

HB 2094 Vaccinations; exemptions from getting immunizations based on reasons of conscience or personal belief

By

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Chair Landwehr and members of the committee, I am pleased to present these comments on House Bill 2094.

The intent of this bill is to amend current legislation that offers religious and medical exemptions to also offer an exemption to receiving vaccinations required for children in schools and child care settings based solely on personal belief. KDHE is in opposition to this bill.

Enforcement of mandatory immunization requirements for children entering childcare facilities and schools has resulted in high immunization coverage levels both in Kansas and across the country. High vaccination levels in a community offer protection not only to those who are immunized, but also to the community as a whole, particularly those who cannot be vaccinated because of medical reasons and infants and children who are not yet fully immunized.

While all states and the District of Columbia allow exemptions from the requirements for medical reasons, and all but two offer exemptions to accommodate religious beliefs, only 20 states allow exemptions based on parents' personal beliefs. Several recent outbreaks of measles, pertussis, and varicella (chickenpox) have been traced to pockets of unvaccinated children in states that allow personal belief exemptions.

The impact of vaccine refusal is documented through several studies that show a direct correlation between increased rates of vaccine refusal and increased disease incidence. Children who are exempted from immunization requirements are at greater risk of contracting vaccine-preventable diseases and transmitting disease to others, thereby increasing the risks to everyone.

- States that made it easy to get exemptions had 90 percent more cases of whooping cough than states with stricter rules; states that allowed only religious and medical exemptions did not have a significantly higher rate of whooping cough.
- Schools with exemption rates as low as 2 percent to 4 percent are at increased risk for disease outbreaks.
- Exempted children have been found to be 22 to 35 times more likely to get measles than vaccinated children.

- The number of exemptions granted for nonmedical reasons grew by 6 percent per year between 1991 and 2004 in states that offered personal belief exemptions.
- Risks to the community, particularly vulnerable individuals within the community, are exacerbated by the tendency for nonmedical exemptions to cluster in small geographic areas rather than be evenly distributed throughout the state. These risks are evident even when overall immunization coverage levels for the state as a whole remain relatively high.
 - In Kansas, approximately 40 percent of school districts have kindergarten children with religious or medical exemptions. (Figure 1)
 - While many school districts report not having any kindergarteners with religious or medical exemptions, exemption rates exceeded 10% in some districts to a high of 20% in 2010-2011. (Figure 1)
 - Overall, 26 school districts reported exemption rates exceeding 5% during the 2010-2011 school year. (Figure 1)
 - These exemptions, coupled with inconsistent enforcement of existing vaccination requirements, result in substantially lower vaccination coverage levels in some communities, thereby increasing the risks of disease outbreaks.

Rising rates of vaccine exemptions can undermine vaccine preventable disease elimination. Outbreaks can also occur among those unable to be vaccinated due to age or medical conditions. Immunizations are a tremendous public health achievement, credited for saving tens of thousands of lives each year in the U.S. alone.

- In 1920, nearly 470,000 measles cases were reported in the U.S., and nearly 7,500 people died from the disease.
- Nearly 148,000 cases of diphtheria were reported that same year, resulting in more than 13,000 deaths.
- Nearly 5,100 patients died from pertussis among the more than 107,000 cases that were reported in 1922.

Dramatic decreases in the numbers of cases and deaths were seen in the years following the introductions of vaccines for these and many other diseases that were once so common. So dramatic, in fact, that outbreaks or even small clusters of some vaccine-preventable diseases are newsworthy today.

Despite high community vaccination coverage, disease outbreaks can occur among clusters of children with vaccine exemptions, at major cost to public health agencies, medical systems, and families. Disease outbreaks have significant costs, both in terms of human costs and costs to the medical and public health communities charged with disease treatment, management, and control.

- From 2008 – 2011, there were 65 outbreaks of vaccine-preventable diseases in Kansas, 46 of which were varicella (chickenpox) or pertussis (whooping cough) outbreaks that occurred in public schools.
- Outbreaks of varicella and pertussis in school settings, in particular, have tended to occur in communities with children with vaccination exemptions.
- From 2008-2011, 25 outbreaks of varicella occurred among schools in districts with a varicella vaccine coverage rate of less than 90 percent, compared to 14 outbreaks occurring in districts with vaccine

coverage rates between 90 percent and 94 percent, and only two outbreaks occurring in districts with a vaccine coverage rate of at least 95 percent. (Figure 2)

- A measles outbreak associated with a child care center in Johnson County in 2011 resulted in six cases. The first three cases alone, all of which were unvaccinated adolescents, required investigations of more than 3,000 contacts.
- The cost associated with an outbreak of 26 cases of pertussis in Nebraska was measured at \$2,172 per case.
- The total estimated cost of one case of measles in Iowa was measured at \$142,452, of which 75% was attributable to personnel costs and overhead.
- Seventy-five percent of the cases were intentionally unvaccinated in a measles outbreak in a highly vaccinated population in San Diego, and resulted in a net public-sector cost of \$10,376 per case.

Increased vaccine preventable disease incidence in Kansas would require increased resources at the state and local levels for disease investigation. Local governments are charged with disease investigation and containment. Greater incidence of vaccine preventable diseases will burden local health departments with increased responsibility in a time of diminishing resources.

Fiscal consideration of the impact of long term care of an individual with residual impairment resulting from a vaccine preventable disease is important and will impact the state budget in terms of resources needed for long term care or support.

- Approximately 1 in every 1,000 cases of measles results in nervous system complications. Encephalitis, or brain swelling, is the most common of these, and it leaves approximately one-quarter of affected patients with long-term brain damage.
- Up to 40% of children who survive meningitis due to *Haemophilus influenzae* type b (Hib) may have life-long neurological defects.
- Complications such as congenital rubella syndrome, liver cirrhosis, and cancer caused by chronic hepatitis B infection or neurological lesions secondary to measles or mumps can have a greater long-term impact than the acute disease. These cases will require life-long care, often at public expense.

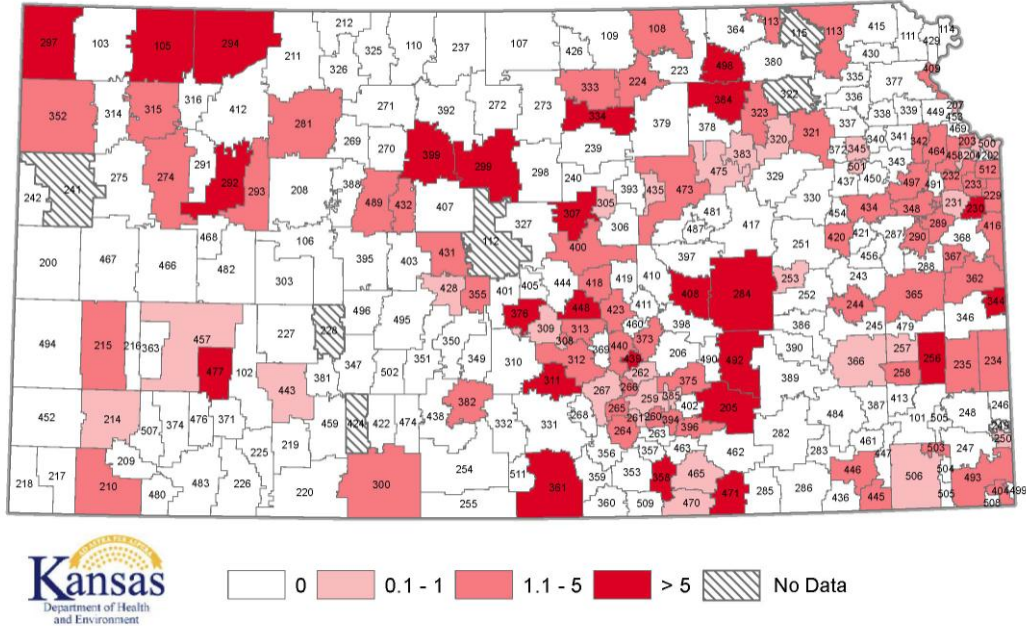
Persons particularly at risk include:

- Pregnant women
- Children under the age of two
- Children and adults with leukemia
- Individuals receiving chemotherapy, or who are otherwise immunosuppressed, as well as persons who live in the same household with immunosuppressed people.

Requiring vaccines for children in schools and child care settings saves lives. Immunizations work, are safe, and are important tools in the public health prevention of disease and protection of Kansas citizens.

Figure 1*:

Percent of Kindergartners Exempt at Submitting Public Schools by District, 2010-2011



*Note: Approximately 72% of all exemptions are religious and 28% of all exemptions are medical.

Figure 2:

VAR2 Coverage 2010-2011 and Number of Varicella Outbreaks 2008-2011 by District

