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Accinations and the Common Good

Medical advances have significantly reduced the rates of serious diseases in the United States. Vaccinations have become a major part of these preventative measures for children and adults, stimulating the body's immune system to recognize and to destroy diseases more effectively. Many people today are unfamiliar with the devastation caused by illnesses such as diphtheria, which can lead to extreme difficulty in breathing and swallowing, or polio, which can cause lifelong paralysis. Before vaccinations, these illnesses were widespread. For example, in 1921-prior to the existence of a vaccine—206,000 Americans became ill from diphtheria and more than 15,000 died from it. In contrast, between 2004 and 2015, only two cases of diphtheria were reported, according to the Centers for Disease Control and Prevention (CDC). In the years preceding a vaccine, polio caused between 13,000 and 20,000 cases of paralysis annually. Polio vaccines were introduced in 1955 and 1963. In 1960, the CDC saw 2,525 paralytic cases of polio. Five years later, there were only sixty-one. Now, polio has been considered eliminated from the United States for over thirty years.

Today, vaccines are regularly recommended in the United States to prevent against sixteen diseases: Diphtheria, Haemophilus Influenzae Type B (Hib), Hepatitis A, Hepatitis B, Human Papillomavirus (HPV), Influenza (flu), Measles, Meningococcal, Mumps, Pertussis (Whooping Cough), Pneumococcal, Polio, Rotavirus, Rubella, Tetanus, and Varicella (Chickenpox). Several others may also be recommended, depending on an individual's travel or circumstances, to prevent against illnesses such as typhoid, shingles, and rabies. Each are designed to protect individuals throughout their lives by boosting their body's natural defenses against a particular virus or bacteria. At the same time, vaccines also provide benefits for public health. Research shows that a greater number of people with vaccinations makes it more difficult for germs and disease to spread.

Recent events, such as the measles outbreak in a California amusement park in 2014, serve as a reminder that these diseases still have a significant impact on public health, especially in areas where many are unvaccinated. Physicians and parents benefit from having open discussions about vaccines and their effects on children, adults, and society as a whole. These discussions should include information about positive impacts, as well as the possibility of adverse events or symptoms a person may experience after a vaccination. The purpose of this **focus** is to promote educated decisions about the use of vaccinations and their impact on public health in schools and communities across the state.

For individuals born between 1994 and 2013, it is estimated vaccinations will¹:

PREVENT **322** million illnesses PREVENT 21 million hospitalizations

732 thousand \$295 billion in direct costs \$1.38 trillion

Frequently Asked Questions About Vaccines

Do vaccinations work?

Rates of illness and death from vaccine-preventable diseases have significantly decreased in the United States. Polio has been eliminated in the country, and smallpox has been fully eradicated worldwide due to vaccines. Evidence shows that vaccines play a significant role in preventing illness.²

Rates of these deadly diseases are incredibly low in the United States. **Why vaccinate?**

- A disease might be virtually eliminated here but still be common around the world. Travelers can unknowingly bring back diseases.
- Vaccines boost "community immunity" and make it more difficult for disease to spread amidst groups, especially the elderly, infants, pregnant mothers, and those who cannot be vaccinated for medical reasons.³
- "Community immunity" also helps the small group of those vaccinated but who may still be vulnerable due to low immune response.

Are vaccines safe?

Before a vaccine is regularly used, it must be licensed by the U.S. Food and Drug Administration (FDA). The agency uses a complex, multistep process for licensure, which includes applications, rounds of clinical trials, an inspection of the manufacturing facility, and evaluation of the product's labels for ease and clarity of use. Typically, the process lasts ten to fifteen years to address concerns about safety or effective-ness, and vaccines are regularly reassessed on the market.⁴

What are the **potential risks** of vaccines?

Federal law requires that patients receive a Vaccine Information Statement (VIS), specific to each vaccine, whenever one is given. These statements explain the benefits and risks, so patients can be properly informed before proceeding. Most risks are minor and temporary, such as a sore arm at the injection site, headache, or mild fever, but other adverse events may also be possible. The Vaccine Adverse Event Reporting System (VAERS) allows individuals, health professionals, and manufacturers to report negative reactions after a vaccine. The system does not determine whether the events were caused by the vaccine, but help "[detect] unusual or unexpected patterns...that might indicate a possible safety problem" and require further investigation.⁵

Will multiple vaccinations in one visit be too much **overload for a child's immune system?**

The CDC provides recommendations for when vaccinations should be given, from infancy through adulthood. Some parents fear giving too many at once will overwhelm a child's immune system. While this concern is understandable, children are exposed to thousands of foreign antigens—toxins or other substances that induce an immune response—each day, including simply by eating. Studies have not shown that receiving multiple vaccinations at one time has an adverse effect on a child's immune system.⁶ In fact, skipping or delaying vaccinations can leave that child vulnerable. Currently, the immunization schedule considers when a child's immune system will best respond and when that child is most at risk for acquiring the disease.

Are vaccinations only for children?

No. Due to the strength of various microbes or the way certain vaccines are currently made, some vaccines require periodic boosters to retain immunity throughout one's life. The CDC recommends that adults should discuss with doctors which ones might be needed based on factors such as age, lifestyle, and travel.



Note: A 1998 report linked the MMR (Measles, Mumps, Rubella) vaccine to increased rates of autism. The study is now retracted, finding the author falsified data and failed to reveal a serious conflict of interest. Other studies have been unable to find a link between the vaccine and autism.⁷

Vaccination Requirements in the Mitten State

Michigan law requires children to receive certain vaccinations before attending daycare or school, before kindergarten, and before seventh grade.⁸ In total, Michigan requires these to be completed for ten diseases, since they are highly contagious and could spread quickly in a group setting. Michigan Compiled Law 333.9215 allows for three types of exemptions to this requirement: medical, religious, and philosophical. All states, as well as Washington D.C., allow medical exemptions. According to the National Vaccine Information Center, Michigan is one of approximately thirty states that allows religious exemptions and one of close to twenty states that allows philosophical exemptions. Other CDC recommended vaccines, such as the Human Papillomavirus (HPV) vaccine, are not mandatory for school attendance.

In recent years, Michigan had seen some of the highest vaccine-waiver rates in the country, most for philosophical reasons. During the 2014–2015 school year, Michigan was sixth overall in the country for kindergarten vaccine-waiver rates. In 2014, the Michigan Department of Health and Human Services (DHHs) created a new rule requiring parents seeking an exemption to speak with a health educator from their local health department. At this session, parents receive information about the benefits of vaccination and risks of disease before obtaining a waiver. Following this new rule, Michigan saw a thirty-five percent decrease in the overall waiver rates from 2014 to 2015, and the state moved to the eleventh highest waiver rate for the 2015–2016 year for kindergarteners.⁹

All 7th Graders

All Kindergarteners

	and 4- to 6-year-old transfer students	students and 7- to 18-year-old transfer students	
Diphtheria, Tetanus, Pertussis (DTP, DTaP, Tdap)	4 doses DTP or DTaP. 1 dose must be at or after 4 years of age.	4 doses D and T or 3 doses Td if 1 st dose given at or after 1 year of age	 1 dose Tdap at 11 years of age or older upon entry into 7th grade or higher
Polio	4 doses 3 doses if dose 3 was given at or after 4 years of age		
Measles, Mumps, Rubella (MMR)	2 doses at or after 12 months of age		
Hepatitis B	3 doses		
Meningococcal Conjugate (MenACWY)	None	1 dose at 11 years of age or older upon entry into 7 th grade or higher	
Varicella (Chickenpox)	2 doses at or after 12 months of age or current lab immunity or history of Varicella disease		



Endnotes

 Benefits from Immunization During the Vaccines for Child
 Program Era–United States, 1994–2013, CDC MMWR, 4/25/14, https://goo.gl/xV8jdv.
 "Disease Eradication," The History of Vaccines, updated 1/25/18, https://goo.gl/YzQqae.
 "Vaccines Protect Your Community,"
 U.S. DHHS, reviewed December 2017, https://goo.gl/9poCEQ.
 "Vaccine
 Development, Testing, and Regulation," The History of Vaccines, updated
 1/17/18, https://goo.gl/vTtrom.
 "About VAERS," U.S. DHHS, accessed
 1/19/18, https://goo.gl/iUTSY6.
 "Global Vaccine Safety," World Health
 Organization, accessed 2/2/2018, https://goo.gl/9hqQfF.
 "Vaccine
 Safety," CDC, updated 11/23/15, https://goo.gl/F1sc3D.
 "Vaccines
 Required for School Entry in Michigan," Michigan DHHS, updated 3/1/17, https://goo.gl/4SvB6f.
 Immunization Status of School Children in Michigan,
 2016, Michigan DHHS, final data 9/1/17, https://goo.gl/rL7BTK.

What Does the Catholic Church Teach About Vaccinations?

"Danger to the health of children could permit parents to use a vaccine which was developed using cell lines of illicit origin." **Congregation for the Doctrine of the Faith**, *Dignitas Personae*, 2008

The Catholic Church recognizes that vaccines have provided significant protection from suffering for the vulnerable and for society. Catholic teaching has generally emphasized the importance of the common good, which includes the good of public health that vaccinations aim to serve. It also addresses questions about the use of certain vaccinations that were developed immorally. Several vaccines have been prepared from human cell lines, WI-38 and MRC-5, which came from fetal tissue from two induced abortions in the 1960s.¹⁰ The Vatican's Pontifical Academy for Life wrote a letter in 2005 to address moral questions about these vaccinations, which have been further clarified by documents from the Congregation for the Doctrine of the Faith (CDF) and the U.S. Conference of Catholic Bishops (USCCB). Read in their entirety, these documents guide Catholics in their decisions about immunizations. Below are several insights from these documents to consider:

- The creation of effective vaccines "represents a 'milestone' in the battle against contagious diseases."¹¹
- Dangers to a child's health may justify the use of immorally produced vaccines.¹² Risks to the broader population, particularly vulnerable persons such as the elderly,

immunosuppressed, pregnant mothers, children in the womb, and infants, may also justify their use, especially in the case of serious contagious diseases like rubella.¹³

- When a proposed vaccine against a particular disease was created immorally, individuals have a "grave responsibility to use alternative vaccines" where these exist,¹⁴ as well as "the duty to make known their disagreement and to ask that their healthcare system make other types of vaccines available."¹⁵
- In the absence of alternatives, individuals may be permitted to use vaccines of illicit origin on a temporary basis to prevent the spread of diseases.¹⁶
- Catholics should decline the use of immorally produced vaccines, including when there is no alternative, "if it can be done without causing children, and indirectly the population as a whole, to undergo significant risks to their health."¹⁷ These instances must be considered carefully.
- When there is no ethical alternative, Catholics should register a complaint with the manufacturer and advocate for development and availability of morally sound options, since "a long-term solution lies in working to ensure that future vaccines and other medicines are not based on cooperation with practices demeaning human life."¹⁷

To urge morally produced vaccination options to be made available and immoral production to cease, contact these manufacturers:

GlaxoSmithKline	Merck & Co.	
5 Crescent Drive Philadelphia, PA 19112	2000 Galloping Hill Road Kenilworth, NJ 07033	
888.825.5249	908.740.4000	
https://us.gsk.com	https://www.merck.com	
Hepatitis A	Hepatitis A, Mumps, Measles, Rubella, Varicella	

Endnotes (Continued)

10. Vaccine Excipient & Media Summary, CDC, current as of 1/6/17, https://goo.gl/RZRK9G. 11, 13, 14, 16, 17. Moral Reflections on Vaccines Prepared from Cells Derived from Aborted Human Foetuses, Pontifical Academy for Life, 2005, https://goo.gl/1pmemm. 12, 15. Instruction Dignitas Personae on Certain Bioethical Questions, nn. 34-35, Congregation for the Doctrine of the Faith, 2008, https://goo.gl/erzpGv. 18. Conscience Exemption for Vaccines Based on Fetal Tissue from Abortions, USCCB, updated April 2015, https://goo.gl/dXmYoR.

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