HB 248: To Prohibit Required Vaccination Status Opponent Testimony: Dawn C. Dillinger, DO Ohio House Health Committee June 22, 2021

I appreciate the opportunity to provide opponent testimony on House Bill 248. I am gravely concerned by this legislation, as it would significantly weaken the robust public health framework that protects us from the devastation of many vaccine-preventable diseases. HB 248 does much more than prevent mandatory COVID-19 vaccinations, as it would actually apply to ALL vaccinations. This bill would decimate our progress in public health in the past century and hinder our efforts to fight communicable diseases in the years to come.

The current anti-vaccination legislation, HB 248, being sponsored by Rep. (R) Jennifer Gross, APN is horrifying. Vaccination is a privilege, a miracle, and a public health success story. Vaccination across the globe is desired by more people than have access to it. The COVID-19 pandemic should have put all of this into blatant perspective, especially for those of us in the health care field. Even since vaccination for COVID-19 has started, it has been clear that vaccination has decreased the overall burden caused by the pandemic. We saw this first in the nursing homes where a highly vaccinated population of residents led to a decrease in infections. We see it in other countries such as Israel, where vaccination rates for COVID are high and infections are decreasing, with life returning to normal. We saw that when we vaccinated older adults, their rate of infection for COVID decreased and the rate of COVID infection in the younger age groups, who were not vaccinated yet, had increased.

While it is bad enough that HB 248 attempts to turn back progress on COVID-19, it is more horrible that it hopes to impact all vaccines. Vaccines have led to a false sense of security that the diseases they protect against are no longer viable or dangerous. Because of vaccination, endemic polio was eliminated from the US in 1991, however there are still parts of the world where polio infects humans and paralyzes children. Smallpox was globally eradicated due to vaccinations in 1977. It takes constant vigilance in the healthcare and public health sectors to maintain this eradication.

Vaccine refusals are not only a public health crisis, but they are also a liability issue for healthcare and industry. Having a person sign a waiver does not protect the public and puts those who visit hospitals and doctors' offices, schools and businesses at higher risk of disease. Imagine being admitted to the hospital for COVID or Influenza and the staff caring for you is not vaccinated. That staff member gets infected and then takes a lunch break and infects the rest of the unvaccinated staff, who take this infection to the visitors (unknowingly) and other patients in a hospital. It is incumbent upon medical professionals to not cause harm to patients. House Bill 248 and Rep. Gross further perpetuate the fallacy that people need protected from vaccination, when really people need to be protected from these preventable diseases. Republican representatives have no qualms about forcing medical decision making on individual women, especially pregnant women. Vaccination is an evidence-based, proven way to protect individuals though vaccination decisions also affect the entire public. It should be a focus of our representatives to protect the population first by encouraging vaccination, especially when those representatives are in the health care field.

The scheduling of vaccines is evidence-based. Optimal immunologic response is balanced with need to achieve protection against disease. For instance, Pertussis is less immunogenic in early infancy, but the benefit to infants is greater due to higher morbidity and mortality in that age group. Also, Measles vaccine must be given after first 12 months of life due to interference with transplacentally acquired maternal antibody. Vaccine schedules are set to achieve a uniform response. Some vaccines achieve immunologic response after single dose and others require multiple. Skipping and spacing vaccine doses against evidence does not allow for maximum benefit. Simultaneously administered vaccines are safe, effective, and often times synergistic.

Perhaps a review of some of the contagious disease vaccines prevent would help our Ohio representatives to better support vaccination and stop their campaign to infect people under their hypocritical guise of medical freedom.

Vaccination of infants against **Hepatitis B** is important because less than 1% of infants less than 12 months old will have symptoms, and more than 90% of infants infected perinatally will develop chronic Hepatitis B. Without post-exposure prophylaxis, the risk of an infant acquiring Hepatitis B from an infected mom perinatally is 70-90%.

Diptheria infection causes a membranous and obstructive infection of an airway. It can be life threatening and lead to airway obstruction, myocarditis, heart block, cranial and peripheral neuropathies and palatal palsy. Severe disease occurs more often in unimmunized or inadequately immunized children. Because of required vaccination, no cases of respiratory diptheria have been reported in USA since 2003, but continued immunity requires regular booster injections every 10 years (Tdap or Td).

Tetanus is a nearly-always fatal bacterial disease caused by neurotoxin from contaminated wounds. Neonatal tetanus is still common in developing countries where pregnant women lack immunity and non-sterile cord care is practiced. Due to required immunization, 40 or fewer cases are reported annually in USA since 1999. In Ohio, 0-2 cases are reported annually.

Whooping cough or pertussis is most severe in first 6 months of life causing respiratory distress, gasping, bradycardia, apnea, subdural bleeding, encephalopathy, seizures, and SIDS. Neither infection nor immunization provides life-long immunity, which is why Tdap boosters are now required for 7th grade. While this is a bacterial infection, antibiotics have no effect on course of illness, but are recommended to limit spread of infection to avoid a massive school outbreak. Ohio schools have shut down for a pertussis outbreaks in 2013, 2014 and 2017. Haven't our school children been negatively impacted enough by staying home from school for what is now vaccine-preventable COVID-19? Why are we risking further school shut downs for all vaccine-preventable diseases?

Paralytic polio occurs in 2/3 of people with acute motor neuron disease, and infection is more common in infants and young children. Since implementation of all-IPV vaccines in 2000, no vaccine reportable cases have been reported. The only cases of polio since 2005 were unimmunized children exposed to someone who had taken OPV outside of this country. Timing is again critical as the final dose is ALWAYS given after the 4th birthday and is required for kindergarten attendance.

Before vaccination, **Hib** was the most common cause of bacterial meningitis in children in the USA. Peak incidence of Hib was 6-18 months old, with peak Hib epiglottitis at 2-4 years old. Many currently

practicing physicians have seen kids infected or dying from this in the past. I can still vividly recall an infant having seizures from Hib meningitis every few minutes in the PICU. Invasive Hib disease in children < 5y decreased 99% after the vaccine was introduced. Currently in the US, invasive Hib occurs primarily in under or unimmunized children.

Pneumococcal vaccination, or PCV7, was introduced in 2000. From 1998-2007, invasive pneumococcal disease decreased 99%. The indirect benefit of pediatric PCV7 was that invasive disease in 65 years and older decreased 92%. PCV13 has now replaced PCV7 to successfully cover more strains.

Rotavirus is a febrile illness with watery diarrhea for 3-8 days. Before vaccination, it was the most common cause of diarrhea in young children. Vaccination against rotavirus became available in 2006. In the first 2 years, ER visits and hospitalizations for Rotavirus decreased 85%.

The **measles** outbreak in the USA that preceded the coronavirus pandemic has been forgotten. Subacute sclerosing panencephalitis (SSPE) has virtually disappeared with vaccination against measles. There has been a 99% decrease in measles after vaccine introduction in 1963 and by 2000 it was considered no longer endemic to US. In 2011, 222 cases were caused from direct importations and 85% of those cases were unimmunized. Due to continued refusal of the MMR vaccine due to unproven claims of an association with autism, there were outbreaks in both 2018 and 2019, including 1282 confirmed cases of measles in 31 states.

Mumps is the only known cause of epidemic parotitis, but can also cause meningitis, orchitis, hearing loss, myocarditis, thyroiditis, and encephalitis. Mumps vaccine was initially licensed in 1967, with the two dose MMR recommended in 1989. By 2000, the USA had a 99% reduction in mumps cases. Ohio had an outbreak of 439 cases of mumps in 2014, which was the same number as occurred in the entire USA in 2013. Most of those cases start with an unimmunized imported case and unvaccinated Ohioans get sick.

Congenital **rubella** syndrome leading to birth defects occurs in up to 85% if mother infected in first 12 weeks of a pregnancy, and still 25% if during end of 2nd trimester. The incidence decreased 99% from pre-vaccine era, with the US determined no longer to have endemic cases of rubella in 2004. Post-pubertal females should not become pregnant for 28 days after a rubella-containing vaccine, which makes infant vaccination even more important.

Chicken pox, or varicella, is most severe in infants, adolescents and adults, and can cause congenital varicella syndrome in newborns. Chicken pox is not just a rash and can cause pneumonia, acute cerebellar ataxia, encephalitis, thrombocytopenia. Since universal immunization in the US in 1995, varicella has declined in all age groups and Zoster or shingles is lower among chicken pox vaccine recipients. Routine requirement of a 2nd dose before kindergarten, since 2006, increased efficacy from 86% protection to 98%.

In the pre-vaccine era, **Hepatitis A** was one of the most frequently reported diseases between 5-14 years olds. A vaccine against Hepatitis A was licensed in 1995 and recommended for ALL children age 12-25 months in 2000. Risk factors for Hepatitis A infection include child care center attendance, international adoptee exposure and foodborne outbreaks.

One of the specifically targeted vaccines by Rep. Gross is the **meningitis** vaccine. Invasive disease includes meningococcemia, meningitis or both with overall case fatality rate of 10%, but higher in teens.

There is a peak in disease at 16-21 years old. Since Hib and PCV vaccines were introduced, N. meningitidis became the leading cause meningitis. Required vaccination keeps teens and college age children protected, especially in a dorm setting. The only time I saw a teenager go from fever to dead in a matter or hours, was during residency and that teenage had meningococcal meningitis. Hearing her mother cry for her daughter is haunting and should not have to happen.

Human Papilloma Virus, or HPV, is associated with genital warts as well as cervical, anogenital and oropharyngeal cancers. While this vaccine is highly effective and is the only vaccine available to prevent cancer, it is currently not required in the USA. Because of this, we still see this very common STI and associated cancers in US. It is licensed for use in both boys and girls and since its inception has expanded use to adults.

As you can see, HB 248 would irresponsibly and negatively impact the health, safety and lives of so many people. This information may seem detailed and overly medical and is one of the reasons why our elected leaders need to trust our physicians who have the medical knowledge and the best interest of our individual patients and the public at heart. Research has shown that health literacy in the general population is not high. Our elected leaders should be encouraging trust in the physicians who care for patients, vaccinate people, and discuss vaccines every single day of their careers.

Thank you for your consideration of my concerns, and once again, I urge the committee to reject HB 248 to keep Ohioans safe and avoid dangerous consequences for our state.