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

		Source risk			
		HIV positive		HIV status unknown	
		Viral load detectable or unknown	Viral load not detectable	**High risk** MSM-IVDU MSM HPC	**Low risk** Hetero-sexual IVDU Non-HPC
Exposure risk		**Risk HIV+ 1**	**U=U†**	**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 child/young adolescent/first time/assault - higher risk due to fragility of mucosa, potential trauma; risk considered lower if older adolescent with longer history of sexual activity
MSM = men who have sex with men (HIV prevalence 5-15%)
HPC = source from high prevalence country (sub-Saharan Africa 7%)
IVDU = intravenous drug user (HIV prevalence 1-17%, higher end of range in MSM)

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

PEP is not recommended when:
Risk of transmission is < 1/10,000
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	Y	Y	Y
Hepatitis B**	Y		
Hepatitis C	Y		Y
STI***	Y		

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

* Hepatitis B surface antibody, core antibody and surface antigen. Hepatitis B vaccine (+/- HBV immune globulin (<30kg 100 IU IM, > 30kg 400 IU IM)) should be administered within 14 days if hepatitis B surface antibody not protective (<10 IU)
** Other sexually transmitted infections investigated if potential exposure (urine PCR for chlamydia and gonorrhoea)

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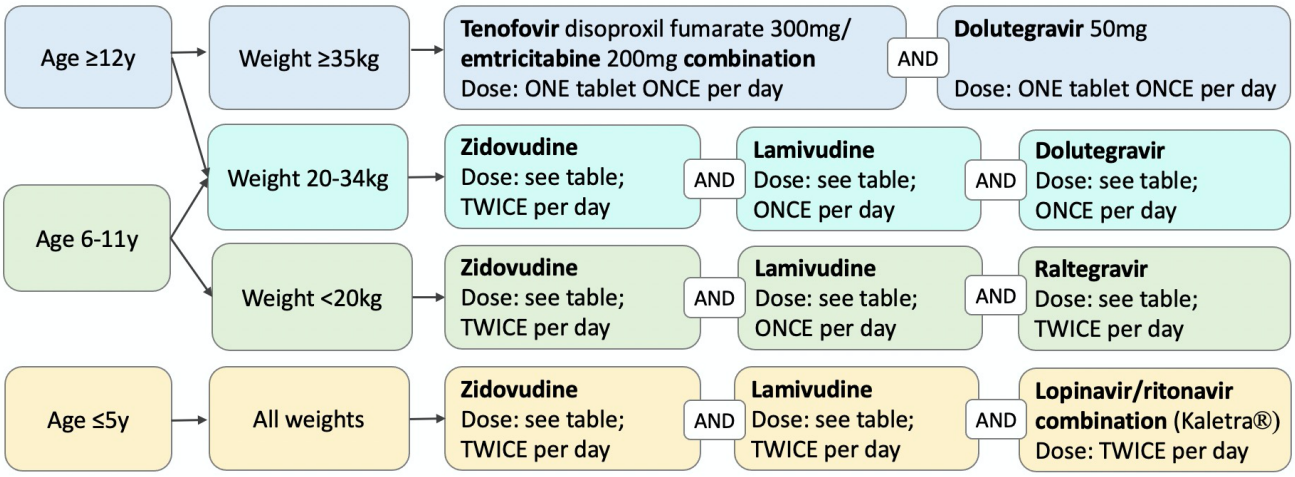
3. PEP medications

PEP should be started as early as possible, preferably within **24 hours** but it is effective **up to 72 hours** following exposure. Duration of PEP is **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	≥20 kg: 50 mg ONCE per day
Zidovudine	Capsule: 100 mg or 250 mg	14-21 kg: 100 mg in am, 200mg in pm 22-27 kg: 200 mg TWICE per day ≥28 kg: 250 mg TWICE per day
Lamivudine	Tablet: 150 mg	14-19 kg: 150 mg ONCE per day 20-24 kg: 225 mg ONCE per day ≥25 kg: 300 mg ONCE per day
Lopinavir/ritonavir (Kaletra®)	Tablet co-formulation: Lopinavir 100 mg, ritonavir 25 mg ***Note paediatric strength***	14-24 kg: TWO tablets TWICE per day ≥25 kg: THREE tablets TWICE per day
Raltegravir	**Chewable** tablet: 25 mg or 100 mg ***NOT bioequivalent*** *to raltegravir 400 mg*	11-13 kg: 75 mg TWICE per day 14-19 kg: 100 mg TWICE per day
LIQUID formulations (if tablets can't be swallowed)		
Zidovudine	Liquid: 10 mg/mL	9-30 kg: 9 mg/kg TWICE per day
Lamivudine	Liquid: 10 mg/mL	5 mg/kg (max 150 mg) TWICE per day
Lopinavir/ritonavir (Kaletra®)	Liquid co-formulation: Lopinavir 80 mg/mL, ritonavir 20 mg/mL	10-13 kg: 2mL TWICE per day 14-19 kg: 2.5mL TWICE per day 20-24 kg: 3mL TWICE 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 >35kg: Contact the after-hours nurse co-ordinator to obtain medications from the after-hours drug cupboard in Emergency
Child <35kg: Contact the on-call pharmacist via switchboard

5. How do I organise follow up?

If PEP given, please arrange for the child to be reviewed within one week in ID Clinic: contact the ID fellow. If risk low and no PEP given, ID review can be at 6 weeks.

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