



# Promoting Childhood Immunizations

Victoria Lynn Anderson, MSN

## ABSTRACT

Immunization was perhaps the single most beneficial public health measure of the 20th century. Vaccine manufacturers work in tandem with government, academic, and nongovernmental agencies to develop safe and effective vaccines that decrease health costs and improve compliance. Despite overwhelming evidence of vaccine safety, suspicion and misconception continues in small groups of hesitant or resistant parents, often leading to outbreaks of vaccine-preventable infections. On the front lines of vaccination, nurse practitioners can improve vaccination rates by developing a trusting relationship with parents and being armed with information based on sound clinical evidence.

**Keywords:** adjuvants, adverse events, autism, compensation, FDA, IND, IOM, regulatory review, vaccine

© 2015 Elsevier, Inc. All rights reserved.

*Victoria L. Anderson, MSN, CRNP, is a Family Nurse Practitioner at the Clinical Center, Department of Radiology and Center for Interventional Oncology, National Institutes of Health in Bethesda, MD. She can be reached at [niaidnp@gmail.com](mailto:niaidnp@gmail.com). This study was supported by the Intramural Research Program of the National Institutes of Health, Clinical Center, Department of Radiology, National Cancer Institute, Center for Interventional Oncology, and the Mark Hatfield Clinical Research Center. In compliance with national ethical standards, the author reports no relationships with business or industry that would pose a conflict of interest.*

## INTRODUCTION

Immunization is perhaps the single most important public health measure of the 20th century. Infectious diseases were once the leading cause of death in the early 1900s, but, since the advent of vaccines, they currently rank eighth.<sup>1</sup> Vaccination is also responsible for improving substantially the

number of children who reach their first birthday.<sup>1</sup> At the turn of the 20th century, 100 of 1,000 babies born in the United States died before their first birthday, and today that rate has decreased dramatically to 7 in 1,000 babies.<sup>2</sup> Table 1 demonstrates that introduction of vaccines has led to dramatic declines vaccine-preventable diseases (VPDs).<sup>3</sup>

This CE learning activity is designed to augment the knowledge, skills, and attitudes of nurse practitioners and assist in their understanding of immunizations and their impact on humans.

**At the conclusion of this activity, the participant will be able to:**

- Describe the characteristics of a hesitant vs resistant parent
- Address parental concerns by explaining major immunization concepts
- Use current evidence to clarify the relationship between vaccines and autism

The author, reviewers, editors, and nurse planners all report no financial relationships that would pose a conflict of interest.

The author does not present any off-label or non-FDA-approved recommendations for treatment.

This activity has been awarded 1.0 contact hours for nurses and advanced practice nurses and 1.0 contact hours of pharmacology credit. The activity is valid for CE credit until February 1, 2017.

Readers may receive the 1.0 CE credit free by reading the article and answering each question **online** at [www.npjjournal.org](http://www.npjjournal.org), or they may mail the test answers and evaluation, along with a processing fee check for \$10 made out to Elsevier, to PO Box 786, East Amherst, NY 14051. Required minimum passing score is 70%.

This educational activity is provided by Nurse Practitioner Alternatives™.

NPA™ is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

Accreditation does not imply endorsement by the provider, Elsevier, or ANCC of recommendations or any commercial products displayed or discussed in conjunction with the educational activity.

**Table 1. Rates of Vaccine Preventable Diseases and Deaths<sup>a</sup>**

Diphtheria		
Year	Cases Reported	Deaths
1950	5796	410
2011	0	NA
Tetanus		
Year	Cases Reported	Deaths
1950	486	336
2011	9	NA
Pertussis		
Year	Cases Reported	Deaths
1950	120,718	1,118
2011	15,216	0
Polio		
Year	Cases Reported	Deaths
1950	33,300	1,904
2011	0	NA
Measles		
Year	Cases Reported	Deaths
1950	319,124	468
2011	212	NA
Rubella		
Year	Cases Reported	Deaths
1966	46,975	12
2011	4	NA
Mumps		
Year	Cases Reported	Deaths
1968	152,209	25
2011	370	0
Varicella		
Year	Cases Reported	Deaths
1972	164,114	122
2011	12,041	NA
Haemophilus		
Year	Cases Reported	Deaths
1991	2764	17
2011	3184	NA

*continued*

**Table 1. (continued)**

Hepatitis A		
Year	Cases Reported	Deaths
1966	32859	N/A
2011	1139	N/A
Hepatitis B <sup>b</sup>		
Year	Cases Reported	Deaths
1966	1497	N/A
2011	2495	N/A

CDC= Center for Disease Control and Prevention

NA= Not available

<sup>a</sup> Table adapted from reference 3

<sup>b</sup> A rapid rise in the number of cases was reported after 1966, following separation of Hepatitis B from all cases of Hepatitis and a peak of cases in 1986 of 26,107 is followed by a post vaccine fall in cases to 2,495 by 2011.

Despite clear benefit, many parents choose not to vaccinate their children, most often citing the fear of the unknown as their motive. In a time when the incidence of VPDs is very low to nonexistent, it is easy to see why parents would become distracted by stories of severe reactions to vaccination. Vaccination scares propagated by the media and self-serving clinicians have led many parents to choose the risk of infection over the risk of vaccination. This year, 592 cases of measles and 4 college campus mumps outbreaks have been reported across the nation, with the majority of these occurring in patients who were unvaccinated.<sup>4,5</sup> Endemic in the US, pertussis cases still range from 20,000 to 40,000 cases yearly. However, these numbers are dwarfed by the prevaccine rates of 100,000 to 200,000 cases per year.<sup>6</sup> Other than smallpox, vaccine-preventable diseases remain active across the globe. When an outbreak of a VPD occurs it is frequently due to one unvaccinated person. Exposure to infections is an inevitable consequence of our global economy, thus stressing the importance of vaccinations domestically and worldwide.

Understanding the fear some parents have as they contemplate vaccinating their child and addressing specific concerns for their child with scientific data is a reasonable approach to improve immunization rates in this subgroup. This article aims to characterize the vaccine-hesitant or -resistant parent and assess the

Download English Version:

<https://daneshyari.com/en/article/2663413>

Download Persian Version:

<https://daneshyari.com/article/2663413>

[Daneshyari.com](https://daneshyari.com)