

Immunizations 101

The following glossary provides further information about vaccines your child will receive to protect him or her against various preventable infectious diseases. Drs Kahn and Garrison support the [AAP's immunization guidelines](#), and believe all children have the **right** to be protected from preventable infectious diseases, with rare medical exceptions.

Below is the link to the Department of Health and Human Services Centers for Disease Control and Prevention webpage listing various vaccinations available. All handouts are updated by the CDC and downloadable by either pdf or text form.

<https://www.cdc.gov/vaccines/hcp/vis/current-vis.html>

Vaccine	Description
DTaP and Tdap	Diphtheria, Tetanus and acellular Pertussis. Diphtheria can cause breathing problems, paralysis, and heart failure. Pertussis is the clinical name for whooping cough. Tetanus causes painful tightening of the muscles. It can cause "locking" of the jaw so you cannot open your mouth or swallow. About 1 person out of 5 who get tetanus dies. Tetanus/pertussis boosters (Tdap) are recommended at age 10 years and at subsequent 10-years. Exception: If a person sustains a "dirty" wound, a Td booster is recommended if it has been more than 5 years since the last booster.
Hepatitis A	Hepatitis A is a serious liver disease caused by the Hepatitis A virus. Hepatitis A can be spread by being in contact with another person who has the illness, or with contaminated food/water. Historically southern states have given this vaccine routinely and noticed a marked drop in the number of cases of infection. The AAP now recommends all children 12 months of age and older receive Hepatitis A vaccine in a 2 dose schedule. This is especially important for international travelers.
Hepatitis B	Hepatitis B is a virus that can lead to liver failure and liver cancer. There is no cure for Hepatitis B virus, so efforts have been focused on prevention with vaccine. It is known that infants and young children who get Hepatitis B infection are much more likely to progress to liver failure and/or develop liver cancer than adults who acquire the infection. That is why it is recommended that infants receive their first dose of the vaccine shortly after they are born, while they are still in the hospital.
HIB	<i>Haemophilus Influenzae B</i> . Prior to this vaccine, HIB was the most common cause of bacterial meningitis and invasive bacterial infections in young children. Do not be confused by the word "influenzae." This has nothing to do with the flu, which is a virus. This is a potentially deadly bacteria which is rarely seen since universal vaccination was initiated.

<p>HPV</p>	<p>Human Papillomavirus is the cause of most cervical cancers and pre-cancerous cervical lesions in women. The HPV vaccine contains 4 strains of the virus which are implicated in at least 70% of cases of cervical cancer. In addition it is the leading cause of mouth/oral cancers in both men and women. The AAP recommends that this vaccine be administered to both boys and girls as an important way to avoid preventable cancers.</p>
<p>IPV</p>	<p>Inactivated Polio Vaccine. The old polio vaccine was the oral polio vaccine and was given by mouth. It was a low dose live vaccine of the polio virus. Since polio as a disease has been eradicated in our part of the world, a killed, inactivated form of the polio vaccine is given by injection.</p>
<p>MMR</p>	<p>Measles, Mumps and Rubella. Prior to universal vaccination with MMR, measles was a common childhood virus that led to seizures, brain damage and death in a significant number of children. Mumps can lead to deafness, meningitis, and swelling of the testicles or ovaries, which could lead to infertility and (rarely) death. Prior to vaccination, Rubella, commonly called "German Measles," was a leading cause of miscarriage and serious birth defects in pregnant women who were infected with the virus. The MMR vaccine does NOT cause autism. Several published studies have documented that there is NO association between the MMR vaccine and developmental problems/autism. Note: The backup dose is not a "booster" per se; rather, it ensures that the small percentage of children who never got an adequate response to the initial vaccine have a second chance to be covered before they enter school (the age with the highest risk of contracting these viral infections.)</p>
<p>Menactra</p>	<p>Meningococcal meningitis is the leading cause of bacterial meningitis in adolescents and young adults. Meningococcal meningitis is often sporadic, but it spreads rapidly in situations where teens and young adults live in close quarters, such as dorm rooms. In the past, the polysaccharide vaccine was recommended for college-bound teens. The new conjugate vaccine is recommended for all children at their 11 year old check ups, with a booster at age 16+ years.</p>
<p>Meningococcal B (Bexsero, Trumenba)</p>	<p>Meningococcal meningitis is the leading cause of bacterial meningitis in adolescents and young adults. All children should get a 2 dose series that cover the four most common strains (A,C,Y,W) at 11 and 16 yrs. Meningococcal B can also cause meningitis, but there are fewer cases in this country each year. Colleges students are not at increased risk for this infection compared to the general population, unless their campus has a known outbreak. However, some families are choosing to vaccinate their adolescents against MenB prior to high school graduation. Our office stocks Bexsero, which is a 2 dose series given at least one month apart.</p>
<p>Pneumococcal (Prevnar)</p>	<p>Protects against invasive Pneumococcal disease (serious bloodstream infections, meningitis, deep skin infections, etc.) Because the HIB vaccine was so effective, scientists decided to develop a vaccine against <i>Streptococcus pneumoniae</i>, which is the second leading cause</p>

of bacterial meningitis in young children. By immunizing your child with both the HIB and Prevnar, you are preventing about 93% of cases of bacterial meningitis in your child. As a side bonus, it has been found that Prevnar also reduces the numbers of cases of ear infections and sinus infections in children. (This does not prevent all cases of ear infections/sinus infections, but reduces the number of infections caused by this particular bacteria.) Do not confuse *Streptococcus pneumoniae* with "strep throat," which is caused by group A streptococcus and will not be prevented with this vaccine.

Rotavirus

Rotavirus is the most common cause of severe gastroenteritis in infants and young children worldwide and results in a large number of ER visits, hospitalizations and up to 60 deaths per year in the US. The CDC and AAP have recommended routine immunization of infants with the oral rotavirus vaccine.

Varicella

Varicella is commonly called chickenpox. Scientists began looking at a vaccine to prevent chickenpox for 3 reasons: (1) About 12,000 people are hospitalized and 100 people die each year in the United States as a result of chickenpox; (2) millions of dollars are lost each year by families who need to stay home from work for 7-10 days because of chickenpox illness in themselves or need to care for an infected family member; and (3) newly emerging resistant bacteria are beginning to account for a lot of secondary infections in people with chickenpox, which are becoming more difficult and in some cases impossible to treat. The CDC and the AAP have now recommended a second dose of Varicella vaccine be given to all children who have only received one dose of the vaccine. This will routinely be given along with the second dose of MMR.