

Guidelines for the Management of Exposures to Blood and Body Fluids

Appendix 8 – Management of Potential Exposures to Hepatitis B

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Please see the following pages for the Management of Potential Exposures to Hepatitis B.

Current Saskatchewan immunization information can be located at :

<https://www.ehealthsask.ca/services/Manuals/Pages/SIM.aspx>.

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HBV PEP – High Risk Source

Source is Known HBsAg Positive (Infected) OR
 Source Status Unknown but Known to be High-risk OR
 Source Status Unknown or Not Available for Testing
 (Adapted from: Canadian Immunization Guide, 2018)

RECIPIENT	RECIPIENT'S MANAGEMENT				
	Results	Next Steps			
Unvaccinated Test for: <ul style="list-style-type: none"> • Anti-HBs • HBsAg 	-Anti-HBs positive -HBsAg negative	Consider immune for the exposure. Offer hepatitis B vaccine series for long-term protection			
	-Anti-HBs negative (<10 Iu/L) - HBsAg negative	HBIG and first dose of vaccine series	Complete vaccine series Test anti-HBs and HBsAg. Ensure testing is at least 1 month after the last dose of vaccine and at least 6 months after HBIG.	-Anti-HBs positive	Consider immune
				-Anti-HBs negative -HBsAg negative	Second series of vaccine. Test 1 month after vaccine series.
				-Anti HBs negative -HBsAg positive	Refer to communicable disease program in Public Health within Saskatchewan Health Authority.
-Anti-HBs negative -HBsAg positive	Refer to communicable disease program in Public Health within Saskatchewan Health Authority.				
Vaccinated Documented and valid series (age appropriate and spaced appropriate) 2 or 3 dose series based upon age. Test for: <ul style="list-style-type: none"> • Anti-HBs • HBsAg See Saskatchewan immunization manual for current vaccine series.	-Anti-HBs positive -HBsAg negative	Consider immune. No further follow-up required.			
	-Anti-HBs negative -HBsAg negative	HBIG and one dose of vaccine.	Test anti-HBs and HBsAg. Ensure testing is at least 1 month after the last dose of vaccine and at least 6 months after HBIG.	Anti HBs positive	Consider immune
				Anti-HBs negative HBsAg negative	Complete second series of vaccine. Test 1 month after vaccine series.
				Anti-HBs negative HBsAg positive	Refer to communicable disease program in Public Health within Saskatchewan Health Authority.
-Anti-HBs negative -HBsAg positive	Refer to communicable disease program in Public Health within Saskatchewan Health Authority				

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<p>Vaccinated Has documented and has completed two valid series of vaccine Test for:</p> <ul style="list-style-type: none"> • Anti-HBs • HBsAg 	-Anti-HBs positive -HBsAg negative	Consider immune. No further follow-up required.		
	-Anti-HBs negative -HBsAg negative	Non responder. No further vaccine indicated	HBIG x 2. Give the 2 nd dose of HBIG one month after 1 st dose.	Test 6 months after HBIG for HBsAg.
	-Anti-HBs negative -HBsAg positive	Refer to communicable disease program in Public Health within Saskatchewan Health Authority.		
<p>Vaccinated Incomplete vaccine series, either one or two doses of 2 or 3 dose series. Test for:</p> <ul style="list-style-type: none"> • Anti-HBs • HBsAg 	Anti-HBs positive HBsAg negative	Consider immune for this exposure. Complete hepatitis B vaccine series for long-term protection.		
	Anti-HBs negative HBsAg negative	HBIG and complete vaccine series. Test anti-HBs and HBsAg. Ensure testing is at least 1 month after the last dose of vaccine and at least 6 months after HBIG.	Anti-HBs positive HBsAg negative	Consider immune
			Anti-HBs negative HBsAg negative	Second series of vaccine. Test 1 month after vaccine series.
			Anti-HBs negative HBsAg positive	Refer to communicable disease program in Public Health within Saskatchewan Health Authority.
Anti-HBs negative HBsAg positive	Refer to communicable disease program in Public Health within Saskatchewan Health Authority.			

Notes

- If recipient is known to be anti-HBs positive (>10 IU/L) following a documented and valid series (age appropriate and spaced appropriate) or if known to be HBsAg positive, hepatitis B testing does not need to be repeated.
- Offer HBIG if antibody testing for recipient is not available within 48 hours and the source is known HBsAg positive.
- **High-risk source:** individuals with multiple sexual partners, men who have sex with men (MSM), sexual partner infected with HBV, close family contact with HBV infected individual, history of injection drug use, immigration from a HBV endemic country (prevalence > 8%). And history of blood transfusions prior to 1970.
- **Immunocompromised people,** protection may wane, subsequent HBV exposure in these individuals can result in acute disease or carrier state. Therefore, these individuals should be tested and offered a booster as needed.
- **HBIG** dose is 0.06 mL/kg IM. Dose should be administered as soon as possible after exposure ideally within 24 hours. For percutaneous or mucosal exposures, HBIG may be given up to 7 days following the exposure. For sexual exposures HBIG may be given up to 14 days following the exposure.

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HBV PEP – Low Risk Source

Source is Known HBsAg negative (uninfected) OR
 Source Status Unknown but Known to be Low Risk OR
 (Adapted from: Canadian Immunization Guide, 2018)

RECIPIENT	RECIPIENT'S MANAGEMENT				
	Results	Next Steps			
<i>Unvaccinated</i> Test for: <ul style="list-style-type: none"> • Anti-HBs • HBsAg 	-Anti-HBs positive -HBsAg negative	Consider immune for this exposure. Offer hepatitis B vaccine series for long-term protection			
	-Anti-HBs negative (<10 IU/L) - HBsAg negative	First dose of vaccine series	Complete vaccine series Test anti-HBs and HBsAg 1-6 months after vaccine series.	Anti-HBs positive	Consider immune
				-Anti-HBs negative -HBsAg negative	Second series of vaccine. Test 1 month after vaccine series.
				-Anti HBs negative -HBsAg positive	Refer to communicable disease program in Public Health within Saskatchewan Health Authority.
-Anti-HBs negative -HBsAg positive	Refer to communicable disease program in Public Health within Saskatchewan Health Authority.				
<i>Vaccinated</i> Documented and valid series (age appropriate and spaced appropriate) 2 or 3 dose series based upon age. Test for: <ul style="list-style-type: none"> • Anti-HBs • HBsAg See Saskatchewan immunization manual for current vaccine series.	-Anti-HBs positive -HBsAg negative	Consider immune. No further follow-up required.			
	-Anti-HBs negative -HBsAg negative	One dose of vaccine.	Test anti-HBs and HBsAg 1-6 months after vaccine series.	Anti HBs positive	Consider immune
				Anti-HBs negative HBsAg negative	Complete second series of vaccine. Test 1 month after vaccine series.
				Anti-HBs negative HBsAg positive	Refer to communicable disease program in Public Health within Saskatchewan Health Authority.
-Anti-HBs negative -HBsAg positive	Refer to communicable disease program in Public Health within Saskatchewan Health Authority				

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Vaccinated Has documented and has completed two valid series of vaccine Test for: <ul style="list-style-type: none"> • Anti-HBs • HBsAg 	-Anti-HBs positive -HBsAg negative	Consider immune. No further follow-up required.		
	-Anti-HBs negative -HBsAg negative	Non responder. No further vaccine indicated	No further follow-up.	
	-Anti-HBs negative -HBsAg positive	Refer to communicable disease program in Public Health within Saskatchewan Health Authority.		
Vaccinated Incomplete vaccine series, either one or two doses of 2 or 3 dose series. Test for: <ul style="list-style-type: none"> • Anti-HBs • HBsAg 	Anti-HBs positive HBsAg negative	Consider immune for this exposure. Complete hepatitis B vaccine series for long-term protection.		
	Anti-HBs negative HBsAg negative	Complete vaccine series. Test anti-HBs and HBsAg at least 1-6 months after vaccine series.	Anti-HBs positive HBsAg negative	Consider immune
			Anti-HBs negative HBsAg negative	Second series of vaccine. Test 1 month after vaccine series.
	Anti-HBs negative HBsAg positive	Refer to communicable disease program in Public Health within Saskatchewan Health Authority.		

Notes:

- If recipient is known to be anti-HBs positive (>10 iU/L) following a documented and valid series (age appropriate and spaced appropriate) or known to be HBsAg positive, hepatitis B testing does not need to be repeated.
- **Low risk source** – individuals who do NOT have the following risk factors: multiple sexual partners, MSM, sexual partner infected with HBV, close family contact with HBV infected individual, history of injection drug use, immigration from a HBV endemic country (prevalence >8%), and history of blood transfusions prior to 1970.
- **Immunocompromised people**, protection may wane, subsequent HBV exposure in these individuals can result in acute disease or carrier state. Therefore, these individuals should be tested and offered a booster as needed.

Adapted from Alberta Post-Exposure Prophylaxis Management Guidelines March, 2019.

<https://open.alberta.ca/publications/9781460143360>.