



KANSAS HEALTH INSTITUTE

For additional information contact:

Gianfranco Pezzino, M.D., M.P.H.
Associate Director of Public Health Systems
212 SW Eighth Avenue, Suite 300
Topeka, Kansas 66603-3936
Tel. 785.233.5443 Fax 785.233.1168

School-based influenza vaccination pilot program

SB 548

February 13, 2008

Senate Committee on Public Health and Welfare

Gianfranco Pezzino, M.D., M.P.H.
Associate Director of Public Health Systems
Kansas Health Institute

Information for policymakers. Health for Kansans.

The Kansas Health Institute is an independent, non-profit health policy and research organization based in Topeka, Kansas. Established in 1995 with a multiyear grant from the Kansas Health Foundation, the Kansas Health Institute conducts research and policy analysis on issues that affect the health of Kansans.

My name is Dr. Gianfranco Pezzino. I am a board-certified public health physician with experience working at the federal, state and local levels. Currently I am the Associate Director of Public Health Systems at the Kansas Health Institute, and also the Health Officer for Shawnee County in Topeka.

I want to congratulate this committee for its attempt to address through SB 548 the important public health issue of how to most effectively vaccinate Kansas children against influenza.

Children play a special role in the epidemiology of influenza for two reasons. First, children who contract influenza can develop complications which in some cases can be fatal. Second, there is a growing body of evidence showing that children represent a reservoir for the community-wide outbreaks of influenza that we experience every year.

Children get infected early during the influenza season and can transmit the infection to others for up to 6 days before they become sick, compared to the average 1– 2 days for adults. Because children spend a lot of their time in close contact with other individuals in their families or in schools and day care settings, they have the potential to infect many people.

Transmission of influenza in schools plays a major role in propagating influenza outbreaks. Cases among students often rise rapidly after holiday recess. In addition, studies have shown that school absenteeism often increases just before an increase in absenteeism in other work places, suggesting that students may become infected first and pass the virus on to their parents.

Does vaccinating children make a difference? Recent studies and the experience in other countries certainly suggest that this is the case. A study conducted in 11 sites across our country in 2004–2005 involving more than 15,000 school children showed that vaccination against influenza reduced disease both in the children who received the vaccine and, most interestingly, in their families, confirming the importance of children in the chain of transmission of this disease. In Japan, where vaccination of school children against influenza was widespread for some years, a substantial reduction in influenza deaths was reported among the elderly. Unfortunately, when the Japanese government decided to discontinue the vaccination of children, the number of deaths in the community increased again.

So it appears that vaccinating school-aged children against influenza can be an important preventive measure to reduce disease and deaths from this infection. Does it make sense to vaccinate the children in the school setting? There are several arguments in favor of this approach. Schools are an environment where disease is transmitted. In a school-based immunization program, administration costs are lower and vaccination can be achieved with minimal time commitment from parents, which in turn can increase vaccination coverage and reduce the indirect cost of the program. An analysis published in the journal *Health Affairs* in January showed that school-based vaccination could be a cost-effective option for preventing influenza among children and their families, and that the cost of the program would be less than the direct and indirect flu-related costs. According to the researchers, school-based immunization of 47 percent of students could save an estimated \$171.96 per student-household over the course of a flu season, and the saving could be higher if more children could be vaccinated.

School-based campaigns also represent excellent opportunities to test the readiness of our public health system to respond to an influenza pandemic or to other public health emergencies that would require the vaccination of many people in a short period of time.

Based on this body of evidence, the CDC is updating its current recommendations for influenza vaccination (putting more emphasis on the importance of vaccinating school children), and at least one state (New Jersey) is requiring flu shots for pre-school children.

Implementing broad vaccination campaigns in schools may present logistical and procedural challenges. In some communities, the use of volunteers can play an important role, while in others public health and school staff may be able and willing to take the full charge for the program. Some administrative and billing requirements and procedures from insurance payers also may conflict with the attempt to deliver vaccines in schools in the quickest and most cost-effective way. It is important that these issues be studied further and that communities be given sufficient flexibility to implement the best program most suitable for their needs.

As a final comment, I want to notice that there are two types of vaccine available for children. Both have an excellent record of safety and efficacy. The two vaccines have different indications and contra-indications. Once again, it is important to give local and state public health officials

flexibility in deciding which vaccine to use given that circumstances may be different from community to community.

Thank you for your attention. I will be glad to answer any questions that you may have.