Antibody to Hepatitis B Virus Core Antigen- This is an FDA-licensed method commercially obtained in kit form (3,4). The literature and instructions with each kit constitute the standard operating procedure (SOP) for the method. Control reagent or test sample is pipetted into appropriate wells of a reaction tray. A bead permanently bound with purified hepatitis surface antigen (HBsAg) is added to each well. During an overnight incubation, any anti-HBs antibody in a sample will bind to the HBsAg on the bead. The beads are washed to remove unbound material. Peroxidase-conjugated HbsAg is added to each bead. The beads are incubated at 40 C for 2 hours. The conjugate will bind to anti-HBs, forming a sandwich of antibody between bead-bound and conjugated HBsAg. Following another wash step, the beads are transferred to test tubes. A substrate solution made up of o-phenylenediamine (OPD) and hydrogen peroxide is added. After 30 minutes the colorimetric reaction is stopped with the addition of sulfuric acid. The reaction is read using an Abbott Quantamatic spectrophotometer. Raw data are expressed as absorbance units at 492 nm. Sample values are compared with the average value derived from three 10- mIU controls and reported as >10 mIU or <10 mIU.

3. Abbott Laboratories, Diagnostics Division, North Chicago, IL. AUSAB EIA directional literature included with each assay kit. Document number 83-3660/R15.
4. Abbott Laboratories. U. S. Patent #4012494.

-from *Laboratory Procedures Used for the Third National Health and Nutrition Examination Survey (NHANES III) 1988-1994*
Elaine W. Gunter, Brenda G. Lewis, and Sharon M. Koncikowski, 1996