



## Department of Pediatric Newborn Medicine

Parent Information Sheet:

### Immunizations

*We understand that your top priority is your baby's health. That is our top priority too. With the vast amount of misinformation regarding immunizations available in our society today, we would like to provide you with the facts. Please don't hesitate to talk to your baby's health care team about additional questions and concerns you may have.*

#### **What is a vaccine?**

Vaccines are clues that tell our immune system how to build tools to fight against infections. Vaccines may be inactivated viruses, parts of a virus or bacteria, sugar-coated antigens, weakened bacterial toxins, or a weakened version of a virus.

#### **Should I vaccinate my infant?**

Routine childhood immunization recommendations are supported by the Advisory Committee on Immunization Practices, the American Academy of Pediatrics, the American Academy of Family Physicians, and the American College of Obstetricians and Gynecologists.

#### **Are vaccines safe?**

Today's vaccines are the safest and most effective in our country's history. Vaccines undergo extensive testing to ensure their safety, purity, potency and effectiveness before they are approved for use by the U.S. Food and Drug Administration (FDA). Even after vaccines are approved for use, monitoring for rare side effects continues through the Vaccine Adverse Event Reporting System.

#### **What are the most common risks of immunizations?**

Your baby may experience mild redness or irritation where the shot was given, and may have a fever or be fussy after the shot.

#### **What are the risks of not immunizing my infant/child?**

Routine childhood immunizations protect your child from 14 vaccine-preventable diseases. These diseases can cause serious illnesses and death, including:

- Meningitis and pneumonia from Haemophilus influenzae type b (Hib).
- Liver disease from Hepatitis B.
- Fever, rash, blindness, encephalitis and death from Measles.
- Severe brain damage and death from Meningitis A.
- Painful swelling under the ears, fever, headache, muscle aches and viral meningitis from Mumps.
- Pneumonia, meningitis, febrile bacteremia, otitis media, sinusitis and bronchitis from Pneumococcal diseases.
- Irreversible paralysis from Polio.
- Painful muscle tightening and stiffness, swallowing problems, breathing problems and death from Tetanus.
- Breathing problems, heart failure, paralysis and death from Diphtheria.
- Whooping cough interfering with eating, drinking and breathing, pneumonia, seizures, brain damage and death from Pertussis.

**Do the benefits of vaccination outweigh the risks?** Yes.

### **What are the benefits of immunizations?**

Immunizations are recognized as one of the **most successful and cost-effective health interventions**.

Per birth cohort, recommended childhood immunizations:

- **Prevent 42,000 early deaths**
- **Prevent 20 million cases of disease**
- **Save \$13.5 billion in direct costs**
- **Save \$68.8 billion in societal costs**



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## **Do vaccines cause autism or other chronic diseases like asthma or diabetes?**

It is understandable that parents may be concerned about this issue with the amount of false information available today. We know you as a parent want to protect your baby and do what is best for them, including avoiding harm. We want to do what is best for your baby too. Many strong scientific studies show that there is no link between vaccines and autism or other chronic diseases like asthma and diabetes. We have no reason to believe, based on the scientific evidence, that vaccines are a threat to a long healthy life for your baby. We do know, however, that not giving your baby vaccines does threaten a long and healthy life.

## **Is there thimerosal and mercury in my baby's vaccines?**

Thimerosal is a compound that contains mercury and prevents the growth of bacteria and fungus. Thimerosal is used as a preservative in some multi-dose vial flu vaccines and is also used during the making of other vaccines. There is no evidence that thimerosal in vaccines is harmful, but the FDA removed thimerosal from vaccines as much as possible to limit overall mercury exposure. Currently no recommended childhood vaccines contain thimerosal as a preservative, except for certain multi-dose vials of flu vaccine. Thimerosal is used during the making of two childhood vaccines (one DTaP and one DTaP-Hib vaccine) but is removed later in the process, with close to zero of it remaining. There is no good scientific evidence showing an association between thimerosal and autism.

## **Why does my baby (if medically stable and weighing at least 2 kilograms) need the Hepatitis B vaccine within 24 hours of birth if I'm surface antigen negative?**

The Advisory Committee on Immunization Practices recommends universal routine prophylaxis within 24 hours of birth to reduce the incidence of perinatal hepatitis B transmission. Since hepatitis B infection has long-term complications for infants, potentially including death, the birth dose is a safety net for any possible errors such as when mother's results are falsely negative, not obtained, not communicated, misinterpreted, or are incorrectly reported. Even if mother is truly surface antigen negative, the birth dose is the appropriate start to lifelong prophylaxis. This dose also protects against household exposures. The American Academy of Pediatrics has endorsed this recommendation.

## **If I choose to not vaccinate my baby, what do I need to do?**

In the future, any time your child is sick, you must inform their doctors and school of their unvaccinated status before your child comes in contact with other people. Your child may need to be isolated while they are sick if a vaccine-preventable disease is suspected. Your child may need to be removed from childcare or school for days to weeks if a vaccine-preventable disease is in your community. Avoiding exposing your child to a vaccine-preventable disease in your community may not be possible. For example, even hours after an infected person has left a room, measles may still infect an unvaccinated person by them just entering that room. If a vaccine-preventable disease is contracted while traveling, travel by bus, train, or plane should not occur until your child is no longer contagious.

## **Will giving multiple vaccines at once hurt my baby?**

It is common for parents to be concerned about multiple vaccine injections or exposing their baby to multiple antigens at once. However, there is no scientific evidence that routine childhood immunizations overly stress the immune system or result in immunosuppression. The routine childhood immunization schedule should be followed as recommended to provide the earliest possible protection for your baby and to reduce the number of uncomfortable vaccine injection experiences your baby has.

## **What can I do to reduce discomfort for my baby during vaccine injections?**

Many things have been shown to reduce discomfort for your baby:

- Breastfeed your baby during the injection.
- Hold your baby in a comfortable upright position. Avoid excessive restraint.
- Stay calm if your baby cries during the process. Crying is a normal response for your baby. It is most helpful to your baby if you stay calm and not show them your stress.
- Distract your baby with their favorite blanket or toy.
- Touch and soothe your baby during the injection.
- Talk softly, smile and make eye contact with them during the injection.
- Cuddle and comfort your baby after the injection.

## **What can the doctors do to reduce discomfort for my baby during vaccine injections?**

Many things have been shown to reduce discomfort for your baby:

- Administration of sucrose solution if breastfeeding is not possible.
- Administration of the most painful vaccine last (i.e. Prevnar).
- Perform rapid intramuscular injection without aspiration.
- Distract the baby with a toy.
- Consider using a topical anesthetic (i.e. EMLA cream), as appropriate.

## **Where can I find more trustworthy information?**

Talk to your baby's health care team about any remaining questions or concerns you may have.

Visit the Centers for Disease Control and Prevention website at <http://www.cdc.gov/vaccines>.

Visit the American Academy of Pediatrics website at <http://www.healthychildren.org>.