

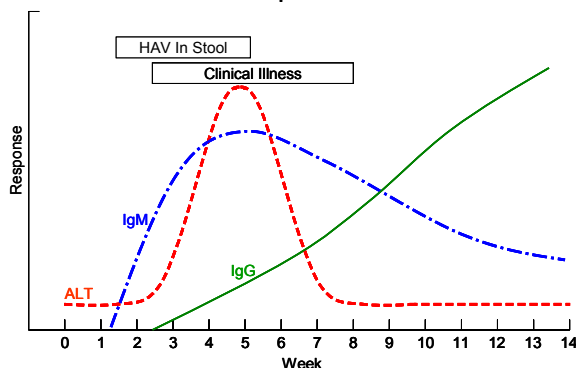
## January 2003 – Viral Hepatitis Part I: Hepatitis A

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The clinical presentation of all types of hepatitis is similar. Distinguishing the type of hepatitis is important because treatment, follow-up and prophylactic recommendations differ. Due to the similarity in the presentation of the various viral hepatitides, laboratory tests are necessary to identify the type of hepatitis and confirm the diagnosis. This newsletter which focuses on hepatitis A, and the two subsequent newsletters which discuss hepatitis B and C, are provided to assist in the use and interpretation of laboratory tests for patients suspected of being infected with viral hepatitis. Prophylaxis of contacts and vaccine recommendations will also be discussed.

The Centers for Disease Control and Prevention (CDC) specifies detection of antibody to the hepatitis A virus (anti-HAV) IgM as laboratory criteria for confirmation of acute viral hepatitis A.<sup>i</sup> These antibodies can be identified approximately five to ten days after exposure to the hepatitis A virus, and will remain in the bloodstream for an average of six months (see figure 1). IgG antibodies also appear early in the infection and remain in the bloodstream providing lifetime immunity. Immunization history for hepatitis A should be taken into account when interpreting an anti-HAV IgM positive result because IgM is also produced following immunization.

**Figure 1**  
Events in Hepatitis A Infection



The most commonly ordered serological test for viral hepatitis is the hepatitis comprehensive panel. If the alanine aminotransferase (ALT) level is  $\geq 75$  and the total (anti-HAV) total is positive, the test for anti-HAV IgM is automatically performed. Table 1 provides an easy to use interpretation of the hepatitis comprehensive panel for hepatitis A.

**Table 1: Interpretation of the Hepatitis Comprehensive Panel**

Tests	Results	Interpretation
Anti HAV ALT	Negative Normal	Susceptible – not infected
Anti-HAV Anti-HAV IgM ALT	Positive Negative Normal	Immune due to natural infection or hepatitis A vaccination
Anti-HAV Anti-HAV IgM ALT	Positive Negative Elevated	Immune due to natural infection or hepatitis A vaccination ALT Elevation due to another cause
Anti-HAV Anti-HAV IgM ALT	Positive Positive Elevated	<b>Acute</b> hepatitis A infection
Anti-HAV Anti-HAV IgM ALT	Positive Positive Normal	Resolving illness – no longer infectious

Immune Globulin (IG) is currently recommended by the CDC as prophylaxis for unimmunized close contacts of acute hepatitis A cases.<sup>ii</sup> Because the incubation period for the illness can be approximately four weeks (range two to six weeks), it is often possible to prevent the spread of illness if the disease is immediately reported so that IG can be

administered to appropriate contacts. IG is >85% effective in preventing hepatitis A if it is administered to contacts within two weeks of exposure. Since IG confers protection against hepatitis A for only three to six months it is recommended that it be administered concurrently with hepatitis A vaccine to provide long-term protection. The vaccine is licensed for use in persons two years of age or older. The Clark County Health District (CCHD) will not administer IG to contacts unless laboratory confirmation of anti-HAV IgM in the patient with hepatitis A has been received. Patients to whom IG prophylaxis has been recommended should contact the CCHD Office of Epidemiology to make arrangements.

Because in the past Nevada had a high rate of hepatitis A, the Nevada State Board of Health on September 7, 2001, mandated hepatitis A immunizations for students enrolling in public or private schools in Clark County, i.e. students entering kindergarten or first grade or students new to the Clark County School District. This mandate became effective July 1, 2002.

Another initiative to reduce hepatitis A in Clark County is the hepatitis A health card program. Food handlers and childcare employees must receive hepatitis A vaccine prior to being issued a health card.

**The CDC has recommended hepatitis A vaccine for the following persons who are at an increased risk<sup>iii</sup>:**

- Travelers to developing countries
- Men who have sex with men
- Injecting drug users
- Children living in areas where the rate of hepatitis A during 1987-1997 are at least twice the national average
- Persons who have chronic liver disease
- Persons who have clotting-factor disorders

### **'TIS THE SEASON FOR COLDS AND FLU**

*The Clark County Health District would like to remind physicians that antibiotics are both inappropriate and potentially problematic for the treatment of colds and influenza. While patients might request antibiotics, fulfilling this is often unnecessary. Instead, studies have shown that communication by the physician is more influential to patient satisfaction than receiving an antibiotic.*

*Antivirals are the appropriate choice in the treatment of influenza. However, their effectiveness relies on early diagnosis and treatment. Current information describing antivirals (including their effectiveness for prophylaxis) is available at: [www.cdc.gov/ncidod/diseases/flu/fluoviral.htm](http://www.cdc.gov/ncidod/diseases/flu/fluoviral.htm)*

*Influenza often circulates beyond winter. Therefore, physicians are encouraged to continue providing flu shots, particularly for their patients who are at high risk for complications.*

**When You See Unusual,  
Think Outbreak!  
24-hour phone: (702) 383-1378**

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<sup>i</sup> Centers for Disease Control and Prevention. Case Definitions for Infectious Conditions Under Public Health Surveillance. MMWR 1997;46(No.RR-10):p18.

<sup>ii</sup> Centers for Disease Control and Prevention. Prevention of hepatitis A through active or passive immunization: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1999;48(No. RR-12): pp 29-30.

<sup>iii</sup> Ibid: pp 25-27.