State Immunization Policy and Practices

(FY2021 Appropriation Act - Public Act 166 of 2020)

April 15, 2021

Sec. 1322. The department shall provide a report by April 15 of the current fiscal year to the house and senate appropriations subcommittees on the department budget, the house and senate fiscal agencies, the house and senate policy offices, and the state budget office on state immunization policy and practices. The report shall include all of the following items:

(a) A list of recommended vaccinations.

(b) The basis and rationale for inclusion of each listed item.

(c) The indicators, measures, and performance outcomes that document improvement in human health for each listed item.

MDHHS

Michigan Department of Health & Human Services

Section 1322 PA 166 of 2020

Recommended Vaccinations

(a). The Michigan Department of Health and Human Services (MDHHS) recommends vaccines for the following vaccine preventable diseases: Diphtheria, Tetanus, Pertussis, *Haemophilus influenzae* type b, Hepatitis A, Hepatitis B, Human Papillomavirus (HPV), Influenza, Measles, Mumps, Rubella, Meningococcal, Pneumococcal, Polio, Rotavirus, Varicella (Chickenpox), Zoster (Shingles), and COVID-19.

Basis and Rationale

(b). MDHHS follows the Advisory Committee on Immunization Practices (ACIP) and the Centers for Disease Control and Prevention (CDC) vaccine recommendations for Children and Adolescents as well as for Adults. The recommendations stand as public health guidance for the safe use of vaccines and related biological products in the United States. Below is a rationale for the use of the currently recommended vaccines.

Diphtheria, Tetanus, and Pertussis (DTP): Before the availability of vaccines, pertussis, tetanus, and diphtheria were common diseases and caused severe morbidity and mortality. As a result of the routine DTP/Diphtheria & tetanus toxoids and acellular pertussis (DTaP) childhood vaccination program and decennial booster doses of tetanus-toxoid containing vaccines for adolescents and adults Tetanus and diphtheria (TD) Tetanus, diphtheria, and pertussis where pertussis component is accellular (Tdap), the number of cases of all three diseases has declined markedly. In order to continue to keep cases down and prevent outbreaks, we must continue to follow the ACIP/CDC recommendations.

***Haemophilus influenzae* type b (Hib):** Hib disease was once a leading cause of bacterial meningitis among U.S. children aged <5 years. As a result of the introduction of Hib vaccines in the United States and sustained high vaccine coverage, Hib disease is now rare, with rates below the Healthy People 2020 objective. However, the risk for invasive Hib disease continues among unimmunized and under immunized children, highlighting the importance of full vaccination with the primary series and booster doses. Hib Vaccination: What Everyone Should Know | CDC

Hepatitis A: In 2006, ACIP recommended routine HepA vaccination of all children aged 12–23 months. These recommendations resulted in a 95.5% decrease in reported hepatitis A cases during 1996–2011. Unfortunately, in recent years the number of people infected has been increasing because there have been multiple outbreaks of hepatitis A in the United States, including a large outbreak that started in August 2016 in Michigan. These outbreaks resulted resulting from person-to-person contact, especially among people who use drugs, people experiencing homelessness, and men who have sex with men. Low adult HepA vaccination coverage and high population susceptibility to

HAV infection allow outbreaks to continue to occur. Prevention of Hepatitis A Virus Infection in the United States: Recommendations of the Advisory Committee on Immunization Practices, 2020 | MMWR (cdc.gov)

Hepatitis B: An estimated 257 million persons worldwide are living with hepatitis b virus (HBV) infection. Persons with chronic infection are often asymptomatic and may not be aware they are infected; however, they are capable of infecting others. The birth dose of hepatitis B is especially important since chronic HBV infection develops in 90% of infants who acquire HBV infection from their mothers at birth or in infancy. Chronic infection is responsible for most HBV-related morbidity and mortality. Approximately 25% of persons who become chronically infected during childhood and 15% of those who become chronically infected after childhood will die prematurely from cirrhosis or liver cancer. Pinkbook: Hepatitis B | CDC

Human Papillomavirus (HPV): HPV infections and cervical precancers (abnormal cells on the cervix that can lead to cancer) have dropped significantly since the HPV vaccine has been in use in the United States. Among teen girls, infections with HPV types that cause most HPV cancers and genital warts have dropped 86 percent. Cancers caused by HPV are preventable and HPV vaccine is the best protection.

Influenza: Flu vaccines have been shown to reduce the risk of flu illness, hospitalization, and death. For example, during 2019-2020, flu vaccination prevented an estimated 7.5 million influenza illnesses, 3.7 million influenza-associated medical visits, 105,000 influenza-associated hospitalizations, and 6,300 influenza-associated deaths. The best way to prevent the flu is to get the flu vaccine.

Measles, Mumps, and Rubella: Despite the success in eliminating and maintaining elimination of endemic transmission of measles and rubella in the United States and the significant decline in mumps morbidity in the United States, measles, mumps, and rubella are still common diseases in other countries. Importations will continue to occur and cause outbreaks in communities that have clusters of unvaccinated persons. We saw this in Michigan in 2019. Persons who remain unvaccinated put themselves and others in their community, particularly those who cannot be vaccinated, at risk for these diseases and their complications. High levels of population immunity through vaccination are needed to prevent large outbreaks and maintain measles and rubella elimination and low mumps incidence in the United States.

Meningococcal: Although rare, meningococcal disease is very serious. Rates of disease are highest in children younger than 1 year of age, with a second peak in adolescence and young adults (those 16 through 23 years old have the highest rates of meningococcal disease). Approximately 1,000 people get meningococcal disease each year in the U.S. and 10–15 percent of these people die. Of those who survive, about 1 in 5 will have permanent disabilities such as brain damage, hearing loss, loss of kidney function or limb amputations. The meningococcal vaccine is the best way to prevent meningococcal disease. Meningococcal Disease: Technical and Clinical Information | CDC

Pneumococcal: Streptococcus pneumoniae (pneumococcus) is a bacterial pathogen

that affects both children and adults. Pneumococcal bacteria are one of the most common causes of pneumonia (infection of the lungs) and can also cause ear infections, sinus infections, meningitis (infection of the tissue covering the brain and spinal cord), and bacteremia (bloodstream infection). Anyone can get pneumococcal disease, but children under 2 years of age, people with certain medical conditions, adults 65 years or older, and cigarette smokers are at the highest risk. Pneumococcal vaccines are the best way to prevent pneumococcal disease. Pneumococcal Vaccination | CDC

Polio: Polio was once one of the most feared diseases in the U.S. In the early 1950s, before polio vaccines were available, polio outbreaks caused more than 15,000 cases of paralysis each year. Thanks to a successful vaccination program, the United States has been polio-free since 1979. But poliovirus is still a threat in some countries. Polio vaccination is the best protection. Polio Elimination in the U.S. | CDC

Rotavirus: In the pre-vaccine era, an estimated 2.7 million rotavirus infections occurred every year in the United States and 95% of children experienced at least one rotavirus infection by age 5 years. Rotavirus infection was responsible for 410,000 physician visits, more than 200,000 emergency department visits, 55,000 to 70,000 hospitalizations, and 20 to 60 deaths annually in children younger than age 5 years. Rotavirus accounted for 30% to 50% of all hospitalizations for gastroenteritis among children younger than age 5 years. Rotavirus vaccine significantly reduced physician visits and reduced rotavirus-related hospitalizations. Pinkbook: Rotavirus | CDC

Varicella (Chickenpox): Before routine chickenpox vaccination, almost all people had been infected by the time they reached adulthood, sometimes with serious complications. Today, the number of cases and hospitalizations is down dramatically. The varicella vaccine is the best way to prevent chickenpox. Pinkbook | Varicella | Epidemiology of Vaccine Preventable Diseases | CDC

Zoster (Shingles): Zoster causes substantial morbidity in the United States, with approximately 1 million new cases occurring annually. Many of these cases cause debilitating pain, and when Post Herpetic Neuralgia (nerve pain) develops, the pain can last for months or even years. Other complications include involvement of the eye that can threaten sight, bacterial superinfections, and disfiguring facial scarring. The availability of a safe and effective vaccine for zoster offers an opportunity to decrease the burden of this disease and its complications among persons with high levels of risk. In the United States, the vaccine is licensed for use among persons aged ≥ 50 years. Pinkbook: Herpes Zoster | CDC

COVID-19: COVID-19 can have serious, life-threatening complications, and there is no way to know how COVID-19 will affect each individual. Stopping a pandemic requires using all the tools we have available. ACIP recommends the use of COVID-19 vaccines within the scope of the Emergency Use Authorization or Biologics License Application for the particular vaccine. Interim ACIP recommendations for the use of COVID-19 vaccines can be found on the ACIP Vaccine Recommendations and Guidelines page.

Indicators, Measures, and Performance Outcomes

(c). For each of the recommended vaccines we use various indicators, measures, and reports to monitor vaccination coverage in Michigan. For routine vaccinations across the lifespan, we compile quarterly county immunization report cards. For each immunization measure the report card quickly allows counties to see their county coverage level, the local health department coverage level, the state and national average coverage, and a Healthy People 2020 goal when applicable. To monitor influenza vaccinations we developed an interactive dashboard during the 2020-2021 influenza season. The dashboard shows progress towards the states flu vaccinations goals, coverage by county, age group and sex, in addition to a comparison to last year's fu vaccination coverage. To monitor COVID-19 vaccination coverage we also have an interactive dashboard that is updated daily. The COVID dashboard includes additional information on COVID-19 vaccine distribution, coverage by race/ethnicity, and information on the providers administering vaccinations. The report cards and dashboards are made available to the public and shared with key stakeholders to identify areas with low vaccination coverage to help with targeted interventions to improve human health.