HEPATITIS B

(Acute Case, Chronic Carrier)

Acute Case

Case Definition

Confirmed Case:

- Hepatitis B surface antigen (HBsAg) and immunoglobulin M antibody to hepatitis B core antigen (anti-HBcIgM) positive in the context of a compatible clinical history or probable exposure.
 OR
- Clearance of HBsAg in a person who was documented to be HBsAg positive within the last 6
 months in the context of a compatible clinical history or probable exposure.

Probable Case:

Acute clinical illness in a person who is epidemiologically linked to a confirmed case.

Clinical Evidence

Acute clinical illness is characterized by a discrete onset of symptoms and jaundice or elevated serum aminotransferase levels.

Chronic Carrier

Case Definitions

Confirmed Case:

- HBsAg positive for more than 6 months.
 - OR
- Detection of HBsAg in the documented absence of anti-HBc-IgM.
 - Detection of HBV DNA for more than 6 months.

Clinical Evidence

Chronic infections may present with disease flares with similar symptoms and signs as acute hepatitis B infection.

See <u>Table 1</u> for HBV diagnostic testing interpretation and data entry into Panorama.

HBV Serological Markers (Common Abbreviations)					
Hepatitis B Surface Antigen; (HBV Surface Ag; HBsAg)	Antibody to HBV Surface Antigen (HBV Surface Ab; anti-HBs)	Antibody to HBV Core Ag (HBV Core Ab; anti-HBc; HBcAb)	IgM class antibody to HBcAg (Anti-HBc IgM)	Interpretation	Panorama data entry:
Negative	Negative ¹	Negative	N/A	Susceptible	Do NOT enter Not a case
Negative	Positive ¹ , ²	Negative	N/A	Immune due to immunization	Do NOT enter Not a case
Negative	Positive ³	Positive	N/A	Immune due to previous infection	Do NOT enter Not a case
Positive ⁴	Negative	Positive	Positive ⁵	Infected-acute infection	Hepatitis B → Staging → Acute*
Positive	Negative ³	Positive	Negative⁵	Infected-chronic infection	Hepatitis B → Staging → Chronic
Negative	Negative	Positive ⁶	Negative	Indeterminate	Do NOT enter Not a case

TABLE 1: HBV Diagnostic Testing and Panorama Data Entry

¹ About 5%–10% of people will not respond to the vaccine or else do not produce protective levels of antibody post-vaccination (i.e. ≥ 10 IU/ml).

² Levels of HBV Surface Ab may decline over time and become undetectable.

³ A small percentage of people with chronic infection will have both HBV Surface Ag and HBV Surface Ab markers present.

⁴ HBsAG can be positive for up to 14 days following HBV vaccination.

⁵ Since anti-HBc IgM can be detected in acute HBV, this test may be helpful when acute infection is suspected. It may also reappear in a flare of chronic infection.

⁶ Indeterminate result. Requires further investigation.

^{*}Note: If a new case is from an endemic country (<u>WHO map of countries and areas of risk for HB</u>) enter the case as Chronic Carrier. Enter all other cases based on case definition. Ensure disease name is updated following the subsequent 6 month lab result. All investigations should be closed in Panorama.

Reporting Requirements

- Report confirmed cases to DHW Surveillance Team via Panorama.
- Select appropriate initial staging option in the "staging" field in Panorama
 - o Update the staging field if/when new information becomes available

Additional Forms

None.

Data Entry

Complete data entry in Panorama.