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Immunizations and the Responsibility of the Emergency Nurse

Description

Immunizations rank as one of the top ten public health achievements in the 20th century and are the most effective way to prevent morbidity and mortality from vaccine preventable infectious diseases.^{1–5} It has been estimated that smallpox, polio and diphtheria have all seen 100% reduction in morbidity due to vaccination.⁶ In addition, vaccines are among the most cost-effective clinical preventative services, yet vaccine preventable diseases that were once thought to be nearly eradicated are now increasing in prevalence due to lower vaccination rates in some areas of the U.S.^{6.7} The decision not to vaccinate is a growing public health concern in the U.S. and globally.⁸ Vaccine hesitancy, known as the delay or refusal to receive vaccines despite the availability, has been reported in over 90% of countries worldwide.⁹ Continued vaccine hesitancy is setting the stage for the resurgence of vaccine preventable diseases, such as measles, smallpox, and polio.¹⁰ Some states do permit non-medical exemptions including religious reasons or philosophical exclusion from vaccination requirements, but these exemptions vary from state to state.¹¹ Communities with groups of unvaccinated and under-vaccinated populations are at an increased risk for outbreaks of vaccine preventable diseases due to decreased herd immunity.^{12,13}

The remarkable success of vaccination programs in eliminating or greatly reducing that which once threatened society, such as smallpox, polio, and diphtheria, has created a shift from fears of contracting vaccine preventable diseases to concerns about complications arising from the vaccines themselves.^{10,14,15} Patient surveys reveal long standing fears of the link between vaccination and autism and the possible harmful side-effects of thimerosal when present in vaccines to prevent microbial contamination.¹⁵ Although the research claiming to show a link to autism has long since been proven fraudulent, invalid, and unscientific, and the claim has been widely rejected by mainstream medical science, fears persist.^{7,15–20}

The National Academy of Medicine (formerly the Institute of Medicine) has concluded that there is a large body of evidence (studies that together included more than 1.8 million children) that refutes the causal relationship between autism and measles, mumps, rubella (MMR) vaccine, simultaneous vaccination with multiple vaccines and thimerosal containing vaccines.^{15–20} Vaccines are not free from adverse effects; however, the rare reactions that do occur are almost always considered mild.^{21,22}

The benefits of vaccination and the problems of under or non-vaccination are magnified for healthcare workers who have a responsibility to provide a safe and healthy environment for their patients.^{23,24} The American Nurses Association (ANA) *Code of Ethics for Nursing with Interpretative Statements*, clearly supports the notion that nurses promote, advocate for, and protect the rights, health, and safety of patients.^{25,26} Receiving an annual influenza vaccine is one example of how healthcare workers help to protect the safety of patients. Authors of a meta-analysis of cohort and case studies concluded that the vaccination of healthcare workers against influenza enhances patient safety and likely reduces patient morbidity and mortality.²⁷ The Society for Post-Acute and Long-Term Care Medicine also supports mandatory annual influenza vaccination for healthcare workers in long-term care settings based on substantial evidence that shows a decrease in morbidity and mortality among the residents when the





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healthcare workforce has been appropriately vaccinated.²⁸ Healthcare workers were vaccinated for influenza at a rate of 78.4% in 2017–2018 per the Centers for Disease Control and Prevention (CDC), which is well under the U.S. Department of Health and Human Services benchmark of 90%.^{29,30} The CDC recommends influenza vaccines for healthcare workers, but the decision is ultimately up to the individual healthcare institution as to what extent those policies are enforced.³¹ Hospital policies may require their employees who have direct patient care roles to receive the influenza vaccination based on patient safety and institutional strategies.^{31,32}

Emergency nurses have a responsibility to be current on recommended routine vaccines and advocate the importance of vaccines to their patients and families. Emergency nurses are at increased risk of exposure to serious and sometimes deadly diseases because they have the type of direct contact with patients and other material that could potentially spread infection. For this reason, it is important for emergency nurses to be current with vaccinations in order to help reduce the chance of spreading vaccine preventable diseases, particularly to vulnerable populations such as pediatric, geriatric, the chronically ill, and the immunocompromised.^{33–39}

ENA Position

It is the position of the Emergency Nurses Association (ENA) that:

- 1. Emergency nurses promote public health by receiving the recommended vaccinations.
- 2. Emergency nurses advocate for vaccination for everyone in accordance with the current Centers for Disease Control and Prevention (CDC) immunization schedules.
- 3. Emergency nurses screen and document the relevant immunization status of all patients.
- 4. Emergency nurses maintain knowledge of credible, evidence-based scientific sources and increase their own understanding of vaccine risks, benefits, effectiveness, and safety to enable them to inform and instruct their patients.
- 5. Emergency nurses support continued evidence-based research and follow updated guidelines as infectious epidemiology changes.
- 6. Emergency nurses promote community awareness of the public health consequences of underimmunization and nonimmunization.
- 7. Emergency nurses collaborate with inter-professional colleagues including hospital leaders, employee health staff, and regulatory organizations to help increase immunization coverage of patients as well as healthcare staff.





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Background

Immunizations are an important but, more recently, underused opportunity to reduce vaccine preventable diseases in pediatric, adult, and older adult populations.¹² Today, society is seeing more parents and caregivers that are either hesitant or refusing to vaccinate their children.⁷ Vaccines have prevented the loss of countless individuals to diseases. Vaccination coverage creates herd immunity, also known as community immunity, once a sufficient fraction of the population is protected.^{6,8} Herd immunity helps to protect individuals who are not able to be vaccinated for different reasons; age, immunocompromised status, potential for anaphylaxis, or other co-morbidities that contradict vaccines.⁷ Current immunization recommendations in the U.S. target 17 diseases that can occur throughout the lifespan, some impacting older adults specifically.^{39,40}

Common concerns often voiced by parents and caregivers include the age recommended to start childhood immunizations, the intervals between doses, and scheduling that requires a child to receive multiple vaccinations at one time. To address these timing issues, the American Academy of Pediatrics (AAP) evaluates the most recent scientific data every year to determine the age that achieves the best balance between immune response and the need to provide protection at the earliest age.³³ As for concerns over multiple vaccinations at the same time, researchers theorize that children will be exposed to 150 antigens over the course of the entire immunization schedule, which pales in comparison to the 2,000–6,000 antigens that children are exposed to daily while playing, eating, or breathing.³³ Overall, very few adverse effects exist, and the risks are low.²⁰ In addition, the Food and Drug Administration tests for safety and continually re-evaluates all vaccines that enter the market.^{39,40}

The national Healthy People 2020 goal is to increase immunization rates and reduce the overall number of preventable infectious diseases, which are estimated to claim the lives of nearly 60,000 people (adults and children) in the U.S. every year and 1.5 million lives globally.^{1,10} Immunizations remain one of the strongest tools available for disease prevention and are a safe and cost-effective way to promote and maintain public health.^{1,7,22} Ideally, immunizations should be administered as part of a comprehensive healthcare examination provided by a patient's primary care pratitioner.²² However, each encounter with a healthcare provider, including an ED visit or hospitalization, is an opportunity to screen vaccination status and, if indicated, administer needed vaccines.²² Implementation of this standard minimizes the number of missed opportunities to vaccinate, particularly for pediatric patients.^{22,31}

The World Health Organization (WHO) included vaccine hesitancy in the 2019 list of top ten threats to global health.¹⁰ The WHO established a Vaccine Safety Net to provide balanced, evidence-based safety information for key stakeholders such as parents, patients, and healthcare personnel.¹⁰ To help achieve the Healthy People 2020 goal of a highly immunized society, it is vital that healthcare workers learn about vaccines from reliable sources, get vaccinated themselves, and respond factually to patient's questions and concerns about immunizations.^{1,7,22,41} Vaccinated healthcare workers are more likely to recommend vaccination to others. Nurses remain the most trusted profession and are a key influence on immunization decisions.⁷ Emergency nurses, in their role as patient and community educators, have a unique opportunity to inform patients and promote vaccinations that are supported by public health research findings.¹





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To help promote vaccination and increase compliance, an increasing number of hospital and healthcare systems have adopted policies making seasonal influenza vaccination mandatory for employees.^{37,38} The Joint Commission's Standard IC.02.04.01 has been revised and strengthened to better reflect current science and the national focus on influenza vaccination.³⁸ The Joint Commission standard states that one way to improve patient safety is for staff to receive the influenza vaccination annually.³⁸ Mandatory policies have improved vaccination rates, but some argue these policies fall short, in the absence of other strategies, of embedding the importance of influenza vaccination into healthcare worker's beliefs, values, and a sense of duty of care.⁴² Loyola University Medical Center in Chicago made seasonal influenza vaccination mandatory as a condition of employment in 2009. In the first year; 99.2% of employees received the vaccine and the results were sustained, with 98.7% of employees receiving the vaccine in 2012.⁴² However, influenza vaccine is not the only recommended vaccine for healthcare workers. There are several vaccines recommended for the healthcare worker including hepatitis B, pertussis, and MMR, but the role of the employer in promoting or mandating these vaccines has been inconsistent, and laws vary by state.²⁴

Vaccine hesitancy is not the only factor that contributes to noncompliance with immunizations. Lack of access to healthcare due to costs and lack of information about immunizations decreases vaccine coverage.⁶ Collaborative and multi-faceted interventions by healthcare providers and community and government agencies can help to increase immunization coverage to prevent disease.⁶

A nurse's duty to protect the safety and health of patients is deeply embedded in the nursing code of ethics.^{25,26} It is important for emergency nurses to understand that receiving vaccines not only protects the nurse; it also protects patients and their families, as well as the emergency nurse's family.

Resources

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Developed: 2015.

Approved by the ENA Board of Directors: July 2015. Revised and Approved by the ENA Board of Directors: September 2019.

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