A Statement Regarding Personal Belief Exemption from Immunization Mandates

–from–

The Pediatric Infectious Diseases Society

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–Position Statement–

The Pediatric Infectious Diseases Society is the world's largest organization of individuals dedicated to the treatment, control, and eradication of infectious diseases in children. As such, and given the background and rationale outlined below, the society opposes any legislation or regulation that would allow children to be exempted from mandatory immunizations based simply on their parents', or, in the case of adolescents, their own, secular personal beliefs.

It is recognized that in some states, failure to pass personal belief exemption legislation or regulation could result in public backlash that will erode support for immunization mandates. If legislation or regulation is being considered in this situation, it should contain the following provisions, which are intended to minimize use of exemptions as the "path of least resistance" for children who are behind on immunizations (whereby it would be easier to obtain an exemption than to catch-up the child's immunizations):[1]

— The personal belief against immunization must be sincere and firmly held.
— Before a child is granted an exemption, the parents or guardians must receive state-approved counseling that delineates the personal and public health importance of immunization, the scientific basis for safety of vaccines, and the consequences of exemption for their child as well as other children in the community who are vulnerable to disease and cannot otherwise be protected.
— Before a child is granted an exemption, the parents or guardians must sign a statement that delineates the basis, strength, and duration of their belief; their understanding of the risks that refusal to immunize has on their child's health and the health of others (including the potential for serious illness or death); and their acknowledgement that they are making the decision not to vaccinate on behalf of their child.
— Parents and guardians who claim exemptions should be required to revisit the decision annually with a state-approved counselor and should be required to sign a statement each year to renew the exemption.
— Children should be barred from school attendance and other group activities if there is an outbreak of a disease that is preventable by a vaccination from which they have been exempted. Parents and guardians who claim exemptions for their children should acknowledge in writing their understanding that this will occur.

— States that adopt provisions for personal belief exemptions should track exemption rates and periodically reassess the impact that exemptions may have on disease rates.

–Background and Rationale–

The Importance of Immunizations to Individual and Public Health

Immunizations are one of the most significant public health interventions in history.[2] Through a progressive, national universal immunization program, four diseases have been eliminated (i.e., endemic disease no longer occurs) from the United States—smallpox (in 1949), polio (1979), measles (2000), and rubella (2004). The occurrence and impact of other infectious diseases have been drastically reduced through vaccination; among these are diphtheria, tetanus, mumps, pertussis (whooping cough), hepatitis A, hepatitis B, varicella (chickenpox), and invasive *Haemophilus influenzae* type b and *Streptococcus pneumoniae*.[3] Hundreds of thousands of deaths have been prevented through routine immunizations and tens of billions of dollars have been saved, making childhood immunizations one of the most cost-effective components of our public health system.[4,5]

Vaccines protect people from disease in two ways. First, vaccine administration directly imparts immunity to individuals. There are two important caveats, however: a) not all healthy individuals respond optimally to all vaccines, leaving some susceptible to disease despite immunization; and b) not all individuals can be immunized. Children with cancer who are undergoing chemotherapy, for example, either cannot be vaccinated or, if vaccinated, will not respond well. Similarly, young infants are not fully protected until they have completed a series of immunizations. These special groups must therefore rely on a second, indirect mechanism of protection, community immunity—the phenomenon whereby if enough individuals in a community are immunized, diseases cannot spread.

Even a small number of unimmunized individuals in a community can facilitate the spread of disease. In the late 1980s, pockets of unimmunized children in the U.S. led to a resurgence of measles that caused 11,000 hospitalizations and 123 deaths.[6] Unfortunately, the lesson from this experience is still being learned today—2008 saw the largest outbreak of measles in this country in over a decade, an outbreak fueled by purposeful refusal to vaccinate, as opposed to programmatic deficiencies or increased importation of disease from other countries.[7] In other words, recent outbreaks have occurred because individuals who should have been immunized were intentionally not immunized. These outbreaks threaten to return the U.S. to a situation where measles is again endemic.

Here is an example of what can happen. In January 2008, an unvaccinated 7-year-old boy returned to San Diego with his family from a European trip.[8] He was brought to two doctors' offices with fever, rash, and respiratory symptoms. A few days later he went to a hospital laboratory for tests and later to the emergency room. Because measles was not immediately recognized, no special isolation procedures were used during any of these visits. Over the next few weeks, 11 additional cases of measles occurred in unvaccinated infants and children; these included the index patient's siblings, schoolmates, and children who had also been in the doctors' office at the same time. One of the infants was hospitalized for 2 days and another traveled by airplane while contagious. In total, 70 children who had been exposed to the index case were placed in voluntary home quarantine because their parents either declined measles immunization or they were too young to be vaccinated. This illustrates how diseases can spread because children are unimmunized. It is also important to realize that measles is not a benign condition—complications include pneumonia, encephalitis (brain infection), and death.

The consequences of refusal to vaccinate have played out dramatically in the United Kingdom. In the late 1970s, intense media coverage of anecdotal reports claiming that the pertussis vaccine caused neurological problems (a claim that is false) resulted in a drop in immunization rates from 81% to 31%, resulting in outbreaks of disease that killed hundreds of infants.[9,10] Similarly, measles was eliminated from the U.K. in 1994. However, in 1998 claims that the MMR (measles, mumps, and rubella) vaccine caused autism (a claim that is false) resulted in a drop in immunization rates to 80-85%, enough to allow, by 2008, the return of endemic measles to the U.K.[7,11] It is important to emphasize that this happened because many parents refused to have their children immunized.

Most parents who refuse vaccines for their children do so because they think vaccines may be harmful or that their children are not at risk from vaccine-preventable diseases.[12,13] Their concerns are fueled by inaccurate reports in the media and on the Internet, celebrity hype, and bad or fraudulent scientific data.[14,15,16] Parents are proximate victims of this misinformation—they want to do the right thing for their children, but they believe that the right thing is to avoid vaccination rather than to prevent disease through vaccination. Many of them also believe there are alternative ways to avoid disease, often adhering to practices that have little foundation in empiric science. The ultimate victims, however, are the children, who in some cases have lost their lives to diseases that could have been prevented.[17]

Immunization Mandates and Exemptions

Education about vaccine-preventable diseases is not enough to ensure that sufficient numbers of children will be immunized. To a large extent, the success

of the U.S. immunization program rests upon state laws and regulations that mandate certain vaccines before entry into child care or school. The ethical basis of these rules is firmly founded in the concepts of *beneficence* (doing the right thing—in this case, protecting individuals and society from the real harm caused by infectious diseases), *nonmaleficence* (not doing harm—vaccines are among the safest and most rigorously evaluated pharmaceuticals used today, and vaccine refusal does harm), and *justice* (equally protecting the rights of all people—in this case, for example, the right of children to be protected despite their parents' beliefs, the right of children who cannot be vaccinated for medical reasons to be protected, and the right of all citizens to benefit from community immunity).[18] While there is a fine line between individual autonomy and the government's interest in protecting its citizens, the courts have consistently upheld the constitutionality of immunization mandates.[19] For all of these reasons, the Task Force on Community Preventive Services, writing some 15 years ago, recommended that vaccination requirements be put in place for childcare, school, and college attendance.[20]

All states allow children who have medical contraindications to vaccination to be exempted from these requirements. Most states also allow for exemption based on religious beliefs, although there is tremendous variability in the rigor with which such beliefs must be proved or documented. In fact, in some states parents simply need to state that "their religion" is against vaccination to be granted an exemption, even though no major religions specifically discourage vaccination.

Some states allow for exemption based on the secular personal beliefs of the parents. However, states do not allow religious or personal belief exemption from other laws or regulations designed to protect children. For example, parents cannot be exempted from placing infants in car seats simply because they do not "believe" in them. Likewise, states do not allow exemption from laws designed to protect others. For example, parents cannot allow their children to drive cars without a license, because this may place others (as well as the children) in harm's way. Whether or not children should be vaccinated before childcare or school entry ought not be a matter of "belief". Rather, it should be a matter of public policy based on the best available scientific evidence, and in this case the science is definitive: vaccines are safe and they save lives.

In this context, it is wrong to allow parents to exempt their children from required immunizations based on their personal beliefs. Exemption directly exposes children (who have no personal say in the matter) to harm. For example, the risk of measles among exemptors is 35-fold higher than among vaccinated children, even in communities where over 90% of children are immunized.[21] Likewise, refusal to vaccinate confers upon children a 23-fold higher risk of pertussis and a 9-fold higher risk of chickenpox.[22,23] Exemptions also confer risk to entire

communities. The incidence of pertussis, for example, is 1.5 times higher in states that allow personal belief exemptions than in those that do not.[24]
It goes without saying that disease outbreaks are both bad for public health and costly. The state therefore has a vested interest in minimizing the number of children exempted from vaccination, because disease will resurge if too many are exempted, and no one knows *a priori* exactly how many is too many.

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