

Vaccine	Brand Name	Company	Inactive Ingredients (per dose)	Vaccine-Production Media	Contraindications To Use	Comments
Ages 7-18 years						
Diphtheria, tetanus, pertussis (Tdap)	Adacel <sup>®</sup>	Sanofi Pasteur Limited	Aluminum phosphate, < 5mcg formaldehyde, <50ng glutaraldehyde, 3.3mg 2-phenoxyethanol (not as preservative), sterile water	Pertussis: Stainer-Scholte medium modified by added casamino acids and dimethyl-beta-cyclodextrin.	Severe allergic reaction to any component of the vaccine - because of the uncertainty as to which component of the vaccine may be responsible, such individuals may be referred to an allergist for evaluation if further immunizations are to be considered; encephalopathy within 7 days of a previous pertussis-containing vaccine not attributable to another identifiable cause. <sup>1</sup>	For ages 11-64 yrs; contains same antigens as Daptacel <sup>®</sup> , however formulated with reduced quantities of <i>d</i> and <i>detoxified PT</i>
		<a href="http://www.us.aventispasteur.com">www.us.aventispasteur.com</a>		Diphtheria: Modified Mueller's growth medium	Progressive neurologic disorder, uncontrolled epilepsy, or progressive encephalopathy, until a treatment regimen has been established and the condition stabilized <sup>2(92)</sup>	The vial stopper is latex free
		800-822-2463		Tetanus: Modified Mueller-Miller casamino acid medium without beef heart infusion.		

Vaccine	Brand Name	Company	Inactive Ingredients (per dose)	Vaccine-Production Media	Contraindications To Use	Comments
	Boostrix <sup>®</sup>	GlaxoSmithKline Biologicals	Sodium chloride, aluminum hydroxide, <100mcg formaldehyde, <100mcg of polysorbate 80, no preservative	Pertussis: Modified Stainer-Scholte liquid medium	Severe allergic reaction to any component of the vaccine - because of the uncertainty as to which component of the vaccine might be responsible, such individuals may be referred to an allergist for evaluation if further immunizations are to be considered; encephalopathy within 7 days of administration of a previous dose of a pertussis-containing vaccine that is not attributable to another identifiable cause; progressive neurological disorder until a treatment regimen has been established and the condition stabilized. <sup>1</sup>	For ages 10-18 yrs; contains the same antigens as Infanrix <sup>®</sup> , but formulated with reduced quantities of these antigens
		<a href="http://www.gsk.com">www.gsk.com</a>		Tetanus: Modified Latham medium derived from bovine casein		The tip cap and the rubber plunger of the needleless prefilled syringes contain dry natural latex rubber, while the vial stopper is latex-free.
		888-825-5249		Diphtheria: Fenton medium containing a bovine extract		
Human Papillomavirus Quadrivalent						
	Gardasil <sup>®</sup>	Merck Vaccine Division	Amorphous aluminum hydroxyphosphate sulfate, sodium chloride, L-histidine, polysorbate 80, sodium borate, sterile water; does not contain a preservative nor antibiotics	<i>S. cerevisiae</i> (budding yeast) on chemically defined fermentation media which includes vitamins, amino acids, mineral salts, and carbohydrates	Hypersensitivity to the active substances or to any of the excipients; individuals who develop symptoms indicative of hypersensitivity after receiving a dose should not receive further doses of the vaccine <sup>1</sup>	Indicated in girls and women 9-26 years of age, not for use in pregnancy.
		<a href="http://www.gardasil.com">www.gardasil.com</a>				
		800-525-2065				

Vaccine	Brand Name	Company	Inactive Ingredients (per dose)	Vaccine-Production Media	Contraindications To Use	Comments
Meningococcal						
	Menactra <sup>R</sup>	Sanofi Pasteur	Sodium phosphate buffered isotonic sodium chloride solution, no preservative	N. Meningitidis: cultured on Mueller-Hinton agar and grown in Watson-Scherp media. C.Diphtheriae: grown in modified Mueller and Miller medium	Known hypersensitivity to any component of the vaccine including diphtheria toxoid or a life-threatening reaction after previous administration of a vaccine containing similar components; known history of Guillain-Barre syndrome <sup>1</sup>	The stopper of the vial contains dry natural rubber latex. The syringe is latex-free <sup>1</sup>
	(MCV4)	<a href="http://www.us.aventispasteur.com">www.us.aventispasteur.com</a>				Of the two meningococcal vaccines, this is the preferred version in the US
		800-822-2463				
	Menomune <sup>R</sup>	Sanofi Pasteur	Powder contains 2.5 to 5mg lactose per 0.5ml. Multidose 10 ml vial diluent contains 0.01% thimerosal, but single dose vial has no preservative.	Casamino acid medium and medium 199. N. meningitidis are cultivated with Mueller Hinton agar and Watson Scherp media	Severe anaphylactic reaction to a vaccine component or following a prior dose of vaccine. <sup>4 (280)</sup>	The stopper to the 10ml vial contains dry natural latex rubber.
	(MPSV, MPV4)	<a href="http://www.us.aventispasteur.com">www.us.aventispasteur.com</a>			Defer immunization during the course of any acute illness <sup>2 (131)</sup>	May be used when Menactra <sup>R</sup> is not available
		800-822-2463				
Pneumococcal						
	Pneumovax 23 <sup>R</sup>	Merck Vaccine Division	0.25% phenol as preservative, sterile saline	Media containing bovine proteins	Hypersensitivity to any component of the vaccine <sup>1</sup>	May be indicated in some individuals older than 2 years with certain medical problems
	(PPV)	<a href="http://www.merckvaccines.com">www.merckvaccines.com</a>			Patients with a history of any type of neurological sign or symptom following administration of vaccine <sup>2 (158)</sup>	
		800-525-2065				

Vaccine	Brand Name	Company	Inactive Ingredients (per dose)	Vaccine-Production Media	Contraindications To Use	Comments
Influenza, inactivated, injectable (TIV)						
	Fluzone <sup>R</sup>	Sanofi Pasteur	Gelatin 0.05%; each 0.5ml dose may contain formaldehyde (not greater than 100mcg), polyethylene glycol p-isooctylphenyl ether (not more than 0.02%, sucrose (not more than 2.0%)	Extraembryonic (allantoic) fluids of chicken embryo	Known systemic hypersensitivity reactions to egg proteins, chicken protein, or any other component of the vaccine, or life threatening reaction after previous administration of a vaccine containing the same components <sup>1</sup>	The 0.25ml pre-filled syringes, the 0.5ml pre-filled syringe, & the single dose vial (0.5ml) contain no preservatives. The 5ml multi-dose vial contains thimerosal (25mcg/dose). These dosage forms are all latex free.
	2008-2009	<a href="http://www.us.aventispasteur.com">www.us.aventispasteur.com</a>			The FDA and manufacturer include the contraindication of vaccination of persons with a history of Guillain-Barre Syndrome (GBS), but it is not included in the ACIP recommendations. The ACIP believes that the benefits of influenza immunization justify annual vaccination, but cautions not to administer the vaccine within 6 weeks of GBS. <sup>2(208), 5</sup>	There is no evidence that patients with allergies to chickens or feathers are at an increased risk of reaction to the vaccine <sup>2 (208)</sup>
		800-822-2463				

\* Other generic versions may be available. Read the accompanying package insert to determine all ingredients.  
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Vaccine	Brand Name	Company	Inactive Ingredients (per dose)	Vaccine-Production Media	Contraindications To Use	Comments
	Fluvirin <sup>®</sup>	Chiron Vaccines Limited for Novartis Vaccines	Phosphate buffered saline; trace amount of thimerosal (less than 1 mcg mercury per 0.5ml dose) in pre-filled syringe; thimerosal added as a preservative in multi-dose vial (25mcg mercury per 0.5ml dose)	Extraembryonic (allantoic) fluids of chicken embryo	Known systemic hypersensitivity reactions to chicken eggs, chicken, chicken feathers, chicken dander, thimerosal, or any other component of the vaccine. Also contraindicated in the occurrence of any neurological symptoms or signs following administration	The multidose vial stopper and the syringe stopper/plunger do not contain latex <sup>1</sup>
	(2008-2009)	<a href="http://www.novartisvaccines.com">www.novartisvaccines.com</a>			The FDA includes the contraindication of vaccination of persons with a history of Guillain-Barre Syndrome (GBS), but it is not included in the ACIP recommendations. The ACIP believes that the benefits of influenza immunization justify annual vaccination, but cautions not to administer the vaccine within 6 weeks of GBS. <sup>2(208), 5</sup>	Each dose from the multidose vial or from the prefilled syringe may also contain residual amounts of egg proteins (less than 1 mcg ovalbumin), polymixin (less than 3.75mcg), neomycin (less than 2.5mcg), betapropiolactone (not more than 0.5mcg) and nonylphenol ethoxylate (not more than 0.015% w/v) <sup>1</sup>
		800-244-7668				

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Vaccine	Brand Name	Company	Inactive Ingredients (per dose)	Vaccine-Production Media	Contraindications To Use	Comments
Influenza Virus Live Intranasal (LAIV)						
	FluMist <sup>R</sup> ,	MedImmune Vaccines, Inc.	0.188mg/dose monosodium glutamate, 2.00mg/dose hydrolyzed porcine gelatin, 2.42mg/dose arginine, 13.68mg/dose sucrose, 2.26mg/dose dibasic potassium phosphate, 0.96mg/dose monosodium phosphate, & <0.015mcg/ml gentamicin sulfate	Allantoic fluid of eggs	Contraindicated with history of hypersensitivity reactions to eggs, egg proteins, gentamicin, gelatin, arginine, life-threatening reactions to previous influenza vaccines, in children and adolescents (2-17 years old), receiving aspirin therapy or aspirin <sup>1</sup>	Contains no preservative. Indicated for individuals 2-49 years of age <sup>1</sup>
	Intranasal Spray	<a href="http://www.medimmune.com">www.medimmune.com</a>			Relative contraindications include a history of asthma or reactive airway disease, history of Guillan-Barre syndrome, known or suspected immune deficiency diseases, immunosuppression by various therapies, certain metabolic diseases, sickle cell disease <sup>2(218),4(249)</sup>	
	(2008-2009)	877-633-4111				
Hepatitis A, inactivated						
	Vaqta <sup>R</sup>	Merck Vaccine Division	Aluminum hydroxyphosphate sulfate, sodium borate, saline, < 10 <sup>-4</sup> mcg bovine albumin, <0.8mcg formaldehyde, no preservative	MRC-5 human diploid cell culture	Hypersensitivity to any component of the vaccine; should not be administered with a history of severe reaction to a prior dose of Hepatitis A vaccine nor to a vaccine component <sup>1</sup>	Vial stopper and syringe plunger stopper contain dry natural latex rubber <sup>1</sup>
	Ped/Adol formulation	<a href="http://www.merckvaccines.com">www.merckvaccines.com</a>				
		800-525-2065				

Kids With Food Allergies www.kidswithfoodallergies.org		EXCIPIENTS IN VACCINES II			AGES 7-18 YEARS	
Vaccine	Brand Name	Company	Inactive Ingredients (per dose)	Vaccine-Production Media	Contraindications To Use	Comments
	Havrix <sup>®</sup>	GlaxoSmithKline	Aluminum hydroxide, amino acid supplements (0.3%) in a phosphate buffered saline solution, polysorbate 20, residual formalin <0.1mg/ml, neomycin sulfate < 40ng/ml; aminoglycoside antibiotic included in the cell growth media, no preservative.	MRC-5 human diploid cells	Severe allergic reaction (e.g. anaphylaxis) after a previous dose of any hepatitis-A containing vaccine or to any component of vaccine, including neomycin <sup>1</sup>	Tip cap and the rubber plunger of the needleless prefilled syringes contain dry natural latex rubber. The vial stopper is latex-free. <sup>1</sup>
		<a href="http://www.havrix.com">www.havrix.com</a>				
		888-825-5249				
Hepatitis B						
	Engerix-B <sup>®</sup>	GlaxoSmithKline Biologicals	Pediatric/adolescent formulation - aluminum hydroxide, sodium chloride, disodium phosphate dihydrate, sodium dihydrogen phosphate dihydrate	Yeast cells	Hypersensitivity to any component of the vaccine, including yeast <sup>1</sup>	Contains no more than 5% yeast; vial stoppers latex free; tip cap & rubber plunger of needleless pre-filled syringes contain dry natural latex rubber
		<a href="http://www.gsk.com">www.gsk.com</a>			Relative contraindication in patients with history of hypersensitivity to yeast <sup>2(195)</sup>	
		888-825-5249				
	Recombivax HB <sup>®</sup>	Merck Vaccine Division	Aluminum hydroxyphosphate sulfate; preservative free	Yeast cells	Hypersensitivity to any component of the vaccine, including yeast <sup>1</sup>	May contain not more than 1% yeast protein; latex present in vial stopper
		<a href="http://www.merckvaccines.com">www.merckvaccines.com</a>			Relative contraindication in patients with history of hypersensitivity to yeast <sup>2(195)</sup>	
		800-525-2065				

Vaccine	Brand Name	Company	Inactive Ingredients (per dose)	Vaccine-Production Media	Contraindications To Use	Comments
Poliovirus, inactivated						
	Ipol <sup>®</sup>	Sanofi Pasteur	Phosphate buffered saline, 0.5% 2-phenoxyethanol, < 0.02% formaldehyde, trace amounts of neomycin, streptomycin, and polymixin B, <1ppm newborn calf serum	Monkey kidney cells, Vero; Eagle MEM modified medium, M-199 medium	History of hypersensitivity to any component of vaccine, including 2-phenoxyethanol, formaldehyde, neomycin, streptomycin, & polymixin B. If anaphylaxis or anaphylactic shock occurs within 24 hours of administration, give no further doses <small>1, 2(272)</small>	Needle cover of syringe contains dry natural latex rubber, but no latex in the vial stopper nor plunger for the syringe.
		<a href="http://www.us.aventispasteur.com">www.us.aventispasteur.com</a>				
		800-822-2463				



Vaccine	Brand Name	Company	Inactive Ingredients (per dose)	Vaccine-Production Media	Contraindications To Use	Comments
Measles, Mumps, Rubella (MMR)						
	M-M-R II <sup>R</sup>	Merck Vaccine Division	Sorbitol, sodium phophate, sucrose, sodium chloride, hydrolyzed gelatin, recombinent human albumin, fetal bovine serum, neomycin, no preservative	Measles & mumps - chicken embryo cell and Medium 199 with sucrose, phophate, glutamate, recombinent human albumin, fetal bovine serum, & neomycin.	Hypersensitivity to any component of the vaccine, including gelatin; anaphylaxis to neomycin; acute febrile respiratory illnesses or other active febrile illness; active immunosuppressive therapy (except replacement corticosteroid therapy); blood dyscrasias, leukemia, lymphoma or other malignant neoplasms affecting bone marrow or lymphatic systems; primary and aquired immunodeficiency states; & family history of congenital or hereditary immunodeficiency. The AAP has stated, "Most children with a history of anaphylactic reactions to eggs have no untoward reactions to measles or MMR vaccine. Persons are not at increased risk if they have egg allergies that are not anaphylactic, and they should be vaccinated in the usual manner. In addition, skin testing of of egg-allergic children with vaccine has not been predictive of which children will have an immediate hypersensitivity reaction...Persons with allergies to chickens or chicken feathers are not at increased risk of reaction to the vaccine" <sup>1</sup>	
		<a href="http://www.merckvaccines.com">www.merckvaccines.com</a>		Rubella - Human diploid lung fibroblasts, Minimum Essential Medium with fetal bovine serum, recombinent human albumin, neomycin, sorbital & hydrolyzed gelatin stabilizer.	Active untreated tuberculosis <sup>2 (235)</sup>	Similar, but not exact vaccines are Priorix <sup>R</sup> (GlaxoSmithKline - Australia), Tresivac <sup>R</sup> (Serum Institute of India, Ltd), Trimovax <sup>R</sup> (Sanofi Pasteur - Europe)
		800-525-2065				

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Vaccine	Brand Name	Company	Inactive Ingredients (per dose)	Vaccine-Production Media	Contraindications To Use	Comments
Varicella (chickenpox)						
	Varivax <sup>®</sup>	Merck Vaccine Division	Sucrose, hydrolyzed gelatin (porcine), sodium chloride, monosodium L-glutamate, sodium phosphate dibasic, potassium phosphate monobasic, potassium chloride, residual components of MRC-5 cells including DNA and protein; and trace quantities of sodium phosphate monobasic, EDTA, neomycin, and fetal bovine serum; no preservative	Human diploid cell culture	History of hypersensitivity to any component of the vaccine, including gelatin; history of anaphylactoid reaction to neomycin; individuals with blood dyscrasias, leukemia, lymphoma of any type, or other malignant neoplasms affecting the bone marrow or lymphatic system; individuals receiving immunosuppressive therapy , individuals with primary and acquired immunodeficiency states; family history of congenital or hereditary immunodeficiency; active untreated tuberculosis; and any febrile respiratory illness or other active febrile infection. <sup>1</sup>	Vaccination should be deferred for at least 5 months following blood or plasma transfusions, or administration of immune globulin <sup>1</sup>
		<a href="http://www.merckvaccines.com">www.merckvaccines.com</a>				
		800-525-2065				The ACIP recommendations state that neomycin allergy is usually of the contact dermatitis type, which is a delayed immune response rather than anaphylaxis. Therefore a history of contact dermatitis to neomycin is not a contraindication to receiving varicellar vaccines <sup>5</sup>

Vaccine	Brand Name	Company	Inactive Ingredients (per dose)	Vaccine-Production Media	Contraindications To Use	Comments
Tetanus & Diphtheria Toxoids						
(Td)	Decavac <sup>R</sup>	Sanofi Pasteur	Aluminum potassium sulfate, bovine extract, formaldehyde or formalin (<0.02%), 2-phenoxyethanol, trace thimerosal. Depending on formulation may contain glycine, sodium acetate, sodium phosphate, aluminum chloride, hydrochloric acid and/or sodium hydroxide <sup>2(104), 4(B-14)</sup>	Diphtheria: Mueller growth media	History of serious adverse reaction to any component of this product <sup>2(101)</sup>	For use after the age of 7 years. The stopper of the vial and the Luer-Lok 0.5ml syringes do not contain latex. The syringes are preservative free. <sup>4(B-16)</sup>
		<a href="http://www.us.aventispasteur.com">www.us.aventispasteur.com</a>		Tetanus: Modified Mueller-Miller media, peptone based containing bovine extract.	While acute infection may be a reason for deferring routine immunizations, it is not a reason to withhold emergency doses. <sup>2(101)</sup>	
		800-822-2463				
	Generic *	Mass. Biological Laboratories	Aluminum hydroxide, aluminum phosphate formaldehyde or formalin, thimerosal (some multidose containers <sup>4(B-14)</sup>	Diphtheria: Mueller growth media	History of serious adverse reaction to any component of this product <sup>2(101)</sup>	For use after the age of 7 years. The stopper of the vial as well as syringes may contain dry natural latex rubber.
				Tetanus: Modified Mueller-Miller media, peptone based containing bovine extract.	While acute infection may be a reason for deferring routine immunizations, it is not a reason to withhold emergency doses. <sup>2(101)</sup>	
		508-856-2000				

Vaccine	Brand Name	Company	Inactive Ingredients (per dose)	Vaccine-Production Media	Contraindications To Use	Comments
Combination Products						
	Twinrix <sup>®</sup>	GlaxoSmithKline	Aluminum phophate, aluminum hydroxide, amino acids, sodium chloride, phophate buffer, polysorbae 20, formalin <0.1mg, residual MRC-5 cellular protiens, neomycin <20ng, no more than 5% yeast proteins, no preservatives	Hepatitis A: MRC-5 cells	Hypersensitivity to any component of the vaccine, including yeast and neomycin; hypersensitivity to monovalent hepatitis A or hepatitis B vaccines.	For persons 18 years of age and older. Contains the same antigenic components as Havrix <sup>®</sup> and Engerix-B <sup>®</sup>
	Hepatitis A inactivated, Hepatitis B recombinant	<a href="http://www.gskvaccines.com">www.gskvaccines.com</a>		Hepatitis B: <i>S. Cerevisiae</i> cells in synthetic media		The tip cap and the rubber plunger of the needleless prefilled syringes contain dry natural latex rubber. The vial stopper is latex-free.
		866-GSK-VACC				

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## Disclaimer and References for Excipients in Vaccines Tables

The following table(s) are presented for informational purposes only and not meant to replace the advice of your health care professionals.

Also note that under the Contraindications column, several sources are listed, which may not all agree with one another. Some contraindications are considered *absolute* (applicable under all circumstances), while other contraindications may be considered *relative* (applicable in specific or certain cases). The package insert information for each specific product is meant to give the broadest protection for not only the patient, but for the drug company as well.

1. Individual product package insert
2. Grabenstein, John D., ImmunoFacts: Vaccines and Immunologic Drugs 2007. St. Louis, MO: Wolters Kluwer Health, 2006
3. The Children's Hospital of Philadelphia, Vaccine Education Center, "Hot Topic: Gelatin Allergies" accessed 5/7/2008, <http://www.chop.edu/consumer/jsp/division/generic.jsp?id=75813>
4. Centers for Disease Control and Prevention, Epidemiology and Prevention of Vaccine-Preventable Diseases. (The Pink Book) Atkinson, W., Hamborsky, J., McIntyre, L., Wolfe, S. eds. 10<sup>th</sup> edition; Washington DE: Public Health Foundation, 2008
5. Centers for Disease Control, Advisory Committee on Immunization Practices: Publications-Recommendations, accessed 6/18/2008, <http://www.cdc.gov/vaccines/pubs/ACIP-list.htm>.