This issue reviews 2 recent guidelines covering HIV prophylaxis for patients who present after an exposure. The first guideline addresses nonoccupational exposures (consensual sexual and needle-sharing activities; needlesticks outside of occupational settings; and trauma, including human bites). The second guideline covers issues specific to survivors of sexual assault. Important recommendations for the emergency clinician include the types of testing to be performed at the initial visit (which differ depending on whether or not the exposure was due to sexual assault), which situations warrant postexposure prophylaxis (PEP), the choice of medication, the length of treatment, and the appropriate follow-up planning.

Practice Guideline Impact

• For high-risk exposures, PEP should be initiated without delaying for test results from the source of the exposure, ideally within 2 hours.

• The preferred initial PEP regimen should be tenofovir combined with emtricitabine and raltegravir for 28 days.

• 3-day follow-up should occur with a healthcare provider familiar with PEP.

• Baseline HIV and sexually transmitted infection (STI) testing should be performed in cases of sexual exposure that are not from assault; however, routine prophylaxis for non-HIV STIs is not indicated.

• Expert advice may be obtained from the National Clinicians’ Consultation Center PEPline at 888-HIV-4911 (888-448-4911).
Introduction To The Guidelines: HIV Postexposure Prophylaxis

This issue of EM Practice Guidelines Update features 2 recently published guidelines on HIV postexposure prophylaxis: PEP after nonoccupational exposure and PEP after sexual assault. There is obvious similarity between these situations, but the recommendations differ enough that they are treated separately. (Note: Although PEP is an acronym for postexposure prophylaxis, it is often used to refer to prophylaxis in the setting of a healthcare exposure such as a needlestick. The term “nPEP,” as used in the first document below, denotes postexposure prophylaxis for exposures outside of healthcare. However, the second guideline (the guidelines for victims of sexual assault), uses the term PEP instead of nPEP.)


These guidelines were published in 2013 by the New York State Department of Health’s AIDS Institute in collaboration with the Johns Hopkins University Division of Infectious Diseases. There are no recent national guidelines on the subject. The United States Centers for Disease Control and Prevention (CDC) guideline on postexposure prophylaxis after nonoccupational exposure has not been updated since 2005, except for the specific scenario of PEP after a bombing or other mass casualty event in 2008. Therefore, only the New York State publications are reviewed in this issue. Although they were produced by a state agency, they are still useful for a broad, United States-based audience, especially in the absence of more recent national guidelines to provide direction for clinicians. They are of particular importance to EDs that do not have internal protocols. A 2008 survey of New York EDs demonstrated a wide variety of nPEP administration and followup, with some not providing medications at all and others providing a prescription and instructions to follow up elsewhere. In the case of consensual sexual exposure, 41% of the EDs would provide care at the discretion of the provider, as there were no protocols in place.

New infections with HIV continue to be a problem in the United States, with an estimated 49,000 individuals diagnosed with HIV each year. Approximately 60% of transmissions are related to male-to-male sexual contact, 27% from heterosexual contact, and 7% from intravenous drug use. The remaining infections are due to blood transfusions, perinatal transmissions, and other exposures. Nonoccupational exposures are more common than occupational exposures in the ED. One study in an urban ED found that 78% of visits for blood or body fluid exposures were nonoccupational. The most common source of exposure for adults was bites (73%) and for children and adolescents it was sexual assault (83%).

The ED is frequently the initial site of care for survivors of sexual assault, accounting for approximately 65,000 to 90,000 ED visits per year. Comprehensive ED care of sexual assault was covered in the August 2011 issue of EM Practice Guidelines Update (“Current Guidelines For Management Of Sexually Transmitted Diseases, Emergency Contraception, And Sexual Assault In The Emergency Department”), but the new New York State guidelines for nPEP offer important updates, notably the preferred prophylactic regimen, the length of post-exposure evaluation and testing, and baseline STI testing. The exact risk of seroconversion from sexual assault is not known; however, in consensual sex, the risk for HIV transmission from vaginal intercourse...
is 0.1% to 0.2%, and for receptive rectal intercourse, 0.5% to 3%.[6] It is thought that the rate of transmission in sexual assault is greater due to increased likelihood of trauma, whether or not it is clinically evident.[7] It is recommended that the first dose of PEP be given to survivors of assault as soon as possible in the ED, up to 72 hours, without delaying for HIV testing of the assailant or survivor.[8]

The ED clinician’s responsibility is to risk stratify the exposure and provide postexposure prophylaxis if it is determined to be a high-risk exposure. High-risk nonoccupational exposures are clearly defined in the recommendations. These guidelines can be useful for emergency clinicians and EDs, especially given the medical complexity and potential liability associated with these cases.

Guest Editor Comment: Demetre Daskalakis, MD, Medical Director For The HIV Ambulatory Care Program At Mount Sinai Hospital, New York, NY

Although the most effective way to prevent community-based HIV transmission is to protect against exposure using condoms or safe needle hygiene, nPEP offers the possibility of preventing HIV transmission after exposure to HIV has already occurred. The recent New York state guidelines are welcome because of the lack of any new federal guidelines on this topic in over 8 years. EDs have varied in how they provide nPEP, when the care should be standardized. These guidelines can help EDs establish their own policies and procedures. Situations that may prompt a request for nPEP include condomless sex, unsafe needle-sharing, or other episodic exposure to blood. It is likely to be most effective when treatment of high-risk exposures is combined with a strong educational component that emphasizes prevention of future exposures. nPEP is a time-sensitive emergency; ideally, nPEP should be started within 2 hours of an exposure. The website www.pepnow.org advocates for PEP and allows patients to find local clinics and EDs offering this emergency service.

The ED, urgent care, and other primary care areas are very frequent sites for a patient’s first contact after a potential exposure to HIV. Often, these patients are underinsured or uninsured and have other social and financial barriers to accessing nPEP. As such, initiation of nPEP in the urgent care environment needs to include a clear plan for referral to outpatient areas of the hospital that can provide:
1. Appropriate testing for HIV and STIs
2. Appropriate baseline testing for drug toxicity monitoring
3. Access to nPEP medications regardless of insurance status
4. Access to risk reduction counseling and services

The goal of the ED interaction should be focused on rapid and safe initiation of nPEP drugs rather than other details that can be handled by the HIV ambulatory areas that are equipped to provide postemergency nPEP care. When indicated, HIV nPEP should be initiated as early as possible. The harms and benefits of continuing nPEP as well as risk reduction counseling should be more fully explored in urgent care clinic follow-up.
The guidelines excerpted in this issue of *EM Practice Guidelines Update* were developed by the New York State Department of Health AIDS Institute. Recommendations are assigned an evidence-based rating and use the rating scheme developed by the United States Department of Health and Human Services. (See Table 1.) Recommendations in these guidelines are based upon scientific evidence and expert opinion.

**Table 1. New York State Department Of Health AIDS Institute Rating Scheme For Recommendations**

<table>
<thead>
<tr>
<th>Strength of Recommendation</th>
<th>Quality of Evidence for Recommendation</th>
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<tr>
<td>A</td>
<td>One or more randomized trials with clinical outcomes and/or validated laboratory endpoints</td>
</tr>
<tr>
<td>B</td>
<td>One or more well-designed nonrandomized trials or observational cohort studies with long-term clinical outcomes</td>
</tr>
<tr>
<td>C</td>
<td>Expert opinion</td>
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Daniel Bell, the first author of this issue, and Sigrid Hahn, Editor-in-Chief, also graded these guidelines using the Appraisal of Guidelines for Research and Evaluation (AGREE) II instrument (available at [http://www.agreetrust.org/](http://www.agreetrust.org/)). This instrument is a checklist that allows users to grade a guideline on 23 items in 6 domains that reflect the degree to which the guideline developers used unbiased, best-practice methodology in developing the guideline and writing the recommendations. The results of the AGREE instrument are presented in Figure 1, with a percentile calculated and assigned for each domain (maximum score of 100%). Because both New York state guidelines were developed using the same methodology, and therefore had the same AGREE II scores, only 1 score is presented. The score for relevance to emergency medicine is not part of the AGREE instrument, but reflects the judgment of the authors and editor of this issue. Overall, this guideline had strong methodology, but was limited by the quality of the evidence on this topic.

**Figure 1. AGREE Criteria Appraisal Of New York State Department Of Health AIDS Institute HIV Prophylaxis Guidelines**

The guidelines excerpted in this issue of *EM Practice Guidelines Update* were developed by the New York State Department of Health AIDS Institute. Recommendations are assigned an evidence-based rating and use the rating scheme developed by the United States Department of Health and Human Services. (See Table 1.) Recommendations in these guidelines are based upon scientific evidence and expert opinion.
The following are excerpts of the New York State Department of Health AIDS Institute Guidelines, HIV Prophylaxis Following Nonoccupational Exposure. Link: http://www.hivguidelines.org/clinical-guidelines/post-exposure-prophylaxis/hiv-prophylaxis-following-non-occupational-exposure/

Initial Assessment For PEP Following Nonoccupational Exposures

- **Patients who present for nPEP should be evaluated as soon as possible in order to initiate therapy, if indicated, within recommended timeframes. Wound and skin exposure sites should be washed with soap and water. Needlestick injuries should not be squeezed.** (AII)
- When an HIV exposure occurs, the events and the subsequent interventions should be clearly documented in order to facilitate determination of the effectiveness of nPEP. (AII)

Evaluation Of The Exposure: Is nPEP Indicated?

- **When deciding whether to recommend the initiation of nPEP, the clinician should assess the patient’s risk of HIV acquisition based on the type of exposure.** (See Table 2.) (AIII)
- Nonoccupational PEP should not be prescribed when there is negligible or low risk of HIV transmission. (See Table 2.) (AII)
- Nonoccupational PEP should not be routinely dismissed solely on the basis of repeated risk behavior or repeat presentation for nPEP. (AII) Persons who present with repeated high-risk behavior or for repeat courses of nPEP should be the focus of intensified education and prevention interventions.
- When bite wounds result in blood exposure, nPEP should be considered for the person(s) who was exposed to blood; this could be the person bitten, the biter, or both. (See Table 2.) (AII) PEP should not be initiated when the integrity of the skin is not disrupted.
- Clinicians should wash bite wounds with soap and water and should not squeeze the wound. (AII)

Editorial Comment on next page >>

<table>
<thead>
<tr>
<th>Table 2. Consideration Of nPEP According To The Type Of Risk Exposure</th>
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<tr>
<td><strong>Types of exposures for which nPEP should be recommended (higher-risk exposures)</strong></td>
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<tr>
<td>- Receptive and insertive vaginal or anal intercourse^a</td>
</tr>
<tr>
<td>- Needle sharing^a</td>
</tr>
<tr>
<td>- Injuries with exposure to blood or other potentially infected fluids from a source known to be HIV-infected or HIV status is unknown (including needlesticks with a hollow-bore needle, human bites, accidents)</td>
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<tr>
<td><strong>Lower-risk exposures that require case-by-case evaluation for nPEP</strong></td>
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<tr>
<td>- Oral-vaginal contact (receptive and insertive)</td>
</tr>
<tr>
<td>- Oral-anal contact (receptive and insertive)</td>
</tr>
<tr>
<td>- Receptive penile-oral contact with or without ejaculation</td>
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<tr>
<td>- Insertive penile-oral contact with or without ejaculation</td>
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<tr>
<td>- Factors that increase risk of lower-risk exposures</td>
</tr>
<tr>
<td>▪ Source person is known to be HIV-infected with high viral load</td>
</tr>
<tr>
<td>▪ An oral mucosa that is not intact (eg, oral lesions, gingivitis, wounds)</td>
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<tr>
<td>▪ Blood exposure; it is important to note that blood exposure can be minimal and therefore not recognized by the exposed person. If the exposed person reports frank blood exposure, PEP would be indicated</td>
</tr>
<tr>
<td>▪ Presence of genital ulcer disease or other STIs</td>
</tr>
<tr>
<td><strong>Types of exposures that do not warrant nPEP (no risk)</strong></td>
</tr>
<tr>
<td>- Kissing^b</td>
</tr>
<tr>
<td>- Oral-to-oral contact without mucosal damage (mouth-to-mouth resuscitation)</td>
</tr>
<tr>
<td>- Human bites not involving blood</td>
</tr>
<tr>
<td>- Exposure to solid-bore needles or sharps not in recent contact with blood^c</td>
</tr>
<tr>
<td>- Mutual masturbation without skin breakdown or blood exposure</td>
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</tbody>
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Notes:
^a With a source known to be HIV-infected or HIV status is unknown.
^b There is no risk associated with close-mouthed kissing. There is a remote risk associated with open-mouthed kissing if there are sores or bleeding gums and blood is exchanged.
^c Examples of solid-bore needles include tattoo needles and lancets used by diabetics to measure blood-sugar levels.

Abbreviations: HIV, human immunodeficiency virus; nPEP, nonoccupational postexposure prophylaxis; STI, sexually transmitted infections.
Evaluation Of The Exposure: Editorial Comment by Daniel Bell, MD and Peter Shearer, MD

The guidelines give clear recommendations for initiation of nPEP in the ED. In a 2005 guideline by the CDC, nPEP was recommended only if the source patient was known HIV positive and the exposure was high risk. In any other scenario (such as if the source patient’s HIV status was unknown), risk stratification was left to the discretion of the treating physician. This updated algorithm is, therefore, welcome. The result is a guideline that likely has increased sensitivity in catching high-risk exposures at the expense of specificity; a trade-off that is considered appropriate given the impact of HIV infection.

Circumstances of the exposure that have epidemiologic significance (such as condom use or a source patient who is HIV positive with a low viral load on AVRT) do not change individual risk stratification in the ED. Correct condom use is known to be decrease transmission risk of HIV; however, during ED postexposure evaluation, the ED physician is not able to judge whether condom slippage, breakage, or leakage occurred. Therefore, condom use is not a reliable criterion to deny HIV nPEP. Similarly, if the source person is HIV positive (though current antiretroviral therapy and low viral loads decreases the risk of transmission), nPEP should still be provided.

HIV Status Of The Source Person

• When assessment of the exposure determines that nPEP is indicated but the source is anonymous, unavailable, or unwilling to undergo HIV testing, nPEP should be initiated and the 28-day course should be completed. (AII)
• If the source of contact is known to be HIV-infected, information about his/her viral load, antiretroviral medication history, and history of antiretroviral drug resistance should be obtained, when possible, to assist in the selection of an nPEP regimen; however, administration of the first dose of nPEP should not be delayed while awaiting this information. (AII)
• When the source person is available and consents to HIV testing, clinicians should obtain the most expeditious HIV test available (ideally with a turnaround time < 1 h), using either a United States Food and Drug Administration (FDA)-approved HIV rapid test or a conventional, laboratory-based screening test, such as an enzyme immunoassay (EIA) or chemiluminescent immunoassay (CIA). (AI) If the test results are not immediately available, the initiation of nPEP should not be delayed pending the test result. If the source person’s HIV screening test result is negative but there may have been exposure to HIV in the previous 6 weeks, a plasma HIV RNA assay should also be obtained. (BIII) In these situations, nPEP should be continued until results of the plasma HIV RNA assay are available: if the result is positive, the 28-day regimen should be completed; if the result is negative, nPEP should be discontinued. (BIII)
• The source person should also be evaluated for hepatitis B and hepatitis C. (AII)

Editorial Comment: Daniel Bell, MD And Peter Shearer, MD

The focus of the emergency clinician should be on whether the exposure of the patient warrants nPEP, and if it does, on urgently providing nPEP. If testing of the source patient is available (such as a rapid HIV test and RNA assay), the treating clinician can administer the first dose of nPEP and then arrange for testing. This process provides prompt antiviral coverage and avoids delays associated with registration of patients and laboratory testing in the ED.
**Baseline Testing For Patients Who Present With Risk Exposures**

- Clinicians should perform baseline HIV testing of the exposed person within 3 days of the exposure. *(AIII)* Exposed persons who decline baseline HIV testing should not receive nPEP. *(AII)*
- nPEP should be started without waiting for the results of the exposed person’s baseline HIV test. *(AII)* If the initial test result is positive, nPEP should be continued until the positive result is repeated with a confirmatory assay. Decisions regarding continuation of antiretroviral therapy should be based on current treatment guidelines.
- For patients who are sexually exposed in nonassault situations, clinicians should perform STI testing at baseline and should treat as indicated. Testing should include the following:
  - Nucleic acid amplification testing (NAAT) to screen for gonorrhea and chlamydia, based on site of exposure *(AIII)*
  - Rapid plasma reagin (RPR) for syphilis *(AIII)*

**Editorial Comment: Daniel Bell, MD And Peter Shearer, MD**

An important distinction between assault and nonassault exposures is that baseline STI testing is recommended for nonassault cases. Testing will not detect STIs transmitted from the exposure; however, preexisting STIs occur in relatively high rates in patients exhibiting high-risk behavior. The visit presents an opportunity to screen and treat these patients. In contrast, baseline STI testing is not recommended for assault cases, as discussed on page 9.

**Timing Of Initiation Of nPEP For All Nonoccupational Exposures**

- When a potential nonoccupational exposure to HIV occurs, every effort should be made to initiate PEP as soon as possible, ideally within 2 hours. *(AII)*
- Decisions regarding initiation of nPEP beyond 36 hours postexposure should be made on a case-by-case basis with the realization of diminished efficacy when timing of initiation is prolonged. *(AIII)*

**Editorial Comment: Daniel Bell, MD And Peter Shearer, MD**

Animal models have demonstrated that postexposure prophylaxis is most effective when taken within 24 to 36 hours of exposure. Prompt initiation of PEP or nPEP is encouraged, and should not be delayed for patient or source HIV testing. PEP and nPEP have diminished efficacy when given after 36 hours; however, there is no absolute elapsed time after which nPEP or PEP should be withheld. There is consideration that perhaps higher-risk exposures should receive PEP or nPEP after 36 hours; however, this decision should be made by the provider with attention to the patient’s preferences. Expert advice may be obtained from the National Clinicians’ Consultation Center PEPline at 888-HIV-4911 (888-448-4911).

**Counseling And Education Before Initiating nPEP**

- The clinician should discuss the following issues with the patient and should document that they were discussed before initiating a regimen *(AIII)*:
  - Potential benefit, unproven efficacy, and potential toxicity of nPEP
  - Duration of nPEP regimen
  - Importance of adherence to the treatment regimen to prevent nPEP failure or the development of drug resistance should infection occur
  - Need to reduce risk and prevent exposure to others
  - Clinical and laboratory monitoring and follow-up schedule
  - Signs and symptoms of acute HIV infection
  - How a full supply of medication will be obtained

**Editorial Comment: Daniel Bell, MD And Peter Shearer, MD**

The proposed benefit of PEP in sexual assault is inferred from retrospective reviews of PEP in occupational exposures. These studies demonstrated an 80% risk reduction with PEP. The benefits of PEP are potential, but unproven, and the patient should weigh this benefit with the risk of medication adverse effects. Furthermore, it is assumed that the efficacy of prophylaxis in increased with regimen adherence, and regular follow-up visits are necessary to assess for adherence and adverse effects.
Recommended nPEP Regimens

- The preferred PEP regimen is tenofovir + emtricitabine plus raltegravir. (AII)
- The preferred alternative PEP regimen is tenofovir + emtricitabine plus ritonavir-boosted darunavir, atazanavir, or fosamprenavir. (AII)

Editorial Comment: Daniel Bell, MD And Peter Shearer, MD
The preferred initial nPEP and PEP regimen is tenofovir 300 mg orally combined with emtricitabine 200 mg orally daily and raltegravir 400 mg orally bid for 28 days. This is the same regimen recommended for healthcare exposure and for sexual assault. The alternative regimen is tenofovir 300 mg orally daily with emtricitabine 200 mg orally daily plus ritonavir 100 mg orally daily plus 1 of the following: darunavir 800 mg orally daily, atazanavir 300 mg orally daily, or fosamprenavir 1400 mg orally daily. Other regimens are available at http://hab.hrsa.gov/deliverhivaidscare/clinicalguide11/cg-302_nonoccupational_pep.html. If the regimens are not available or are unfamiliar to the prescribing provider, expert advice may be obtained from the National Clinicians’ Consultation Center PEPline at 888-HIV-4911 (888-448-4911).

Follow-Up And Monitoring Following Nonoccupational Exposure

- All patients receiving nPEP should be re-evaluated within 3 days of the exposure to further clarify the nature of the exposure, review available source person data, evaluate adherence, and monitor toxicities associated with the nPEP regimen. (AII)

Editorial Comment: Daniel Bell, MD And Peter Shearer, MD
This recommendation stands for patients receiving PEP or nPEP. Close follow-up allows attention to multiple factors, including evaluation of nPEP adherence, monitoring for adverse events of nPEP, results of patient or source testing, evaluation of emotional well-being, and risk reduction counseling, as needed. Providers who do not have access to a clinician experienced in nPEP should use the National Clinicians’ Consultation Center PEPline at 888-HIV-4911 (888-448-4911) for phone consultation.

**Assessment To Determine Whether HIV PEP Is Indicated Following Sexual Assault**

- When deciding whether to recommend the initiation of PEP following sexual assault, the clinician should assess and carefully weigh the following factors: *(AII)*
  - Whether or not a significant exposure has occurred during the assault
  - Knowledge of the HIV status of the alleged assailant
  - Whether the victim is ready and willing to complete the PEP regimen

**Degree Of Risk Based On Type Of Exposure**

- Clinicians should recommend HIV PEP to victims when significant exposure may have occurred, as defined by direct contact of the vagina, penis, anus, or mouth with the semen, vaginal fluids, or blood of the alleged assailant, with or without physical injury, tissue damage, or presence of blood at the site of the assault. *(AII)*
- PEP should also be offered in cases when broken skin or mucous membranes of the victim have been in contact with blood, semen, or vaginal fluids from the alleged assailant. Similarly, PEP should be offered in cases of bites that result in visible blood. *(AII)*

**Editorial Comment: Daniel Bell, MD And Peter Shearer, MD**

The list of high-risk exposures in the case of sexual assault is broader than that of nonassault exposure. This is due to the higher risk of trauma or disruption of mucosa or endothelial barriers in the circumstance of assault. Absence of visible signs of trauma should not delay administration of PEP.8

**Considering The HIV Status Of The Alleged Assailant**

- Unless the identity and HIV status of the alleged assailant has been clearly established to assist with the decision-making, PEP should be promptly initiated and should not be delayed while awaiting test results from the alleged assailant. *(AII)*
- Even when the alleged assailant is known to be HIV-infected, the decision to recommend PEP should be based on the nature of the exposure and the victim’s ability to complete the regimen. *(AIII)*

**Editorial Comment: Daniel Bell, MD And Peter Shearer, MD**

The initial dose of PEP should not be delayed for any testing of the alleged assailant. If the alleged assailant is known to be HIV positive, prophylaxis should initiated based on the type of exposure according to the appropriate guidelines. The initial dose should be given as soon as possible upon arrival to the ED and not be delayed while other injuries are being evaluated or if the wait for a forensic examiner is going to be delayed.

**Management Of Sexually Transmitted Infections Other Than HIV**

- For sexual assault victim, clinicians should offer prophylactic medication to prevent gonococcal and chlamydial infections. Routine baseline testing for STIs is not recommended in cases of sexual assault. *(AII)*

**Editorial Comment: Daniel Bell, MD And Peter Shearer, MD**

Rates of STI transmission are higher following sexual assault,16 therefore routine prophylaxis for gonorrhea, chlamydia, and trichomoniasis is indicated. Providers are encouraged not to test for STI at baseline; rather, to test at follow-up visits. This is because the presence of STIs preceding an assault has been used to bias a jury against a sexual assault survivor in court proceedings.17
Recommended PEP Regimen For Sexual Assault Victims

- PEP should be initiated as soon as possible after exposure, ideally within 2 hours. (AII) Decisions regarding initiation of PEP beyond 36 hours postexposure should be made on a case-by-case basis with the realization that diminished efficacy is a consequence of delay in the timing of initiation. (AIII)
- The recommendation for PEP should be communicated simply and clearly to the patient, considering his/her emotional state and ability to comprehend the nature of antiretroviral treatment. (AIII)
- If a sexual assault victim is too distraught to engage in a discussion about PEP or make a decision about whether to initiate prophylaxis at the initial assessment, the clinician should offer a starter pack of medication and make arrangements for a follow-up appointment within 24 hours to further discuss the indications for PEP. (AIII)
- If a sexual assault victim decides to initiate treatment, a follow-up visit should be scheduled within 24 hours to review the decision, evaluate initial drug tolerability, reinforce the need for adherence to the regimen, and arrange for follow-up care. (AII) In New York State, hospitals providing treatment to victims of sexual assault must provide or arrange for an appointment for medical follow-up related to PEP and other care as appropriate.
- Discussions regarding initiation of PEP should include the following: (AIII)
  - Potential benefit, unproven efficacy, and potential toxicity of PEP
  - Duration of PEP regimen
  - Importance of adherence to the treatment regimen to prevent PEP failure or the development of drug resistance should infection occur
  - Need to reduce risk and prevent exposure to others
  - Clinical and laboratory monitoring and follow-up schedule
  - Signs and symptoms of acute HIV infection

Editorial Comment: Daniel Bell, MD And Peter Shearer, MD

The preferred initial PEP regimen is the same as for other types of exposures: tenofovir 300 mg orally combined with emtricitabine 200 mg orally daily and raltegravir 400 mg orally twice a day. This PEP regimen is recommended over formulations using zidovudine (AZT) or protease inhibitors due to its favorable side effect profile, resulting in higher rates of adherence and regimen completion.16,17 Having 7-day starter packs available to patients upon discharge assists by removing a barrier to PEP adherence during an emotionally difficult time. This regimen and alternative regimens are the same as those recommended for nPEP guideline, described earlier in this article.

IV. HIV Testing Of The Victim

- Clinicians should perform baseline rapid HIV testing of the victim. PEP should be initiated without waiting for the results of the HIV test. (AIII)
- Refusal to undergo baseline testing should not preclude initiation of PEP. (AIII)

Editorial Comment: Daniel Bell, MD And Peter Shearer, MD

Baseline testing for HIV establishes the HIV status of the survivor prior to the exposure. This test cannot determine whether the survivor will seroconvert as a result of the exposure, and initial prophylaxis or management should not be delayed or contingent on this test. If the test is positive, and it is confirmed with subsequent assay testing, the survivor can be referred to a specialist to initiate antiretroviral therapy.
References

1. Centers for Disease Control and Prevention. Recommendations for postexposure interventions to prevent infection with hepatitis B virus, hepatitis C virus, or human immunodeficiency virus, and tetanus in persons wounded during bombings and similar mass-casualty events — United States, 2008. MMWR. 2008;57(No. RR-6). (Guideline)


CME Questions

To take the CME test, visit: www.ebmedicine.net/CME or scan the QR code below with a smartphone:

1. Which of the following is an appropriate indication to provide nPEP?
   a. Human bites without apparent blood involvement
   b. Mouth-to-mouth resuscitation without mucosal damage
   c. Exposure to solid-bore needles not in recent contact with blood
   d. Consensual vaginal intercourse with an intact condom

2. If a source patient is available for HIV testing, initial postexposure prophylaxis should be given based upon the of source patient's HIV status.
   a. True
   b. False

3. Which of the following is a correct statement?
   a. For survivors of sexual assault, non-HIV STI testing and empiric prophylaxis should be administered at the initial visit.
   b. For survivors of sexual assault, non-HIV STI empiric prophylaxis should be administered at the initial visit, but non-HIV STI testing should be deferred to the follow-up visit.
   c. For consensual sexual exposures, non-HIV STI testing and empiric prophylaxis should be administered at the initial visit.
   d. For consensual sexual exposures, non-HIV STI empiric prophylaxis should be administered at the initial visit, but non-HIV STI testing should be deferred to the follow-up visit.

4. The preferred PEP/nPEP regimen is:
   a. Tenofovir + emtricitabine + raltegravir
   b. Tenofovir + emtricitabine + zidovudine
   c. Zidovudine + raltegravir + emtricitabine
   d. Zidovudine + raltegravir
   e. Based upon consultation with an infectious disease specialist
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