ALERT: CDC Expands Hepatitis B Testing Recommendations for Chemotherapy Patients

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The U.S. Centers for Disease Control and Prevention (CDC) released new recommendations in September 2008, for health care providers to increase routine testing for chronic hepatitis B, the major cause of liver disease and liver cancer worldwide. The CDC now recommends routine hepatitis B surface antigen (HBsAg) testing for all people born in Asia and Africa, as well as testing additional at-risk populations, including persons who require immunosuppressive therapy. Individuals chronically infected with hepatitis B are at increased risk for fulminant liver failure and death during chemotherapy or immunosuppressive therapy, and should be prophylactically placed on antiviral therapy, even if blood tests for liver enzymes are normal. Patients with resolved hepatitis B infection (HBsAg negative, anti-HBc positive) are still at risk for viral reactivation with immunosuppression, and need close monitoring for signs of liver disease. Below are specific testing recommendations and guidelines.

Recommended tests and interpretation for asymptomatic patients

Serologic Tests			
HBsAg[1]	**Total anti-HBc[2]**	**Anti-HBs[3]**	**Interpretation**
–	–	–	Never infected and no evidence of immunization
+	+	–	Chronic infection
–	+	+	Recovered from past infection and immune
–	–	+	Immune

[1]HBsAg: Hepatitis B surface antigen [2]Total anti-HBc: Antibody to hepatitis B core antigen [3]Anti-HBs: Antibody to HBsAg

The new CDC testing recommendations are key to identifying chronically infected persons so that they can receive life-saving care and treatment and prevent deaths from liver failure or liver cancer. The CDC estimates that 800,000-1.4 million Americans have chronic hepatitis B infection. As many as 1 in 10 Asian and Pacific Islanders are chronically infected with hepatitis B. Most have no symptoms and are unaware of their disease.

Populations recommended or required for routing testing for chronic hepatitis B virus (HBV) infection

Population	Recommendations and Rationale
Persons needing cytotoxic or immunosuppressive therapy, including chemotherapy, immunosuppression related to organ transplantation, and immunosuppression for rheumatologic or gastroenterologic disorders	• Serologic testing should test for all markers of HBV infection (HBsAg, anti-HBc, and anti-HBs) • Chronically infected (HBsAg-positive) patients are at elevated risk of fulminant hepatitis once suppressive therapy is initiated and should be referred for medical management and anti-viral treatment • Those with resolved infection (anti-HBc positive, HBsAg negative) are at risk for reactivation and should be monitored closely with blood tests for liver enzymes
Persons born in regions of high and intermediate HBV endemicity	• Includes all persons born in Asia, Africa, and select countries in other regions*
U.S.-born persons not vaccinated as infants whose parents were born in regions with high HBV endemicity (≥8%)	• Test for HBsAg • Includes children of parents born in most Asian or Pacific Islands countries, among others*
Household, needle-sharing, or sex contacts of persons known to be HBsAg positive	• First vaccine dose should be given at the same visit as testing for HBsAg • Testing for anti-HBc and/or anti-HBs should be performed as well to identify susceptible persons • Susceptible persons should complete 3-dose hepatitis B vaccine series to prevent transmission from ongoing exposure

*For a complete list of geographic regions, refer to MMWR 2008;57(No.RR-8)

For more information, visit: http://liver.stanford.edu or www.cdc.gov/mmwr/PDF/rr/rr5708.pdf

Recommendations are abridged from the Morbidity and Mortality Weekly Report (MMWR), published by the Centers for Disease Control and Prevention (CDC), Coordinating Center for Health Information and Service, U.S. Department of Health and Human Services. MMWR 2008;57(No.RR-8)