

NEW IMMUNIZATIONS FOR ADOLESCENTS

By Nancy Husarik, MD

Until recently, immunizations for kids were limited to babies and toddlers, with all the primary immunizations and boosters being completed at age 4, and a tetanus booster for most kids at about 12, when they are entering 7th grade. Generally, vaccines are given to help the body's natural immune system make antibodies to protect against future infection.

Over the last several years, new immunizations have been developed and recommendations for boosters for some immunizations have changed. For adolescents, three new immunizations are now recommended.

Menactra is a new and improved vaccine to protect against bacterial meningitis and replaces a prior version of the vaccine. Bacterial meningitis is a rare, but very serious and potentially fatal infection. There are several strains of the bacteria, *Neisseria meningitidis*, which may cause meningitis. This bacteria can exist or be carried in the nasal passages of healthy individuals. Adolescents, especially when living in close contact, have one of the highest rates of infection, second only to the rate in infants. Menactra is intended for kids age 11 or 12, or those entering high school or college. Because of the way menactra is produced, it should provide long term immunity and it decreases the incidence of community meningococcal bacteria carriers. The vaccine can also be given to high risk adults up to age 55. Menactra does not provide protection against all types of



meningitis, so anyone with concerning symptoms (headache, fever, stiff neck) should still be evaluated by a physician. Though there has been some concern that Menactra may be associated with Guillain Barre syndrome, recent research has shown that the rates of this neurologic condition are basically the same in those immunized and those not immunized.

Gardasil is a new vaccine recommended for girls at about age 11 or 12, and protects against some a virus which can cause cervical cancer, the Human Papilloma Virus (HPV). Currently, it has only been studied in and is only recommended for girls. The virus has over 100 subtypes, most of which are responsible for low risk infections, such as warts, however, some of the subtypes are responsible for high grade infections which may progress to cancer. While many cervical HPV infections will resolve on their own within 1-2 years, those that persist are most likely to progress to abnormal cells and cancer. Gardasil protects against four types of HPV, two of which are responsible for about

2/3 of all cervical cancer cases. However, the vaccine may be given as early as age 9 and as late as age 26. Cervarix is a very similar vaccine soon to be available. Routine screening for cervical cancer with Pap testing is still needed as recommended, generally starting at age 21 or within three years of initial intercourse.

The Tdap immunization, known as Adacel or Boostrix, is the traditional tetanus booster, with the addition of a booster for pertussis (whooping cough). Over the last 20 years, research has found that the protective effects of the primary series of immunizations for pertussis will eventually wear down. Whooping cough infections among adolescents and young adults have become widespread. In Europe, researchers found that using Tdap, rather than the usual tetanus booster, cuts the number of whooping cough infections in young adults significantly. This immunization can be used in place of the routine tetanus (Td) booster every 10 years through age 64. If a Td booster has already been given, Tdap can be administered in as little as two years.

More vaccines for adolescents are in the works, including vaccines for tomealovirus and herpes simplex virus, both of which remain in the body for life once an individual is infected. For additional information about any of these new immunizations, contact your pediatrician or family doctor.



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Recommended Childhood Immunizations

Vaccine	Birth	2 mths	4 mths	6 mths	12-18 mths	4-6 yrs	11-12 yrs	13-18 yrs
▶ Hepatitis B	Hep B	Hep B	Hep B				Catch Up	Catch Up
▶ Rota Virus		Rotavirus	Rotavirus	Rotavirus				
▶ Diphtheria, Tetanus, Pertussis		DTaP	DTaP	DTaP	DTaP	DTaP		
▶ Haemophilus Influenza Type B		Hib	Hib	Hib	Hib			
▶ Pneumococcal		PCV	PCV	PCV	PCV			
▶ Inactivated Polio Virus		IPV	IPV	(IPV)	(IPV if needed)	IPV		
▶ Influenza					Influenza (yearly) 6 mths to 5 yrs			
▶ Measles, Mumps, Rubella/ Varicella					MMRV	MMRV		
▶ Tetanus, Diphtheria, Pertusis							Tdap	Tdap
▶ Human Papillomavirus (gardasil)							HPV (3 doses)	Catch Up
▶ Meningococcal							Menactra	Catch Up