

## Option 2 – Postexposure Management of Health Care Personnel (HCP) for Hepatitis B Virus Protection<sup>1</sup>

Determining the Need of Hepatitis B Prophylaxis for HCP Following an Exposure

HCP status	Postexposure Testing		Postexposure Prophylaxis			Post-Vaccination Testing of HCP
	Source Patient (HBsAg) <sup>2</sup>	HCP testing (Anti-HBs)	HBIG	HepB Vaccine		
Unvaccinated or incompletely vaccinated (including those who refused vaccination)	Positive/unknown	Test for total Anti-HBc <sup>3</sup>	Give 1 dose of HBIG <sup>4</sup>	Begin/complete hepB vaccine series		Test for anti-HBs <sup>3,5,6</sup>
	Negative	None	None	Begin/complete hepB vaccine series		Test for anti-HBs <sup>5,6</sup>
Documented anti-HBs 10 mIU/mL <sup>6</sup> or greater after complete hepB vaccine series (3 or more doses)	NO additional testing or prophylaxis needed					
Vaccinated with 3 or more hepB doses and not tested for anti-HBs (test source and HCP simultaneously)	Positive/unknown	If < 10 mIU/mL	Give 1 dose of HBIG <sup>4</sup>	Revaccinate <sup>8</sup> with hepB series		Test for anti-HBs <sup>5,6</sup>
	Negative	If < 10 mIU/mL	None	Give 1 hepB dose; repeat anti-HBs test 1-2 months later ( <b>IF</b> repeat anti-HBs less than 10 mIU/mL revaccinate with 2 more hepB doses)		Test for anti-HBs <sup>5,6</sup>
	Any result	If ≥ 10 mIU/mL	NO additional testing or prophylaxis needed			
Vaccinated with 6 doses and anti-HBs less than 10 mIU/mL <sup>7</sup>	Positive/unknown	None	Give 2 doses of HBIG <sup>4</sup>	None	No follow-up testing needed	
	Negative	NO additional testing or prophylaxis needed				

**Abbreviations:** HCP=health-care personnel; HBsAg = hepatitis B surface antigen; total anti-HBc = antibody to hepatitis B core; anti-HBs = antibody to hepatitis B surface antigen; HBIG = hepatitis B immune globulin; MCIR – Michigan Care Improvement Registry

<sup>1</sup>**Initial post-exposure management:** Refer to facility exposure control plan; remember wounds and skin sites that have been in contact with blood or body fluids should be washed with soap and water; mucus membranes should be flushed with water.

<sup>2</sup>Source patient should be tested for HBsAg as soon as possible after exposure.

<sup>3</sup>HCPs with anti-HBs less than 10 mIU/mL, or unvaccinated or incompletely vaccinated, and sustain an exposure to a source patient who has an unknown or HBsAg-positive status, should have baseline testing as soon as possible after exposure, and follow-up testing approximately 6 months later. Baseline tests consist of total anti-HBc; follow-up testing at 6 months consists of HBsAg and total anti-HBc.

<sup>4</sup>Hepatitis B Immune Globulin (0.06 mL/kg) administered IM. (If two doses are needed give first dose as soon as possible after exposure and second dose 1 month later). Administer HBIG and hepB vaccine at separate sites.

<sup>5</sup>Test 1–2 months after last dose of hepB vaccine series (6 months after administration of HBIG). If anti-HBs is less than 10 mIU/mL after primary hepB series, revaccinate and repeat testing 1-2 months after last dose.

<sup>6</sup>(Responder) = anti-HBs of at least 10 mIU/mL after 3 or more doses of hepB vaccine.

<sup>7</sup>(Non-responder) = anti-HBs less than 10 mIU/mL after 6 or more doses of hepB vaccine.

<sup>8</sup>Revaccinate = additional 3-dose series of hepB vaccine administered after the primary series.

Note: Best practice is to document all administered doses of hepB vaccine and HBIG in MCIR.

For **Option 1** – Refer to *Pre-Exposure Management of HCP* at [www.michigan.gov/immunize](http://www.michigan.gov/immunize).

**Resources:** “Immunization of Health-Care Personnel” Vol. 60, No. 7, 11/25/11; <http://www.cdc.gov/mmwr/pdf/rr/rr6007.pdf>; this document is adapted from “CDC Guidance for Evaluating Health-Care Personnel for Hepatitis B Virus Protection and for Administering Postexposure Management” December 20, 2013 / 62(rr10); 1-19 <http://www.cdc.gov/mmwr/PDF/rr/rr6210.pdf>