

# Contents

<b>Introduction:</b> .....	<b>2</b>
<b>HIV Exposure</b> .....	<b>3</b>
<b>Determining the Need for HIV Postexposure (PEP) after an Occupational Exposure</b> .....	<b>4</b>
<b>Staff Education Concerning Occupational Exposures to HIV</b> .....	<b>7</b>
<b>Human Bites</b> .....	<b>9</b>
<b>Follow-up Counseling and Medical Evaluation of Post-Exposed Health Care Workers</b> .....	<b>10</b>
<b>PEP Regimens</b> .....	<b>12</b>
<b>PEP Following Occupational Exposure</b> .....	<b>13</b>
<b>Occupational Exposure to HIV: Comparison of NYSDOH and CDC Recommendations</b> .....	<b>14</b>
<b>Use of Monitoring Checklist</b> .....	<b>16</b>
<b>Evaluation and Testing of Exposure Source</b> .....	<b>18</b>
<b>Antiretroviral Drug Therapy In Pediatric HIV Infection</b> .....	<b>19</b>
<b>Recommended antiretroviral regimens for Initial Therapy for HIV Infection in Children</b> .....	<b>20</b>
<b>1994 Revised HIV Pediatric Classification System</b> .....	<b>21</b>
<b>Antiretroviral Drug Use in Pregnant Women</b> .....	<b>23</b>
<b>Antiretroviral Use in HIV Infected Adults and Adolescents</b> .....	<b>26</b>
<b>Rate of Decline of Plasma HIV RNA Concentration after Initiation of Potent Combination Antiretroviral Therapy</b> .....	<b>28</b>
<b>Likelihood of Developing AIDS within 3 years</b> .....	<b>29</b>
<b>Indications for Plasma HIV RNA Testing</b> .....	<b>30</b>
<b>Indications for the Initiation of Antiretroviral Therapy in the Chronically HIV-Infected Patient</b> .....	<b>31</b>
<b>Care of Occupationally Exposed Site</b> .....	<b>32</b>
<b>HIV Counseling and Education after an Occupational Exposure</b> .....	<b>33</b>
<b>Other Antiretrovirals That May Be Alternatives To Recommended Regimens For PEP</b> .....	<b>43</b>

# Introduction

The Center for Disease Control and Prevention (CDC) has issued recommendations for post exposure prophylaxis to HIV. These recommended changes have made the clinical management of occupational HIV exposures more complex. While most exposures to HIV do not result in transmission, and for many exposures the risk is very low these policies provide a framework for:

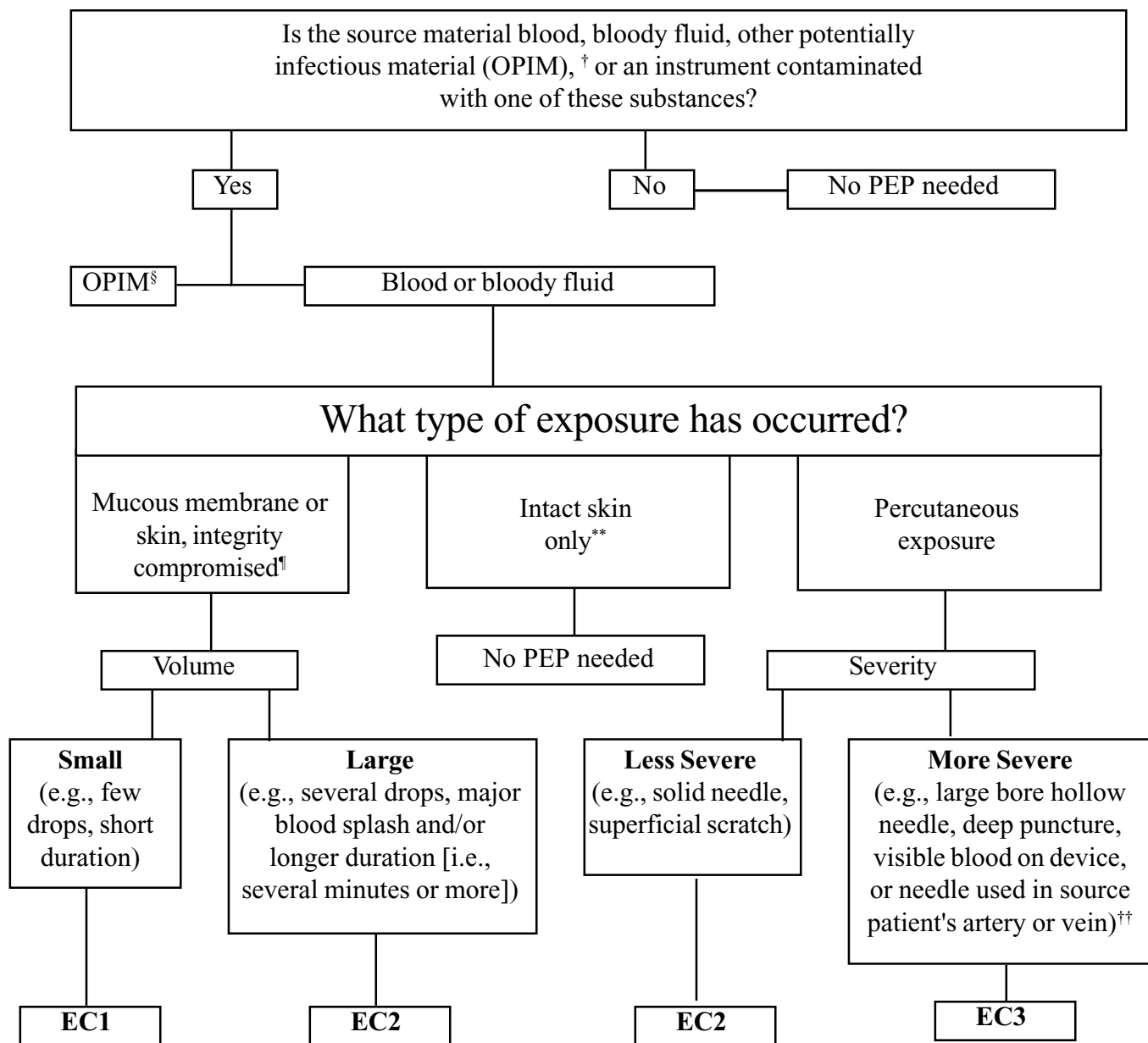
- evaluation of risks; and
- providing guidance to employees.

Agencies are responsible to have processes in place to facilitate a rapid evaluation, voluntary testing and/or disclosure of HIV related information of source individuals. In addition, the agency should have processes in place for:

- pre and post counseling
- administration of PEP treatment within 1-2 hours of a reported exposure.

# Determining the need for HIV postexposure prophylaxis (PEP) after an occupational exposure\*

## STEP 1: Determine the Exposure Code (EC)



\* This algorithm is intended to guide initial decisions about PEP and should be used in conjunction with other guidance provided in this report.

† Semen or vaginal secretions; cerebrospinal, synovial, pleural, peritoneal, pericardial, or amniotic fluids; or tissue.

§ Exposures to OPIM must be evaluated on a case-by-case basis. In general, these body substances are considered a low risk for transmission in health-care settings. Any unprotected contact to concentrated HIV in a research laboratory, or production facility is considered an occupational exposure that requires clinical evaluation to determine the need for PEP.

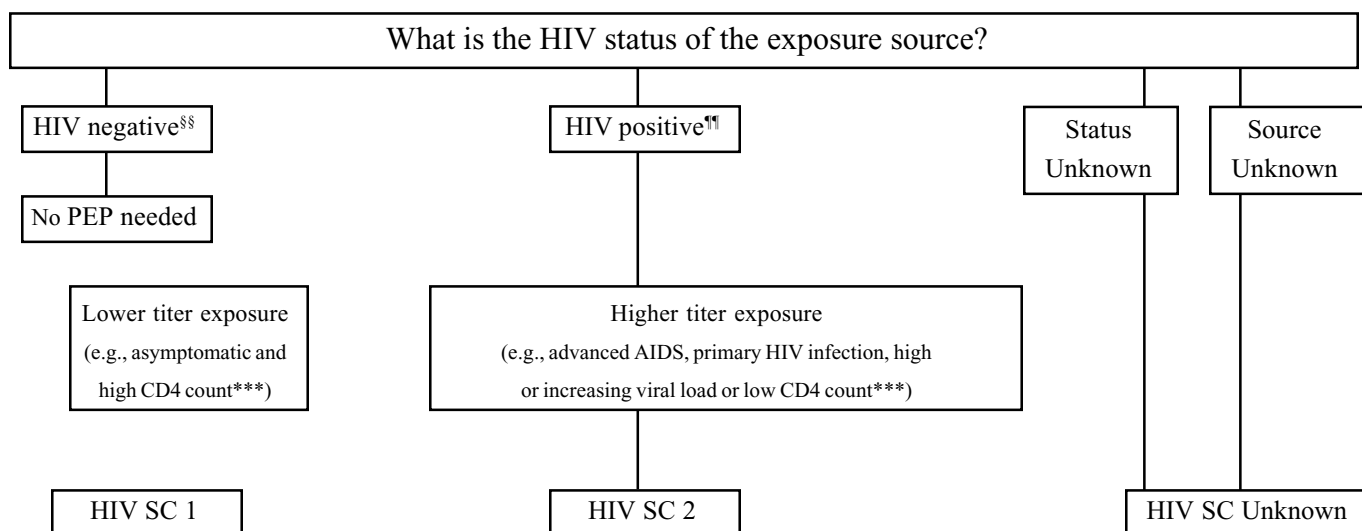
¶ Skin integrity is considered compromised if there is evidence of chapped skin, dermatitis, abrasion, or open wound.

\*\* Contact with intact skin is not normally considered a risk for HIV transmission. However, if the exposure was to blood, and the circumstance suggests a higher volume exposure (e.g., an extensive area of skin was exposed or there was prolonged contact with blood), the risk for HIV transmission should be considered.

†† The combination of these severity factors (e.g., large-bore hollow needle and deep puncture) contribute to an elevated risk for transmission if the source person is HIV-positive.

## Determining the need for HIV postexposure prophylaxis (PEP) after an occupational exposure\* - Continued

### STEP 2: Determine the HIV Status Code (HIV SC)



§§ A source is considered negative for HIV infection if there is laboratory documentation of a negative HIV antibody, HIV polymerase chain reaction (PCR), or HIV p24 antigen test result from a specimen collected at or near the time of exposure and there is no clinical evidence of recent retroviral-like illness.

¶¶ A source is considered infected with HIV (HIV positive) if there has been a positive laboratory result for HIV antibody, HIV PCR, or HIV p24 antigen or physician-diagnosed AIDS.

\*\*\* Examples are used as surrogates to estimate the HIV titer in an exposure source for purposes of considering PEP regimens and do not reflect all clinical situations that may be observed. Although a high HIV titer (HIV SC 2) in an exposure source has been associated with an increased risk for transmission, the possibility of transmission from a source with a low HIV titer also must be considered.

### STEP 3: Determine the PEP Recommendation

<u>EC</u>	<u>HIV SC</u>	<u>PEP recommendation</u>
1	1	<b>PEP may not be warranted.</b> Exposure type does not pose a known risk for HIV transmission. Whether the risk for drug toxicity outweighs the benefit of PEP should be decided by the exposed HCW and treating clinician.
1	2	<b>Consider basic regimen.</b> <sup>†††</sup> Exposure type poses a negligible risk for HIV transmission. A high HIV titer in the source may justify consideration of PEP. Whether the risk for drug toxicity outweighs the benefit of PEP should be decided by the exposed HCW and treating clinician.
2	1	<b>Recommend basic regimen.</b> Most HIV exposures are in this category; no increased risk for HIV transmission has been observed but use of PEP is appropriate.
2	2	<b>Recommend expanded regimen.</b> <sup>§§§</sup> Exposure type represents an increased HIV transmission risk.
3	1 or 2	<b>Recommend expanded regimen.</b> Exposure type represents an increased HIV transmission risk.
	Unknown	If the source or, in the case of an unknown source, the setting where the exposure occurred suggests a possible risk for HIV exposure and the EC is 2 or 3, consider PEP basic regimen.

††† Basic regimen is four weeks of zidovudine, 600 mg per day in two or three divided doses, and lamivudine, 150 mg twice daily.

§§§ Expanded regimen is the basic regimen plus either indinavir, 800 mg every 8 hours, or nelfinavir, 750 mg three times a day.

**Subject:** Follow-up Counseling and Medical Evaluation of Post-Exposed Health Care Workers

**Policy:** Workers with occupational exposures to HIV should receive follow-up counseling and medical evaluation, including HIV-antibody tests at baseline and periodically for at least 6 months post-exposure (e.g., 6 weeks, 12 weeks, and 6 months), and should observe precautions to prevent possible secondary transmission. In those agencies in New York State, the recommendation for follow-up testing (HIV) of a health care worker is as follows:

- baseline
- 6 weeks post-exposure
- 12 weeks post-exposure
- 26 weeks post-exposure &
- 52 weeks post-exposure.

**Practice/Procedure/Implementation:**

1. Exposed workers will have a baseline confidential HIV antibody test. (Pretest counseling and informed consent may be required in your state.)
2. Follow-up testing should be based on the outcome of the source evaluation.
3. The post-exposure testing interval for HIV is 6 weeks, 12 weeks, and 6 months(those agencies in New York State will follow the NYS Department of Health recommendations as stated above). The majority of seroconversions have occurred within 6 weeks after exposure.
4. If prophylaxis treatment is initiated, a baseline should be established with:
  - a CBC (with differential and platelet count),
  - renal tests
  - liver tests
  - urinalysis, and
  - pregnancy test (if indicated).