General Immunization Philosophy

Children's Biomedical Center of Utah **By Bryan Jepson, M.D.**

Immunization

Since I have started treating autistic children, many people have asked me about my personal philosophy regarding immunizations. I am an emergency physician by training and continue to spend most of my professional life in that arena. Therefore, I am very familiar with acute infectious illness. I know how devastating it can be to have a previously healthy person become violently ill or die from a preventable illness. It is especially difficult to see in children, who rely on us as parents and medical professionals to take care of them in the best way that we know how.

We are taught very early in our professional and parental lives about the importance of immunizations in preventing communicable disease. This is well indoctrinated in the psyche of all physicians. This is one of the relative few areas of preventative medicine that we are consistent with. But, the more I looked into this controversy, the more I realized that in reality, we are more expert in the diseases that the vaccines are supposed to prevent than the vaccinations themselves.

Most physicians know very little about the vaccine manufacturing and research process, but make the assumption that they are safe and well-studied before they come out onto the market.

There are several issues with the childhood vaccinations that I have particular concerns about. First, immunizations are really the only medical interventions that I can think of, preventative or otherwise, that is government mandated to the general public. I certainly understand the philosophy of public health protection. We are trying to reduce exposures to contagious illnesses in the hope that the illnesses will be eliminated. But, the fact is, no medical interventions are completely safe and effective for every individual, vaccinations included.

There are very well-documented cases where vaccinations have caused harm. The government (the Center for Disease Control – CDC, actually) has decided that the risk as a population of these illnesses is more important than the harm that may come to some individuals. We have a captive population in our children that I wonder if we are usurping their individual right to make an informed decision (or their parents on the child's behalf) in the name of the public good.

Our policy towards individuals with HIV is a good example of a double standard in this area. We know that HIV is a highly contagious illness that is invariably terminal. We do not have a vaccination against it but we do know very effective ways to prevent its spread. It only would require a change in behavior, which is a completely safe and risk-free intervention. And yet, our nation does not actively seek to take away the rights of HIV-infected individuals to continue to engage in risky behavior with known risk of spreading this illness.

But, it is okay to mandate that all of our children receive vaccinations, an intervention that is not risk free to some individuals. I know that most states have exemption clauses for parents who do not wish that their children be immunized but these are certainly not well publicized and pediatricians do not routinely offer that alternative.

Most physicians do not spend enough, or any, time with the parents discussing individual immunizations, their risks vs. benefits, and allowing the parents to make

an informed decision. Although it is required by law to provide to parents vaccination information sheets for each individual immunization well ahead of the time of the actual injection, from my experience, that is rarely done in practice.

So, in effect, by not educating parents about potential harm as well as potential benefit, we are trading public health policy for the right to make decisions for our individual health.

Second, we have been assured that these vaccinations are well-tested and safe, but the more I have looked into this issue, the less convinced I am of how rigorous the testing process is. Most of the safety research is done looking for acute allergic-type reactions and the subjects are followed for a relatively short period of time (weeks to months).

There have been several examples when once the vaccinations are given to the general public they are later removed from the market because of reactions that were not initially detected or recognized as important during the research trials. One recent example of this is the rotavirus vaccine that was pulled from the market in less than a year and a half when it was found to be linked to a serious form of bowel obstruction called intussusception.

Other examples include the DPT vaccine that was later modified to DPaT because it was associated with severe neurological damage to some children. The polio vaccine was recently changed back to the intramuscular form instead of the oral form because the only children getting polio in the last 20 years where getting it from the vaccine itself.

So, the reality is that you often cannot detect even significant adverse reactions in limited observation research studies. In fact, we do not actually know the true incidence of vaccine-related adverse effects. There are a couple of reasons for this. One is that the vaccine adverse event reporting system (VAERS) is grossly underutilized. It is estimated that less than 10% of the actual events are reported by physicians. And this information is not available to independent review to be sure that the data is being interpreted and presented correctly.

Second, usually only immediate severe allergic-type reactions or deaths are reported. We do not have data or studies designed to look at potential sub-acute or chronic reactions. Saying that these reactions do not exist is as irresponsible as blindly blaming autism on vaccinations if there is no basis to back it up.

In the case of autism, many of the reactions are not within 24-48 hours of the injections and so it is more difficult to determine if the vaccinations were involved based on the VAERS reporting system alone. Unfortunately, the research that is being widely publicized in the press claiming to "put the issue to rest" by saying that there is no link between autism and immunizations are based on these epidemiological studies that were design to answer a different question. If you don't get the question right, you won't find the right answer.

Finally, although I certainly believe that vaccines can be effective at reducing the incidence of some illnesses, I think that because of this success, the philosophy of the CDC and vaccine manufacturers is moving in a direction to begin vaccinating against more and more diseases that are significantly less debilitating.

This can lead to several potential problems. First, it may have the effect of decreasing natural immunity and pushing these diseases into adulthood as the immunity wears off and when the illnesses may be more devastating. I think chicken pox is a good example of this concern. For the most part, young children tolerate chicken pox very well without long-term consequences. However, the older you get, the more serious the illness becomes. I have personally taken care of young adults in their 20s who have died from pneumonia caused by the chicken pox virus.

I believe that vaccinations should be reserved for life-threatening or significantly life-altering diseases only, and not to be generalized to other less serious diseases.

Second, the more vaccines that are given, there is a higher potential for adverse reactions.

Third, many of the defenses built into our immune system require natural routes of exposure such as the respiratory and gastrointestinal tracts. Bypassing these by injecting antigens into the muscle is not how our bodies were designed and I believe that "tricking" the immune system in this way can predispose some individuals to autoimmune disease.

The studies that I have seen that "refute" such a theory actually just show that the body has the ability to develop antibodies to hundreds of antigens in a short period of time and therefore does not "overwhelm" the immune system. But, I don't believe that that effectively answers the question about whether immunizations can cause autoimmune (body attacking itself) or hyperimmune (over-reaction) problems.

There is very good evidence that at least in some individuals, autism has a strong autoimmune component and there does seem to be a much higher incidence of other autoimmune disorders in the extended families of autistic children suggesting a genetic immune weakness.

Fourth, vaccines contain many other materials that are used in the manufacturing process that in and of themselves can be toxic and when combined can be much worse.

The thimerosal issue (ethyl mercury) is now well-known to those in the autism community. Mercury is a direct neurotoxin and autistic children have an impaired ability to excrete heavy metals from their body. When HIB and Hep B (both thimerosal-containing vaccines) were added to the schedule, the load of mercury injected into our children was doubled. This is also about the time that the incidence of autism skyrocketed.

Some argue that the amount is miniscule but when you add up the cumulative exposure to mercury alone, children were often getting in one day more than 100 times the safe EPA standard for an oral exposure in an adult.

The more vaccines that are given, the more these type of errors will occur. Vaccinations also contain formaldehyde, aluminum, ethylene glycol, gelatin, glutamate, neomycin, streptomycin, phenol and various combinations of live virus, recombinant DNA viruses and inactivated bacteria. They are grown in culture media that may include rabbit brain tissue, guinea pig tissue, dog kidney tissue, monkey kidney tissue, chicken embryo, or chicken or duck egg protein and even human fetal tissue.

Recommendations

So my general recommendations are as follows:

1. **Educate yourself about each vaccination and the disease that it is designed to prevent.**

What are the risks and what are the benefits? What are the chances of my child developing this illness and if it happens, what are the odds of serious consequences?

What is my child's risk for developing an adverse reaction to the immunization itself (unfortunately, this assessment is not as easy to quantify)? This type of risk vs. benefit analysis is important in any medical intervention. It is a very individual decision, as every person's risks and comfort level with those risks are different. I cannot tell you what immunizations to get because I cannot really tell you in a percentage what your risks are. I can only tell you what is available and what it is used for. What I would choose for my child may be very different from what you would do for yours, but I believe that you are capable of making that decision.

2. **If you do choose to immunize, then prioritize based on when the children are at most risk of contracting the illness.**

The hepatitis B vaccination is a good example of this point. The only ways of contracting this illness are through sexual activity with an infected individual, sharing contaminated needles during IV drug abuse, accidental needle sticks in health care workers from infected individuals and perinatal transmission during childbirth from an infected mother.

The only risk your baby has to develop Hepatitis B is from their infected mother. If the mother has tested negative and is not in one of the above risk groups, the child has no risk. So why do we vaccinate every child starting at the day of birth for an illness that most have no risk of contracting? It would make much more sense to vaccinate your child sometime before their teenage years when their risk may become higher.

3. **Spread out the vaccinations so that they are not receiving more than two shots in any given visit.**

The reasoning behind this is so you do not get as much of a cumulative daily exposure to several viruses and inactivated bacteria but also that the daily dose of the other toxins in the vaccinations is minimized.

It also helps you to determine which vaccine is the culprit if your child does experience an adverse effect. I would also suggest spacing live virus vaccines (measles, mumps, rubella, and varicella) by at least 3 to 6 months, since some children seem to have a more dramatic response to these vaccines.

4. **Use only thimerosal-free vaccines.**

The evidence is accumulating that mercury is a significant problem in children who are genetically susceptible to autism and eliminating all sources of mercury (vaccinations being the major source in babies and toddlers) is essential.

Remember that although the government required as of 2001 that no more childhood vaccinations be made with thimerosal, there was no recall. So, there are still thimerosal-containing vaccinations on shelves in doctor's offices. Also, many rhogam injections and all influenza vaccines that are given to pregnant women contain thimerosal

and the fetus is exposed as the mercury crosses the placenta.

5. **Avoid all unnecessary combination vaccines, if possible.**

The reasons for this are the same as for spreading out the vaccinations. The MMR/autism controversy is still very much alive and recently more researchers, including in the United States, are confirming Dr. Wakefield's initial findings of gut inflammation associated with MMR vaccine strain measles virus in autistic children.

This does not prove causation but certainly raises suspicion of involvement.

Unfortunately, monovalent (individualized) measles, mumps and rubella vaccines are not currently being manufactured because MMR itself is in short supply and that is where the vaccine-makers are concentrating their resources. We have been told that it will be at least 2003 before the monovalent vaccines will be available. DTaP is also not available in monovalent form.

6. **Use single dose rather than multi-dose vials.**

The reason for this is that it ensures uniform dosing and reduces the need for preservatives. In multi-dose vials, if the bottle is not mixed thoroughly before each injection, it is realistic that many of the preservatives (toxins) can settle to the bottom and that the last few doses in the vial have a much higher concentration than intended.

7. **Do not vaccinate your child if he/she is sick or still recovering from an illness**.

Getting your vaccinations done out of convenience when you are at the physician's office for an illness is probably not the best idea for your child.

8. **Give vitamins to your child before and after vaccinations**

Give recommended daily dose of **vitamin A** (1250-5000 IU depending on child size—1250 IU equals ½ teaspoon) at least 3 days before and 3 days after shot.

Give **vitamin C** 150 mg twice daily for infants and 300 mg twice daily for toddlers on the day of the shot and the day after.

These are strong antioxidants and can help prevent damage to body tissues and help the body to recover from infections.

9. **Get immune titers, if possible, before repeating doses.**

These are relatively expensive tests but many children are fully immunized after the first dose and may not require subsequent boosters.

10. **Avoid re-immunization with a vaccine if there is a negative reaction to it.**

11. **Do not immunize newborns unless they are at risk for Hepatitis B**.

The immune system takes many months to mature and the body's ability to rid itself of toxins through the liver does not mature for 6 months.

General Immunization Philosophy

Children's Biomedical Center of Utah **By Bryan Jepson, M.D.**

Vaccinations

Originally, I had planned on briefly describing each vaccination and the diseases that they are preventing. But, instead of doing this, I am going to recommend a book that describes this in excellent detail and is written for parents. It is well worth the time investment.

The book is titled, **What Your Doctor May Not Tell You About Children's Vaccinations** by Stephanie Cave MD.

Many of the principles that I am talking about are emphasized in this book and other Defeat Autism Now (DAN) materials.

Vaccination Schedule

I have included an example of an immunization schedule that provides the required vaccinations prior to entering school. *Please understand that this is just an example and does not constitute an official recommendation.* I think that there are many modifications that could take place depending on the individual circumstances.

Notice how difficult it is to follow the guidelines about limiting injections to two in one day if all of the currently recommended vaccinations are included. You could extend the schedule into to 10th, 11th or 12th month but this also decreases the chance that they will get all of the necessary immunizations when they are most risk for e illness, especially in the cases of Hib, DTaP and Prevnar.

Vaccination Schedule

(Example)

- Birth—Hepatitis B, if mom Hep B positive. If unsure, check titer in mother. If mother involved in high risk behavior in last 6 months, give vaccine.
- 4 months—Hib, IPV
- 5 months—DtaP
- 6 months—Hib, Prevnar
- 7 months—DtaP
- 8 months—Hib, IPV, Prevnar
- 9 months—DtaP
- 15 months—measles
- 17 months—Hib, IPV, Prevnar
- 18 months—DtaP
- 27 months—Rubella
- 39 months—Mumps
- 4-5 years—Varicella (if not immune already)
- 4-5 years—Hepatitis B series (you may wish to delay this until age 10-12 since they are at low risk of contracting the disease before that)
- 4-5 years—DtaP, IPV boosters
- 4-5 years—test titers for MMR and do not give unless low
- 12 years—retest titers, boosters if needed.

Adverse Reactions

If your child develops any of the reactions listed below after receiving a vaccination, please inform the clinic where they received it and ask them to submit a Vaccine Adverse Events Reporting System (VAERS) report.

They will need a detailed description of the reaction as well as date and duration of the reaction and the dates the immunization was given. They will need to include the lot number of the vaccine that was given. If they do not or will not submit this report, you can do it yourself with the above information.

Watch for Adverse Reactions

- High fever
- Behavior changes
- Difficulty breathing, hoarseness or wheezing
- Weakness
- Fast heartbeat
- Dizziness
- Hives/rash
- Paleness
- Collapse/shock
- Seizures/convulsions
- Persistant crying/irritable
- Any hospitalizations or Emergency department visits
- Coma/decreased level of consciousness
- Encephalitis or other brain disorder
- Paralysis

Summary

In summary, I would like to reemphasize that I believe that the decision to immunize your child is one that parents have a right to make based on informed consent after doing an appropriate risk vs. benefit analysis.

I cannot make that decision for you. To be fair, I do not have irrefutable evidence that the above recommendations are, in fact, safer. It has been difficult to get the CDC to agree to conduct good studies to answer this question. The principles seem sound, in my judgment.

Your pediatrician or family physician may disagree with this. That is okay. They are basing their opinion on a different set of experiences. I feel strongly, however, that you as parents need to be aware that other options are available to you and that it is your right to make reasonable medical decisions for your child.