Policy:
To ensure proper implementation of the procedure for the handling of employee exposure injuries on duty, to allow the employee the appropriate treatment options.

Procedure:
If you experienced a needle-stick or sharps injury or were exposed to the blood or other body fluid of a patient during the course of your work, immediately follow these steps:

• Wash needle-sticks and cuts with soap and water
• Flush splashes to the nose, mouth, or skin with water
• Irrigate eyes with clean water or saline
• Fill out the appropriate sharps injury/exposure report (see attached) Epinet Uniform Needle stick and Sharp Object Injury Report
• Report the incident to your supervisor and also to Human Resources Immediately
• Immediately seek medical treatment. The employee is to leave work and go immediately to the Emergency Room. (If treatment for exposure is indicated this must be implemented as soon as possible, ideally PEP (post-exposure prophylaxis) should be implemented within the first 2 hours post exposure)
• Following immediate evaluation and treatment at the Emergency Room, the employee will report to Human Resources to review the Needle-stick/Exposure incident report and to ensure that all appropriate paperwork is completed to comply with comprehensive insurance as well as OSHA, and New York State Department of Health and Workers’ Compensation.
• If the employee declines to go to the emergency room they will be immediately referred to Human Resources for post exposure counseling including the reading of the Policy and Procedure protocols of Premier Medical Group and the NYS HIV Prophylaxis Following Occupational Exposure information packet. Following the reading of the information on exposure recommendations the employee can decline treatment and will sign, with witnesses, the declination of HIV/AIDS Prophylaxis form with witnesses present. (See attached). The employee will still be strongly encouraged to have blood work for HIV and Hepatitis within 36 hours.
Responsibilities:

- **Employee:**
  1) Wash needle-sticks and cuts with soap and water.
  2) Flush splashes to the nose, mouth, or skin with water.
  3) Irrigate eyes with clean water or saline.
  4) Fill out the appropriate Needle-stick and Sharp Object Injury Report.
  5) Report the incident to your supervisor and to Human Resources, immediately.
  6) Immediately seek medical treatment, ideally within one hour. The employee is to leave work and go immediately to the Emergency Room. (If treatment for exposure is indicated this must be implemented as soon as possible, ideally PEP (post-exposure prophylaxis) should be implemented within the first 2 hours post exposure). The employee is encouraged to have HIV and Hepatitis status testing.
  7) Following immediate evaluation and treatment at the Emergency Room, the employee will report to Human Resources to ensure timely completion of all related forms while details are still fresh.

- **Site Manager or Unit Coordinator:**
  1) Assist Employee in getting emergent evaluation
  2) Reviews the medical history of the source patient if known, provided in the chart and privately with patient.
  3) The source patient will be approached by a physician for consent to have blood for HIV and Hepatitis screening. Written Consent will be documented on standard NYS DOH forms. Oral consent is acceptable as long as the conversation is documented in the patients chart. If the source patient is not capable of giving consent, determine if a surrogate is available. If so, they can be approached to give consent. If no surrogate the patient can be tested anonymously as per Amended HIV Testing Law in NY state.

- **Human Resources:**
  1) Reviews the Needle-stick and Sharp Object injury Report for completion and accuracy.
  2) Follows up with Employee for counseling and review of Premier Medical Groups Post Exposure Plan including NY State HIV guidelines paperwork.
  3) Ensures completion of all required paperwork and forms for NY State Compensation, Comprehensive insurance and OSHA as well as NY State DOH.
  4) Reports the Needle-stick/Sharps Injury to the Infection Control Coordinator and to the Infection Control Committee as required for tracking.
  5) If the employee declines evaluation and treatment it is the responsibility of Human Resources to review the Premier Medical Post Exposure Plan and NY State HIV guidelines with the employee and to have the employee sign the declination of prophylaxis with witnesses. The employee is still to be strongly encouraged to have HIV status testing as well as Hepatitis status testing within 36 hours of injury.

Date Policy to be reviewed: 05/20
### Uniform Needlestick and Sharp Object Injury Report

#### 3. Medical Student: 12 Dentist

<table>
<thead>
<tr>
<th>4. Nurse: Specify:</th>
<th>13 Dental Hygienist</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Nursing Student:</td>
<td>14 Housekeeper</td>
</tr>
<tr>
<td>6. Respiratory Therapist:</td>
<td>19 Laundry Worker</td>
</tr>
<tr>
<td>7. Surgery Attendant:</td>
<td>20 Security</td>
</tr>
<tr>
<td>8. Other Attendant:</td>
<td>17 Other Student</td>
</tr>
<tr>
<td>9. Phlebotomist/Venipuncture/I.V. Team:</td>
<td>15 Other, Describe:</td>
</tr>
</tbody>
</table>

#### 7. Was the Source Patient Identifiable?: (Check One)

- Yes
- No
- Unknown
- Not Applicable

#### 8. Was the Injured Worker the Original User of the Sharp Item?: (Check One)

- Yes
- No
- Unknown
- Not Applicable

#### 9. The Sharp Item Was: (Check One)

- Contaminated (Known Exposure to Patient or Contaminated Equipment)
- Uncontaminated (No Known Exposure to Patient or Contaminated Equipment)
- Unknown/Not Applicable

#### 10. For: What Purpose Was the Sharp Item Originally Used?: (Check One)

- To draw a venous blood sample
- To draw an arterial blood sample if used to draw blood was it: Direct stick
- To obtain a body fluid or tissue sample (urine/CSF/amniotic fluid/other fluid, biopsy)
- Fingerstick/heel stick
- Suturing
- Cutting
- Drilling
- Electrocautery
- To contain a specimen or pharmaceutical (glass items)
- Other; Describe:

#### 11. Did the Injury Occur: (Check One)

- Before Use of Item (Item Broke or Slipped, Assembling Device, Etc.)
- During Use of Item (Item Slipped, Patient Jarred Item, Etc.)
- Restraining Patient
- Between Steps of a Multi-Step Procedure (Between Incremental Injections, Passing Instruments, Etc.)
- Disassembling Device or Equipment
- In Preparation for Reuse of Reusable Instrument (Sorting, Disinfecting, Sterilizing, Etc.)
- While Recapping a Used Needle
- Withdrawing a Needle from Rubber or Other Resistant Material (Rubber Stopper, I.V. Port, Etc.)

#### 12. Did the Injury Occur: (Check One)

- Equipment Left on Floor, Table, Bed or Other Inappropriate Place
- Other After Use, Before Disposal (in Transit to Trash, Cleaning, Sorting, Etc.)
- From Item Left on or Near Disposable Container
- While Putting the Item into the Disposal Container
11 after disposal, stack by item protruding from opening of disposal container
12 item pierced side of disposal container
13 after disposal, item protruded from trash bag or inappropriate waste container 14 other; describe:

12a) Brand / Manufacturer of product: (e.g. ABC Medical Company)
12 ____________________________
13a) Was protective mechanism activated?
1 yes 2 no/not applicable
13b) Did exposure incident happen:
1 before activation 2 during activation 3 after activation

13) If the item causing the injury was a needle, or sharp medical device, was it a “safety design” with a shielded, recessed, retractable or blunted needle blade?

14) MARK THE LOCATION OF THE INJURY:

15) Was the injury:
1 superficial (little or no bleeding)
2 moderate (skin punctured, some bleeding)
3 severe (deep stick/cut, or profuse bleeding)

16) If the injury was to the hands, did the sharp item penetrate: (check one)
1 single pair gloves
2 double pair gloves
3 no gloves

17) Was the injured worker: (check one)
1 right handed
2 left handed

18) Describe the circumstances leading to this injury: (please note if a device malfunction was involved)

19) For injured employee: If the sharp had no engineered injury protection, do you have an opinion that such a mechanism could have prevented the injury? prevented the injury? yes no

Explain: ____________________________

19) For injured employee: Do you have an opinion that any other engineering administrative or work practice could have prevented the injury? prevented the injury? yes no

Explain: ____________________________
NEEDLE (for suture needle see “surgical instruments”) Item Codes

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>disposable syringe</td>
<td>8</td>
<td>vacuum tube blood collection holder/needle</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(includes VACUTAINER™ – type devices)</td>
</tr>
<tr>
<td>a</td>
<td>Insulin</td>
<td>e</td>
<td>22 gage needle</td>
</tr>
<tr>
<td>b</td>
<td>Tuberculin</td>
<td>f</td>
<td>21 gage needle</td>
</tr>
<tr>
<td>c</td>
<td>24/25 gage needle</td>
<td>g</td>
<td>20 gage needle</td>
</tr>
<tr>
<td>2</td>
<td>23 gage needle</td>
<td>h</td>
<td>“other” prefilled cartridge syringe (includes Tubex™)</td>
</tr>
<tr>
<td>3</td>
<td>Carpuject™ – type syringes) blood gas syringe</td>
<td>i</td>
<td>(ABG) syringe, other type needle on I.V. line</td>
</tr>
<tr>
<td>4</td>
<td>(includes piggybacks and I.V. line connectors)</td>
<td>j</td>
<td>winged steel needle I.V. set (includes winged set – type devices)</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>k</td>
<td>I.V. catheter (stylet)</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>l</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>m</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>n</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>lancet (finger or heel sticks)</td>
<td>43</td>
<td>specimen/test tube (plastic)</td>
</tr>
<tr>
<td>31</td>
<td>suture needle</td>
<td>44</td>
<td>fingernails/teeth</td>
</tr>
<tr>
<td>32</td>
<td>scalpel, reusable (scalpel, disposable: code as 45)</td>
<td>45</td>
<td>scalpel, disposable</td>
</tr>
<tr>
<td>33</td>
<td>razor</td>
<td>46</td>
<td>retractors, skin/bone hooks</td>
</tr>
<tr>
<td>34</td>
<td>pipette (plastic)</td>
<td>47</td>
<td>staples/steel sutures</td>
</tr>
<tr>
<td>35</td>
<td>scissors</td>
<td>48</td>
<td>wire (suture/tissue/guide wire)</td>
</tr>
<tr>
<td>36</td>
<td>electrocautery device</td>
<td>49</td>
<td>pin (fixation/guide pin)</td>
</tr>
<tr>
<td>37</td>
<td>bone cutter</td>
<td>50</td>
<td>drill bit/bur</td>
</tr>
<tr>
<td>38</td>
<td>bone chip</td>
<td>51</td>
<td>pickups/forceps/hemostats/clamps</td>
</tr>
<tr>
<td>39</td>
<td>towel chip</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>microtome blade</td>
<td>53</td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>trocar</td>
<td>54</td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>vacuum tube (plastic)</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td>56</td>
<td>needle, not sure what kind</td>
<td>57</td>
<td></td>
</tr>
<tr>
<td>59</td>
<td>other needle (please describe device on report form)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
GLASS
Item Codes

- 60 medication ampule
- 61 medication vial (small volume with rubber stopper)
- 62 medication/I.V. bottle (large volume)
- 63 pipette (glass)
- 64 vacuum tube (glass)
- 65 specimen/test tube (glass)
- 66 capillary tube
- 67 glass slide
- 68 glass item, not sure what kind
- 78 other glass item (please describe item on the report form)
- 79 other glass item (please describe item on the report form)

* Tubex™ is a trademark of Wyeth Ayerst; Carpuject™ is a trademark of Sanofi Winthrop; Butterfly™ is a trademark of Abbott Laboratories; VACUTAINER™ is a trademark of Becton Dickinson. Identification of these product categories does not imply involvement or endorsement of these specific brands.
EMMLYER'S REPORT OF WORK-RELATED INJURY/ILLNESS
C-2

State of New York - Workers' Compensation Board

If one of your employees has a work-related injury or illness, you must complete and file this form within 10 days of the injury/illness or be subject to a penalty. For additional information on filing this form please refer to Workers’ Compensation Law Section 110 at the end of this form. Type or print neatly.

WCB Case Number (if you know it): __________________ Date of Injury/illness: ________/______/_______
Carrier Case Number (if you know it): __________________ Date of this Report: ________/______/_______

A. EMPLOYER INFORMATION

1. Employer: ____________________________ 2. Employer FEIN: __________________________
3. Mailing Address: ____________________________ __________________________
4. Location Address (if different): ____________________________
6. Nature of Business or Industry Code: ____________________________
5. Phone Number: (______)____________________
7. OSHA Case Number (if known): ____________________________

B. INSURANCE CARRIER / SELF-INSURED EMPLOYER

If individually self-insured, enter your Board W Number and skip to Section C.

1. Board W Number: W
2. Carrier/Group Name: ____________________________
4. If Carrier Unknown, Insurance Agent Name: ____________________________
3. Policy Number: ____________________________ Policy Period: From: ________/______/_______ To: ________/______/_______
5. Phone Number: (______)____________________

C. EMPLOYEE'S PERSONAL INFORMATION

1. Name: ____________________________ 2. Date of Birth: ________/______/_______
3. Mailing Address: ____________________________ 5. Contact Phone Number: (______)____________________

D. EMPLOYEE'S INJURY OR ILLNESS

1. Time of day employee began work on date of injury: □ AM □ PM 2. Time of injury: ________/______/_______
3. Has the employee given you notice of injury/illness? □ Yes □ No
   If yes, notice was given to: ____________________________ orally in writing Date notice provided: ________/______/_______
   If available, attach a copy of the employee’s written notice and medical notes, and the employer's incident report.

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4. Have you given the employee a Claimant Information Packet?  Yes  No  If yes, give date:  

5. Where did the injury/illness happen (e.g., 1 Main St., Pottersville, at the front door):

6. Was this location where the employee normally worked?  □ Yes  □ No  If no, why was the employee there?

7. Employee’s supervisor: ________________________________  8. Did supervisor see injury happen?  □ Yes  □ No  □ Unknown

9. Did anyone else see the injury happen?  □ Yes  □ No  □ Unknown  If yes, give name(s): ________________________________

10. What was the employee doing when he/she was injured or became ill? (e.g., unloading a truck, stocking a shelf, typing annual report)

THE WORKERS’ COMPENSATION BOARD EMPLOYS AND SERVES PEOPLE WITH DISABILITIES WITHOUT DISCRIMINATION

EMPLOYEE’S NAME: ________________________________  DATE OF INJURY/ILLNESS: ________/_______/_______

First  MI  Last

D. EMPLOYEE’S INJURY OR ILLNESS continued

11. How did the injury/illness occur? (e.g., the employee tripped over a pipe and fell on the floor)

12. Explain fully the nature of the employee’s injury/illness; list body parts affected (e.g., twisted left ankle and cut to forehead): ________________________________

13. Was an object (e.g., forklift, hammer, acid) involved in the injury/illness?  □ Yes  □ No  If yes, what was it?

14. Was the injury the result of the use or operation of a licensed motor vehicle?  □ Yes  □ No

If yes, □ employee’s vehicle □ employer’s vehicle □ other vehicle License plate number (if known):

If employer’s vehicle was involved, give name and address of your motor vehicle insurance carrier:

15. Did the injury/illness result in the employee’s death?  □ Yes  □ No  If yes, what was the date of death?  ______/_______/_______

Name and address of the nearest relative: ________________________________
E. MEDICAL TREATMENT
1. What was the date of the employee’s first treatment? ______/_____/______ □ None received □ Unknown
2. Where did the employee receive first medical treatment for this injury? □ On site □ Doctor’s office □ Emergency Room
□ Clinic/Hospital/Urgent Care □ Hospital Stay over 24 hours □ Unknown
Who treated the employee and where?

3. Is the employee still being treated for this injury? □ Yes □ No □ Unknown If yes, name and address of treating doctor(s):

4. To your knowledge, did the employee have another work-related injury to the same body part or a similar illness while working for you? □ Yes □ No If yes, name the doctor(s) who treated the previous injuries/illnesses (if known):

F. RETURN TO WORK
1. Did the employee stop work because of his/her injury? □ Yes □ No If yes, on what date? ______/_____/______
2. Has the employee returned to work? □ Yes □ No
   If yes, on what date? □ ______/_____/______ regular duty □ limited duty

3. If the employee has returned to limited duty, what are his/her average gross earnings per week?

EMPLOYEE’S NAME: __________________________________________ DATE OF INJURY/ILLNESS: ______/_____/______
First MI Last

G. EMPLOYEE’S WORK INFORMATION on the date of the injury or illness
1. Date the employee was hired: ______/_____/______
2. What was the employee’s job title?

3. What types of activities did the employee normally perform at work? (Attach job description if available.) __________________________________________

________________________________________
H. EMPLOYEE’S PAYROLL INFORMATION on the date of the injury or illness

1. Employee's gross pay in an average week was: $

2. Did the employee receive lodging or tips in addition? Yes [ ] No [ ] If yes, describe: ____________________________

3. Employee's job was (check one) Full Time [ ] Part Time [ ] Seasonal [ ] Volunteer [ ] Other: ____________________________

4. Which days of the week did the employee usually work? Mon. [ ] Tues. [ ] Wed. [ ] Thurs. [ ] Fri. [ ] Sat. [ ] Sun. [ ]

5. Was the employee paid for a full day on the day of the injury/illness? Yes [ ] No [ ]

6. Did you continue to pay the employee after the injury/illness (e.g., sick leave, vacation, disability, regular salary)? Yes [ ] No [ ]

I. ADDITIONAL INFORMATION

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

An employer or carrier, or any employee, agent, or person acting on behalf of an employer or carrier, who KNOWINGLY MAKES A FALSE STATEMENT OR REPRESENTATION as to a material fact in the course of reporting, investigation of, or adjusting a claim for any benefit or payment under this chapter for the purpose of avoiding provision of such payment or benefit SHALL BE GUILTY OF A CRIME AND SUBJECT TO SUBSTANTIAL FINES AND IMPRISONMENT.

The above information is true to the best of my knowledge and belief.

If prepared by the employer:

Signature of Person Preparing Form: ____________________________ Date: ______/_____/______

Print Name: ____________________________ Title: ____________________________ Phone Number: (______)__________

If prepared by a Third Party on Behalf of the Employer:

Signature of Person Preparing Form: ____________________________ Date: ______/_____/______

Print Name: ____________________________ Title: ____________________________ Phone Number: (______)__________

Company Name and Address: ____________________________

Name & Phone Number of Person Who Provided Information Necessary to Prepare This Form: ____________________________

Reports should be filed by sending directly to the appropriate WCB district office (DO) at the address below with a copy sent to the insurance carrier:


Binghamton DO - State Office Building, 44 Hawley Street, Binghamton NY 13901  866-802-3604 (for accidents in the following counties: Broome, Chemung, Chenango, Cortland, Delaware, Otsego, Schuyler, Sullivan, Tioga, Tompkins)

Buffalo DO - Statler Towers, 107 Delaware Avenue, Buffalo NY 14202  866-211-0645 (for accidents in the following counties: Cattaraugus, Chautauqua, Erie, Niagara)

Rochester DO - 130 Main Street West, Rochester NY 14614  866-211-0644 (for accidents in the following counties: Allegany, Genesee, Livingston, Monroe, Ontario, Orleans, Seneca, Steuben, Wayne, Wyoming, Yates)

Syracuse DO - 935 James Street, Syracuse NY 13203  866-802-3730 (for accidents in the following counties: Cayuga, Herkimer, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, St. Lawrence)
Downstate Centralized Mailing - PO Box 5205, Binghamton NY, 13902-5205 for all DO's in NYC 800-877-1373; in Hempstead 866-805-3630; in Hauppauge 866-681-5354; in Peekskill 866-746-0552 (for accidents in the following counties: Bronx, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Westchester)
WORKERS' COMPENSATION LAW

Section 13  Treatment and care of injured employees  
(a) "The employer shall promptly provide for an injured employee such medical, surgical, optometric or other attendance or treatment, nurse and hospital service, medicine, optometric services, crutches, eye-glasses, false teeth, artificial eyes, orthotics, functional assistive and adaptive devices and apparatus for such period as the nature of injury or the process of recovery may require.*****

Section 13 Injury to employee’s prosthesis  
(a) "Damage to or loss of a prosthetic device shall be deemed an injury except that no disability benefits shall be payable with respect to such injury under section fifteen of this article.*****

Section 25  Effect of failure to file reports  
3. (e) "If the employer or its insurance carrier fails to file a notice or report requested or required by the board or chair or otherwise required within the specified time period or within ten days if no time period is specified, the board may impose a penalty in the amount of fifty dollars.*****

Section 51  Posting of notice regarding compensation  
"Every employer who has complied with section fifty of this chapter shall post and maintain in a conspicuous place or places in and about his place or places of business typewritten or printed notices in form prescribed by the chairman, stating the fact that he has complied with all the rules and regulations of the chairman and the board and that he has secured the payment of compensation to his employees and their dependents in accordance with the provisions of this chapter, but failure to post such notice as herein provided shall not in any way affect the exclusiveness of the remedy provided for by section eleven of this chapter.
*****

Section 52  Effect of failure to secure compensation  
1. (a) "Failure to secure the payment of compensation shall constitute a misdemeanor, punishable by a fine of not less than five hundred nor more than two thousand five hundred dollars or imprisonment for not more than one year, or both.
(b) Where any person has previously been convicted of a failure to secure the payment of compensation within the preceding five years, upon conviction for a second violation such person shall be fined not less than one thousand nor more than five thousand dollars in addition to any other penalties including fines otherwise provided by law, and upon conviction for a third or subsequent violation such person may be fined up to seven thousand five hundred dollars in addition to any other penalties including fines otherwise provided by law.
(c) Where the employer is a corporation, the president, secretary and treasurer thereof shall be liable for failure to secure the payment of compensation under this section.*****

Section 110  Record and report of injuries by employers  
1. An employer, or a third party designated by the employer, shall record any injury or illness incurred by one of its employees in the course of employment using the form prescribed by the chair for reporting injuries under subdivision two of this section. Such form, a copy of which shall be provided to the injured employee upon request, shall be maintained by the employer, or a third party designated by the employer, for at least eighteen years, and shall be subject to review by the chair at any time. Such form need not be filed with the chair unless the status of such injury or illness changes resulting in a loss of time from regular duties or in medical treatment which would require reporting in accordance with subdivision two of this section.
2. An employer, or a third party designated by the employer, shall file with the chair of the workers' compensation boardand with the carrier if the employer is insured, upon a form prescribed by the chair, a report of any accident resulting in personal injury which has caused or will cause a loss of time from regular duties of one day beyond the working day or shift on which the accident occurred, or which has required or will require medical treatment beyond ordinary first aid or more than two treatments by a person rendering first aid. Such report shall state the name and nature of the business of the employer, the location of its establishment or place of work, the name, address and occupation of the injured employee, the time, nature and cause of the injury and such other information as may be required by the chair. Such report shall be filed within ten days after the occurrence of the accident. An employer shall furnish a report of an occupational disease incurred by an employee in the course of his or her employment, to the chair of the workers' compensation board, and to the carrier if the employer is insured, upon the same form. The carrier, within fourteen days of receipt of the report or accompanying the initial check forwarded to the employee, whichever is earlier, or a self-insured employer, within fourteen days of transmitting the report to the chair or accompanying the initial check forwarded to the employee, whichever is earlier, shall provide the injured employee or, in the case of death, his or her dependents with a written statement of their rights under this chapter, in a form prescribed by the chair. An employer shall file a report of any other accident resulting in personal injury incurred by its employee in the course of employment, upon the same form, whenever directed by the chair.
3. Any injury or illness which is not required to be reported in accordance with subdivision two of this section, shall not be used as a basis for determining experience modification rates, provided the employer pays in the first instance or reimburses the employer's insurer for the treatment rendered to the employee.

C-2.0 (10-08)  www.wcb.state.ny.us
4. An employer who refuses or neglects to make a report or to keep records as required by this section shall be guilty of a misdemeanor, punishable by a fine of not more than one thousand dollars. The board or chair may impose a penalty of not more than two thousand five hundred dollars upon an employer who refuses or neglects to make such report.

5. The chair shall be authorized to promulgate regulations necessary to carry out the provisions of this section.

**Instructions for Completing Form C-2, “Employer's Report of Work-Related Injury/Illness”**

Please complete this form and send it directly to your local Workers' Compensation Board district office (DO). The addresses are listed at the bottom of page 3. Also send a copy of the form to your insurance carrier. If you need additional help in completing this form, you may contact the Workers' Compensation Board at 1-877-632-4996 or visit http://www.wcb.state.ny.us/.

If you do not have or know your Workers' Compensation Board Case Number, please leave this field blank. It is not required to process the form. Fill out the Date of Injury/Illness, to the best of your knowledge, and the Date of this Report on the top of page 1. Remember to enter in the name of the injured employee and the date of injury/illness on the top of page 2 and page 3.

**Section A - Employer Information:**

- **Item 1:** Indicate the name of the company or the owner's name and DBA name.
- **Item 2:** Enter the employer's Federal Employer Identification Number (FEIN). This is your Federal Tax ID number. If you do not have a FEIN, enter your Social Security Number.
- **Item 3:** Enter the employer's main address where you receive mail (such as a central office). Include P.O. Boxes.
- **Item 4:** Enter the physical address of the employer (if different).
- **Item 5:** Enter the primary contact phone number for the employer, including area code.
- **Item 6:** Indicate the North American Industry Classification System (NAICS) or Standard Industrial Classification (SIC) Code for your business. If you do not know your NAICS or SIC Code, please indicate the type or nature of business as accurately as possible (e.g., Restaurant, Construction, Retail).
- **Item 7:** Enter the OSHA Case Number, if known.
- **Item 8:** Enter the first 7 digits of your New York Unemployment Insurance (NY UI) Registration Number (UIER). This is the number used to report to the Department of Labor.

**Section B - Insurance Carrier / Self-Insured Employer:**

- **Item 1:** Indicate the Carrier Code Number (W Number) issued by the Workers' Compensation Board. If you do not know the W number, contact your insurance carrier. If you are self-insured, only enter your Carrier Code Number (W Number) and skip to Section C.
- **Item 2:** Enter the name of the employer's Workers' Compensation Insurance Carrier or Group Name. If you do not know your insurance carrier, please indicate the employer's Insurance Agent Name for item 4 and the Agent's contact phone number for item 5.
- **Item 3:** Enter your Workers' Compensation Insurance Policy Number and indicate the policy effective period for coverage at the time of the injury or illness.
- **Item 4:** Insurance Agent Name if the carrier is unknown.
- **Item 5:** Insurance Agent phone number, including the area code.

**Section C - Employee's Personal Information:**

- **Item 1:** Indicate the injured employee's full legal name.
- **Item 2:** Enter the employee's date of birth.
- **Item 3:** Enter the employee's mailing address, including street number, P.O. Box (if applicable), Town or City, State, and Zip Code.
- **Item 4:** Indicate the employee's Social Security Number (SSN).
- **Item 5:** Enter a contact phone number for the employee, either a home phone number or a cell phone number, including the area code.
- **Item 6:** Indicate his/her gender.

**Section D - Employee's Injury or Illness:**

If this is an illness or occupational disease and an exact date of illness cannot be determined, then skip items 1 and 2.

- **Item 1:** Indicate the time of day when the employee began work on the day the injury occurred.
- **Item 2:** Enter the time when the injury occurred.
Item 3: Check whether the employee has given notice of his/her injury or illness to the employer. If so, enter the date notice was given and if it was orally or in writing. If written notice was given, please attach a copy of the employee's notice as well as any medical notes you may have received. Also attach the [supervisor's] incident report, if available.

Item 4: Check whether you gave the employee a Claimant Information Packet and if so, when.

Item 5: Indicate the location where the injury/illness occurred, including the address of the building and the physical location in the building where the injury/illness happened.

Item 6: Check if this was the employee's normal work location. If it was not, explain why the employee was at this location.

Item 7: Enter the name of the employee's direct supervisor.

Item 8: Indicate whether the supervisor was a witness to the injury/illness.

Item 9: Check if anyone else witnessed the injury/illness and if so, list their name(s).

C-2.0 (10-08)

Section D - Employee's Injury or Illness (cont.):

Item 10: Describe in detail what the employee was doing at the time of the injury/illness (e.g., unloading boxes from a truck by hand). This explains the events leading up to the injury.

Item 11: Describe in detail how the injury/illness occurred (e.g., the employee was lifting a heavy box off a truck). This should include all people and events involved in the injury/illness.

Item 12: Indicate fully the nature and extent of the employee's injury/illness, including all body parts injured. Be as specific as possible (e.g., lumbar gluteal muscle strain resulting from sudden straining).

Item 13: Indicate if some object was involved in the accident OTHER THAN a licensed motor vehicle. Other objects may include a tool (e.g., hammer), a chemical (e.g., acid), machinery (e.g., forklift or drill press), etc.

Item 14: Indicate if a licensed motor vehicle was involved in the accident. If so, check if the motor vehicle involved was the employee's, the employer's, or that of a third party and include the license plate number (if known). If the employer's vehicle was involved, fill out the automobile liability insurance carrier for the vehicle and their address.

Item 15: Check if the injury/illness resulted in the death of the employee and if so, indicate the date of death and the nearest relative of the deceased (if known).

Section E - Medical Treatment:

Item 1: If the employee did not receive medical treatment for this injury/illness, check None Received and skip to item 4. Otherwise, enter the date the employee first started treatment for this injury/illness, or check Unknown if you do not know, and complete the rest of this section.

Item 2: Check the location where initial medical treatment was administered for this injury/illness and whom was responsible for treatment/care of the employee (e.g., Physician, Nurse, EMT, etc.). Include the name of the person and the facility.

Item 3: If the employee is still receiving ongoing treatment for the same injury/illness, check Yes and indicate the name and address of the physician providing treatment; otherwise check No or Unknown.

Item 4: If the employee had a similar work-related injury to the same body part or a similar work-related illness while working for the same employer, check Yes and if known, indicate the name and address of the physician whom provided care; otherwise check No.

Section F - Return To Work:

Item 1: If the employee has stopped working as a result of the work-related injury/illness, check Yes and indicate on what date he/she stopped working.

Item 2: If the employee has since returned to work, check Yes. Also indicate on what date the employee started working again, as well as if the employee has returned to his/her Normal Duties or if the employee is on Limited or Restricted Duty. (If the employee has not returned to his/her full pre-injury or illness work duties, then the employee is on Limited Duty).

Item 3: If the employee has returned to work on Limited Duty, enter in his/her average gross earnings per week.

Section G - Employee's Work Information:

Item 1: Indicate the date the employee was hired by the employer.
Item 2: Enter the employee's current job title.
Item 3: Describe the employee's typical work activities or enter the employee's job description. If you need more space, you may attach an official job description or additional pages to completely and accurately describe the employee's work activities.

Section H - Employee's Payroll Information:
Item 1: Enter the employee's average gross weekly pay before the injury/illness.
Item 2: Check if the employee received any tips or lodging in addition to his/her regular pay and if so, describe them.
Item 3: Check the type of job the employee had.
Item 4: Check which days of the week the employee usually worked. If the employee did not work a standard work week, please explain in Section I or attach an additional page or work schedule in order to fully explain.
Item 5: Check if the employee was paid for a full day's work on the day of the injury/illness.
Item 6: Indicate if the employee continued to receive pay after the illness/injury, such as sick leave or disability pay.

Section I - Additional Information:
Enter any additional information that may be relevant to the employee's work-related injury/illness in this section. You can also use this area to further explain other items in this form, such as G-3 or H-4.

Sign Form C-2 on the last page. If the form was filled out by a third-party on behalf of the employer, that person should sign on the second signature line.

C-2.0 (10-08)
HIV PROPHYLAXIS FOLLOWING OCCUPATIONAL EXPOSURE

What’s New – October 2014 Update

- The Medical Care Criteria Committee now recommends tenofovir + emtricitabine* plus either raltegravir or dolutegravir as the preferred initial PEP regimen because of its excellent tolerability, proven potency in established HIV infection, and ease of administration. Zidovudine is no longer recommended in the preferred PEP regimen because it is believed to have no clear advantage in efficacy over tenofovir while having significantly higher rates of treatment-limiting side effects.

- Plasma HIV RNA testing of the source patient is recommended in addition to HIV serologic screening in the following settings; PEP should be continued in these situations until results of the plasma HIV RNA assay are available:
  - If the source patient’s HIV screening result is negative but there has been a risk for HIV exposure in the previous 6 weeks
  - If the source patient’s HIV screening result is positive but the confirmatory antibody-differentiation assay is nonreactive or indeterminate

- The Committee continues to recommend the following from the October 2012 Update:
  - Occupational exposures require urgent medical evaluation. The Committee further emphasizes recommendations regarding the importance of initiating occupational PEP as soon as possible, ideally within 2 hours of exposure. A first dose of PEP should be offered while evaluation is underway. PEP should not be delayed while awaiting information about the source patient or results of the exposed worker’s baseline HIV test.
  - This guideline incorporates amendments to New York State regulations (10 NYCRR part 63) regarding testing of source patients and access to HIV-related information after occupational exposures (see Appendix C).
  - Baseline HIV testing of the exposed worker should always be obtained after an occupational exposure, even if the exposed worker declines PEP.
  - Regardless of whether the exposed worker accepts or declines PEP treatment, if the post-exposure evaluation determines that PEP is indicated, repeat HIV testing at 4 weeks and 12 weeks should be obtained. A negative HIV test result at 12 weeks post-exposure reasonably excludes HIV infection related to the occupational exposure; routine testing at 6 months post-exposure is no longer recommended.
Appendix B includes an updated comparison of occupational PEP recommendations from the New York State Department of Health AIDS Institute and the Centers for Disease Control and Prevention.

*Lamivudine may be substituted for emtricitabine.

I. INTRODUCTION
The purpose of these guidelines is to provide recommendations for prescribing HIV postexposure prophylaxis (PEP) following occupational exposure. To develop these guidelines, the New York State Department of Health AIDS Institute’s (NYSDOH AI) Medical Care Criteria Committee has reviewed available literature addressing the biologic efficacy, effectiveness, and implementation of PEP, as well as current standards for the use of antiretroviral therapy (ART) in established HIV infection. Because randomized, placebo-controlled clinical trials of PEP in humans have not been conducted and are not feasible to design, the NYSDOH AI guidelines are based on existing published studies, best-practice evidence, and the considered opinion of the expert clinicians in the field of adult HIV medicine who comprise the Medical Care Criteria Committee. Expert opinion was frequently used to arrive at recommendations as the PEP literature leaves many questions unanswered or poorly studied.

New York State recommendations differ from those published by the Centers for Disease Control and Prevention (CDC) (see Appendix B). The guidelines of this committee stress simplicity and tolerability in the approach to PEP, recommending a potent but very well tolerated first-line triple therapy for all significant exposures. Recommended second choice regimens are potent and include the best tolerated boosted protease inhibitors.

These 2014 guidelines update any previously issued guidelines. Revisions are summarized in the What’s New box.

II. RATIONALE FOR PEP

Several clinical studies have demonstrated that HIV transmission can be significantly reduced by the post-exposure administration of antiretroviral agents. A dramatic decline in vertical transmission was observed in the AIDS Clinical Trial Group (ACTG) 076 study, \(^1\) in which pregnant women and their newborns received monotherapy with zidovudine (ZDV), and in the HIVNET 012 study, \(^2\) in which single-dose nevirapine was compared with ZDV. A CDC retrospective case-control study \(^3\) of ZDV use after occupational HIV exposure in healthcare workers (HCWs) showed an 81\% reduction in risk of HIV infection in persons who received ZDV. This study also identified characteristics of both the exposure and the source patient that placed the HCWs at highest risk for HIV acquisition (see Section III: Risk Factors Associated With HIV Transmission).

Because the ultimate goals of PEP are to maximally suppress any limited viral replication that may occur and to shift the biologic advantage to the host cellular immune system to prevent or abort early infection, the Committee recommends the use of a three-drug PEP regimen for all significant risk exposures.

Experimental models of HIV infection demonstrate the following sequence of events: After percutaneous or mucosal exposure to HIV, local replication of virus occurs in tissue
macrophages or dendritic cells; host cytotoxic T cells will kill productively infected target cells. However, if infection cannot be contained at this stage, it is followed within 2 to 3 days by replication of HIV in regional lymph nodes; viremia then follows within 3 to 5 days of virus inoculation. This sequence of events carries significant implications. Given the rapid appearance of productively infected cells following the introduction of virus, regimens with the most rapid onset of activity, multiple sites of antiviral action, and greatest strength are likely most effective.

_In vitro_ evidence from a small study of HCWs who were exposed percutaneously to HIV but who did not seroconvert suggests that limited viral replication may occur without establishment of infection. A HIV-specific T-cell proliferative responses were observed in the majority of these individuals. Because the T-cell proliferative response is major histocompatibility complex (MHC) class I specific, limited viral replication within the tissue macrophages is inferred. This sequence of events also carries important implications. If limited HIV replication following exposure is a frequent event, then the argument to use a highly active PEP regimen (i.e., three drugs) to maximize potency becomes even stronger.

### III. RISK FACTORS ASSOCIATED WITH HIV TRANSMISSION

Considered collectively, the cases of seroconversion in exposed workers that have been reported to the CDC and the data from the CDC retrospective case-control study provide insight into the risk factors associated with occupational HIV infection. Blood or visibly bloody fluids or other potentially infectious material (e.g., semen; vaginal secretions; breast milk; and cerebrospinal, synovial, pleural, peritoneal, pericardial, and amniotic fluids) are the only source fluids that carry meaningful risk. Exposure to saliva, tears, sweat, or non-bloody urine or feces does not require PEP.

Table 1 shows the estimated per-act probability of acquiring HIV from a known HIV-infected source by exposure. The CDC is reviewing the most recent data and constructing mathematical models to update transmission risk. Also see Appendix D for a logistic-regression analysis from 1997 of risk factors for HIV transmission after percutaneous exposure to HIV-infected blood.

<table>
<thead>
<tr>
<th>Type of Exposure</th>
<th>Risk per 10,000 Exposures</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parenteral</td>
<td></td>
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</table>

**TABLE 1**

**ESTIMATED PER-ACT PROBABILITY OF ACQUIRING HIV FROM A KNOWN HIV-INFECTED SOURCE BY EXPOSURE ACT**

10/14  New York State Department of Health AIDS Institute: www.hivguidelines.org 4
Blood Transfusion
Percutaneous (needlestick) | 9,000 | 5

| Other | 30 | 6 |

- Biting
- Spitting
- Throwing body fluids (including semen or saliva)

Negligible
Negligible
Negligible

7


*a* Factors that increase the risk of HIV transmission include early and late-stage HIV infection and a high level of HIV in the blood. Factors that reduce the risk of HIV transmission include low level of HIV in the blood and the use of ART.

*b* HIV transmission through these exposure routes is technically possible but extremely unlikely and cases are not well documented.

Fifty-seven cases of documented seroconversion following occupational HIV exposure were reported to the CDC through 2010. The most recent possible case of occupationally acquired HIV was reported to the CDC in 2009; however, no new documented cases have been reported since 1999. The mean risk following an occupational percutaneous exposure is roughly 1 in 300 (0.3%). However, the mean risk may be significantly higher in cases in which more than one risk factor is present (e.g., in persons who incur a deep injury with a hollow-bore needle from an HIV-infected patient with a high viral load). Although the effect of viral load level has not been studied in the setting of occupational exposures, studies have shown that the probability of sexually transmitting HIV is correlated with HIV viral load. The risk of transmission can be expected to be increased in the setting of high HIV viral load levels in the source patient.

After a mucous membrane exposure, the average risk of seroconversion is approximately 9 in 10,000 (0.09%). In this analysis, the use of ZDV PEP by HCWs in the CDC study was shown to reduce the risk of HIV acquisition by 81%.

IV. RESPONSIBILITIES OF EMPLOYERS

RECOMMENDATIONS:
As part of a comprehensive plan to prevent the transmission of bloodborne pathogens, employers should implement the use of safety devices and educate workers about how to prevent needlestick injuries. (AIII)

Antiretroviral medications for PEP should be readily available to exposed workers who sustain a potential occupational exposure to HIV. (AIII) When establishing plans for providing PEP, employers should determine the following: • who will perform the post-exposure evaluation  
  • who will provide counseling to the exposed worker regarding the exposure and indications for PEP (for off-hour exposures as well)  
  • how PEP will be made available within 2 hours of an exposure  
  • how a 3- to 5-day supply of PEP will be made available for urgent use  
  • who will be given authority for releasing drugs for this purpose  
  • how the exposed worker will obtain a continuous supply of PEP drugs to complete the 28-day regimen

Employers should determine who will pay for PEP and establish policies for submitting claims to their Workers’ Compensation plan. Exposed workers should not be expected to pay out-of-pocket for PEP, even if it is reimbursed at a later date.

Federal law requires covered employers to ensure that all medical evaluations and procedures, vaccines, and post-exposure prophylaxis are made available to the employee within a reasonable time and at a reasonable location and are made available at no cost to the employee (OSHA, 29 CFR, Part 1910.1030, CPL 2-02.069, 11/27/01, Enforcement Procedures for the Occupational Exposure to Bloodborne Pathogens).

As part of the employer’s plan to prevent transmission of bloodborne pathogens, the following measures can be taken to avoid injuries:
  • elimination of unnecessary use of needles or other sharps  
  • use of devices with safety features  
  • verification of compliance with safety features  
  • avoidance of recapping of needles  
  • planning before beginning any procedure using needles or other sharps for safe handling and prompt disposal in sharps disposal containers  
  • promotion of education and safe work practices for handling needles and other sharps

For more information about prevention of needlestick injuries, refer to the NIOSH Alert: Preventing Needlestick Injuries in Health Care Settings.12

Even when effective prevention measures are implemented, exposures to blood and bodily fluid still occur. Employers of personnel covered by the Bloodborne Pathogen Standard are obligated to provide post-exposure care, including prophylaxis, at no cost to the employee. The employer
may subsequently attempt to obtain reimbursement from Workers’ Compensation. Appendix C provides further information regarding employer responsibilities.

V. POST-EXPOSURE MANAGEMENT AND EVALUATION

RECOMMENDATION:
Occupational PEP should be initiated as soon as possible, ideally within 2 hours of the exposure. A first dose of PEP should be offered to the exposed worker while the evaluation is underway. (AII)

There are many factors to consider when deciding whether to implement occupational PEP. The uncertainties that are occasionally associated with a given exposure may complicate the decisionmaking process, especially for an inexperienced clinician, and may possibly delay prompt initiation of PEP. Figure 1 is meant to serve as a general guide. The sections that follow the figure provide more detail regarding the specific factors that are weighed in decision-making. Optimal management of the exposed worker following an occupational exposure to a bloodborne pathogen balances the benefits of preventing infection with the risks of medication-induced side effects and toxicity.
28-DAY REGIMEN:

Recommended PEP Regimen\(^{b,c}\)

- Tenofovir 300 mg PO qd
- Emtricitabine\(^{d}\) 200 mg PO qd
- plus
- Raltegravir\(^{e}\) 400 mg PO bid or Dolutegravir\(^{e}\) 50 mg PO qd

\(^n\) Perform baseline confidential HIV testing of the exposed worker and refer to experienced clinician within 3 days of initiating PEP. \(^n\) See Tables 4 and 5 for alternative regimens.

---

\(^a\) Depending on the test used, the window period may be shorter than 6 weeks. Clinicians should contact appropriate laboratory authorities to determine the window period for the test that is being used.

\(^b\) If the source is known to be HIV-infected, information about his/her viral load, ART medication history, and history of antiretroviral drug resistance should be obtained when possible to assist in selection of a PEP regimen. \(^c\) Initiation of the first dose of PEP should not be delayed while awaiting this information and/or results of resistance testing. When this information becomes available, the PEP regimen may be changed if needed in consultation with an experienced provider.

\(^c\) See Appendix A for dosing recommendations in patients with renal impairment. \(^d\) Lamivudine 300 mg PO qd may be substituted for emtricitabine. A fixed-dose combination is available when tenofovir is used with emtricitabine (Truvada 1 PO qd). \(^e\) See Appendix A for drug-drug interactions, dosing adjustments, and contraindications associated with raltegravir and dolutegravir.
A. Management of the Exposed Site

**RECOMMENDATION:**

Body sites exposed to potentially infectious fluid should be cleansed immediately. Wound and skin exposure sites should be washed with soap and water. Exposed mucous membranes should be flushed with water. The exposed worker should not attempt to “milk” the wound. (AII)

Exposed sites should be cleansed of contaminated fluid as soon as possible after exposure. Wounds and skin sites are best cleansed with soap and water, avoiding irritation of the skin. Exposed mucous membranes should be flushed with water. Alcohol, hydrogen peroxide, Betadine or other chemical cleansers are best avoided. HCWs should be trained to avoid “milking” or squeezing out needlestick injuries or wounds. Squeezing the wound may promote hyperemia and inflammation at the wound site, potentially increasing systemic exposure to HIV if present in the contaminating fluid.

B. Evaluating the Exposure

**RECOMMENDATIONS:**

Prompt initiation of PEP is recommended for exposure to blood, visibly bloody fluids, or other potentially infectious material (semen; vaginal secretions; breast milk; and cerebrospinal, synovial, pleural, peritoneal, pericardial, and amniotic fluids) from HIV-infected or HIV-unknown sources in any of the significant exposure situations outlined in Table 2. (AII)

Initiation of PEP should be followed by telephone or in-person consultation with a clinician experienced in HIV PEP. Clinicians who do not have access to experienced HIV clinicians should call the Clinical Education Initiative CEI PEP Line at 1-866-637-2342. When using the PEP Line, providers from New York State should identify themselves as such.

Whenever a worker has been exposed to potentially HIV-infected blood, visibly bloody fluids, or other potentially infectious material through the percutaneous or mucocutaneous routes or through non-intact skin (see Table 2), PEP is indicated. For these exposures, prompt initiation of PEP followed by telephone or in-person consultation with a clinician experienced in HIV PEP is recommended (see Section XII: Resources for Consultation).

<table>
<thead>
<tr>
<th>TABLE 2</th>
<th>EXPOSURES FOR WHICH PEP IS INDICATED</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Break in the skin by a sharp object (including hollow-bore, solid-bore, and cutting needles or broken glassware) that is contaminated with blood, visibly bloody fluid, or other potentially infectious material, or that has been in the source patient’s blood vessel.</td>
<td></td>
</tr>
</tbody>
</table>
• Bite from a patient with visible bleeding in the mouth that causes bleeding in the exposed worker.
• Splash of blood, visibly bloody fluid, or other potentially infectious material to a mucosal surface (mouth, nose, or eyes).
• A non-intact skin (e.g., dermatitis, chapped skin, abrasion, or open wound) exposure to blood, visibly bloody fluid, or other potentially infectious material.

C. HIV Testing of the Source Patient

RECOMMENDATIONS:
If the HIV serostatus of the source patient is unknown, consent for voluntary HIV testing of the source patient should be sought as soon as possible after the exposure. (All) Rapid HIV testing with an FDA-approved fourth-generation antigen/antibody combination assay is strongly recommended for the source patient (see the CDC Recommended Laboratory HIV Testing Algorithm for Serum or Plasma Specimens). Organizations subject to OSHA regulations are required to perform rapid HIV testing rather than standard HIV testing. (AIII)

In New York State, when the source patient has the capacity to consent to HIV testing, informed consent is required; if consent is not obtained, HIV testing cannot be performed. When the source person does not have the capacity to consent, consent may be obtained from a surrogate, or anonymous testing may be done if a surrogate is not immediately available. See Appendix C for information regarding HIV testing when the source patient does not have the capacity to consent. Clinicians should follow individual institutional policies for obtaining consent.

If the source patient consents to HIV testing and the HIV screening test is positive, this preliminary result should be utilized in decision-making regarding PEP for the exposed worker. The preliminary positive result should be provided to the source patient and followed by confirmatory testing as soon as possible.* (AIII)

*When anonymous testing is performed, the results of the test cannot be disclosed to the source person or placed in the source person’s medical record (see Appendix C).

Plasma HIV RNA testing of the source patient is recommended in addition to HIV serologic screening in the following settings; PEP should be continued in these situations until results of the plasma HIV RNA assay are available:
• If the source patient’s HIV screening result is negative but there has been a risk for HIV exposure in the previous 6 weeks (BIII)
• If the source patient’s screening result is positive but the confirmatory antibody differentiation assay is nonreactive or indeterminate (AI)
If the result from testing the source patient is not immediately available or a complete evaluation of the exposure is unable to be made within 2 hours of the exposure, PEP should be initiated while source testing and further evaluation are underway. (AII)

The source patient’s HIV serostatus, HIV exposure history, and other HIV-related information are critical factors to evaluate when considering PEP initiation after occupational exposure.

If the source patient is known to be HIV-infected, information about his/her viral load, ART history, and history of antiretroviral drug resistance should be obtained when possible to assist in the selection of a PEP regimen; however, administration of the first dose of PEP should not be delayed while awaiting this information. See Section VIII: Recommended PEP Regimen.

For source patients of unknown HIV serostatus, rapid HIV testing with an FDA-approved fourth-generation antigen/antibody combination assay is strongly recommended as soon as possible in order to aid in decision-making regarding PEP. Organizations subject to OSHA regulations are required to perform rapid HIV testing rather than standard HIV testing. Results from rapid testing are usually available within 60 minutes. If the test results are not immediately available, the initiation of PEP should not be delayed pending the test result.

Source patients who are in the “window period” prior to seroconversion may not be identified. When the source patient’s screening test result is negative and the clinician has ascertained that the source patient could have been exposed to HIV in the previous 6 weeks or when the source patient’s screening result is positive but the confirmatory assay is nonreactive or indeterminate, then a plasma HIV RNA assay should be obtained to determine the source patient’s HIV status. In these situations, PEP should be initiated and continued until results of the plasma HIV RNA assay are available.

For information regarding interpretation of HIV tests, see the CDC Recommended Laboratory HIV Testing Algorithm for Serum or Plasma Specimens.

D. Recording Information Following Occupational Exposure

RECOMMENDATIONS:
When an occupational exposure occurs, the following information should be recorded in the exposed worker’s confidential medical record (AIII):

- date and time of the exposure
- details of the procedure being performed and the use of protective equipment at the time of the exposure
- the type, severity, and amount of fluid to which the worker was exposed
- details about the source patient
- whether consent was obtained for HIV testing of the source patient
- medical documentation that provides details about post-exposure management

If the exposed worker declines PEP, this decision should be documented in the worker’s medical record.
Specific OSHA requirements regarding documentation may be found at Safety and Health Topics: Bloodborne Pathogens and Needlestick Prevention.

VI. BASELINE TESTING FOR THE EXPOSED WORKER

RECOMMENDATIONS:
Confidential baseline HIV testing* of the exposed worker should be obtained at the time the occupational exposure is reported or within 3 days of the exposure. (AIII) Testing must be performed in full compliance with New York State Public Health Law.  
*A fourth-generation antigen/antibody combination assay is recommended (see the CDC Recommended Laboratory HIV Testing Algorithm for Serum or Plasma Specimens).

PEP should be started without waiting for the results of the HIV test. (AII)

Exposed workers should be counseled that it is in their best interest to receive a baseline HIV test to document their HIV status at the time of the exposure. In the rare event of seroconversion following an occupational exposure, a negative baseline test is the only way to show that the worker was infected as a result of the exposure.

Key Point:
A negative HIV test only demonstrates that the exposed worker was not previously infected with HIV before the exposure occurred; the baseline HIV test cannot determine whether the exposed worker was infected as a result of the exposure.

Baseline HIV testing of the exposed worker is also used to identify individuals who were already infected with HIV at the time of the exposure. This allows decisions to be made regarding the continuation of ART (see Antiretroviral Therapy, Section III: When to Initiate ART in Patients With Chronic Infection). However, the PEP regimen should not be discontinued until the positive result is repeated with a confirmatory assay.

PEP should be initiated without waiting for the results of the HIV test.

VII. TIMING OF INITIATION OF PEP

RECOMMENDATIONS:
When a potential occupational exposure to HIV occurs, every effort should be made to initiate PEP as soon as possible, ideally within 2 hours. (AII) A first dose of PEP should be offered to the exposed worker while the evaluation is underway.
Decisions regarding initiation of PEP beyond 36 hours post exposure should be made on a case-by-case basis with the understanding of diminished efficacy when timing of initiation is prolonged. (AIII)

Data from animal models of PEP have shown that effective antiretroviral treatment is most likely to prevent infection when initiated within 24 to 36 hours of exposure.\textsuperscript{14-19} HIV virions can traverse epithelial barriers in just hours, and many antiretroviral drugs require an intracellular activation step that delays the onset of antiviral activity. Therefore, every effort should be made to initiate PEP as soon as possible and ideally within 2 hours. An absolute elapsed time after which PEP should not be administered cannot be stated with certainty.

Prompt initiation of PEP followed by telephone or in-person consultation with an experienced HIV provider or occupational health clinician experienced in providing PEP is recommended. Expert advice may be obtained from the Clinical Education Initiative CEI PEP Line at 1-866637-2342. When using the PEP Line, providers from New York State should identify themselves as such.

VIII. RECOMMENDED PEP REGIMEN

RECOMMENDATIONS:
The preferred PEP regimen is tenofovir + emtricitabine* plus either raltegravir or dolutegravir (see Table 3 for dosing and Appendix A for description of each drug). Zidovudine is no longer recommended in the preferred PEP regimen. The first dose should be given as soon as possible after exposure, ideally within 2 hours. The recommended duration of PEP is 28 days. *Lamivudine may be substituted for emtricitabine.

If the source patient is known to be HIV-infected and information is immediately available regarding past and present ART experience, current level of viral suppression, or resistance profile, the treating clinician, in consultation with a clinician experienced in managing PEP, should individualize the PEP regimen to maximize potential effectiveness against the exposed HIV strain. (AII) Initiation of the first dose and continuation of PEP should never be delayed while awaiting this information. (AII) If indicated, the regimen can be changed when more information becomes available.

Table 4 and Table 5 list recommended alternative PEP regimens that should be used in the setting of potential HIV resistance, toxicity risks, clinician preference, or constraints on the availability of particular agents. (AII)

Clinicians should switch exposed workers to an alternative regimen if the initial or subsequent PEP regimen is not well tolerated (see Appendix A for potential adverse events).

Treating clinicians should consult with a clinician experienced in managing PEP when alternative agents are prescribed or if there is doubt as to whether PEP should be continued after the first dose.
The prescribing clinician should ensure that the exposed worker has access to the full 28-day recommended course of antiretroviral medications (AIII) and is appropriately monitored for toxicities during the treatment (see Section IV: Responsibilities of Employers and Section IX: Follow-Up and Monitoring of the Exposed Worker Following Occupational Exposure).

Treating clinicians who do not have access to experienced HIV clinicians should call the Clinical Education Initiative CEI PEP Line at 1-866-637-2342. When using the PEP Line, providers from New York State should identify themselves as such.

**TABLE 3**

**RECOMMENDED REGIMEN FOR HIV PEP FOLLOWING OCCUPATIONAL EXPOSURE**

<table>
<thead>
<tr>
<th>Regimen</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenofovir[^b] 300 mg PO daily + Emtricitabine[^b,c] 200 mg PO daily</td>
<td></td>
</tr>
<tr>
<td>Plus</td>
<td></td>
</tr>
<tr>
<td>Raltegravir[^d] 400 mg PO twice daily or Dolutegravir[^d] 50 mg PO daily</td>
<td></td>
</tr>
</tbody>
</table>

[^a]: When the source is known to be HIV-infected, past and current ART experience, viral load data, and genotypic or phenotypic resistance data (if available) may indicate the use of an alternative PEP regimen. Consult with a clinician experienced in managing PEP. See Tables 4 and 5.  
[^b]: The dosing of tenofovir and emtricitabine/lamivudine should be adjusted in patients with baseline creatinine clearance <50 mL/min (see Appendix A for dosing recommendations). Tenofovir should be used with caution in exposed workers with renal insufficiency or who are taking concomitant nephrotoxic medications. Fixed-dose combinations should not be used in patients who need dose adjustment due to renal failure.  
[^c]: Lamivudine 300 mg PO daily may be substituted for emtricitabine. However, a fixed-dose combination is available when tenofovir is used with emtricitabine (Truvada 1 PO daily).  
[^d]: See Appendix A for drug-drug interactions, dosing adjustments, and contraindications associated with raltegravir and dolutegravir.

**A. Duration of PEP Regimen**

**RECOMMENDATIONS:**

When the source patient is confirmed to be HIV-negative, clinicians should discontinue the PEP regimen before completion (see Section V. C: HIV Testing of the Source Patient).

If the exposed worker’s baseline test shows evidence of HIV infection acquired before the exposure and initiation of PEP, decisions regarding continuation of ART should be based on current treatment guidelines (see Antiretroviral Therapy). However, the PEP regimen should not be discontinued until the positive result is repeated with a confirmatory assay.

If the exposed worker’s week 4 post-exposure HIV test results are indeterminate or the exposed worker has symptoms suggestive of acute HIV infection, clinicians should continue ART beyond 28 days until a definitive diagnosis is established.
The recommended 28-day treatment duration is based on limited animal data and expert opinion.\textsuperscript{19} When the source patient is confirmed to be HIV-negative, the PEP regimen should be discontinued before completion (see Section V. C: \textit{HIV Testing of the Source Patient}).

If at any time acute HIV infection is suspected, consultation with a clinician experienced in managing acute HIV infection should occur immediately (also see \textit{Diagnosis and Management of Acute HIV Infection}). Clinicians who do not have access to experienced HIV clinicians should call the Clinical Education Initiative CEI PEP Line at 1-866-637-2342. When using the PEP Line, providers from New York State should identify themselves as such.

\section*{B. Rationale for Recommended PEP Regimen}

This Committee now recommends tenofovir plus emtricitabine\textsuperscript{*} and either raltegravir or dolutegravir as the preferred initial PEP regimen because of its excellent tolerability, proven potency in established HIV infection, and ease of administration. \textsuperscript{*}Lamivudine may be substituted for emtricitabine.

The recommended regimen has a favorable side effect profile, fewer potential drug-drug interactions, and an expected efficacy similar to PEP regimens containing zidovudine or protease inhibitors. Studies have shown increased rates of adherence and regimen completion when tenofovir + either emtricitabine or lamivudine have been used as components of the PEP regimen.\textsuperscript{20,21} Limited data show similar improved tolerability with tenofovir + emtricitabine plus raltegravir.\textsuperscript{22,23} Additionally, tenofovir + emtricitabine has been highly successful in recent studies of pre-exposure prophylaxis.\textsuperscript{24-26}

This Committee no longer recommends that zidovudine must be included in PEP regimens because it is believed to have no clear advantage in expected efficacy over tenofovir while having significantly higher rates of treatment-limiting side effects. As experience with PEP continues to accumulate, it has become increasingly clear that tolerability is one of the most important factors in selecting a PEP regimen, especially when the source patient is not available for testing and the patient will need to complete the full 28-day course.

Unlike protease inhibitors, which block HIV replication in steps after integration with cellular DNA, all drugs in the recommended regimen (tenofovir, emtricitabine, and either raltegravir or dolutegravir) act before viral integration with cellular DNA, providing a theoretical advantage in preventing establishment of HIV infection.

\section*{C. Use of a Three-Drug PEP Regimen}

Once a decision has been made that a significant risk exposure (see Section V. B: \textit{Evaluating the Exposure}) has occurred and that PEP is warranted, this Committee recommends a three-drug regimen as the preferred option.

\section*{D. Preferred Alternative PEP Regimens}
RECOMMENDATIONS:
The preferred alternative PEP regimen is tenofovir + emtricitabine* plus ritonavir-boosted darunavir, atazanavir, or fosamprenavir (see Table 4). *Lamivudine may be substituted for emtricitabine.

Clinicians should carefully assess for potential drug interactions between these agents and other medications (including prescription medications and over-the-counter drugs, such as proton pump inhibitors and H2-blockers) that the patient may be taking. See Appendix A for information regarding dosing, adverse effects, and drug interactions.

Clinicians should consult a clinician experienced in managing PEP or an occupational health clinician experienced in providing PEP when using alternative PEP regimens (AII). If consultation cannot be immediately obtained, the first dose of the regimen should be given rather than delaying initiation, with consultation occurring as soon as possible thereafter (AII). Clinicians who do not have access to experienced HIV clinicians should call the Clinical Education Initiative CEI PEP Line at 1-866-637-2342. When using the PEP Line, providers from New York State should identify themselves as such.

The alternative regimens in Table 4 are expected to be less well tolerated than the preferred regimen of tenofovir + emtricitabine plus either raltegravir or dolutegravir, but significantly better tolerated than regimens containing zidovudine or lopinavir/ritonavir. Efficacy of the preferred alternative regimens is expected to be equivalent to other alternative regimens (Section E: Other Alternative PEP Regimens), unless the source patient’s HIV strain is resistant to one or more of the agents.

<table>
<thead>
<tr>
<th>TABLE 4</th>
<th>PREFERRED ALTERNATIVE PEP REGIMENS FOLLOWING OCCUPATIONAL EXPOSURE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tenofovir<em>a 300 mg PO daily + Emtricitabine</em>a,b 200 mg PO daily</td>
</tr>
<tr>
<td></td>
<td>Plus</td>
</tr>
<tr>
<td></td>
<td>Darunavir 800 mg PO daily,c or Atazanavir 300 mg PO daily,c or Fosamprenavir 1400 mg PO daily,c</td>
</tr>
<tr>
<td></td>
<td>and</td>
</tr>
<tr>
<td></td>
<td>Ritonavir 100 mg PO daily*c</td>
</tr>
<tr>
<td>a</td>
<td>The dosing of lamivudine/emtricitabine, and tenofovir should be adjusted in patients with baseline creatinine clearance &lt;50 mL/min (see Appendix A for dosing recommendations). Tenofovir should be used with caution in exposed workers with renal insufficiency or who are taking concomitant nephrotoxic medications. Fixed-dose combinations should not be used in patients who need dose adjustment due to renal failure.</td>
</tr>
<tr>
<td>b</td>
<td>Lamivudine 300 mg PO daily may be substituted for emtricitabine. However, a fixed-dose combination is available when tenofovir is used with emtricitabine (Truvada 1 PO daily).</td>
</tr>
<tr>
<td>c</td>
<td>See Appendix A for dosing recommendations for protease inhibitors in exposed workers with hepatic impairment.</td>
</tr>
</tbody>
</table>
Potential for drug interactions in patients receiving protease inhibitors is increased due to the extensive cytochrome P450 interactions. For example, proton pump inhibitors may adversely affect the absorption of atazanavir. Clinicians should assess for potential interactions before prescribing a PEP regimen.

The following online resources provide information about antiretroviral drug interactions:

- Department of Health and Human Services *Guidelines for the Use of Antiretroviral Agents in HIV-1-Infected Adults and Adolescents*, available at: www.aidsinfo.nih.gov
- Johns Hopkins POC-IT Center, available at: www.hopkinsmedicine.org/poc-it
- University of Liverpool drug interactions site, available at: www.hiv-druginteractions.org
- Epocrates medical software, available at: www.epocrates.com

E. Other Alternative PEP Regimens

Other alternative PEP regimens are listed in Table 5 and may be acceptable in certain situations.

Some clinicians continue to favor use of zidovudine in PEP regimens based on the results of a retrospective study supporting the efficacy of the agent and from long-term experience in occupational PEP. Clinicians continuing to prescribe zidovudine in this setting should recognize and inform patients that the drug has significant side effects and that better-tolerated agents are available (see Appendix A for side effects associated with alternative PEP agents).

Some clinicians may favor use of lopinavir/ritonavir due to long-term experience in occupational PEP. It should be recognized that this agent has greater potential for drug interactions and side effects than raltegravir, dolutegravir, or the preferred protease inhibitors (darunavir, atazanavir, or fosamprenavir; with each protease inhibitor taken with ritonavir 100 mg daily), with little added efficacy benefit expected. Recent studies have demonstrated decreasing protease inhibitor resistance among HIV strains, suggesting that there may be diminishing benefit to choosing lopinavir/ritonavir for its activity against resistant HIV strains. The other recommended ritonavir-boosted protease inhibitor regimens listed in Table 4 also have excellent activity against protease inhibitor-resistant strains and are better tolerated than lopinavir/ritonavir.

| TABLE 5 |
| ALTERNATIVE PEP REGIMENS FOLLOWING OCCUPATIONAL EXPOSURE* |
• Tenofovir + Emtricitabine $^b$ + Zidovudine  
• Tenofovir + Emtricitabine $^b$ + Lopinavir/ritonavir  
• Zidovudine + Lamivudine$^c$ + one of the following ritonavir-boosted protease inhibitors: Darunavir, Atazanavir, Fosamprenavir, or Lopinavir  

$^a$ See Appendix A for full dosing information for alternative ARV agents that may be used in the PEP regimen. Also see HIV Drug-Drug Interactions for important drug interactions. Dosing interval of zidovudine should be adjusted in patients with baseline creatinine clearance <15 mL/min. The dosing interval of lamivudine, emtricitabine, and tenofovir should be adjusted in patients with baseline creatinine clearance <50 mL/min (see Appendix A for dosing recommendations in patients with renal impairment). Fixed-dose combinations should not be used in patients who need dose adjustment due to renal failure.

$^b$ Lamivudine 300 mg PO daily may be substituted for emtricitabine. However, a fixed-dose combination is available when tenofovir is used with emtricitabine (Truvada 1 PO daily). Emtricitabine 200 mg PO daily may be substituted for lamivudine. However, a fixed-dose combination is available when zidovudine is used with lamivudine (Combivir 1 PO twice daily).

Although this Committee recommends a three-drug regimen, the PEP regimen could be reduced to a two-drug regimen if tolerability was a concern. Use of a two-drug regimen would be preferred to discontinuing the regimen completely. An early case control study of occupational exposure demonstrated an 81% reduction in seroconversion with the use of zidovudine monotherapy alone, suggesting that treatment with any active antiretroviral agent is beneficial in reducing risk.

**F. Antiretroviral Drugs to Avoid as PEP Components**

Consultation with a clinician experienced in managing PEP is recommended before using any of the following non-preferred antiretroviral drugs in a PEP regimen (see Section X: PEP for Exposed Workers Who Are Pregnant or Breastfeeding for drugs to avoid in exposed workers who are pregnant or breastfeeding):

- **Efavirenz**: Although efavirenz is considered a preferred agent for treatment of chronic HIV infection, it is not recommended as part of an initial PEP regimen for several reasons: 1) central nervous system (CNS) side effects are common, complicating the need to provide a first dose at any time of the day; 2) CNS side effects may impair work after the initial and subsequent doses; 3) efavirenz should be avoided in pregnant women, women intending to become pregnant, or women of childbearing potential who are not using effective contraception; and 4) substantial efavirenz resistance continues to be found in community HIV isolates. If efavirenz is used in women of childbearing potential, a pregnancy test should be obtained before initiation and the woman should be counseled about the use of effective contraception while taking efavirenz.

- **Nevirapine** is contraindicated for use in PEP due to the potential for severe hepatotoxicity.

- **Abacavir** should not be used due to the potential for hypersensitivity reactions

- **Stavudine** and Didanosine should not be used due to the possibility of toxicities

- **Nelfinavir** and **Indinavir** are generally poorly tolerated.
• *CCR5 co-receptor antagonists* should not be used due to lack of activity against potential CXCR4 tropic virus
• *Rilpivirine* and *Etravirine* have not been commonly used in PEP

**IX. FOLLOW-UP AND MONITORING OF THE EXPOSED WORKER FOLLOWING OCCUPATIONAL EXPOSURE**

**RECOMMENDATIONS:**
All exposed workers receiving PEP should be re-evaluated within 3 days of the exposure. (AIII) This allows for further clarification of the nature of the exposure, review of available source patient data, and evaluation of adherence to and toxicities associated with the PEP regimen.

The exposed worker should be evaluated weekly while receiving PEP to assess treatment adherence, side effects of treatment, interval physical complaints, and emotional status. (AIII) Longitudinal care of the exposed worker during PEP treatment and the follow-up period should be provided by an occupational health provider familiar with PEP or directly by or in consultation with a clinician experienced in managing PEP. Providers who do not have access to a clinician experienced in PEP should use the Clinical Education Initiative CEI PEP Line at 1-866-637-2342 for phone consultation. When using the PEP Line, providers from New York State should identify themselves as such.

Clinicians should provide risk-reduction counseling to HIV-exposed workers to prevent secondary transmission during the 12-week follow-up period. HIV-exposed workers should be advised to:
• use condoms to prevent potential sexual transmission
• avoid pregnancy and breastfeeding
• avoid needle-sharing
• refrain from donating blood, plasma, organs, tissue, or semen

During the PEP treatment period, other blood tests may be indicated to monitor for side effects of treatment. The timing and specific testing indicated varies based on the PEP regimen used (see Table 6).

<table>
<thead>
<tr>
<th>TABLE 6</th>
<th>MONITORING RECOMMENDATIONS AFTER INITIATION OF PEP REGIMENS FOLLOWING OCCUPATIONAL EXPOSURE&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>Week 1</td>
</tr>
</tbody>
</table>

<sup>a</sup> Timing and specific testing indicated varies based on the PEP regimen used.
Post-exposure care involves simultaneous attention to multiple issues: the emotional state of the exposed worker, adherence to the PEP regimen, monitoring for potential adverse effects, and sequential HIV testing to exclude acquisition of infection. Clinicians should be aware of the resources within the community that offer medical and counseling services needed following occupational exposure.

**A. Adherence to the PEP Regimen**

Follow-up care is necessary for patients receiving PEP to monitor for adverse effects of the PEP regimen and to maximize adherence to the prescribed regimen. Adherence to a 28-day PEP regimen has historically been modest (40-60%), although newer studies using tenofovir + either lamivudine or emtricitabine as components for PEP regimens show increased rates of adherence. Limited data show similar improved tolerability with tenofovir + emtricitabine plus raltegravir.

If the recommended regimen is not well tolerated, an early switch to an alternative regimen is encouraged to improve adherence. Consultation with a clinician experienced in managing PEP should occur when switching to an alternative regimen due to tolerability or resistance.

**B. Sequential HIV Testing**

**RECOMMENDATIONS:**
Sequential confidential HIV testing should be obtained at baseline, week 4, and week 12 post-exposure:
• HIV testing at 6 months post-exposure is no longer recommended
• HIV testing of the exposed worker at 4 weeks and 12 weeks should be performed with laboratory-based fourth-generation antigen/antibody combination HIV tests rather than point-of-care HIV tests
• If the post-exposure evaluation determined that PEP was indicated, but the exposed worker declines PEP, serial testing should still be obtained (see Table 6) If at any time the HIV test result is positive, a confirmatory assay must be performed to confirm the diagnosis of HIV infection.

If the exposed worker presents with signs or symptoms of acute HIV seroconversion, an HIV serologic screening test should be used in conjunction with a plasma HIV RNA assay (All) to diagnose acute HIV infection. A fourth-generation HIV antigen/antibody combination test is the recommended serologic screening test (see the CDC Recommended Laboratory HIV Testing Algorithm for Serum or Plasma Specimens). Immediate consultation with a clinician experienced in managing ART should be sought for optimal treatment options.

When workers are potentially exposed to HIV, longitudinal medical follow-up is necessary regardless of whether PEP is initiated or completed, in order to test sequentially for HIV infection.

HIV seroconversion will generally occur within 2 to 4 weeks if chronic HIV infection develops after an exposure. HIV testing at baseline, 4 weeks, and 12 weeks is recommended after significant exposures, regardless of whether the worker accepts or declines PEP treatment. Point-of-care HIV tests are slightly less sensitive than laboratory-based HIV tests; therefore, exposed workers should be tested with laboratory-based HIV tests whenever possible.

HIV testing at 6 months after exposure is no longer recommended. Late seroconversion (i.e., after 3 months) has been rarely reported and has not been described since 1990. It is unclear if these rare events were related to the original or subsequent exposures. Taking into consideration the infrequency of this occurrence, the increased sensitivity of standard HIV tests to detect early infection and seroconversion, and the added anxiety and significant consequences of an additional 3 months of precautions and testing for exposed workers, this Committee believes that the benefit of routinely testing all workers for HIV at 6 months is outweighed by the negative consequences of routinely extending post-exposure HIV follow-up testing to 6 months.

Patients acutely infected with HIV will often experience at least some symptoms of the acute retroviral syndrome. Fever and flu- or mono-like symptoms are common in acute HIV infection but are nonspecific. Rash, mucocutaneous ulcers, oropharyngeal candidiasis, and meningismus are more specific. Symptoms may also include fatigue or malaise, joint pain, headache, loss of appetite, night sweats, myalgias, lymphadenopathy, oral and/or genital ulcers, nausea or diarrhea, or pharyngitis. Acute HIV infection is often not recognized in the primary care setting because of the similarity of the symptom complex with that of the flu or other common illnesses. When infection occurs and a third-generation ELISA antibody test is used, it will generally be positive within 3 weeks of the onset of symptoms and is virtually always positive within 3 months.
following exposure. However, the CDC now recommends fourth-generation antibody/antigen combination immunoassays for initial HIV screening. These tests can simultaneously detect both HIV-1/HIV-2 antibodies and HIV-1 p24 antigens and will generally be positive within 14-15 days of infection. Western blot, which may yield an indeterminate result during the early stages of seroconversion, is no longer recommended as the confirmatory test. Instead, HIV screening should be confirmed with an FDA-approved HIV-1/HIV-2 antibody-differentiation assay. When acute HIV infection is suspected based on the clinical scenario or when there is a discrepancy between screening and confirmatory serologic testing, plasma HIV RNA assay should be obtained to diagnose HIV infection. (AII) For information regarding interpretation of HIV tests, see the **CDC Recommended Laboratory HIV Testing Algorithm for Serum or Plasma Specimens**.

See the following resources for more information:

- Characteristics of FDA-Approved Rapid HIV Tests for further information on available rapid HIV tests
- Diagnosis and Management of Acute HIV Infection for further information on management of acute HIV infection
- AIDS Institute’s Voluntary HIV Provider Directory for referral for continued HIV care

X. PEP FOR EXPOSED WORKERS WHO ARE PREGNANT OR BREASTFEEDING

A. Exposed Workers Who Are Pregnant

**RECOMMENDATIONS:**

Based on increasing clinical experience with ART, PEP is indicated at any time during pregnancy when a significant exposure has occurred, despite possible risk to the woman and the fetus. (AII) Expert consultation should be sought. When occupational exposure to HIV occurs, every effort should be made to initiate PEP within 2 hours. (AII) The recommended PEP regimen is the same for pregnant women as for non-pregnant adults (see Section VIII: Recommended PEP Regimen). (AII)

Before administering PEP to a pregnant woman, the clinician should discuss the potential benefits and risks to her and to the fetus.

The agents listed in Table 7 are all non-preferred agents for use in PEP regimens and are not likely to be used; however, clinicians should be aware that these agents should *not* be prescribed in exposed workers who are pregnant. Initiation of PEP at any time during pregnancy requires a careful discussion of the risks and benefits.

<table>
<thead>
<tr>
<th>TABLE 7</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PEP DRUGS TO AVOID DURING PREGNANCY</strong></td>
</tr>
</tbody>
</table>

10/14 New York State Department of Health AIDS Institute: www.hivguidelines.org 22
<table>
<thead>
<tr>
<th>Drug(s) to Avoid</th>
<th>Toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efavirenz</td>
<td>Teratogenicity</td>
</tr>
<tr>
<td>Combination of stavudine and didanosine</td>
<td>Mitochondrial toxicity</td>
</tr>
<tr>
<td>Nevirapine</td>
<td>Hepatotoxicity</td>
</tr>
<tr>
<td>Unboosted indinavir in the 2nd or 3rd trimester</td>
<td>Substantially lower antepartum indinavir plasma concentrations; risk for nephrolithiasis</td>
</tr>
</tbody>
</table>

**Key Point:**
In addition to the risk of seroconversion for the exposed worker, the high viral load levels associated with the acute retroviral syndrome markedly increase the risk of transmission to the fetus or breastfeeding infant.  

Although birth defects and adverse effects on human fetuses have generally not been associated with the antiretroviral agents that are currently available, exposure of a fetus to antiretroviral agents during pregnancy carries a theoretical risk of teratogenicity.

For additional information, refer to NYSDOH guidelines on *Use of ART in HIV-Infected Pregnant Women.*

**B. Exposed Workers Who Are Breastfeeding**

**RECOMMENDATION:**
Clinicians should advise women who may have been exposed to HIV through occupational exposure to avoid breastfeeding for 3 months after the exposure. (AII) If HIV infection is definitively excluded in the source patient at any time prior to 3 months post-exposure, the woman may resume breastfeeding.

Initiation of PEP in exposed workers who are breastfeeding requires careful discussion. Both HIV and antiretroviral drugs may be found in breast milk; therefore, breastfeeding should be avoided for 3 months after the exposure to prevent HIV transmission and potential drug toxicities. Clinicians should discuss the risks and benefits with the exposed worker. The infant’s pediatrician should be informed of any potential exposure to HIV or antiretroviral medications.

**XI. OCCUPATIONAL EXPOSURES TO HEPATITIS B AND C**
RECOMMENDATION:
When an occupational exposure occurs, the source patient should be evaluated for both hepatitis B and hepatitis C. (AII)

The risk of transmission of hepatitis B virus (HBV) and hepatitis C virus (HCV) from an occupational exposure is significantly greater than the risk of HIV transmission. The risk of HCV infection following a needlestick is 1.8%, whereas the risk of HBV infection ranges from 1% to 30% depending on the presence of hepatitis e antigen (see Table 8). The risk of transmission of HCV from a single mucous membrane exposure is negligible.

<table>
<thead>
<tr>
<th>Source</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>HBV</td>
<td></td>
</tr>
<tr>
<td>HBeAg+</td>
<td>22.0% – 30.0%</td>
</tr>
<tr>
<td>HBeAg-</td>
<td>1.0% – 6.0%</td>
</tr>
<tr>
<td>HCV +</td>
<td>1.8%</td>
</tr>
<tr>
<td>HIV +</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

A. Hepatitis B Virus Post-Exposure Management

RECOMMENDATIONS:
The hepatitis B vaccine series should be initiated in non-HBV-immune exposed workers who sustain a blood or body fluid exposure. (AI)

Determination of antibody response of previously vaccinated exposed workers should be based on information available at presentation. Decision-making should not be delayed while testing for anti-HBs (see Table 9).

Administration of prophylactic hepatitis B immune globulin (HBIG) and the initiation of the hepatitis B vaccine series injected at different sites is recommended when the nonHBV-immune exposed worker sustains a blood or body fluid exposure to a source patient with known acute or active HBV (see Table 9). (AI) Both HBIG and the first dose of the hepatitis B vaccine series should be ideally administered within 24 hours of exposure (AII); HBIG should not be given later than 14 days post-exposure. The three-dose HBV vaccine series is
given at 0, 1 to 2 months, and 6 months. Hepatitis B antibodies should be obtained 1 to 2 months after completion of the third dose of the vaccine.

Needlestick injuries and wounds should be washed with soap and water and should not be squeezed. Mucous membranes should be flushed with water. (AII)

Initiation of the HBV vaccine series within 12 to 24 hours of an exposure has been demonstrated to be 70% to 90% effective in preventing HBV infection. The combination of vaccine and HBIG achieves a similar level of efficacy. Among known non-responders to vaccination, one dose of HBIG is 70% to 90% effective in preventing HBV when administered within 7 days of percutaneous HBV exposure, and multiple doses have been shown to be 75% to 95% effective. Pregnant women can safely receive both the HBV vaccination and HBIG.

When considering PEP for HBV exposures, both the source patient’s HBsAg status and the exposed worker’s vaccination status should be considered (see Table 9). Determination of antibody response of previously vaccinated exposed workers should be based on information available at presentation. It is not recommended that decision-making be delayed while testing for anti-HBs. If antibody response is unknown, follow recommendations for “antibody response unknown” in Table 9.

Both HBIG and the first dose of the hepatitis B vaccine should be ideally administered within 24 hours of exposure; HBIG should not be given later than 14 days post-exposure. The three-dose HBV vaccine series is given at 0, 1 to 2 months, and 6 months. Hepatitis B antibodies should be obtained 1 to 2 months after completion of the third dose of the vaccine.

Even if the risk of exposure to HBV is not deemed significant, HBV vaccination should still be advised for all non-HBV-immune exposed workers (see Hepatitis B Virus guidelines for more information). Household, sex, and needle-sharing contacts of HBsAg-positive individuals should be identified and vaccinated according to the guidelines for patients exposed to known HBsAg-positive individuals.
### Table 9

**Recommended Post-Exposure Prophylaxis for Hepatitis B Virus**

<table>
<thead>
<tr>
<th>Vaccination and/or antibody response status of exposed person&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Treatment when source patient is:</th>
</tr>
</thead>
<tbody>
<tr>
<td>HBsAg positive</td>
<td>HBsAg negative</td>
</tr>
<tr>
<td>Unvaccinated/ non-immune</td>
<td>HBIG&lt;sup&gt;b&lt;/sup&gt; ×1; initiate HBV vaccine series</td>
</tr>
<tr>
<td>Previously vaccinated,&lt;sup&gt;c&lt;/sup&gt; known responder&lt;sup&gt;d&lt;/sup&gt;</td>
<td>No treatment</td>
</tr>
<tr>
<td>Previously vaccinated,&lt;sup&gt;c&lt;/sup&gt; known non-responder&lt;sup&gt;d&lt;/sup&gt;</td>
<td>HBIG&lt;sup&gt;b&lt;/sup&gt; ×1 and initiate revaccination&lt;sup&gt;e&lt;/sup&gt; or HBIG&lt;sup&gt;b&lt;/sup&gt; ×2</td>
</tr>
<tr>
<td>Previously vaccinated,&lt;sup&gt;c&lt;/sup&gt; antibody response unknown</td>
<td>Single vaccine booster dose</td>
</tr>
<tr>
<td>If still undergoing vaccination</td>
<td>HBIG&lt;sup&gt;b&lt;/sup&gt; ×1; complete series</td>
</tr>
</tbody>
</table>

<sup>a</sup>Persons who have previously been infected with HBV are immune to re-infection and do not require PEP.  
<sup>b</sup>Dose 0.06 mL/kg intramuscularly.  
<sup>c</sup>Vaccinated with full three-dose series.  
<sup>d</sup>Based on information available at presentation. Responder is defined as person with previously documented adequate levels of serum antibody to HBsAg (serum anti-HBs ≥10mIU/mL); non-responder is a person with previously documented inadequate response to vaccination (serum anti HBs <10mIU/mL). It is not recommended that decision-making be delayed while testing for anti-HBs at presentation.  
<sup>e</sup>The option of giving one dose of HBIG and re-initiating the vaccine series is preferred for non-responders who have not completed a second three-dose vaccine series. For persons who previously completed a second vaccine series but failed to respond, two doses of HBIG are preferred.  
<sup>f</sup>High-risk is defined as sources who engage in needle-sharing or high-risk sexual behaviors, and those born in geographic areas with HBsAg prevalence of ≥2%.<sup>37</sup>

### B. Hepatitis C Virus Post-Exposure Management

**RECOMMENDATIONS:**
Clinicians should consider concurrent exposure to HCV when exposed workers present with an HIV exposure. (AII)

Neither immunoglobulin nor antiviral agents are recommended for HCV PEP.

When HCV infection is identified, the exposed worker should be referred for medical management to a clinician with experience in treating HCV. (AII)

Currently, no effective prophylaxis for HCV has been identified. Immunoglobulin and antiviral agents are not recommended for HCV PEP. However, if an individual becomes acutely infected with HCV and is diagnosed at that time, immediate referral to a specialist experienced in the treatment of HCV is strongly recommended. Data suggest that early treatment of acute HCV with interferon for 24 weeks is highly effective, perhaps as high as 98%. However, the best regimen or duration of therapy is unknown, and no data currently exist for treating acute infection with newer direct-acting HCV antiviral therapy.

Whether standard interferon, pegylated-interferon with or without ribavirin, or treatment with direct-acting antiviral agents is used will depend on the individual scenario, as there have been no randomized, controlled trials to guide this decision.

1. Baseline Management

Recommendations:
Following an exposure to blood or body fluid, the clinician should assess the risk for exposure to HCV. (AII) Wounds should be washed with soap and water, and should not be squeezed. (AII) Mucous membranes should be flushed with water.

Once the clinician has determined that exposure to blood or body fluid has occurred, the following baseline tests should be obtained (see Table 10 for follow-up according to baseline results):

Source Patient:
- HCV antibody test (e.g., EIA/ELISA) and, if positive, HCV RNA test

Exposed Worker:
- Liver panel including liver enzymes
- HCV antibody and, if positive, HCV RNA test

If the source patient is tested with an EIA/ELISA and found to be positive, then follow-up testing is necessary to confirm the source patient’s status. HCV RNA may be used as the confirmatory test. When the source patient tests positive with the HCV RNA test, the exposed worker should be managed as though the source has chronic HCV.


<table>
<thead>
<tr>
<th>Clinical Scenario</th>
<th>Follow-Up&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source patient is HCV-antibody negative</td>
<td>No further testing or follow-up is necessary for source patient or the exposed worker&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Source patient is unavailable or refuses testing</td>
<td>Exposed worker: Follow-up HCV antibody at 3 and 6 months&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Source patient is HCV-antibody positive and HCV RNA negative</td>
<td>Manage the exposed worker as if the source patient has chronic hepatitis C (see Section XI. B. 2: Post-Exposure Follow-Up for HCV)&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>Source patient is positive for both HCV antibody and HCV RNA and Exposed worker is HCV-antibody negative</td>
<td>Source patient: Counsel and manage as chronic hepatitis C regardless of status of exposed worker; Exposed worker: Follow up as outlined in Section XI. B. 2: Post-Exposure Follow-Up for HCV</td>
</tr>
<tr>
<td>Exposed worker tests positive for both HCV antibody and HCV RNA</td>
<td>Counsel and manage as chronic hepatitis C</td>
</tr>
</tbody>
</table>

<sup>a</sup> Refer to Appendix E for information about HCV tests and how to interpret results.

<sup>b</sup> If at any time the serum ALT level is elevated in the exposed worker, the clinician should test for HCV RNA to assess for acute HCV infection. A single negative HCV RNA result does not exclude active infection.

Clinicians should educate exposed workers about the natural history of HCV infection and should counsel exposed workers about the following:

- **Avoidance of alcohol and, if possible, medications that may be toxic to the liver**
- **Risk of transmission related to:**
  - Blood-to-blood contact, including sharing personal care items that may have come in contact with another person’s blood, such as razors or toothbrushes; occupational needlestick injuries; and sharing needles, syringes, or other equipment to inject drugs
  - Sexual activity
  - Donating blood, plasma, organs, tissue, or semen
- **HCV is not spread via food or water and is not transmitted by:**
  - Sharing eating utensils
  - Hugging, kissing, or holding hands
  - Coughing or sneezing
  - Breastfeeding: HCV is not transmitted by breastfeeding; however, clinicians should advise women who may have been exposed to HIV to avoid breastfeeding<sup>34</sup> for 3 months after the exposure
Factors that may increase the risk of sexual transmission include sex with multiple partners, history of STIs, including HIV, or any other practice that might disrupt mucous membranes. The potential need for mental health counseling should be anticipated and offered as needed.

2. Post-Exposure Follow-Up for HCV

RECOMMENDATIONS:
If the source patient is known to be positive for HCV antibody and/or HCV RNA, the follow-up schedule for the exposed worker should be as follows (AII):

- Week 4: HCV RNA and liver panel
- Week 12: HCV RNA and liver panel
- Week 24: Liver panel and HCV antibody

If at any time the serum ALT level is elevated, the clinician should repeat HCV RNA testing to confirm acute HCV infection. (AIII)

At any time that exposed workers test positive for HCV RNA, the clinician should refer for medical management and possible treatment by a clinician with experience in treating HCV. (AIII)

For individuals exposed to HCV-infected source patients, regular follow-up with HCV RNA testing is recommended in addition to HCV antibody testing, because HCV RNA testing can identify acute infection within 2 weeks of exposure, whereas accuracy of the antibody test can be delayed up to several months after acute infection (i.e., “window period”). Seroconversion with the ELISA antibody test occurs in 50% of patients within 9 weeks of exposure, in 80% of patients within 15 weeks of exposure, and in at least 97% of patients within 6 months of exposure.\(^4^0\) The ELISA test is highly sensitive but relatively nonspecific, resulting in a low positive predictive value in low-prevalence populations. Positive HCV ELISA antibody test results require confirmation by a quantitative viral load assay, such as HCV PCR.

XII. RESOURCES FOR CONSULTATION

Persons who have responsibility for providing PEP may need expert advice and consultation, as well as assistance in helping their clients obtain medication. The following resources are available:

- The Clinical Education Initiative CEI PEP Line at 1-866-637-2342. When using the PEP Line, providers from New York State should identify themselves as such.
- For further education of health providers or for consultation regarding setting up PEP services, contact: the HIV/HCV Center of Excellence.
Appendix C provides information regarding employer issues and responsibilities.

REFERENCES


40. Centers for Disease Control and Prevention. Recommendations for preventing transmission of infections among chronic hemodialysis patients. *MMWR Recomm Rep*. 2001;50(RR-5):1-43 Available at: [www.cdc.gov/mmwr/preview/mmwrhtml/rr5005a1.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5005a1.htm)

**APPENDIX A. ANTIRETROVIRAL DRUGS**

The medications listed below include antiretroviral agents recommended for PEP (tenofovir, emtricitabine, and either raltegravir or dolutegravir) as well as alternative antiretroviral drugs
that may be used in the setting of potential HIV resistance, toxicity risks, or constraints on the 
availability of particular agents. For information on all antiretroviral medications, see 
Antiretroviral Therapy.

More information about these antiretroviral agents, including dosage and dose adjustment, 
potential adverse events and drug interactions, and FDA pregnancy categories, can be found 
in Antiretroviral Therapy, Appendix A: Characteristics of Antiretroviral Drugs. Before using 
these drugs, package inserts should also be consulted.

**Recommended PEP Medications:**

- Tenofovir (TDF)
- Emtricitabine (FTC)
- Raltegravir (RAL)
- Dolutegravir (DTG)
- Lamivudine (3TC) – equivalent substitute for emtricitabine

**Alternative PEP Medications:**

- Atazanavir (ATV)
- Lopinavir/ritonavir (LPV/r)
- Darunavir (DRV)
- Fosamprenavir (FPV)
- Zidovudine (ZDV)

**FDA Pregnancy Categories**

**A** Adequate and well-controlled studies of pregnant women fail to demonstrate a risk to the 
fetus during the first trimester of pregnancy (and there is no evidence of risk during later 
trimesters).

**B** Animal reproduction studies fail to demonstrate a risk to the fetus and adequate and well-
controlled studies of pregnant women have not been conducted.

**C** Safety in human pregnancy has not been determined, animal studies are either positive 
for fetal risk or have not been conducted, and the drug should not be used unless the potential 
benefit outweighs the potential risk to the fetus.

**D** Positive evidence of human fetal risk based on adverse reaction data from investigational 
or marketing experiences, but the potential benefits from the use of the drug in pregnant women 
may be acceptable despite its potential risks.

**X** Studies in animals or reports of adverse reactions have indicated that the risk associated with 
the use of the drug for pregnant women clearly outweighs any possible benefit.
### APPENDIX B. OCCUPATIONAL EXPOSURE TO HIV: COMPARISON OF NYSDOH AND CDC RECOMMENDATIONS

<table>
<thead>
<tr>
<th>NYSDOH AI Recommendations (2014)</th>
<th>CDC Recommendations (2013)*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Indication for PEP</strong></td>
<td></td>
</tr>
<tr>
<td>Percutaneous or mucocutaneous exposure with blood or visibly bloody fluid or other potentially infectious material.</td>
<td>Percutaneous injury or contact of mucous membrane or nonintact skin with blood, tissue, or potentially infectious body fluids, such as semen, vaginal secretions, and visibly bloody fluids and reasonable suspicion that the source patient is HIV-infected.</td>
</tr>
<tr>
<td><strong>HIV Testing of the Source Patient</strong></td>
<td></td>
</tr>
</tbody>
</table>
| If HIV serostatus of the source is unknown, voluntary HIV testing of the source should be sought. Rapid testing is strongly recommended for the source patient, and for those organizations subject to OSHA regulations, rapid testing of the source patient is mandated for occupational exposures. When the source patient’s rapid test result is negative, and the clinician has ascertained that the source patient could have possibly been exposed to HIV in the previous 6 weeks, a plasma HIV RNA assay should be used in conjunction with the rapid HIV antibody test. In these situations, PEP should be initiated and continued until results of the plasma HIV RNA assay are available. In New York State, when the source patient has the capacity to consent to HIV testing, specific informed consent is required (see Appendix C). | HIV Testing of the Source Patient
Although concerns have been expressed regarding HIV-negative sources being in the window period for seroconversion, no case of transmission involving an exposure source during the window period has been reported in the United States. Rapid HIV testing of source patients can facilitate making timely decisions regarding use of HIV PEP after occupational exposures to sources of unknown HIV status. |
**Recommendations for Number of Drugs in PEP Regimen**

A three-drug PEP regimen is the preferred option for all significant-risk occupational exposures.

A regimen containing three (or more) antiretroviral drugs is recommended for all occupational exposures. Clinicians facing challenges associated with a three-drug regimen might consider a two-drug regimen in consultation with an expert.

**Recommended PEP Regimen**

<table>
<thead>
<tr>
<th>Recommended PEP Regimen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenofovir 300 mg PO daily + Emtricitabine 200 mg PO daily or Lamivudine 300 mg PO daily plus Either Raltegravir 400 mg PO twice daily or Dolutegravir 50 mg PO daily</td>
</tr>
</tbody>
</table>

**Recommended PEP Regimen**

<table>
<thead>
<tr>
<th>Recommended PEP Regimen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenofovir 300 mg PO daily + Emtricitabine 200 mg PO daily plus Raltegravir 400 mg PO twice daily</td>
</tr>
</tbody>
</table>

See [CDC Appendix A](https://www.cdc.gov) for dosing and alternatives.

**Duration of PEP: 4 weeks**

**HIV Antibody Testing of Healthcare Worker**

- Baseline
- 1 month post-exposure
- 3 months post-exposure

Alternatively, if the clinician is certain that a fourth-generation antibody/antigen combination assay is being used, then HIV testing could be performed at baseline, 6 weeks, and concluded at 4 months post-exposure.
### Timing of Initiation of PEP

When a potential occupational exposure to HIV occurs, every effort should be made to initiate PEP, as soon as possible, ideally within 2 hours. A first dose of PEP should be offered to the exposed worker while the evaluation is underway. In addition, PEP should not be delayed while awaiting information about the source or results of the exposed individual's baseline HIV test. Decisions regarding initiation of PEP beyond 36 hours post exposure should be made on a case-by-case basis with the understanding of diminished efficacy when timing of initiation is prolonged.

### Timing of Initiation of PEP

PEP should be initiated as soon as possible, preferably within hours of exposure. Initiation of PEP should not be delayed while awaiting the results of a source patient’s HIV test, nor should it be delayed during consultation with experts to determine ideal PEP regimens.

APPENDIX C. POST-EXPOSURE MANAGEMENT: EMPLOYER ISSUES AND RESPONSIBILITIES

Organizations that employ health professionals or other persons who are at risk for occupational exposure to blood, body fluids, or other potentially infectious materials are generally required to establish policies and procedures that guide the management of such exposures. Employers must conform to the OSHA Bloodborne Pathogen Standard (OSHA Bloodborne Pathogen Standard 29 CFR § 1910.1030, and Compliance Directive CPL 02-02-069, 11/27/01, Enforcement Procedures for the Occupational Exposure to Bloodborne Pathogens), which are applicable to New York public employers under the New York Public Employee Safety and Health (PESH) Act (Labor Law § 27-a) and regulations (12 NYCRR Part 800). OSHA and PESH standards with regard to occupational exposure to bloodborne pathogens are identical. These regulations require that a management plan be in place.

The employer should ensure that any employee who sustains an occupational exposure has access to post-exposure services within 1 to 2 hours of a reported event. Services must be available 24 hours per day, 7 days per week. Organizations that do not have on-site occupational health services are encouraged to form agreements or contracts with another facility, Emergency Department, or private practitioner for such services.

I. DEFINITION OF PERSONS COVERED

New York State regulations apply to staff, employees, or volunteers in the performance of employment or professional duties in:

• A medical or dental office.
• A facility regulated, authorized, or supervised by the Department of Health, Office of Mental Health, Office of Mental Retardation and Developmental Disabilities, Office of Children and Family Services, Office of Alcoholism and Substance Abuse Services, or the Department of Correctional Services.
• Emergency response employee (paid or volunteer, including an emergency medical technician, a firefighter, a law enforcement officer or local correctional officer, or medical staff).

Post-exposure policies should define who is included as an “employee” for purposes of providing care. In addition to staff who are clearly employed by an organization (e.g., nurses, laboratory personnel, housekeepers), consideration must be given to whether other individuals (e.g., medical/nursing students, house staff, attending physicians, volunteers, and pre-hospital care personnel) will be covered by the institution’s policy. In addition, the scope of services that will be provided must be delineated (e.g., laboratory testing, occupational health services, prophylactic drugs or vaccines), including whether there are limitations within the categories of individuals covered particularly with regard to Workers’ Compensation benefits.
II. ACCESS TO OCCUPATIONAL HEALTH SERVICES

Exposed workers who sustain an occupational exposure should be ensured access to postexposure services within 1 to 2 hours of a reported event. This may require 24-hour and weekend coverage. Procedures should identify how workers access services during regular work hours and, if different, how they access services during evening, night, or weekend shifts. Organizations that do not have on-site occupational health services should consider forming agreements or contracts with another facility or private practitioner for such services.

Post-exposure services for exposures to all bloodborne pathogens include but are not limited to:

- Post-exposure evaluation and follow-up post-exposure vaccinations
- Arrangements for a full course of post-exposure prophylaxis medications, at no cost to the employee
- Care provided under the supervision of a licensed physician or other licensed healthcare professional
- Availability of a rapid HIV test for source patient testing
- Supportive counseling

Federal law requires covered employers to ensure that all medical evaluations and procedures, vaccines, and post-exposure prophylaxis are made available to the employee within a reasonable time and at a reasonable location and are made available at no cost to the employee (OSHA, 29 CFR, Part 1910.2030, CPL 2-02.069, 11/27/01, Enforcement Procedures for the Occupational Exposure to Bloodborne Pathogens).

PESH and OSHA’s Bloodborne Pathogen Standards indicate that the covered employer is responsible for all costs associated with an exposure incident. An employer may not require any out-of-pocket expenditures on behalf of the employee, such as requiring the employee to utilize workers’ compensation if prepayment is required or compelling an employee to use health insurance to cover these expenses unless the employer pays all premiums and deductible costs associated with the employees’ health insurance. In addition to services listed above, NYS Guidelines, HIV Prophylaxis Following Occupational Exposure, state that the following should be considered by the employer when establishing plans for providing PEP for exposures to HIV:

- who will perform the post-exposure evaluation
- who will provide counseling to the exposed worker regarding the exposure and indications for PEP (for off-hour exposures as well)
- how PEP will be made available within 2 hours of an exposure
- how a 3- to 5-day supply of PEP will be made available for urgent use
- who will be given authority for releasing drugs for this purpose
- how the exposed worker will obtain PEP drugs to complete the 28-day regimen
III. DETERMINING HIV STATUS OF SOURCE PATIENT

Procedures to facilitate rapid evaluation and voluntary testing for HIV, HBV, HCV and other bloodborne pathogens and/or disclosure of related information of the source individual should be in place.

The employer is responsible for establishing and implementing policies to protect the confidentiality of both the exposed employee and the exposure source (New York Public Health Law §§ 2135, 2782; 10 NYCRR § 63.6).

A. Access to Source Patient HIV-Related Information

New York law and regulations (Public Health Law § 2781(6)(e); 10 NYCRR § 63.8(m)) authorize disclosure of existing HIV-related information to providers of persons who have been exposed in the workplace when significant risk exposure has occurred.

When the source patient is already known to be infected with HBV, HCV, or HIV, testing for the source individual’s known HBV, HCV, or HIV status does not need to be repeated. Testing for other bloodborne pathogens should still occur.

If the exposed worker is part of the healthcare team, he/she may have access to the medical record and know the HIV status of the source patient, as well as information about drug resistance. Information related to drug regimens, and, if available, resistance information, should be made available to the exposed employee’s provider to determine the best regimen for the employee. However, initiation of PEP should not be delayed while awaiting this information.

B. HIV Testing of the Source Patient

- Consistent with recommendations by the Centers for Disease Control and Prevention (CDC), the US Department of Labor, Occupational Safety and Health Administration (OSHA) mandates that medical facilities subject to OSHA authority use rapid HIV antibody tests when testing the source patient after potential exposure to a bloodborne pathogen. The CDC recommends testing with a fourth-generation antibody/antigen combination assay.
- The source patient should be tested as soon as possible to determine HIV infectivity.
- Results of the source individual’s HIV testing should be made available to the exposed worker’s provider. Patient authorization for release of this information is not required for necessary communication of information from provider to provider for timely treatment of the exposed worker.
**Source Patient Has Capacity to Consent for HIV Testing:**

- Informed consent from the source patient should be obtained.
- If consent is not obtained for HIV testing, the employer should document that consent cannot be obtained and testing cannot be performed.

**Source Patient Does Not Have Capacity to Consent for HIV Testing:**

If the source is comatose or is determined by his or her attending professional to lack mental capacity to consent, and the source person is not expected to recover in time for the exposed person to receive appropriate medical treatment, the Health Care Proxy Law and Family Health Care Decisions Act (FHCDA) give providers the ability to locate someone who has the legal authority to consent to HIV testing (the healthcare agent or FHCDA Surrogate).

New York regulations (§§ 63.3(d)(7), 63.8(n)) also authorize anonymous testing when no person authorized to consent on behalf of the source patient is immediately available.

**An anonymous test* may be performed if:**

- the healthcare agent or FHCDA Surrogate, who has legal authority to consent, is not available or reasonably likely to become available in time for the exposed person to receive appropriate medical treatment, **and**
- the exposed person will benefit medically by knowing the source person’s HIV test results

**or**

- The source patient is deceased

* The law requires that results of anonymous source patient testing are given only to the provider of the exposed person solely for assisting the exposed person in making appropriate decisions regarding post-exposure medical treatment. The results of the test cannot be disclosed to the source patient or placed in the source patient’s medical record. The source patient may be told that the exposure occurred and an HIV test was performed. The source patient should be offered confidential testing so that they may have access to information about his/her own HIV status.

**IV. WORKERS’ COMPENSATION PROGRAM**

The Workers’ Compensation Law (WCL) has specific implications for employees exposed to HIV, as well as those rare cases that result in seroconversion. Individuals who manage such exposures should be familiar with these implications, as they should be able to counsel employees and refer them for legal and medical assistance accordingly. The organization’s Workers’ Compensation provider should be contacted as situations arise.
APPENDIX D. LOGISTIC REGRESSION ANALYSIS OF RISK FACTORS FOR HIV INFECTION AFTER PERCUTANEOUS EXPOSURE TO HIV-INFECTED BLOOD

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Adjusted odds ratio (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>US Cases^a</td>
</tr>
<tr>
<td>Deep injury</td>
<td>16.1</td>
</tr>
<tr>
<td>Visible blood on device</td>
<td>5.2</td>
</tr>
<tr>
<td>Procedure involving needle in artery or vein</td>
<td>5.1</td>
</tr>
<tr>
<td>Terminal illness in source patient^d</td>
<td>6.4</td>
</tr>
<tr>
<td>Postexposure use of zidovudine</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Reprinted from Cardo DM, Culver DH, Ciesielski CA, et al. A case-control study of HIV seroconversion in health care workers after percutaneous exposure: Centers for Disease Control and Prevention Needlestick Surveillance Group. *N Engl J Med* 1997;337:1485-1490. [PubMed] ^a All risk factors were significant (P < 0.02). ^b All risk factors were significant (P < 0.01). ^c Odds ratios are for the odds of seroconversion after exposure in workers with the risk factor as compared with those without it. ^d Terminal illness was defined as disease leading to the death of the source patient from AIDS within two months after the health care worker’s exposure.
### APPENDIX E. INTERPRETATION OF RESULTS OF TESTS FOR HEPATITIS C VIRUS INFECTION AND FURTHER ACTION

<table>
<thead>
<tr>
<th>Test Outcome</th>
<th>Interpretation</th>
<th>Further Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCV antibody nonreactive</td>
<td>No HCV antibody detected</td>
<td>– Sample can be reported as nonreactive for HCV antibody. No further action required.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>– If recent HCV exposure in person tested is suspected, test for HCV RNA.⁠²</td>
</tr>
<tr>
<td>HCV antibody reactive</td>
<td>Presumptive HCV infection</td>
<td>A repeatedly reactive result is consistent with current HCV infection, or past HCV infection that has resolved, or biologic false positivity for HCV antibody. Test for HCV RNA to identify current infection.</td>
</tr>
<tr>
<td>HCV antibody reactive and HCV RNA detected</td>
<td>Current HCV infection</td>
<td>Provide person tested with appropriate counseling and link person tested to medical care and treatment.⁠²</td>
</tr>
<tr>
<td>HCV antibody reactive and HCV RNA not detected</td>
<td>No current HCV infection</td>
<td>– No further action required in most cases.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>– If distinction between true positivity and biologic false positivity for HCV antibody is desired, and if sample is repeatedly reactive in the initial test, test with another HCV antibody assay.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>– In certain situations,³ follow up with HCV RNA testing and appropriate counseling.</td>
</tr>
</tbody>
</table>
If HCV RNA testing is not feasible and person tested is not immunocompromised, perform follow-up testing for HCV antibody to demonstrate seroconversion. If the person tested is immunocompromised, consider testing for HCV RNA.

b It is recommended before initiating antiviral therapy to retest for HCV RNA in a subsequent blood sample to confirm HCV RNA positivity.

c If the person tested is suspected of having HCV exposure within the past 6 months, or has clinical evidence of HCV disease, or if there is concern regarding the handling or storage of the test specimen.
DECLINATION OF HIV/AIDS PROPHYLAXIS

I have received and read the information regarding Premier Medical Group's Needle Stick Management and Employee Exposure to Bloodborne Pathogen Policy and Procedure. Furthermore I have received and read the New York State Department of Health HIV Prophylaxis Following Occupational Exposure.

I hereby acknowledge that the exposure plan and HIV prophylaxis against HIV/AIDS virus has been offered to me at no cost to me by Premier Medical Group and that I decline this offer. I assume the risks associated with this decision, and I release Premier Medical Group, its employees, agents, and managing members from any and all loss or liability arising out of any injuries or damages associated with my decision.

I understand that I may request and receive inclusion in the Needle Stick Management and Employee Exposure to Bloodborne Pathogen Plan, and HIV/AIDS prophylaxis at any time throughout my employment at Premier Medical Group.

______________________________________________________  ____________________________
Signature of Employee                                      Date

______________________________________________________
Signature of Witness                                       Date

______________________________________________________
Signature of Witness                                       Date