




Introduction of hepatitis B vaccine into childhood immunization services (*WHO/V&B/01.31*)

Management guidelines, including information for health workers and parents
WHO, Department of Vaccines and Biologicals, November 2001

-  Many studies have shown that infants, children and adults who have responded to a three-dose hepatitis B immunization series are protected from the disease for as long as 15 years, even if they lose protective antibodies over time.
-  Long-term protection relies on immunological memory, which allows a protective anamnestic response after exposure to HBV.
-  **Booster doses of vaccine are not, therefore, recommended.**

Information for the Development of Immunization Policy

2002 update (WHO/V&B/02.28, printed: March 2003)

The priorities for hepatitis B immunization strategies in order of importance are:

- routine infant vaccination;**
- prevention of perinatal HBV transmission (from mother to baby);**
- catch-up vaccination for older age groups.**

Information for the Development of Immunization Policy

2002 update (WHO/V&B/02.28, printed: March 2003)

Booster doses:

- *These are not recommended.*
- Studies have shown that infants, children and adults who have responded to a three-dose hepatitis B immunization series are protected from hepatitis B for at least 15 years even if they lose detectable antibodies over time. Long-term protection relies on the immunological memory, which allows a protective anamnestic antibody response after exposure to HBV.

HBV vaccine response: need for booster?

- **Additional information is needed to establish the need for a booster injection for adults beyond 15 years after vaccination**
- **Additional information is needed also for children immunized at birth, in order to assess whether the immunological memory persists into adolescence and advanced adulthood, when the risk of infection, either by lifestyle or HBV professional exposure, becomes higher.**
- **To address this, cohort studies of immunized subjects are warranted.**

HBV vaccine booster: Conclusions

- **To date there are no data to support the need for booster doses of HB vaccine in immunocompetent individuals who have responded to a primary course.**
- **Almost all adequately vaccinated individuals have shown evidence of immunity in the form of persisting anti-HBs and/or in vitro B-cell stimulation or an anamnestic response to a vaccine challenge.**

HBV vaccine booster: Conclusions

- **Boosters may be used to provide reassurance of protective immunity against benign breakthrough infection**
- **Appropriate monitoring of vaccine/treatment escape mutants requires the set up of an independent global network for this purpose**

HBV vaccine booster: Conclusions

- **Booster policy should be addressed for special sub-groups (e.g. health care workers).**
- **Recommendations for post-exposure prophylaxis of subjects, that are not immune or whose status is unknown should be standardized.**