



DEPARTMENT OF DEFENSE
ARMED FORCES EPIDEMIOLOGICAL BOARD
5109 LEESBURG PIKE
FALLS CHURCH, VA 22041-3258



REPLY TO
ATTENTION OF

AFEB (15-1a) 98-1

09 January 1998

MEMORANDUM FOR THE ASSISTANT SECRETARY OF DEFENSE (HEALTH AFFAIRS)
THE SURGEON GENERAL, DEPARTMENT OF THE ARMY
THE SURGEON GENERAL, DEPARTMENT OF THE NAVY
THE SURGEON GENERAL, DEPARTMENT OF THE AIR FORCE

SUBJECT: Recommendation for the Use of Reduced Dose of Hepatitis B
Vaccines in Military Recruits

1. The Centers for Disease Control and Prevention now recommends universal vaccination against hepatitis B virus for all adolescents aged 11-21 years in the United States. The Armed Forces Epidemiological Board (AFEB), Infectious Disease Control Subcommittee, met on 11 December 1997 to review the data on immune responses to reduced doses of hepatitis B vaccines, and their possible application for universal immunization of all military recruits. Responses to recombinant hepatitis B vaccines are highly age dependent with dependably vigorous responses observed in persons <30 years of age. Obesity and smoking are noted to reduce immune response to hepatitis B vaccine. Responses to reduced doses of the two licensed vaccines (5 μ g of Recombivax HB or 10 μ g of Engerix B) administered intramuscularly are adequate to provide protection in the vast majority (>95%) of recruits. Data show that peak antibody response to hepatitis B vaccine is increased when the third dose (booster) is given more than six months after the first dose. Therefore, the following recommendations were proposed:

- a. ALL MILITARY RECRUITS <30 YEARS OF AGE WHO HAVE NOT PREVIOUSLY RECEIVED A DOCUMENTED PRIMARY SERIES OF HEPATITIS B VACCINE SHOULD BE IMMUNIZED AGAINST HEPATITIS B.
- b. A REDUCED DOSE OF HEPATITIS B VACCINE (5 μ g OF RECOMB VIVAX HB OR 10 μ g OF ENGERIX B) MAY BE USED TO IMMUNIZE RECRUITS. THE REDUCED DOSE MAY ALSO BE USED IN OTHER MILITARY PERSONNEL <30 YEARS OF AGE PROVIDED THEY ARE NON-SMOKERS AND NOT OBESE.
- c. THE THIRD DOSE MAY BE GIVEN AT AN INTERVAL LONGER THAN SIX MONTHS AFTER THE FIRST DOSE.

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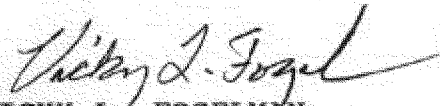
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2. This recommendation was discussed and approved by the
Infectious Disease Subcommittee on 11-12 December 1997
and endorsed by the full Board on 12 December 1997.

FOR THE ARMED FORCES EPIDEMIOLOGICAL BOARD:



GERALD F. FLETCHER, M.D.
AFEB President



VICKY L. FOGELMAN
Colonel, BSC, USAF
AFEB Executive Secretary

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