



# 7. Management of Potentially Infectious Exposures and Illnesses

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Infection Control in Healthcare Personnel: Infrastructure and Routine Practices for Occupational Infection Prevention and Control Services (2019)

#### **AT A GLANCE**

Management of Potentially Infectious Exposures and Illnesses from the Infection Control in Healthcare Personnel: Infrastructure and Routine Practices for Occupational Infection Prevention and Control Services (2019) guideline.

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## Recommendations

# For healthcare organization leaders and administrators

Number	Recommendation
7.a.	Implement sick leave options for healthcare personnel that encourage reporting of potentially infectious exposures or illnesses, appropriate use of sick leave, and adherence to work restrictions.

# For occupational health services leaders and staff

Number	Recommendation
7.b.	Develop, review, and update when necessary policies and procedures about healthcare personnel exposure and illness management services that:
7.b.1.	Include methods to provide job-related exposure and illness management services.
7.b.2.	Establish a timely, confidential, and non-punitive mechanism for healthcare personnel to report potentially infectious exposures and access exposure and illness management services 24 hours a day and 7 days per week.
7.b.3.	Include sick leave options that encourage reporting of potentially infectious exposures and illnesses and that discourage presenteeism.
7.b.4.	Facilitate access to clinical providers with expertise in exposure and illness management who are available 24 hours a day and 7 days per week.

7.b.5.	Facilitate prompt access to laboratory testing and treatment for managing exposures and illnesses.
7.b.6.	Describe work restrictions for exposed or ill healthcare personnel that:
7.b.6.b.	Specify methods of communication between occupational health services, healthcare personnel, and others (e.g., human resources, managers) about work restrictions.
7.b.6.c.	Identify how work restrictions are imposed and healthcare personnel are cleared for return to work.
7.c.	Define criteria, methods, and individuals responsible for reporting potentially infectious exposures and illnesses or suspected infectious outbreaks to internal departments and external authorities.
7.d.	Provide or refer healthcare personnel who have sustained job-related potentially infectious exposures or illnesses for prompt management that includes:
7.d.1.	Evaluating the exposed or ill healthcare personnel.
7.d.2.	Evaluating the exposure incident and source, including whether the source was potentially infectious and whether others remain at risk.
7.d.3.	Arranging for any needed testing.
7.d.4.	Counseling about:  risk of exposure or illness,  testing,  options for and risks and benefits of postexposure prophylaxis or treatment,  need for specialty care,  follow-up testing and treatment,  work restrictions, if indicated,  risk of transmitting infections to others and methods to prevent transmission, and  signs and symptoms of illness to report after an exposure, including potential side effects of prophylaxis.
7.d.5.	Offering prophylaxis or treatment, if indicated.
7.d.6.	Offering prophylaxis or treatment, if indicated

# Background

HCP can be exposed to potentially infectious blood, tissues, secretions, other body fluids, contaminated medical supplies, devices, and equipment, environmental surfaces, or air in healthcare settings. Mechanisms of occupational exposures include percutaneous injuries such as

needlesticks, mucous membrane or non-intact skin contact via splashes or sprays, and inhalation of aerosols. HCP can also be exposed to infectious diseases in the community and risk transmitting them to others at work.

Appropriate management of potentially infectious exposures and illnesses among HCP can prevent the development and transmission of infections. Effective management of exposures and illnesses includes promptly assessing exposures and diagnosing illness, monitoring for the development of signs and symptoms of disease, and providing appropriate postexposure or illness management. Providing exposure and illness management services also affords the opportunity for counseling to address HCP concerns about issues such as potential infection, adverse effects of postexposure prophylaxis, and work restrictions.

### Exposure management

A substantial number of potentially infectious exposures occur in the workplace, despite longstanding regulations and guidelines in place for their prevention [1] [2] [3] [4], and providing timely and effective exposure management services can be challenging. Bloodborne pathogen exposures among HCP subpopulations, including trainees, technicians, surgeons, medical staff, and nurses, are significantly underreported [5] [6] [7]. Time constraints, fear of reprimand, lack of information on how to report exposures, and cost coverage of exposure management have been identified as factors in not reporting exposures [6]. While many HCP may be guaranteed cost coverage for job-related exposure and illness by workers' compensation laws, not all HCP, such as volunteers and trainees, may have this benefit.

Off-site services can be a barrier to accessing care if they are inconveniently located. When timeliness is critical for provision of prophylaxis or expert consultation and management (see <u>Expert consultation and management services</u>), such as after a needlestick injury from an HIV-infected source, off-site services may not be sufficient.

Identifying whether an exposure to an infectious disease has occurred can be challenging and depends upon eliciting the circumstances of the (sometimes remote) exposure incident, including where, when, and how the exposure occurred, the duration and extent of the exposure, and whether appropriate PPE was used and functioned correctly. Some guidelines provide disease-specific guidance on how to determine if an occupational exposure has occurred [8] [9].

Efficient management of HCP exposures can benefit from procedures that streamline and enable HCP exposure reporting and service access. Patient care processes are an important aspect of HCP exposure management. For example, some HCO request patients to sign an advance release that allows for bloodborne pathogen testing should an HCP exposure occur during the course of their care.

## Illness management

Treatment and containment of infectious illnesses in HCP can protect patients and coworkers from infection [10]. Occupationally- and community-acquired infections can both be of concern. A prominent issue is "presenteeism;" that is, HCP reporting to work when sick [11]. Whether because of individual work ethic, local culture (e.g., unwillingness to disappoint colleagues), or financial pressures such as a lack of paid sick leave or policies that combine sick leave and vacation days, presenteeism puts others at risk. Eliciting reasons for HCP presenteeism may inform methods to reduce the problem. Developing policies that discourage presenteeism can be challenging, as contractual staff employers and self-employed HCP may have different rules about missing work.

## Selected federal requirements for exposure and illness management

Federal requirements affect the delivery of exposure or illness management services. Affected services include:

### Employer inquiry about infectious illnesses among HCP

• The ADA limits if and how employers may ask employees about medical problems, illnesses, and potential disabilities [12].

### Provision of exposure or illness management services

• The OSHA Bloodborne Pathogens standard contains requirements for the provision of job-related exposure and illness management services related to bloodborne pathogens [3].

### Notification of HCP potentially exposed to infectious pathogens

• The Ryan White HIV/AIDS Treatment Extension Act of 2009 mandates notification of emergency response personnel possibly exposed to selected infectious diseases. In accordance with this Act, CDC maintains a list of infectious disease exposures that must be reported to emergency response personnel, as well as reporting requirements [13].

#### **Work Restrictions**

- The ADA contains provisions that affect how work restrictions are applied. Employers are required to provide reasonable accommodation so that HCP can perform the essential functions of their job [12].
- Work restrictions are typically communicated to appropriate individuals and HCO authorities, such as supervisors and human resources departments, while maintaining the HCP right to privacy. The HIPAA Privacy Rule provides federal protections for individually identifiable health information held by covered entities and their business associates and gives individuals an array of rights with respect to that information. Detailed information on the HIPAA Privacy Rule can be found on the U.S. Department of Health and Human Services website "Health Information Privacy [2"].

#### Sick Leave

• The Family and Medical Leave Act of 1993 (FMLA) entitles eligible employees of covered employers to take unpaid, job-protected leave for specified family and medical reasons with continuation of group health insurance coverage under the same terms and conditions as if the employee had not taken leave. The FMLA provides specific leave time allowances, as long as they meet specific criteria [14]. Details regarding employee eligibility and covered employers are available on the U.S. Department of Labor website "Fact Sheet #28: The Family and Medical Leave Act" PDF 2.

Additional state and local requirements may also apply to exposure and illness management services.

### Expert consultation and management services

The capacity for providing exposure and illness management services varies by OHS. Depending upon clinical circumstances, expert consultation may be appropriate for managing exposures to infections or illnesses such as HIV [8] and hepatitis C [15] [16]. OHS locations and healthcare settings may not have such experts available on-site, and arranging for consultation can require advanced planning. Methods to facilitate expert consultation include standing agreements with on-site or contracted experts and the use of decision support resources, such as telemedicine services and accessing exposure and illness management guidelines or protocols electronically [17] [18].

#### Work restrictions

Work restrictions exclude potentially infectious HCP from the workplace or specifically from patient contact to prevent transmission of infectious diseases. Work restrictions may also be implemented when HCP are at increased risk for infection, such as restricting susceptible HCP contact with patients with varicella zoster when immune HCP are available [19]. Exclusion can be based on time, or evaluation for clearance to return to work, depending on the infection. Reluctance to report exposures and illnesses and concerns regarding missed work can make work restrictions difficult to implement. Staffing limitations can also affect implementation of work restrictions. Alternative work options that minimize risk to others (e.g., telework for infectious workers), and utilizing paid sick leave days or job-protected leave (e.g., provided by the FMLA [14]) may reduce the negative impacts of work restrictions.

### Outbreak detection and management

When OHS detects an outbreak among HCP, internal coordination with other HCO departments, such as IPC services, is essential, as is notification of the appropriate public health authorities [20]. When HCP testing is required, clinical laboratory personnel are part of the response planning process [11] [21]. OHS can also inform post-outbreak assessments to identify options for preventing future outbreaks [22].

# Reporting HCP exposures and illnesses

All states and territories have requirements for reporting selected infections or infectious conditions in persons to health departments [23] [24]. Reporting of notifiable infections can hasten identification of chains of transmission and outbreaks and facilitate health department assistance with notifying contacts.

Adverse events due to medical devices or equipment can result in HCP exposure to infectious diseases (e.g., sharps injuries), and devices involved in such exposures due to a quality problem or other issues can be reported to the <u>U.S. Food and Drug Administration (FDA) MedWatch</u> database 2 [25]. Reporting to the FDA MedWatch Database is voluntary, but serves to identify device-related hazards that might warrant review.

### **Abbreviations**

- ADA = Americans with Disabilities Act
- CDC = Centers for Disease Control and Prevention

- FDA = Food and Drug Administration
- FMLA = Family and Medical Leave Act (of 1993)
- HCO = Healthcare Organization
- HCP = Healthcare Personnel
- HIPAA = Health Insurance Portability and Accountability Act
- HIV = Human Immunodeficiency Virus
- OHS = Occupational Health Services
- OSHA = Occupational Safety and Health Administration
- PPE = Personal Protective Equipment

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