## Hepatitis A, B, and Combination A/B Vaccines

Vaccine Description See package inserts for specific vaccine components	Hepatitis A: Vaqta and Havrix	
	Inactivated whole virus     Adjuvant: aluminum hydroxide     Vial stopper and/or the syringe plunger stopper may contain dry natural latex rubber	
	Hepatitis B: Heplisav-B, Recombivax HB, Engerix-B	
	Subunit viral antigen vaccine     Vial stoppers are notmade with natural latex rubber     Heplisav-B adjuvant: CpG, DNA, innate immunity activator	
	Combination Hepatitis A and B: Twinrix	
	Bivalent vaccine containing the antigenic components used in producing Havrix and Engerix-B  Tip caps of the prefilled syringes contain natural rubber latex; the plungers are not made with natural rubber latex  Bivalent vaccine containing the antigenic components of the producing Havrix and Producing	
Route (all)	IM (Precaution: hemophilia, thrombocytopenia, and anticoagulation therapy)	
Vaccine	Age	Dose
Hepatitis A (Vaqta)	6 months-18 years	25 units (0.5 mL)
	19 years and older	50 units (1 mL)
Hepatitis A (Havrix)	6 months-18 years	720 EL.U. (0.5 mL)
	19 years and older	1440 EL.U. (1 mL)
Hepatitis B (Engerix-B)	0-19 years	0.5 mL
	20 years and older	1 mL
Hepatitis B (Recombivax HB)	0-19 years	0.5 mL
	20 years and older	1 mL
Hepatitis B (Heplisav-B)	18 years and older	0.5 mL
Hepatitis A/Hepatitis B (Twinrix)	18 years and older	1 mL

## Hepatitis A, B, and Combination A/B Vaccines (Continued)

Indications	Hepatitis A	
	All persons aged > 1 year infected with human immunodeficiency virus (HIV) All persons with chronic liver disease Pregnant women at risk for hepatitis A infection (HAV) during pregnancy All persons aged > 1 year, at risk for infection or severe disease from HAV during hepatitis A outbreaks Persons providing services to adults in which a high proportion of those persons have risk factors for HAV infection Persons aged > 1 year at risk for HAV infection or for severe disease from HAV including: International travelers men who have sex with men persons who use injection or non-injection illegal drugs persons with occupational risk for exposure persons who anticipate close personal contact with an international adoptee persons experiencing homelessness persons requesting protection All military personnel	
	Hepatitis B	
	All children and adolescents All military personnel Household members and sexual partners of HBV carriers (test and if susceptible, vaccinate) Intravenous drug users Any person with more than one sex partner in 6 months Men who have sex with men People with recently diagnosed sexually transmitted diseases (STDs) Persons with HIV Persons with diabetes Persons with diabetes Patients receiving hemodialysis and patients with renal disease that may result in dialysis Recipients of certain blood products Healthcare and public safety workers with frequent blood contact Residents and staff of institutions for people with developmental disabilities Long-term prison inmates Certain international travelers (Determine risk by checking CDC or ther travel medicine websites or check with local travel clinic for guidance) People who want to decrease their risk for hepatitis B	

## Hepatitis A, B, and Combination A/B Vaccines (Continued)

Administration Schedule	Dose	Interval
Hepatitis A (Vaqta - 2 doses)	#1	N/A
	#1 to #2	6 months
Hepatitis A (Havrix - 2 doses)	#1	N/A
	#1 to #2	6 months
Hepatitis B (Engerix-B) - 3 doses)	#1	N/A
	#1 to #2	4 weeks
	#2 to #3	8 weeks minimum, 16 weeks after dose #1
Hepatitis B (Recombivax HB - 3 doses)	#1	N/A
	#1 to #2	4 weeks
	#2 to #3	8 weeks minimum, 16 weeks after dose #1
* Hepatitis B (Heplisav-B - 2 doses)	#1	N/A
	#1 to #2	4 weeks minimum
** Hepatitis A + Hepatitis B (Twinrix)	#1	N/A
	#1 to #2	4 weeks
	#2 to #3	5 months
Twinrix (accelerated)	3 doses: 0, 7 days, and 21-30 days. Booster at 12 months.	

<sup>\*</sup> Note: The 2-dose HepB vaccine series only applies when both doses in the series consist of HepB-CpG. Series consisting of a combination of 1 dose of HepB-CpG and a vaccine from a different manufacturer should consist of 3 total vaccine doses and should adhere to the 3-dose schedule minimum intervals of 4 weeks between dose 1 and 2, 8 weeks between dose 2 and 3, and 16 weeks between dose 1 and 3. Doses administered at less than the minimum interval should be repeated. However, a series containing 2 doses of HepB-CpG administered at least 4 weeks apart is valid, even if the patient received a single earlier dose from another manufacturer.

<sup>\*\*</sup> If combining regimen of Twinrix® with individual doses of HepA and HepB vaccines, see info paper for number of doses needed (<a href="https://www.health.mii/HepA">www.health.mii/HepA</a>)

## Hepatitis A, B, and Combination A/B Vaccines (Continued)

Contraindications	Serious allergic reaction to prior dose or vaccine component, including yeast and neomycin     Moderate or severe acute illness     Pregnancy and breastfeeding are NOT contraindications	
Special Considerations	Hepatitis A	
Considerations	Start vaccine series at least 2-4 weeks before international traveling If first dose is given less than 4 weeks before international travel, consider giving IG as well as vaccine Close contact of international adoptee (e.g., household or regular babysitting), within 60 days of arrival from country with high or intermediate endemic hepatitis A (administer dose 1 as soon as adoption is planned, at least 2 weeks before adoptee's arrival) If dose #2 is delayed, do not repeat dose #1; just give dose #2. See Storage and Handling Section	
	Hepatitis B	
	If the series is delayed between doses, DO NOT start the series over. Continue from where you left off. For vaccine non-responders (negative Hep BAb titers), consult allergy/immunology, DHA-IHD, infectious disease See Storage and Handling Section	

VIS: <a href="http://www.cdc.gov/vaccines/hcp/vis/vis-statements/hep-a.html">http://www.cdc.gov/vaccines/hcp/vis/vis-statements/hep-a.html</a>
http://www.cdc.gov/vaccines/hcp/vis/vis-statements/hep-b.html

Additional education may be found at <a href="www.health.mil/hepA">www.health.mil/hepA</a> <a href="www.health.mil/hepB">www.health.mil/hepB</a>

Pregnancy registry for Twinrix®: 1-888-825-5249 (GlaxoSmithKline); also notify DHA-IHD