

# "Expert" Believes Infants Can Tolerate 10,000 Vaccines

By Sherri Tenpenny, DO

## Addressing Parents' Concerns' Do Multiple Vaccines Overwhelm or Weaken the Infant's Immune System

by Dr. Paul Offit, et. al.  
[Pediatrics](#), Vol. 109 No. 1, Jan. 2002

### Summary of the Recent Pediatrics article:

One hundred years ago, children received 1 vaccine (the smallpox vaccine). Forty years ago, children received 5 vaccines routinely (diphtheria, pertussis, tetanus, polio, and smallpox vaccines) and as many as 8 shots by 2 years of age. Today, children receive 11 vaccines routinely and as many as 20 shots by 2 years of age.

Recent national surveys show that about 25% of the parents are waking up and questioning if all these shots are necessary or if the vaccines might actually weaken the immune system.

Dr. Offit attempts to explain the effect of vaccines on the infant's immune system and the capacity of the immune system to respond safely to multiple vaccines.

### Passively Acquired Immunity

The neonate is, in part, protected against disease by maternal immunoglobulins (Ig). Maternal IgG is transported across the placenta before birth and maternal secretory IgA is present in breast milk and colostrum. These passively acquired antibodies provide protection against pathogens to which the mother was immune.

Dr. Offit states that maternal antibodies offer limited and short-term immunologic protection when compared with protection afforded by an infant's active immune response.

Dr. Offit then goes on to explain that a young infant is fully capable of generating protective humoral and cellular immune responses to multiple vaccines simultaneously. He then uses some physiological immune facts to come to the outrageous conclusion that an infant would have the **theoretical capacity to respond to about 10,000 vaccines at any one time, and then goes on to say that this is a conservative** estimate!

### Dr. Tenpenny's Response to Above Article:

It always amazes me when highly respected journals such as Pediatrics are willing to publish articles such as this. And what is even more amazing is that the people who write this information call themselves "physicians" and "scientists."

## **Passive protection conveyed by the mother is dismissed as less effective than a vaccine.**

However, much research clearly documents that more protection is conferred through breast milk than through artificially-induced antibodies. Breast milk contains large quantities of secretory IgA, lysozyme-secreting macrophages, and both T- and B-lymphocytes. The lymphocytes release of gamma interferon, migration inhibition factors and monocyte chemotactic factors, all of which strengthen the intrinsic immune response of the infant. [1]

In addition, the protection provided by breast milk is not short-lived. There is evidence that the enhanced protection it provides lasts for years.[2] In addition, concentrations of antibodies found at six weeks of lactation are the same levels as those at six months, so any amount of breast-feeding contributes to immune enhancement. [3]

Children less than 2 years of age are considered to be more susceptible to infections by H. influenza type b and Streptococcus pneumoniae bacterium, both major causes of otitis media and invasive bacterial diseases. Although the infant's immune system may be less capable of "mounting a response" to the polysaccharide cell walls of the bacteria than an adult's immune system, infection can again be offset by breast milk.

Components within the milk have been found to inhibit both colonization and tissue adherence. [4,5] The premise that conjugate vaccines are essential for the protection of an infant omits this important fact.

Vaccine-specific antibody protection is considered to be the cornerstone of vaccination success. In all studies published on vaccines, "efficacy" is considered to be the development antibodies. When vaccines are given together, the combination is considered "effective" if both antigens generate an antibody response at least equal to the response seen if a single antigen vaccine is given alone.

## **However, is this an antibody response a valid presumption of disease protection?**

Even experts in the field admit that they don't know. During a discussion regarding the approval of yet another acellular pertussis vaccine, a panel member said,

"...A basic question is: Is antibody correlated with protection? In the year 2000, we don't really know which antibodies protect, let alone exactly what level of an antibody protects." Another panelist went on to say, "The protective mechanisms [of the immune system] are not understood. Is it antibody or is it cell mediated or some assessment of memory that can occur in response to infection?" [6]

The Advisory Committee on Immunization Practices (ACIP) discloses this regarding the pertussis vaccine, "The findings of efficacy studies have not demonstrated a direct correlation between antibody response and protection against pertussis disease."

Antibody studies are only useful to compare immune responses elicited between similar vaccines. Efficacy studies to measure clinical protection conferred by each pertussis vaccine have not been done. [7]

## **Therefore, antibodies apparently mean nothing.**

The H. flu vaccine has been found to have high avidity in vitro. This means that there is a high affinity of attachment between the antigen and the antibody. However, "the contribution [of this] to clinical protection is unknown." [8]

Again, "efficacy" as defined by the development of antibodies apparently means nothing in relation to disease protection. Therefore, using the antigen binding capacity of the immune system and its ability to create an antibody response as a measure of safety, also means nothing.

**The concept that 10,000 antigens could theoretically be deposited uneventfully into the blood stream of either an infant or an adult defies logic and is a blatant disregard for mechanisms of human physiology.**

By injecting a vaccine into the body, the first four lines of normal immune defense are by-passed:

- Skin,
- Mucous membranes,
- Gut lymphoid tissue and
- Lymphatic neutralization

This abnormal introduction of pathogens and adjuvants into the blood stream does not "trick" the immune system: it contaminates it.

And contaminate it we do. Children now receive 52 vaccines, in the form of 15 shots, by the time they are 6 months of age if they receive all the recommended shots, including the Prevnar® (the pediatric pneumonia shot.) That is because each viral or bacterial particle contained in the vaccine elicits an immune response.

So, the measles, mumps and rubella vaccines are three separate vaccines. The injectable polio vaccine (IPV) contains three strains of polio, thus it is three vaccines. And this overwhelming amount of biological material does not include the adjuvants, which can include MSG, aluminum, formaldehyde, sucrose and phenoxyethanol, which is antifreeze, among many others.

The potential for disaster looms as multiple live and attenuated viruses are combined during multiple vaccinations on the same day. In a study reported in Science Magazine, two avirulent herpes viruses were simultaneously injected in the footpads of mice. Many (62%) of the mice that had received equal doses of each virus died while none died that had received up to 100 times the diluted dose of just one virus.

Eleven recombinant viruses were isolated from the dead mice. Three of these isolates were lethal when injected into the next set of mice. This study demonstrates that in vivo, two avirulent viruses can recombine with deadly results. [9] If two vaccine antigens can cause a serious outcome when given simultaneously, then what about "only 123-126"? Or 10,000?

Once again, a "ground breaking" medical study has drawn media attention by posting conclusions that are not supported by facts. Stating that an infant has a large capacity to respond to antigens, i.e. create an antibody response, does nothing to allay reasonable fears and doubts by investigative parents.

Any "thinking doctor" should recognize this "study" for what it is: another opportunity to spread the mantra of "safe and effective" vaccines. Perhaps in this way we won't question the more than 200

vaccines that are currently in development or resist the more than 20 that are anticipated to become part of the childhood vaccination schedule by 2010.

A "thinking parent" might conclude that, "if the immune system is that strong, why do we need to vaccinate at all?"

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## References

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