Viral Hepatitis Testing - Quick Reference Guide for Physicians North Carolina Communicable Disease Branch





Communicable Disease Branch (Viral Hepatitis Surveillance) 919-733-3419

Immunization Branch (Perinatal Hepatitis B) 919-707-5575

	Hepatitis A (HAV)	Hepatitis B* (HBV)	Hepatitis C (HCV)
TRANSMISSION ROUTE	Fecal-oral	Primarily sexual, also parenteral, perinatal via blood/body fluids	Primarily parenteral; less commonly via sexual contact
INCUBATION PERIOD	15-50 days; average 28-30 days	14-180 days; average 60-90 days	14-180 days; average 6-9 weeks
SYMPTOM ONSET	Sudden; children less likely than adults to be symptomatic	Can be sudden or gradual; 50% of adults are asymptomatic	Usually gradual; 75% are asymptomatic
SEVERITY	Generally mild; 1/3 of cases require hospitalization; most have no lasting liver damage; rarely fatal; case fatality increases with advanced age	Most with acute infection recover with no lasting liver damage; rarely fatal. 15- 25% with chronic infection develop chronic liver disease, including cirrhosis, liver failure, liver cancer	Slowly progressive over 20-30 years; chronic infection can lead to cirrhosis and liver cancer
CHRONIC FORM?	No	Yes	Yes
TESTING TO DIAGNOSE ACUTE FORM	Anti-HAV, IgM	HBsAg Anti-HBc, IgM	Anti-HCV HCV RNA (Lab tests can't differentiate between acute and chronic infection)
TESTING TO DIAGNOSE CHRONIC FORM	N/A	HBsAg HBV DNA HBeAg Anti-HBe	Anti-HCV HCV RNA HCV genotype (Lab tests can't differentiate between acute and chronic infection)
TEST TO DETECT PREVIOUS INFECTION	Anti-HAV, Total (Can't differentiate previous infection vs. vaccination)	Anti-HBc, Total Anti-HBs	Anti-HCV
VACCINE?	Yes	Yes	No
REPORT TO LOCAL PUBLIC HEALTH **	Yes, within 24 hours with positive anti-HAV, IgM	Acute cases – within 24 hours Chronic cases – within 7 days Report all HBsAg + pregnant women; Case management is provided by Public Health to ensure all infants receive appropriate treatment	Acute cases only – within 7 days

^{*}Additional Hepatitis B guidance can be found in the N.C. Hepatitis B Public Health Program Manual: http://epi.publichealth.nc.gov/cd/lhds/manuals/hepB/toc.html
**Case definitions and reporting criteria are available in the N.C. Communicable Disease Manual: http://epi.publichealth.nc.gov/cd/lhds/manuals/cd/toc.html
Reviewed by Dr. Andrew Muir, Clinical Director of Hepatology, Duke Liver Center, Duke University Medical Center, Durham, NC.

ABBREVIATIONS

- Anti-HAV = Hepatitis A antibody
- Anti-HAV, IgM = IgM antibody to hepatitis A
- Anti-HBs = Hepatitis B surface antibody
- Anti-HBe = Hepatitis B e antibody
- Anti-HBc = Antibody to hepatitis B core antigen
- HBsAg = Hepatitis B surface antigen
- **HBeAg** = Hepatitis B e antigen
- **HBV DNA** = Hepatitis B virus
- Anti-HBc, IgM = IgM antibody to hepatitis B core antigen
- Anti-HCV = Hepatitis C antibody
- HCV RNA = Hepatitis C virus
- HCV viral load = Detection and/or count of the amount of Hepatitis virus in the blood
- **HCV genotype** = Determines type of hepatitis C viral "strain" (will be one of 6 types)