

TESTIMONY OF CONNECTICUT HOSPITAL ASSOCIATION SUBMITTED TO THE PUBLIC HEALTH COMMITTEE Wednesday, February 19, 2020

HB 5044, An Act Concerning Immunizations

The Connecticut Hospital Association (CHA) appreciates this opportunity to submit testimony concerning **HB 5044**, **An Act Concerning Immunizations**. CHA supports this bill.

All Connecticut hospitals strive to improve the health of our communities, whether it is partnering with community-based organization to address social determinants of health, treating a loved one at 2:00 a.m. in the Emergency Department, or employing science-based best practices for infectious disease control.

Vaccines are one of the success stories of modern medicine, spanning the 19th, 20th and 21st centuries, with millions of lives saved because of vaccines.^{i,ii} In fact, trust continues to be evidenced in vaccines by the call for and development of a rapid vaccine for the novel Corona virus (2019 nCoV) that is achieving pandemic state in the world as we speak.^{iii,iv} Vaccines continue to be developed and utilized for a range of infectious diseases, and now vaccines are even used to prevent cancer, with the use of HPV (Human Papilloma Virus) vaccine shown to decrease not only the rate of infection^v but also the rate of multiple cancers associated with HPV infection^{vi}.

Immunizations, or vaccines, are used to develop immunity to an illness, with immunity defined as the ability of an organism to resist a particular infection or toxin by the action of specific antibodies or sensitized white blood cells. Immunizations are used in humans and in petsviii, with pet immunizations preventing pets and humans from rabies Immunizations require not only the vaccine product, but also a healthcare worker to administer the vaccine.

Childhood disease in particular has been impacted by immunization. Immunizations have been embraced across the globe as a prevention strategy for illness, with more than 116 million children worldwide immunized against illness from diphtheria, pertussis, and tetanus alone in 2018, preventing two to three million deaths^x. Polio is close to being eradicated worldwide^{xi}, and thanks to immunizations, the United States has been polio-free since 1979^{xii}. Measles-related deaths declined between 2000 and 2017 by 80 per cent worldwide, with more than 20 million children avoiding death from measles infection^{xiii}. Measles was declared eliminated in

the United States in 2000 but because of travel from endemic countries, lack of immunization, and lack of herd immunity, measles is starting to reappear^{xiv}. Herd immunity is a population response to vaccination. It is defined as "the resistance to the spread of a contagious disease within a population that results if a sufficiently high proportion of individuals are immune to the disease, especially through vaccination; the level of vaccination needed to achieve herd immunity varies by disease but ranges from 83 to 94 percent"^{xv}. Herd immunity is at risk if a large number of people fail to be immunized.

Controversy over the need for immunizations is not new^{xvi}, and is not confined to America^{xvii}. Various issues create debate about immunizations, including parental differences, political differences, and religious differences^{xviii}. There is also a long history of science denial and distrust for evidence-based medicine that can skew public discourse, and confuse consumers, because non-scientific viewpoints are often repeated in multiple venues across the internet^{xix,xx,xxi}. It is important to ensure that we are listening to concerns of parents and patients to build confidence in evidence-based medicine including for immunizations. The American Academy of Pediatrics has published guidance for pediatricians to enhance immunization rates by listening to the concerns parents are identifying^{xxii}.

As healthcare providers, healthcare advocates, and scientists, we trust science. The science in favor of immunizations is strong. Healthy People 2020 has an entire section devoted to using immunizations to prevent diseasexxiii. The safety of vaccines is strongxxiv. Claims that vaccines cause autism have been debunked by scientistxxv. When the benefits of immunization are compared to the risks of immunization, the science in favor of immunizations is overwhelmingxxvi,xxvii. We are willing to spend millions each year trying to decrease preventable deaths in healthcare through safety initiatives, such as our high reliability collaborative in the hospitals in Connecticut, or our work with the federal government to prevent avoidable infections, or our work with the Department of Public Health to reduce falls and pressure ulcers. Immunizations are one of the most cost-effective strategies that healthcare can implement to prevent avoidable deaths and illnesses.

The science behind the development of vaccines and the practice of immunization are proven to save and improve the lives of countless citizens around the world, in the US and in the state of Connecticut. Hospitals are committed to providing care that is based on the best clinical practices that yield the very best outcome. For these reasons, CHA supports HB 5044.

Thank you for your consideration of our position. For additional information, contact CHA Government Relations at (203) 294-7310.

ⁱ R.A. Meckel, "Levels and Trends of Death and Disease in Childhood, 1620 to the Present," in *Children and Youth in Sickness and Health: A Handbook and Guide,* ed. J. Golden, R.A. Meckel, and H.M. Prescott (Westport, Conn.: Greenwood Press, 2004), 3–24. ⁱⁱ https://www.cdc.gov/mmwr/preview/mmwrhtml/00056796.htm (accessed 2.8.2020)

iii https://www.fda.gov/emergency-preparedness-and-response/mcm-issues/novel-coronavirus-2019-ncov (accessed 2.8.2020)

^{iv} https://www.niaid.nih.gov/diseases-conditions/coronaviruses-therapeutics-vaccines (accessed 2.8.2020)

^v Lee LY, Garland SM. Human papillomavirus vaccination: the population impact. *F1000Res*. 2017;6:866. Published 2017 Jun 12. doi:10.12688/f1000research.10691.1

vi https://www.cancer.gov/about-cancer/causes-prevention/risk/infectious-agents/hpv-vaccine-fact-sheet (accessed 2.8.2020)

vii Oxford English Dictionary, https://www.lexico.com/en/definition/immunity (accessed 2.8.2020)

- viii https://www.avma.org/resources-tools/pet-owners/petcare/vaccinations (accessed 2.8.2020)
- ix https://www.avma.org/resources/public-health/rabies-and-your-pet (accessed 2.8.2020)
- x https://data.unicef.org/topic/child-health/immunization/ (accessed 2.8.2020)
- xi https://www.who.int/features/factfiles/polio/en/ (accessed 2.8.2020)
- xii https://www.cdc.gov/polio/what-is-polio/polio-us.html (accessed 2.8.2020)
- xiii Ibid.
- xiv https://www.cdc.gov/measles/downloads/measlesdataandstatsslideset.pdf (accessed 2.8.2020)
- xv Oxford English Dictionary, https://www.lexico.com/en/definition/herd immunity (accessed 2.8.2020)
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- xvii https://www.sciencemag.org/news/2019/06/france-most-skeptical-about-science-and-vaccines-global-survey-finds (accessed 2.8.2020)
- xviii Ibid.
- xix https://www.nationalgeographic.com/news/2015/2/150206-measles-vaccine-disney-outbreak-polio-health-science-infocus/ (accessed 2.8.2020)
- xx https://blogs.scientificamerican.com/observations/dis-trust-in-science/ (accessed 2.8.2020)
- xxi https://www.usatoday.com/story/news/health/2019/04/23/vaccine-measles-big-pharma-distrust-conspiracy/3473144002/ (accessed 2.8.2020)
- xxii https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/immunizations/Pages/vaccine-hesitant-parents.aspx (accessed 2.8.2020)
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- xxiv Maglione MA, Das L, Raaen L, et al. Safety of Vaccines Used for Routine Immunization of US Children: A Systematic Review *Pediatrics* Aug 2014, 134 (2) 325-337; DOI: 10.1542/peds.2014-1079
- xxv https://www.cdc.gov/vaccinesafety/concerns/autism.html (accessed 2.8.2020)
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