here, I offer a national action plan to achieve full community protection. However, first I need to explain why well-intentioned, often punitive, policies will only backfire.

Provoking a Backlash

Overreaction is not the answer. On April 5th, 2019, a state judge invalidated a Rockland County, New York emergency declaration, banning all unvaccinated children from public places.¹ Confining unvaccinated children to virtual house arrest is unethical and unconstitutional. While public health justifies reasonable limits on personal autonomy, it does not permit disproportionate restrictions of liberty. Requiring a healthy unvaccinated child to remain at home is overly punitive.

Just days after Rockland County’s order was struck down, New York City’s Health Commissioner declared a health emergency requiring measles vaccinations for all residents living in four specific zip codes in Williamsburg, Brooklyn. Persons with valid medical reasons were exempt. The order imposed a fine on parents who fail to vaccinate their children. Requiring vaccination is rare in modern America, which last occurred in 1991 during a measles outbreak in Philadelphia.² Yet fining

individuals for vaccine refusals was common in the early 20th century. In 1905, the Supreme Court in *Jacobson v. Massachusetts* upheld a Cambridge, Massachusetts smallpox vaccination mandate enforced by a small fine. Since that time, courts have repeatedly upheld *Jacobson*.

Importantly, NYC's order does not require vaccination through physical force. Restraining and forcibly vaccinating children would shock the conscience, provoking a public backlash. But fines for violating health and safety laws are fully constitutional. Our social compact dictates that everyone must contribute to the common good by not jeopardizing the health of others. On April 18th, a judge upheld NYC's vaccination order, finding that the commissioner did not exceed his authority.³

Yet NYC's decision to apply the vaccine mandate solely within four zip codes is problematic. At first glance, targeting specific geographic areas at the epicenter of measles cases may sound reasonable. However, it is impossible to localize a fast-spreading infectious disease in dense urban areas. In a 20-minute subway ride, an unvaccinated child can travel from Brooklyn to Manhattan and play in a crowded park.

The designated zip codes directly target Orthodox Jewish communities with low vaccination rates, opening the city to the charge of discrimination. In *Jew Ho v. Williamson* (1900) a federal court struck down a quarantine order disproportionately impacting Chinese-Americans. Famously, the court observed that health officials acted "with an evil eye and unequal hand." NYC's health commissioner certainly had genuine motivations, but the Orthodox Jewish community may well feel blamed and singled out. Applying the vaccine mandate to all city residents would have been fair and effective. After all, the same reasoning justifying vaccines in one geographic area surely applies to individuals wherever they live.

Beyond vaccination, do health authorities have the right to isolate or quarantine individuals who are infected with, or exposed to, measles? On April 25th, two emergency orders—in New York State and Los Angeles—posed exactly this question. Rockland County declared a second emergency, requiring anyone infected with, or exposed to, measles to avoid public spaces or face a \$2,000-a-day fine. In response to a measles outbreak at two Los Angeles universities, California ordered students infected with, or exposed to, measles to stay home.

The orders in both Rockland County and Los Angeles were lawful and necessary. Public health authorities have the power to confine actively contagious individuals, or those exposed, for the short duration during which they pose a risk to others. No one has the right to congregate with others, placing the public in jeopardy of a serious disease.

Achieving Near Universal Vaccine Coverage

It will never be possible to ensure 100% vaccine coverage, but we only need to achieve community protection, and it is our social duty to do so to safeguard all children. Here is an ethical, lawful, and highly effective three-part plan.

Reform State Vaccination Laws

For a century now, the United States has promoted childhood vaccinations by requiring vaccines for school entry. In 1922, the Supreme Court in *Zucht v. King* upheld state vaccination laws. Today, every state requires vaccines as a condition of school entry, and all states grant exemptions for medical necessity, such as children with compromised immune systems. Three states (CA, MS, and WV) allow no nonmedical exemptions. Every other state allows religious exemptions, while 17 also permit conscientious exemptions.⁴ Religious and conscientious exemptions can open up wide chasms in vaccine coverage, with states often giving generous opt-outs.

States are constitutionally permitted to eliminate *all* nonmedical exemptions and urgently should do so.⁵ Religious groups have no First Amendment right to refuse vaccinations. The Supreme Court has ruled that religious communities must abide by generally applicable public health laws. The West Virginia Supreme Court in *Brown v. Stone* (1979), for example, approved the state's decision to deny all religious and conscientious claims. School mandates, moreover, should apply widely, from preschool to primary/secondary/tertiary, public or private institutions—including religious education such as Yeshivas.

If states fail to eliminate nonmedical exemptions, then the Secretary for Health and Human Services (HHS) should incentivize state law reform. While the federal government cannot directly compel states, it

can set reasonable conditions on grants to states based on reforming vaccine laws. Taking due care not to harm the health of poor communities, HHS should require state law reform as a condition for receiving certain Medicaid or ACA funds. The Supreme Court upheld this kind of conditional spending in *South Dakota v. Dole* (1987) when Congress withheld highways funds unless states raised the minimum drinking age to 21.

Safe Vaccines for a Healthy America

Vaccinations are among the safest and most effective public health interventions. While distrust of vaccinations has a long history, modern social media has propelled falsehoods and conspiracy theories. Automated bots, trolls, and robocalls pump out false information, for example, that vaccines cause autism, which has been scientifically disproven. Most parents are well-intentioned and would vaccinate their children if they had access to accurate, nonjudgmental information from trusted sources.

HHS should fund a long-term *Safe Vaccines for a Healthy America* campaign, designed to curtail circulation of false information and to educate parents about vaccination safety. Partnering with states, philanthropies, and businesses, the campaign would promote vaccine literacy through comprehensible messages, including from public health leaders, parents, and celebrities. Community leaders should talk with parents, providing high-quality information. Conveying evidence-based messages from reliable sources should be uncontroversial, calming a toxic environment where vaccines have been politically contested.

Corporate Social Responsibility

Social media has fueled misinformation on vaccine safety, escalating the penetration of falsehoods. Antivaccine websites are highly organized nationally, even internationally. Social media (Facebook, Twitter, WhatsApp) and internet search engines (Google, Yahoo) should exercise corporate social responsibility. They should screen out unscientific information, much the way they do for pornographic, racist, or violent content. For example, in early March 2019, Facebook pledged to reject advertisements with false vaccine claims and to lower the rankings of pages that purvey false information. Search engines should separate

evidence-based scientific information from patently deceptive websites. Antivaccine messages have misled and frightened parents, causing children to suffer from serious infectious diseases. Corporate America has a social responsibility to foster truthful evidence-based information.

Parents claim, with justification, that they owe their children a duty of care. But true caring would not place children at risk. And it most certainly would not grant the parent a license to endanger other children, or the community at large. Our culture too often stresses the ideology of “my rights” and “my autonomy.” It is time to shift from a culture of individualism to the common good, where each of us owes a duty to one another.

References

1. Gostin LO, Hodge Jr. JG. Potential discrimination in NYC’s measles public health emergency order. *The Hill*. April 11, 2019. <https://thehill.com/opinion/healthcare/438301-potential-discrimination-in-nycs-measles-public-health-emergency-order>. Accessed April 17, 2019.
2. National Public Radio. Why a court once ordered kids vaccinated against their parents’ will. *NPR*. February 19, 2015, <https://www.npr.org/sections/health-shots/2015/02/19/386040745/why-a-court-once-ordered-kids-vaccinated-against-their-parents-will>. Accessed April 18, 2019.
3. National Public Radio. Judge upholds mandatory measles vaccinations as New York closes more schools. *NPR*. April 19, 2019, <https://www.npr.org/2019/04/19/715016284/brooklyn-judge-upholds-mandatory-vaccinations-as-new-york-city-closes-more-school>. Accessed April 18, 2019.
4. Erik Skinner. State vaccination policies: requirements and exemptions for entering school. *National Conference of State Legislatures*. December 2017, <http://www.ncsl.org/research/health/state-vaccination-policies-requirements-and-exemptions-for-entering-school.aspx>. Accessed April 19, 2019.
5. Egelko B. California’s mandatory-vaccination law survives court test. *San Francisco Chronicle*, July 3, 2018. <https://www.sfchronicle.com/health/article/California-s-mandatory-vaccination-law-survives-13047905.php>. Accessed April 19, 2019.