



# **STATE OF MAINE**

# Seventh Report of the MAINE VACCINE BOARD

*for the* State Fiscal Year ended June 30, 2017

December 2017

Peter Gore, Chair Deborah Deatrick, MPH Larry Losey, MD Katherine Pelletreau, MPH Forrest West, MD Gary Connor, RN Judith Chamberlain, MD (ex officio) Terry Hayes (ex officio) Lori Wolanski, MPH

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# **EXECUTIVE SUMMARY**

This is the seventh annual report of the Maine Vaccine Board (MVB). MVB assessment collections commenced on November 15, 2011. The MVB raises funds to support universal childhood vaccine purchases at the Maine CDC's favorable rates by assessing insurers and other entities responsible for the health benefits afforded to Maine's children. Assessment compliance by payers continues to be strong. The close of the 2016/17 fiscal year saw the MVB continuing to advance in organizational maturity and improved efficiency. The MVB has now completed five full years of operation.

At the core of MVB's mission is the desire to reduce the occurrences of vaccine preventable disease by increasing medically-appropriate use of vaccines for Maine's children. This year continues MVB's success in that goal. Maine's childhood immunization rates continue to improve. As noted in MVB's VaxFacts<sub>SM</sub> for 2016/17, primary credit for this significant turnaround should go to the Maine CDC and Maine's pediatric care providers. But the contributions of the pharmaceutical industry and healthcare payers, directly and through MVB, should also be noted as significant. While assisting to advance this goal, MVB also enabled overall systemic cost savings to be realized for the provider community and the insurer community.

State vaccine purchases with MVB funds and distribution to providers began in January 2012. This report contains data for the fiscal year July 1, 2016 - June 30, 2017:

Fiscal Year 7/1/2016 – 6/30/2017				
Total Number of Payers (4-qtr average)	89			
Total Assessments Raised	\$12,535,504			
Average Monthly Child Covered Lives	135,737			
Number of Meetings	5			

All Board meetings are open to the public and afford opportunity for public comment. Both oral and written comments are welcome. The Board met on 09-20-2016, 09-28-2016, 11-15-2016, 02-12-2017, and 05-16-2017. Detailed information about the MVB and its operations, including minutes of all board meetings, is available at <u>www.MEvaccine.org</u>.

# HISTORY AND DESCRIPTION OF THE MAINE VACCINE BOARD

The history and information regarding the Maine Vaccine Board can be found on our website: <u>www.MEvaccine.org</u>.

## THE VACCINE BOARD

The MVB was created by the 124th Legislature through the enactment of Public Law 595. That law took effect on August 2, 2010. The Board consists of nine members, with representatives from the health insurance carrier community, the health provider community, the public health community, self-insuring employers, the pharmaceutical industry, and the Maine Department of Health and Human Services. Peter M. Gore currently serves as Board chair. Lori Wolanski, Director, Division of Disease Control, now serves as the DHHS Commissioner's designee. With the exception of the pharmaceutical manufacturing industry representative, who serves a one-year term, the terms of Board members are three years.

## PROGRAM PROGRESS AND ASSESSMENT RATE HISTORY

The State of Maine began purchasing vaccines for non-VFC eligible children January 1, 2012. Maine became a universal vaccine purchasing state and purchased vaccines for all Maine children at the same favorable federal CDC contract rates negotiated with vaccine manufacturers for the VFC program. As the program has matured Maine Center for Disease Control and Prevention (Maine CDC) has worked to aid in enhancing the program. For example, Maine CDC's proactive steps during the windstorm in October 2017, minimized vaccine loss resulting in a cost savings of over a quarter of a million dollars.

MVB has adopted five assessment rate changes since its formation. These rate changes occur each year and in 2015 the rate changes moved from a state fiscal year calculation to a calendar year calculation. The rate changes have seen a fluctuation in rates over the years which is a response to many factors, some include: increased vaccine utilization, continuous effort by KidsVax® to broaden the assessment base, increased participation by the insurers, increased vaccine costs, new vaccine recommendations, and inventory management by Maine CDC.

On September 19, 2017, MVB voted to set the assessment rate to \$8.29 per child covered life per month for 2018. At the same time, MVB advised payers that its best estimate of the assessment rate for 2019 would be \$8.05 per child covered life per month.

MVB Assessment Rates			
2011/2012	\$6.98		
2012/2013	\$6.81		
2013/2014	\$8.16		
2015*	\$8.16		
2016	\$9.19		
2017	\$3.17		
2018	\$8.29		

\*An annual assessment review began in 2015 moving from a fiscal year assessment rate to a calendar year assessment rate. The assessment rate remained at \$8.16 of the remainder of calendar year 2014.

MVB's oversight of the universal vaccine program and collaborative efforts of Maine CDC, the payer community and many others, Maine continues to make progress in increasing the immunization rates in Maine as well as access for all Maine children. This is particularly important as a way to improve the health of all Mainers by reducing or eliminating vaccine-preventable diseases. In addition, there is a multiplier effect of childhood immunization dollars in reducing long term healthcare costs. Experts estimate the long term financial cost reduction through disease avoidance at over \$10 for each \$1 of childhood immunization costs. This cost benefit to healthcare payers, of course, is in addition to the indirect benefits of improved health and decreased loss of work hours.

## CONCLUSION

MVB is grateful for the support of its key constituents: payers, providers, and the Maine CDC. Special thanks go to the board members and their employers (who allow time for this service to the state without charge), the staff of the Maine CDC, the Maine State Treasurer's Office, and the Office of Attorney General, all of whom have facilitated its work in improving childhood health in the State of Maine. Other agencies, including the MVB's auditor, Dawson, Smith, Purvis, and Bassett, PA, have remained resourceful and diligent in supporting the board.

Attached are Exhibits A, B, and C. These further illustrate the cost savings, increased access to immunizations and benefits of the universal vaccine purchasing program respectively.

Please note this report has been compiled by Nicole G. Price who serves the MVB as its servicing agent through a turnkey Executive Director and Administrative Services Agreement with KidsVax<sup>®</sup>, LLC. Nicole can answer any questions that may arise from this report.

Nicole G. Price | CEO Northeast Region



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# **Exhibit** A



Administering Programs to Fund Vaccines

October 31, 2017

Maine Vaccine Board P.O. Box 1885 Concord, NH 03302-1885

#### MBV Program Savings Calculation for FYE 6/30/2017 & FYE 6/30/2016

Dear Directors,

Below is our calculation of the savings that the program has created in the fiscal years ended June 30, 2017 and June 30, 2016.

	(A) <u>FY 6/2017</u>	(B) <u>FY 6/2016</u>
A. CDC Survey Market Comparison costs:	\$16,062,036	\$16,413,677
(Actual doses per brand x CDC market survey)		
B. MVB Program costs:		
Cost of vaccine replenishments	\$10,916,405	\$10,048,369
+ Operating Cost	158,746	154,267
+ Leakage & Bad Debt	···· -	÷
+/- Incremental Reserve Adj.	ین م	
= Total Program Cost	\$11,075,151	\$10,202,636
C. MVB Program Savings (A – B = C)	\$4,986,885	\$6,211,041
D. Program Savings Percentage (C / A = D)	31.1%	37.84%
E. Savings per child covered life per year (Covered lives: FY2017= 135,737, FY2016= 131,117)	\$36.74	\$47.37

#### Notes:

1. In any program like this it is not possible to calculate savings with 100% accuracy. There are a number of reasons for this including the fact that some providers may continue to bill for some private supply.

- 2. The market comparison used for each dose is an average of prices given in response to the survey conducted annually by the CDC. Information is not provided on volume or location purchased. This CDC survey just addresses vaccine prices and does not include other costs associated with provider overhead or payer administration.
- 3. We believe this is a fair representation of the cost savings for the vaccines themselves. Payments to providers for administration of vaccines, of course, are completely outside of this system.
- 4. KidsVax® will continue to track this metric periodically to aid the MVB in monitoring its program effectiveness.

Sincerely,

Tete M. Smith

Peter M. Smith Financial & Internal Control Analyst

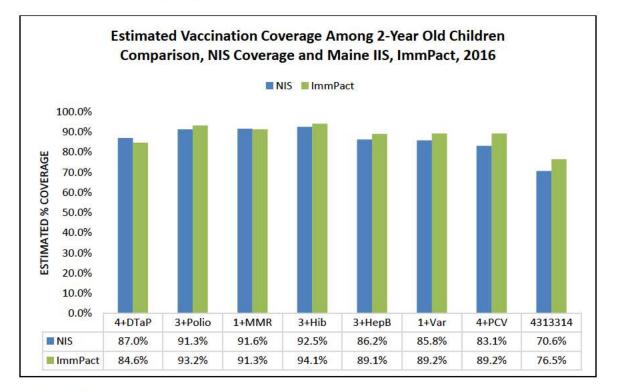


cc: Fred L. Potter, Nicole Price

# Exhibit B

The graph below represents vaccination coverage for Maine's 2-year old children. It illustrates vaccination coverage as compiled by the 2016 National Immunization Survey (NIS) and ImmPact, the Maine specific database.

- NIS uses data to monitor vaccination coverage among 2-year old children at both the national and state levels. 14,988 children aged 19-35 months were included in the NIS survey, only 260 of which resided in Maine, representing 0.02% of Maine's 2-year old population.
- Immpact's cohort of children includes 9530 Maine children aged 24 35 months, representing 74% of Maine's 2-year old population.
- ImmPact is the immunization registry from for the state of Maine.
- The registry represents only Maine children and is updated in real time which allows for more accurate data as well as a larger sample size.
- **Trend:** Apart from DTaP and MMR, Maine's IIS rates are higher than NIS, considerably higher for the full series.



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

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

1+MMR~≥1 dose of measles-mumps-rubella (MMR) vaccine.

3+Hib ~>3 doses of Haemophilus influenzae type b (Hib) vaccine.

3+ HepB ~≥3 doses of hepatitis B (HepB) vaccine.

 $1+Varicella \sim \geq 1$  dose of varicella (VAR) vaccine.

 $4+PCV \sim \geq 4$  doses of pneumococcal conjugate vaccine (PCV).

4:3:1:3:3:1:4 ~ A series comprised of all of the above individual antigens

Note: Hib, HepB and PCV vaccines are not part of the vaccine requirements for school children in Maine.

# Exhibit C--VaxFactssm

The VaxFacts<sup>™</sup> provides an overview of MVB activities for the past fiscal year along with high level financial summaries and links to MVB's website locations for more detailed financial data. A full-sized version of the VaxFacts<sup>™</sup> report is available for viewing or download on MVB's home page at <u>www.MEvaccine.org</u>.

2016 - 2017



MAINE VACCINE BOARD

# TIMELINE

#### 2009-2010

The Maine State Legislature passed a bill establishing the Universal Childhood Immunization Program to provide all children birth to 19 years of age with access to a uniform set of vaccines. The Maine Vaccine Board (MVB) was created and MVB hired KidsVax® to administer the program.

#### 2011-2012

MVB began selecting vaccines and setting the assessment rate. January 2012 began the purchase of state vaccines using MVB funds with distribution to providers. Initial reports confirmed that the program reduced costs. Additionally, the program assisted Maine CDC in raising childhood immunization rates.

#### 2013-2014

MVB simplified the process for setting the vaccine list. KidsVax<sup>®</sup>, the Maine Bureau of Insurance, and the Attorney General's Office worked to narrow the gap between projected and reported child covered lives and to ensure that assessments were allocated equitably. Maine's universal immunization program was recognized nationally for its success in improving statewide healthcare.

#### 2015-2016

With funding secured via MVB, Maine CDC, providers, and payers worked to continue increasing childhood immunization rates. In December 2016, Maine's immunization rules became further aligned with national recommendations by requiring one dose of Tdap vaccine for all students entering the seventh grade.

#### 2017

Maine CDC's Immunization Program implemented a new vaccine replacement procedure to help reduce vaccine wastage. This led to significant cost savings. MVB recognized Dr. Chamberlain's impactful service to the Board with a resolution.

# Vax Facts.

The Maine Vaccine Board (MVB) funds Maine's universal childhood vaccine purchasing and distribution program. The program yielded over \$47 in savings per child this year. That added up to over \$6MM in total health care cost savings.

More important than the cost savings yielded by Maine's universal vaccine program for children ages 0 to 19, are the health benefits from improved immunization rates for Maine's children. Most of the credit for this goes to Maine's healthcare providers, in cooperation with the Maine CDC's vaccine distribution system, clinical expertise and technical support. The work of the Maine Vaccine Board in overseeing the universal vaccine program has been aided by representatives of the Maine CDC, as well as the cooperation of insurance companies who do business in Maine.



\*2016 National Immuzation Survey Childhood Report, published Nov. 2017

MVB has reduced administrative and financial burdens on health care providers. Instead of having to purchase vaccines up front and await repayment from insurance companies, provider offices now receive vaccines from the state free of charge.

MVB is a joint public and private effort, in collaboration with the Maine CDC, to improve immunization rates while lowering the costs of health care. The universal childhood immunization purchasing program administered by the MVB allows the state to purchase all 17 of the Advisory Committee on Immunization Practices' (ACIP) recommended vaccines from ages 0-19 for all Maine's children at substantially discounted rates.

#### INDEPENDENT STUDIES ESTIMATE THAT FOR EACH MAINE BIRTH COHORT VACCINATED THROUGH AGE 6 AGAINST 13 PREVENTABLE CHILDHOOD DISEASES\*:

135 LIVES ARE SAVED 600,000 CASES OF DISEASE ARE PREVENTED \$43 million

\$1 SPENT ON = \$10.10 SAVED IN DIRECT HEALTHCARE COSTS

\*Data from Fangjun Zhou, PhD Health scientist, CDC 2011

The MaineHealth Health Index monitors progress on Maine's most pressing health priorities. Increasing childhood immunization is one such priority. www.mainehealth.org/HealthIndex.



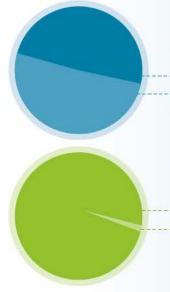
# Maine: Advocating to Improve Public Health

Immunization Rates for the 4:3:1:3:3:1:4 Antigen Series*	United States 2016	Maine 2016
Diphtheria and tetanus toxoids & acellular pertussis (DTaP/DT/DTP)	83.4%	87%
Poliovirus (Polio)	91%	91.3%
Measles or Measles-Mumps-Rubella (MMR)	91.1%	91.6%
Haemophilus influenza type b (Hib)	81.8%	82.7%
Hepatitis B (HepB)	90.5%	86.2%
Varicella -chicken pox- (VAR)	90.6%	85.8%
Pneumococcal conjugate vaccine (PCV)	81.8%	83.1%

\*Data from the 2016 National Immunization Survey Childhood Report (NIS). The NIS uses a total sample size of 14,988 children nationally. This total includes a smaller subset of 260 Maine children, which represents .02% of Maine's 2 year-old population.

## FINANCIALS

July 1, 2016 - June 30, 2017



# Vaccine Funding Sources Total: \$22,232,082

 - 49.1% | MVB Funds (from private insurers)
- 50.9% | Federal Contribution (Vaccines for Children (VFC) Funds)

# MVB Program Expenditures\* Total: \$11,075,151

98.6% | Remittance to ME for Vaccine Costs 1.4% | Operating Costs

\*This chart reflects funding operations for MVB-funded vaccines. The overall success of Maine's universal childhood immunization program is a result of the contributions of the Maine CDC, providers, payers, and others not reflected in this chart.



### **MVB Board of Directors**

Judith Chamberlain, MD Senior Medical Director Aetna Medicaid

Gary Connor, RN Asclepius Research Services, Inc.

Deborah Deatrick, MPH Senior Vice President for Community Health MaineHealth

Peter Gore, Chairman Vice President Maine State Chamber of Commerce

Terry Hayes (ex officio) Maine State Treasurer, Office of the Treasurer

Larry Losey, MD Mid Coast Hospital Maine Chapter AAP

Katherine Pelletreau, MPH Executive Director Maine Association of Health Plans

Forrest West, MD HealthReach Community Health Centers

Lori Wolanski, MPH (ex officio) Director, Division of Infectious Disease Maine CDC

WWW.MEVACCINE.ORG

# ADMINISTRATOR:



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#### **KIDSVAX STAFF**

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Terry Mills Executive Assistant

Peter Smith Financial Analyst

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Executive Director

Matthew Miller Client Services Coordinator