Appendix C

Hepatitis B Vaccine Recommendations Algorithm for Individuals at High-Risk of Past Infection

Screen for evidence of immunity or past disease; HBsAg, Anti-HBc and Anti-HBs serology

- HBsAg positive regardless of other results
  - Vaccine not required; Laboratory will notify ordering physician and automatically send results to zone Medical Officer of Health or designate for follow up based on zone processes.
  - Advise to alert their school/professional organization.

- HBsAg negative, Anti-HBc positive
  - Consider immune; Vaccine not required
  - Recommend follow up with family physician

- HBsAg negative, Anti-HBc negative, Anti-HBs positive
  - Consider immune. No further vaccine or serological testing required
  - Anti-HBs positive
  - Consider immune. No further vaccine or serological testing required
  - Anti-HBs negative
  - Recommend completion of second series. Repeat Anti-HBs 1 to 6 months later

- HBsAg negative, Anti-HBc negative, Anti-HBs negative
  - Not immune; Recommend vaccine series. Repeat Anti-H Bs 1 to 6 months later
  - Anti-HBs positive
  - Consider immune. No further vaccine or serological testing required
  - Anti-HBs negative
  - Consider non-responder. No further vaccine or serological testing required

Notes:
- These recommendations apply to pre-exposure immunization only. Post-exposure recommendations fall under the notifiable disease management guidelines and blood/body fluid exposure protocols.
- Those at high-risk of past infection include:
  - Those who have immigrated to Canada from a country where hepatitis B is endemic – see Hepatitis B Endemic Countries List
  - Those who have received repeated blood transfusions
  - Those with a history of dialysis
  - Those with lifestyle risks of infection
- Ideally post-immunization serology (Anti-HBs) should be done a minimum of 1 month to a maximum of 6 months following immunization. For clients where it has been longer than 6 months order the serology and follow this algorithm based on the result.
- If an anti-HBs titre of at least 10 IU/L is confirmed (including HCW providing a copy of previous results), testing need not be repeated nor should further immunization be undertaken, with the exception of immunocompromised persons who may have further testing ordered through their attending physician.