

Infection Control in Healthcare Personnel: Infrastructure and Routine Practices for Occupational Infection Prevention and Control Services Recommendations Only

Centers for Disease Control and Prevention National Center for Emerging and Zoonotic Infectious Diseases Division of Healthcare Quality Promotion

Updated: October 2019

These recommendations are intended to facilitate the provision of occupational infection prevention and control (IPC) services to healthcare personnel (HCP). They address eight IPC elements of Occupational Health Services (OHS):

- 1. Leadership and management
- 2. Communication and collaboration
- 3. Assessment and reduction of risks for infection among HCP populations
- 4. Medical evaluations
- 5. Occupational IPC education and training
- 6. Immunization programs
- 7. Management of potentially infectious exposures and illnesses
- 8. Management of HCP health records

The recommendations are classified as good practice statements based upon the expert opinions of the authors and the Healthcare Infection Control Practices Advisory Committee (HICPAC).

Table of Contents

1. Leadership and Management	2
2. Communication and Collaboration	3
3. Assessment and Reduction of Risks for Infection among Healthcare Personnel Populations	3
4. Medical Evaluations	4
5. Occupational Infection Prevention and Control: Education and Training	5
6. Immunization Programs	6
7. Management of Potentially Infectious Exposures and Illnesses	6
8. Management of Healthcare Personnel Health Records	7

This document lists only the recommendations in "Infection Control in Healthcare Personnel: Infrastructure and Routine Practices for Occupational Infection Prevention and Control Services."

The entire guideline includes an Executive Summary, Introduction, Background, References, Contributors, Terminology, and Methods: Infection Control in Healthcare Personnel [PDF - 70 pages].

1. Leadership and Management

See section **2. Communication and Collaboration** (page 3) for additional related recommendations.

For healthcare organization leaders and administrators

- 1.a. Invest in an organizational culture that prioritizes safety and occupational infection prevention and control.
- 1.b. Regularly review organizational information about occupational infectious risks, exposures, and illnesses with occupational health services.
- 1.c. Dedicate one or more persons with appropriate authority and training to lead occupational infection prevention and control services.
- 1.d. Provide sufficient resources (e.g., expertise, funding, staff, supplies, information technology) to implement elements of occupational infection prevention and control:
 - Leadership and management,
 - Communication and collaboration,
 - Assessment and reduction of risks for infection among healthcare personnel populations,
 - Medical evaluations,
 - Occupational infection prevention and control education and training,
 - Immunization programs,
 - Management of potentially infectious exposures and illnesses, and
 - Management of healthcare personnel health records.
- 1.e. Oversee, and include occupational health services leaders in, performance measurement and continuous quality improvement activities for occupational infection prevention and control services.

For occupational health services leaders and staff

- 1.f. Promote an organizational culture with a consistent focus on safety and occupational infection prevention and control.
- 1.g. Develop occupational infection prevention and control services that are tailored to the needs of healthcare personnel and the environment in which they work.
- 1.h. Develop, review, and update when necessary, written policies and procedures that adhere to federal, state, and local requirements for elements of occupational infection prevention and control services:
 - Leadership and management,
 - Communication and collaboration,
 - Assessment and reduction of risks for infection among healthcare personnel populations,
 - Medical evaluations,
 - Occupational infection prevention and control education and training,
 - Immunization programs,
 - Management of potentially infectious exposures and illnesses, and
 - Management of healthcare personnel health records.
- 1.i. Inform all healthcare personnel and relevant healthcare organization departments about occupational infection prevention and control policies and procedures.

- 1.j. Collaborate with appropriate healthcare organization departments and individuals to:
 - 1.j.1. Achieve compliance with regulations related to occupational infection prevention and control.
 - 1.j.2. Develop infectious disease emergency and outbreak management plans.
 - 1.j.3. Develop and monitor performance measures for occupational infection prevention and control services that include the proportion of healthcare personnel with documented evidence of immunity and the proportion of healthcare personnel vaccinated, as appropriate, for each vaccine-preventable disease recommended for healthcare personnel by the Advisory Committee on Immunization Practices (ACIP).
 - 1.j.4. Set and meet quality improvement goals for occupational infection prevention and control services and report performance measures and areas for improvement to management.
 - 1.j.5. Periodically assess the effectiveness of occupational infection prevention and control services.

2. Communication and Collaboration

See section 1. Leadership and Management (page 2) for additional related recommendations.

For healthcare organization leaders and administrators

2.a. Establish organizational goals, policies and procedures, infrastructure, and interventions that foster communication and collaboration about occupational infection prevention and control.

For occupational health services leaders and staff

- 2.b. Engage senior leaders, administrators, leaders of other programs that share activities related to occupational infection prevention and control, and healthcare personnel to foster collaborative decision-making.
- 2.c. Participate in the development of policies, procedures, and interventions that affect occupational infection prevention and control.

3. Assessment and Reduction of Risks for Infection among Healthcare Personnel Populations

See section 1. Leadership and Management (page 2) for additional related recommendations.

For healthcare organization leaders and administrators

3.a. Regularly meet with occupational health services leaders to review results of risk assessments related to occupational infection prevention and control, set performance goals, and charge relevant healthcare organization departments and individuals to reduce risks.

For occupational health services leaders and staff

3.b. Conduct, or collaborate with other healthcare organization departments or individuals in, regular risk assessments and risk reduction activities related to occupational infection prevention and control.

3.c. Notify healthcare organization leaders and departments about hazards identified and risk reduction plans, progress, and priorities for healthcare personnel.

4. Medical Evaluations

See section **7. Management of Potentially Infectious Exposures and Illnesses** (page 6) for additional related recommendations.

For healthcare organization leaders and administrators

4.a. Provide job descriptions with sufficient detail to assess job-related infection risks to occupational health services staff before the pre-placement medical evaluation.

For occupational health services leaders and staff

4.b. Develop, review, and update when necessary, policies and procedures for providing preplacement, periodic, and episodic medical evaluations that include health assessments, screening and diagnostic testing, immunization services, exposure and illness management, counseling, and reporting of findings of medical evaluations.

4.c. For preplacement medical evaluations

- 4.c.1. Review each employee's job description for duties that may affect risk of acquiring or transmitting infections in healthcare settings.
- 4.c.2. Collect a directed health inventory to assess:
 - history of medical conditions and other factors that may affect the risk of acquiring or transmitting infections in healthcare settings, and
 - evidence of immunity to vaccine-preventable diseases recommended for healthcare personnel by the Advisory Committee on Immunization Practices (ACIP).
- 4.c.3. Conduct or refer healthcare personnel for physical examination, as indicated, to assess medical conditions that might affect risk of acquiring or transmitting infections in healthcare settings.
- 4.c.4. Conduct or refer healthcare personnel for infectious diseases screening as recommended by CDC.
- 4.c.5. Test for evidence of immunity to vaccine-preventable infections as recommended by the Advisory Committee on Immunization Practices (ACIP).
- 4.c.6. Provide or refer healthcare personnel for services that reduce risks of infectious disease transmission (e.g., immunizations, medical clearance for respirator fit testing).
- 4.c.7. Provide or refer healthcare personnel for information regarding:
 - health conditions that may increase their risk of acquiring or transmitting infections in healthcare settings, and recommended actions to reduce those risks;
 - procedures for preventing and managing workplace exposures and illnesses;
 - work restrictions and sick leave policies; and
 - confidentiality of their health information.

4.d. For periodic medical evaluations

4.d.1. Provide additional doses of vaccines recommended for healthcare personnel by the Advisory Committee on Immunization Practices (ACIP).

- 4.d.2. Perform or refer healthcare personnel for indicated follow-up testing.
- 4.d.3. Conduct periodic screening for tuberculosis, if indicated, as recommended by CDC.
- 4.d.4. Provide or refer healthcare personnel for periodic respirator fit testing, if indicated.
- 4.e. For **episodic medical evaluations**, conduct or refer healthcare personnel for medical evaluations on an as-needed basis to:
 - 4.e.1. evaluate and manage potentially infectious exposures and illnesses;
 - 4.e.2. evaluate and manage new health conditions (e.g., pregnancy, rashes) that may affect risk of acquiring or transmitting infections or ability to perform job functions;
 - 4.e.3. provide pre-placement medical evaluations for healthcare personnel who are changing job duties;
 - 4.e.4. survey healthcare personnel for exposures and/or illness during outbreaks of infectious diseases in healthcare settings, if indicated.

5. Occupational Infection Prevention and Control: Education and Training

For healthcare organization leaders and administrators

5.a. Provide healthcare personnel dedicated time during their normal work hours to complete occupational infection prevention and control education and training.

For occupational health services leaders and staff

- 5.b. Collaborate with appropriate healthcare organization departments or individuals to:
 - 5.b.1. Define the goals and scope of education and training for healthcare personnel about occupational infection prevention and control.
 - 5.b.2. Support initial, periodic, and as-needed education and training that is appropriate in content to the educational level, literacy, and language of healthcare personnel.
 - 5.b.3. Periodically review healthcare personnel exposure data to identify high risk sub-populations for refresher infection prevention and control education and training.
- 5.c. Determine periodic "refresher" education topics based upon analyses of healthcare personnel exposure incident reports, risk assessments, and other methods that identify infectious hazard vulnerabilities for healthcare personnel.
- 5.d. Topics for initial, periodic, and as-needed education and training should include:
 - Federal, state, and local education and training requirements
 - Modes of infectious disease transmission and implementation of standard and transmission-based precautions
 - Hand hygiene
 - Sharps injury prevention
 - Immunizations recommended by the Advisory Committee on Immunization Practices (ACIP) for healthcare personnel
 - Healthcare personnel screening for selected infectious diseases before job placement and periodically thereafter
 - How to access occupational health services, when needed, and expectations for reporting exposures

- Expectations for reporting illnesses or conditions (work-related or acquired outside of work), such as rashes or skin conditions (e.g., non-intact skin on hands); febrile, respiratory, and gastrointestinal illnesses, and hospitalizations resulting from infectious diseases
- Sick leave and other policies and procedures related to infectious healthcare personnel, including the risks of presenteeism to other healthcare personnel and patients

6. Immunization Programs

For healthcare organization leaders and administrators

6.a. Set goals to achieve high rates of evidence of immunity to vaccine-preventable diseases recommended for healthcare personnel by the Advisory Committee on Immunization Practices (ACIP).

For occupational health services leaders and staff

6.b. Develop, review, and update when necessary immunization program policies and procedures that:

- 6.b.1. Adhere to Advisory Committee on Immunization Practices (ACIP) recommendations for immunizing healthcare personnel.
- 6.b.2. Indicate all preplacement, annual, and other job-related immunizations that healthcare personnel should receive.
- 6.b.3. Specify strategies to offer vaccines to healthcare personnel and to achieve high immunization coverage.
- 6.b.4. Specify strategies for gathering and reviewing information on why recommended immunizations are not administered to inform program quality improvement.

7. Management of Potentially Infectious Exposures and Illnesses

For healthcare organization leaders and administrators

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 leaders and staff of occupational health services

- 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.a. Specify criteria for work restrictions.
 - 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 follow-up care.

8. Management of Healthcare Personnel Health Records

For healthcare organization leaders and administrators

- 8.a. Establish systems to maintain confidential work-related healthcare personnel health records, preferably in electronic systems, that:
 - 8.a.1. limit access only to authorized personnel,
 - 8.a.2. enable rapid access by authorized clinical providers,
 - 8.a.3. facilitate aggregation and de-identification of information,
 - 8.a.4. allow tracking and assessments of trends in infectious risks, screening tests, exposures, and infections, and
 - 8.a.5. enable confidential reporting to internal departments and individuals or external groups.
- 8.b. Consider enabling electronic system features that:

- 8.b.1. notify occupational health services when occupational infection prevention and control services are due, and
- 8.b.2. communicate work restrictions with other healthcare organization data systems (e.g., human resources information systems).

For leaders and staff of occupational health services

- 8.c. Participate in the development of policies and plans that facilitate confidential, efficient exchange of healthcare personnel health information.
- 8.d. Maintain healthcare personnel records and databases that include medical evaluations, infectious disease screening, evidence of immunity and immunizations, exposure and illness management, and work restrictions.
- 8.e. Maintain confidentiality, use appropriate authorizations, and provide only necessary information when sharing healthcare personnel records.
- 8.f. Facilitate healthcare personnel data aggregation for reporting performance measures and supporting occupational health services quality improvement activities.
- 8.g. Make copies of individual records promptly available to healthcare personnel upon their request, preferably within 15 days.