

## INFECTION CONTROL POLICIES RELATED TO STAFF

### VACCINATION POLICY

Doctors, Nurses, Paramedical Staff, Lab Technicians who are in direct contact with the patient blood and body fluids are given Vaccination at regular intervals

#### Hepatitis “B” Vaccine

**1<sup>st</sup> Dose** – **0 day**

**2<sup>nd</sup> Dose** – **1month**

**3<sup>rd</sup> Dose** – **6months**

All HCWs should have serologic testing (**Anti HBs Titre**) 1-2months following the final dose of the hepatitis B vaccine series. An anti-HBs serologic test result of >10mIU/mL indicates immunity. No further routine doses or testing are indicated if Anti HB s Titre>10mIU/MI

#### Policy for management of Occupational exposure to Blood borne pathogens

##### **Management of needle sticks and other potentially blood-borne pathogen exposure incidents**

A uniform system for the reporting and medical management of persons sustaining exposure to blood or other body fluids via needle stick, other percutaneous injury, mucous membrane exposure (e.g. splash to eye or mouth), or contact with non-intact skin is in place

##### Action to be taken by an injured member of staff following an incident:

##### **First Aid and Immediate Help**

1. Encourage bleeding where skin is punctured
2. Wash thoroughly with copious soap and warm water. Do not use a scrubbing brush
3. If eyes are involved wash immediately with water (use tap water). If mouth is contaminated rinse with plenty of water
4. Where massive contamination of unbroken skin has occurred, remove all contaminated clothing and wash all affected areas with plenty of water
5. Ensure that your supervisor or immediate senior is informed promptly of the incident
6. Staff Clinic/Emergency Department/Infectious disease Nurse to be notified
7. An employee who experiences an accidental puncture with a contaminated needle or blade should be given a booster of tetanus toxoid (0.5cc) if one has not been given in the past 10 years

##### **Testing the source patient**

1. Details of the source patient to be documented
2. Testing the source patient for blood borne Virus (BBV) infections

Prior to testing a source patient for a blood borne virus infection he or she must be counseled and verbal consent obtained

Source testing does not usually need to be done immediately, but should be considered within 24hours following an incident in which the source is suspected to be HIV positive

### **Post exposure Management**

#### **Post exposure prophylaxis for Human Immunodeficiency Virus (HIV)**

(WHO: December 2014 supplement to the 2013 consolidated ARV guidelines)

- Assessment for eligibility should be based on the HIV status of the source whenever possible and may include consideration of background prevalence and local epidemiological patterns
- Exposures that may warrant post-exposure prophylaxis include
  - ✓ Parenteral or mucous membrane exposure (splashes to the eye, nose or oral cavity);
  - ✓ The following bodily fluids may pose a risk of HIV infection: blood, blood-stained saliva, breast-milk, genital secretions and cerebrospinal, amniotic, rectal, peritoneal, synovial, pericardial or pleural fluids
- Exposures that do not require post-exposure prophylaxis include:
  - ✓ When the exposed individual is already HIV positive;
  - ✓ When the source is established to be HIV negative; and
  - ✓ Exposure to bodily fluids that does not pose a significant risk; tears, non-blood stained saliva, urine and sweat
- Testing of HCW and source
- Counselling and support: HCW should be counseled regarding risk of HIV acquisition, risks and benefits of HIV post-exposure prophylaxis, side effects of drug
- The employee is advised to report any symptoms such as fever, lymphadenopathy, rash, profound fatigue, or persistent headache that occur within 12 weeks after exposure
- Follow-up testing
  - ✓ HIV testing at baseline and at 6 weeks, 12weeks, and 6months after exposure; alternatively, if the clinician is certain that a fourth-generation combination HIV p24 antigen-HIV antibody test is being utilized, then HIV testing could be performed at baseline, 6 weeks after exposure, and 4 months after exposure
  - ✓ Complete blood counts and renal and hepatic function tests (at baseline and 2 weeks after exposure; further testing may be indicated if abnormalities are detected)

#### **Post-exposure prophylaxis ARV regimens – adults and adolescents**

- Post-exposure prophylaxis should be offered, and initiated as early as possible, to all individuals with exposure that has the potential for HIV transmission, and ideally within 72 hours
- 28-day prescription of recommended age-appropriate ARV drugs

**Recommendations**

- TDP + 3TC (or FTC) is recommended as the preferred backbone regimen for HIV post-exposure prophylaxis for adults and adolescents
- LPV/r or ATV/r is recommended as the preferred third drug for HIV post-exposure prophylaxis for adults and adolescents
- Where available RAL, DRV/r or EFV can be considered as alternative options

**Post exposure prophylaxis for Hepatitis B**

- The exposure evaluation will include review of hepatitis B vaccine status, and serologic testing or prophylaxis as indicated
- If the source is HBsAg positive and the employee is susceptible for Hepatitis B, early prophylaxis with HBV Immunoglobulin (0.06 ml / kg IM) is advised at the earliest (within 72 hours and not more than 7 days post exposure) after evaluating their HBs Antibody titre
- Hepatitis B vaccination is recommended in conjunction with post exposure prophylaxis if not already initiated
- Anti-HBs testing of HCP who received HBIG should be performed after anti-HBs from HBIG is no longer detectable (6month after administration)

**Post-exposure management of HCW after occupational percutaneous and mucosal exposure to blood and body fluids (CDC Guidance for evaluating Health-care Personnel for hepatitis B Virus Protection and for Administering Post-exposure Management. MMWR December 20, 2013 / 62(RR10); 1-19)**

Health-care personnel status	Post exposure testing		Post exposure prophylaxis		Post vaccination serologic testing†
	Source patient (HBsAg)	HCP testing (anti-HBs)	HBIG*	Vaccination	
Documented responder <sup>§</sup> after complete series (≥3 doses)	No action needed				
Documented non-responder <sup>¶</sup> after 6 does	Positive / unknown		HBIG x2 separated by 1 month	-	No
	Negative	<b>No action needed</b>			
Response unknown after 3 doses	Positive/unknown	<10 mIU/mL **	HBIG x 1	Initiate revaccination	Yes
	Negative	<10 mIU/mL			
	Any result	≥10 mIU/mL	<b>No action needed</b>		

Unvaccinated/incomplete 1y vaccinated or vaccine refusers	Positive/unknown	-**	HBIG x 1	Complete vaccination	Yes
	Negative	-	None	Complete vaccination	Yes

**Abbreviations:**

HCP = health-care personnel; HBsAg = hepatitis B surface antigen; anti-HBs = antibody to hepatitis B surface antigen; HBIG = hepatitis B immune globulin

\* - HBIG should be administered intramuscularly as soon as possible after exposure when indicated. The effectiveness of HBIG when administered >7 days after percutaneous, mucosal, or nonintact skin exposures is unknown. HBIG dosage is 0.06 mL/kg

† - Should be performed 1-2 months after the last dose of the HepB Vaccine series (and 4-6 months after administration of HBIG to avoid detection of passively administered anti-HBs) using a quantitative method that allows detection of the protective concentration of anti-HBs ( $\geq 10$  mIU/mL)

§ - A responder is defined as a person with anti-HBs  $\geq 10$  mIU/mL after  $\geq 3$  doses of HepB vaccine

¶ - A nonresponder is defined as a person with anti-HBs  $< 10$  mIU/mL after  $\geq 6$  doses of HepB vaccine

\*\* - HCP who have anti-HBs  $< 10$  mIU/mL, or who are unvaccinated or incompletely vaccinated, and sustain an exposure to a source patient who is HBsAg-positive or has unknown HBsAg status, should undergo baseline testing for HBV infection as soon as possible after exposure, and follow-up testing approximately 6 months later. Initial baseline tests consist of total anti-HBc; testing at approximately 6 months consists of HBsAg and total anti-HBc

**Post exposure prophylaxis for Hepatitis C**

**Counsel**

- Regarding risks and precautions
- Regarding symptoms: anorexia, nausea or vomiting, malaise, abdominal pain, dark urine, jaundice

**Testing**

- For the source, perform testing for anti-HCV
- For the person exposed to an HCV-positive source perform baseline testing, 3, 6months for anti-HCV and ALT activity (if earlier diagnosis of HCV infection is desired, testing for HCV RNA may be performed at 4-6 weeks)