Immunizations

The Centers for Disease Control and Prevention (CDC) and the American Academy of Pediatrics have worked together over the years to develop an immunization vaccination schedule based on long-standing practice and current evidence-based research.

According to the CDC, "Vaccines are the best defense we have against infectious diseases; however, no vaccine is 100% safe or effective. Differences in the way individual immune systems react to a vaccine account for rare occasions when people are not protected following immunization or when they experience side effects" (CDC, 2013). Vaccines are tested and then approved by the U.S. Food and Drug Administration.

The National Childhood Vaccine Injury Act (NCVIA) was passed by Congress in 1986 to provide the public with information regarding vaccine safety and health concerns and to reduce government liability (CDC). The NCVIA also gave the medical community resources and guidelines for administering immunizations and reporting vaccine reactions. The resources developed include the vaccine information sheet (VIS), which all healthcare providers must provide to parents before requesting consent for each scheduled immunization. Each VIS contains a brief description of the disease as well as the risks and benefits of the vaccine. The CDC develops and distributes the VIS to state and local health departments and posts it on the CDC website. The NCVIA also calls for a compensation program to assist those who have been injured from immunizations and a review committee to monitor information on vaccine side effects (CDC).

It is important for healthcare providers to educate parents about diseases and viruses, which may be harmful to children. It is important for parents to remember that breastmilk has immunologic benefits to help as well. If is also important that the mother receives pertussis vaccination during pregnancy or at delivery to protect the baby. All family members and caregivers of infants younger than 6 months of age should receive the flu vaccine as well.

Newborns are immune to many diseases because they have antibodies from their mothers and these antibodies increase with breastfeeding. However, this immunity lessens during the first year of life. Infants and young children do not have "maternal immunity" against some diseases, such as whooping cough. Immunizing individual children also helps to protect the health of our community, especially those who cannot be immunized. That population includes children who are too young to be vaccinated (e.g., children younger than 1 year cannot receive the measles vaccine but can be infected by the measles virus), who cannot be vaccinated for medical reasons (e.g., children with leukemia), and those for whom vaccination is not successful.

By visiting www.cdc.gov/vaccines, healthcare providers can review information about preventable diseases and vaccines that prevent them. Content is designated specifically for healthcare providers and parents of infants and toddlers.

Immunization schedules may be printed directly from the CDC website and given to parents. Copies of immunization records and immunization injection dates should be included in the electronic health record printed discharge instructions and given to parents to share with their pediatric provider.

Reference

The Centers for Disease Control and Prevention (CDC). (2013). Vaccines and Immunizations. Retrieved from www.cdc.gov

Immunizations: Information for Parents

The diseases that immunizations (vaccines) prevent can be dangerous—or even deadly. Vaccines reduce the risk of infection by helping the body's natural defenses to develop immunity (or resistance) to disease.

When germs, such as bacteria or viruses, invade the body, they attack and multiply, causing an infection. The immune system (our natural system of defenses) has to fight the infection, but once this happens, the fighting cells can remember that infection to fight it in the future. Vaccines help develop these fighting cells (immunity) by imitating an infection, but this imitation infection doesn't cause illness. It causes the immune system to have the same fighting response as though it were a real infection, so the body can recognize it and fight it in the future. Sometimes, the vaccine can cause minor symptoms, such as fever. These minor symptoms are normal and should be expected as the body builds immunity.

Like any medication, vaccines can cause side effects. The most common side effects are mild (such as redness and swelling where the shot was given) and go away within a few days. If your baby experiences redness, soreness, and swelling where the shot was given, you can ease those symptoms with a cool, wet cloth. Pay extra attention to your baby for a few days after vaccination. If you see something that concerns you, call your baby's provider.

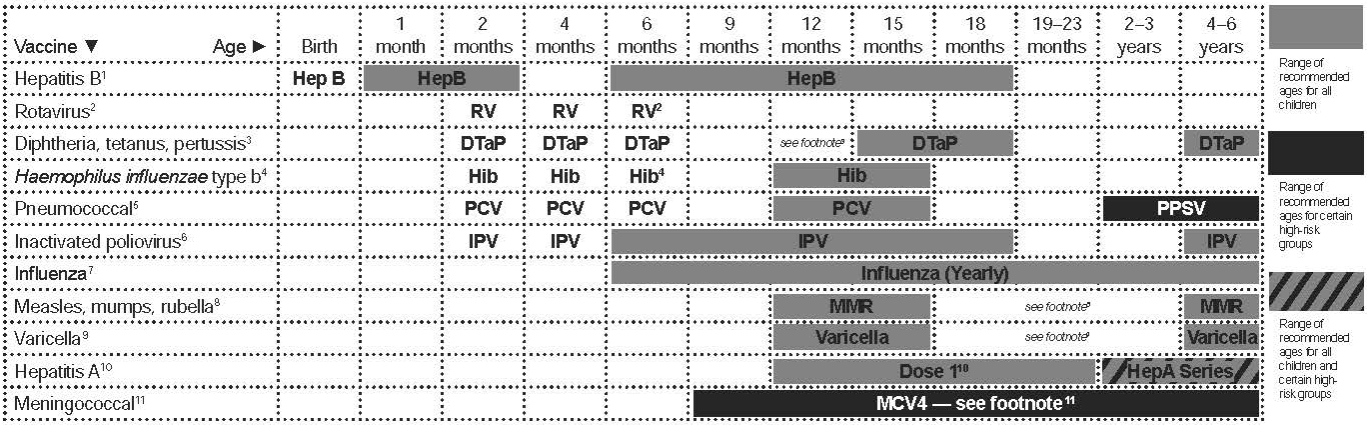
While your baby is in the hospital, the NICU team will follow the vaccine schedule for your baby and make any necessary changes due to your baby being born early. The vaccine recommendations for the first 6 years of life are shown below.

A medicine called Synagis (palivizumab) will also be recommended if your baby was premature and born before 35 weeks to help prevent your baby from getting a respiratory virus called RSV.

The nurses will give you information on the specific shots your baby needs that will explain the possible side effects. They will ask for your written permission before giving your baby any shots.

A vaccine shot schedule and a record of the shots your baby received while in the hospital will be given to you before you go home. Vaccine shot records will be needed for public day care centers and public schools. It's very

FIGURE 1: Recommended immunization schedule for persons aged 0 through 6 years—United States, 2012 (for those who fall behind or start late, see the catch-up schedule [Figure 3])



This schedule includes recommendations in effect as of December 23, 2011. Any dose not administered at the recommended age should be administered at a subsequent visit, when indicated and feasible. The use of a combination vaccine generally is preferred over separate injections of its equivalent component vaccines. Vaccination providers should consult the relevant Advisory Committee on Immunization Practices (ACIP) statement for detailed recommendations, available online at http://www.cdc.gov/vaccines/pubs/acip-list.htm. Clinically significant adverse events that follow vaccination should be reported to the Vaccine Adverse Event Reporting System (VAERS) online (http://www.vaers.hhs.gov) or by telephone (800-822-7967).

important that you make routine well-child appointments for your baby to see his or her provider. They will help manage your baby's vaccines and make sure the shots are given when they are needed. One of the best ways you can build your baby's immune system is to follow up and ensure that your baby receives all of the shots and medicines recommended for his or her age.