



**Statement for the Record
March of Dimes**

**Hearing of the Senate Health, Education, Labor and Pensions (HELP) Committee
"Vaccines Save Lives: What Is Driving Preventable Disease Outbreaks?"
March 5, 2019**

March of Dimes, a unique collaboration of scientists, clinicians, parents, members of the business community, and other volunteers representing every state, the District of Columbia and Puerto Rico, appreciates this opportunity to submit testimony for the record for the hearing, "Vaccines Save Lives: What Is Driving Preventable Disease Outbreaks?" March of Dimes commends you for holding this hearing to examine a topic of utmost importance to maternal and child health.

Vaccines are considered one of the greatest public health successes of modern medicine. It is estimated that from 1994 to 2016, the U.S. childhood immunization program prevented 381 million illnesses, 855,000 deaths, and nearly \$1.65 trillion in societal costs.ⁱ Adult immunizations have similarly prevented millions of fatalities and illnesses from diseases like influenza and pneumococcal disease.ⁱⁱ

Immunizations play an especially critical role in the health of pregnant women and young children. For pregnant women, rubella (or German measles) is among the most dangerous infectious diseases. Rubella can cause stillbirth, miscarriage, or severe birth defects that can affect almost every part of the newborn's body, including deafness, cataracts, heart defects, intellectual disabilities, and liver and spleen damage.ⁱⁱⁱ During the last major rubella epidemic in the United States, which took place 1964-1965, an estimated 12.5 million people contracted rubella, 11,000 pregnant women miscarried their pregnancies, 2,100 newborns died, and 20,000 babies were born with congenital rubella syndrome. Today, congenital rubella syndrome in newborns is all but unknown in the United States due to the incredible success of the measles, mumps and rubella (MMR) vaccine. Rubella was declared eliminated in the United States in 2004.^{iv}

Influenza can also have disproportionate dangers for pregnant women compared to other individuals. Due to changes in their immune system, heart, and lungs during pregnancy, pregnant women and women up to two weeks postpartum are more vulnerable to severe illness from flu, including illness requiring hospitalization.^v During the H1N1 pandemic influenza outbreak of 2009, several studies indicated that pregnant women were at increased risk of hospitalization, admission to an intensive care unit, death, and other severe outcomes related

to that strain of influenza.^{vi} Data from the first month after the appearance of 2009 H1N1 showed that pregnant women were four times more likely to be hospitalized than the general population.^{vii} Although pregnant women represent only 1 percent of the U.S. population, they accounted for about 5 percent of all 2009 H1N1-related deaths.^{viii} Influenza vaccination plays a critical role in protecting the health of both pregnant women and their babies.

Our nation cannot afford to let down its guard and allow the return of diseases that threaten the lives and health of pregnant women, children, and families. While child vaccination rates remain high in most part of our nation, there are communities around the country susceptible to outbreaks of vaccine-preventable diseases due to low vaccination rates.^{ix} Recent measles outbreaks in Washington, Texas, Oregon and New York and a similar 2014-2015 outbreak in California have served as a potent illustration of the fact that infectious diseases will resurge when vaccination rates drop. While endemic measles was declared eliminated in 2000 in the United States due to the tremendous work and investment by the U.S. public health system,^x measles has begun to spread again in communities with low vaccination rates. There were 372 measles cases in 2018, the second-worst year for measles since 2000.^{xi} This year, there are already 159 cases of measles reported.^{xii} The majority of those infected in both years were unvaccinated.^{xiii} Like rubella and influenza, measles can also pose a particular threat to pregnant women. Those who contract measles are at risk for more severe complications of the illness, as well as at increased risk for preterm birth.^{xiv}

It is imperative that our nation move aggressively to protect public health by ensuring that all Americans receive the full schedule of recommended vaccinations as medically appropriate. The rise of non-medical exemptions in some communities is allowing dangerous infectious diseases to gain a foothold from which they can spread. The resulting reduction in herd immunity endangers not only pregnant women and children, but those who cannot be vaccinated, such as those with medical conditions that compromise their immune systems. March of Dimes applauds states such as West Virginia and Mississippi for maintaining long-time vaccine mandates that do not allow for non-medical exemptions.^{xv} Because of these strong policies, both states have some of the highest vaccination rates in the country for children entering kindergarten.^{xvi} California joined their ranks in 2016 by eliminating non-medical exemptions from the state's school vaccine laws in response to a significant measles outbreak that began at Disney Land.^{xvii} Preliminary data indicate that the policy change is increasing the vaccination rate for schoolchildren in the Golden State.^{xviii}

March of Dimes urges Congress to ensure the Centers for Disease Control and Prevention's (CDC) 317 Immunization Program has ample funding to do its vital work, including developing evidence-based consumer education campaigns to educate the public about the safety and effectiveness of vaccines. We stand ready to partner with Congress, the CDC and other federal agencies on this vital effort. We also encourage Congress to continue investing in vaccine research at the National Institutes of Health to continue research on new vaccines for viruses that pose a severe threat to maternal and child health, such as Zika.

March of Dimes is proud of our legacy in helping to end the terrible scourge of polio. We know that the same success is possible for other vaccine-preventable diseases, but only if individuals and families are receiving immunizations as recommended by the CDC. We thank the Committee for highlighting this important issue and look forward to partnering with you to save lives and prevent illness through immunization.

ⁱ Centers for Disease Control and Prevention (CDC). (2018). VFC Infographic: 20 Years of Protection. Retrieved from <https://www.cdc.gov/vaccines/programs/vfc/20-year-infographic.html>

ⁱⁱ CDC. (2016). Vaccine-Preventable Adult Diseases. Retrieved from <https://www.cdc.gov/vaccines/adults/vpd.html>.

ⁱⁱⁱ CDC. (2017). Pregnancy and Rubella. Retrieved from <https://www.cdc.gov/rubella/pregnancy.html>.

^{iv} CDC. (2017). Rubella in the U.S. Retrieved from <https://www.cdc.gov/rubella/about/in-the-us.html>.

^v Rasmussen SA, Jamieson DJ, Uyeji TM. (2012). Effects of influenza on pregnant women and infants. *American Journal of Obstetrics & Gynecology*, 207(3 Suppl):S3-8. Retrieved from [https://www.ajog.org/article/S0002-9378\(12\)00722-3/pdf](https://www.ajog.org/article/S0002-9378(12)00722-3/pdf).

^{vi} Ibid.

^{vii} Ibid.

^{viii} Ibid.

^{ix} Hill HA, Elam-Evans LD, Yankey D, Singleton JA, Kang Y. (2018). Vaccination Coverage Among Children Age 19–35 Months — United States, 2017. *Morbidity and Mortality Weekly Report*, 67:1123–1128. Retrieved from <https://www.cdc.gov/mmwr/volumes/67/wr/mm6740a4.htm>.

^x CDC. (2018). Measles History. Retrieved from <https://www.cdc.gov/measles/about/history.html>.

^{xi} CDC. (2019). Measles Cases and Outbreaks. Retrieved from <https://www.cdc.gov/measles/cases-outbreaks.html>.

^{xii} Ibid.

^{xiii} Ibid.

^{xiv} Rasmussen SA, Jamieson DJ. (2015). What Obstetric Health Care Providers Need to Know About Measles and Pregnancy. *American Journal of Obstetrics & Gynecology*, 126(1): 163–170. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4552307/>.

^{xv} Sandstrom A. (2015, July 16). Nearly all states allow religious exemptions for vaccinations. Pew Research Center. Retrieved from <http://www.pewresearch.org/fact-tank/2015/07/16/nearly-all-states-allow-religious-exemptions-for-vaccinations/>.

^{xvi} CDC. (2018). 2009-10 through 2017-18 School Year Vaccination Coverage Trend Report. Retrieved from <https://www.cdc.gov/vaccines/imz-managers/coverage/schoolvaxview/data-reports/coverage-trend/index.html>.

^{xvii} Sandstrom A. (2015, July 16). Nearly all states allow religious exemptions for vaccinations. Pew Research Center. Retrieved from <http://www.pewresearch.org/fact-tank/2015/07/16/nearly-all-states-allow-religious-exemptions-for-vaccinations/>.

^{xviii} Skeptical Raptor. (2017, July 30). California vaccination rates – record high thanks to SB277. Retrieved from <https://www.skepticalraptor.com/skepticalraptorblog.php/california-vaccination-rates-record-high/>.