

Q: Should parents be allowed to opt out of vaccinating their kids?

Yes: Children at risk for adverse reactions should be given a pass without penalty.

BY BARBARA LOE FISHER



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Parents do not want their children to be injured or die from a disease or a vaccination. As guardians of their children until those children are old enough to make life-and-death decisions for themselves, parents take very seriously the responsibility of making informed vaccination decisions for the children they love. That responsibility includes becoming educated about the relative risks of diseases when compared to the vaccines aimed at preventing them.

Like every encounter with a viral or bacterial infection, every vaccine containing lab-altered viruses or bacteria has an inherent ability to cause injury or even death. Vaccination either can produce immunity without incident or can result in mild to severe brain and immune-system damage, depending upon the vaccine or combination of vaccines given, the health of the person at the time of vaccination and whether the individual is genetically or otherwise biologically at risk for developing complications.

The fact that vaccines can cause injury and death officially was acknowledged in the United States in 1986 when Congress passed the National Childhood Vaccine Injury Act, creating a no-fault federal compensation system for vaccine-injured children to protect the vaccine manufacturers and doctors from personal-injury lawsuits. Since then, the system has paid out more than \$1 billion to 1,000 families, whose loved ones have died or been harmed by vaccines, even though three out of four applicants are turned away.

Since 1990, between 12,000 and 14,000 reports of hospitalizations, injuries and deaths following vaccination are made to the federal Vaccine Adverse Event Reporting System, or VAERS, annually, but it is estimated that only between 1 and 10 percent

of all doctors make reports to VAERS. Therefore, the number of vaccine-related health problems occurring in the United States every year may be more than 1 million.

In the late 1980s, the Institute of Medicine, or IOM, and the National Academy of Sciences convened committees of physicians to study existing medical knowledge about vaccines and, in 1991 and 1994, IOM issued historic reports confirming vaccines can cause death, as well as a wide spectrum of brain and

immune-system damage. But the most important conclusion, which deserves greater public attention and congressional action, was: "The lack of adequate data regarding many of the [vaccine] adverse events under study was of major concern to the committee. [T]he committee encountered many gaps and limitations in knowledge bearing directly or indirectly on the safety of vaccines."

Because so little medical research has been conducted on vaccine side effects, no tests have been developed to identify and screen out vulnerable children. As a result, public-health officials have taken a "one-size-fits-all" approach and have aggressively implemented mandatory vaccination laws while dismissing children who are injured or die after vaccination as unfortunate but necessary sacrifices "for the greater good." This utilitarian rationale is of little comfort to the growing number of mothers and fathers who watch their once-healthy, bright children get vaccinated and then suddenly descend into mental retardation, epilepsy, learning and behavior disorders, autism, diabetes, arthritis and asthma. Some adverse reactions are fatal.

As vaccination rates have approached 98 percent for children entering kindergarten in many states, there is no question that mass vaccination in the last quarter-century has suppressed infectious diseases in childhood, eradicating polio in the Western hemisphere and lowering the number of cases of measles from a high of more than 400,000 cases in 1965 to only 100 in 1999. Yet, even as infectious-disease rates have fallen, rates of chronic disease and disability among children and young adults have risen dramatically.

A University of California study published by the U.S. Department of Education in 1996 found that "the proportion of the U.S.

(continued on page 42)

FISHER: continued from page 40

population with disabilities has risen markedly during the last quarter-century. [T]his recent change seems to be due not to demographics, but to greater numbers of children and young adults reported as having disabilities." The study concluded the change was due to "increases in the prevalence of asthma, mental disorders (including attention-deficit disorder), mental retardation and learning disabilities that have been noted among children in recent years."

Instead of epidemics of measles and polio, we have epidemics of chronic autoimmune and neurological disease: In the last 20 years rates of asthma and attention-deficit disorder have doubled, diabetes and learning disabilities have tripled, chronic arthritis now affects nearly one in five Americans and autism has increased by 300 percent or more in many states. The larger unanswered question is: To what extent has the administration of multiple doses of multiple vaccines in early childhood — when the body's brain and immune system is developing at its most rapid rate — been a cofactor in epidemics of chronic disease? The assumption mass-vaccination policies have played no role is as unscientific and dangerous as the assumption that an individual child's health problems following vaccination are only coincidentally related to the vaccination.

Questions about vaccination only can be answered by scientific research into the biological mechanism of vaccine injury and death so that pathological profiles can be developed to distinguish between vaccine-induced health problems and those that are not. Whether the gaps in scientific knowledge about vaccines will be filled in this decade or remain unanswered in the next depends upon the funding and research priorities set by Congress, the National Institutes of Health and industry.

With the understanding that medical science and the doctors who practice it are not infallible, today's better-educated health-care consumer is demanding more information, more choices and a more equal decision-making partnership with doctors. Young mothers, who are told that their children must be injected with 33 doses of 10 different vaccines before the age of 5, are asking questions such as: "Why does my 12-hour-old newborn infant have to be injected with hepatitis B vaccine when I am not infected with hepatitis B and my infant is not an IV-drug user or engaging in sex with multiple partners — the two highest risk groups for hepatitis B infection?" And: "Why does my 12-month-old have to get chicken-pox vaccine when chicken pox is a mild disease and once my child gets it he or she will be immune for life?"

Informed parents know that hepatitis B is not like polio and that chicken pox is not like smallpox. They know the difference between taking a risk with a vaccine for an adult disease that is hard to catch, such as the blood-transmitted hepatitis B, and using a vaccine to prevent a devastating, highly contagious childhood disease such as polio.

All diseases and all vaccines are not the same and neither are children. Parents understand the qualitative difference between options freely taken and punishing dictates. They are calling for enlightened, humane implementation of state vaccination laws, including insertion of informed-consent protections that strengthen exemptions for sincerely held religious or conscientious beliefs. This is especially critical for parents with reason to believe that their child may be at high risk for dying or being injured by one or more vaccines but cannot find a doctor to write an exemption.

The notion that a minority of individuals are expendable in service to the majority prevented the development of ways to screen out vulnerable children and spare their lives.

Informed consent has been the gold standard in the ethical practice of medicine since World War II, acknowledging the human right for individuals or their guardians to make fully informed, voluntary decisions about whether to undergo a medical procedure that could result in harm or death. To the extent that vaccination has been exempted from informed-consent protections and vaccine makers and doctors have been exempted from liability for vaccine injuries and deaths, the notion that a minority of individuals are expendable in service to the majority has prevented a real commitment of will and resources to develop ways to screen out vulnerable children and spare their lives. It is not difficult to understand why some parents resist offer-

ing up their children as sacrifices for a government policy that lacks scientific and moral integrity.

But even as educated health-care consumers are asking for more information and choices, mechanisms are being set up to restrict those choices. Government-operated, electronic vaccine-tracking systems already are in place in most states, using health-care identifier numbers to tag and track children without the parent's informed consent in order to enforce use of all government-recommended vaccines now and in the future. Health-maintenance organizations are turning down children for health insurance and federal entitlement programs are economically punishing parents who cannot show proof their child got every state-recommended vaccine. Even children who have suffered severe vaccine reactions are being pressured to get revaccinated or be barred from getting an education.

Drug companies and federal agencies are developing more than 200 new vaccines, including ones for gonorrhea and herpes that will target 12-year-olds. On March 2, President Clinton joined with the international pharmaceutical industry, multinational banks and the Bill and Melinda Gates Foundation to launch the Millennium Vaccine Initiative with several billion dollars committed to vaccinating all children in the world with existing and future vaccines, including those in accelerated development for AIDS, tuberculosis and malaria.

With so many unanswered questions about the safety and necessity of giving so many vaccines to children, the right to

No: That would open the door for epidemics of some deadly childhood diseases.

BY STEVEN P. SHELOV



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Some parents today are in a quandary regarding the need for immunizing their children. They need not be.

True, recent media stories about an increase in childhood autism associated with immunizations and other illnesses have led some to question the need to give their children the full range of vaccinations required by most school districts in the country. In addition, numerous others have had unfortunate experiences with their own children or relatives with respect to a bad reaction to an immunization. Yet, it is important to keep all these issues and incidents in perspective and not to erode public confidence in immunizing our children. In fact, if the U.S. population or any population regards immunizing children as optional, we risk having large numbers of children becoming vulnerable to the most deadly diseases known to man. As a practicing pediatrician, I am passionately opposed to that. The following are a few questions some skeptical parents are asking about the vaccination issue:

What would happen if I did not have my child immunized? Without immunizations there would be a significant possibility that your child would contract some of the diseases that are now waiting to come back. These include: whooping cough (pertussis), tetanus, polio, measles, mumps, German measles (rubella), bacterial meningitis and diphtheria.

These illnesses all may injure children severely, leaving them deaf, blind, paralyzed or they even may cause death. For example, in 1960 there were more than 1.5 million cases of measles and more than 400 deaths associated with this disease. As a result of our active immunization process in 1998 the United States had only 89 cases of measles and there were no deaths.

Why should I accept any risk of immunization for my child when other children already are immunized? Won't that protect my child? It is important to understand the concept of herd immunity and public health vs. individual risk. Individual risk is always a possibility with any procedure, medication, new activity or vaccine. The key to any program or new intervention is to minimize the risk. There is no question that vaccines are the safest, most risk-free type of medication ever developed. Nevertheless, occasionally — very occasionally — children have been known to experience a bad, or adverse, reaction to a vaccine. In some cases — polio vaccine, for example — one in 1 million doses appears to have been associated with vaccine-related mild polio disease. The reactions to other vaccines also have been very, very small, though nevertheless significant for the child or family who have experienced one.

It is not, however, good public policy to give those few at-risk situations priority over the goal of protecting the popula-

tion as a whole from those diseases. If the pool of unimmunized children becomes large enough, then the disease itself may reemerge in those unimmunized children, possibly in epidemic proportions. This has occurred in countries where immunizations have been allowed to decrease; most recently pertussis (whooping cough) resurfaced in Europe. Failure to immunize a child not only puts that child at risk of illness but also increases the potential for harm to other children who are not able to be vaccinated because they are too young or too ill or to those who in rare cases are vaccinated but the vaccination fails to provide the expected protection.

Are immunizations safe? Don't they hurt? Reactions to vaccines may occur, but they usually are mild. Serious reactions are very, very rare but also may occur. Remember, the risks from these potentially dangerous childhood illnesses are far greater than any risk of serious reaction from immunization. Even though immunizations may hurt a little when they are given, and your baby may cry for a few minutes, and there might be some swelling, protecting your child's health is worth a few tears and a little temporary discomfort.

Isn't it better that children get a disease such as chicken pox to give them a permanent immunity? If a child gets the disease, the danger is that the child may develop serious complications from the disease. The immunity conferred following the recommended immunization schedule will give excellent immunity and not place the child at risk.

Is it true that hepatitis B vaccine can cause autism or juvenile diabetes, sudden infant death syndrome, or SIDS, multiple sclerosis or asthma? There have been occasional reports in the media associating this vaccine with all of the above illnesses. Scientific research has not found any evidence linking the hepatitis B vaccine to autism, SIDS, multiple sclerosis, juvenile diabetes or asthma. In fact, SIDS rates have declined during the same time period that the hepatitis B vaccine has been recommended for routine immunization. Although some media have circulated reports that health authorities in France have stopped giving the hepatitis vaccine to children, that is not true. French health officials did not stop giving the hepatitis vaccine but decided not to administer the vaccine in the schools and recommended that the vaccine be given in medical settings.

Is there a link between measles vaccine and autism? No. There is no scientifically proven link between measles vaccine and autism. Autism is a chronic developmental disorder often first identified in toddlers ages 18 months to 30 months. The MMR (mumps, measles, rubella vaccine) is administered just before the peak age of autism that has caused some parents to assume a causal relationship, but a recent study in a British journal showed there was no association between the MMR vaccine and autism.

It is assumed that there has been an increase in the diagnosis of autism because the definition for who would fall under

(continued on page 43)

informed consent to vaccination takes on even greater legal and ethical significance as we head into the 21st century. In a broader sense, the concept of informed consent transcends medicine and addresses the constitutional concept of individual freedom and the moral concept of individual inviolability. If the state can tag, track down and force individuals into being injected with biological agents of unknown toxicity today, will there be any limit on what individual freedoms the

state can take away in the name of the greater good tomorrow?

Parents, who know and love their children better than anyone else, have the right to make informed, voluntary vaccination decisions for their children without facing state-sanctioned punishment. Whether a child is hurt by a vaccine or a disease, it is the mother and father — not the pediatrician, vaccine maker or public-health official — who will bear the lifelong grief and burden of what happens to that child.

SHELOV: continued from page 41

that category has changed. In addition, parents and medical professionals are more aware of this condition and are more likely to pursue that diagnosis. Though there may be an increase in the number of children who have autism, there have been many studies completed that show that the MMR does not cause autism.

Aren't measles, mumps and rubella relatively harmless illnesses? Measles is a highly contagious respiratory disease. It causes a rash, high fever, cough and runny nose. In addition, it can cause encephalitis, which leads to convulsions, deafness or mental retardation in one to two children of every 2,000 who get it. Of every 1,000 people who get measles, one to two will die. MMR can prevent this disease. Mumps is less serious than measles but may cause fever, headache and swelling of one or both sides of the jaw. Four to 6 percent of those who get mumps will get meningitis, which puts the child at risk for significant disability and potential retardation. In addition, inflammation of the testicles occurs in four of every 10 adult males who get mumps, and mumps may result in hearing loss that usually is permanent. The effects of rubella are mild in children and adults — causing only a minor rash — but the major reason to prevent rubella in the community is to prevent exposure of pregnant women to children who have rubella. When contracted by a pregnant woman, rubella may infect her unborn baby, leading to a significant potential for mental retardation and a host of serious defects. This devastating disease, known as congenital rubella syndrome, essentially has been eliminated with the use of rubella vaccine.

Given that measles, rubella and mumps essentially have disappeared from the United States and therefore are uncommon, why should we continue to immunize? The measles virus continues to be present in other countries outside the United States. Given the large number of immigrants to this country, the potential for exposure to measles remains a real potential. Just a few weeks ago several young children who recently emigrated from the United Kingdom came into one of our pediatrician's offices. Due to the decrease in immunization vigilance in the United Kingdom against measles, these young children were

infected with measles, and they put at risk the other infants and children in the waiting room of this busy pediatrician's office. If those other children contract measles, they will be at risk for developing serious sequela of the disease. And, should they develop the disease, they potentially will expose others as well. A mini-epidemic could have been caused by these infected children with measles.

Should parents be able to choose not to vaccinate their child without being barred from enrolling that child in school? Immunizing children is a public-health issue. Public-health laws in all 50 states require immunization of children as a condition of school enrollment. This is as it should be, since public health must take precedence. Immunizations have a clear community benefit and, therefore, individual preferences should not be permitted to expose the public to the hazards of infectious diseases.

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In summary, it is clear that the risk of exposing children to infectious disease should there be a decline in immunizations is a risk to which the population of the United States should not be exposed. It always is regrettable when an individual case of an adverse event occurs no matter what might have taken place. These adverse events clearly affect the child and obviously the family as well, and there indeed is always an outcry when this does occur. However, as with all safe, proven interventions, an exception could always occur given a normal risk ratio.

It would be actual malpractice and poor public-health philosophy and practice to consider not immunizing our children against the potentially deadly infectious diseases. We should be thankful to our research scientists, epidemiologists, and medical and pharmaceutical industry for the skill and care with which these important vaccines have been developed and the care with which the vaccine policies have been developed and monitored. There is no question in my mind that immunizations are one of the most important ways parents can protect their children against serious diseases. Without immunizations the children of the United States would be exposed to deadly diseases that continue to occur throughout the world.