

Bailey DeLuca

Dr. Stephen Boakye

ENG 20803

9 March 2023

Literature Review: Vaccine Mandates

Would you rather go about your life knowing that you are safe with vaccines, or could potentially become extremely ill without them? Vaccines have the ability to save your life-so it's time for Americans to accept it. According to the CDC, vaccinations are proven to be about 90%-99% effective at preventing diseases throughout your life. In the US, our healthcare system has suffered a significant hit from viral diseases. In response to this, our government quickly established vaccine mandates. In this literature review, I will explain in detail how vaccines biologically work, discuss the history of vaccine mandates, and express the need for vaccine mandates in our country.

HOW VACCINES BIOLOGICALLY WORK

To grasp why vaccines are needed, you first need to understand the way they work in our bodies. In the beginning of becoming ill, your body is infected with something called pathogens. These are bacteria that carry diseases, making our immune system go into defense mode. With pathogens being formed, antibodies begin to form in reaction to them (WHO). Specific antibodies can be produced to stop the pathogen from developing. Vaccines come into play in a different way. The World Health Organization states that vaccines hold the inactive and severely weakened parts of an antigen. This then sends the body a signal to essentially start an immune response to fight back against the antigen, however much newer and updated vaccines have the DNA makeup of the antigen instead of containing the antigen itself. The majority of vaccines

also need several doses as well. This allows for the development of memory cells and for your cells the ability to rapidly respond to the pathogen in your immune system in the future.

Regarding the need for boosters or continuous doses, the European Medicines Agency discusses how there are numerous vaccines that have different levels of protection, and depending on that vaccine, some may only last for a specific period of time, requiring you to get a booster. But there are also several vaccines where the immunization will last you for your entire lifetime.

Many Americans worry about actually getting the disease or bacteria while receiving a vaccine. While this is partially true, it is most important to note that although you are receiving a small part of the pathogen, it is not nearly enough for you to obtain the disease and become ill.

HISTORY OF VACCINE MANDATES

Many people try to argue that the demand for vaccines is a newer discussion; but mandates have been in the US for many decades. Mayo Clinic provides a very detailed explanation of the timeline of vaccines, dating back to 1885 in Massachusetts, which became the first state to require smallpox vaccines amongst children before they are able to return to school in the fall. Soon after Massachusetts, other US states would also follow their precautions all throughout the 1900s, and by the late 90s all 50 states had required specific vaccinations for children, older students, and those in daycare centers (College of Vaccines). Although vaccines have been deemed safe, some find a few ethical issues with them. Vaccines don't always align with the American people's religious or philosophical views. With that issue arising, "all 50 states allow vaccination exemptions for medical contraindications; to address individuals' beliefs and their varied concerns about vaccination, 48 states allow religious exemptions; and 20 states allow exemptions for philosophical reasons" (Malone). But it is also to note, that the states that have completely removed exemptions regarding vaccines, have the lowest rates of infections

spreading along with some of the highest vaccination rates as well (Mello). While there are no federal vaccine requirements addressing the general American population, state policies ultimately have the control to mandate vaccines, especially those that are required for school entry. For example, in 1905, a man tried to rule the vaccine mandate in Massachusetts as unconstitutional, which in the vital Supreme Court case *Jacobson v Massachusetts*, the Court ruled that state governments have the authority within each state to decide and enforce vaccination requirements- and there is no violation of the United States Constitution. (History of Vaccines). This case showed that vaccine mandates are to be taken extremely seriously within states, and they truly here to stay in the United States.

THE NEED FOR VACCINES

The World Health Organization has even gone as far to list “vaccine hesitancy as one of the biggest threats to global health”. While getting a vaccine for yourself, you are also helping those who are not able to be vaccinated remain safe. This idea is known as “herd immunity”, which essentially means when a high percentage of the population is vaccinated, it makes the spread of infectious diseases much more difficult. But, the University of Oxford explains this idea as only being extremely effective if the majority of the people within the population are vaccinated. If people choose not to, this herd immunity will not protect the community. Although this does not guarantee no infectious diseases, it protects populations such as elderly people, immunocompromised individuals, those on chemotherapy, younger children who cannot be vaccinated yet and patients extremely ill in the hospital as well. Another important population that needs to be protected are all the health care workers. Dr. Anderson, a chief medical officer in Virginia spoke with the AMA and expressed the safety of their staff during peak seasons of illness among the population, and the need for every employee to be healthy. Having the health

workers vaccinated means they are able to remain healthy, stay working, and also keep the communities safe and comfortable within these doctors offices and hospitals (AMA). At the end of the day, doctors, nurses, and their other staff have to be safe and healthy in order for all of us to be treated efficiently and effectively.

In conclusion, the biological makeup of vaccines, the history of vaccines, and the urgent need for vaccines highlights the importance of such mandates. Having immunizations allows for you to live a full, safe, and exciting life by first protecting yourself. Federal and state governments truly care about the well-being of the American population, and through the numerous sources above, the argument for vaccine mandates remains constant and unwavering within our society.

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