

Hepatitis B status – initial screening

Hep B surface antigen HBsAg	Hep B core antibody HBcAb	Hep B surface antibody HBsAb	Hep B core IgM	Status	Management	
Pos	Pos	Neg	Neg	Chronic	Determine phase, test: HBeAg, HBV DNA, HBeAb, LFT, FBC, INR, AFP and Liver USS Assess liver fibrosis-cirrhosis → Screen for co-infection: HIV, HCV, HDV and HAV Screen household and sexual contacts and vaccinate as needed.	Non-Invasive fibrosis assessment • Image-based elastography • Serum interpretation
Pos	Pos	Neg	Pos High Titre	Acute		
Neg	Neg	Pos		Immune (vaccination)	HB antibody >10IU/ml = immune Document in client file	Cirrhosis – present or likely ↓ Treatment indicated Refer to specialist
Neg	Pos	Pos		Immune (acquisition)	Immunity due to resolved infection Document in client file	
Neg	Pos	Neg		Unclear	Interpretation: 1. Resolved infection (most common) 2. False positive 3. Occult HBV infection 4. Resolving acute infection	
Neg	Neg	Neg		Non-immune	Non-immune Offer Hep B vaccination	Elastography – non-invasive technique to check the stiffness of the liver.

Acute HBV = <6mths

Chronic HBV = >6months

95% of adults obtain natural clearance of acute Hepatitis B

Chronic Hepatitis B - assessing phase of infection

HBeAg	HBV DNA	ALT	Anti-HBe	Phase	Management
Pos	High >20,000IU/ml	Normal		Immune tolerance HBeAg-pos chronic infection	No treatment indicated
Pos	High >20,000IU/ml	Elevated Women >19U/L Men >30U/L		Immune clearance HBe-Ag-pos chronic hepatitis	Treatment indicated Refer to specialist
Neg	Low <2000IU/ml	Normal	Pos	Immune control HBe-Ag-neg chronic infection	No treatment indicated
Neg	High >2000IU/ml	Elevated Women >19U/L Men >30U/L	Pos	Immune escape HBeAg-neg chronic hepatitis	Treatment indicated Refer to specialist

Fibrosis – scarring of the liver with the formation of large amounts of scar tissue as the liver attempts to repair and replace damaged cells.

Cirrhosis – widespread distortion of the internal structure of the liver when permanently replaced with scar tissue. Scar tissue develops with repeated or continuous damage to the liver ie. Chronic hepatitis.

