Hepatitis B Virus Infection – High Endemic Geographic Areas

Children younger than seven years of age whose families have immigrated to Canada from areas where there is a high prevalence (8% or higher) of hepatitis B are at increased risk of hepatitis B infections even if neither parent is a chronic carrier. These children are likely to be exposed to hepatitis B carriers through their extended families or when visiting friends and relatives in their country of origin and should be offered hepatitis B vaccine. Immunization can start with the routine vaccination schedule at two months of age, with the next doses to complete the series given at four and 12 months of age. Hepatitis B vaccine series can be started at any age (two months up to seven years of age) for children identified who meet these eligibility criteria.

Countries considered highly endemic (8% or higher HBsAg prevalence) for hepatitis B infection are listed by geographical areas below:

Africa (all countries except Algeria, Egypt, Libya, Morocco and Tunisia)

Angola	Gabon	Rwanda
Benin	Gambia	Saint Helena
Botswana	Ghana	SaoTome and Principe
Burkina Faso	Guinea	Senegal
Burundi	Guinea-Bissau	Seychelles
Cameroon	Kenya	Sierra Leone
Cape Verde Islands	Lesotho	Somalia
Central African Republic	Liberia	South Africa
Chad	Madagascar	Sudan
Comoros	Malawi	Swaziland
Congo	Mali	Togo
Côte d'I'voire	Mauritania	Uganda
Democratic Republic of the Congo	Mauritius	United Republic of Tanzania
Djibouti	Mozambique	Western Sahara
Equatorial Guinea	Namibia	Zambia
Eritrea	Niger	Zimbabwe
Ethiopia	Nigeria	
	Reunion Island	

Central and Eastern Europe (including the independent states of the former Soviet Union) and the Middle East

		Saudi Arabia
Albania	Georgia	Tajikstan
Armenia	Jordan	Turkmenistan
Azerbaijan	Kazakhstan	Uzbekistan
Bulgaria	Kyrgyzstan	
Denmark – Greenland (indigenous populations)	Malta	
	Republic of Moldova	

Central and South America (interior Amazon basin and parts of the Caribbean)

Bolivia (Amazon Basin)	Dominican Republic	Peru
Brazil (Amazon Basin)	Haiti	Venezuela (Amazon Basin)
Columbia (Amazon Basin)		

North America

High hepatitis B endemicity occurs in the Alaska Native populations and indigenous populations in Northern Canada**.**

Southeast Asia and the South and Western Pacific Islands

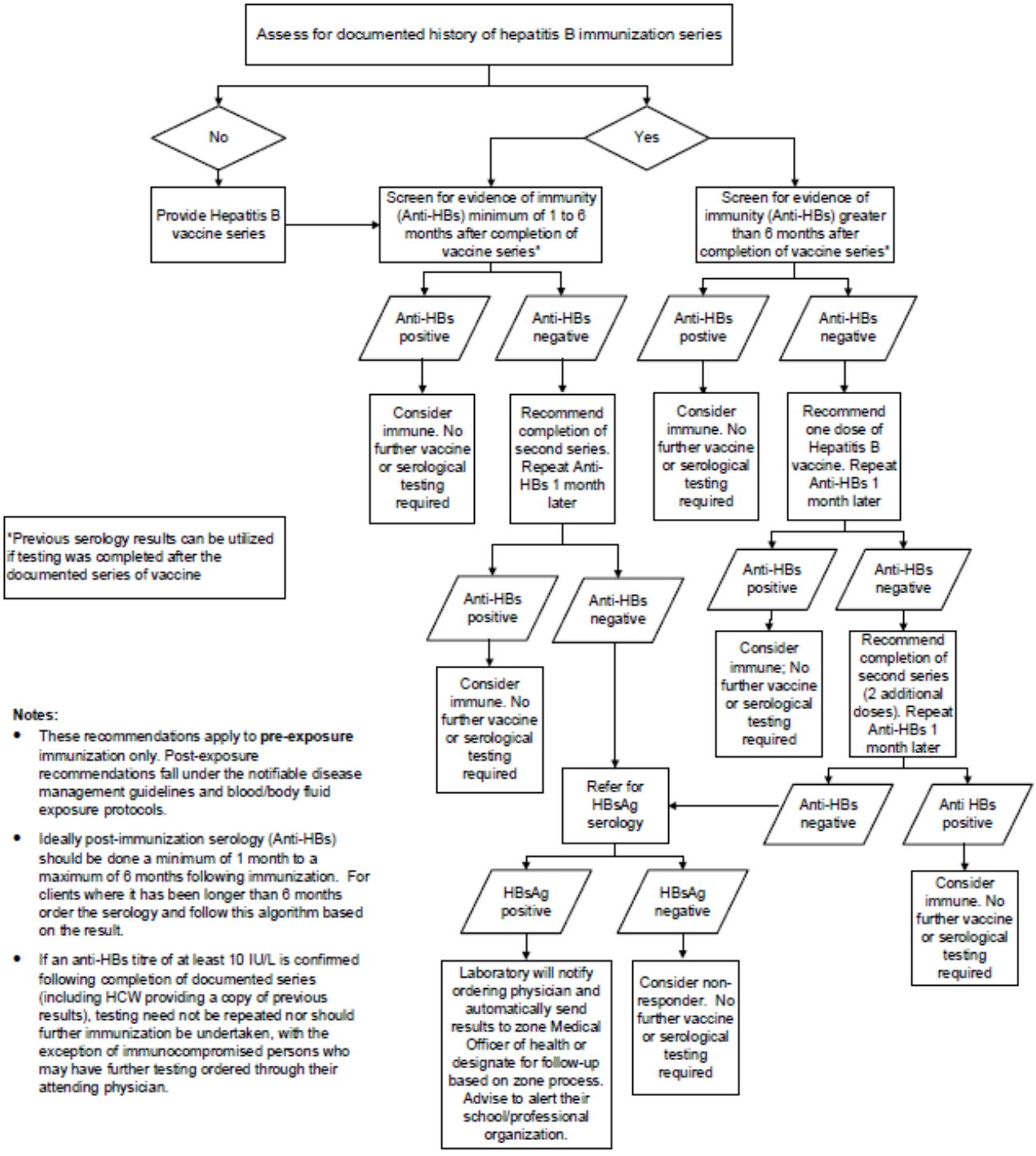
America Samoa
Cambodia
China (includes Hong Kong, Macao and Taiwan)
Cook Islands
Easter Island
Federated States of Micronesia
Fiji
French Polynesia
Guam
Hong Kong
Indonesia
Kiribati
Korea (North and South)
Lao People's Democratic Republic
Marshall Islands
Macao
Mongolia
Myanmar (Burma)
Nauru
New Caledonia and Dependencies
Niue
Palau
Papua New Guinea
Philippines
Samoa
Solomon Islands
Taiwan
Thailand
Timor-Leste
Tokelau
Tonga
Trust Territories of Pacific Islands
Tuvalu
Vanuatu Vietnam
Wallis and Futuna Islands

Source:
Alberta Health, Public Health and Compliance Division, Alberta Immunization Policy (2017, August). *Hepatitis B Virus Infection – High Endemic Geographic Areas*

Appendix B

Hepatitis B Vaccine Recommendations Algorithm for Health Care Workers <u>Not at High-Risk</u> of Past Infection

*This algorithm is intended to be used in conjunction with the Standard for Immunization of Health Care Workers, Standard for Immunization of Post-Secondary Health Care Students and the Hepatitis B Vaccine Biological Page.

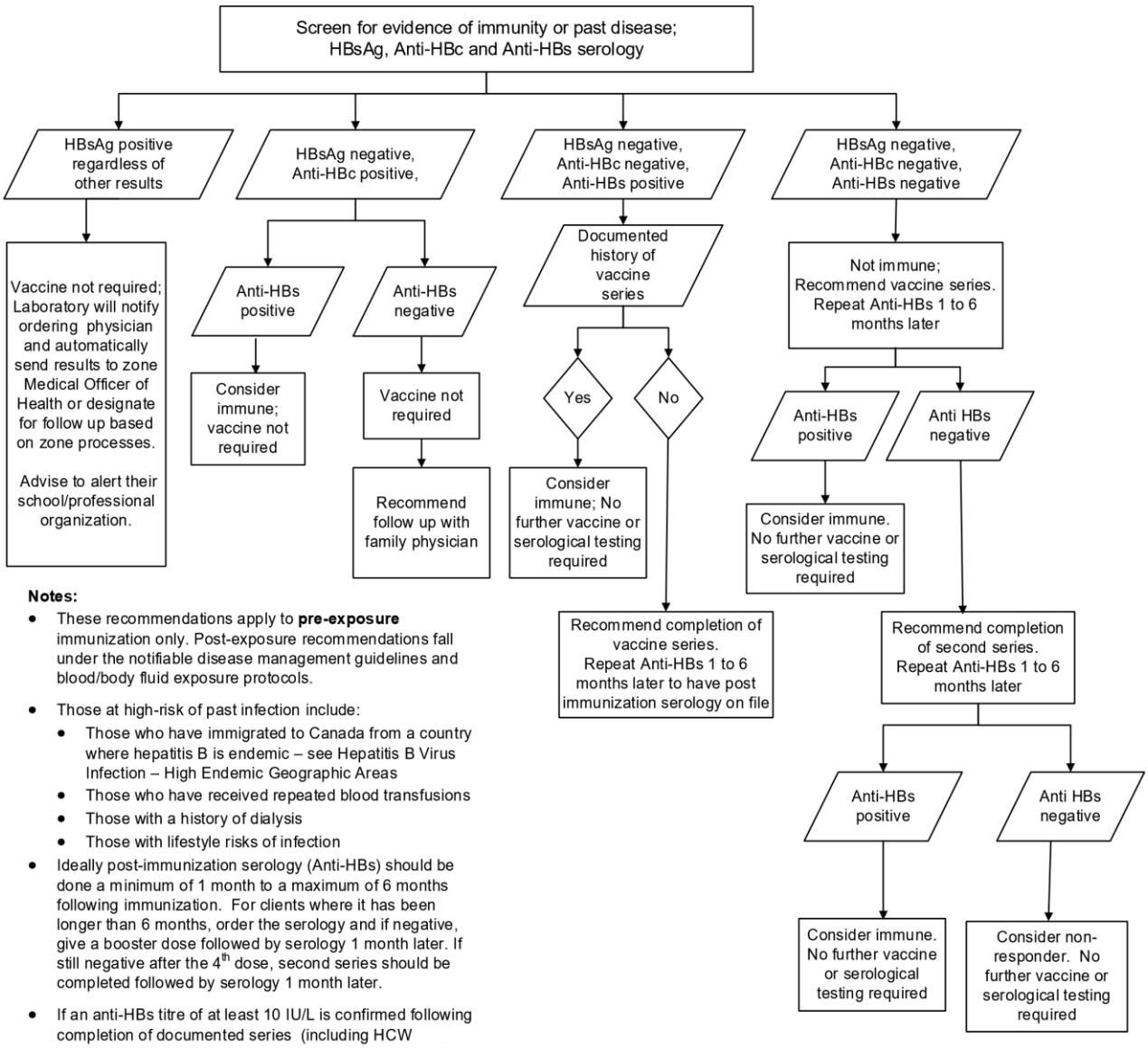


Notes:

- These recommendations apply to **pre-exposure** immunization only. Post-exposure recommendations fall under the notifiable disease management guidelines and blood/body fluid exposure protocols.
- 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 following completion of documented series (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.

Hepatitis B Vaccine Recommendations Algorithm for Health Care Workers <u>At High-Risk</u> of Past Infection

*This algorithm is intended to be used in conjunction with the Standard for Immunization of Health Care Workers, Standard for Immunization of Post-Secondary Health Care Students and the Hepatitis B Vaccine Biological Page.



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 Virus Infection – High Endemic Geographic Areas
  - 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 if negative, give a booster dose followed by serology 1 month later. If still negative after the 4th dose, second series should be completed followed by serology 1 month later.
- If an anti-HBs titre of at least 10 IU/L is confirmed following completion of documented series (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.