



National Infant Immunization Week

April 23 – 30, 2011

Love them. Protect them. Immunize them.

## VACCINE-PREVENTABLE DISEASES FACT SHEET FOR PARENTS

In the United States, vaccines have reduced or eliminated many infectious diseases that once routinely killed or harmed thousands of infants and young children each year. However, the viruses and bacteria that cause vaccine-preventable disease and death still exist and can be passed on to people who are not immunized. Vaccine-preventable diseases have many social and economic costs. These diseases result in doctor visits, hospitalizations, and even death. Sick children miss school and can cause parents to lose time from work.

### **Diphtheria**

This serious disease is caused by bacteria that produce a toxin (poison). Diphtheria can cause blockage of the airway, making it impossible to breathe. It can also cause heart problems, paralysis of the muscles needed for swallowing, and sometimes death.

*Vaccinate with DTaP vaccine (a combination vaccine that protects against diphtheria, tetanus, and pertussis) at 2 months, 4 months, 6 months, 15 through 18 months, 4 through 6 years, and 11 through 12 years.*

### **Hib Disease**

*Haemophilus influenzae* type b (Hib) bacteria cause meningitis (infection of the covering around the brain and spinal cord). Hib can also cause pneumonia (infection in the lungs) and infection of the blood, joints, bones, throat, and heart covering. The disease is very serious for children younger than age 5, especially infants. Before vaccines were available, about 3% to 8% of Hib meningitis cases were fatal and, of those children who survived, 15% to 30% suffered severe nerve damage.

*Vaccinate with Hib vaccine at 2 months, 4 months, 6 months, and 12 through 15 months.*

### **Hepatitis A**

Hepatitis A is a contagious liver infection caused by the hepatitis A virus. Symptoms can include fever, tiredness, poor appetite, vomiting, stomach pain, and sometimes jaundice (when skin and eyes turn yellow). Hepatitis A virus is found in large quantities in the feces (or stool) of an infected person. Hepatitis A is spread by contact with people who are infected or through contact with contaminated objects such as food or water.

*Vaccinate with hepatitis A vaccine between 12 and 23 months (2 doses).*

### **Hepatitis B**

Hepatitis B is an infection of the liver caused by a virus. It spreads through contact with blood or other body fluids due to sharing of personal items, such as toothbrushes. Symptoms of hepatitis B include fever, fatigue, loss of appetite, nausea, vomiting, pain in joints and stomach, dark urine, grey-colored stools, and jaundice (when skin and eyes turn yellow). The virus stays in the liver of some people for the rest of their lives and can result in severe liver diseases or cancer.

*Vaccinate with hepatitis B vaccine at birth, 1 through 2 months and 6 through 18 months.*

### **Human Papillomavirus (HPV)**

Human papillomavirus is a common virus. HPV is most common in people in their teens and early 20s. It is the major cause of cervical cancer in women and genital warts in women and men.

*Vaccinate your pre-teen girl with three doses of HPV vaccine beginning at ages 11 through 12. Pre-teen boys may also be vaccinated at this time.*

### **Influenza (Flu)**

Influenza is a highly contagious viral infection of the nose, throat, and lungs. It is one of the most severe illnesses of the winter season and spreads easily when an infected person coughs or sneezes. Influenza may lead to hospitalization or even death. Typical symptoms include a sudden high fever, chills, a dry cough, headache, runny nose, sore throat, and muscle and joint pain. Extreme fatigue can last from several days to weeks.

*Vaccinate with influenza vaccine annually after 6 months of age.*

### **Measles**

The measles virus is spread very easily. Just being in the same room with a person with measles is enough to catch the disease. Symptoms usually include a rash, fever, cough, and watery eyes. Measles can also cause pneumonia, seizures, brain damage, or death. Of every 1,000 children who get measles, 1 or 2 will die from the disease.

*Vaccinate with MMR vaccine (a combination vaccine that protects against measles, mumps, and rubella) at 12 through 15 months and 4 through 6 years.*

### **Meningococcal Disease**

Caused by a type of bacteria, meningococcal disease is a leading cause of bacterial meningitis (infection of the covering around the brain and spinal cord) in children. Meningococcal disease also causes blood infections, which can be treated with antibiotics; still, about one of every ten people who get the disease dies from it. Survivors may lose their arms or legs, become deaf, have problems with their nervous systems, become developmentally disabled, or suffer seizures or strokes.

*Vaccinate with meningococcal vaccine at 11 through 12 years.*

### **Mumps**

The mumps virus causes fever, headaches, and swollen salivary glands under the jaw. Children who get mumps may develop meningitis (infection of the covering around the brain and spinal cord) and sometimes encephalitis (brain swelling). Mumps can also result in permanent hearing loss.

*Vaccinate with MMR vaccine (a combination vaccine that protects against measles, mumps, and rubella) at 12 through 15 months and 4 through 6 years.*

### **Pertussis (Whooping Cough)**

Pertussis is caused by bacteria. It can cause spells of violent coughing and choking, making it hard to breathe, drink, or eat. The cough can last for weeks. Pertussis is most serious for babies, who can get pneumonia (infection in the lungs), have seizures, become brain damaged, or even die. More than half of children under 1 year old who get pertussis must be hospitalized.

*Vaccinate with DTaP vaccine (a combination vaccine that protects against diphtheria, tetanus, and pertussis) at 2 months, 4 months, 6 months, 15 through 18 months, 4 through 6 years, and 11 through 12 years.*

### **Pneumococcal Disease**

Pneumococcal disease is a bacterial infection that invades the lungs, causing the most common kind of bacterial pneumonia (infection in the lungs). The bacteria can invade both the bloodstream (bacteremia) and the brain (meningitis). Symptoms include high fever, cough with chest pain and mucus, shaking chills, breathlessness, and chest pain that increases with breathing. Pneumococcal disease can result in hospitalization and even death.

*Vaccinate with pneumococcal vaccine at 2 months, 4 months, 6 months, and 12 through 15 months.*

**Polio**

Polio is caused by a virus that is spread by contact with the feces (human waste) of an infected person. Symptoms can include sudden fever, sore throat, headache, muscle weakness, and pain. Polio can cause paralysis and even death.

*Vaccinate with polio vaccine at 2 months, 4 months, 6 through 18 months, and 4 through 6 years.*

**Rotavirus**

Rotavirus is the most common cause of severe diarrhea and vomiting among children in the United States and around the world. Before rotavirus vaccines were available in the United States, more than 200,000 young children each year received care in hospital emergency departments for rotavirus disease, and 55,000 to 70,000 young children were hospitalized. Symptoms include vomiting and watery diarrhea for 3 to 8 days and fever and abdominal pain occur frequently.

*Vaccinate with rotavirus vaccine at 2 months, 4 months, and 6 months (2 or 3 doses depending on brand).*

**Rubella (German Measles)**

The rubella virus usually causes a mild sickness with fever, swollen glands, and a rash that lasts about 3 days. If a pregnant woman is infected, the result to the baby can be devastating, including miscarriage, serious heart defects, and loss of hearing and eye sight.

*Vaccinate with MMR vaccine (a combination vaccine that protects against measles, mumps, and rubella) at 12 through 15 months and 4 through 6 years.*

**Tetanus (Lockjaw)**

Tetanus is caused by a toxin produced by bacteria found in soil that enters the body through a cut or wound. Tetanus causes serious, painful spasms and stiffness of all muscles in the body and can lead to “locking” of the jaw so a person cannot open his or her mouth, swallow, or breathe. Three out of ten people who get tetanus die from the disease.

*Vaccinate with DTaP vaccine (a combination vaccine that protects against diphtheria, tetanus, and pertussis) at 2 months, 4 months, 6 months, 15 through 18 months, 4 through 6 years, and 11 through 12 years.*

**Varicella (Chickenpox)**

The varicella virus usually causes a rash, itching, tiredness, and fever. It can sometimes lead to severe skin infections, pneumonia (infection in the lungs), brain infection, or death. Complications occur most often in very young children or those with weakened immune systems.

*Vaccinate with varicella vaccine at 12 through 15 months and 4 through 6 years.*

This document can be found on the CDC website at:

<http://www.cdc.gov/vaccines/events/niiw/>