

7 Reasons to Vaccinate Newborns

by Sharon Humiston, M.D.

"In the final analysis, the question of why bad things happen to good people transmutes itself into a different question, no longer asking why something happened, but asking how we will respond, what we intend to do now that it happened."

Harold S. Kushner

I am a pediatrician and a mother. I had both my babies fully vaccinated according to the American Academy of Pediatrics schedule and would again today. Here are my reasons.

Haemophilus influenzae type B (called Hib) - In the Emergency Department, we regularly saw children limp and lethargic from Hib infection surrounding the brain (meningitis), or gasping for air because of Hib infection at the opening of the airway. One child I grew attached to during my training had a Hib infection in his leg bone and had to be hospitalized for months. After the vaccine was invented and most children were receiving it, Hib infection practically disappeared. Now in the U.S., instead of 20,000 serious Hib infections each year there are about 200.

Diphtheria - Back in the late 1800s in Massachusetts, where records go back that far, 3 percent to 10 percent of *all* deaths were caused by diphtheria (pronounced dip-thear-ee-ah). The disease started like strep throat, but within a couple of days a thick membrane would form on the back of the throat and this could obstruct the airway. Also, poisons produced by the bacteria often damaged the heart, kidneys, and nervous system. In the U.S. today diphtheria is rare, but that could change quickly if we stopped immunizing children. Unfortunately, this was demonstrated by a massive outbreak in the former Soviet Union during the mid-1990s. About 50 thousand people developed diphtheria before efforts to immunize everyone got the epidemic under control. It was a terribly sad way to remind the world of the importance of diphtheria vaccine.

Tetanus - We will never be rid of tetanus because it lives as very tough spores in the soil and the bowels of animals worldwide. It enters through a cut or a burn; even a minor wound can harbor the infection. The bacteria start producing a poison that causes muscle spasms so powerful they can lead to broken bones. Of course, we depend on muscles for breathing and swallowing, too, so if these muscles go into spasm, intensive care life support systems are necessary. Tetanus disease is rare now in the U.S. because of vigilant use of the vaccine.

Pertussis - Pertussis is called whooping cough. The infection causes the airway to swell in such a way that infants and young children make a whooping noise when they are trying to get air in after coughing spasms. The coughing jags may be fre-

quent and prolonged and may lead to vomiting, so the child becomes exhausted and has difficulty eating or drinking. In addition, about 1-out-of-1000 pertussis cases reported to the CDC between 1992 and 1994 were complicated by inflammation of the brain. A third of children with this complication die, a third develop permanent brain damage, and a third survive without obvious nervous system damage. Even though pertussis is a terrible disease for infants and young children, a lot of parents used to refuse the vaccine because it was associated with side effects. A relatively new vaccine (the acellular pertussis vaccine) has many fewer side effects and so is the preferred version.

Hepatitis B - Hepatitis B is a virus that infects about 5% of Americans. In some infected individuals the virus lives on in the body, gradually destroying the liver over 20 to 40 years, causing liver cancer or cirrhosis. If an infant is infected, his/her risk of long-term infection and a death from the long-term infection are high.

Polio - Polio may be eradicated from the entire planet in a year or two. That is really exciting to think about, but in the meantime every mother wants her child protected from this paralyzing disease. Parents should know that the polio shot - called IPV or inactivated (killed) polio vaccine -- is the only polio vaccine recommended in the U.S. now. The live polio drops - OPV or oral polio vaccine -- caused eight to ten cases of polio each year in the U.S. Approximately a third of these people were previously healthy people who came into contact with OPV-infected stool.

Pneumococcus - *Streptococcus pneumoniae* is called pneumococcus (pronounced new-mow-cock-us). It is now the most common cause of meningitis in infants and toddlers, but until recently there was no pneumococcus vaccine for this age group. It is expected that the new vaccine will be licensed in early 2000 so be sure to ask your child's doctor about it.

Many of these vaccines can be given in a single injection (e.g., diphtheria, tetanus, and pertussis; Hib and hepatitis B), but all of them require repeated doses to provide protection. Vaccine Information Statements are available at www.cdc.gov/nip/ or www.immunize.org or by calling the CDC Immunization Hotline at 800-232-2522.