

In order to attend public school in Maine, children should be immunized to prevent the spread of 8 diseases: measles, mumps, rubella, polio, chicken pox, tetanus, diphtheria, and pertussis. However, Maine is one of **18 states** in which school age children may request an exemption from school-required immunizations based on medical, religious, and philosophical beliefs. Only 0.3% of Maine kindergarten parents requested medical exemptions in the 2017-18 school-year. **Non-medical exemptions were requested nearly 17x more, representing 5% of Maine kindergarteners.**

## Not immunizing children puts them and others at risk

**Community immunity** is created in schools when children are immunized at high enough levels to prevent the spread of disease.

- High community immunity rates are needed to **protect those who are unable to be vaccinated**, such as individuals who are immunosuppressed due to transplants or chemotherapy.

**Schools are at risk of outbreaks** when community immunity levels are low.

- From January – November 2018 the following diseases were spread:
  - Pertussis: **13 schools** in Cumberland, Hancock, Waldo, Penobscot, and York counties. This included Sanford and Cumberland schools, among others, and **3 daycare centers** in York county.<sup>1,2</sup>
  - Chicken pox: **1 daycare** in Westbrook<sup>3</sup> and a case in a Waterboro middle school.
  - Mumps: Outbreaks occurred among college students in 2016 at University of Southern Maine, Bates, and Bowdoin. Other than one reported case in 2013, Maine has not had a mumps outbreak since 2007<sup>4,5</sup>
  - Measles: The **first case since 1997** occurred in Farmington in 2017.<sup>6</sup>

## Why is this so important?

Low vaccination rates put Maine children at risk for diseases that are entirely preventable. The breakdown of herd (or community) immunity can happen even when the majority of people vaccinate, or only a few opt-out in a school community. Below are kindergarten vaccination rates against measles, pertussis and polio, and 7th grade vaccination rates for pertussis, for school year 2017-18.

County	Diphtheria, Tetanus and Pertussis	Polio	Measles, Mumps and Rubella	Tetanus, Diphtheria and Pertussis (7th)
Androscoggin	95.3	95.6	95.3	94.9
Aroostook	96.7	97.3	93.7	96.4
Cumberland	95.0	94.9	94.4	95.0
Franklin	96.2	95.8	95.4	96.6
Hancock	93.5	93.3	92.4	92.3
Kennebec	95.5	95.8	94.1	93.7
Knox	93.4	93.1	91.2	92.5
Lincoln	94.9	94.4	92.1	96.6
Oxford	95.3	95.1	94.4	92.4
Penobscot	96.4	96.4	95.8	95.8
Piscataquis	93.3	93.9	95.1	88.4
Sagadahoc	93.1	92.2	91.6	96.6
Somerset	92.8	93.7	91.3	91.2
Waldo	94.4	93.8	93.5	92.3
Washington	98.6	98.6	96.1	94.2
York	96.1	95.8	95.4	91.7

Kindergarteners and 7th graders in eight counties are at risk of measles, pertussis, or even polio outbreaks.

Disease	Crude Herd Immunity Threshold <sup>7</sup>
Measles	94%
Pertussis	94%
Polio	93%

## Proposed solution

This bill proposes **immunization as a condition for public school entry** by removing ‘philosophical reasons’ and ‘religious belief’ as allowable exemptions (called “exception” in current law) to school-required vaccines from both Maine State Statute<sup>8</sup> and DHHS/DOE Joint Rule.<sup>9</sup> **This bill would retain currently defined medical exemptions.** The constitutionality of immunization as a condition of school entry has been supported in numerous cases; specifically that this legislation does not infringe on rights to education, and in fact reinforces the right to education, by protecting school children from disease, which is a precondition to receiving the education to which they are entitled.<sup>10,11</sup> Evidence from other states shows that immunization requirements for school entry have been instrumental in achieving high immunization coverage rates and ensuring community immunity against infectious disease outbreaks.<sup>12</sup>

The removal of philosophical belief and religious exemptions for school-required immunizations will:

- Ensure a safe learning environment for all children, including those who cannot receive immunizations and those who are at risk for severe side effects to vaccine-preventable disease.
- Result in fewer missed-school days from preventable outbreaks.
- Allow school administrators, school boards and nurses to adequately protect their students from preventable disease.

Maine legislators have an opportunity in this legislative session to address this increasingly critical issue facing Maine schools. ***Ensuring that children are immunized as a condition of school entry is common-sense, constitutional, critical for protecting our public schools, and widely supported by the constituents of Maine.***

<sup>1</sup> McDermott, Deborah. “Whooping cough outbreak reported in Maine schools.” *Bangor Daily News*, June 22, 2018. <https://bangordailynews.com/2018/06/22/health/whooping-cough-outbreak-reported-in-maine-schools/>

<sup>2</sup> Maine Center for Disease Control and Prevention. *Maine Monthly Pertussis Surveillance Report November 2018*. Augusta, Maine. Maine Department of Health and Human Services. December 4, 2018. <https://www.maine.gov/dhhs/mecdc/infectious-disease/epi/vaccine/documents/November-2018-Monthly-Report.pdf>

<sup>3</sup> Lawlor, Joe. “Chicken pox outbreak reported at day care facility.” *Portland Press Herald*, May 16, 2018. <https://www.pressherald.com/2018/05/16/chickenpox-outbreak-reported-at-day-care-facility/>

<sup>4</sup> Byrne, Matt and Hoey, Dennis. “First Mumps Case Reported in Maine since 2013.” *Portland Press Herald*, March 3, 2016. <https://www.pressherald.com/2016/03/03/first-mumps-case-reported-in-maine-since-2013/>

<sup>5</sup> Gallagher, Noah K. “Mumps outbreaks among students at Bates and Bowdoin.” *Portland Press Herald*, November 4, 2016. <https://www.pressherald.com/2016/11/04/mumps-outbreaks-among-students-at-bates-and-bowdoin/>

<sup>6</sup> Ellis, Colin and McCormick, Kate. “First Maine case of measles in two decades confirmed in Farmington area.” *Portland Press Herald*, June 27, 2017. <https://www.centralmaine.com/2017/06/27/first-maine-case-of-measles-in-a-decade-confirmed-in-farmington-area/>

<sup>7</sup> “Community Immunity.” Fine, Paul E. M. and Mulholland, Kim. *Vaccines*. Elsevier: 2008.

<sup>8</sup> Title 20-A: Education, Part 3: elementary and secondary education, Chapter 223: Health, nutrition and safety, Subchapter 2: Immunization, §6359 Immunization of students. <http://www.mainelegislature.org/legis/statutes/20-a/title20-Asec6359.html>

<sup>9</sup> 10-144 Department of Health and Human Services, Maine CDC, Chapter 261 Immunization Requirements for School Children is a joint rule with 05-071 Department of Education, Chapter 126 Immunization Requirements for School Children. <https://www.maine.gov/dhhs/mecdc/infectious-disease/immunization/family/documents/immunization-requirements-for-school-children.pdf>

<sup>10</sup> Mello MM, Studdert DM, Parmet WE. Shifting Vaccination Politics — The End of Personal-Belief Exemptions in California. *August 27, 2015*. *N Engl J Med* 2015; 373:785-787. <https://www.nejm.org/doi/full/10.1056/NEJMp1508701>

<sup>11</sup> Rubenstein Reiss D. Vaccines, School Mandates, and California's Right to Education. *UCLA L. Rev. Disc.* 98 (2015)63:118. <https://www.uclalawreview.org/vaccines-school-mandates-californias-right-education/>

<sup>12</sup> Gorski D. California SB 277: New evidence that restricting nonmedical exemptions to school vaccine requirements works. April 16, 2017. <https://sciencebasedmedicine.org/california-sb-277-new-evidence-that-restricting-nonmedical-exemptions-to-school-vaccine-requirements-works/>