RCH Guidelines for Post-Exposure Prophylaxis (PEP) After Non-Occupational Exposure to Blood-Borne Viruses

In all cases where PEP is being considered, please contact ID fellow on call in hours and ID consultant on call out of hours for advice.

1. Has there been significant exposure to recommend PEP?

Risk of HIV transmission = source risk x exposure risk
Overall seroprevalence of HIV in Australia is 0.1%. Most (90%) of people living with HIV know their diagnosis, and the >90% are on treatment with an undetectable viral load.

		Source risk			
		HIV positive		HIV status unknown	
		Viral load detectable or unknown	Viral load not detectable	**High risk** MSM HPC	**Low risk** IVDU Non-HPC
Exposure risk		**Risk HIV+ 1**	**U=U† Very low**	**Risk HIV+ ~1/10**	**Risk HIV+ ~1/100**
Receptive anal intercourse	1/100	1/100	Very low risk	1/1000	1/10,000
Receptive vaginal intercourse - child*	1/100	1/100	Very low risk	1/1000	1/10,000
Use of shared needle	1/100	1/100	Very low risk	1/1000	1/10,000
Receptive vaginal intercourse - older*	1/1000	1/1000	Very low risk	1/10,000	1/100,000
Insertive intercourse (anal or vaginal)	1/1000	1/1000	Very low risk	1/10,000	1/100,000
Oral sex non intact mucosa	1/1000	1/1000	Very low risk	1/10,000	1/100,000
Oral sex intact mucosa/other mucosal	Very low risk	Very low risk	Very low risk	Very low risk	Very low risk
Human bite	Very low risk	Very low risk	Very low risk	Very low risk	Very low risk
Community-acquired needlestick injury	Very low risk	Very low risk	Very low risk	Very low risk	Very low risk

*vaginal intercourse in a pre-pubertal child/young adolescent/first encounter/vaginal trauma - higher risk due to fragility of mucosa, potential trauma; risk considered lower if older adolescent with longer history of sexual activity
†Undetectable=Untransmissible
MSM = men who have sex with men (HIV prevalence 7%, but >80% on treatment and undetectable)
HPC = source from high prevalence country (sub-Saharan Africa 7%, but >80% on treatment and undetectable)
IVDU = intravenous drug user (HIV prevalence 1%, MSM with IVDU 30%)

PEP is recommended (3 drugs) when:
Risk of transmission >1/10,000

PEP is not recommended when:
Risk of transmission is <1/10,000
Risk of transmission =1/10,000. Usually not but discuss case by case
Source is HIV positive with *known* undetectable viral load (†Undetectable=Untransmissible)

2. Recommended testing after exposure to blood-borne viruses

Test	Baseline	6 wks	3 mths
HIV Ab	Store serum	Y**	Y
Hepatitis B*	Surface antibody		sAb, sAg, cAb
Hepatitis C Ab	Store serum		Y
Chlamydia/gonorrhoea†	Urine PCR		Y
Syphilis†	Store serum		Y

Baseline bloods from the **source** if possible. If source is known to be HIV positive, HIV viral load and resistance testing should be requested. **6wk test if high risk.

* Hepatitis B surface antibody at baseline to test if protected; if <10 mIU/mL, Hepatitis B vaccine (+/- HBV immune globulin (<30 kg 100 IU IM, >30 kg 400 IU IM)) should be administered within 14 days. If had a documented level ≥10 mIU/mL) at any time after vaccination then not required.
†Other sexually transmitted infections investigated if sexual assault

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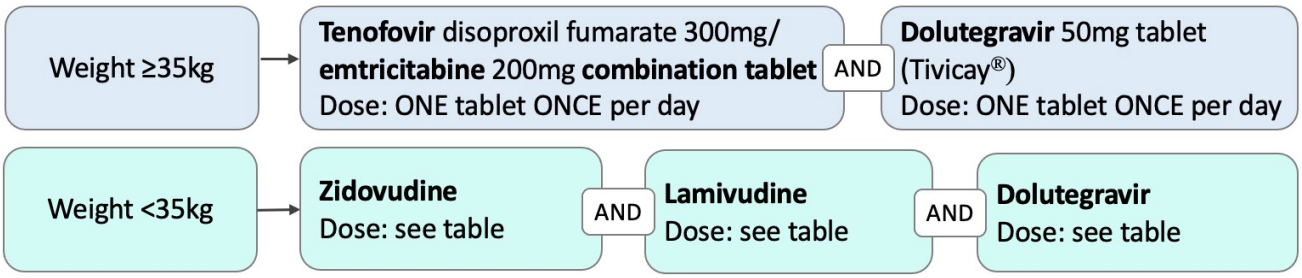
3. PEP medications

PEP should be started as early as possible, preferably within **24 hours** but it is effective **up to 72 hours** following exposure. First prescription for **7 days only**; total duration **28 days**.

PEP medication choice:



PEP medication dose (contact pharmacy if need extended dose/formulation/weight options):

Medication	Formulary	Dose
TABLET formulations (for those who can swallow tablets)		
Tenofovir/ emtricitabine	Tablet co-formulation: Tenofovir disoproxil fumarate 300mg, emtricitabine 200mg	≥35 kg: ONE tablet ONCE per day *(If renal impairment discuss with ID)*
Dolutegravir	Tablet: 50 mg *NOT bioequivalent to dispersible 5mg tablets*	≥20 kg: 50 mg ONCE per day
Zidovudine	Capsule: 100 mg or 250 mg	≥28 kg: 250 mg TWICE per day 22-27 kg: 200 mg TWICE per day 14-21 kg: 100 mg in AM, 200mg in PM
Lamivudine	Tablet: 150 mg	≥25 kg: 300 mg ONCE per day 20-24 kg: 225 mg ONCE per day 14-19 kg: 150 mg ONCE per day
LIQUID or DISPERSIBLE formulations (if tablets can't be swallowed)		
Zidovudine	Liquid: 10 mg/mL	9-30 kg: 9 mg/kg TWICE per day 4-8 kg: 12 mg/kg TWICE per day
Lamivudine	Liquid: 10 mg/mL	≥3 months: 5 mg/kg (max 150 mg) TWICE per day
Dolutegravir dispersible	Dispersible tablets: 5 mg *NOT bioequivalent to dolutegravir 50mg tablets* **Prescriber needs to fill out SAS form** available at https://compliance.health.gov.au/sas/	≥20 kg: 30 mg ONCE per day 14-19 kg 25 mg ONCE per day 10-13 kg 20 mg ONCE per day 6-9 kg 15 mg ONCE per day 3-5 kg 5 mg ONCE per day

4. How do I access medications?

In hours: Contact pharmacy Mon-Fri: 0900-1700, Sat: 0900-1300, Sun: 1000-1200
Out of hours: Child ≥35 kg: Contact the after-hours nurse co-ordinator to obtain medications from the after-hours drug cupboard in Emergency Department
Child <35 kg: Contact the on-call pharmacist via switchboard
Please **write a prescription** for 7 days of medication.

5. How do I organise follow up?

If PEP is given, it will be for the first 7 days only; please arrange for the child to be reviewed within one week in ID Clinic to discuss baseline results and assess tolerability: contact the ID fellow. If risk low and no PEP given, ID review at 3 months.

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