

Occupational Exposure for Oral Healthcare Workers

Resources Supporting Policy and Procedures pertaining to a Bloodborne Pathogen Exposure for Dental Settings

How to use this file: Click on the second icon from the top to enable "bookmarks". An index of all the sections in the file will open in a separate window. Click on the section of interest to go to that location.

The clinical recommendations in this toolkit are current as of 9/16/20 but are subject to change. For the most up-to-date information go to: <http://www.hivguidelines.org/pep-for-hiv-prevention/occupational/>

Post-exposure prophylaxis following occupational exposures in the oral health setting

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[NYSDOH HIV Guidelines: Employer responsibilities in PEP Management to Prevent HIV Infection following an Occupational Exposure](#)

[New York State Department of Health HIV Clinical Guidelines:](#) This program provides state of the art clinical guidelines on a wide range of topics including *PEP to Prevent HIV Infection*.

OSHA's Model Exposure Control Plan <https://www.osha.gov/Publications/osha3186.pdf>

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Additional Resources **HIV Clinical Education Initiative (CEI):** provides comprehensive training resources on HIV care and treatment including on-line training on post-exposure prophylaxis related to occupational exposure and non-occupational exposure. Visit www.ceitraining.org

Post-Exposure Prophylaxis Clinical Card: This reference card provides clinically relevant information on recommended regimens, screening protocols, lab tests and monitoring, the CEI Line, as well as websites for further information. The card attaches to a name tag to provide easy access to information about PEP, including phone numbers to call for assistance. Copies may be ordered free of charge from CEI at <https://www.surveymonkey.com/r/BG38MH5>.

CEI webinar: [Updates to the NYSDOH Guidelines on PEP, July 2020](#)

The toll-free **CEI Line (866-637-2342)** connects NYS clinicians with specialists who can provide information on PEP, PrEP, HIV, HCV and STD management.

[American Dental Association: Employer Obligations After Exposure Incidents OSHA](#)

NYS Worker's Compensation Board: <http://www.wcb.ny.gov/>

- **Worker benefits and information regarding how to file a claim:**

<http://www.wcb.ny.gov/content/main/Workers/Workers.jsp>

POST-EXPOSURE PROPHYLAXIS FOLLOWING OCCUPATIONAL EXPOSURES IN THE ORAL HEALTH SETTING

INTRODUCTION

The New York State Department of Health AIDS Institute (NYSDOH AI) has issued updated guidelines that address [PEP to Prevent HIV Infection](#). Healthcare workers, including dental practitioners, are at risk for occupational exposure to bloodborne pathogens including HIV, hepatitis B virus (HBV), and hepatitis C virus (HCV).^{1,2} In dentistry, the risk of sharps injuries is increased because of a small operating field, frequent patient movement, and the variety of sharp instruments used in dental procedures³. This toolkit provides recommendations, guidelines, and management considerations for occupational PEP in oral healthcare settings.

Risk of HIV Transmission Following Occupational Exposure

The risk of transmission of HIV to healthcare workers following occupational needlestick exposure is estimated at 0.23% (2.3 of every 1,000 such injuries if untreated)¹ Factors that increase the risk of HIV transmission include deep intramuscular injury, blood exposure from patients with high viral load levels, injury with a sharp device with visible blood, and injury with hollow-bore needles. Episodes of HIV transmission after non-intact skin exposure have been documented,² but the average risk of transmission by this route is estimated to be <0.09%.³ 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.⁴⁻⁶ The risk of transmission can be expected to be increased in settings where source patients have high HIV viral load levels..

None of the 58 cases of documented seroconversion following occupational HIV exposure that were reported to the CDC through 2013 occurred among oral healthcare workers (OHWs).¹ Although more recent data are not available, a 1997 summary review of occupational blood exposures among OHWs reported an approximate rate of two to three injuries/exposures per year. “PEP to Prevent HIV Infection: Occupational Exposure Risk”, updated in 2020, notes the effect advances in HIV treatment resulting in increasing viral load suppression, and improved engineering and infection control protocols, should result in a reduction of previous estimates of risk of HIV exposure in the dental setting

The risk of HIV infection through occupational exposure for OHWs compared with other healthcare workers (HCWs) may be lower due to both the decreased amount of viral load in saliva and the anti-HIV activity of saliva. When bloodborne percutaneous exposures occur among OHWs, most injuries are not deep and most occur outside the patient’s mouth, which poses less risk for re-contact with patient tissues.^{7,8} Percutaneous injuries involve small amounts of blood and are caused by burs, needles, laboratory knives, and other sharp instruments. Injuries among oral surgeons may occur more frequently during fracture reductions with the use of wires.⁸⁻¹⁵ Experience, as measured by years in practice, does not appear to affect the risk of injury among general dentists or oral surgeons.^{8,9,15}

Table 1 shows the estimated per-act probability of acquiring HIV from a known HIV-infected source by exposure.

TABLE 1 ESTIMATED PER-ACT PROBABILITY OF ACQUIRING HIV FROM A KNOWN HIV-INFECTED SOURCE BY EXPOSURE ACT ^a	
Type of Exposure	Risk per 10,000 Exposures
Parenteral	
Blood transfusion	9,000
Percutaneous (needlestick)	30
Other^b	
Biting	Negligible
Spitting	Negligible
Throwing body fluids (including semen or saliva)	Negligible
Modified from the Centers for Disease Control and Prevention. HIV Risk Behaviors, fact sheet; December 4, 2015. Available at https://www.cdc.gov/hiv/risk/estimates/riskbehaviors.html . ^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 Antiretroviral Therapy. ^b HIV transmission through these exposure routes is technically possible but extremely unlikely and cases are not well documented.	

RISK OF VIRAL HEPATITIS INFECTIONS FOLLOWING OCCUPATIONAL EXPOSURE

HCWs exposed to percutaneous injuries are also at risk for HBV and HCV infection. The risk of transmission of HBV and HCV from an occupational exposure is significantly greater than HIV transmission. HBV infection is vaccine preventable and immunization is strongly recommended to protect all HCWs. The incidence of HBV infection following a needlestick ranges from 1% to 30%, depending on the presence of hepatitis e antigen (see Table 2). Although the most efficient mode of HBV transmission is percutaneous exposure, HBV is transmissible through direct contact with mucous membranes and nonintact skin (e.g., psoriasis, eczema, burns, wounds, cuts, and scratches).¹⁶ Because most HBV-infected HCWs do not recall an overt percutaneous exposure, other routes of transmission may account for a large percentage of HBV infections among HCWs.¹⁶ The risk of HCV infection following a needlestick is 1.8% (see Table 2), and the risk of transmission of HCV from a single mucous membrane exposure is negligible. Refer to [PEP to Prevent HIV Infection](#), for recommendations for post-exposure management for [HBV](#) and [HCV](#).

TABLE 2 AVERAGE RISK FOR TRANSMISSION OF HEPATITIS B AND C VIRUSES AFTER NEEDLESTICK (COMPARED WITH HIV)		
Source		Risk
HBV	HBeAg-	22.0% - 30.0%
	HBeAg+	1.0% - 6.0%
HCV		1.8%
HIV		0.3%

Risk and Management of Blood-Borne Infections in Health Care Workers
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC88939/>

INDICATIONS FOR PEP

HIV PEP is recommended for individuals exposed to blood or visibly bloody fluid or other potentially infectious material (e.g., semen; vaginal secretions; breast milk; and cerebrospinal, synovial, pleural, peritoneal, pericardial, and amniotic fluids) that are associated with potential HIV transmission and in any of the exposure situations outlined in Table 3.²

TABLE 3 EXPOSURES FOR WHICH PEP IS INDICATED
<ul style="list-style-type: none">• 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 has been in the source patient's blood vessel• Bite from a patient with visible bleeding in the mouth that causes bleeding in the OHW• Splash of blood, visibly bloody fluid, or other potentially infectious material to a mucosal surface (mouth, nose, or eyes)• Nonintact skin (e.g., dermatitis, chapped skin, abrasion, or open wound) exposure to blood, visibly bloody fluid, or other potentially infectious material

Oral healthcare employers (OHE) in New York State (NYS) should follow the NYS DOH AI guidelines for [PEP to Prevent HIV Infection](#) when any significant-risk occupational exposure has occurred. **If it has been determined that PEP is indicated, procedures outlined in the Exposure Control Plan should be followed immediately.**

EMPLOYER RESPONSIBILITIES IN PEP MANAGEMENT TO PREVENT HIV INFECTION FOLLOWING AN OCCUPATIONAL EXPOSURE (NYSDOH AIDS Institute, June 2020)

Organizations that employ health professionals or others 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 29CR CFR, Part 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 regarding occupational exposure to bloodborne pathogens are identical.

TABLE 4 ELEMENTS OF AN EXPOSURE CONTROL PLAN
The exposure control plan should address: <ul style="list-style-type: none">• Determination of employee exposure• Implementation of various methods of exposure control, including:<ul style="list-style-type: none">○ Standard precautions○ Engineering and work practice controls○ Personal protective equipment○ Housekeeping• Hepatitis B vaccination• Post-exposure evaluation and follow-up• Communication of hazards to employees and employee training• Record-keeping• Procedures for evaluating circumstances related to exposure incidents

These regulations require a written exposure control plan (see Table 4)¹⁷ that must be reviewed and updated at least annually. The plan should include use of commercially available devices shown to reduce the risk of occupational exposure.^{18,19} Employees must receive the exposure control plan during their orientation and review the plan annually. The plan must be easily accessible to all employees.

OSHA has published a template for an exposure control plan, *Model Plans and Programs for the OSHA Bloodborne Pathogens and Hazard Communications Standards*, available at: <http://www.osha.gov/Publications/osha3186.pdf>.

The NYSDOH [*PEP to Prevent HIV Infection*](#) Guideline includes a section entitled: [*Employer Responsibilities in PEP Management to Prevent HIV Infection Following an Occupational Exposure*](#); and additional resources for developing an exposure control plan are:

- Appendix A: [*Developing an Exposure Control Plan for a Small Private Office*](#)
- Appendix B: [*Exposure Record*](#) – documents the exposure details and steps taken immediately after an OHW has experienced an exposure
- Appendix C: [*Source Patient Record*](#) – documents HIV testing of the source patient
- Appendix D: [*Information for the exposed health care worker*](#)
- Appendix E [*Source Patient Information Sheet*](#)

CONSIDERATIONS FOR AN EXPOSURE CONTROL PLAN

OHE covered by OSHA’s Bloodborne Pathogen Standard are required to ensure that post- exposure care, including prophylaxis, is provided at no cost to the employee. The employer may subsequently attempt to obtain reimbursement from Workers’ Compensation.

Employee access to post-exposure services: 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 onsite occupational health services are encouraged to form agreements or contracts with another facility, Emergency Department, or private practitioner for such services.

Definition of persons covered: New York State regulations apply to staff, employees, or volunteers in the performance of employment or professional duties who work 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 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 regarding workers’ compensation benefits.

Access to services: Exposed workers who sustain an occupational exposure should be ensured access to post-exposure services within 1 or 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 onsite 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 PEP 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 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 Pathogens 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.

Preventing transmission of 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 training and compliance with safety features.
- Avoidance of needle recapping.
- 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 National Institute for Occupational Safety and Health Alert: [Preventing Needlestick Injuries in Health Care Settings](#).

In addition to considerations listed above, the NYSDOH AI guideline *Post-Exposure Prophylaxis (PEP) to Prevent HIV Infection* states that the following should be considered by the employer when establishing plans for providing PEP for HIV exposure:

- 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 7-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 medications to complete the 28-day regimen.

Documentation: Information that should be recorded after an occupational exposure to HIV has occurred includes the following, which the clinician should record in the exposed worker’s confidential medical record:

- Date and time of the exposure.
- Details of the procedure being performed and the use of protective equipment at the time of the exposure.
- Type, severity, and amount of fluid to which the worker was exposed.
- Details about the source person.
- Whether HIV testing of the source was performed.
- Medical documentation that provides details about post-exposure management.
- If the occupationally exposed individual declines PEP, the clinician should document this decision in the individual’s medical record.

Specific OSHA requirements regarding documentation may be found at [Safety and Health Topics: Bloodborne Pathogens and Needlestick Prevention](#)

NYS Worker's Compensation Board

The Workers' Compensation Law 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 because 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.

- Website: <http://www.wcb.ny.gov/>
- Worker benefits and information regarding how to file a claim: <http://www.wcb.ny.gov/content/main/Workers/Workers.jsp>
- Advocate for Injured Workers, for questions related to injured workers:
(877) 632-4996
(800) 580-6665
Email: advinjwkr@wcb.ny.gov

CARE OF THE EXPOSED WORKER

Emergent Care for Oral Healthcare Workers (OHWs):

If an OHW has experienced an exposure to blood or body fluids, the exposed person should take the following steps as soon as possible:

- wash needlestick injuries, wounds and skin sites that have been in contact with blood or body fluids with soap and water
- avoid "milking" or squeezing out needlestick injuries or wounds.
- if blood gets on the skin, irrespective of whether there are cuts or abrasions, wash well with soap and water
- if eyes are contaminated, rinse while they are open, gently but thoroughly (for at least 30 seconds) with water or normal saline
- exposed mucous membranes should be flushed with water.
- the application of strong solutions (for example, alcohol, hydrogen peroxide, betadine or other chemical cleaners) to wounds or skin sites is not recommended.
- for human bites, the clinical evaluation should include the possibility that both the person bitten and the person who inflicted the bite were exposed to bloodborne pathogens.

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 OHW while the medical 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 72 hours post exposure should be made on a case- by-case basis with the understanding of diminished efficacy when timing of initiation is prolonged.

The OHW should be assessed and receive appropriate post-exposure management for HIV, HCV and HBV exposures, including testing for HCV and assessment for HBV vaccination.

Confidential baseline HIV testing of the OHW should be obtained at the time the occupational exposure is reported or within 3 days of the exposure. For a detailed discussion regarding HCV and HBV post-exposure management, see PEP to Prevent HIV Infection: [Management of Potential Exposure to Hepatitis C virus](#), or [Management of Potential Exposure to Hepatitis B Virus](#)..

FOLLOW-UP CARE FOR ORAL HEALTHCARE WORKERS (OHWS)

All OHWs receiving PEP should be reevaluated within 3 days of the exposure to assess for side effects of treatment, treatment adherence and physical and emotional status. Continue weekly evaluation, by telephone or in-person consultation, while receiving PEP to assess treatment adherence, side effects of treatment, interval physical complaints, and emotional status. Longitudinal care of the OHW 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 CEI (Clinical Education Initiative) Line at 1-866- 637-2342 for phone consultation.

DETERMINING THE HIV STATUS OF THE EXPOSURE SOURCE

Procedures to facilitate rapid evaluation and voluntary testing for HIV, hepatitis B virus (HBV), hepatitis C virus (HCV), and other bloodborne pathogens and 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](#)).

Access to source 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 those who have been exposed in the workplace when significant risk exposure has occurred.

When the source 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, 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.

HIV testing of the source: Consistent with recommendations by the Centers for Disease Control and Prevention (CDC), and the U.S. Department of Labor, OSHA mandates that medical facilities subject to OSHA authority use rapid HIV antibody tests when testing the source after potential exposure to a bloodborne pathogen. The CDC recommends testing with a 4th-generation antibody/antigen combination assay.

- The source 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 the release of this information is not required for necessary communication of information between care providers for timely treatment of the exposed worker.

Source has the capacity to consent for HIV testing: Informed consent from the source 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 does not have the capacity to consent for HIV testing: If the source is comatose or is determined by his or her attending professional to lack the mental capacity to consent, and the source is not expected to recover in time for the exposed individual 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 is immediately available.

An anonymous test* may be performed if: The healthcare agent or FHCDA Surrogate, who has the legal authority to consent, is not available or reasonably likely to become available in time for the

exposed individual to receive appropriate medical treatment **and** the exposed individual will benefit medically by knowing the source's HIV test results **or** the source is deceased.

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

FOR CONSULTATION:

Dentists who have responsibility for providing PEP may discuss questions or concerns with a clinical expert through the CEI Line at 1-866-637-2342.

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DEVELOPING AN EXPOSURE CONTROL PLAN FOR A SMALL PRIVATE OFFICE

To be completed before exposure occurs:

1. Develop an exposure control plan that meets [OSHA Bloodborne Pathogens Standard](#).
2. Educate staff about prevention of exposures and first aid
 - A. Communicate to staff their role in prevention of occupational exposures, include them in creation of exposure plan, and ensure that all new employees read the protocol as part of new employee orientation and then annually.
 - B. Advise staff that immediately after exposure they must administer first aid. Wash any puncture wound/cut with soap and water. Flush mucous membranes with water until body fluid is not visible. Do NOT squeeze injury. The application of strong solutions (for example, alcohol, hydrogen peroxide, betadine or other chemical cleaners) to wounds or skin sites is not recommended.
 - C. Determine local medical resources for post-exposure care of oral healthcare worker (OHW) and source patient. Contact the medical director at the closest emergency department or urgent care center that your employees will go to for urgent care. Emergency rooms are recommended because they can perform the required tests, provide the medications immediately as well as a 7-day supply, administer any needed vaccines, and assess for.
 - Let them know in advance that you will be sending your employees there in the event of an occupational exposure. Follow up with a letter. (This is a courtesy, not a requirement.)
 - D. Some employers create a form letter that an employee can bring with them to the emergency department. The letter should include:
 - Name and address of your practice
 - Type of injury, fluid exposed to, type of first aid administered
 - Whether source patient has consented be tested
 - What the emergency department needs to do
 - What your practice will do
 - Name of the HIV clinician to refer your employee to for follow-up care
 - [Workers' Compensation](#) information
3. Locate a facility that can provide 4th generation HIV testing for source patient if patient is not known to be living with HIV. 4th generation rapid testing is available at local laboratories, hospitals, or may be offered in your office.
 - To offer rapid HIV testing in your practice: See the NYSDOH website for details on how to provide office based rapid testing: [Rapid HIV Testing Workbook and Implementation Guidelines](#)

Appendix A (continued)

- To arrange source patient testing for HIV, hepatitis B virus and hepatitis C virus in a local hospital or laboratory
 - Contact the facility and make sure they provide 4th generation rapid HIV testing as well as any indicated viral hepatitis testing for source patients.
 - Provide source patient with points of information about HIV testing, inform the source patient that an HIV test will be performed, order the HIV test, and document that the source patient received HIV testing notification on the occupational exposure record.
 - If the source patient declines HIV testing, the employer should document that consent cannot be obtained and testing cannot be performed.
 - If the source patient's hepatitis B and/or hepatitis C status is unknown, inform the source patient that screening tests will be drawn at the same time as HIV test, order the tests as recommended in the NYS HIV guidelines for PEP following occupational exposure.
 - Discuss the urgency of the HIV test and the need for results within 1-2 hours if possible. Discuss billing procedures.
4. It is recommended that follow-up care be provided by an occupational health provider familiar with PEP or directly by, or in consultation with, a clinician experienced in managing PEP. When developing your Occupational Exposure Plan, establish a relationship with an occupational health provider familiar with PEP or a clinician experienced in managing PEP.
- A. The following resources are available to help identify an appropriate provider:
- The [New York State AIDS Institute Provider Directory](#) which lists names and contact information for NYS providers who prescribe PrEP/PEP.
 - The [New York State Designated AIDS Centers \(DACs\)](#), which provide outpatient and inpatient medical care for people infected with HIV.
- B. Once identified, contact the provider and let them know you would like to have your employees receive their follow-up care there.
- C. Some employers create a form letter that an employee can bring with them to the HIV experienced provider. The letter should include:
- Name and address of your practice
 - Type of injury, fluid exposed to, type of first aid administered
 - Whether source patient has consented to be tested and results
 - What the emergency department has done
 - What your practice will do
 - What the HIV experienced provider will do
 - [Workers' Compensation](#) information

EXPOSURE RECORD

Name of employer: _____

Date: _____

Procedure being performed: _____

Protective equipment in use: _____

Details of oral healthcare worker's exposure (type, severity, amount of fluid)

Type of exposure (puncture, cut, splash): _____

Quantity of infectious fluid and type: _____

Site of exposure: _____

First aid administered: _____

Immediately wash wound and skin sites with soap and water or flush mucous membranes with water. Do NOT squeeze injury.

Name of employee: _____

Date of exposure: _____ Time of exposure: _____

IMMEDIATE CARE

Immediate care for the OHW may be managed with one of two strategies:

1. Referral to emergency department
2. Referral to urgent care center

Referred to _____ Date: _____ Time: _____

The exposed OHW should be evaluated for both hepatitis B and hepatitis C. Refer to [PEP to Prevent HIV Infection](#), for recommendations for post-exposure management for [HBV](#) and [HCV](#).

PEP DETERMINATION

Whenever an OHW 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, 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. The NYSDOH HIV Guidelines document [Occupational HIV Exposure: PEP and Exposure Management when Reported within 72 Hours](#) provides a general guide.

PEP treatment received as soon as possible and no later than 72 hours after exposure:

PEP treatment determination and reason (see “[Preferred PEP Regimens for Patients Who Weigh ≥40 kg](#)” :

PRESCRIBED HIV PEP REGIMEN*

* See “Preferred PEP Regimens for Patients Who Weigh ≥40 kg,” for PEP medication options and dosing information.

Provider of immediate care needs to provide a 7day supply of PEP medications.

Employee given starter supply 7 of PEP medications:

Date: _____ by: _____

PAYMENT FOR PEP

If provided by the employer:

Purchased by: _____ *for employee:* _____

After the employee receives a starter supply of PEP medications (7days), the employer must arrange for the remaining 21 days of PEP medication to be provided. NYS employers of personnel covered by the Bloodborne Pathogen Standard are required to ensure that post-exposure care, including prophylaxis, is provided at no cost to the employee. The employer may subsequently attempt to obtain reimbursement from Workers' Compensation.

FOLLOW-UP CARE

First visit for follow-up care should be within 3 days of PEP initiation.

Referral to experienced clinician provided and visit scheduled for:

Clinician: _____

Clinician's address: _____

Longitudinal care of the exposed worker during PEP treatment and the follow-up period should be provided by an HIV clinician familiar with PEP or directly by, or in consultation with, a clinician experienced in managing PEP. The OHW should be evaluated weekly, by telephone or in-person consultation, over the first month to assess PEP adherence, adverse effects of the PEP medications, physical complaints, and emotional status. Providers who do not have access to a clinician experienced in PEP should use the Clinical Education Initiative CEI Line at 1-866-637-2342 for phone consultation.

SOURCE PATIENT RECORD DOCUMENTATION* (sample)

Name of employee: _____ Date of exposure: _____

Name of source patient: _____ Date of birth (source): _____

Source patient known to be HIV-infected:

If source is known to be HIV-infected, **consult with a clinician experienced in HIV Post Exposure Prophylaxis. (PEP) Clinicians who do not have access to experienced HIV clinicians should call the Clinical Education Initiative CEI Line at 1-866-637-2342.**

The clinician providing follow-up care will need to know the source patient's:

- viral load
- CD4 count
- current medications
- past medications
- results from resistance testing, if testing performed

Do not delay initiation of PEP if this information is not immediately available.

An alternative regimen for PEP may be considered based on the source patient's information. See [Preferred PEP Regimens for Patients Who Weigh >40 kg](#), for more dosing information.

Source patient's HIV status unknown†:**Fourth generation rapid test performed:**

Date: _____ Time: _____

Type of test: _____

Results: Reactive: _____ Nonreactive: _____

If the rapid test is reactive, confirmatory testing must be performed within 36 hours.

Results of confirmatory tests of source patient:

Date: _____ Time: _____

Type of test: _____

Laboratory: _____

Results: _____

Results provided to source patient:

Post-test counseling provided: Date: _____ by: _____

* This is sample documentation for the employer's records only.

† Source patient should also be evaluated for hepatitis B and hepatitis C.

Results of the source individual's HIV testing should be made available to the exposed worker's provider.

Result provided to: _____ Date: _____

By: _____

If the result from testing the source patient is not immediately available, the need for PEP should be evaluated based on exposure risk assessment. If the likelihood of potential exposure is high, the initiation of PEP should not be delayed pending the test result.

Source patient's hepatitis B and/or hepatitis C status unknown:

Hepatitis tests drawn: Date: _____ Time: _____

Results:

Hepatitis B antigen: Positive: _____ Negative: _____

Hepatitis e antigen: Positive: _____ Negative: _____

Hepatitis C antibody: Reactive: _____ Nonreactive: _____

IF HEPATITIS C ANTIBODY IS REACTIVE, RESULTS OF VIRAL LOAD TEST: _____ IU/L

Bloodborne Pathogen Information for the Exposed Health Care Worker

What are bloodborne pathogens?

Bloodborne pathogens are pathogenic microorganisms (e.g. viruses) that can be transmitted through contact with blood and other body fluids. The most important viruses affecting health care workers exposed to blood and body fluids are human immunodeficiency virus (HIV), hepatitis B, and hepatitis C.

HIV is a virus that can be acquired by sharing blood or by sexual contact with infected people. The initial symptoms of infection with HIV may be minimal, but may include fever, enlarged lymph nodes, sore throat, or a rash. The virus remains in the body and multiplies, causing damage to the immune system, the body's defense system against infection. At this time there is no vaccine to protect against HIV infection.

Hepatitis B virus causes a hepatitis, or inflammation of the liver. It is spread in the same way as HIV, blood and sexual contact. The usual symptoms are jaundice (yellowing of the skin or eyes), fatigue, nausea, and stomach pain. Often the disease will be so mild that people may not know they have had the illness. Rarely, the disease is severe enough to cause liver failure and death. About 10% of people who get the disease will become chronic carriers of the virus. They can develop chronic liver disease such as cirrhosis and they can infect other people by sharing blood through sexual contact. There is a vaccine that can protect people from getting this disease; this vaccine is safe and very effective.

Hepatitis C is an inflammation of the liver caused by the Hepatitis C virus. It is spread mainly through blood contact, although there is a small chance of infection with sexual contact. Like other forms of hepatitis, the symptoms range from none at all to jaundice (yellow skin), fatigue, loss of appetite, and stomach pain. The initial infection with Hepatitis C may cause very mild symptoms; the risk of the disease becoming chronic is much greater than with Hepatitis B. Up to 50% of people with Hepatitis C will have chronic disease that may lead to cirrhosis. There is currently no vaccine against Hepatitis C.

The risk of becoming infected with bloodborne pathogens depends on:

- The type of exposure (transfusion, needle stick, splash)
- How much virus is in the blood or body fluid of the source
- The ability of that particular virus to cause infection

For example, a transfusion with a pint of blood would carry much more risk than a stick from a needle used to draw blood. A splash to mucous membranes, such as eyes or lips is generally less of a risk than a needle stick. The source may be more infectious if (s)he has a lot of the virus in the blood. For example, "hepatitis B virus" is much more infectious than either "hepatitis C virus" or HIV. **A health care worker cannot be infected with any bloodborne pathogen if the source of the exposure does not carry the virus.** Most of the occupational exposures that occur do not carry the risk of infection by any of the viruses mentioned.

Healthcare workers who have received Hepatitis B vaccine and developed immunity to the virus are at virtually no risk for infection. **For a susceptible person, the risk from a single needlestick or cut exposure to HBV- infected blood ranges from 6-30%. For Hepatitis C, the average risk for infection after a needlestick or cut exposure to HCV-infected blood is approximately 1.8%.** The risk following a blood exposure to the eye, nose or mouth is

unknown, but is believed to be very small; however, HCV infection from a blood splash to the eye has been reported. **For HIV, the average risk of HIV infection after a needlestick or cut exposure to HIV-infected blood is 0.3% (about 1 in 300). The risk after an exposure of the eye, nose or mouth to HIV-infected blood is estimated to be on average, 0.1% (about 1 in 1000).**

The most important thing to remember is that the risk of getting HIV or hepatitis C from a needlestick or other exposure is quite small. As an example, there were 57 documented cases and 138 possible cases of occupationally acquired HIV infection among healthcare personnel in the United States since reporting began in 1985. No new documented cases of occupationally-acquired HIV/AIDS have been reported since December 2001.

What if the source patient's blood tests are negative?

If your exposure was very low risk, based on the source's blood work and the type of exposure, you may choose not to complete follow up blood work. If your exposure was high risk for a bloodborne pathogen, your medical provider will counsel you regarding appropriate follow up.

Any acute illness with fever, sore throat, rash, enlarged lymph nodes, or jaundice that occurs within six months after an exposure should be reported to your health care provider.

HIV Post-Exposure Risk-reduction:

- use condoms to prevent potential sexual transmission
- avoid pregnancy and breastfeeding
- avoid needle-sharing
- refrain from donating blood, plasma, organs, tissue, or semen

Hepatitis B Post-Exposure Risk-Reduction:

- HBV vaccination is advised for all non-HBV-immune persons.
- 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
- refrain from donating blood, plasma, organs, tissue or semen.
- avoid alcohol and, if possible, medications that may be toxic to the liver

Hepatitis C Post-Exposure Risk Reduction: Currently, no effective prophylaxis for hepatitis C virus infection has been identified. However, if you are infected or become infected with hepatitis C, the virus can often be treated successfully by taking medication.

- avoid blood-to-blood contact, including sharing personal care items that may come in contact with another person's blood, such as razors or toothbrushes and sharing needles, syringes, or other equipment to inject drugs
- refrain from donating blood, plasma, organs, tissue or semen
- there may be risk of transmission with sexual activity

Source Patient Information: Testing for hepatitis B, hepatitis C & HIV

An incident has occurred in which another person has been exposed to your blood or body fluid. Because of the nature of the exposure, there is a need to carry out a blood test to check if you have certain viruses that can be transmitted if present in your blood. These viruses are hepatitis B, hepatitis C and human immunodeficiency virus (HIV). Negative test results will reduce the other person's anxiety and eliminate the need for them to undergo unnecessary treatment.

Testing for the viruses

Blood tests will be done to determine whether you already have any of these viruses. The results of these tests are confidential and only used for the purposes of confirming your infection status at the time of the incident. If any of the tests are positive and this was previously unknown to you, the results can be sent confidentially to your own healthcare provider. The results of your blood tests will be disclosed to the health care provider who is treating the person who was exposed to your blood or body fluid.

What do the blood tests involve?

Before the tests, you will be provided with information regarding the tests that will be conducted. The blood tests are similar to testing that you may have had before. It should only take a few minutes and you will be advised when to expect the results. You have the right to refuse to be tested. If you choose not to be tested, your care will not be affected.

What happens if the blood tests are negative?

This means that you tested negative for the viruses and no further testing will be required.

What happens if the blood test is positive?

If the blood test is positive for one of these viruses and this was previously unknown to you, you will be referred to a specialist for follow-up.

Are there any implications of a positive test?

- If the test is positive for any of these bloodborne viruses, you will be referred to a specialist for follow up assessment and management.
- You should inform your sexual or injection drug using partners, so they have the chance to be tested and get any treatment needed.
- If you want help with informing a partner, the NYS Department of Health Partner Services staff can talk with you about your options, and help you to set up a plan for those partners who need to be notified, offered testing and if necessary, treatment for their exposure. For information about partner services go to: www.health.ny.gov/diseases/communicable/std/partner_services/accessing_partner_services.htm
- You should not share shaving blades or razors, toothbrushes and needles.
- You should get advice about pregnancy and breast feeding from your health care provider.
- Hepatitis B, hepatitis C and HIV are notifiable diseases and positive results will be reported confidentially to the NYS Department of Health

For more information:

https://www.health.ny.gov/diseases/aids/providers/standards/post_exposure_prophylaxis.htm