

Why Immunizations Are Important

Immunizations are an important part of living a healthy lifestyle. Some diseases are becoming rare in the United States, largely due to vaccinations; however viruses and bacteria continue to circulate in this country. We live in a very mobile society, and over one million people travel into the United States from other countries daily. With this mobility comes the risk of transporting the germs responsible for many preventable diseases. Immunizations are largely responsible for preventing the spread of these infectious diseases, and those that were once an epidemic threat are now reduced to rare occurrences.

The human body is built with an amazing system comprised of organs, glands, fluids and cells that fight foreign germs. This “immune system” is responsible for fighting invading germs called “antigens.” When the immune system identifies these antigens, it produces “antibodies,” a protein substance that fights them. The normal body produces millions of antibodies daily, fighting the many invaders that attack it. When an antibody identifies and destroys an antigen, it disappears when the job is done; however, the response is usually tattooed on a “memory cell” so the body is armed next time the invader enters the body. This process is called “immunity.” With vaccinations, the invader, or antigen, that is introduced to the body is either killed or severely weakened beforehand; therefore, it is not strong enough to cause the disease but is strong enough to produce antibodies. This generally is enough exposure to develop immunity through the production of the memory cells, without causing the disease itself.

Risks: While the identification of autism is on the rise in this country, there have been no legitimate research studies to validate a correlation between vaccination exposure and the development of autism. The Centers for Disease Control and Prevention (CDC) has developed a committee to assess and evaluate the side effects or negative response to immunizations. The *Immunization Safety Committee* information can be found at www.cdc.gov/vaccines. Immunizations, like medications, may come with some risk of side effects such as low grade fever. Very few people have adverse effects like a severe allergic response, high fever or seizure. People who have compromised immune systems should be mindful of immunization exposure. Consult with your healthcare practitioner for guidance or with questions.

2011 Recommended Immunizations for Children from Birth Through 6 Years Old

Age	1 month	2 months	4 months	6 months	12 months	15 months	18 months	19-23 months	2-3 years	4-6 years
HepB	HepB	HepB	HepB	HepB	HepB	HepB	HepB	HepB	HepB	HepB
RV	RV	RV	RV	RV	RV	RV	RV	RV	RV	RV
DTaP	DTaP	DTaP	DTaP	DTaP	DTaP	DTaP	DTaP	DTaP	DTaP	DTaP
Hib	Hib	Hib	Hib	Hib	Hib	Hib	Hib	Hib	Hib	Hib
PCV	PCV	PCV	PCV	PCV	PCV	PCV	PCV	PCV	PCV	PCV
IPV	IPV	IPV	IPV	IPV	IPV	IPV	IPV	IPV	IPV	IPV
Influenza (Yearly)										
MMR										MMR
Varicella										Varicella
HepA, 2 doses ⁵										

Note: Shaded boxes indicate the vaccine can be given during shown age range.

NOTE: If your child misses a shot, you don't need to start over, just go back to your child's doctor for the next shot. The doctor will keep your child up-to-date on vaccinations. Talk with your doctor if you have questions.

FOOTNOTES:
 1. HepA vaccination is recommended for high-risk children older than 2 years. Children with certain medical conditions may also need a dose of meningococcal vaccine (MCV4) and pneumococcal vaccine (PPSV23). HepA vaccination may be administered to any child older than 2 years for whom immunity is desired. See vaccine-specific recommendations at <http://www.cdc.gov/vaccines/pubs/ACIP/0418.htm>.
 2. Two doses given at least four weeks apart are recommended for children aged 6 months through 8 years of age who are getting a flu vaccine for the first time. Children who only got one dose in their first year of vaccination should get two doses the following year.

For more information, call toll free 1-800-CDC-INFO (1-800-232-4636) or visit <http://www.cdc.gov/vaccines>

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

AMERICAN ACADEMY OF FAMILY PHYSICIANS
STRONG MEDICINE FOR AMERICA

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN

See back page for more information on vaccine-preventable diseases and the vaccines that prevent them.

Source: http://www.cdc.gov/vaccines/spec-grps/infants/images/parent_ver_sch_0_6yrs_view.jpg. Accessed April 11, 2011.

When Do Children and Teens Need Vaccinations?

Age	HepB (Hepatitis B)	DTaP/Tdap (Diphtheria, tetanus, pertussis)	Hib (Haemophilus influenzae type b)	Polio	PCV (Pneumococcal conjugate)	RV (Rotavirus)	MMR (Measles, mumps, rubella)	Varicella (Chickenpox)	HepA (Hepatitis A)	HPV (Human papilloma virus)	MCV4 (Meningococcal conjugate)	Influenza
Birth	✓											
2 months	✓ ^{1,2}	✓	✓	✓	✓	✓						
4 months	✓ ¹	✓	✓	✓	✓	✓						
6 months		✓	✓ ⁵		✓	✓ ⁵						
12 months												
15 months	✓ ³ (15-18 mos)	✓ ³ (15-18 mos)	✓ ³ (12-15 mos)	✓ ³ (12-15 mos)	✓ ³ (12-15 mos)		✓ (12-15 mos)	✓ (12-15 mos)		✓ (2 doses given 6 mos apart at age 12-23 mos)		
18 months												
19-23 months		Catch-up ²	Catch-up ² (in 5 years)	Catch-up ²	Catch-up ² (in 5 years)		Catch-up ²	Catch-up ²				
4-6 years		✓		✓			✓	✓				
7-10 years		Catch-up ^{2,4}							Catch-up ²			
11-12 years		✓					Catch-up ²	Catch-up ²		✓✓✓		✓ ⁸
13-18 years		Catch-up ² (Tdap)								Catch-up ^{2,8}	Catch-up ²	✓ ⁸

Note: (✓) gives each fall or winter to all people ages 6 and older.

1. Your infant may not need a dose of HepB at age 4 months depending on the type of vaccine that your healthcare provider uses.
 2. If your child's vaccinations are delayed or missed, they should be given as soon as possible.
 3. This dose of DTaP may be given as early as age 12 months if it has been 6 months since the previous dose.
 4. If your child is age 7-10 years and never completed the series of DTaP, they need to catch up now. For protection against pertussis, it's important that they and all teens get a dose of Tdap.
 5. Your infant may not need a dose of Hib vaccine or RV vaccine at age 6 months depending on the type of vaccine that your healthcare provider uses.
 6. All girls and women ages 11 through 26 years should be vaccinated with 3 doses of HPV vaccine, given over a 6-month period. Boys and men ages 9 through 26 years may also be vaccinated with one of the HPV vaccines (Cervarix) to reduce their likelihood of getting genital warts. The vaccine may be given to children as young as age 9 years.
 7. All adolescents and teens ages 11 through 18 years should be vaccinated with MCV4, an shingles vaccine, if they are 19 through 21 years who are attending college. Booster doses will be necessary for those who get their first dose before age 16 years.
 8. Only one dose of influenza vaccine is recommended for most children. However, those younger than age 9 years who are receiving influenza vaccine for the first time, or who received only 1 dose in the previous season (if it was their first time receiving influenza vaccine), should receive 2 doses spaced at least 4 weeks apart.

Source: Acquired from <http://www.immunize.org/catg.d/p4050.pdf> on April 11, 2011. We thank the Immunization Action Coalition.