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# Off the Grid: Vaccinations Among Homeschooled Children

*Donya Khalili and Arthur Caplan*

Every September, millions of parents around the country herd their children into pediatricians' offices with school immunization forms in hand. Their kids have already received a dozen or more shots before the age of two, and, depending on the state in which they live, a dozen more may await them over the ensuing decade. To protect public health, states require that parents have their children immunized before they are permitted to attend public or private school, but the rules vary for homeschooled children. With the spectacular growth in the number of homeschooled students, it is becoming more difficult to reach these youth to ensure that they are immunized at all. These children are frequently unvaccinated, leaving them open to infection by diseases that have been all but stamped out in the United States by immunization requirements. States should encourage parents to have their homeschooled students vaccinated by enacting the same laws that are used for public school students, enforcing current laws through neglect petitions, or requiring that children be immunized before participating in school-sponsored programs.

Vaccinations are required for entrance into public schools to protect the public health, as schools are a veritable breeding ground for disease, causing epidemics across the country. Mandatory immunizations also serve as a tool to ensure that all young children are vaccinated before exposure, when the vaccinations are most efficacious and provide the greatest protection of the public health. Requiring it for public schools provides a

powerful incentive for people to vaccinate their children since parents want their kids to be able to attend school. Additionally, the government monitors children's health and well-being through the school system, which makes schools an excellent forum to ensure that all children have received their childhood vaccinations.

## Laws Governing Compulsory Education in America

All 50 states have compulsory education laws to ensure that children determined to be of school age<sup>1</sup> must attend school every day or be held truant.<sup>2</sup> However, the Supreme Court held that parents have certain rights to direct their children's upbringing free from governmental intrusion. For example, *Meyer v. Nebraska*<sup>3</sup> upheld parents' right to direct their children's education, and *Pierce v. Society of the Sisters*<sup>4</sup> held that states cannot require students to go to public school when parents would prefer to have their children attend private or parochial school. These cases establish that compulsory school statutes are reasonable, but found that these laws are not unconstitutional per se.

However, in *Prince v. Massachusetts*,<sup>5</sup> the Supreme Court noted some limitations on a parent's right to raise a child without government intervention, including vaccinations and mandatory regular school attendance<sup>6</sup> as examples of permissible state restrictions of parental control. The state has an interest in protecting children's health, education, safety, and well-being. In keeping with the protection of health and well-being, all 50 states and the District of Columbia mandate that all children receive some vaccinations for them to attend public school with state-specific exemptions. Each state has varying vaccination schedules, requiring different immunizations at different times. In addition, states differ in what exemptions they allow.

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State laws treat private schools, including charter and parochial schools, largely the same way as public schools for the purposes of vaccination.<sup>7</sup> While schools can be required to mandate and report immunizations before enrollment, it is not clear that all of these schools actually follow these regulations. It is also possible that some private schools, in distribut-

who homeschool their children outside of the United States; indeed, it is frequently illegal.<sup>14</sup>

Parents cite a number of different reasons for choosing to homeschool, including concerns about the school environment and desires to provide religious/moral instruction.<sup>15</sup> In fact, a Department of Education study says that 38.4 percent of respondents claim they are homeschooling for religious reasons,<sup>16</sup> while Christopher Klicka suggests in his book, *The Right to Home School*, that it is closer to 85 percent.<sup>17</sup> Regardless, religion is a prime motivator to choose homeschooling over public school and a key reason for choosing not to vaccinate.

Most children in America are immunized prior to enrollment in public and private schools, but these laws largely do not protect homeschooled children<sup>18</sup> where the laws that apply to them vary substantially across the country.<sup>19</sup> Home-

schoolers do not necessarily receive the "child-protective functions of formal schooling, such as vaccination requirements and health screenings."<sup>20</sup> No teacher monitors whether the children are abused or neglected by their parents or, in some states, whether they receive a comprehensive education with them. The level of regulation and monitoring varies dramatically by state, and with three basic types of state regulation: no registration, basic registration, and intense regulation. Since Texas<sup>21</sup> requires no contact with the state to set up a home school, parents must merely keep their kids home from school and educate them there, which makes it difficult to understand how states can even enforce that requirement (no registration), as the state does not know who homeschools their children.

Most states, however, require either basic registration or more rigorous standards. Alabama,<sup>22</sup> for example, requires only that parents register the school, but the state does little or no follow-up, and most of these schools have no substantial requirements of curriculum or attendance. Equivalency laws exempt students from compulsory attendance if they receive equivalent instruction elsewhere, as they do in a home school. In Connecticut<sup>23</sup> and Massachusetts,<sup>24</sup> for example, parents must submit paperwork and include certain subjects, such as reading, writing, and arithmetic, in the curriculum. Some states have more restrictive, specific regulations for homeschools, including Ohio,<sup>25</sup> South Carolina,<sup>26</sup> West Virginia,<sup>27</sup> and Wisconsin.<sup>28</sup> Ohio, for example, requires that the instructor be qualified, that the district superintendent give approval, and that any religious exemption to compulsory schooling meet a three-prong test of religious sincerity, free exercise, and the state's overriding interest.<sup>29</sup>

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ing immunization forms<sup>8</sup> that list exemption information, pressure parents to pursue these exemptions for religious or other reasons. These are likely to be religious schools, especially those for the Amish or Christian Scientists, whose populations are largely unvaccinated. Thus, an outbreak of measles could cause disaster. Indeed, "the last two American polio outbreaks were in Amish and Mennonite communities in 1979 and in a Christian Science school in Connecticut in 1972...in 1991, 890 cases of rubella, leading to more than a dozen deformed children, hit Amish areas."<sup>9</sup> Not vaccinating these children clearly puts them at risk for death and disease. However, for the most part, private schools approach vaccination similarly to public schools.

### Laws Governing Homeschooling in America

Homeschooling is a growing movement in the United States. The National Center for Education Statistics reported in 2003 that approximately 1.1 million students in the United States were homeschooled, a 29 percent increase in just five years.<sup>10</sup> This number is disputed, however, as some states<sup>11</sup> do not require parents even to register that their children are being homeschooled. The National Center for Home Education suggests that the number of homeschooled children is closer to two million, which comprises 2.2 percent of the population of school-age children in the United States.<sup>12</sup> Whatever the exact number, homeschooling is a fast-growing phenomenon in this country that shows no signs of losing popularity. Despite claims by the Homeschool Legal Defense Association of a growing interest in homeschooling abroad,<sup>13</sup> there are currently no significant numbers of parents

## Laws Governing School Vaccinations in the United States

Massachusetts enacted the first mandatory immunization law in 1809, shortly after Dr. Edward Jenner's smallpox vaccine became available.<sup>30</sup> In 1905, the Supreme Court ruled in *Jacobson v. Massachusetts*<sup>31</sup> that state-mandated, compulsory vaccination was permitted to "protect the public health and public safety"<sup>32</sup> but that certain, unnamed exemptions exist. At that time, all but six states had a statute regarding smallpox vaccination.<sup>33</sup> However, in 1922, the Court upheld a local statute in *Zucht v. King*<sup>34</sup> and required that children be immunized before enrolling in school.

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offer a philosophical objection, either instead of or in addition to the other objections.<sup>40</sup> When philosophical objections are available, they are used substantially to avoid immunization altogether, as parents usually explain that they are against vaccinations, with little or no follow-up from the state.

Some states provide religious exemptions only to members of recognized religions, such as Dutch Reformed (Amish) or Christian Science, that prohibit this kind of medical care. New York actually requires that the religious belief be "genuine and sincere,"<sup>41</sup> forcing state employees to determine whether someone's religious belief is genuinely and sincerely held – hardly the job of a bureaucrat. However, some less restrictive states allow people to claim a broader range

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nity as a whole. Vaccinations protect the community by creating "herd immunity." Essentially, when a large proportion of group members are immune to a disease, the group as a whole is resistant to attack. Herd immunity protects a small number of unvaccinated individuals in a community from coming into contact with the disease because of the vaccination of their neighbors.<sup>35</sup> The proportion of members of a community that must be vaccinated for the group to have herd immunity, called the threshold, varies by disease, but seems to hover around 90 percent for most childhood vaccines.<sup>36</sup> Thus, to protect the community from diseases like the measles or whooping cough, approximately 90 percent of people must receive vaccinations. As more and more people choose not to vaccinate, they undermine the herd immunity that protects those who cannot be vaccinated for medical reasons, putting the community's health at risk.

"Since *Jacobson*, we have come to recognize that although states may restrain liberty in order to protect public health, there are constitutional limits to public health powers."<sup>37</sup> While states may mandate a schedule of vaccinations for students to attend public schools as well as require compulsory education, they must also provide exemptions for certain circumstances. However, there is no consistent rule among the states. Most states offer some kind of a medical exemption<sup>38</sup> and a religious exemption<sup>39</sup> though three states (Mississippi, West Virginia, and Arkansas) do not offer a religious exemption. At least 17 states, including Arizona, also

of religions to receive an exemption, including one organized by a group of chiropractors that preaches that the only acceptable form of medical care is placing hands on the spine.<sup>42</sup>

Regulation of vaccination for homeschoolers is even more haphazard. States like Texas and Mississippi that do not even require registration in order to homeschool make it nearly impossible to track compliance with any childhood vaccination regulations, as there are no records to file with the state. Additionally, Mississippi offers no religious exemption for vaccination laws.<sup>43</sup> There, all children who attend public school must be vaccinated unless they have a valid medical exemption, offering an automatic exemption for homeschoolers.<sup>44</sup> Even states like Illinois, which require immunizations for homeschoolers,<sup>45</sup> have no follow-up mechanism.

North Carolina, on the other hand, specifically requires that homeschooled children be vaccinated,<sup>46</sup> treating children who attend public, private, and home schools exactly the same. This is the ideal situation to increase rates of vaccination. Compulsory education provides both the carrot and the stick to encourage immunization. However, with homeschooling, unless the state requires registration and proof of immunization or accepted exemption as under the North Carolina model, there is no inducement to vaccinate. Many state legislators may believe that the purpose of requiring immunizations to attend public schools is solely to stop contagion efficiently. While this is certainly one reason, it is also an incentive to encourage immunization in

general to allow herd immunity to exert its full protection of the community. Thus, the laws should apply to public, private, and home schooled children equally.

### Reasons Parents Choose Not to Immunize Their Children

“Legal power alone cannot protect public health.”<sup>47</sup> Parents must trust that the government-mandated vaccinations are actually for the public health and will benefit all citizens. Parents choose not to vaccinate for a number of reasons. Some belong to religions, like Christian Science, that prohibit this kind of medical care or philosophically object to immunizations as inappropriate forms of medical care. Some do not wish to allow their children to be hurt, and others do not believe that the benefits outweigh the risks, as they think that their children will never catch measles because herd immunity will protect them. Some do not wish their children to be tracked by the state vaccination registries, started by former Secretary Donna Shalala during the Clinton administration, that exist to ensure that all children attending public schools are immunized.

Parents can make risk-based decisions without good information, but their decision-making process can be improved with more complete information about vaccinations and the real dangers that exist.<sup>48</sup> A recent study suggested that “15% of adults believe vaccines are unnecessary to prevent disease and that 61% believe that childhood vaccines are at least somewhat unsafe.”<sup>49</sup> And some parents who choose to homeschool simply do not trust the government to inject chemicals into their children, even with promises and evidence that they prevent disease. Some fear potential or fictional medical complications, such as the myth that autism is caused by vaccinations<sup>50</sup> or chemical damage. At the most basic level, doctors who give immunizations must give adequate information to the public on the benefits of vaccinations for the entire community and their children specifically. With a growing number of children remaining unprotected, homeschoolers or not, the herd may no longer be enough to protect homeschooled children.<sup>51</sup> As noted, if a community requires 90 percent immunization rates to maintain herd immunity and those who require medical exemptions must take priority, the growing number of homeschooled children puts herd immunity at risk. Parents who do not immunize their children are extracting the benefit from other parents who have put their children at the minimum risk by having them vaccinated. This “free rider” problem takes advantage of others who provide immunity for their children by placing “family interest ahead of civic responsibility.”<sup>52</sup> This should

not be encouraged, as the more children who remain unvaccinated, the less protected the community. We must use the options at hand to increase immunization rates.

### Rationales for Requiring Vaccination for Children Not Attending Public School

*Jacobson*<sup>53</sup> gives state governments the ability to mandate vaccination for citizens, whether adult or child, as it is in the public interest for all children to receive immunization. Whether a child attends public school or home school does not automatically exempt anyone. Public schools do not require immunization merely to protect the students at school; it is an incentive to get parents to vaccinate their children to protect the public health.

As noted, vaccinations do not work perfectly every time; even people who have been immunized have a risk of catching the disease. Vaccines work best when everyone receives them so that no one can carry the illness back to the group and put them at risk. School immunization provides long-term benefits both to those who have and those who have not received the vaccine. Those who have not had the vaccine are at risk in times of outbreak and put other students and later, adults at risk.<sup>54</sup> Schools in most states now have the right to exclude students who have been legally exempted from vaccinations from school when there is an outbreak, but that does not protect adults.

A state’s right to mandate vaccination to protect the public health does not hinge on whether a student attends public school. State governments have the power to require that all student-age children, regardless of whether they attend public school, provide proof of vaccination or records of approved exemptions, as with North Carolina.

Some parents who do not want their children immunized cannot get a religious or medical exemption. These parents may choose to remove their children from public or private school and homeschool them in order to avoid vaccinations. However, it is more important from a public health standpoint to protect the great majority of children from disease than it is to put more people in public schools. In addition, just because parents do not want their children to go to public school does not mean that they do not want their children to be vaccinated. And though the law may not require vaccination, this does not mean that all homeschoolers will choose not to immunize. The simplest and most fair solution is to require parents of homeschooled children to submit to the same immunization rules and exemptions as those who send their kids to public schools.



## Strategies to Encourage Vaccination of Homeschooled Children

Obviously, the simplest method to get homeschoolers to vaccinate their children is simply to require it in order to be homeschooled, as is done in North Carolina.<sup>55</sup> States can require whatever paperwork they wish from parents to allow them to homeschool their children, but as previously noted, some require nothing, and some require extensive paperwork with some monitoring. While the Supreme Court has established strong parental rights in choosing how a child is educated, parents do not have a right to avoid state attention entirely. Thus, the North Carolina model can be enforced through refusing to register parents as valid homeschoolers without this paperwork, so that their children are truant from school if they refuse to submit to the requirements. If truant, the school district and local child services organization can intervene to ensure the health and safety of the children. This re-

they frequently succeed. The North Carolina statute was passed in 1981 before the homeschooling movement had gained traction and power, so it was likely not as well resisted as it would be now. As the goal is to encourage parents to vaccinate their children, the least that the state ought to do is provide the same opt-out model for parents that they have for public schools, rather than providing an automatic exemption for homeschooled children, as Mississippi<sup>56</sup> has done.

If requiring that parents file their immunization paperwork before being permitted to homeschool their children proves politically impossible, then other methods for immunization can be encouraged. Many homeschooled children participate in government-funded programs, such as school competitions, e.g., spelling bees, debates, and sports teams, in order to provide socialization with other children. Schools could easily require that, to participate in these school-sponsored programs, children must provide proof of immunization or validated exemption. This back-door requirement might prevent some people from participating in school-sponsored programs, but the state's interest in public health is more important than whether a child would participate in a program.

By at least creating the semblance of requiring parents to have their children vaccinated, as required by laws that currently

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may seem extreme, but it simply necessitates that parents fill out a form describing their religious, medical, or philosophical objections to vaccination, as the state allows, after which they will be evaluated in the same manner as parents of kids attending public and private schools.

Indeed, in many states, it would be relatively simple to change systems. States that require even basic registration to homeschool could easily require proof of immunization or a valid exemption as part of their homeschool registration program. States that require registration and some monitoring could more easily require that parents comply with the state immunization requirements under the same rules as provided for public school students before they receive permission to homeschool. The only question is: why have they not done so already?

Given the laws in many states, especially in Illinois, that strongly protect the rights of homeschoolers, there might be substantial opposition to this change. Homeschoolers have very powerful lobbying groups that have fought and will fight any regulation or monitoring of their programs. The Homeschool Legal Defense Association vigorously fights all attempts to regulate homeschooling in any way around the country, and

currently do not require registration of immunization information, there exists the possibility of enforcing this provision through other means. In states where immunization is obligatory officially but unmonitored, vaccinations could be required through enforcing child neglect, delinquency, and child labor statutes, as suggested by the American Academy of Pediatrics Committee on Bioethics.<sup>57</sup> While health care professionals do not advocate its usage outside of emergency situations, they can contact state child protective services agencies if concerned about medical neglect. This could come up, for example, if "a child's parents refuse treatment [of a deep and contaminated puncture wound] with tetanus vaccine,"<sup>58</sup> but would likely not be implicated for routine immunizations. This would be an extremely unpopular system as most parents, whether or not they want their children vaccinated, would be concerned if the government began to routinely overrule parental decisions as to their children's non-emergency medical care.

As the homeschooling movement continues to grow in this country, more children will be untouched by the laws mandating vaccinations to attend public schools. They will become adults who are vulnerable to childhood diseases like measles and whooping cough and

will put others who have been vaccinated at risk. The state has an interest in protecting all people in both their childhood and adulthood, whether they attend public schools, private schools, or home schools. All parents who choose not to vaccinate, not just those who homeschool their children, rely on herd protection to ensure their children's health, but doing so forces others to get shots to provide for their immunity. But as a smaller proportion of people vaccinate, herd immunity becomes weaker, and everyone is less safe. Immunization is easy to do, important to the public health of everyone's children, and a governmental responsibility. The number of homeschooled children is growing rapidly in the United States, and the government barely tries to protect their health through vaccination. This inattention places everyone at risk. While homeschooling and childhood vaccination laws vary substantially among states, the most direct way to encourage more parents to have their children vaccinated is to require that homeschoolers follow the same rules of mandatory immunization and standard exemptions that parents of public schooled students must follow. With improved vaccination rates, all Americans will be more protected against disease, and it is critical to the health and safety of our nation that we protect the health and safety of homeschooled children.

## References

- These ages vary by state, but are frequently defined as ages seven through 16. See e.g., Ala. Code § 16-28-3 (1975), Alaska Stat. § 14.30.010 (2006), and Colo. Rev. Stat. § 22-33-104 (2000).
- See e.g., Ala. Code § 16-28-3 (1975), Alaska Stat. § 14.30.010 (2006), and Ariz. Rev. Stat. § 15-802 (1990).
- Meyer v. Nebraska*, 262 U.S. 390 (1923) (holding unconstitutional a Nebraska statute forbidding teaching school in any language other than English).
- Pierce v. Society of the Sisters*, 268 U.S. 510 (1925).
- Prince v. Massachusetts*, 321 U.S. 158 (1944).
- However, in *Wisconsin v. Yoder*, 406 U.S. 205 (1972), the Court held that it was acceptable for parents to remove their children from school before the age of 16, without putting the children in a new school, for religious reasons, because the children were Amish in this case. The Court noted a difference between religious and philosophical reasons for exemption from compulsory schooling.
- See e.g., Miss. Code Ann. § 41-23-37 (1983) ("It shall be unlawful for any child to attend school...either public or private...unless they had been vaccinated.")
- See e.g., California Department of Health Services, *California School Immunization Record*, 2006, available at <<http://www.dhs.ca.gov/publications/forms/pdf/pm286b.pdf>> (last visited May 9, 2007).
- D. G. McNeil, "Worship Optional: Joining a Church to Avoid Vaccines," *New York Times*, January 14, 2003, at F1.
- S. Reilly and A. Gonzalez, "Home-Schooling Up," *USA Today*, September 1, 2004, at A1.
- Texas and Michigan require no registration for parents to homeschool children.
- L. P. Nappen, "The Privacy Advantages of Homeschooling," *Chapman Law Review* 9, no. 1 (2002): 73-109, at 80, citing "More Kids Learning at Home, U.S. Says," *Asbury Park Press*, August 4, 2004, at A5.
- C. J. Klicka, "Homeschooling Expands around the Globe," October 2, 2001, available at <<http://www.hslda.org/hs/international/200110020.asp>> (last visited January 14, 2006). ("Homeschooling is gradually but steadily spreading across the world.")
- Id.* ("Unfortunately, they often find out it is not legal where they live....A number of these parents have also asked Home School Legal Defense Association for assistance as they seek to gain this freedom in their own countries.")
- See Reilly and Gonzalez, *supra* note 10.
- S. Bielick, U.S. Department of Education, *Homeschooling in the United States: 1999, 2001*.
- C. J. Klicka, *The Right to Home School: A Guide to the Law on Parents' Rights in Education*, 2nd ed. (Durham, NC: Carolina Academic Press, 1998): at 2.
- But see, e.g., *People v. Levisen*, 90 N.E.2d 213 (1950) (noting that home instruction may constitute a private school in Illinois).
- Some states, like Arizona, Ariz. Rev. Stat. § 15-802 (1990), require that home schools have specific curriculums, submit to home visits like Minnesota, Minn. Stat. Ann. § 120A.22 (2006), affiliate with a home school organization like Delaware, Del. Code Ann. Tit. 14 § 2702 (2006), or take standardized tests like Arkansas, Ark. Code Ann. § 6-18-201 (2003).
- J. McMullen, "Behind Closed Doors: Should States Regulate Homeschooling?" *South Carolina Law Review* 54, no. 1 (2002): 75-109, at 83.
- Texas Education Agency v. Leeper*, 893 S.W.2d 432, 435 (Tex. 1994).
- Ala. Code § 16-28-7 (2001) ("[E]ach private tutor...shall report on forms prescribed by the State Superintendent of Education to the county superintendent of education...or to the city superintendent of schools...the names and addresses of all children between the ages of seven and 16 years who have enrolled in such schools.")
- Conn. Gen. Stat. Ann. § 10-184 (West 2002). (If "the parent or person having control of such child is able to show that the child is elsewhere receiving equivalent instruction in the studies taught in the public schools [then such] parent or person shall personally appear at the school district office and sign a withdrawal form. The school district shall provide such parent or person with information on the educational options available in the school system and in the community.")
- Mass. Gen. Laws Ann. ch. 76, § 1 (West 2002) (instructing that school superintendents may approve alternative educational systems for children).
- Ohio Rev. Code Ann. § 3321.04 (A)(2) (1995) (The district superintendent may permit homeschooling after determining that "the child is being instructed at home by a person qualified to teach the branches in which instruction is required, and such additional branches, as the advancement and needs of the child may, in the opinion of such superintendent, require.")
- S.C. Code Ann. §§ 59-65-45 (2001) ("[P]arents or guardians may teach their children at home if the instruction is conducted under the auspices of the South Carolina Association of Independent Home Schools.")
- W. Va. Code § 18-8-1(c)(2)(A) (2003) ("Annually, the person or persons providing home instruction shall present to the county superintendent or county board a notice of intent to provide home instruction and the name, address, age and grade level of any child of compulsory school age to be instructed.")
- Wis. Stat. Ann. § 115.30(3) (West 1999) (Every "home-based private educational program shall submit, on forms provided by the department, a statement of the enrollment on the 3rd Friday of September.")
- State v. Whisner*, 470 S.2d 181 (1976) (adopting *Wisconsin v. Yoder*, 406 U.S. 205 [1972] for Ohio).
- C. L. Jackson, "State Laws on Compulsory Immunization in the United States," *Public Health Report* 84, no. 9 (1969): 787-795, at 787.
- Jacobson v. Massachusetts*, 197 U.S. 1 (1905).
- Id.*, at 25 ("[T]he police power of a state must be held to embrace, at least, such reasonable regulations established directly by legislative enactment as will protect the public health and public

- safety.”) It is clear that among the exemptions implied was that the government could not take citizens aside on the street and demand to inject them with vaccinations, as what happened to the plaintiff in this case.
33. W. Fowler, “Principal Provisions of Smallpox Vaccination Laws and Regulations in the United States,” *Public Health Reports* 56 (1941): 167-173, at 167 (laying out smallpox vaccination statistics).
  34. *Zucht v. King*, 260 U.S. 174, 176 (1922).
  35. R. M. Anderson and R. M. May, *Infectious Diseases of Humans: Dynamics and Control* (Oxford, England: Oxford University Press, 1991): at 31.
  36. National Network for Immunization Information, “Immunization Issues: Community Immunity,” May 23, 2006, available at <[http://www.immunizationinfo.org/immunization\\_issues\\_detail.cfv?id=26](http://www.immunizationinfo.org/immunization_issues_detail.cfv?id=26)> (last visited May 9, 2007).
  37. W. E. Parmet, R. A. Goodman, and A. Farber, “Individual Rights versus the Public’s Health – 100 Years after *Jacobson v. Massachusetts*,” *New England Journal of Medicine* 352, no. 7 (February 17, 2005): 652-654, at 652.
  38. See e.g., Ala. Code § 16-30-3 (2) (1975) (“A competent medical authority may provide an individual exemption, to be presented to the admissions officer of the school), 4 Alaska Admin. Code tit. 4, § 06.055 (b)(2) (2006) (“Affidavit signed by a licensed doctor... stating that immunization would be hazardous to the health and welfare of the child or to members of his family or household.”)
  39. See e.g., Colo. Rev. Stat. § 25-4-901(2)(a), (b)(2) (2000) (“A signed statement that the child or parent ‘is an adherent to a religious belief whose teachings are opposed to immunizations....’”)
  40. See e.g., Ariz. Rev. Stat. § 15-873 (A)(1) (1990) (“The parent... may submit a signed statement to the school administrator stating that they have received information from the department of health services, understand the risks and benefits of immunization and non-immunization, and that due to personal beliefs do not consent to immunization.”)
  41. N.Y. Pub. Health § 2164.8.
  42. See D. G. McNeil, *supra* note 9.
  43. *Brown v. Stone*, 378 So. 2d. 218 (Miss. 1979), cert. denied 449 U.S. 887 (holding that Miss. Code Ann. § 41-23-37 [1972], which allowed religious exemptions to vaccination requirements, was unconstitutional under the Fourteenth Amendment to the U.S. Constitution).
  44. Miss. Code Ann. § 41-23-37 (1983) (It “shall be unlawful for any child to attend any school, kindergarten or similar type facility intended for the instruction of children (hereinafter called ‘schools’), either public or private, with the exception of any legitimate home instruction program...unless they shall first have been vaccinated against those diseases specified by the state health officer.”)
  45. 105 Ill. Comp. Stat. 5/27-8.1 (6) (2005) (noting that all schools, including private and home schools, must report “the number of children who have received the necessary immunizations” and “the number of children who are exempt”).
  46. N.C. Gen. Stat. Ann. §§39-115C-548, -556 (West 2001).
  47. See Parmet, Goodman, and Farber, *supra* note 37.
  48. L. Serpell and J. Green, “Parental Decision-Making in Childhood Vaccination,” *Vaccine* 24, no. 19 (2006): 4041-4046, at 4045. (“People are, reasonably enough, more likely to believe the reassuring part of a message if they feel they are being given all the negative information.”)
  49. *Id.*, at 4041-42, quoting D. Neumann and M. Garel et al., *Attitudes about Childhood Immunization – 2003 Survey Results*, paper presented at the 38th National Conference Immunization Conference, 2004.
  50. B. Taylor, E. Miller, and C. P. Farrington et al., “Autism and Measles, Mumps and Rubella Vaccine: No Epidemiological Evidence for a Causal Association,” *Lancet* 353, no. 9169 (1999): 2026-29.
  51. M. A. Stoto, G. Evans, and A. Bostrom, “Vaccine Risk Communication,” *American Journal of Preventative Medicine* 13, no. 3 (1998): 237-239, at 237.
  52. D. S. Diekema, “Responding to Parental Refusals to Immunization of Children,” *Pediatrics* 115, no. 5 (May 2005): 1428-1431, at 1429.
  53. See Jacobson, *supra* note 31.
  54. See Center for Disease Control, “Update, Multistate Outbreak of Mumps – United States, January 1-May 2, 2006,” available at <<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm55d518a1.htm>> (last visited May 9, 2007) (noting that, in mumps outbreaks, “accumulation of susceptible persons who were not successfully immunized might be sufficient to sustain transmission in certain settings”).
  55. N.C. Gen. Stat. Ann. §§39-115C-548, -556 (West 2001).
  56. See Miss. Code, *supra* note 44.
  57. See Diekema, *supra* note 52 (describing the “limited circumstances under which parental refusals should be referred to child protective services agencies...”).
  58. *Id.*, at 1429.

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