



HIV nPEP (Non-Occupational Post- Exposure Prophylaxis)

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What is a Clinical Pathway?

An evidence-based guideline that decreases unnecessary variation and helps promote safe, effective, and consistent patient care.

Objectives of Pathway

- Ensure that all patients who are potentially exposed to HIV receive prompt and appropriate anti-retroviral therapy to decrease their risk of becoming infected with the virus and developing HIV/AIDS
- Ensure that all patients potentially exposed to HIV have the appropriate baseline laboratory testing
- To ensure appropriate follow up and monitoring for patients potentially exposed to HIV

Why is Pathway Necessary?

- Timely and appropriate anti-HIV regimens can decrease the risk of patients acquiring HIV
- Many anti-HIV medications may not be readily available at local pharmacies (especially pediatric dosage forms) – ensuring patients have an adequate supply of medication is crucial
- Ensure that patients have appropriate treatment and necessary work up
- Ensure that patients have appropriate follow up in place
- In 2016, CDC published new guidelines for non-occupational HIV PEP

- In 2016, CDC updated their guidelines for Antiretroviral Post-Exposure Prophylaxis for Non-Occupational HIV exposures ¹
 - Outlines specific parameters for starting HIV PEP
 - Outlines specific baseline laboratory work up
 - Outlines only using a 3-drug regimen when HIV PEP is indicated
- 3 drug regimens are preferred because of:
 - Maximal suppression of viral replication
 - Greater protection against acquiring resistant virus
 - Increased likelihood of successful prophylaxis with resistance mutations
 - More likely to limit emergence of resistance
 - Ensures maximal protection for the population who may have poor follow up

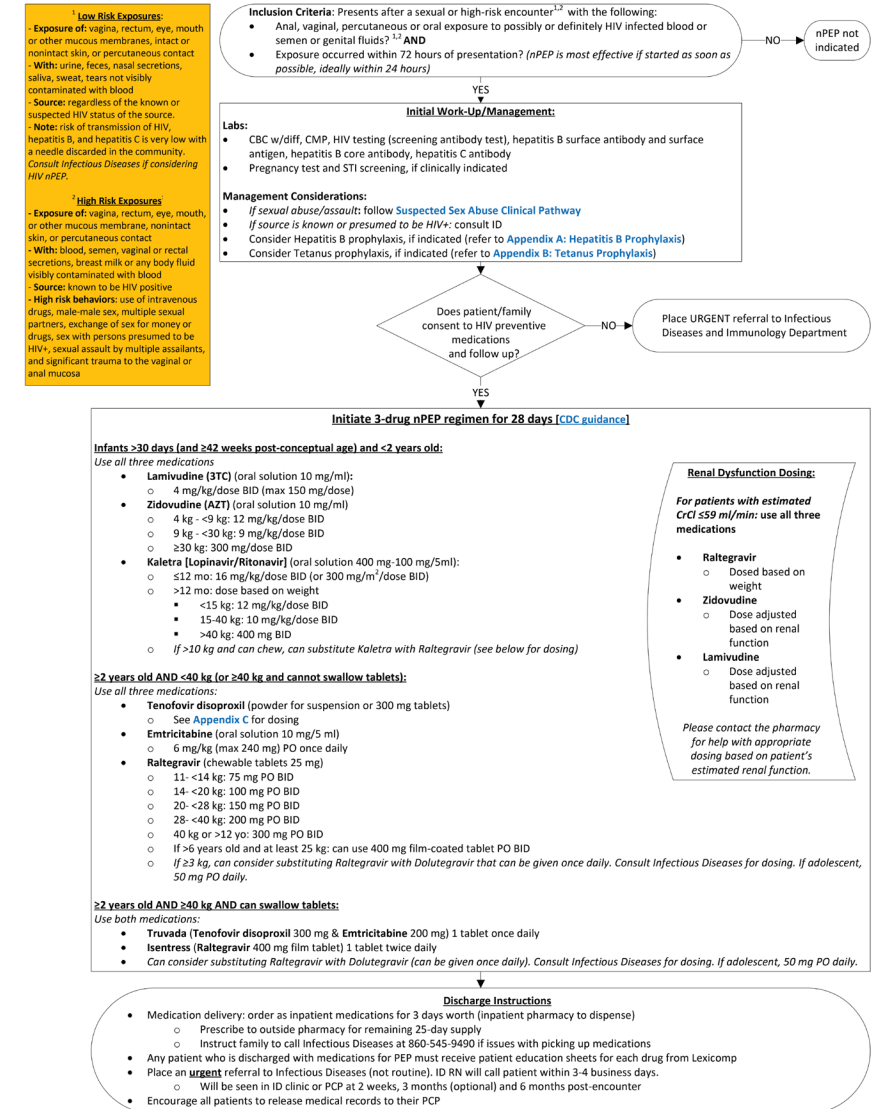
- A key for low risk and high risk exposures for HIV nPEP
- When to consider hepatitis B and tetanus prophylaxis
- Addition of substituting twice daily Raltegravir with once daily Dolutegravir for patients that meet criteria
- Clarification of when to follow up with Infectious Diseases as an outpatient (to optimize medication adherence)

CLINICAL PATHWAY: HIV Non-Occupational Post-Exposure Prophylaxis (nPEP)

THIS PATHWAY
SERVES AS A GUIDE
AND DOES NOT
REPLACE CLINICAL
JUDGMENT.

This is the HIV nPEP Clinical Pathway.

We will be reviewing each component in the following slides.



NEXT PAGE



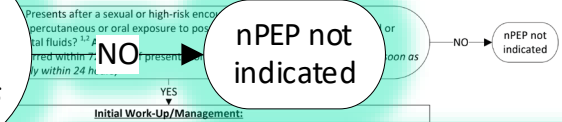
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Inclusion Criteria: Presents after a sexual or high-risk encounter^{1,2} with the following:

- Anal, vaginal, percutaneous or oral exposure to possibly or definitely HIV infected blood or semen or genital fluids?^{1,2} **AND**
- Exposure occurred within 72 hours of presentation? (*nPEP is most effective if started as soon as possible, ideally within 24 hours*)



- This pathway focuses on non-occupational exposures to HIV.
- A key has been added to outline low vs high risk exposures. Consult ID if you are considering HIV nPEP for low risk exposures.
- HIV nPEP is the most effective within 72 hours of the encounter (it is the best if started as soon as possible, ideally within 24 hours).
 - Beyond this period, HIV nPEP is unlikely to prevent HIV transmission.

High Risk Exposures:

- Exposure of: vagina, rectum, eye, mouth, or other mucous membrane, nonintact skin, or percutaneous contact
- With: blood, semen, vaginal or rectal secretions, breast milk or any body fluid visibly contaminated with blood
- Source: known to be HIV positive
- High risk behaviors: use of intravenous drugs, male-male sex, multiple sexual partners, exchange of sex for money or drugs, sex with persons presumed to be HIV+, sexual assault by multiple assailants, and significant trauma to the vaginal or anal mucosa

Management Considerations:

- If sexual abuse/assault: follow
- If source is known or presumed
- Consider Hepatitis B prophylaxis
- Consider Tetanus prophylaxis

Initiate 3-drug nPEP:

Infants >30 days (and >42 weeks post-conceptual age) and <2 years old:

Use all three medications:

- **Lamivudine (3TC)** (oral solution 10 mg/ml):
 - 4 mg/kg/dose BID (max 150 mg/dose)
- **Zidovudine (AZT)** (oral solution 10 mg/ml):
 - 4 kg - <9 kg: 12 mg/kg/dose BID
 - 9 kg - <30 kg: 9 mg/kg/dose BID
 - ≥30 kg: 300 mg/dose BID
- **Kaletra [Lopinavir/Ritonavir]** (oral solution 400 mg/100 mg):
 - ≤12 mo: 16 mg/kg/dose BID (or 300 mg/m²/dose BID)
 - >12 mo: dose based on weight:
 - <15 kg: 12 mg/kg/dose BID
 - 15-40 kg: 10 mg/kg/dose BID
 - >40 kg: 400 mg BID
 - If >10 kg and can chew, can substitute Kaletra

≥2 years old AND <40 kg (or ≥40 kg and cannot swallow tablets):

Use all three medications:

- **Tenofovir disoproxil** (powder for suspension or 300 mg tablet):
 - See Appendix C for dosing
- **Emtricitabine** (oral solution 10 mg/5 ml):
 - 6 mg/kg (max 240 mg) PO once daily
- **Raltegravir** (chewable tablets 25 mg):
 - 11- <14 kg: 75 mg PO BID
 - 14- <20 kg: 100 mg PO BID
 - 20- <28 kg: 150 mg PO BID
 - 28- <40 kg: 200 mg PO BID
 - 40 kg or >12 yo: 300 mg PO BID
 - If >6 years old and at least 25 kg: can use 400 mg PO daily
 - If ≥3 kg, can consider substituting Raltegravir with Dolutegravir 50 mg PO daily

≥2 years old AND ≥40 kg AND can swallow tablets:

Use both medications:

- **Truvada (Tenofovir disoproxil 300 mg & Emtricitabine 200 mg film tablet)** 1 tablet PO daily
- **Isentress (Raltegravir 400 mg film tablet)** 1 tablet PO daily
- Can consider substituting Raltegravir with Dolutegravir 50 mg PO daily

- Medication delivery: order as inpatient medications
 - Prescribe to outside pharmacy for remain
 - Instruct family to call Infectious Diseases
- Any patient who is discharged with medications for HIV
 - Place an urgent referral to Infectious Diseases (not a routine referral)
 - Will be seen in ID clinic or PCP at 2 weeks
- Encourage all patients to release medical records to ID

¹ Low Risk Exposures:

- **Exposure of:** vagina, rectum, eye, mouth or other mucous membranes, intact or nonintact skin, or percutaneous contact
 - **With:** urine, feces, nasal secretions, saliva, sweat, tears not visibly contaminated with blood
 - **Source:** regardless of the known or suspected HIV status of the source.
 - **Note:** risk of transmission of HIV, hepatitis B, and hepatitis C is very low with a needle discarded in the community.
- Consult Infectious Diseases if considering HIV nPEP.

² High Risk Exposures:

- **Exposure of:** vagina, rectum, eye, mouth, or other mucous membrane, nonintact skin, or percutaneous contact
- **With:** blood, semen, vaginal or rectal secretions, breast milk or any body fluid visibly contaminated with blood
- **Source:** known to be HIV positive
- **High risk behaviors:** use of intravenous drugs, male-male sex, multiple sexual partners, exchange of sex for money or drugs, sex with persons presumed to be HIV+, sexual assault by multiple assailants, and significant trauma to the vaginal or anal mucosa

- The initial work up includes baseline laboratory tests.
- If we know there is a sexual assault – remember to consult SCAN team.
- If source is known or presumed to be HIV+: consult ID to help determine optimal regimen which may be different than the pathway outlines.
- Considerations for hepatitis B and tetanus prophylaxis has been added.

Low Risk Exposures:
Exposure of vagina, rectum, eye, mouth or other mucous membranes, intact or nonintact skin, or percutaneous contact with urine, feces, nasal secretions.

Inclusion Criteria: Presents after a sexual or high-risk encounter^{1,2} with the following:
• Anal, vaginal, percutaneous or oral exposure to possibly or definitely HIV infected blood or semen or genital fluids?^{1,2} **AND**
• Exposure occurred within 72 hours of presentation? (nPEP is most effective if started as soon as possible, ideally within 24 hours).

NO → nPEP not indicated

Initial Work-Up/Management:

Labs:

- CBC w/diff, CMP, HIV testing (screening antibody test), hepatitis B surface antibody and surface antigen, hepatitis B core antibody, hepatitis C antibody
- Pregnancy test and STI screening, if clinically indicated

Management Considerations:

- *If sexual abuse/assault:* follow **Suspected Sex Abuse Clinical Pathway**
- *If source is known or presumed to be HIV+:* consult ID
- Consider Hepatitis B prophylaxis, if indicated (refer to **Appendix A: Hepatitis B Prophylaxis**)
- Consider Tetanus prophylaxis, if indicated (refer to **Appendix B: Tetanus Prophylaxis**)

Kaletra [Lopinavir/Ritonavir] (oral solution 400 mg/100 mg/5ml):

- <30 kg: 300 mg/dose BID
- >12 mo: dose based on weight
 - <15 kg: 12 mg/kg/dose BID
 - 15-40 kg: 10 mg/kg/dose BID
 - >40 kg: 400 mg BID
- If >10 kg and can chew, can substitute Kaletra with Raltegravir (see below for dosing)

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 - If >6 years old and at least 25 kg: can use 400 mg film-coated tablet PO BID
 - If ≥3 kg, can consider substituting Raltegravir with Dolutegravir that can be given once daily. Consult Infectious Diseases for dosing. If adolescent, 50 mg PO daily.

≥2 years old AND ≥40 kg AND can swallow tablets:
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Discharge Instructions

- Medication delivery: order as inpatient medications for 3 days worth (inpatient pharmacy to dispense)
 - Prescribe to outside pharmacy for remaining 25-day supply
 - Instruct family to call Infectious Diseases at 860-545-9490 if issues with picking up medications
- Any patient who is discharged with medications for PEP must receive patient education sheets for each drug from Lexicomp
- Place an **urgent** referral to Infectious Diseases (not routine). ID RN will call patient within 3-4 business days.
 - Will be seen in ID clinic or PCP at 2 weeks, 3 months (optional) and 6 months post-encounter
- Encourage all patients to release medical records to their PCP

Raltegravir

- Dosed based on weight

Zidovudine

- Dose adjusted based on renal function

Lamivudine

- Dose adjusted based on renal function

Please contact the pharmacy for help with appropriate dosing based on patient's estimated renal function.

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If the family does not consent to treatment,
place an URGENT referral to ID..

The outpatient ID team will ensure appropriate
education and testing.

Does patient/family
consent to HIV preventive
medications
and follow up?

NO

Place URGENT referral to Infectious
Diseases and Immunology Department

Low Risk Exposures:
- Exposure of: vagina, rectum, eye, mouth
or other mucous membranes, intact or
nonintact skin, or percutaneous contact
- With: urine, feces, feces, nasal secretions,
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- Source: regardless of the known or
suspected status of the source
- Note: risk
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High Risk Exposures
- Exposure of: vagina, rectum, eye, mouth,
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- With: blood, semen, vaginal or rectal
secretions, breast milk or any body fluid
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- Source: known to be HIV positive
- High risk behaviors: use of intravenous
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semen or genital fluids?^{1,2} AND
• Exposure occurred within 72 hours of presentation? (nPEP is most effective if started as soon as possible)

nPEP not
indicated

• If source is known or presumed to be HIV+: consult ID
• Consider Hepatitis B prophylaxis, if indicated (refer to Appendix A: Hepatitis B Prophylaxis)
• Consider Tetanus prophylaxis, if indicated (refer to Appendix B: Tetanus Prophylaxis)

Does patient/family
consent to HIV preventive
medications
and follow up?

Place URGENT referral to Infectious
Diseases and Immunology Department

YES

Initiate 3-drug nPEP regimen for 28 days [CDC guidance]

Infants >30 days (and ≥42 weeks post-conceptual age) and <2 years old:

Use all three medications:

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 - Will be seen in ID clinic or PCP at 2 weeks, 3 months (optional) and 6 months post-encounter
- Encourage all patients to release medical records to their PCP

Renal Dysfunction Dosing:

For patients with estimated
CrCl ≤59 ml/min: use all three
medications

- **Raltegravir**
 - Dosed based on weight
- **Zidovudine**
 - Dose adjusted based on renal function
- **Lamivudine**
 - Dose adjusted based on renal function

Please contact the pharmacy
for help with appropriate
dosing based on patient's
estimated renal function.

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- The CDC guidelines point to a 3 drug regimen for HIV nPEP.
 - A direct link to the CDC guideline has been provided on the pathway.
- The recommended medications are divided out based on age, weight, and ability to swallow tablets. It no longer differentiates between puberty classification.

Low Risk Exposures:
Exposure of vagina, rectum, eye, mouth
or other mucous membranes, intact or

Inclusion Criteria: Presents after a sexual or high-risk encounter^{1,2} with the following:
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NO → nPEP not

Initiate 3-drug nPEP regimen for 28 days [CDC guidance]

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≥2 years old AND ≥40 kg AND can swallow tablets:

Use both medications:

- Truvada (Tenofovir disoproxil 300 mg & Emtricitabine 200 mg)** 1 tablet once daily
- Isentress (Raltegravir 400 mg film tablet)** 1 tablet twice daily
- Can consider substituting Raltegravir with Dolutegravir (can be given once daily). Consult Infectious Diseases for dosing. If adolescent, 50 mg PO daily.

Renal Dysfunction Dosing:

For patients with estimated CrCl ≤59 ml/min: use all three medications

- Raltegravir**
 - Dosed based on weight
- Zidovudine**
 - Dose adjusted based on renal function
- Lamivudine**
 - Dose adjusted based on renal function

Please contact the pharmacy for help with appropriate dosing based on patient's estimated renal function.

• Will be seen in clinic for PCP at 2 weeks, 3 months (optional) and 6 months post-encounter
• Encourage all patients to release medical records to their PCP

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For those <2 years old and >10 kg and can chew: using raltegravir is much more tolerable than Kaletra.

Low Risk Exposures:
Exposure of vagina, rectum, eye, mouth
or other mucous membranes, intact or

Inclusion Criteria: Presents after a sexual or high-risk encounter^{1,2} with the following:
• Anal, vaginal, percutaneous or oral exposure to possibly or definitely HIV infected blood or semen or genital fluids?^{1,2} AND

NO → nPEP not indicated

Initiate 3-drug nPEP regimen for 28 days [CDC guidance]

Infants >30 days (and ≥42 weeks post-conceptual age) and <2 years old:

Use all three medications

- **Lamivudine (3TC)** (oral solution 10 mg/ml):
 - 4 mg/kg/dose BID (max 150 mg/dose)
- **Zidovudine (AZT)** (oral solution 10 mg/ml)
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≥2 years old AND <40 kg (or ≥40 kg and cannot swallow tablets):

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≥2 years old AND ≥40 kg AND can swallow tablets:

Use both medications:

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Renal Dysfunction Dosing:

For patients with estimated CrCl ≤59 ml/min: use all three medications

- **Raltegravir**
 - Dosed based on weight
- **Zidovudine**
 - Dose adjusted based on renal function
- **Lamivudine**
 - Dose adjusted based on renal function

Please contact the pharmacy for help with appropriate dosing based on patient's estimated renal function.

• Encourage all patients to release medical records to their PCP

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Low Risk Exposures:
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nonintact skin, or percutaneous contact

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NO → nPEP not indicated

Initiate 3-drug nPEP regimen for 28 days [CDC guidance]

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Renal Dysfunction Dosing:

For patients with estimated CrCl ≤59 ml/min: use all three medications

- **Raltegravir**
 - Dosed based on weight
- **Zidovudine**
 - Dose adjusted based on renal function
- **Lamivudine**
 - Dose adjusted based on renal function

Please contact the pharmacy for help with appropriate dosing based on patient's estimated renal function.

- For those ≥2 years old and ≥30 kg, twice daily raltegravir can be substituted with Dolutegravir, which is given once daily.
- Dosing will be provided by ID if the patient is not an adolescent.

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If there is renal dysfunction noted ($\text{CrCl} \leq 59 \text{ ml/min}$), the 3 drug regimen is outlined on the pathway.

It is important to contact the pharmacy for help to determine the appropriate dosing as it is based on the individual patient's estimated renal function.

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Inclusion Criteria: Presents after a sexual or high-risk encounter^{1,2} with the following:
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- **Raltegravir** (chewable tablets 25 mg)
 - 11- <14 kg: 75 mg PO BID
 - 14- <20 kg: 100 mg PO BID
 - 20- <28 kg: 150 mg PO BID
 - 28- <40 kg: 200 mg PO BID
 - 40 kg or >12 yo: 300 mg PO BID
 - If >6 years old and at least 25 kg: can use 400 mg film-coated tablet PO BID
 - If ≥3 kg, can consider substituting Raltegravir with Dolutegravir that can be given once daily. Consult Infectious Diseases for dosing. If adolescent, 50 mg PO daily.

≥2 years old AND ≥40 kg AND can swallow tablets:

Use both medications:

- **Truvada (Tenofovir disoproxil 300 mg & Emtricitabine 200 mg)** 1 tablet once daily
- **Isentress (Raltegravir 400 mg film tablet)** 1 tablet twice daily
- Can consider substituting Raltegravir with Dolutegravir (can be given once daily). Consult Infectious Diseases for dosing. If adolescent, 50 mg PO daily.

Renal Dysfunction Dosing:

For patients with estimated $\text{CrCl} \leq 59 \text{ ml/min}$: use all three medications

- **Raltegravir**
 - Dosed based on weight
- **Zidovudine**
 - Dose adjusted based on renal function
- **Lamivudine**
 - Dose adjusted based on renal function

Please contact the pharmacy for help with appropriate dosing based on patient's estimated renal function.

• Will be seen in clinic or PCP at 2 weeks, 3 months (optional) and 6 months post-encounter
• Encourage all patients to release medical records to their PCP

NEXT PAGE



Low Risk Exposures:
Exposure of vagina, rectum, eye, mouth
or other mucous membranes, intact or

Inclusion Criteria: Presents after a sexual or high-risk encounter^{1,2} with the following:
• Anal, vaginal, percutaneous or oral exposure to possibly or definitely HIV infected blood or semen or genital fluids?^{1,2} AND

nPEP is most effective if started as soon as

NO → nPEP not indicated

Discharge Instructions

- Medication delivery: order as inpatient medications for 3 days worth (inpatient pharmacy to dispense)
 - Prescribe to outside pharmacy for remaining 25-day supply
 - Instruct family to call Infectious Diseases at 860-545-9490 if issues with picking up medications
- Any patient who is discharged with medications for PEP must receive patient education sheets for each drug from Lexicomp
- Place an **urgent** referral to Infectious Diseases (not routine). ID RN will call patient within 3-4 business days.
 - Will be seen in ID clinic or PCP at 2 weeks, 3 months (optional) and 6 months post-encounter
- Encourage all patients to release medical records to their PCP

Place URGENT referral to Infectious Diseases and Immunology Department

YES

Initiate 3-drug nPEP regimen for 28 days [CDC guidance]

Infants >30 days (and ≥42 weeks post-conceptual age) and <2 years old:

Use all three medications

- Lamivudine (3TC)** (oral solution 10 mg/ml):
 - 4 mg/kg/dose BID (max 150 mg/dose)
- Zidovudine (AZT)** (oral solution 10 mg/ml):
 - 4 kg - <9 kg: 12 mg/kg/dose BID
 - 9 kg - <30 kg: 9 mg/kg/dose BID
 - ≥30 kg: 300 mg/dose BID

Kaletra [Lopinavir/Ritonavir] (oral solution 400 mg/100 mg/5ml):

- ≤12 mo: 16 mg/kg/dose BID (or 300 mg/m²/dose BID)
- >12 mo: dose based on weight
 - <15 kg: 12 mg/kg/dose BID
 - 15-40 kg: 10 mg/kg/dose BID
 - >40 kg: 400 mg BID
- If >10 kg and can chew, can substitute Kaletra with Raltegravir (see below for dosing)

AND <40 kg (or ≥40 kg and cannot swallow tablets):

Use medications:

Tenofovir disoproxil (powder for suspension or 300 mg tablets)

- See Appendix C for dosing
- Emtricitabine** (oral solution 10 mg/5 ml)
 - 6 mg/kg (max 240 mg) PO once daily
- Raltegravir** (chewable tablets 25 mg)
 - 11- <14 kg: 75 mg PO BID
 - 14- <20 kg: 100 mg PO BID
 - 20- <28 kg: 150 mg PO BID
 - 28- <40 kg: 200 mg PO BID
 - 40 kg or >12 yo: 300 mg PO BID

- If >6 years old and at least 25 kg: can use 400 mg film-coated tablet PO BID
- If ≥3 kg, can consider substituting Raltegravir with Dolutegravir that can be given once daily. Consult Infectious Diseases for dosing. If adolescent, 50 mg PO daily.

AND ≥40 kg AND can swallow tablets:

Use medications:

- Truvada (Tenofovir disoproxil 300 mg & Emtricitabine 200 mg)** 1 tablet once daily
- Isentress (Raltegravir 400 mg film tablet)** 1 tablet twice daily

Can consider substituting Raltegravir with Dolutegravir (can be given once daily). Consult Infectious Diseases for dosing. If adolescent, 50 mg PO daily.

Renal Dysfunction Dosing:

For patients with estimated CrCl ≤59 ml/min: use all three medications

- Raltegravir**
 - Dosed based on weight
- Zidovudine**
 - Dose adjusted based on renal function
- Lamivudine**
 - Dose adjusted based on renal function

Please contact the pharmacy for help with appropriate dosing based on patient's estimated renal function.

Discharge Instructions

Medication delivery: order as inpatient medications for 3 days worth (inpatient pharmacy to dispense)

- Prescribe to outside pharmacy for remaining 25-day supply
- Instruct family to call Infectious Diseases at 860-545-9490 if issues with picking up medications

Any patient who is discharged with medications for PEP must receive patient education sheets for each drug from Lexicomp

Place an **urgent** referral to Infectious Diseases (not routine). ID RN will call patient within 3-4 business days.

- Will be seen in ID clinic or PCP at 2 weeks, 3 months (optional) and 6 months post-encounter

Encourage all patients to release medical records to their PCP

NEXT PAGE



- It is often difficult to find an appropriate supply for HIV nPEP medications at outside pharmacies.
 - Our inpatient pharmacy will give 3 days worth of medication to the patient, with the remaining 25 day supply being sent to the outside pharmacy (so that they have a few days to fill the medication).
- If there are issues with the outpatient medications, the family should be instructed to contact ID for help.

Discharge Instructions

- Medication delivery: order as inpatient medications for 3 days worth (inpatient pharmacy to dispense)
 - Prescribe to outside pharmacy for remaining 25-day supply
 - Instruct family to call Infectious Diseases at 860-545-9490 if issues with picking up medications
- Any patient who is discharged with medications for PEP must receive patient education sheets for each drug from Lexicomp
- Place an **urgent** referral to Infectious Diseases (not routine). ID RN will call patient within 3-4 business days.
 - Will be seen in ID clinic or PCP at 2 weeks, 3 months (optional) and 6 months post-encounter
- Encourage all patients to release medical records to their PCP

NO → nPEP not indicated

partners, exchange of sex for money or drugs, sex with persons presumed to be

consent to HIV preventive medications
follow up?

NO → Place URGENT referral to Infectious Diseases and Immunology Department

[CDC guidance]

Renal Dysfunction Dosing:

For patients with estimated CrCl ≤59 ml/min: use all three medications

- Raltegravir**
 - Dosed based on weight
- Zidovudine**
 - Dose adjusted based on renal function
- Lamivudine**
 - Dose adjusted based on renal function

Please contact the pharmacy for help with appropriate dosing based on patient's estimated renal function.

once daily. Consult Infectious Diseases for dosing. If adolescent,

Consult Infectious Diseases for dosing. If adolescent, 50 mg PO daily.

pharmacy to dispense)

picking up medications
sheets for each drug from Lexicomp
in 3-4 business days.
post-encounter

- ID follow up MUST be arranged prior to discharge. This is imperative – patients who start on HIV nPEP often get lost to follow up.
- Place an URGENT referral to ID in Epic. This will put them on top of ID's patient queue and allow our staff to arrange follow up appropriately. ID will coordinate care with their PCP and SCAN as appropriate.
 - ID will follow up with a phone call in 3-4 business days, and have close follow up in person to ensure medication adherence and allow for repeat testing.
- It is helpful if the ED can encourage all patients to release medical records to their PCP in case the patient is lost to follow up here.

Appendix A outlines recommendations for hepatitis B prophylaxis.

CLINICAL PATHWAY: HIV Non-Occupational Post-Exposure Prophylaxis (nPEP) Appendix A: Hepatitis B Prophylaxis

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Guidelines for Postexposure Prophylaxis^a of People with Nonoccupational Exposures^b to Blood or Body Fluids That Contain Blood, by Exposure Type and Vaccination Status

EXPOSURE	TREATMENT	
	Unvaccinated Person ^c	Previously Vaccinated Person ^d
HBsAg-positive source		
Household member	Consider testing if significant exposure; if negative, administer hepatitis B vaccine series	Ensure completion of vaccine series
Percutaneous (e.g., bite or needlestick) or mucosal exposure to HBsAg-positive blood or body fluids	Administer hepatitis B vaccine series and hepatitis B immune globulin (HBIG)	Administer hepatitis B vaccine booster dose
Sexual or needle-sharing contact of an HBsAg-positive person	Administer hepatitis B vaccine series and HBIG	Administer hepatitis B vaccine booster dose
Person who has been sexually assaulted or abused by a perpetrator who is HBsAg positive	Administer hepatitis B vaccine series and HBIG	Administer hepatitis B vaccine booster dose
Source with unknown HBsAg status		
Person who has been sexually assaulted or abused by a perpetrator with unknown HBsAg status	Administer hepatitis B vaccine series	No treatment
Percutaneous (e.g., bite or needlestick) or mucosal exposure to potentially infectious blood or body fluids from a source with unknown HBsAg status	Administer hepatitis B vaccine series	No treatment
Sexual or needle-sharing contact of person with unknown HBsAg status	Administer hepatitis B vaccine series	No treatment

HBsAg indicates hepatitis B surface antigen

^aWhen indicated, immunoprophylaxis should be initiated as soon as possible, preferably within 24 hours. Studies are limited on the maximum interval after exposure during which postexposure prophylaxis is effective, but the interval is unlikely to exceed 7 days for percutaneous exposures or 14 days for sexual exposures. The hepatitis B vaccine series should be completed.

^bThese guidelines apply to nonoccupational exposures.

^cA person who is in the process of being vaccinated but who has not completed the vaccine series should complete the series and receive treatment as indicated.

^dA person who has written documentation of a complete hepatitis B vaccine series and who did not receive postvaccination testing.

Reference: Adapted from: Schillie S, Vellozzi C, Reingold A, et al. Prevention of hepatitis B virus infection in the United States: recommendations of the Advisory Committee on Immunization Practices. *MMWR Recomm Rep*. 2018;67(1): 1-31.

CONTACTS: GRACE HONG, APRN | HASSAN EL CHEBIB, MD

LAST UPDATED: 06.13.25

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CLINICAL PATHWAY: HIV Non-Occupational Post-Exposure Prophylaxis (nPEP)

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CLINICAL PATHWAY: HIV Non-Occupational Post-Exposure Prophylaxis (nPEP) Appendix B: Tetanus Prophylaxis

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of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN®



From: Tetanus (Lockjaw)

Red Book: 2024–2027 Report of the Committee on Infectious Diseases, 2024



Figure Legend:

¹A primary series consists of a minimum of 3 doses of tetanus- and diphtheria-containing vaccine (DTaP/DTaP/DTaP/DTaP).

²Age-appropriate vaccine (DTaP) for infants and children 6 weeks up to 7 years of age.

³Tetanus-diphtheria (Td) boost for persons 7 through 9 years of age and 65 years of age and older.

⁴Tdap for persons 11 through 64 years of age if using Adacel[®] or 10 years of age and older if using Boostrix[®], unless the person has received a prior dose of Tdap.⁵

⁵No vaccine or TIG is recommended for infants younger than 6 weeks of age with clean, minor wounds. (And no vaccine is licensed for infants younger than 6 weeks of age.)

⁶Tdap is preferred for persons 11 through 64 years of age if using Adacel[®] or 10 years of age and older if using Boostrix[®]. Td is preferred to tetanus toxoid (TT) for persons 7 through 9 years, 65 years and older, or who have received a Tdap previously. If TT is administered, and adjuvanted TT product is preferred to fluid TT. (All DTaP/DTaP/DTaP/DTaP products contain adjuvanted tetanus toxoid.)

⁷Give TIG 250 U/4M for all ages. It can and should be given simultaneously with the tetanus-containing vaccine.

⁸For infants younger than 6 weeks of age, TIG (without vaccine) is recommended for "dirty" wounds (wounds other than clean, minor).

⁹Persons who are HIV positive should receive TIG regardless of tetanus immunization history.

¹⁰Brand names are used for the purpose of clarifying product characteristics and are not an endorsement of either product.

¹¹Tdap vaccines Boostrix (GSK) is licensed for persons 10 years of age and older.

¹²Adacel (sanofi) is licensed for persons 11 through 64 years of age.

Courtesy of the Minnesota Department of Health (www.health.state.mn.us/diseases/tetanus/hcp/tetwngtr.html), with modifications.

Date of Download: 12/30/2024

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Appendix B outlines tetanus prophylaxis recommendations (adapted from the AAP Red Book).

NT referral to Infectious
d Immunology Department

Dysfunction Dosing:

nts with estimated
ml/min: use all three
ions

tegravir

Dosed based on

weight

ovudine

Dose adjusted

based on renal

function

mludine

Dose adjusted

based on renal

function

contact the pharmacy

up with appropriate

g based on patient's

ated renal function.

rases for dosing. If adolescent,

If adolescent, 50 mg PO daily.

CONTACTS: GRACE HONG, APRN | HASSAN EL CHEBIB, MD

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Appendix C outlines the dosing for Tenofovir disoproxil based on weight and formulation.

CLINICAL PATHWAY:
HIV Non-Occupational Post-Exposure Prophylaxis (nPEP)
Appendix C: Tenofovir Disoproxil Fumarate Dosing

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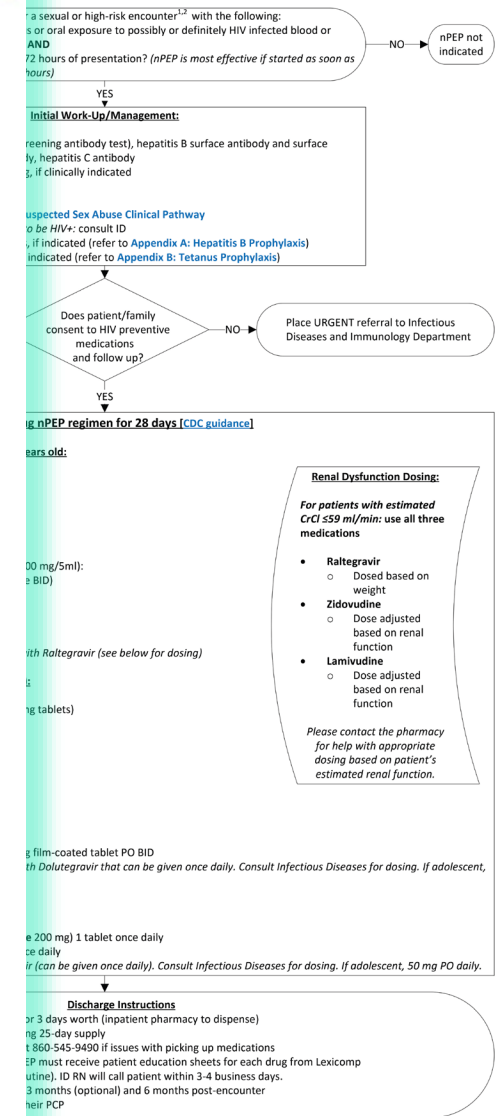
Daily Dose of Tenofovir Disoproxil Fumarate Powder		
Patient Weight	Dose (mg) of Tenofovir Disoproxil Fumarate Once Daily	Scoops of Powder (One Level Scoop = 40 mg Tenofovir Disoproxil Fumarate)
10 to <12 kg	80 mg once daily	2 scoops
12 to <14 kg	100 mg once daily	2.5 scoops
14 to <17 kg	120 mg once daily	3 scoops
17 to <19 kg	140 mg once daily	3.5 scoops
19 to <22 kg	160 mg once daily	4 scoops
22 to <24 kg	180 mg once daily	4.5 scoops
24 to <27 kg	200 mg once daily	5 scoops
27 to <29 kg	220 mg once daily	5.5 scoops
29 to <32 kg	240 mg once daily	6 scoops
32 to <34 kg	260 mg once daily	6.5 scoops
34 to <35 kg	280 mg once daily	7 scoops
≥35 kg	300 mg once daily	7.5 scoops

Daily Dose of Tenofovir Disoproxil Fumarate Oral Tablets For children ≥2 years weighing ≥17 kg and adolescents	
Patient Weight	Dose (mg) of Tenofovir Disoproxil Fumarate Once Daily
17 to <22 kg	150 mg once daily
22 to <28 kg	200 mg once daily
28 to <35 kg	250 mg once daily
≥35 kg	300 mg once daily

Obtained from: [Tenofovir Disoproxil Fumarate \(Lexi-Drugs\)](#) - UpToDate® Lexidrug™

Exposure Prophylaxis (nPEP)

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Review of Key Points

- HIV nPEP should be started within 72 hours of high-risk exposure.
 - Ideally, it should be started as soon as possible, within 24 hours.
- Baseline testing should be obtained on all patients.
- A 3-drug regimen is recommended for all patients starting HIV PEP – regardless of risk stratification.
- An URGENT referral to ID outpatient is required for all patients to ensure medication adherence and appropriate testing is done.

- Percentage of patients prescribed the appropriate type medication
- Percentage of patients all PEP patients having obtained baseline HIV, and Hepatitis B and C testing
- Percentage of patients with sexual assault having obtained Syphilis, Chlamydia, Gonorrhea and HcG (if appropriate) testing
- Percentage of patients with Infectious Disease clinic follow up within 2 months of exposure
- Average length of stay in ED (minutes)
- Pathway adherence bundle: percentage of patients with appropriate type of medication and AND obtained baseline HIV, Hepatitis B and C testing

Pathway Contacts



- Hassan El Chebib, MD
 - Connecticut Children's Infectious Disease and Immunology Department
- Grace Hong, APRN
 - Connecticut Children's Infectious Disease and Immunology Department

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Thank You!



About Connecticut Children's Pathways Program

Clinical pathways guide the management of patients to optimize consistent use of evidence-based practice. Clinical pathways have been shown to improve guideline adherence and quality outcomes, while decreasing length of stay and cost. Here at Connecticut Children's, our Clinical Pathways Program aims to deliver evidence-based, high value care to the greatest number of children in a diversity of patient settings. These pathways serve as a guide for providers and do not replace clinical judgment.