Non-Occupational Post-Exposure Prophylaxis (PEP)

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Clinician Consultation Center (CCC)
Warmline, PEPline, PrEPline and Perinatal HIV Hotline

UCSF Dept. of Family and Community Medicine
San Francisco General Hospital

HIV/AIDS Clinician Consultation Center (CCC)

www.nccc.ucsf.edu
serving New York / New Jersey

Warmline (800) 933 – 3413
Mon-Fri 9 am - 8 pm EST
PEPline (888) 448 – 4911
9 am – 2 am (NY: 24/7)
Perinatal HIV Hotline (888) 448 – 8765
24/7
PrEPline (855) 448 – 7737
Mon-Fri 11 am – 6 pm EST (NY 9 am – 8 pm)

UCSF – San Francisco General Hospital
HRSA AIDS ETC Program & Community Based Programs, HIV/AIDS Bureau
& Centers for Disease Control and Prevention (CDC)
• TJ, a 27 y.o. HIV-negative man, has been with an HIV-positive partner for 3 years.
• Partner has undetectable VL on ARVs.
• They use condoms regularly; only two condom failures in past 3 years.
• Partner out of town. TJ went to bar, met someone who stated he is HIV-negative. Had unprotected receptive and insertive intercourse.
• Now, 28 hours after exposure, TJ comes to you in a panic and a cold sweat, telling you how embarrassed and frightened he is.
Do you have anything to offer TJ besides a most unwanted and sorry lecture about condom use and fidelity?

Is it too late to give PEP?

If it is not too late…

… what tests do you have to obtain now?

… what regimen would you recommend?

… what follow-up is necessary?

Efficacy of nPEP

Strong belief that nPEP is effective because of:

Animal studies of PEP for SIV & HIV-2

Mother-to-child transmission (076 and others)

Occupational PEP (case-controlled study)

No studies conclusively prove efficacy of nPEP
Infectious Fluids - HIV

Considered **infectious**
- Blood, tissue
- Semen, vaginal secretions, rectal secretions
- Cerebrospinal, amniotic, pericardial, peritoneal, pleural, synovial fluids; pus

Considered **non-infectious** (unless visibly bloody)
- Urine, feces, nasal secretions, saliva, vomitus, gastric fluid, sputum, tears, sweat

HIV Transmission Risk per 1000 Exposures

**Parenteral**
- Needlestick (occupational) 0.3
- IDU (injection drug use) 0.67

**Sexual**
- Receptive anal 0.5
- Receptive vaginal 0.1
- Insertive anal 0.065
- Insertive vaginal 0.05
- Receptive oral Low
- Insertive oral Low
HIV Transmission Risk per 1000 Exposures

High viral load → marked increase

8- to 12-fold higher probability of transmission when source person is in the acute and early stages of HIV infection (e.g., first 6 months)

Timing of PEP

PEP should be initiated as soon as possible, preferably within hours, rather than days

Ideal 1-2 hours. Excellent: 4 hours

Window of effectiveness:

36 hours?

>72 hours – no evidence of efficacy

<1 week – possibly, if enormous risk

*Do not delay PEP pending test results*

*unless rapid test results available in 1-2 hours*
Deciding whether to recommend PEP

Rapid Tests (a game-changer for occupational PEP)
Consent laws per individual State
Decisions often must be made with incomplete SP information.
Do not delay decision pending SP lab results
DEFAULT: CAN TREAT AND STOP
Can be reassuring, especially for traumatized or otherwise upset persons
Allows time for test results
Allows time for reconsideration
Decision is the patient’s - risks and benefits

Baseline HIV Testing of Source Person

Rapid Tests (a game-changer for occupational PEP)
Consent laws per individual State
Conventional 3rd generation test
4th Generation antigen-antibody test
Baseline HIV Testing of Exposed Person

Rapid Tests

Conventional 3\textsuperscript{rd} generation test

4\textsuperscript{th} Generation antigen-antibody test

If baseline test is negative but there may have been exposure in last 6 wks, consider giving PEP and obtaining HIV RNA assay.

Response to HIV infection
Testing Reminders

Hepatitis B and hepatitis C: The source person (when possible) and the exposed person should be evaluated for HBV and HCV.

STI testing
- Nucleic acid amplification testing (NAAT) to screen for gonorrhea and chlamydia
- Rapid plasma reagin (RPR) for syphilis

STI treat as indicated

Testing & Emergency Contraception

Clinicians should obtain baseline pregnancy testing for exposed women.

Emergency contraception should be discussed and offered to women who have the potential of becoming pregnant as a result of the exposure.
Standard 3-drug PEP Regimen

Recommend 3-drug PEP similar to occ-PEP recs.
Rationale: 3-drug regimens very effective against HIV and regimens generally well tolerated.

2-drug regimens may be used when clinicians or patients are concerned about adherence or toxicity issues.

28-day treatment course
Monitor for toxicities at 2 wks.
 Few toxicities in a 28d treatment course.

Standard 3-drug PEP

Preferred regimen:
Tenofovir + emtricitabine (Truvada) plus
Raltegravir 400mg bid

Excellent tolerability, proven potency in HIV infection, ease of administration.

Screen for renal and hepatic disease
Few drug interactions
Preferred Alternative Regimens

Tenofovir + emtricitabine* (Truvada) plus
ritonavir-boosted darunavir 800qd or atazanavir 300qd or fosamprenavir 1400qd

*Lamivudine may be substituted for emtricitabine.

Follow-up of Exposed Person

Follow-up in 3 days
Counseling and Support
Ensure adherence
Side effects (symptoms)
Counseling to reduce future risks
Consideration of PrEP
Follow-up of Exposed Person

HIV Testing
HIV antibody at 4 wks and 12 wks post-exposure
NYS: Testing at 6 mo. no longer recommended
CDC: 4 mo. if 4th generation; otherwise 6 mos.

Reminder: STI testing and treat as indicated
- Nucleic acid amplification testing (NAAT) to screen for gonorrhea and chlamydia
- Rapid plasma reagin (RPR) for syphilis
**Acute HIV Syndrome: 1-8 weeks**

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Probability</th>
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<tbody>
<tr>
<td>Fever</td>
<td>75 - 96%</td>
</tr>
<tr>
<td>Rash</td>
<td>48 - 70%</td>
</tr>
<tr>
<td>Sore Throat</td>
<td>40 - 70%</td>
</tr>
<tr>
<td>Adenopathy</td>
<td>39 - 74%</td>
</tr>
<tr>
<td>Myalgias</td>
<td>49 - 54%</td>
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<tr>
<td>Headache</td>
<td>45 - 32%</td>
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<tr>
<td>Diarrhea, N-V, malaise, thrush, arthralgias, hepatosplenomegaly, neurological symptoms (meningitis/neuropathy, facial palsy)</td>
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Oral/genital ulcers—specific

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**PEP in Pregnancy**

PEP should be provided for pregnant women exposed to HIV

TRV + RAL is also the preferred PEP regimen for pregnant EP

After completion of the 28-day nPEP regimen, initiation of pre-exposure prophylaxis (PrEP) should be considered
PEP and Lactation

PEP can be provided to breastfeeding women
ARVs are passed into breast milk
Lactating women exposed to HIV taking PEP should be counseled on the risks and benefits of continued breastfeeding
Women who have been exposed to HIV should avoid breastfeeding for 3 months after exposure unless HIV infection is excluded in the SP
After completion of 28-days of nPEP, initiation of pre-exposure prophylaxis (PrEP) should be considered

nPEP costs

Insurance (private and public)
Public hospitals and clinics
Patient assistance programs
Clinicians without access to experienced HIV clinicians can call the New York State Clinician Education Initiative’s CEI Line at 1-866-637-2342 (24 hours/7 days per week) or the national Clinician Consultation Center PEPline at 1-888-448-4911. When using the PEPline, providers from New York State should identify themselves as practicing in the State.