Janet T. Mills Governor

Jeanne M. Lambrew, Ph.D. Commissioner



2018-2019 Maine School Immunization Assessment Report

State-mandated vaccination requirements for school entry protect children and communities against vaccine preventable diseases. Each school year, federally funded immunization programs collect and report kindergarten vaccination data to the Centers for Disease Control and Prevention (CDC). Federally funded immunization programs in all 50 states partner with their Department of Education (DOE) to assess vaccination coverage and exemption status of children enrolled in public and private kindergartens. In addition to kindergartens, the Maine Immunization Program (MIP) also collects coverage and exemption data for both seventh grade students and, beginning 2018-19, twelfth grade students. This information is collected through an annual immunization assessment survey of all State of Maine elementary, middle, and high schools.

Although each state mandate is different, Maine rules pursuant to 22 M.R.S. § 6359 requires any K-12 student enrolled in a designated public or private elementary, secondary, or special education facility which operates for children of school age to show proof of immunization with the following vaccines or documented immunity against the following vaccines:

- Diphtheria/Pertussis/Tetanus: Five doses of any DTP, DT or DTaP vaccine, a fifth dose is not needed if the fourth dose was administered on or after the fourth birthday. Beginning September 2017, one dose of Tdap is required for seventh grade entry;
- Measles/Mumps/Rubella: Two doses of MMR vaccine;
- Poliomyelitis: Four doses of OPV or IPV vaccine, a fourth dose is not needed if the third dose was given on or after the fourth birthday; and,
- Varicella: One dose of varicella (VAR) vaccine.
- Meningococcal Meningitis: Beginning September 2018, one dose of quadrivalent meningococcal meningitis vaccine (MenACWY) is required for seventh grade entry and two doses of MenACWY are required for twelfth grade entry.

A child who does not meet the immunization/immunity requirements above may be enrolled in school under the following circumstances:

- The parent provides the school with written assurance that the child will be immunized within ninety days of enrolling. This is a one-time provisional 90-day grace period.
- The parent (or child) presents to the school each year a physician's written statement that immunization against one of more of the diseases may be medically inadvisable (medical exemption in annual survey).
- The parent states in writing each year an opposition to immunization because of a sincere religious belief or for philosophical reasons (religious or philosophical exemption in survey).

The 2018-19 Maine Annual School Age Immunization Survey was conducted online from October to December 31, 2018 and aggregate results for kindergarten students were reported to the CDC in April 2019. The following tables (Tables 1-3) list the aggregate results gathered from the 2018-19 Maine Annual School Age Immunization Survey.

The annual immunization and exemption rates for each individual reporting school in Maine can be found on our website at: <u>http://www.maine.gov/dhhs/mecdc/infectious-</u><u>disease/immunization/publications/index.shtml</u>

2018-19 School Exemption and Immunization Rates By Individual Vaccine, Kindergarten							
Vaccine	Number of Students Surveyed	Number of Missing Records	Missing Records Rates	Total Exemptions (Medical, Religious & Philosophical)	Total Exemption Rates	Total Students Immune by Vaccine/Disease	Total Vaccination Rates
DTaP	12875	88	0.7%	616	4.8%	12171	94.5%
MMR	12875	124	1.0%	674	5.2%	12077	93.8%
Polio	12875	83	0.6%	623	4.8%	12169	94.5%
Varicella	12875	37	0.3%	493	3.8%	12345	95.9%

Table 2: 2018-19 MIP School Exemption and Immunization Rates, Seventh Grade

2018-19 School Exemption and Immunization Rates By Individual Vaccine, Seventh Grade							
Vaccine	Number of Students Surveyed	Number of Missing Records	Missing Records Rates	Total Exemptions (Medical, Religious & Philosophical)	Total Exemption Rates	Total Students Immune by Vaccine/Disease	Total Vaccination Rates
Tdap	13444	376	2.8%	502	3.7%	12566	93.5%
MenACWY	13444	503	3.7%	591	4.4%	12350	91.9%

Table 3: 2018-19 MIP School Exemption and Immunization Rates, Twelfth Grade

2018-19 School Exemption and Immunization Rates By Individual Vaccine, Twelfth Grade							
Vaccine	Number of Students Surveyed	Number of Missing Records	Missing Records Rates	Total Exemptions (Medical, Religious & Philosophical)	Total Exemption Rates	Total Students Immune by Vaccine/Disease	Total Vaccination Rates
MenACWY	13000	1329	10.2%	667	5.1%	11004	84.6%

School vaccination requirements provide an opportunity for children who are behind on early childhood vaccinations to be vaccinated by school entry. School vaccination assessments allow MIP to identify schools and communities where focused action could improve vaccination coverage to ensure that more children can benefit from the protection offered by vaccines. MIP and DOE will use this data to monitor incomplete vaccination records, coverage rates and exemptions and work with schools to ensure that all students receive all required Maine State school age vaccines.

Vaccination is the most effective and efficient way to ensure that students and their family members, particularly those who are immunocompromised, are protected against these vaccine preventable diseases. This is perhaps one of the most important reasons why it would be advantageous for Maine State educational institutions to meet all requirements of the Immunization Requirements for School Children state law and to help reach the goal of the Maine Immunization Program to bring the State vaccine coverage rate average for each of these vaccines to 100%.

The Vaccination Coverage Among Children in Kindergarten – United States, 2018-19 School Year report data will be released in the fall of 2019. Historical reports were analyzed and graphical representations for each vaccine surveyed show trending comparisons for Maine and National U.S. immunization rates and exemption rates over the past 5 years (Figures 1-7). Please be aware that 2018-19 incudes Maine only at this time until National data is released in October 2019.

Additionally, graphical representations of immunization rates for Maine kindergarten students have been generated to show county specific rates compared to overall Maine state rates (Figures 8-11). Herd immunity (or community immunity) occurs when a high percentage of the community is immune to a disease (through vaccination and/or prior illness) making the spread of the disease from person to person unlikely. Herd immunity targets of 95% have been added to individual county vaccination rate graphs to represent which counties in Maine are susceptible to widespread disease.

As always, thank you for your commitment to keeping Maine's children free of vaccine preventable disease.

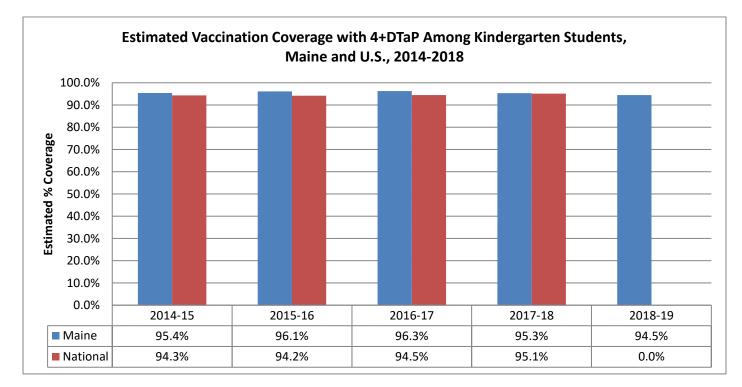
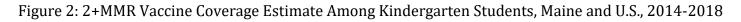
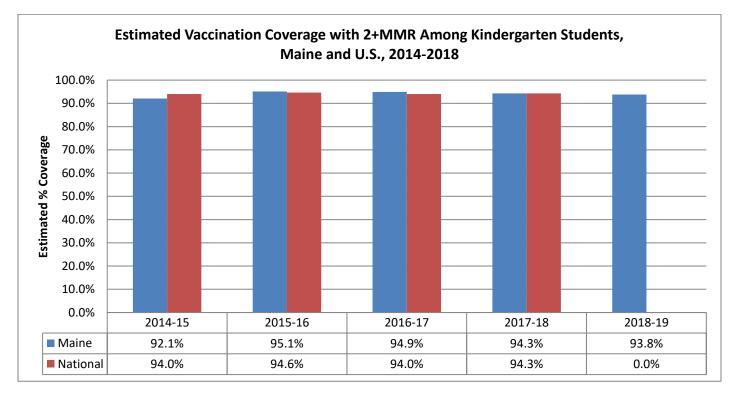


Figure 1: 4+DTaP Vaccine Coverage Estimate Among Kindergarten Students, Maine and U.S., 2014-2018

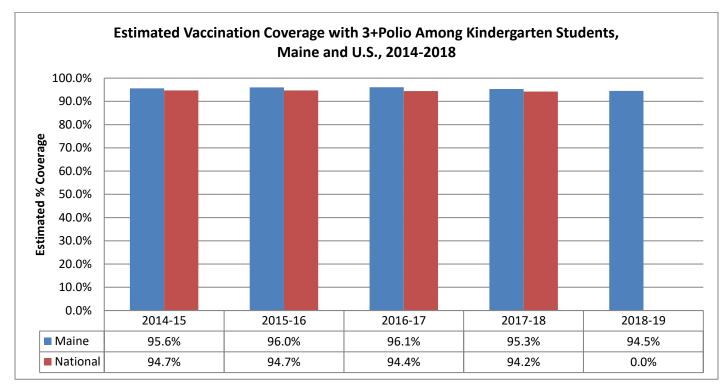
4+ DTaP ~≥4 doses of diphtheria and tetanus toxoids and acellular pertussis (DTaP) vaccine. 2018-19 National Kindergarten 4+DTaP rates unavailable until Fall 2019.





 $2+MMR \sim \geq 2$ dose of measles-mumps-rubella (MMR) vaccine.

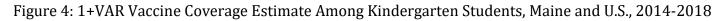
2018-19 National Kindergarten 2+MMR rates unavailable until Fall 2019.

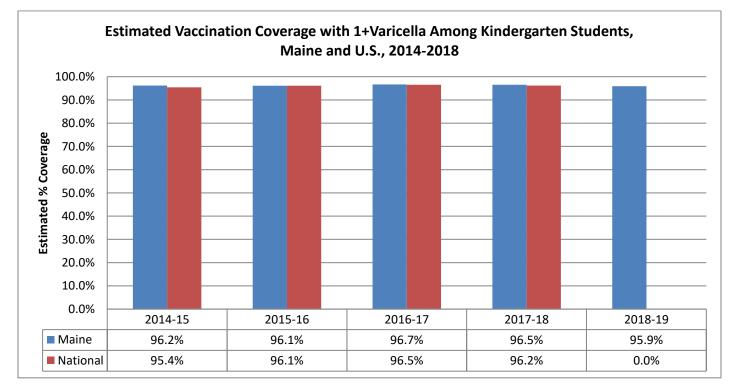




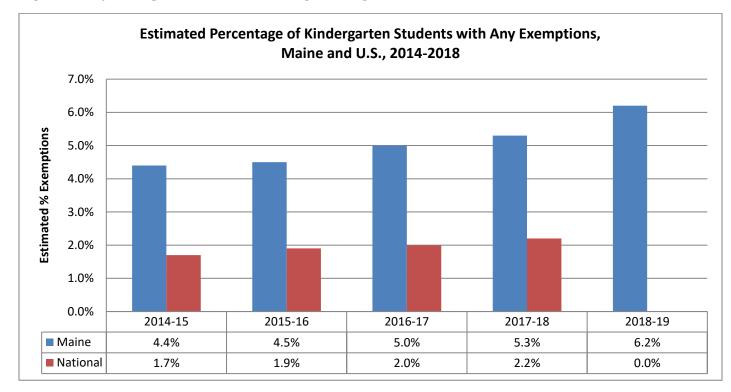
3+ Polio ~ \geq 3 doses of any poliovirus (Polio) vaccine.

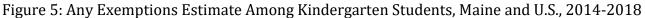
2018-19 National Kindergarten 3+Polio rates unavailable until Fall 2019.



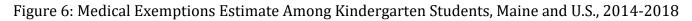


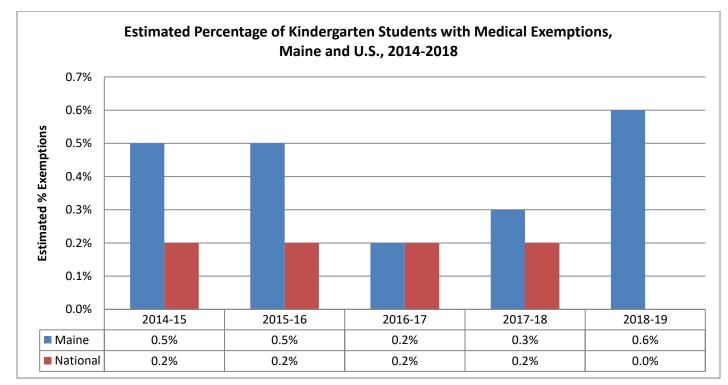
1+Varicella $\sim \geq 1$ dose of varicella (VAR) vaccine at or after child's first birthday, adjusted to include history of varicella disease 2018-19 National Kindergarten 1+Varicella rates unavailable until Fall 2019.



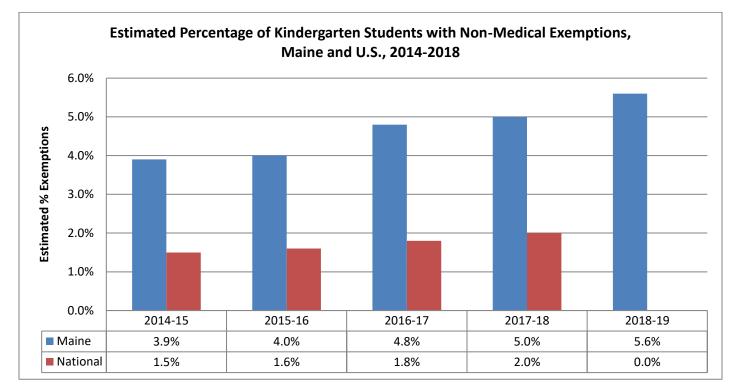


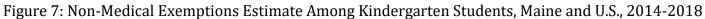
Any Exemption ~ Includes medical, religious and philosophical exemptions for all school vaccines in Maine. 2018-19 National Kindergarten exemption rates unavailable until Fall 2019.





Medical Exemption ~ Includes medical exemptions only for all school vaccines in Maine. A medical note from physician is required annually. 2018-19 National Kindergarten exemption rates unavailable until Fall 2019.





Non-Medical Exemption ~ Includes sincere religious belief and philosophical exemptions for all school vaccines in Maine. A parent/guardian signed note is required annually.

The National CDC Kindergarten Immunization Survey does not collect or publish individual religious or philosophical rates. They are combined as nonmedical exemption rates.

2018-19 National Kindergarten non-medical exemption rates unavailable until Fall 2019.

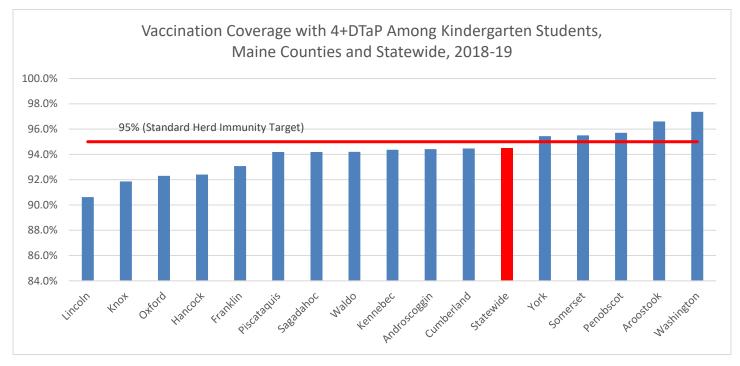
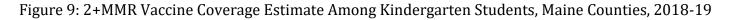
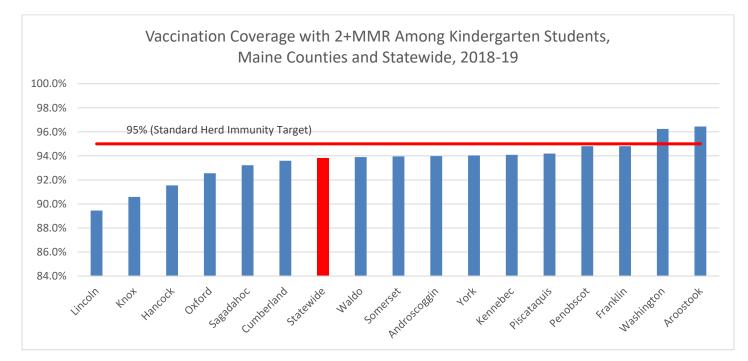


Figure 8: 4+DTaP Vaccine Coverage Estimate Among Kindergarten Students, Maine Counties, 2018-19

4+ DTaP ~ ≥4 doses of diphtheria and tetanus toxoids and acellular pertussis (DTaP) vaccine.





²⁺MMR~≥2 dose of measles-mumps-rubella (MMR) vaccine.

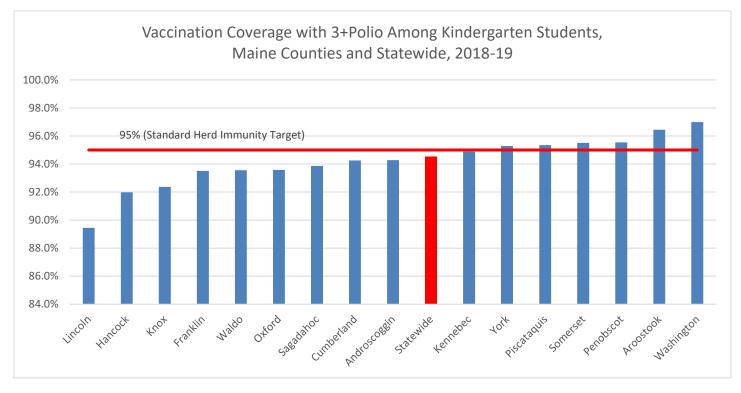
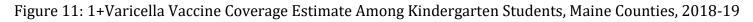
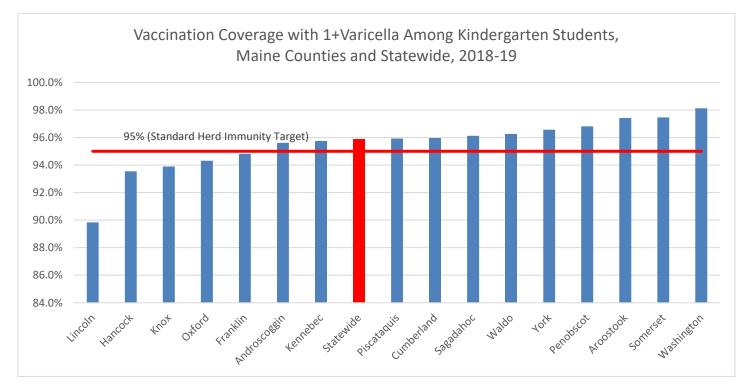


Figure 10: 3+Polio Vaccine Coverage Estimate Among Kindergarten Students, Maine Counties, 2018-19

³⁺ Polio ~ \geq 3 doses of any poliovirus (Polio) vaccine.





 $1+Varicella \sim \geq 1$ dose of varicella (VAR) vaccine at or after child's first birthday, adjusted to include history of varicella disease