AMERICAN ACADEMY OF PEDIATRICS

CLINICAL REPORT

Guidance for the Clinician in Rendering Pediatric Care

Douglas S. Diekema, MD, MPH; and the Committee on Bioethics

Responding to Parental Refusals of Immunization of Children

ABSTRACT. The American Academy of Pediatrics strongly endorses universal immunization. However, for childhood immunization programs to be successful, parents must comply with immunization recommendations. The problem of parental refusal of immunization for children is an important one for pediatricians. The goal of this report is to assist pediatricians in understanding the reasons parents may have for refusing to immunize their children, review the limited circumstances under which parental refusals should be referred to child protective services agencies or public health authorities, and provide practical guidance to assist the pediatrician faced with a parent who is reluctant to allow immunization of his or her child. *Pediatrics* 2005;115:1428–1431; *immunization, parental refusals, medical neglect, vaccine refusal.*

ABBREVIATION. AAP, American Academy of Pediatrics.

OVERVIEW OF THE PROBLEM

The immunization of children against a multitude of infectious agents has been hailed as one ▲ of the most important health interventions of the 20th century. 1-3 Immunizations have eliminated smallpox infection worldwide, driven polio from North America, and made formerly common infections like diphtheria, tetanus, measles, and invasive *Haemophilus influenzae* infections rare occurrences. By one account, pediatric immunizations are responsible for preventing 3 million deaths in children each year worldwide.³ Despite this success, some parents continue to refuse immunizations for their children. The number of pertussis cases has increased steadily in the United States over the past 20 years, and Web sites critical of immunization are prominent on the Internet, a source that many parents rely on for health information.⁴ It is ironic that the remarkable success of vaccine programs has resulted in a situation in which most parents have no memory of the devastating effects of illnesses such as poliomyelitis, measles, and other vaccine-preventable diseases, making it more difficult for them to appreciate the benefits of immunization.

According to a periodic survey of fellows of the American Academy of Pediatrics (AAP) on immuni-

The guidance in this report does not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate.

doi:10.1542/peds.2005-0316

PEDIATRICS (ISSN 0031 4005). Copyright © 2005 by the American Academy of Pediatrics.

zation-administration practices, 7 of 10 pediatricians reported that they had had a parent refuse an immunization on behalf of a child in the 12 months preceding the survey.⁵ Measles-mumps-rubella vaccine was refused most frequently, followed by varicella vaccine, pneumococcal conjugate vaccine, hepatitis B vaccine, and diphtheria and tetanus toxoids and pertussis vaccines. Four percent of pediatricians had refused permission for an immunization for their own children younger than 11 years. When faced with parents who refuse immunization, almost all pediatricians reported that they attempt to educate parents regarding the importance of immunization and document the refusal in the patient's medical record. A small number of pediatricians reported that they always (4.8%) or sometimes (18.1%) tell parents that they will no longer serve as the child's physician if, after educational efforts, the parents continue to refuse permission for an immunization.⁵

The AAP strongly endorses universal immunization. However, for universal childhood immunization programs to be successful, parents must comply with immunization recommendations. The problem of parental refusal of immunization for children is an important one for pediatricians. Parents may have many reasons for refusing immunization. Some parents may object to immunization on religious or philosophical grounds, some may object to what seems to be a painful assault on their child, and others may believe that the benefits of immunization do not justify the risks to their child. Many commonly held beliefs about the risks of immunization are not supported by available data, and they frequently originate from the unsupported claims of organizations that are critical of immunization. These antivaccine information sources not only propagate unproven claims regarding vaccines but also may undermine the physician-family relationship by challenging the parents' trust of the medical profession.

What should the pediatrician do when faced with a parent who refuses to consent to immunizations for a child? The goal of this clinical report is to provide guidance to the pediatrician faced with this difficult situation. The physician faced with a parent who refuses to immunize a child faces 3 important and distinct issues that will be addressed in this report. First, are there situations in which parents who withhold immunizations from their children risk harming them sufficiently that their decision constitutes actionable medical neglect and should be reported to

state child protective services agencies? Second, are there situations in which a parental decision to withhold immunization from a child puts other individuals at risk of harm sufficient to justify public health intervention? Finally, how should the pediatrician respond to a parent who refuses immunizations for his or her child?

PARENTAL REFUSALS AND THE BEST INTERESTS OF CHILDREN

Health care professionals and parents are bound by the duty to seek medical benefit for and minimize harm to children in their care. When faced with the decision to immunize a child, the welfare of the child should be the primary focus. However, parents and physicians may not always agree on what constitutes the best interest of an individual child. In those situations, physicians may need to tolerate decisions they disagree with if those decisions are not likely to be harmful to the child.⁶ Although decision-making involving the health care of children should be shared between physicians and parents, parental permission must be sought before children receive medical interventions, including immunizations.⁷ Parents are free to make choices regarding medical care unless those choices place their child at substantial risk of serious harm.

Whether parents place their children at substantial risk of serious harm by refusing immunization will depend on several factors, including the probability of contracting the disease if unimmunized and the morbidity and mortality associated with infection. The results of such an analysis will also vary depending on the prevalence of disease in the community in which the child resides or the areas in which the child is likely to travel. The balance between the risks and benefits to a given individual favors immunization most strongly when rates of immunization in the community are low and disease prevalence is high. In most cases, however, as immunization rates increase and disease prevalence decreases, the balance may tip the other way.8,9 Although the benefits of a measles-vaccine program, for example, clearly outweigh the risks at a population level, 10 an unimmunized child living in a well-immunized community derives significant indirect protection from herd immunity.¹¹ Even in a community with high immunization rates, the risk assumed by an unimmunized child is likely to be greater than the risks associated with immunization. However, the risk remains low, and in most cases the parent who refuses immunizations on behalf of his or her child living in a well-immunized community does not place the child at substantial risk of serious harm.

The role of the physician in these situations is to provide parents with the risk and benefit information necessary to make an informed decision and to attempt to correct any misinformation or misperceptions that may exist. For example, in a national survey of parents, 25% believed falsely that their child's immune system could become weakened as a result of too many immunizations. Exploring and addressing parental concerns may be an effective strategy with reluctant parents. Only in rare cases in

which the decision of a parent places a child at substantial risk of serious harm may the health care professional be obligated to involve state agencies in seeking to provide the necessary immunization over the parents' objections. For example, for the situation in which a child has sustained a deep and contaminated puncture wound, it might be justifiable to challenge the decision of a child's parents to refuse treatment with tetanus vaccine. In these situations, the health care professional would involve the appropriate state child protective services agency because of the concern about medical neglect. It would be up to the state agency to decide whether immunization would be required. Although this role of the state has been recognized as constitutionally valid in the United States, courts have closely examined such actions, showing reluctance to require medical treatment over the objection of parents "except where immediate action is necessary or where the potential for harm is rather serious."13

COMMUNITY INTERESTS AND PUBLIC HEALTH

The benefits provided by most vaccines extend beyond benefit to the individual who is immunized. There is also a significant public health benefit. Parents who choose not to immunize their own children increase the potential for harm to other persons in 4 important ways. 14 First, should an unimmunized child contract disease, that child poses a potential threat to other unimmunized children. Second, even in a fully immunized population, a small percentage of immunized individuals will either remain or become susceptible to disease. These individuals have done everything they can to protect themselves through immunization, yet they remain at risk. Third, some children cannot be immunized because of underlying medical conditions. These individuals derive important benefit from herd immunity and may be harmed by contracting disease from those who remain unimmunized. Finally, immunized individuals are harmed by the cost of medical care for those who choose not to immunize their children and whose children then contract vaccine-preventable disease.

A parent's refusal to immunize his or her child also raises an important question of justice that has been described as the problem of "free riders." 14-16 Parents who refuse immunization on behalf of their children are, in a sense, free riders who take advantage of the benefit created by the participation and assumption of immunization risk or burden by others while refusing to participate in the program themselves. The decision to refuse to immunize a child is made less risky because others have created an environment in which herd immunity will likely keep the unimmunized child safe. These individuals place family interest ahead of civic responsibility. Although such parents do reject what many would consider to be a moral duty, coercive measures to require immunization of a child over parental objections are justified only in cases in which others are placed at substantial risk of serious harm by the parental decision.

Compulsory immunization laws in the United

States have been upheld repeatedly as a reasonable exercise of the state's police power in the absence of an epidemic or even a single case. They also have been found to be constitutional even for cases in which the laws conflict with the religious beliefs of individuals.

When others are placed at substantial risk of serious harm, the range of choices of the individual may be restricted. With regard to immunization, the key question becomes whether the harms associated with unimmunized individuals are great enough to make restrictions permissible. In times of epidemic disease, when an effective vaccine can end the epidemic and protect those individuals who have not yet contracted the disease, the answer clearly is yes.

In a highly immunized population in which disease prevalence is low, the risk of disease from the small number of children who remain unimmunized does not usually pose a significant-enough health risk to others to justify state action.²⁰ Diseases with very high morbidity and mortality (such as smallpox), however, might create a situation in which even a single case of infection would justify mandatory immunization of the population. For most routine vaccines, less forcible alternatives can be used justifiably to encourage parents to immunize children because of the public health benefit. In the case of vaccines routinely recommended for children, the AAP supports the use of appropriate public health measures, education, and incentives for immunization.⁷ Because unimmunized children do pose a risk to other children who lack immunity to vaccinepreventable infections, the AAP also supports immunization requirements for school entry.

RESPONDING TO PARENTS WHO REFUSE IMMUNIZATION FOR THEIR CHILDREN

What is the pediatrician to do when faced with a parent who refuses immunization for his or her child? First and most important, the pediatrician should listen carefully and respectfully to the parent's concerns, recognizing that some parents may not use the same decision criteria as the physician and may weigh evidence very differently than the physician does.²¹ Vaccines are very safe, but they are not risk free; nor are they 100% effective.²² This poses a dilemma for many parents and should not be minimized. The pediatrician should share honestly what is and is not known about the risks and benefits of the vaccine in question, attempt to understand the parent's concerns about immunization, and attempt to correct any misperceptions and misinformation.^{23–25} Pediatricians should also assist parents in understanding that the risks of any vaccine should not be considered in isolation but in comparison to the risks of remaining unimmunized. For example, although the risk of encephalopathy related to the measles vaccine is 1 in 1 million, the risk of encephalopathy from measles illness is 1000 times greater.²² Parents can also be referred to one of several reputable and data-based Web sites for additional information on specific immunizations and the diseases they prevent (see pages 52 and 53 of the Red Book²⁵

for a list of Internet resources related to immunization).

Many parents have concerns related to 1 or 2 specific vaccines. A useful strategy in working with families who refuse immunization is to discuss each vaccine separately. The benefits and risks of vaccines differ, and a parent who is reluctant to accept the administration of 1 vaccine may be willing to allow others

Parents also may have concerns about administering multiple vaccines to a child in a single visit. In some cases, taking steps to reduce the pain of injection, such as those suggested in the *Red Book*,²⁶ may be sufficient. In other cases, a parent may be willing to permit a schedule of immunization that does not require multiple injections at a single visit.

Physicians should also explore the possibility that cost is a reason for refusing immunization. For a parent whose child does not have adequate preventive care insurance coverage, even the administrative costs and copayments associated with immunization can pose substantial barriers. In such cases, the physician should work with the family to help them obtain appropriate immunizations for the child.

For all cases in which parents refuse vaccine administration, pediatricians should take advantage of their ongoing relationship with the family and revisit the immunization discussion on each subsequent visit. As respect, communication, and information build over time in a professional relationship, parents may be willing to reconsider previous vaccine refusals.

Continued refusal after adequate discussion should be respected unless the child is put at significant risk of serious harm (as, for example, might be the case during an epidemic). Only then should state agencies be involved to override parental discretion on the basis of medical neglect. Physician concerns about liability should be addressed by good documentation of the discussion of the benefits of immunization and the risks associated with remaining unimmunized. Physicians also may wish to consider having the parents sign a refusal waiver (a sample refusal-to-immunize waiver can be found at www.cispimmunize.org/ pro/pdf/RefusaltoVaccinate_2pageform.pdf). In general, pediatricians should avoid discharging patients from their practices solely because a parent refuses to immunize his or her child. However, when a substantial level of distrust develops, significant differences in the philosophy of care emerge, or poor quality of communication persists, the pediatrician may encourage the family to find another physician or practice. Although pediatricians have the option of terminating the physician-patient relationship, they cannot do so without giving sufficient advance notice to the patient or custodial parent or legal guardian to permit another health care professional to be secured.²⁷ Such decisions should be unusual and generally made only after attempts have been made to work with the family. Families with doubts about immunization should still have access to good medical care, and maintaining the relationship in the face of disagreement conveys respect and at the same time allows the child access to medical care. Furthermore, a continuing relationship allows additional opportunity to discuss the issue of immunization over time.

Committee on Bioethics, 2003–2004 Jeffrey R. Botkin, MD, MPH, Chairperson Douglas S. Diekema, MD, MPH G. Kevin Donovan, MD, MLA Mary E. Fallat, MD Eric D. Kodish, MD Steven R. Leuthner, MD, MA Marcia Levetown, MD

LIAISONS
Christine E. Harrison, MD
Canadian Paediatric Society
Marcia Levetown, MD
American Board of Pediatrics
Arlene Morales, MD
American College of Obstetricians and
Gynecologists

STAFF Alison Baker, MS

REFERENCES

- Centers for Disease Control and Prevention. Impact of vaccines universally recommended for children—United States, 1990–1998. MMWR Morb Mortal Wkly Rep. 1999;48:243–248
- Centers for Disease Control and Prevention. Ten great public health achievements—United States, 1990–1999. MMWR Morb Mortal Wkly Rep. 1999;48:241–243
- Bonanni P. Demographic impact of vaccination: a review. Vaccine. 1999; 17(suppl 3):S120–S125
- 4. Davies P, Chapman S, Leask J. Antivaccination activists on the World Wide Web. *Arch Dis Child*. 2002;87:22–25
- American Academy of Pediatrics, Division of Health Policy Research. Periodic Survey of Fellows No. 48: Immunization Administration Practices. Elk Grove Village, IL: American Academy of Pediatrics; 2001
- Buchanan AE, Brock DW. Deciding for Others: The Ethics of Surrogate Decision Making. New York, NY: Cambridge University Press; 1990
- American Academy of Pediatrics, Committee on Bioethics. Informed consent, parental permission, and assent in pediatric practice. *Pediatrics*. 1995:95:314–317
- 8. Pertussis vaccine. Br Med J (Clin Res Ed). 1981;282:1563–1564
- 9. Vaccination against whooping cough. Lancet. 1981;1(8230):1138-1139
- Hinman AR, Koplan JP. Pertussis and pertussis vaccine. Reanalysis of benefits, risks, and costs. JAMA. 1984;251:3109–3113

- Fox JP, Elveback L, Scott W, Gatewood L, Ackerman E. Herd immunity: basic concept and relevance to public health immunization practices. *Am J Epidemiol*. 1971;94:179–189
- Gellin BG, Maibach EW, Marcuse EK. Do parents understand immunizations? A national telephone survey. *Pediatrics*. 2000;106:1097–1102
- Wing KR. The Law and the Public's Health. 3rd ed. Ann Arbor, MI: Health Administration Press; 1990
- Veatch RM. The ethics of promoting herd immunity. Fam Community Health. 1987;10:44–53
- Menzel PT. The pros and cons of immunisation—paper four: noncompliance: fair or free-riding. Health Care Anal. 1995;3:113–115
- Ball LK, Evans G, Bostrom A. Risky business: challenges in vaccine risk communication. *Pediatrics*. 1998;101:453–458
- McMenamin JP, Tiller WB. Children as patients. In: American College of Legal Medicine. Legal Medicine: Legal Dynamics of Medical Encounters. 2nd ed. St Louis, MO: Mosby Year Book; 1991:282–317
- Dover TE. An evaluation of immunization regulations in light of religious objections and the developing right of privacy. *Univ Dayton Law Rev.* 1979;4:401–424
- 19. Jacobson v Massachusetts, 197 US 11 (1905)
- Ross LF, Aspinwall TJ. Religious exemptions to the immunization statutes: balancing public health and religious freedom. J Law Med Ethics. 1997;25:202–209, 83
- Meszaros JR, Asch DA, Baron J, Hershey JC, Kunreuther H, Schwartz-Buzaglo J. Cognitive processes and the decisions of some parents to forego pertussis vaccination for their children. J Clin Epidemiol. 1996;49: 697–703
- Maldonado YA. Current controversies in vaccination: vaccine safety. JAMA. 2002;288:3155–3158
- Wilson CB, Marcuse EK. Vaccine safety—vaccine benefits: science and the public's perception. Nat Rev Immunol. 2001;1:160–165
- Pattison S. Ethical debate: vaccination against mumps, measles, and rubella: is there a case for deepening the debate? Dealing with uncertainty. BMJ. 2001;323:840
- American Academy of Pediatrics. Parental misconceptions about immunization. In: Pickering LK, ed. Red Book: 2003 Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2003:50–53
- American Academy of Pediatrics. Managing injection pain. In: Pickering LK, ed. Red Book: 2003 Report of the Committee on Infectious Diseases.
 26th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2003: 20–21
- American Medical Association, Council on Ethical and Judicial Affairs.
 Termination of the physician-patient relationship. In: Code of Medical Ethics: Current Opinions. 2002–2003 ed. Chicago, IL: American Medical Association; 2002:110

All clinical reports from the American Academy of Pediatrics automatically expire 5 years after publication unless reaffirmed, revised, or retired at or before that time.