Guideline

Post-Exposure Prophylaxis for HIV

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Author/custodian	Director, Infection Management and Prevention services, Immunology and Rheumatology			**Review date**	30/01/2027
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Applicable to	All Children's Health Queensland (CHQ) Clinical Staff				
Authorisation	Executive Director Clinical Services				

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 3rd ed. (2023),* 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 (CHQ) Clinical 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
- CHQ-PROC-01036 Antimicrobial: Prescribing and Management
- CHQ Antimicrobial restrictions list
- Queensland Health Guideline for the Management of care for people 14 years and over disclosing Sexual Assault (health.qld.gov.au)

- Acute medical care of paediatric patients who have experienced alleged sexual abuse/assault (health.qld.gov.au)
- Post-Exposure Prophylaxis after non-occupational and occupational exposure to HIV (June 2023)

Guideline

Assessment of the risk of HIV transmission

- All children presenting following a potential risk of Human immune deficiency virus (HIV) exposure should be immediately considered for post exposure prophylaxis (PEP).
- **Most cases of potential exposure to HIV in children in Australia do not require PEP**.
- Seroprevalence of HIV in adults not known to be men who have sex with men (MSM) or intravenous drug user IVDU is approximately 0.1%
- PEP is not routinely recommended for non-occupational exposure when an HIV-infected source has a known undetectable viral load (with source history accurate, good medication compliance, regular follow up and no intercurrent 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 guideline: Acute medical care of paediatric patients who have experienced alleged sexual abuse/assault (health.qld.gov.au).
- 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 ASHM Estimated HIV transmission of risk by exposure | PEP Guidelines.

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Table 1: 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**.

Regimens	Formulation	Oral dose	Intake advice
More than or equal > 6 years of age and >25kg , able to swallow tablets whole			
Preferred 3 drug regimen	Biktarvy ® Bictegravir - Emtricitabine - Tenofovir Alafenamide (50mg-200mg-25mg) Tablet	1 tab once daily **Swallow whole**	Take with food Take at least 2 hours before or after calcium/ magnesium/ iron/ aluminium/zinc containing supplements/products
Between 1 month and 6 years of age and < 25kg, >6 years of age and > 25kg and unable to swallow tablets OR > 6 years of age and <25kg			
Preferred 3 drug regimen	Zidovudine **plus** Lamivudine **plus** Raltegravir or Dolutegravir (See drug dosing information 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 (Max 300 mg/dose) **Capsules:** 8 to 13 kg: 100 mg twice daily 14 to 21 kg: 100 mg in the morning and 200 mg at night 22 to 28 kg: 200 mg twice daily 29 to 35 kg: 250 mg twice daily	Liquid: With or without food. Capsules can be opened and dissolved in water.
	Lamivudine Liquid: 10 mg/mL Tab: 150 mg	**Liquid and tablets:** More than 3 months and less than 35 kg: 5 mg/kg twice daily (Max 150 mg/dose)	Liquid: With or without food. Tablet can be crushed and mixed with small amount of water or 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 If more than 25 kg and can swallow tablets whole: 400 mg tablet twice daily (use 400mg film coated 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.**
	Dolutegravir **5 mg dispersible tablets**	**Infants and children > 4 weeks old** **3 to 5 kg: 5 mg once daily** **6 to 9 kg: 15 mg once daily** **10 to 13 kg: 20 mg once daily** **14 to 19 kg: 25 mg once daily** **≥20 kg: 30 mg once daily**	With or without food. Take at least 6 hours before or 2 hours after taking calcium/ magnesium/ iron/aluminium/zinc containing supplements/ products

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- 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 alafenamide containing regimens are preferred in the setting of renal impairment.
- For information on counselling points, monitoring and drug interactions with HIV PEP medications:
  - ASHM Post exposure prophylaxis after non-occupational and occupational exposure to HIV – Medication information and cautions
  - 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 Queensland Children's Hospital (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
- **Full 28 day supply** should be dispensed to all patients at time of first consultation/approval.
- PEP is supplied at Queensland Health Hospital pharmacy as non-PBS and non-chargeable to patients according to the CHQ Pharmaceutical Patient charges, exemptions, and waivers procedure.
- Pharmacist to complete the Queensland Health Non occupational HIV post exposure prophylaxis drug replacement form and send with copy of prescription to BBVCDU@health.qld.gov.au.

Follow up for children commenced on HIV PEP

If HIV PEP prescribed, arrange for early (generally within 14 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 LMO or appropriate local service.

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Abbreviations

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

Consultation

Key stakeholders who reviewed this version:

- Director, IMPS, Rheumatology and Immunology (CHQ)
- Paediatric Infection Specialists (CHQ)
- Pharmacist Advanced - Antimicrobial Stewardship (CHQ)
- Medicines Advisory Committee (CHQ) endorsed 22/12/2023

References and suggested reading

1. Post-Exposure Prophylaxis after Non-Occupational and Occupational exposure to HIV Australian National Guidelines (Third edition) ASHM. https://pep.guidelines.org.au/guidelines/pep-in-specific-populations/children-younger-than-16-years-of-age/
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9. CHQ Guideline: Tetanus Prophylaxis in Wound Management. Available via intranet: http://qheps.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	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
3.0 09/08/2021	Paediatric Infection Specialist (Infection Management and Prevention Service) Pharmacist Advanced- Antimicrobial Stewardship	Service Group Director – IMPS Medical Director – Division of Medicine	Executive Director of Clinical Services
4.0 19/01/2024	Paediatric Infection Specialist (Infection Management and Prevention Service) Pharmacist Advanced- Antimicrobial Stewardship	Medicines Advisory Committee (CHQ)	Executive Director of Clinical Services
5.0 30/01/2024	Infection Specialist	Director, IMPS, Immunology	Executive Director Clinical Services

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Accreditation references	NSQHS Standards (1-8): 3: Preventing and Controlling Healthcare-Associated Infection, 4: Medication Safety ISO 9001:2015 Quality Management Systems: (4-10)

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