



Kansas School

Nurse Organization

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Position Statement

IMMUNIZATION EXEMPTIONS FOR SCHOOL ATTENDANCE

SUMMARY

It is the position of the Kansas School Nurse Organization (KSNO) that state regulations requiring students to be immunized prior to attendance to school have greatly improved the health of all citizens, not just school-age populations. KSNO supports the Centers for Disease Control and Prevention (CDC), Advisory Committee on Immunization Practices (ACIP), the Governor's Child Health Advisory Committee's recommended vaccines, and federal, state, and local legislation that provides for the immunization of students and their families (CDC, 2011; Kansas Department of Health and Environment, 2013). Further, KSNO supports the current Kansas exemptions for medical and religious reasons and is opposed to allowing exemptions based on philosophical reasons. Research has demonstrated that states with easy exemption processes for immunizations have a greater proportion of unprotected citizens ultimately leading to disease outbreak.

HISTORY

According to the CDC (1999), vaccinations are one of the ten greatest public health achievements of the twentieth century. States began enacting immunization laws in the early 1800s when Massachusetts required citizens to be immunized against smallpox. The American Academy of Pediatrics offered the first immunization guidelines in the 1930s (CDC, 2007). National efforts to promote immunizations among all children began in 1955 with the appropriations of federal funds for polio vaccinations. The modern era for school and licensed child care immunization laws began with efforts to eliminate measles in the 1960s and 1970s (Selekman, 2013). States have historically played a key role in assuring high levels of vaccination coverage through legislative requirements for immunization policies or by authorizing public health agencies to set such policies. School and day care immunization requirements have been an important factor in the prevention of vaccine-preventable diseases in the United States (Wharton, Hogan, & Segal-Freeman, 2005). All states require immunizations prior to entry into school, with additional vaccines required during the school age years, as an effort to improve low childhood immunization rates (CDC, 2014). High immunization coverage rates among students create herd immunity which protects both individuals and the larger population, especially

those people who have immune system disorders and cannot be vaccinated. Despite significant levels of vaccine compliance, segments of the public continue to voice concerns about potential adverse effects of vaccines. These concerns potentially threaten vaccine uptake, and place added burden on the medical and public health communities (Cooper, 2008; CDC, 2010).

School nurses audit student immunizations and exemptions as an extension of public health. The school nurse is in a critical position to create awareness and influence action related to mandated and recommended immunizations in the school community. The Director of Health Services for Olathe Public Schools reports seeing firsthand the positive impact of vaccination on the reduction of disease occurrence. During the 2011-2012 school year, the district reported 25 cases of chicken pox among 28,500 students, a little less than 1 in 1000 students. In 2002, prior to a second dose of varicella vaccine being required for kindergarten entry into school, 262 cases of chicken pox were reported in the school population of approximately 22,000 students or a little more than 1 case in every 100 students (KSNO, 2013).

DESCRIPTION OF ISSUE

School-aged children usually have the highest attack rates for vaccine preventable diseases and infections. School children are a likely source of secondary infections of susceptible household contacts. Vaccines reduce disease morbidity and the potential for mortality from vaccine-preventable diseases in students and staff, and also prevent disease spread to others at risk because of age, immunodeficiency, and lack of vaccine coverage. As the bacteria and viruses that cause diseases still exist, the public health gains achieved through vaccines can only be maintained by ensuring that vaccination rates remain high enough to prevent outbreaks. When a sufficiently high proportion of a population is vaccinated, the entire population can obtain protection by establishing “herd immunity.” Herd immunity is critical for protecting the health of people who are vulnerable to communicable diseases, as well as those who cannot, or choose not, to be vaccinated. Epidemics occur even in immunized populations when clusters of susceptible individuals exist and are exposed to a contagious individual (Wharton, Hogan, & Segal-Freeman, 2005).

Overall, vaccination rates in the United States remain high; however, as increasing numbers of children are being exempted from vaccination, an increased rate of disease is most likely to occur. To continue to maintain high rates of vaccination coverage, individuals (including parents) must recognize that vaccines are a safe and effective way to help the body defend against vaccine-preventable diseases. Healthcare providers, including the school nurse, are in a position to maintain and share accurate knowledge and recommendations regarding vaccines with the communities they serve.

Multiple types of exemptions are allowed, depending on state and local regulations, and are usually grouped into medical, religious, and philosophical. All 50 states allow children to be exempted from

vaccination requirements for a medical reason determined by their healthcare provider, such as a child's immune status being compromised by a permanent or temporary condition. Forty-eight states allow exemptions to vaccination for religious reasons, and twenty states allow exemptions to children whose parents have philosophical or personal belief objections to vaccination (College of Physicians of Philadelphia, 2014). Philosophical reasons for refusal to vaccinate range from perceived danger of the vaccine to the belief that the parent should determine what their child receives and not a school or other governmental body (Freed, Clark, Butchart, Singer, & Davis, 2010).

Unfortunately, the percentage of parents claiming religious exemptions for students has risen dramatically in the past 15 years. According to testimony prepared by KSNO, one large school district in Kansas reports the exemption rate increasing from 0.37% in 1998 to 1.44% in 2012 (an almost four fold increase) (2013). According to Daniel Salmon, PhD, MPH, Director of Vaccine Safety with the U.S. Department of Health and Human Services, easy exemption processes are associated with high exemption rates. Because Kansas allows medical and religious exemptions, Kansas is ranked as medium in the exemption process. Salmon reports that research shows once a population has 1% or higher of unvaccinated people, they are at increased risk for disease outbreak (2011).

RATIONALE

Researchers have additionally emphasized that vaccine-preventable diseases have societal and economic costs in addition to the morbidity and premature deaths resulting from these diseases - the costs include missed time from school and work, physician office visits, and hospitalizations. The Seaman School District, USD #345, experienced a chicken pox outbreak winter of 2012, with a total of 13 cases being confirmed (KSNO, 2013). The 13 infected students missed a total of 62 days of "seat time" in school because they were excluded with active disease. Ten students in the district had a religious exemption for varicella vaccine, and of those ten students, five received the vaccine, two provided proof of disease, and three chose to remain excluded for 21 days. The three excluded students missed a total of 30 days of seat time, and if it had not been for winter break, would have missed significant more school time. In summary, outbreaks of disease impact the health of students and staff time, sometimes impacting multiple school districts as infected students may expose others at extracurricular events.

In January of 2013, Mary Anne Jackson, MD, Division Director-Infectious Disease; and Christopher Harrison, MD, Director of the Infectious Disease Research Laboratory and Primary Investigator in the National Institutes of Health Vaccine Treatment and Evaluation Unit at Children's Mercy Hospital and Clinics in Kansas City, provided the following "Do You Know" list of vaccine preventable diseases.

- In 2012 and 2013, two children were diagnosed with whooping cough every week at Children’s Mercy Hospital, and in the U.S. there were nearly 50,000 cases and dozens of deaths.
- Chicken pox is vaccine-preventable, but outbreaks still occur in school and daycare settings, and complications are especially common in newborns, and in children with cancer or other immunocompromising conditions.
- Communities with clusters of families that do not have their children immunized have a nine times greater risk of those children being infected with whooping cough and three times greater risk of measles infection.
- If only 10 percent of your community does not receive measles vaccine, just one measles case coming to your community will cause an outbreak, as herd immunity to measles requires more than 90 percent of people be immunized.
- Hepatitis A vaccine being added to the list of routine vaccines that all children receive has led to the disease all but disappearing in the U.S.

The issue of nonvaccination and undervaccination must be addressed to protect children and their communities from significant health risks. We can no longer ignore the growing incidence of children who are not immunized due to parents’ use of nonmedical vaccine exemptions. This rise in nonmedical exemptions has contributed to recent outbreaks and increased rates of vaccine-preventable diseases such as measles, pertussis, and varicella.

The greatest concern with Kansas allowing additional nonmedical exemptions is the potential for increased death and disability as related to vaccine preventable diseases. A second concern is the loss of valuable education time as unvaccinated students, who are deemed susceptible contacts, must remain out of school until the incubation period for the disease of concern has passed (e.g. 21 days for chicken pox exposure). Finally, the required continual monitoring of unvaccinated students places additional manpower burdens on school districts in a time of limited budgets.

States must take primary responsibility in designing their vaccine mandates and must balance the latitude for individuals to make decisions about their own health and the health of their children with protecting the safety and well-being of the public. To protect Kansans, current and future populations, it is important that the vast majority of our population be fully immunized. School nurses are on the front-lines in communicable disease prevention, surveillance, and reporting. They work closely with local and state public health officials, and are a great resource for providing direction in dealing with actual/potential disease outbreaks. Working in the educational system, school nurses see firsthand that healthy children learn better. We know children need to be in school to learn. Allowing a philosophical exemption in our state would pose a significant risk to the health and well-being of Kansans students.

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