

## Virginia Adult Hepatitis B Immunization Initiative (VAHBII) Use of Monovalent Hepatitis B and Twinrix Vaccines

Individuals who start with monovalent hepatitis B vaccine can complete the hepatitis B series with the appropriate number of doses of Twinrix (Hepatitis A-B). They will only receive one or two doses of Twinrix and thus will not have full protection against hepatitis A afforded by three Twinrix doses. Extra doses of Twinrix should not be administered to individuals (more than three doses) just so the hepatitis A series is complete. Single-antigen hepatitis A vaccine can be used to complete the hepatitis A series begun with Twinrix (although not provided by the hepatitis B initiative).

Single-antigen hepatitis B vaccine can also be used to complete the hepatitis B series begun with Twinrix. Because the hepatitis B component of Twinrix is equivalent to a standard dose of hepatitis B vaccine, the schedule is the same whether Twinrix or single-antigen hepatitis B vaccine is used.

### Hepatitis A protection

Twinrix is highly efficacious and receipt of only one or two doses of Twinrix will provide some measure of protection against hepatitis A. Clinical trials of Twinrix found that percent seroconversion for hepatitis A after one dose was 93.8 and after two doses, 98.8. If individuals do not receive all three doses of Twinrix, they should be counseled that their hepatitis A vaccination series is still incomplete. To complete the hepatitis A series *outside of the adult hepatitis B initiative*:

- a person 19 years of age or older who received one dose of Twinrix may complete the hep A series with two doses of adult formulation hepatitis A vaccine separated by at least 5 months.
- a person who received two doses of Twinrix may complete the series with one dose of adult formulation hepatitis A vaccine or Twinrix 5 months after the second dose

### Monovalent Hepatitis B (Engerix-B in the adult hepatitis B initiative)

- Approved for use in those 20 years and older, however, it is fine to use in 19 year olds.
- Each adult dose is 1 mL and contains 20 mcg of hepatitis B surface antigen protein.
- Given intramuscularly.
- The usual schedule for adults is the first two doses separated by no less than 4 weeks, and the third dose 4 to 6 months after the second dose.
- If an accelerated schedule is needed, the minimum interval between the first two doses is 4 weeks, and the minimum interval between the second and third doses is 8 weeks. However, the first and third doses should be separated by no less than 16 weeks.
- Package insert available here: [http://us.gsk.com/products/assets/us\\_engerixb.pdf](http://us.gsk.com/products/assets/us_engerixb.pdf)

### Twinrix (Hepatitis A- Hepatitis B)

- Approved in 2001 by the FDA for those 18 years and older.
- Given intramuscularly.
- Each dose contains 720 ELISA units of hepatitis A vaccine and 20 mcg of hepatitis B surface antigen protein.
- The vaccine is administered in a three-dose series at 0, 1, and 6 months. The first and third doses of Twinrix should be separated by at least 6 months. The first and second doses should be separated by at least 4 weeks, and the second and third doses should be separated by at least 5 months.
- An alternative, 4-dose schedule for Twinrix was FDA approved in 2007; however, this schedule is not encouraged for routine use in the adult hepatitis B initiative. On this alternative, 4-dose schedule, Twinrix is administered at 0, 7, and 21--30 days, followed by a dose at 12 months after the first dose.
- It is not necessary to restart the series or add doses if the interval between doses is longer than the recommended interval.
- Package insert available here: [http://us.gsk.com/products/assets/us\\_twinrix.pdf](http://us.gsk.com/products/assets/us_twinrix.pdf)

**Source:** *Epidemiology and Prevention of Vaccine-Preventable Diseases*, rev. 5/2009.