ANZPID GUIDELINES FOR POST-EXPOSURE PROPHYLAXIS (PEP) FOR BLOOD BORNE VIRUSES IN CHILDREN

In all cases, contact Paediatric Infectious Diseases for advice on the need for PEP and to discuss follow-up.

Please affix patient label here

Print form, circle exposure and drug choice and include in medical record.

1. Has there been significant exposure to recommend PEP for HIV?

Risk of HIV transmission = exposure risk x source risk

Exposure		**Source**		
	Source risk ↘	**HIV-infected**	**High risk*** MSM MSM-IVDU HPC	**Low risk*** Heterosexual IVDU Non-HPC
Exposure risk in children ↘	**Transmission risk ↘**	**1**	**1/10**	**1/100**
Receptive intercourse (anal/vaginal)	1/100	1/100	1/1000	1/10,000
Use of shared needle	1/100	1/100	1/1000	1/10,000
Insertive intercourse (anal/vaginal)	1/1000	1/1000	1/10,000	1/100,000
Oral sex - non intact mucosa	1/1000	1/1000	1/10,000	1/100,000
Oral sex - intact mucosa/other mucosal	Very low risk	Very low risk	Very low risk	Very low risk
Community acquired needlestick	Never documented	Very low risk	Very low risk	Very low risk

*If HIV status unknown, assess high risk or low risk; sexual exposure risk is higher in children than adults due to increased risk of mucosal trauma, vaginal wall thinness and cervical ectopy
MSM = men who have sex with men (HIV prevalence in Australia 5-15%)
HPC = source from high prevalence country (sub-Saharan Africa: HIV prevalence in Australia 7%)
IVDU = intravenous drug use (HIV prevalence in Australia 1-17% - MSM-IVDU upper end of range)

PEP is recommended (3 drugs) when:
Risk of transmission **>** 1/10,000
Risk of transmission **=** 1/10,000. **Recommend** discuss with ID and give PEP if uncertain

PEP is not recommended when:
Risk of transmission is **<** 1/10,000

2. Recommended management following exposure to blood borne viruses

a) Investigations (with forensic management as necessary) as per potential exposure:

Test	**Baseline***	**6 wks**	**3 mths**
HIV antibody	√	√	√
Hepatitis B anti-HB surface Ab, anti-HB core Ab, HB surface Ag	√		√
Hepatitis C antibody	√		√
STI investigations (eg urine PCR for chlamydia and gonorrhoea)	√		

b) Consider PEP (next page). *Baseline bloods should *also* be collected from source if known. If source is HIV positive, request HIV viral load and resistance testing.

c) If anti-HBsAb level not protective (< 10 IU/L), administer hepatitis B vaccine 0.5 ml within 7 days (+/- HBV immunoglobulin (<30 kg 100 IU, >30 kg 400 IU) within 72 hours)

d) If male-female sexual exposure consider emergency contraception **within 72 hours**.

3. PEP medications

PEP (antiretroviral medication) should be started as early as possible after exposure, but has been shown to be effective **up to 72 hours** following exposure. Duration of PEP is **28 days**. Seek advice regarding drug interactions if on other medications.

A. Choice of PEP for weight under 35 kg

<3 years
Preferred option: Zidovudine + Lamivudine + Kaletra
≥3 years
Preferred option: Zidovudine + Lamivudine + Raltegravir (if chewable tablets available)
Secondary option: Zidovudine + Lamivudine + Kaletra

B. Doses of drugs for weight under 35kg

Medication	Formulary	Dose
Zidovudine (AZT)	Liquid: 10 mg/ml Capsule: 100 mg or 250 mg	4-<9 kg: 12 mg/kg BD 9-<30 kg: 9 mg/kg BD ≥30 kg: 300 mg BD (max)
Lamivudine (3TC)	Liquid: 10 mg/ml Tablet: 100 mg or 150 mg *For 20-25kg can use 75mg AM 150mg PM if only have 150 mg tablets	4 mg/kg BD 14-<20 kg: 75 mg BD 20-<25 kg: 100 mg BD* ≥25 kg: 150 mg BD (max)
Kaletra® (LPV+RTV) Co-formulated	Liquid: Lopinivir 80 mg/ml + Ritonavir 20 mg/ml ***Dose based on LPV*** Tablet: Paediatric Lopinavir 100 mg + Ritonavir 25 mg ***Note tablet strength***	<15 kg: 12 mg/kg BD 15-40 kg: 10 mg/kg BD ***Using <u>100/25mg</u> tablets*** 15-<25 kg: TWO tablets BD 25-<35 kg: THREE tablets BD ≥35 kg: FOUR tablets BD
Raltegravir (RLT)	**CHEWABLE** tablets: 25 mg or 100 mg ***These tablets are NOT bioequivalent to the 400mg Raltegravir tablet*** Tablet: 400 mg	11-<14 kg: 75 mg BD 14-<20 kg: 100 mg BD 20-<28 kg: 150 mg BD 28-<40 kg: 200 mg BD ≥40 kg: 300 mg BD If >25 kg and can swallow tablets: 400 mg tablet BD

A. Choice of PEP for weight 35 kg or more

Preferred option: Truvada + Raltegravir
Secondary options: 1) Combivir + Raltegravir; 2) Combivir + Kaletra (or local PEP provision)

B. Doses of drugs for weight 35 kg or more

Medication	Formulary	Dose
Truvada® (TDF+FTC) Co-formulated	Tablet: Tenofovir disoproxil fumarate 300 mg + Emtricitabine 200 mg	ONE tab *once daily* ***Not in renal impairment***
Raltegravir (RLT)	Tablet: 400 mg	ONE tab BD
Combivir® (AZT+3TC) or generic equivalent	Tablet: Zidovudine 300 mg + Lamivudine 150 mg	ONE tab BD
Kaletra® (LPV+RTV) Co-formulated	Tablet: Adult Lopinavir 200 mg + Ritonavir 50 mg ***Note tablet strength***	TWO tabs BD

4. How to access medications

Contact local hospital pharmacy including out of hours. We recommend having PEP available in pre-dispensed packs in Emergency drug cupboard for young people ≥35 kg.

5. Organising follow up

Arrange for appropriate follow-up within one week (ID/paediatrician/forensic service).
If risk determined to be low and no PEP given, review can be at 6 weeks if family happy.