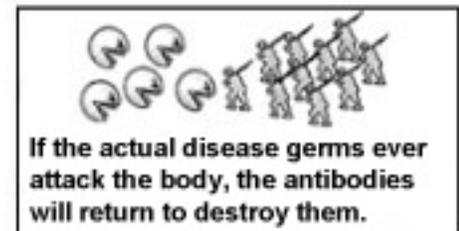
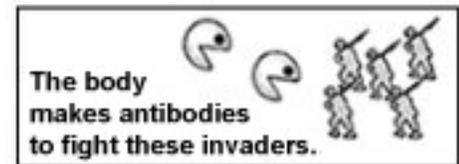
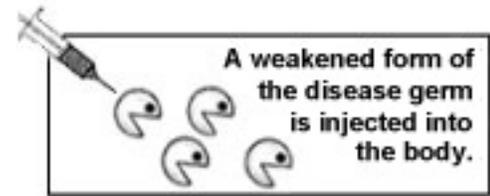


Vaccines Protect Public Health.

“A decision not to immunize a child also involves risk and could put the child and others who come into contact with him or her at risk of contracting a potentially deadly disease.”
– National Center for Immunization and Respiratory Diseases, 2018

What are vaccines?

- Vaccines are treatments that protect us from serious, deadly, and often highly contagious diseases.
- Vaccines contain either weakened or killed forms of germs, so our bodies can create antibodies, which then fight the germs when we're exposed to them, protecting us from the disease.
- Vaccines are like a dry run, preparing our bodies for a stronger and quicker response prior to the main exposure.

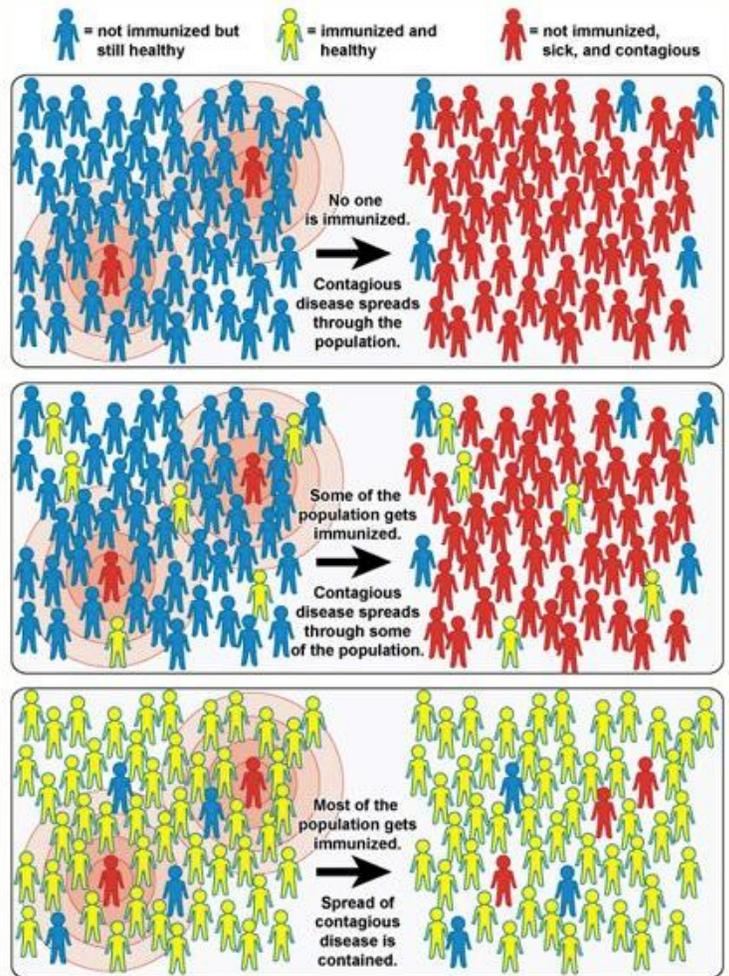


Are they safe?

- **Vaccines are safe.** Licensed vaccines are rigorously tested in multiple trials before they are approved for use, and are continuously reassessed when on the market. Scientists constantly monitor information from several sources for any sign that a vaccine may cause an adverse event. Most vaccine reactions are minor and temporary; in the rare event a serious side effect is reported, there is an immediate investigation.¹
- **It is far more likely to be seriously injured by a vaccine-preventable disease than by the vaccine.** Polio can cause paralysis; measles can cause encephalitis and blindness; and other vaccine-preventable diseases can result in death. Minor adverse effects from vaccines (sore arm, low-grade fever) often go away in a few days; more serious adverse effects are very rare.¹ The benefits of vaccines far outweigh the risks. Many more illnesses and deaths would occur without vaccines.
- **No links have been found between vaccines and Autism Spectrum Disorder.²**
- **What about preservatives in vaccines?** Thimerosal is an organic, mercury-containing compound that is added to some vaccines as a preservative; it is safe and the most widely-used preservative for vaccines.¹ **There is no evidence to suggest that thimerosal used in vaccines poses a health risk.¹**
- **What about animal products in vaccines?** Viral vaccines need to be produced in living cells, requiring the addition of complex growth components to be effective. Animal-derived products used can include amino acids, glycerol, detergents, gelatin, enzymes and blood.³
- **What about fetal cells?** Fibroblast cells hold skin and other connective tissue together; some vaccines (chickenpox, rubella, hepatitis A, and one version of shingles and rabies) are best developed from the virus growing in a fetal embryo fibroblast. Viruses require cells to grow, and tend to grow better in cells from humans than animals. These cells were first obtained in the 1960s from elective termination of two pregnancies; the same cells are used to make vaccines today. **No other fetal cell sources are used to make these vaccines.**

Why Vaccinate Against Diseases Not In My Community?

- In a highly inter-connected world, diseases easily cross geographical borders.
- We get vaccinated to protect ourselves and to protect those around us. Successful vaccination programs depend on the cooperation of every individual to ensure the wellbeing of all.
- We should not just rely on the people around us to stop the spread of disease. We, too, must do what we can.
- Herd immunity is quickly and dramatically weakened with even small decreases in vaccination rates.⁴ For example, **measles was declared eliminated in the U.S. in 2000; however, as of March 2019, there have been more than 206 confirmed cases across the U.S.**



What About Parents' Rights to Choose?

- **Exercising a choice to not vaccinate a child is dangerous.** It is a choice that jeopardizes the health of the child, and also other children and their families.
- **All children have the right to attend a safe school.** A heightened risk associated with an increasing prevalence of vaccine-preventable disease, especially for those children with weakened immune systems, is unethical; threatening their health is discriminatory.
- **The side effects of not being vaccinated are that children can die from disease.**

Policy Actions to Take

- End non-medical exemptions from childhood vaccinations required for school attendance.
- Strengthen Maine's public health system, including funding and workforce capacity and training. If there is a disease outbreak, we need to be able to respond.

To learn more, please visit www.MainePublicHealth.org.

¹ World Health Organization. 2019. <https://www.who.int/features/qa/84/en/>

² Centers for Disease Control and Prevention, National Center for Emerging and Zoonotic Infectious Diseases (NCEZID), Division of Healthcare Quality Promotion (DHQP) 2015.

³ U.S. Federal Drug Administration. 2018. <https://www.fda.gov/biologicsbloodvaccines/vaccines/questionsaboutvaccines/ucm143521.htm>

⁴ Helft L., Willingham E. What is herd immunity? Nova. September 2014. <https://www.pbs.org/wgbh/nova/article/herd-immunity/>