Management of Occupational Exposures to HIV and Recommendations for PEP in Healthcare Settings

Joanne Stekler, MD MPH
Professor of Medicine
University of Washington

Last Updated: November 10, 2025

Disclosures

This talk will include discussion of non-FDA approved strategies for HIV prevention. There are no medications with an FDA-approved indication for use as post-exposure prophylaxis (PEP).

I have no conflicts of interest or relationships to disclose.

MWAETC

Disclaimer

Funding for this presentation was made possible by 5 TR7HA53202-02-00 from the Human Resources and Services Administration HIV/AIDS Bureau. The views expressed do not necessarily reflect the official policies of the Department of Health and Human Services nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government. *Any trade/brand names for products mentioned during this presentation are for training and identification purposes only.*

AETC AIDS Education & Training Center Program Mountain West

CDC Clinical Recommendations

Infection Control & Hospital Epidemiology (2025), **46**, 863–873
doi:10.1017/ice.2025.10254

SHEA

Review

2025 US Public Health Service Guidelines for the Management of Occupational Exposures to Human Immunodeficiency Virus and Recommendations for Post-exposure Prophylaxis in Healthcare Settings

Aaron D. Kofman MD[1], Kimberly A. Struble PharmD[2,*], Walid Heneine PhD[3], Britt Gayle MD[4], Marie A. de Perio MD[5], Devon L. Okasako-Schmucker MPH[1], Christine N. So MPH[1,6], Laura E. Anderson MPH[1,6], Erin C. Stone MPH, MA[1], David K. Henderson MD[7] and David T. Kuhar MD[1]

[1]Division of Healthcare Quality Promotion, National Center for Emerging and Zoonotic Infectious Disease, Centers for Disease Control and Prevention, Atlanta, GA, USA, [2]Division of Antiviral Products, Center for Drug Evaluation and Research, Food and Drug Administration, Silver Spring, MD, USA, [3]Division of HIV Prevention, National Center for HIV, Viral Hepatitis, STD, and TB Prevention, Centers for Disease Control and Prevention, Atlanta, GA, USA, [4]HIV/AIDS Bureau, The Health Resources and Services Administration, Rockville, MD, USA, [5]Office of the Director, National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention, Cincinnati, OH, USA, [6]Chenega Enterprise Systems and Solutions, Chesapeake, VA, USA and [7]Hospital Epidemiology Service Clinical Center, National Institutes of Health, Bethesda, MD, USA

https://www.cambridge.org/core/journals/infection-control-and-hospital-epidemiology/article/2025-us-public-health-service-guidelines-for-the-management-of-occupational-exposures-to-human-immunodeficiency-virus-and-recommendations-for-postexposure-prophylaxis-in-healthcare-settings/

MWAETC

Practice Guideline > Infect Control Hosp Epidemiol. 2013 Sep;34(9):875-92. doi: 10.1086/672271.

Updated US Public Health Service guidelines for the management of occupational exposures to human immunodeficiency virus and recommendations for postexposure prophylaxis

David T Kuhar [1], David K Henderson, Kimberly A Struble, Walid Heneine, Vasavi Thomas, Laura W Cheever, Ahmed Gomaa, Adelisa L Panlilio; US Public Health Service Working Group

U.S. Centers for Disease Control and Prevention
MMWR
Morbidity and Mortality Weekly Report
Recommendations and Reports / Vol. 74 / No. 1
May 8, 2025

Antiretroviral Postexposure Prophylaxis After Sexual, Injection Drug Use, or Other Nonoccupational Exposure to HIV — CDC Recommendations, United States, 2025

MWAETC

What's new in the 2025 guidelines?

- New regimens
- Shortened duration of post-exposure follow-up
- Elimination of routine lab tests for toxicity
- Considerations with source patients with undetectable HIV RNA

MWAETC

Emphasis

1. Primary prevention of exposures.
2. Prompt reporting and initiation of PEP ASAP.
3. Best tolerated PEP regimens with fewest side effects.
4. Attention to drug-drug interactions.
5. Consultation for complex cases.
6. HIV testing of source patients w/o delaying PEP.
7. Counseling and f/u of healthcare personnel (HCP).

MWAETC

What is an at-risk exposure?

- Percutaneous injury (risk 0.23%, 95% CI 0.00%-0.46%) or
  Contact of mucous membranes (0.09%, 95% CI 0.006%-0.5%) or non-intact skin
  (nPEP: case-by-case determination)
  Human bites (nPEP: not routinely recommended)

AND

- Blood, tissue or body fluids that are potentially infectious
  - Blood + visibly bloody body fluids
  - Semen, preseminal fluid, vaginal fluid, rectal fluid, breast milk
  - CSF, synovial, pleural, peritoneal, pericardial, or amniotic fluids
- Not infectious unless visibly bloody
  - Urine, feces, vomitus
  - Nasal secretions, saliva, sputum, sweat and tears

MWAETC

Timing: "Initiation of PEP after exposure is an urgent matter.."

"Initiate PEP as soon as possible, up to 72 hours following the occupational exposure to HIV. When considering initiation of PEP after 72 hours following occupational exposures thought to represent a high risk of transmission, consult a provider with expertise in HIV treatment."

- 2015: Initiating therapy after a longer interval (e.g., 1 week) might still be considered for exposures that represent an extremely high risk for transmission.
- nPEP: Health care professionals should ensure the first dose of nPEP is provided as soon as possible, and ideally within 24 hours, but no later than 72 hours after exposure.

MWAETC

Source patient

- Determine HIV status of source patient whenever possible, but do not delay PEP. POC testing is recommended for speed, and additional testing is only recommended if clinical suspicion of AHI.
- Do not test needles or other sharps for HIV.
  - (nPEP not recommended for discarded needles unless exceptional circumstances)
- Discontinue PEP and f/u testing if source patient is HIV-negative.
- If source patient has drug-resistant HIV
  - Consult a provider with expertise in HIV treatment, but do not delay PEP.
  - Modify PEP regimen if appropriate.

MWAETC

When to consult a provider with expertise in HIV treatment, and use shared decision making about PEP.

- If source patient known to be living with HIV and has undetectable HIV RNA levels.
  - nPEP: "nPEP not routinely recommended."
- If source patient is unknown (e.g. needle in sharps container).
- If HCP is taking PrEP or has received CAB in last 12 months.
  - nPEP: if taking PrEP as recommended, "nPEP not recommended."
- Pregnancy, breastfeeding, moderate/severe renal dysfunction (CrCl <49mL/min), hepatic impairment.
- Intolerance or toxicity with PEP regimen.

MWAETC

What to use (28 days)

- Preferred
  - BIC/FTC/TAF
  - DTG + (TAF or TDF) + (FTC or 3TC)
- Alternative
  - Boosted DRV (w cobi- or RTV) + (TAF or TDF) + (FTC or 3TC)
- Acceptable
  - Raltegravir-based regimen
- Do not use
  - Nevirapine, cabotegravir/rilpivirine

MWAETC

Baseline laboratory testing

- Ag/Ab HIV test (POC or lab)
- HIV NAT if received CAB for PrEP in last 12 months
  - Qualitative NAT preferred due to higher sensitivity at low RNA levels
- Serum creatinine, AST, ALT
- Pregnancy testing, HBV, HCV not listed in this document

MWAETC

Counseling messaging

- Importance of adherence to PEP.
- Precautions to prevent secondary transmission until final testing.
- Side effects and drug-drug interactions.
- Symptoms of acute HIV infection.
- Reassessment at 72 hours.

MWAETC

Follow-up laboratory testing

- 4-6 wks: HIV Ag/Ab + NAT if PEP started >24 hrs or missed any dose.
- 12 wks post exposure (8 weeks post-PEP): HIV Ag/Ab + NAT.
- Repeat creatinine or LFTs only if abnormal baseline or signs/sx or on case-by-case basis depending on comorbidities.
- Symptoms of AHI → lab-based Ag/Ab + NAT.

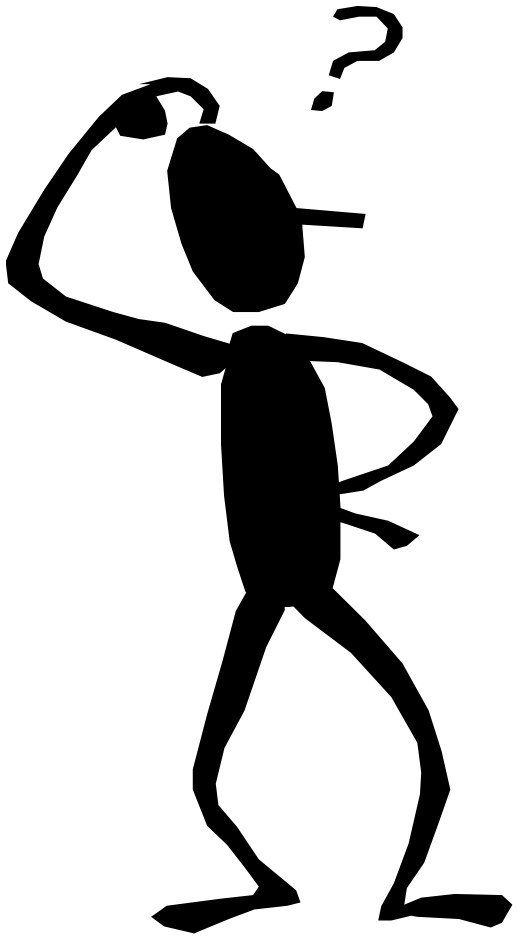
MWAETC

Related guidelines

- CDC Guidance for Evaluating Health-Care Personnel for Hepatitis B Virus Protection and for Administering Postexposure Management https://www.cdc.gov/mmwr/preview/mmwrhtml/rr6210a1.htm
- Testing and Clinical Management of Health Care Personnel Potentially Exposed to Hepatitis C Virus — CDC Guidance, United States, 2020 https://www.cdc.gov/mmwr/volumes/69/rr/rr6906a1.htm
- Recommendations for the Use of Antiretroviral Drugs During Pregnancy and Interventions to Reduce Perinatal HIV Transmission in the United States https://clinicalinfo.hiv.gov/en/guidelines/perinatal/whats-new

MWAETC

Questions?



Acknowledgment

This Mountain West AIDS Education and Training (MWAETC) program is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of award 5 TR7HA53202-02-00 totaling $2,820,772 with 0% financed with non-governmental sources.

AETC AIDS Education & Training Center Program Mountain West