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Pre-Exposure Prophylaxis (PrEP), Non-Occupational Post-Exposure Prophylaxis (nPEP) and Occupational PEP (oPEP)

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This resource summarizes the guidelines for the management of occupational and non-occupational exposures to the human immunodeficiency virus (HIV), hepatitis B (HBV), and hepatitis C (HCV), including recommendations for pre-exposure prophylaxis (PrEP) for the prevention of HIV in men who have sex with men (MSM), injecting drug users (IDUs), and heterosexually active adults at high risk for acquiring HIV. Post-exposure prophylaxis (PEP) is also summarized. This resource is intended to guide initial decisions about PrEP/PEP and should be used in conjunction with other guidance provided in the full reports. View the full reports at websites listed throughout this resource.

Management of Non-Occupational Exposures

- Evaluate Exposure - See inside of card
- Start non-occupational post-exposure prophylaxis (nPEP) when indicated
- Sexual exposure requires evaluation for sexually transmitted infections (STIs)
- For IDUs, assess access to clean needles/syringes
- Women at risk for unintended pregnancy should be offered emergency contraception
- Refer as appropriate to counseling for risk-reduction, mental health, substance abuse, and domestic violence
- Victims of sexual assault should be referred for additional evaluation and counseling
  - See the New York State Department of Health AIDS Institute guidelines for victims of sexual assault at *http://www.hivguidelines.org/clinical-guidelines/post-exposure-prophylaxis/hiv-prophylaxis-for-victims-of-sexual-assault/*
  - National Sexual Assault Online Hotline 1.800.656.HOPE (656.4673)

Management of Occupational Exposures

Requires immediate reporting so exposed person can be evaluated, tested, and provided with appropriate occupational post-exposure prophylaxis (oPEP) if indicated

- **Treatment (tx) of Exposure Site**
  - Wash wounds and skin sites with soap and water
  - Flush mucous membranes with water
  - Use of antiseptics-not contraindicated, but no evidence that it will further reduce risk of transmission. Avoid use of caustic agents (e.g., bleach).
- **Evaluate Exposure - See inside of card**
- **Start oPEP when indicated**

Exposure to other blood-borne pathogens (e.g., hepatitis B and C) should be considered in addition to HIV. See sections on hepatitis B and C provided in this resource. Clients should be counseled to initiate or resume preventive behaviors to prevent additional exposure and to prevent possible secondary transmission while receiving PEP.

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Pre-Exposure Prophylaxis for the Prevention of HIV Infection

Centers for Disease Control and Prevention (CDC) and Department of Health and Human Services. U.S. Public Health Service. Clinical Practice Guideline: Pre-Exposure Prophylaxis for the Prevention of HIV Infection in the United States – 2014. Available at *www.cdc.gov/hiv/pdf/PrEPguidelines2014.pdf*.

CDC and DHHS. U.S. Public Health Service. Clinical Providers' Supplement: Pre-Exposure Prophylaxis for the Prevention of HIV Infection in the United States – 2014. Available at *www.cdc.gov/hiv/pdf/PrEPProviderSupplement2014.pdf*. Both accessed December 8, 2014.

BEFORE INITIATING PrEP

Recommendations for PrEP

- PrEP is recommended for men who have sex with men (MSM), intravenous drug users (IDUs) and heterosexual adults who do not have acute or established HIV infection, but are at high risk for acquiring HIV infection
- Risks and benefits of PrEP for adolescents should be weighed carefully in the context of local laws and regulations as the data on efficacy and safety of PrEP for adolescents are insufficient
- Sexual PrEP Indications (men who have sex with men and/or women, heterosexual men or women, transgender men or women):
  - Adult person
  - Without acute or established HIV infection
  - Any sex in past 6 months
  - Not in a mutually monogamous partnership with a recently tested HIV-negative partner **AND ≥ 1 of the following:**
    - Ongoing sex with HIV-positive partner **or**
    - Any STI diagnosed or reported in past 6 months **or**
    - High number of different sexual partners **or**
    - History of inconsistent or no condom use **or**
    - Commercial sex work

NOTE: Sexual activity in high HIV prevalence areas may increase risk of HIV acquisition (see *http://www.AIDSvu.org* or *http://www.cdc.gov/nchhstp/atlas/*).

- IDUs indications:
  - Risk of sexual acquisition (see above)
  - Sharing of injection or drug preparation equipment in the past 6 months or in a methadone, buprenorphine, or suboxone tx program in the past 6 months
- Tenofovir/emtricitabine (TDF/FTC, Truvada®) is the only agent that is FDA-approved for prevention of HIV via PrEP for all populations at risk listed above. Tenofovir (TDF, Viread®) alone is an alternative option for heterosexual or IDU's but not for MSM, as efficacy has not been studied in the MSM population. See guidelines for more information.

Determine Eligibility

- Negative HIV antibody test immediately (i.e., within one week) before starting PrEP medication. Anonymous tests, patient-self reported test results or oral rapid tests (less sensitive) should not be used to screen for HIV infection when considering PrEP.
- HIV viral load if symptoms of acute HIV infection present or if patient (pt) has had at-risk sexual exposure with an HIV-infected person in the last 30 days and/or ongoing injection drug use. Delay initiating PrEP until pt is confirmed to be HIV-negative.
  - See Figure on Documenting HIV Status in the PrEP Guidelines available at *http://www.cdc.gov/hiv/pdf/PrEPguidelines2014.pdf*
- Assess for pregnancy or breastfeeding and discuss pregnancy plans
- Confirm that pt is at substantial, ongoing, high risk for acquiring HIV infection
- A sexual history is recommended for all pts. If sexual partner(s) are known HIV-positive, assess if they are in care and on antiretroviral (ARV) therapy and assist if needed.
- Perform estimated creatinine clearance (CrCL). Do not initiate if estimated CrCL is < 60 mL/min. If pt has mild renal insufficiency or risk factors for renal dysfunction obtain CrCL, phosphorus, urine glucose and urine protein prior to initiating PrEP. Please visit *www.kidney.org/professionals/kdoqi/gfr_calculator.cfm* for a glomeruar filtration rate calculator to estimate renal function.
- Consider bone mineral density in pts with risk factors for osteoporosis or bone loss or history of pathologic fracture

Other Recommended Actions

- Screen for hepatitis B infection; vaccinate if appropriate, or treat if active infection identified whether or not PrEP prescribed. Because TDF/FTC treats hepatitis B, it is important to recognize if this infection is present as flare of hepatitis B is possible if infection is not recognized and Truvada® is discontinued.
- Screen pt for alcohol and illicit drug use, including the use of injectable drugs as these substances may affect sexual risk behavior. Refer for substance abuse tx if indicated. For IDUs, assess access to clean needles/syringes.
- Sexually transmitted infection (STI) screening including oral or rectal STI testing and tx as appropriate
- Educate all pts on the importance of practicing safer sex consistently, using condoms correctly, and the need for 100% adherence to PrEP medications if prescribed. Educate women on the following:
  - The safety of PrEP medication exposure to infants during pregnancy has not been fully assessed but no harm reported to date
  - PrEP should not be prescribed for breastfeeding women

BEGINNING PrEP MEDICATION REGIMEN

- Pts taking PrEP should be informed of side effects of these medications and possible signs and symptoms requiring urgent medical evaluation
- Provide pt with a medication fact sheet listing dosing instructions and side effects
- Reinforce the fact that PrEP is not always effective in preventing HIV infection particularly if used inconsistently. The consistent use of PrEP together with other prevention methods (consistent condom use, discontinuing drug injection or never sharing injection equipment) confers very high levels of protection.
- Review important prescribing considerations[1]
- Review "Agreement Form for Initiating TRUVADA® for Pre-Exposure Prophylaxis (PrEP) of Sexually Acquired HIV-1 Infection" with your pt[2]
- Prescribe Truvada® (300 mg tenofovir [TDF]/200 mg emtricitabine [FTC]) po once daily and educate pt on proper use of medication[3]
- Prescribe no more than a 90-day supply, and renew only if HIV antibody test or fourth generation antigen/antibody test confirms that pt remains HIV-uninfected
- Assess pregnancy intent and perform pregnancy test. Assure the pt has been informed about the benefits and risk of use should pregnancy occur as well as the need to avoid breastfeeding.
- Consider using TDF/FTC for both tx of active hepatitis B infection and HIV prevention
- Provide risk-reduction (consistent condom use, discontinuing drug injection, never sharing injection equipment) and PrEP medication adherence counseling and condoms
- Make sure pt has a follow up appointment date

1. Gilead Sciences, Inc. TRUVADA® for a Pre-exposure Prophylaxis (PrEP) Indication: Risk Evaluation and Mitigation Strategy (REMS). June, 2014. Available at *www.truvadaprepremss.com*. Accessed: December 8, 2014.
2. Gilead Sciences, Inc. Agreement Form for Initiating TRUVADA® for Pre-exposure Prophylaxis (PrEP) of Sexually Acquired HIV-1 Infection. June, 2014. Available at *www.truvadaprepremss.com/Content/pdf/Agreement_Form.pdf*. Accessed: December 8, 2014.
3. Use of this drug for prevention of parenteral HIV acquisition in those without sexual risk is "off label". *MMWR*. 2013; 62(23);463-465.

NOTE: 100% adherence is essential for PrEP to be effective.
PrEP is not always effective in preventing HIV infection particularly if used inconsistently.

FOLLOW-UP AT LEAST EVERY 90 DAYS WHILE PATIENT TAKING PrEP

- Repeat HIV and pregnancy tests every 3 months
- Document negative (blood or serum) HIV antibody test or fourth generation antigen/antibody test
- Document negative pregnancy test; if pregnant, discuss ongoing PrEP (unknown risks) with pt and prenatal care provider and report exposure to antiretroviral pregnancy registry (*www.apregistry.com*)
- Assess side effects, adherence and HIV acquisition risk behaviors. Consider more frequent follow-up visits if inconsistent adherence is identified
- Provide support for risk-reduction strategies and the consistent and correct use of condoms. Respond to new questions and provide any new information about PrEP use.
- STI symptoms assessment and testing and tx as indicated at each follow-up visit; at 6 month intervals screen for STIs (syphilis, gonorrhea and chlamydia) without regard to symptoms.
- Assess for signs/symptoms of acute HIV infection and if present, discontinue PrEP until testing confirms that pt is HIV-negative.
- Three months after PrEP initiation, and at least every 6 months thereafter, evaluate serum creatinine and estimated creatinine clearance (*www.kidney.org/professionals/kdoqi/gfr_calculator.cfm*). If pt has mild renal insufficiency or risk factors for renal dysfunction obtain CrCL, phosphorus, urine glucose and urine protein prior to initiating PrEP. If CrCL falls to < 60 mL/min while on PrEP, re-assess the risk vs. benefits of PrEP and dose adjust TDF/FTC per package insert if PrEP continued.
- At least every 12 months, evaluate the need to continue PrEP as a component of HIV prevention

ON DISCONTINUING PrEP

- Document reasons for discontinuing PrEP
- Perform blood (or serum) HIV antibody test or fourth generation HIV antigen/antibody test
- If HIV-positive, baseline HIV genotype and linkage to care
- If HIV-negative, assure continued risk-reduction support services as indicated
- If active hepatitis B is diagnosed, assure continued hepatitis B tx
- If pregnant, inform prenatal care provider of TDF/FTC use in early pregnancy

An up-to-date and downloadable PDF file is available online at ***www.FCAETC.org/treatment***. To order additional printed copies, please email ***orders@fcaetc.org***. If you require an alternate format to accommodate a disability, please email ***contact@fcaetc.org*** or call ***866.352.2382***.

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Hepatitis in HIV/AIDS
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Oral Manifestations Associated with HIV/AIDS
Post-Exposure Prophylaxis (PEP) in Pediatrics/Adolescents
Treatment of Sexually Transmitted Diseases (STDs) in HIV-Infected Patients
Treatment of Tuberculosis (TB) in HIV/AIDS

Report Adverse Events and Pregnancy Exposures

- **FDA MedWatch:**
  Report unusual or severe toxicity to antiretrovirals
  www.fda.gov/Safety/MedWatch/HowToReport/default.htm
  800.FDA.1088 (332.1088)
- **Antiretroviral Pregnancy Registry:**
  A voluntary prospective, exposure-registration, observational study designed to collect and evaluate data on the outcomes of pregnancy exposures to antiretroviral products.
  www.apregistry.com
  800.258.4263

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Clinician Consultation Center
Post Exposure Prophylaxis Consultation (PEPline)
888.HIV.4911 (448.4911)

The information contained in this publication is intended for medical professionals, as a quick reference to the national guidelines. This resource does not replace nor represent the comprehensive nature of the published guidelines. Recognizing the rapid changes that occur in this field, clinicians are encouraged to consult with their local experts or research the literature for the most up-to-date information to assist with individual treatment decisions for their patient. If your patient should experience a serious adverse event, please report the event to the FDA (www.fda.gov/Safety/MedWatch/HowToReport/default.htm) to help increase patient safety.

Visit *www.FCAETC.org/treatment* for the most up-to-date version of this resource.

Post-Exposure Prophylaxis (PEP) for Hepatitis B Virus (HBV)

CDC. Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HBV, HCV, and HIV and Recommendations for Postexposure Prophylaxis. *MMWR*, 2001;50(RR-11): 1-53. Available at *www.cdc.gov/mmwr/pdf/rr/rr5011.pdf*.
CDC. CDC Guidance for Evaluating Health-Care Personnel for Hepatitis B Virus Protection and for Administering Postexposure Management. *MMWR*, 2013;62(RR-10); 1-19. Available at *http://www.cdc.gov/Mmwr/preview/mmwrhtml/rr6210a1.htm?s_cid=rr6210a1_w*. Both accessed: December 8, 2014.

Management of Exposures to HBV

- Any blood or body fluid exposure to an unvaccinated person should lead to the initiation of the hepatitis B vaccine series, unless they have not responded after a second complete vaccination series (after two 3-dose series)
  - Recombivax HB® 10 mcg or Engerix-B® 20 mcg IM at 0, 1, and 6 months (Consider 40 mcg dose if exposed person is on dialysis or is immunocompromised)
- When Hepatitis B Immune Globulin (HBIG) is indicated, it should be administered as soon as possible after the exposure (preferably within 24 hours, but is recommended up to 1 week following an occupational exposure)
  - HBIG can be administered simultaneously with the Hepatitis B vaccine, but at a separate site
- Test for Hepatitis B surface antibody (HBsAb) 1-2 months after last dose of vaccine series or booster, adequate HBsAb ≥ 10 mIU/mL (>0.99 index value)
- Exposed persons with HBsAb < 10 mIU/mL, or unvaccinated/incompletely vaccinated, and exposure from a source pt HBsAg (+) or unknown HBsAg status: baseline HBV testing [hepatitis B surface antibody (HBsAb), hepatitis B surface antigen (HBsAg) and hepatitis B core antibody (HBcAb) total] and at 6 months retest with HBsAG and HBcAb total

EXPOSED PERSON'S IMMUNE STATUS	TREATMENT	
	Source HBsAg (+), HBsAg (unknown) or Not Available for Testing	Source HBsAg (-)
Unvaccinated or Incomplete Vaccination	HBIG (0.06 mL/kg IM) x 1 and vaccinate	Vaccinate
Vaccinated-responder (HBsAb ≥ 10 mIU/mL)	No PEP	No PEP
Vaccinated-nonresponder (HBsAb < 10 mIU/mL)	After first vaccination series- HBIG (0.06 mL/kg IM) x 1 and revaccinate[4]	Revaccinate[4]
	After second vaccination series- HBIG (0.06 mL/kg IM) x 2 doses (one at time of exposure and one 1 month after exposure)	No PEP
Vaccination Completed (HBsAb response unknown)	Test exposed person for HBsAb. If HBsAb ≥ 10 mIU/mL, no PEP necessary.	No PEP
	Test exposed person for HBsAb. If HBsAb < 10 mIU/mL, administer HBIG x 1 and revaccinate.[4]	Revaccinate[4]

4. Give vaccine booster dose; check antibody response (HBsAb quantitative) 1-2 months later; give additional 2 doses (for total of 6 doses) if HBsAb remains < 10 mIU/mL and repeat HBsAb 1-2 months later.

Post-Exposure Management for Hepatitis C Virus (HCV)

CDC. Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HBV, HCV, and HIV and Recommendations for Postexposure Prophylaxis. *MMWR*, 2001;50(RR-11), 1-53. Available at *www.cdc.gov/mmwr/pdf/rr/rr5011.pdf*.
CDC. Recommendations for the Identification of Chronic Hepatitis C Virus Infection Among Persons Born During 1945-1965. *MMWR*, 2012;61(4) 1-34. Available at *http://www.cdc.gov/mmwr/pdf/rr/rr6104.pdf*.
CDC. Testing for HCV Infection: An Update of Guidance for Clinicians and Laboratorians. *MMWR*, 2013;62(18), 357-365. Available at *http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6218a5.htm*. All accessed: December 8, 2014.

Management of Exposures to HCV

- Perform hepatitis C virus antibody test (HCV Ab) for the exposure source[5]; if source is an injection drug user or immunocompromised, consider adding HCV viral load testing
- Perform baseline testing for HCV Ab and alanine transaminase (ALT) activity for the exposed person
- Perform follow-up testing for the exposed person: HCV Ab and ALT at 4-6 months **or** HCV viral load at 4-6 weeks for earlier detection
- Confirm HCV Ab results reported positive by testing for HCV viral load

Post-Exposure Management for HCV

- No regimens proven beneficial for PEP
- Early identification of acute HCV and referral to hepatitis C specialist for management if infected

5. CDC. Recommendations for the Identification of Chronic Hepatitis C Virus Infection Among Persons Born During 1945-1965. *MMWR*, 2012;61(4) 1-34. Available at *http://www.cdc.gov/mmwr/pdf/rr/rr6104.pdf*. Accessed: December 8, 2014.

HIV Exposure Management

NOTE: Consider exposure to other blood-borne pathogens (e.g., hepatitis B and C) in addition to HIV. See sections on hepatitis B and C provided in this resource.

- PEP for non-occupational (nPEP) and occupational exposures (oPEP) should start IMMEDIATELY (ideally within 1-2 hours post exposure), and continue for 28 days, or until the source person is determined to be HIV-negative. Plasma HIV RNA testing of the source person is recommended in addition to HIV serologic screening if:
  - the source person's HIV screening result is negative but there has been a risk for HIV exposure in the previous 6 weeks or if the source person's HIV screening result is positive but the confirmatory antibody-differentiation assay is nonreactive or indeterminant
- PEP can be considered after 24-36 hours of the exposure with expert consultation
- Exposed persons should have an HIV antibody test at baseline, 6 weeks, 12 weeks, and 6 months after the exposure. If the 4th generation antigen/antibody test is used, testing can be done at baseline, 6 weeks, and 4 months. This testing should be done regardless of whether the exposed person accepts or declines PEP treatment.
- If nPEP, consider PrEP after completion of the 28-day nPEP regimen for those with repeated high-risk behavior or repeat courses of nPEP
- Risk reduction and primary prevention counseling should be provided whenever someone is assessed for nPEP, regardless of whether PEP is initiated
- The Clinician Consultation Center 888.448.4911 provides timely answers for urgent exposure management and PEP. Call 9 am - 2 am EST, 7 days a week or see the online PEP Quick Guide for urgent PEP decision-making. See *http://nccc.ucsf.edu/clinical-resources/pep-resources/pep-quick-guide/*.
- Callers are encouraged to call the PEPline with any additional or follow-up questions. Emergency calls made between 2 am and 9 am EST and during holiday hours are answered when live service resumes the following morning. See *http://nccc.ucsf.edu/clinician-consultation/post-exposure-prophylaxis-pep/*.

Non-Occupational Post-Exposure Prophylaxis (nPEP) for HIV

New York State Department of Health AIDS Institute. HIV Prophylaxis Following Non-Occupational Exposure. (October 2014).
Available at *http://www.hivguidelines.org/clinical-guidelines/post-exposure-prophylaxis/hiv-prophylaxis-following-non-occupational-exposure/*. Accessed December 8, 2014.

Algorithm for Evaluation and Treatment of Possible Non-Occupational HIV Exposures

Higher Risk Exposures
- Receptive and insertive vaginal or anal intercourse
- Needle sharing
- Injuries (e.g., needlestick with hollow-bore needle, human bites, accidents) with exposure to blood or other potentially infected fluids

from a source known to be HIV-infected or HIV status is unknown

→ ≤ 36 hours post-exposure → nPEP recommended

→ > 36 hours post-exposure → Case-by-case evaluation for nPEP. Consider expert consultation. Clinicians can contact the Clinician Consultation Center at 888.448.4911. Go to *nccc.ucsf.edu/clinician-consultation/post-exposure-prophylaxis-pep/* for more information.

Lower Risk Exposures
- Oral-vaginal contact (receptive and insertive)
- Oral-anal contact (receptive and insertive)
- Receptive penile-oral contact with or without ejaculation
- Insertive penile-oral contact with or without ejaculation

→ Evaluate for factors that increase risk:
- Source person known HIV-infected with high viral load
- Non-intact oral mucosa
- Blood exposure
- Genital ulcer disease or other sexually transmitted infection (STI) present

→ Case-by-case evaluation for nPEP. Consider expert consultation. Clinicians can contact the Clinician Consultation Center at 888.448.4911. Go to *nccc.ucsf.edu/clinician-consultation/post-exposure-prophylaxis-pep/* for more information.

No Risk Exposures
- Kissing (remote risk if blood exchanged due to sores and/or bleeding gums)
- Oral-to-oral contact without mucosal damage
- Human bites without blood
- Exposure to solid-bore needles or sharps (e.g., tattoo needles or diabetic lancets) not in recent contact with blood
- Mutual masturbation without skin breakdown or blood exposure

→ nPEP not recommended

Occupational Post-Exposure Prophylaxis (oPEP) for HIV

The Society for Healthcare Epidemiology of America. Updated US Public Health Service Guidelines for the Management of Occupational Exposures to Human Immunodeficiency Virus and Recommendations for Postexposure Prophylaxis.
Infection Control and Hospital Epidemiology, 2013; 34(9) 875-892. Available at *http://www.jstor.org/stable/10.1086/672271*. Accessed: October 9, 2014.

Exposed persons should have an HIV antibody test at baseline, 6 weeks, 12 weeks, and 6 months after the exposure. If the 4th generation antigen/antibody test is used, testing can be done at baseline, 6 weeks, and 4 months. Obtain complete blood count (CBC), liver function tests (LFTs), and creatinine and estimated glomerular filtration rate (GFR) at baseline before tx with ARV medications. When given oPEP should be given for 28 days, unless the source is confirmed to be HIV-negative. Counseling at time of exposure and followup; advise on use of barrier contraception, avoidance of blood or tissue donations, pregnancy, and if possible breast feeding to prevent secondary transmission, especially during the first 6-12 weeks after exposure.

Step 1: Evaluation of Exposure

Is the source material blood, bloody fluid, other potentially infectious material (OPIM), or an instrument contaminated with one of these substances?
(OPIM = semen, vaginal secretions; cerebrospinal, synovial, pleural, peritoneal, pericardial, and amniotic fluids; or tissue)

- Yes → **What type of exposure has occurred?**
  - Mucous membrane, non-intact skin[6] or percutaneous exposure → oPEP recommended depending on source HIV status
  - Intact skin only[6] → No oPEP needed
- No → No oPEP needed

6. Skin integrity is considered compromised if there is evidence of chapped skin, dermatitis, abrasion, or open wound.

Step 2: Determine the HIV Status of the Source

What is the HIV status of the exposure source?

- HIV-Negative → No oPEP needed
- HIV-Positive → oPEP recommended[7]
- Status Unknown → Determine HIV status of source to guide oPEP but do not delay starting oPEP[8]
- Source Unknown → oPEP generally not warranted[9]

7. If drug resistance is suspected, obtain expert consultation. Initiation of oPEP should not be delayed pending expert consultation, and, because expert consultation alone cannot substitute for face-to-face counseling, resources should be available to provide immediate evaluation and follow-up care for all exposures.
8. Do not delay giving oPEP while awaiting test results. If source is determined to be HIV-negative, oPEP can be discontinued. Assessment of whether a source pt is in the window period between infection and positive HIV antibody, is not necessary unless acute retroviral syndrome is clinically suspected.
9. Consider oPEP where exposure to HIV-infected person likely.

Preferred HIV Post-Exposure Prophylaxis Regimens (All regimens are for 28 days [4 weeks])

See the Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HIV and Recommendations for Postexposure Prophylaxis, (September 2013) at *http://www.jstor.org/stable/10.1086/672271*, the New York State Department of Health AIDS Institute occupational post-exposure prophylaxis guidelines (October 2014) at *http://www.hivguidelines.org/clinical-guidelines/post-exposure-prophylaxis/hiv-prophylaxis-following-occupational-exposure/*, and the New York State Department of Health AIDS Institute. HIV Prophylaxis Following Non-Occupational Exposure (October 2014) at *http://www.hivguidelines.org/clinical-guidelines/post-exposure-prophylaxis/hiv-prophylaxis-following-non-occupational-exposure/*. All accessed October 27, 2014. The clinician is encouraged to consult an expert in PEP management when choosing a regimen for an exposed pregnant women or in cases of exposures to virus known or suspected to be resistant to one or more antiretroviral agents. The Clinician Consultation Center provides timely answers for urgent exposure management and PEP.
Call 888.448.4911 9 am - 2 am EST, 7 days a week or see the online PEP Quick Guide for urgent PEP decision-making. See *http://nccc.ucsf.edu/clinician-consultation/post-exposure-prophylaxis-pep* for additional information.

NOTE: Some pharmacies may not "break" their bottles of ARVs which typically come in a 30-day supply. Consider ordering a complete 30-day supply to assure PEP is started in a timely manner.

PREFERRED oPEP REGIMENS	ALTERNATIVE oPEP REGIMENS
Tenofovir/Emtricitabine 300/200 mg (Truvada®) po once daily **PLUS** [raltegravir (Isentress®) 400 mg po twice daily **OR** dolutegravir (Tivicay®) 50 mg po once daily][10]	For alternative oPEP regimens see New York State Department of Health AIDS Institute occupational post-exposure prophylaxis guidelines (October 2014) at *http://www.hivguidelines.org/clinical-guidelines/post-exposure-prophylaxis/hiv-prophylaxis-following-occupational-exposure/*
PREFERRED nPEP REGIMEN	**ALTERNATIVE nPEP REGIMENS**
Tenofovir/Emtricitabine 300/200 mg (Truvada®) po once daily **PLUS** [raltegravir (Isentress®) 400 mg po twice daily **OR** dolutegravir (Tivicay®) 50 mg po once daily][10]	For alternative nPEP regimens see New York State Department of Health AIDS Institute non-occupational post-exposure prophylaxis guidelines (October 2014) at *http://www.hivguidelines.org/clinical-guidelines/post-exposure-prophylaxis/hiv-prophylaxis-following-non-occupational-exposure/*

10. USPHS Guidelines list only the raltegravir regimen as preferred. See *http://www.jstor.org/stable/10.1086/672271*.

Antiretrovirals Recommended for oPEP and nPEP (Dosage Forms and Important Points)

Refer to Appendix B of the Adult/Adolescent Antiretroviral Guidelines for a complete and updated source for antiretroviral medications to include: dosing, renal or hepatic insufficiency dosage adjustments, side effects, drug interactions, and warnings/condraindications.
Available at *http://aidsinfo.nih.gov/contentfiles/lvguidelines/adultandadolescentgl.pdf*.

DRUG	DOSAGE FORMS	IMPORTANT POINTS
Dolutegravir (DTG, Tivicay®)	50 mg tab	• Take with or without food • Take 2 hrs before or 6 hrs after certain medications (e.g. cation-containing antacids or laxatives, sucralfate, oral iron or calcium supplements, multivitamins with minerals) containing polyvalent cations (e.g. Mg, Al, Fe, Ca). DTG may be taken with calcium or iron supplements if taken together with food. • Adverse Effects: headache and insomnia most common. Hypersensitivity reaction including rash, constitutional symptoms and organ dysfunction (e.g. liver injury) have been reported.
Emtricitabine (FTC, Emtriva®)	200 mg cap, 10 mg/mL oral solution (soln)	• Take with or without food • Abrupt withdrawal can cause chronic active HBV flares • Adverse effects: generally well-tolerated, ↑ pigmentation of palms/soles (> in black and Hispanic pts)
Raltegravir (RAL, Isentress®)	400 mg tab, 25 and 100 mg chewable tabs	• Take with or without food • Evidence suggests polyvalent cations may ↓ RAL levels. Avoid Al or Mg-containing antacids. No separation needed when given with CaCO3 antacids. Consider taking RAL 2 hrs before or 6 hrs after other medications containing polyvalent cations (e.g., Mg, Al, Fe, Ca) pending more data regarding interactions. • Adverse effects: diarrhea, nausea, headache, and pyrexia; ↑ ALT, AST, creatine phosphokinase; myopathy and rhabdomyolysis have been reported, rare severe skin reactions (SJS/TEN) and systemic HSR with rash, and constitutional symptoms +/- hepatitis
Tenofovir (TDF, Viread®)	300, 150, 200, 250 mg tab, 40 mg/1g oral powder	• Take tabs with or without food; take powder with food • Abrupt withdrawal can cause chronic active HBV flares • Do not use for PEP in pts with estimated CrCL < 60 mL/min • Adverse effects: flatulence, headache, renal insufficiency, Fanconi Syndrome (rare), ↓ PO4
Tenofovir/Emtricitabine (TDF/FTC, Truvada®)	Tenofovir 300mg/Emtricitabine 200 mg tab	See individual components