



# Immunizations for your preemie

**Make it a priority:  
develop your baby's  
immunization schedule *today*.**

BY STACEY RYDER

**W**hen my son, Gavin, was born 10 weeks early, my normal pregnancy suddenly veered into the unfamiliar world of the NICU. Nothing was normal during those 96 days he spent in the hospital.

So I was surprised when, 2 months after he was born, the nurse in the intermediate care nursery told me it was time for him to be vaccinated. I'd given no thought to anything as ordinary as childhood immunizations.

Vaccinations are no less important for preemies than for full-term babies, however.

Research has found that premature birth, no matter how early, is no reason to delay immunizations. Preemie immune systems are mature enough to successfully create antibodies against some of the most deadly diseases out there.

Most preemies get their first immunizations on the same schedule as full-term babies, with the exception of the hepatitis B vaccine.

Full-term babies get their first dose of hepatitis B vaccine shortly after birth. Preemies who weigh more than 2,000 grams (4.4 pounds) at birth or whose mother tested positive for hepatitis B during pregnancy also get the vaccine at birth, but for smaller preemies, the immunization is delayed until they reach 2,000 grams.

Preemies get their first round of multiple immunizations at 2 months, just like other babies. One of the only reasons to delay may be infection. "Asking the system to do more than fight the infection may be asking too much of it," explained Dr. Ashima

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Madan, a neonatologist at Lucile Packard Children's Hospital at Stanford.

Serious side effects to these vaccines are unusual. Some babies may develop

## The 2-month vaccinations usually include four injections:

**DTaP**, a vaccine that protects against the three diseases diphtheria, tetanus (lockjaw) and pertussis (whooping cough) with a single injection.

The combined **hepatitis B** and **Haemophilus influenzae type B (Hib)** vaccines, (sometimes going by the trade name COMVAX). In the past before the use of the Hib vaccines, Haemophilus influenza type B was a leading cause of meningitis, epiglottitis and severe sepsis in young children. Some physicians give these two vaccines separately depending on which vaccines are ordered from the manufacturer.

**Pneumococcal vaccine** (sometimes going by the trade name Prevnar) protects against pneumococcus, a bacteria that can cause life-threatening meningitis and blood infections among children under 5 years old.

**Polio vaccine** — also called IPV (Inactivated Polio Vaccine). Live oral polio vaccine is no longer used because of extremely rare reports of polio disease after vaccination. IPV does not carry this risk because it is not a live vaccine.

redness or swelling at injection sites, moderate fevers, mild fussiness, some sleepiness or slight loss of appetite in the 2 days after vaccination. These are generally not considered serious reactions. Your pediatrician will discuss what to watch for and when to call him or her.

“We give Tylenol 2 hours before the vaccinations and every 6 hours afterwards for 24 hours,” said Madan. “That prevents the baby from getting a fever that could lead to an unnecessary septic workup.” Other physicians may have different advice about the use of Tylenol (acetaminophen), so be sure to ask your doctor about dosage and when it is appropriate to give Tylenol.

Like most procedures done at the hospital, immunizations can only be given with the informed consent of a preemie’s parents. At Packard Children’s Hospital, parents are given a packet of information about each of the vaccines and an opportunity to ask questions. They need to fill out and sign a form before vaccinations can be given.

Not all parents are eager to have their babies immunized. Some worry that vaccines may cause leukemia or autism, but according to Madan, no scientific study to date has made any conclusive connection between those conditions and vaccines.

Refusal to vaccinate may also lead to public health issues. “In a society where the rate of immunization is high, you can get lulled into thinking it can’t happen,” Madan cautions, “but as immunity in the population goes down, these diseases can become a problem.”

If you are considering not vaccinating your child, speak with your doctor before making a final decision. They can be helpful sifting through your concerns and offering sound advice for you and your baby. **CP**

*Stacey Harp Ryder is a freelance science writer based in Los Altos, CA. She has a M.S. in science journalism from Boston University. She is the mother of two preemies, Gavin and Cassandra, now 4 years and 2 years old, respectively.*

## a special note on RSV and the flu:

Preemies discharged between early Fall and late Spring usually get their first dose of **Synagis** before going home. Synagis protects them against RSV (respiratory syncytial virus). It is usually given only to preemies born at less than 32 weeks gestation or those born at 32 to 35 weeks if they have other risk factors, such as chronic lung disease. Synagis is given again later as monthly shots in the pediatrician’s

office or a special clinic until the end of RSV season in early Spring.

In the fall and winter months, it is also especially important for preemies, their parents and siblings to get **flu shots**. A baby’s first flu shots are given in two doses, 1 month apart starting after 6 months of age. These shots may not be given at the hospital, but should be given by the pediatrician.