

# Report of hepatitis B - Please use this form for reporting LAB CONFIRMED hepatitis B

Fax completed form to 905-940-4541

<b>Health Care Provider information:</b> (Name, Address, Phone, Fax)	
<b>Client information:</b> (Name, Sex, DOB, Phone, Address, Language)	

## Diagnosis

Ensure all Acute and Undetermined clients are retested in 6 months for all HBV markers, including HBsAg, anti- HBs, and anti-HBc

- Chronic hepatitis B - HBsAg positive > 6 months  
 Acute hepatitis B – Result of **Anti-HBc IgM** test:  Negative  Positive – date (yy/mm/dd): \_\_\_\_\_

**If positive, please fax lab slip**

**\*IF this is a confirmed or suspected acute hepatitis B case, contact Public Health immediately\***

- Undetermined - Retest client for HBsAg, anti-HBs, and anti-HBc in 6 months from initial positive HBsAg  
 Resolved infection - Client is not infected with HBV  
 False positive - Client was recently immunized (Hepatitis B antigenemia) or other

## Reasons for Testing

- Routine screening  Contact tracing  Immigration screening  Insurance Application  
 Prenatal – EDD (yy/mm/dd): \_\_\_\_\_  Other: \_\_\_\_\_

## Symptoms

- Was client symptomatic?  No  Yes - anti-HBc IgM testing recommended  
Symptom(s): \_\_\_\_\_ Onset date (yy/mm/dd): \_\_\_\_\_

## Assessment of Risk Factors

### Medical Risk Factors

- |  |   |
|--|---|
| <input type="checkbox"/> Client born to a case or carrier            | <input type="checkbox"/> Dialysis recipient                   |
| <input type="checkbox"/> Born in an endemic country - specify: _____ | When: _____ Where: _____                                      |
| <input type="checkbox"/> Received blood or blood products            | <input type="checkbox"/> Invasive medical/surgical procedures |
| When: _____ Where: _____   | When: _____ Where: _____                                      |
| <input type="checkbox"/> Partially/Incompletely immunized            | <input type="checkbox"/> Invasive medical/surgical procedures |
| <input type="checkbox"/> Organ/tissue transplant                     | When: _____ Where: _____                                      |
| When: _____ Where: _____   | <input type="checkbox"/> Unimmunized                          |
| <input type="checkbox"/> Co-Diagnosis/Co-infection with existing STI | <input type="checkbox"/> Unknown                              |
| Specify: _____   | <input type="checkbox"/> Other: _____                         |
| <input type="checkbox"/> ON PrEP                                     |   |

## Public Health

4261 Highway 7 East, Suites B6-9, Unionville ON L3R 9W6  
1-877-464-9675 • TTY 1-866-512-6228 • Fax 905-940-4541  
[www.york.ca/sexualhealth](http://www.york.ca/sexualhealth)



**Behavioural Risk Factors**

Acupuncture  
When: \_\_\_\_\_ Where: \_\_\_\_\_

Contact is HIV positive  
 Contact is hepatitis B positive  
 Correctional facility  
 Electrolysis  
When: \_\_\_\_\_ Where: \_\_\_\_\_

Fighting, biting, blood brother  
 High risk sexual activity  
 Homeless/underhoused  
 Inhalation drug use  
 Injection drug use  
 Intranasal drug use  
 Occupational exposure to potentially hepatitis B contaminated body fluids

Other personal services – Specify: \_\_\_\_\_  
 Piercing  
 Shared drug use equipment  
 Shared personal items, e.g. toothbrush, razorblades  
 Sex worker  
 Sex with opposite sex  
 Sex with same sex  
 Tattoo  
 Travel/live in country where hepatitis B is endemic  
When: \_\_\_\_\_ Where: \_\_\_\_\_  
 Unknown  
 Other: \_\_\_\_\_

**Have other SBBI tests been done (indicate results)?**

Chlamydia \_\_\_\_\_  Gonorrhoea \_\_\_\_\_  Hep C \_\_\_\_\_  HIV \_\_\_\_\_  Syphilis \_\_\_\_\_

**Education/ Follow-up**

1. Client is informed/or will be informed of their hepatitis B status and provided with health teaching?  No  Yes

**Health teaching includes:**

- Informing client to have household/sexual contacts to be assessed for hepatitis B
- Discussing what HBV is and how it is transmitted – preventions, precautions and including safer sex practices
- Discussing regular follow up with Health Care Provider
- Informing client not to donate blood, organs, tissue or semen
- Discussing the available free hepatitis A immunization for client and free hepatitis B immunization for contacts
- If applicable, advise client to refer to their professional college for further infection reporting and any practice recommendations/restrictions

2. Has the client been referred to a specialist?  No  Yes - Specialist: \_\_\_\_\_

3. Would you like a hepatitis B education package sent to the client?  No  Yes – if yes:  English  Chinese

Comments: \_\_\_\_\_

Signature of Health Care Provider: \_\_\_\_\_ Date (yy/mm/dd): \_\_\_\_\_

To order free hepatitis A vaccine (available to persons who have chronic liver disease; including hepatitis C, injection drug users and men who have sex with men) for this client, or free hepatitis B vaccine for this client’s household contact(s) and sexual contact(s), please fax vaccine order form to (905) 830-0578. If you are a health care provider who practices outside of York Region, please order your hepatitis B vaccine through your vaccine provider.

## Serology Testing Markers for Hepatitis B

Stage	HBsAg	Anti-HBc Total (IgG + IgM)	Anti-HBc IgM	HBeAg	Hepatitis B viral DNA	Anti-HBs
Acute (early)	+	+	+	+	+	-
Acute (resolving)	+	+	+	-	-	-
Chronic	+	+	-	+/-	+/-	-
Resolved/Immune	-	+	N/A	-	-	+/-*
Vaccinated	-	-	N/A	-	-	+* <sup>β</sup>

\* In some patients, anti-HBs may decline over time and become undetectable.

<sup>β</sup> About 5-10% of people will not respond to the vaccine or do not produce protective levels of antibody post-vaccination (i.e.,  $\geq 10$  IU/ml). Reference: *Primary Care Management of Hepatitis B – Quick Reference*, Public Health Agency of Canada, 2013

### Significance of HBV Serological Markers

<b>HBsAg</b> (surface antigen)	<ul style="list-style-type: none"> <li>• First marker of HBV infection to appear, 1 to 3 weeks before symptoms</li> <li>• Presence indicates person is infectious</li> <li>• When present with anti-HBc IgM, may indicate acute infection</li> <li>• Persistence &gt;6 months indicates chronic infection</li> <li>• Disappears with resolution of acute infection</li> </ul>	
<b>Anti-HBc Total</b> (total core antibody – IgM and IgG)	<ul style="list-style-type: none"> <li>• Appears around time of symptom onset</li> <li>• Lifelong marker of past infection regardless of whether patient is immune or a chronic carrier</li> <li>• Does not indicate immunity</li> <li>• Present only in those who have acquired natural infection and does not appear after vaccination</li> </ul>	
<b>Isolated antibody to hepatitis B core</b> (appears in the absence of other positive markers) Rarely occurs; most common in immunocompromised people and those co-infected with HIV or HCV	Possible Interpretations:	
	1) The client is in the “window phase” of an acute infection	→ Test for anti-HBc IgM and/or repeat testing in several weeks
	2) Chronic infection with HBsAg that is escaping detection due to mutated virus or low level of circulating surface antigen	→ Test for HBV DNA (PCR)
	3) A remote resolved infection	→ Give a challenge dose of vaccine and test for antibodies in 1 month
	4) This may be a false positive test result	→ Retest in 6 months or give 3 doses of vaccine and test for antibodies
<b>Anti-HBc IgM</b> (core antibody - IgM)	<ul style="list-style-type: none"> <li>• Marker of recent acute infection</li> <li>• May persist for up to 6-12 months before becoming undetectable</li> <li>• May be the only marker during window period when HBsAg is undetectable but before anti-HBs appears</li> <li>• May reappear in a chronic carrier during a flare (reactivation of virus)</li> </ul>	
<b>HBeAg</b> (e-antigen)	<ul style="list-style-type: none"> <li>• Appears shortly before symptoms</li> <li>• Detectable during active viral replication in either acute or chronic infection</li> <li>• Indicates high infectivity</li> <li>• Persistence &gt;6 months indicates chronic infection</li> </ul>	
<b>HBV DNA</b>	<ul style="list-style-type: none"> <li>• A direct measure of the hepatitis B virus in the blood</li> </ul>	
<b>Anti-HBs</b> (surface antibody)	<ul style="list-style-type: none"> <li>• Appears 1 to 3 months after immunization or resolution from acute infection</li> <li>• Indicates immunity to HBV infection</li> <li>• If present with positive HBsAg; the person is considered infectious</li> </ul>	
<b>Anti-HBe</b> (e-antibody)	<ul style="list-style-type: none"> <li>• Appears within a few weeks of loss of HBeAg</li> <li>• Indicates a decline in infectivity and corresponds to resolution of infection</li> <li>• Could also indicate active infection with a mutant strain of virus that does not induce production of “e” antigen</li> </ul>	