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# Clinical Safety: Occupationally-acquired Infections and Healthcare Workers

KEY POINTS

- These resources support occupational infection prevention and control for healthcare workers in healthcare settings.
- Preventing infections in healthcare protects the health and safety of personnel, patients and visitors.

## Why it's important

Occupationally acquired infections are infections caused by pathogens transmitted to healthcare personnel following exposures that occur in healthcare settings. Exposures could occur because of contact with:

- Coworkers.
- Patients.
- Visitors.
- Environmental surfaces.
- Medical devices.
- Other healthcare sources.

## Background

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### Novel and emerging pathogens +

Infection prevention and control (IPC) guidance for novel and emerging pathogens might be available on an individual pathogen basis. IPC processes for novel pathogens may vary from standard practices. Examples include:

- [Infection Control: Severe acute respiratory syndrome coronavirus 2 \(SARS-CoV-2\) | CDC](#)
- [Infection Control: Healthcare Settings | Mpox | Poxvirus | CDC](#)
- [Infection Prevention and Control Recommendations for Hospitalized Patients Under Investigation \(PUIs\) for Ebola Virus Disease \(EVD\) in U.S. Hospitals | Ebola Virus Disease | Clinicians | Ebola \(Ebola Virus Disease\) | CDC](#)
- [National Emerging Special Pathogens Training and Education Center \(NETEC\) !\[\]\(c045a398c48fcb47adf237d338b1b391\_img.jpg\)](#)

### Occupational IPC +

CDC publishes infection control guidelines and recommendations for healthcare settings Including the [Guideline for Infection Control in Healthcare Personnel](#) The recommendations in this guideline are intended for leaders, administrators, and staff of occupational health services who provide occupational infection prevention and control services to healthcare personnel and prevent transmission of infections between healthcare personnel and others. This includes recommendations about:

- the infrastructure and routine practices necessary to provide occupational infection prevention and control services to healthcare personnel, and

- controlling the work-related spread of selected pathogens to and from healthcare personnel, including work restrictions and post-exposure prophylaxis.

**Keep Reading:**

[Infection Control in Healthcare Personnel: Epidemiology and Control of Selected Infections](#)

## Resources for worker safety

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Bloodborne pathogen exposures and infections



### Prevention

- [Sharps Safety Programs and Workbook](#)

### Response after exposure

- [Updated US Public Health Service Guidelines for the Management of Occupational Exposures to Human Immunodeficiency Virus and Recommendations for Postexposure Prophylaxis](#)
- [CDC Guidance for Evaluating Health-Care Personnel for Hepatitis B Virus Protection and for Administering Postexposure Management](#)
- [Updated CDC Guidance for Testing and Clinical Management of Health Care Personnel Potentially Exposed to Hepatitis C Virus](#)
- [National Clinicians Post-Exposure Prophylaxis Hotline \(PEPLINE\)](#)
- [Exposed to HIV? The clock is ticking! Take Action!](#)

### Living with infections

- [Updated CDC Recommendations for the Management of Hepatitis B Virus–Infected Health-Care Providers and Students](#)
- Society for Healthcare Epidemiology of America (SHEA)'s [Management of Healthcare Personnel Living with Hepatitis B, Hepatitis C, or Human Immunodeficiency Virus in US Healthcare Institutions](#)

Personal Protective Equipment (PPE)



- [National Institute for Occupational Safety and Health \(NIOSH\) toolkit](#) National Institute for Occupational Safety and Health (NIOSH) toolkit
- [Training Frontline Health Care Professionals and Auditing Practices](#)
- [Sequence for Donning and Removing Personal Protective Equipment](#)

Immunization



Healthcare personnel are at risk for exposure to vaccine-preventable diseases because of their contact with infectious patients or related materials. Immunization of healthcare personnel remains a critical part of an occupational infection prevention and control program.

Recommendations for immunization of healthcare personnel and resources include the [Immunization of Health-Care Personnel: Recommendations of the Advisory Committee on Immunization Practices \(ACIP\)](#)

**Keep Reading:**

[ACIP](#)

Aerosol generating procedures



Some procedures are more likely to generate higher concentrations of infectious respiratory aerosols than coughing, sneezing, talking or breathing. These aerosol generating procedures (AGPs) potentially put healthcare personnel and others at an increased risk for pathogen exposure and infection.

There is neither expert consensus nor sufficient supporting data to create a definitive and comprehensive list of AGPs for healthcare settings.

Commonly performed medical procedures that are often considered AGPs or that might create uncontrolled respiratory secretions include:

- Open suctioning of airways.
- Sputum induction.
- Cardiopulmonary resuscitation.
- Endotracheal intubation and extubation.
- Non-invasive ventilation such as BiPAP and CPAP.
- Bronchoscopy.
- Manual ventilation.

It is uncertain whether aerosols generated from some procedures may be infectious, such as:

- Nebulizer administration [\[A\]](#)
- High flow O2 delivery

## Staff education

Project Firstline provides resources for frontline healthcare personnel including educational modules on:

- Infection control.
- Injection safety.
- PPE use.
- Environmental cleaning and disinfection.

**Keep Reading:**  
[Project Firstline Trainings](#)

SOURCES

**CONTENT SOURCE:**  
[National Center for Emerging and Zoonotic Infectious Diseases \(NCEZID\)](#)

FOOTNOTES

- A. Aerosols generated by nebulizers come from medication in the nebulizer. It is uncertain whether potential associations between performing this common procedure and increased risk of infection might be due to aerosols generated by the procedure or due to increased contact between those administering the nebulized medication and infected patients.