

Guideline

Paediatric Guideline

Post-Exposure Prophylaxis for HIV

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Applicable to	All Children's Health Queensland staff				
Authorisation	Executive Director Clinical Services (QCH)				

Purpose

This Guideline provides best practice recommendations for the immediate assessment, management and follow-up of children who have been exposed (or suspect they have been exposed) to HIV in non-occupational settings and provides recommendations for initiation of post-exposure prophylaxis (PEP). This Guideline is consistent with the *Australian National Guidelines for post-exposure prophylaxis after non-occupational and occupational exposure to HIV 2nd ed. (2016)*, takes into account available paediatric PEP recommendations and was developed in consultation with experienced Paediatric Infectious Diseases clinicians.

Scope

This Guideline provides information for all Children's Health Queensland employees (permanent, temporary and casual) and all organisations and individuals acting as its agents (including Visiting Medical Officers and other partners, contractors, consultants and volunteers) caring for paediatric patients.

Related documents

Procedures, Guidelines, Protocols

- [CHQ-GDL-65665: Community acquired needle stick injury](#)

Acronyms

HIV	Human immune deficiency virus
IMPS	Infection Management and Prevention Service
IVDU	Intravenous drug user
MSM	Men who have sex with men
PEP	Post exposure prophylaxis
STI	Sexually transmitted diseases
QCH	Queensland Children's Hospital

Guideline

Assessment of the risk of HIV transmission

- All children presenting following a potential risk of HIV exposure should be immediately considered for PEP.
- However, most cases of potential exposure to HIV in children in Australia do not require PEP.
- Seroprevalence of HIV in adults not known to be MSM or IVDU is approximately 0.1%.
- PEP is not routinely recommended for non-occupational exposure when an HIV-positive source has a known undetectable viral load (with source history accurate, good medication compliance, regular follow up and no inter-current STIs).
- If in exceptional cases, HIV PEP is considered appropriate, please contact IMPS service at QCH for confirmation and advice.
- In cases of sexual assault, for guidance re further investigation and intervention, see [Queensland Sexual Assault Guidelines](#).
- In cases of child sexual abuse contact your local Child Protection Specialist or On call Child Protection Consultant at QCH via QCH switchboard (07) 3068 1111.

Risk assessment

- For detailed discussion, risk assessment, clinical and laboratory follow up refer to [Australian National Guidelines for Post-Exposure Prophylaxis after Non-Occupational and Occupational exposure to HIV](#).

Table 1: QCH recommended PEP regimens and dosing for children

PEP should be started as early as possible, preferably within **1 hour** but has been shown to be effective **up to 72 hours** following exposure if required. Duration of PEP is **28 days**.

Weight	Regimens	Formulation	Oral dose	Intake advice
More than or equal to 35kg				
	Preferred	Truvada® Tab: Tenofovir 300 mg / Emtricitabine 200 mg (Do not use in renal impairment) plus Raltegravir Film coated Tab: 400 mg	1 tab once daily 1 tab twice daily	Truvada®: Take with food Raltegravir: With or without food. Take at least 4 hours before or after calcium/ magnesium/ iron/ aluminium/zinc containing supplements/products.
	Alternative	Combivir® Tab: Zidovudine 300 mg / Lamivudine 150 mg Plus Raltegravir Film coated Tab: 400 mg	1 tab twice daily 1 tab twice daily	Raltegravir: With or without food. Take at least 4 hours before or after calcium/ magnesium/ iron/aluminium/zinc containing supplements/ products.

Table 1: QCH recommended PEP regimens and dosing for children (continued)

Weight	Regimens	Formulation	Oral dose	Intake advice
Less than 35kg				
	Preferred for those < 3 years of age (and alternative option for ≥3 years of age unable to swallow/chew tablets)	Zidovudine plus Lamivudine plus Kaletra® (Lopinavir/Ritonavir) (See drug dosing information below)		See below
	Preferred if ≥3 years of age AND Raltegravir chewable tablets are available	Zidovudine plus Lamivudine plus Raltegravir (See drug dosing information below)		See below
Oral drug dosing:	Zidovudine Liquid: 10 mg/mL Capsules: 100 mg or 250 mg	Liquid: 4 to 9 kg: 12 mg/kg twice daily More than 9 to 30 kg: 9 mg/kg twice daily Capsules: 8 to 13 kg: 100mg twice daily 14 to 21 kg: 100mg in the morning and 200mg at night 22 to 28kg: 200mg twice daily 29 to 35kg: 250mg twice daily	Liquid: With or without food. Capsules can be opened and dissolved in water.	
	Lamivudine Liquid: 10 mg/mL Tab: 150mg	Liquid and tablets: More than 3 months and less than 14kg: 5 mg/kg twice daily More than 14kg: 4 mg/kg twice daily (Max 150mg/dose)	Liquid: With or without food. Tablet can be crushed and mixed with small amount of water or food.	
	Kaletra® (Lopinavir/ritonavir) Co-formulated Liquid: Lopinavir 80mg/mL + Ritonavir 20mg/mL Tab: Paediatric Lopinavir 100 mg + Ritonavir 25 mg Note strength of tablet	Weight banded dosing using liquid: 3 to 5.9 kg: 1 mL twice daily, 6 to 9.9 kg: 1.5 mL twice daily, 10 to 13.9 kg: 2 mL twice daily, 14 to 19.9 kg: 2.5 mL twice daily, 20 to 24.9 kg: 3 mL twice daily. Dose based on Lopinavir component Weight banded dosing using 100/25mg tablets: 15 to 25 kg: 2 tab twice daily 25 to 35 kg: 3 tab twice daily More than 35 kg: 4 tab twice daily	Liquid: Take with food Contains 42% alcohol. Tablet: Can be given with or without food	
	Raltegravir 25 mg and 100 mg CHEWABLE tablets *The chewable tablets are NOT bioequivalent to the 400mg Raltegravir tablet. 400 mg tablets	#CHEWABLE tablet: 11 to 14 kg: 75 mg twice daily 14 to 20 kg: 100 mg twice daily 20 to 28 kg: 150 mg twice daily 28 to 40 kg: 200 mg twice daily More than 40kg: 300 mg twice daily If more than 25 kg and can swallow tablets: 400 mg tablet twice daily (do not use 100mg chewable tablets*)	With or without food. Take at least 4 hours before or after calcium/ magnesium/ iron/aluminium/zinc containing supplements/ products #Note: 100mg chewable tablet can be halved for 50mg dosing increments.	

- If Raltegravir used, measure baseline serum creatine kinase and repeat during course of treatment. Repeat also if myalgias or weakness develop along with clinical examination for proximal muscle weakness.
- Tenofovir containing regimens are not preferred in the setting of renal impairment.
- For information on drug interactions with HIV PEP medications:
University of Liverpool HIV drug interaction checker: <http://www.hiv-druginteractions.org/>

How do I access emergency HIV medications at QCH?

- Approval for HIV PEP is required from IMPS. Contact On Call Infection Management Consultant or Fellow via QCH switchboard (07) 3068 1111.
- For supply:
 - Within normal pharmacy hours: call QCH Pharmacy (07) 3068 1914
 - Afterhours: Contact the on-call pharmacist via QCH switchboard (07) 3068 1111
- HIV PEP is available in pre-dispensed 3-day dose packs in afterhours drug cupboards for young people weighing more than 35kg. Access to these medications should be approved by the IMPS Consultant on service and authorised by the pharmacist on duty/ on call pharmacist.

Follow up for children commenced on HIV PEP

If HIV PEP prescribed, arrange for early (generally within 3 to 4 days) review with IMPS. Follow up planning is part of providing HIV PEP and should be discussed when deciding to commence HIV PEP. Local or other appropriate follow up should be organised if follow up at QCH is not practical or appropriate.

If risk determined to be low and no HIV PEP given, review can be with Local Medical Officer or appropriate local service.

Consultation

Key stakeholders who reviewed this version:

- Director, IMPS, Rheumatology and Immunology (CHQ)
- Paediatric Infection Specialist (CHQ)
- Paediatric Infection Specialist (CHQ)
- Pharmacist Advanced - Antimicrobial Stewardship (CHQ)

References and suggested reading

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2. Australian National Council on AIDS, Hepatitis C and Related Diseases May 2000 Information Booklet
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10. CHQ Guideline: [Tetanus Prophylaxis in Wound Management](http://qhps.health.qld.gov.au/childrenshealth/resources/guidelines/gdl-01023.pdf). Available via intranet: <http://qhps.health.qld.gov.au/childrenshealth/resources/guidelines/gdl-01023.pdf>
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Guideline revision and approval history

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1.0 03/04/2017	Infectious Diseases Consultant- Antimicrobial Stewardship (Infection Management and Prevention Service)	Medicines Advisory Committee (CHQ)	Executive Director of Hospital Services
2.0 16/05/2019	Paediatric Infection Specialist (Infection Management and Prevention Service); Pharmacist Advanced-Antimicrobial Stewardship	Medicines Advisory Committee (CHQ)	Executive Director of Clinical Services (QCH)

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Accreditation references	National Safety and Quality Health Service Standards (1-8): Standard 3: Preventing and Controlling Healthcare-Associated Infection Standard 4: Medication Safety