



Hepatitis B Serological Markers - Common Patterns

N.B. - Other combinations of markers may occur rarely

Hepatitis B surface Antigen HBsAg	Hepatitis B core Antibody anti HBc or HBcAb	Hepatitis B surface Antibody anti HBs or HBsAb	Interpretation
Positive	Positive	Negative	Acute or Chronic infection. The distinction depends on the clinical history and liver function tests. If HBsAg is present in serum for more than 6 months the patient is defined as a "carrier".
Negative	Positive	Negative	Several possibilities including the "window phase" of an acute infection - additional testing may be required depending on the clinical picture. In these cases advice should be sought from a MedLab Pathologist, a Doctor with Hepatitis B expertise or the Medical Officer of Health.
Negative	Positive	Positive	Resolved Infection – Immune and non-infectious
Negative	Negative	Positive	Post vaccination – Immune and non-infectious
Negative	Negative	Negative	No previous exposure or vaccination - Not immune Consider immunisation

- Interpretation of Hepatitis B serology is dependent on the clinical details (reason for testing) and interpretation may require additional results such as Liver Function Tests
- If both Hepatitis B surface Antigen and Hepatitis B surface Antibody are detected – a false positive is likely and results should be discussed with the laboratory
- Other patterns are possible and in these cases advice should be sought from a Specialist with expertise in Hepatitis B infection
- Hepatitis B e Antigen or Hepatitis B e Antibody may also be present in acute or chronic infection. Testing not routine. These are helpful in some cases e.g. chronic cases to identify patients who have actively replicating infection and are thus more infectious.