



**INTERPRETATION OF THE HEPATITIS B PANEL**

| <b>TESTS</b>                                  | <b>RESULTS</b>                               | <b>INTERPRETATION</b>  | <b>RECOMMENDATION</b> |
|---|--|--|-----------------------|
| HbsAg<br>anti-HBc<br>anti-HBs                 | Negative<br>Negative<br>Negative             | SUSCEPTIBLE - not immune, has not been infected and is still at risk of future infection – NEEDS VACCINE | VACCINATE             |
| HbsAg<br>anti-HBc<br>anti-HBs                 | Negative<br>Positive<br>Positive             | IMMUNE due to natural infection  | Vaccine is not needed |
| HbsAg<br>anti-HBc<br>anti-HBs                 | Negative<br>Negative<br>Positive             | IMMUNE due to hepatitis B vaccination*   | Vaccine is not needed |
| HbsAg<br>anti-HBc<br>IgM anti-HBc<br>anti-HBs | Positive<br>Positive<br>Positive<br>Negative | ACUTELY INFECTED – can spread the virus to others  | EVALUATE              |
| HbsAg<br>anti-HBc<br>IgM anti-HBc<br>anti-HBs | Positive<br>Positive<br>Negative<br>Negative | CHRONICALLY INFECTED – can spread the virus to others  | EVALUATE              |
| HbsAg<br>anti-HBc<br>anti-HBs                 | Negative<br>Positive<br>Negative             | Four possible interpretations**  | EVALUATE              |

\*Anti-HBs can be measured quantitatively or qualitatively. Qualitative results are reported as positive, quantitative results are often reported as 10 or more milliinternational units ( $\geq 10$  mIU/ml is a protective antibody response). According to CDC, post vaccination testing should be completed 1-2 months after the third vaccine dose for results to be meaningful.

\*\* 1- Might be recovering from acute HBV infection

2- Might be distantly immune and test is not sensitive enough to detect very low level of anti-HBs in serum

3- Might be susceptible with a false positive anti-HBc

4- Might be undetectable level of HbsAg present in the serum and the person is actually chronically infected.

### INTERPRETATION OF HCV TEST RESULTS

| <b>ANTI-HCV<br/>SCREENING TEST</b> | <b>RIBA</b>          | <b>HCV RNA</b> | <b>INTERPRETATION</b>    | <b>ACTION<br/>(Additional Testing or evaluation)</b> |
|------------------------------------|----------------------|----------------|--------------------------|--|
| Negative                           | Not needed           | Not needed     | Not infected             | No   |
| Positive                           | Not done             | Not done       | Unknown                  | Supplemental anti-HCV (RIBA) or<br>HCV RNA           |
| Positive                           | Not done             | Negative       | Unknown ♦                | Supplemental anti-HCV (RIBA)                         |
| Positive (high s/co ratio†)        | Not done             | Not done       | Past/current infection   | Evaluate for chronic infection and liver<br>disease  |
| Positive                           | Negative             | Not needed     | Not infected             | No   |
| Positive                           | Positive             | Not done       | Past/current infection   | Evaluate for chronic infection and liver<br>disease  |
| Positive                           | Positive             | Negative       | Past/current infection ♦ | Repeat HCV RNA                                       |
| Positive                           | Positive/not<br>done | Positive       | Current infection        | Evaluate for chronic infection and liver<br>disease  |
| Positive                           | Indeterminate        | Not done       | Unknown                  | Test for HCV RNA or repeat Anti-HCV<br>testing       |
| Positive                           | Indeterminate        | Positive       | Current infection        | Evaluate for chronic infection and liver<br>disease  |
| Positive                           | Indeterminate        | Negative       | Not infected             | No   |

† Samples with high s/co ratios usually confirm positive (>95%) when supplemental testing is performed. Less than 5 of every 100 might represent false-positives.

♦ Single negative HCV RNA result cannot determine infection status as persons might have intermittent viremia