



Washington State Department of

HEALTH



Playbook for New Infection Preventionists in Outpatient Settings

2024

Playbook for New Infection Preventionists in Outpatient Settings

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Introduction

This resource was created by a workgroup of the Washington State Healthcare-Associated Infections and Antimicrobial Resistance Outpatient Network. The Outpatient Network is a group of partners focused on preventing healthcare-associated infections (HAIs) and improving the safe use of antimicrobials in outpatient settings, and includes members from health systems, local and state public health, academic institutions and patient safety organizations.

The intent of this Playbook is to provide a quick reference for Infection Preventionists (IPs) in Washington state who are new to working in the outpatient setting*. This could be a new IP working in this setting, or a seasoned IP who is adding outpatient settings to their responsibilities. We have defined outpatient broadly to include all settings that provide clinic-based healthcare. Links for information related to specialty settings are included in Appendix A. For questions related to the use of this material, please contact hai@doh.wa.gov.

**Agencies and individuals outside of WA are welcome to use this tool, however, please be aware that that guidance and contacts may differ for your location.*

Updates

This Playbook was last updated September 30, 2024, and is scheduled to be updated next in January of 2026.

Key Terms

Antimicrobial Stewardship (AMS): Antimicrobial resistance happens when germs like bacteria and fungi develop the ability to defeat the drugs designed to kill them. (Source: [CDC: Antibiotic Use](#))

Healthcare-Associated Infection (HAI): HAIs are infections that patients get while or soon after receiving health care. (Source: [CDC: HAI](#))

Infection Preventionist (IP): Infection preventionists (IPs) are specially trained professionals, leaders, educators, and collaborators from diverse backgrounds, including nursing, public health, laboratory, and allied health fields. (Source: [APIC: Who are IPs](#))

List of Acronyms

- **AMS:** Antimicrobial Stewardship
- **APIC:** Association for Professionals in Infection Prevention and Epidemiology
- **AR:** Antimicrobial Resistance
- **BBP:** Bloodborne pathogens
- **CDC:** Centers for Disease Control and Prevention
- **COHRA:** Council for Outbreak Response: HAI/AR
- **HAI:** Healthcare-Associated Infection
- **HLD:** High Level Disinfection
- **IP:** Infection Preventionist
- **LHJ:** Local Health Jurisdiction
- **LNI:** WA State Department of Labor and Industries
- **OPIM:** Other potentially infectious materials
- **SAL:** Sterility Assurance Level
- **SHEA:** Society for Healthcare Epidemiology of America
- **WHO:** World Health Organization

Getting Started: First Things First

The first steps to being an effective IP in outpatient are to assess your own knowledge, and the needs of the settings you work with. Then you will want to familiarize yourself with key resources. This section provides links to get you started on this process.

Self-Assessment

Prior to using this Playbook, you may want to take a Self-Assessment to determine what areas of IP you have the most need for resources in. The [Competency Self-Assessment Activity for Novice or Becoming Proficient IPs](#) is provided by the Association for Professionals in Infection Prevention and Epidemiology (APIC) and covers major areas of IP which are common across many settings.

Program Assessment

Two resources are available for conducting an initial assessment of your outpatient setting infection prevention practices and policies.

- The Centers for Disease Control and Prevention (CDC) provides the [Guide to Infection Prevention for Outpatient Settings: Minimum Expectations for Safe Care: Appendix A Checklist](#) which covers major elements of infection control in this setting.
- [The CDC's Key Policy Elements for Best Practices, Appendix II – Outpatient settings worksheets](#) provides a tracking mechanism for IP-related policies across a variety of outpatient settings.

Key Resources

- [Centers for Disease Control and Prevention \(CDC\) HAI webpage](#): The resources available on this page cover many aspects of infection prevention and antimicrobial resistance.
- [Guide to Infection Prevention for Outpatient Settings: Minimum Expectations for Safe Care](#): This is a great starting place as it pulls together recommendations for outpatient infection prevention into one document.
- [Outbreaks and Patient Notifications in Outpatient Settings, Selected Examples, 2010-2014](#): This table includes outbreaks across many outpatient settings and can be helpful for you to consider as you look at the risks in your settings.
- [WA Department of Health HAI webpage](#): This resource provides state-specific information and resources on HAI and Antimicrobial Resistance (AR).
- [DOH All-In-One Resource for Infection Preventionists](#): This resource document contains infection prevention resources from several infection prevention subject areas.
- [WA HAIAR Outpatient Network](#): This network of partners work together to prioritize and address HAIAR and antibiotic prescribing issues in outpatient settings.
- [Guide to Infection Prevention For Outpatient Settings: Minimum Expectations for Safe Care](#): This document from the CDC is a summary guide of infection prevention recommendations for outpatient (ambulatory care) settings.
- [Guideline for Disinfection and Sterilization in Healthcare Facilities \(2008\)](#): This document from the CDC is based on published articles from 1980 through 2006 and is a good introduction to understanding disinfection and sterilization.
- [Project Firstline](#): These resources created by the CDC that can be helpful as staff education, or onboarding for yourself.
- [Washington State Project Firstline](#): These resources created by WA DOH provide education and tools for staff education
- [Society for Healthcare Epidemiology of America \(SHEA\)](#): SHEA works to improve infection prevention and antimicrobial stewardship through guidelines and research

Staying Up To Date

This is a partial list of organizations you may want to sign up for newsletters or updates from to help you stay up to date with infection prevention practices.

- [Centers for Disease Control and Prevention](#)
 - Suggested topics (top picks in **BOLD**):
 - ACIP: Vaccine Recommendations
 - **Antimicrobial Resistance & Antibiotic Use**
 - COCA - Clinician Outreach and Communication
 - Emerging Infectious Diseases Journal Updates
 - **Flu: News & Highlights**
 - Handwashing
 - **Health Alert Network (HAN)**
 - **Infection Control & Healthcare-Associated Infections**
 - **Infection Prevention & Control**
 - Infectious Diseases: What's New
 - **Morbidity and Mortality Weekly Report (MMWR)**
 - Respiratory Virus Updates
 - Vital Signs
- [Washington State Department of Health](#)
 - Suggested topics (top picks in **BOLD**):
 - COVID-19 Response Partner Update
 - **DOH WA Health Alert Network (HAN)**
 - epiTRENDS
 - **Healthcare-Associated Infections and Antibiotic Resistance (HAIAR) Updates**
 - **Project Firstline**
 - Public Health Emergency Preparedness
 - **Washington State Department of Health Influenza Update**
- Your [Local Health Jurisdiction](#) (LHJ) is the local public health authority for your area, and you should subscribe to their email list.
- [ProMED](#), from the International Society for Infectious Diseases, provides daily updates on infectious disease outbreaks across the globe.
- [COHRA](#) is the Council for Outbreak Response: HAI/AR, and their updates provide important information about outbreak response.
- [CIDRAP](#) is the Center for Infectious Disease Research and Policy.
 - Suggested Topics:
 - Daily News Headlines
 - Antimicrobial Stewardship Newsletter
 - Flu Vaccine Roadmap Newsletter

Chapter 1: Infection Prevention Basics and Core Practices

Chapter Outline

- A. Hand hygiene
- B. Respiratory etiquette/hygiene
- C. Signage for waiting rooms
- D. Cleaning/Disinfection
 - Scheduling and Terminal Cleaning
 - Low-level disinfection
- E. PPE and Minimizing Exposure

Key Resources for this section

[CDC's Core Infection Prevention and Control Practices for Safe Healthcare Delivery in All Settings](#)

Hand Hygiene

The following are resources helpful for tracking and promoting good hand hygiene practices among staff in your outpatient settings.

- [CDC: Clinical Safety: Hand Hygiene for Healthcare Workers](#)
- [CDC: Clean Hands in Healthcare Training](#)
- [APIC: Hand Hygiene Resources](#)
- [World Health Organization \(WHO\): Hand hygiene in outpatient and home-based care and long-term care facilities](#)
- [SHEA: Strategies to prevent healthcare-associated infections through hand hygiene](#)

Respiratory Etiquette and Respiratory Hygiene

To prevent the transmission of all respiratory infections in healthcare settings, including influenza, the following infection control measures should be implemented at the first point of contact with a potentially infected person. They should be incorporated into infection control practices as one component of Standard Precautions.

- [CDC: Respiratory Hygiene/Cough Etiquette in Healthcare Settings](#)
- [CDC: Cover Your Cough](#)
- [CDC: Facemask Dos and Don't for Healthcare Workers PDF](#)

Cleaning/Disinfection

- [APIC: Environmental Services Resources](#)
- [CDC: Environmental Infection Control Guidelines](#)
- [CDC: Recommendations for Disinfection and Sterilization in Healthcare Facilities](#)
- [APIC: Disinfection and Sterilization](#)
- [APIC: Environment of Care*](#)

*See the *Environment of Care* chapter in this Playbook for further information

PPE and Minimizing Exposure

This section of the chapter addresses Minimizing Exposure in an Outpatient Setting through standard and isolation precautions. You will use it to reduce the risk of infections by mitigating exposure using appropriate hand hygiene, personal protective equipment (PPE) and respiratory hygiene. This chapter is applicable to any facility caring for patients in an outpatient setting.

Links to resources that you should look at first:

- [CDC: Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings](#). Use this resource to understand the basics and importance of standard precautions and the importance of implementing isolation precautions based on the clinical presentation or confirmed diagnosis.
- [CDC: Standard Precautions for All Patient Care](#). This document is a summary of the different elements that make up standard precautions, including hand hygiene, PPE, respiratory hygiene, appropriate cleaning and disinfecting and more.

Personal Protective Equipment (PPE)

- [CDC: PPE Donning and Doffing Posters PDF](#). These posters show the CDC recommended sequence for donning (putting on) and doffing (removing) PPE.
- [North Carolina SPICE Program: PPE Competency Tool](#)
- [APIC: Quick Observation Tools \(QUOTS\)](#). This is a comprehensive infection prevention and control observational audit tool library.
- [CDC: Conserving Supplies of Personal Protective Equipment in Healthcare Facilities during Shortages](#). This document offers a series of strategies or options to conserve supplies of personal protective equipment (PPE) in healthcare settings when there is limited supply due to increased use and demand (e.g., as may occur during an infectious disease pandemic or epidemic) or supply chain disruption.

Isolation Precautions

- [CDC: Type and Duration of Precautions Recommended for Selected Infections and Conditions](#). A subsection of the [Guideline for Isolation Precautions](#), this is a summary table that lists infections and conditions that the CDC recommends isolation precautions for. Includes what type of precaution and the recommended duration to reduce the risk of transmission.
- [WA DOH and Washington State Hospital Association: Isolation Precautions Signs](#). These are downloadable signs that can be used for isolation at any facility.
- [CDC: Expedient Patient Isolation Rooms](#). This document covers engineering controls to reduce Airborne, Droplet and Contact Exposures during Epidemic/Pandemic Response.

- [APIC: Emerging Infectious Disease 'Playbooks'](#). A series of 'Playbooks' that can be downloaded and customized for use in individual healthcare facilities specific to certain pathogens, including *Candida auris*, measles and COVID-19.

Patient Movement/Transport

- [CDC: Infection Control Basics: Transmission-Based Precautions](#). For additional guidance on how to safely transport/move patients in precautions, refer to bullet points labeled "Limit transport and movement of patients" under each type of precautions.
- [CDC: Interim Infection Prevention and Control Recommendations for Measles in Healthcare Settings](#). Although this guidance is for measles, many of the concepts can be applied for disease that requires airborne precautions. For additional guidance on how to safely transport/move patients in precautions see following sections:
 - "2. Minimize Potential Measles Exposures, A. Before arrival to a healthcare setting & B. Upon arrival to a healthcare setting"
 - "3. Adhere to Standard and Airborne Precautions, A. Patient placement & C. Transporting patients with known or suspected measles within and between healthcare facilities"

Chapter 2: Occupational Health

Chapter Outline

- A. Basics (find links to minimum requirements)
 - OSHA requirements
 - LNI requirements (links)
- B. Exposures to BBP
- C. Vaccination for healthcare personnel
 - Hesitancy
- D. Employee onboarding/training/vaccination
 - TB testing
- E. Expand from core practices

Washington State has a Federally approved Occupational Health and Safety Administration (OSHA) plan that is enforced by the Department of Labor and Industries (LNI). The rules and regulations at the State level are as, or more stringent than the Federal rules and regulations. Below are links to the standards relating to infection prevention and control and worker safety.

- **OSHA requirements**
 - [1910.134 - Respiratory protection](#)
- **LNI requirements**
 - [Personal Protective Equipment \(PPE\) Requirements](#)
 - [Safety Standard for Respirators, Chapter 296-842 WAC](#)

Exposures to Bloodborne Pathogens

The Exposure Control Plan is a written document that details the workers at risk of exposure to blood or other potentially infectious materials (OPIM), OPIM are body fluids and tissue that can contain BBPs. It should explain the protective measures in place to reduce or eliminate the dangers of the exposures identified. This document must be available to all workers.

Exposure to BBPs may occur from needlesticks from used needles, splashes of infected body fluids into eyes, nose, mouth or broken skin, or cuts from contaminated sharps such as a used scalpel.

Identify the staff that are at risk of being exposed to BBPs. **The common roles typically at risk are:**

- Healthcare workers (medical providers, RNs, LPNs, MAs, Surgical Technicians)
- Environmental service workers
- Laundry service workers

Other staff to consider:

- Security workers that may be called to assist with a disruptive patient
- Administrative staff that may be called to assist with cleaning and prepping a room

Training on BBPs will need to be provided to this group of workers to inform them about the dangers and how to stay safe. The proper use of personal protective equipment and how to report an injury will also need to be included in the training.

Hepatitis B vaccination will need to be made available to the workers at no cost. Some organizations will provide HIV post-exposure prophylaxis for high-risk exposures. If your organization offers this therapy, it would be helpful to also include this process in the Exposure Control Plan.

When An Exposure Happens

Immediate care:

Dermal exposures:

1. Wash the site with soap and water for 15 minutes.
2. Apply direct pressure to lacerations to control bleeding and seek medical attention.

Mucous membrane exposure:

1. Mouth: Rinse several times with water
2. Eyes:
 - Remove contact lens
 - If eye wash available – flush for 15 minutes
 - If eye wash not available – have a peer flush exposed eye(s) with 500 ml lactated ringers or normal saline. If no lactated ringers or normal saline are available, flush under the faucet with tepid water for 15 minutes or as tolerated. Keep the eyes open and rotate the eyeballs in all directions to remove the contamination.

Report the incident as soon as possible to determine seriousness of the exposure, the possibility of post-exposure prophylaxis, and the plan of post-exposure care.

Evaluate the exposure:

- Provide detailed information and description of how the exposure happened to assist with a root cause investigation.
- This is a work-related injury and will need to be in the OSHA report.
- If the source is known, titers may be requested to be done on the source.
- If the source is unknown and the worker has unknow titers, a baseline titer may be requested to be done for HBV, HCV, and HIV.

Post-exposure prophylaxis (PEP):

- Available for HBV and HIV only

Follow- up testing:

- HBV exposure
 - If vaccine is given in response to the exposure, test for anti-HB, 1-2 months after last dose.
 - No follow up if worker is immune to HBV or received HBIG PEP.
- HCV exposure
 - Perform testing for anti-HCV and ALT, 4-6 months after exposure
 - Perform HCV RNA testing at 4-6 week for early diagnosis of HCV is desired
 - Confirm repeatedly reactive anti-HCV EIAs with supplemental tests

- HIV exposure
 - Evaluate person on HIV PEP within 72 hours after exposure and monitor for drug toxicity for 2 weeks
 - HIV antibody testing at baseline, 6 weeks, 3 month, and 6 months post exposure
 - Perform HIV antibody testing for illness compatible with acute retroviral syndrome.
 - Advise exposed persons to use precautions to prevent secondary transmission during the follow-up period.

Resources

[WA State Department of Labor and Industries: Overview of Bloodborne Pathogens](#)

[WA State Department of Labor and Industries – Occupational Exposure to Bloodborne Pathogens, Chapter 296-823 WAC](#)

[WA State Department of Labor and Industries - Post-exposure requirements.](#)

[CDC: Stop Sticks Campaign](#)

[OSHA: 1910.1030 - Bloodborne pathogens](#)

Employee Onboarding, Training and Vaccination

Vaccination for Healthcare Personnel

This section of the chapter is most applicable to IPs who work in all settings where vaccinations are administered.

Vaccinations that are important for healthcare workers:

- Hepatitis B (required to be offered, WAC 296-823-13005)
- Flu
- MMR - Mumps, Measles, and Rubella
- Tdap – Tetanus, Diphtheria, and Pertussis
- TD – Tetanus and Diphtheria
- Varicella
- COVID-19
- If valid documentation is not available, titers may be done for Hepatitis B, MMR, and varicella to verify immunity.

The worker has the right to decline receiving any vaccination after a discussion and information provided to the worker. Documentation of the worker's declination will need to be completed according to the facilities policy.

Vaccine Hesitancy

Steps to addressing vaccine hesitancy in multiple settings and populations

- Vaccine hesitancy can happen in many different settings or groups. This section will help you with staff training to understand, plan for, and address vaccine hesitancy and improve cultural competency for vaccine promotion.
- You will use it to create an action plan to address:

- Vaccine hesitancy for patients and staff
- Provide support to staff to increase internal vaccination rates
- Train staff on how to address vaccine hesitancy in patients
- Create capacity to address vaccine hesitancy in a culturally competent manner.

If you need additional resources, look at [Partnering for Vaccine Equity Resource Hub](#) where you can find additional videos, toolkits, documents and other information to address vaccine hesitancy for different settings and populations.

Resources:

Understanding vaccine hesitancy

[News Medical: What are the main causes of vaccine hesitancy?](#)

[Vaccine Journal: Vaccine hesitancy and health care providers \(PDF\)](#)

Creating a plan to address vaccine hesitancy

[WHO Essential Programme on Immunization](#). This resource covers how addressing low vaccination requires an adequate understanding of the determinants of the problem, tailored evidence-based strategies to improve uptake, and monitoring and evaluation to determine the impact and sustainability of the interventions.

[University of Minnesota: Vaccine Central](#). This resource is aimed at addressing vaccine hesitancy in Refugee, Immigrant and Migrant (RIM) communities, but can be adapted to other communities.

Improving vaccine uptake in healthcare staff

[Joint Commission: Strategies for Improving Healthcare Personnel Influenza Vaccination Rates \(PDF\)](#)

[CDC: Recommendations for vaccinations](#). Scroll down for healthcare staff recommendations

[Immunity Community: Healthcare Worker Immunization Toolkit](#)

Vaccine hesitancy training and information for clinicians and patients

[Boost Oregon](#). Use this resource to train providers on motivational interviewing and empathic inquiry and education for parents. Training may be offered virtually or in-person and can be tailored for your organization. Individual resources are listed in the additional topic areas.

[Immunity Community: E-courses for vaccine hesitancy training](#).

Multilingual vaccine information

[Medline Plus Vaccine information – Multiple languages](#). Use this resource to find information in multiple languages for adult vaccination, screening for contraindication and travel vaccinations.

[Children's Hospital of Philadelphia: Interpreting Foreign Immunization Records and Immunizing Newly Immigrated Populations](#). Use this resource to find information on list of terms for vaccine-preventable diseases, vaccines, and foreign vaccine trade names as well as a guide to the process for translating foreign immunization records.

Additional Resources:

[Boost Oregon: Motivational Interviewing \(PDF\)](#). These six open-ended questions are designed to assist you in using an MI approach to learn about your patients and build engagement.

[Boost Oregon: Offering advice and information \(PDF\)](#). A motivational interviewing (MI) approach for information exchange

[Boost Oregon: How to listen \(PDF\)](#). In motivational interviewing (MI), listening means paying close attention to what we say to demonstrate listening and understanding.

[Immunization.org: Vaccine Information Statement in 40 languages](#)

[Sample Hospital Immunization Policy](#) (Word document)

Training and recognizing vaccine champions:

[Washington State Department of Health: Vaccine Champion Award](#)

[Boost Oregon: Vaccine educator training](#)

Onboarding Tuberculosis Testing

In WA State, TB screening requirements are based on the facility type and not professional licensure. If your facility has a laboratory that handles clinical TB specimens or provides services to a patient population that is considered high risk for TB, a written TB control program must be in place.

Baseline screening and risk assessment is recommended by CDC to be done before the worker starts employment. The screening serves two purposes: 1) to provide a baseline should the worker be exposed, 2) to facilitate detection and treatment for latent TB infection or TB disease before placement.

Annual screening is no longer required for those tested negative at their baseline. Consider doing serial TB screening for workers that may be at a higher risk of occupational TB exposure who may be providing care to a population that has infectious pulmonary TB.

Type of testing

- **Blood tests - Interferon gamma release assay (IGRA)**
 - Commercially available TB blood test
 - QuantiFERON® TB Gold Plus (QFT-Plus)
 - T-SPOT® TB test (T-Spot)
- **Skin testing – Purified protein derivative (PPD)**
 - Two-step TB skin test
 - The two-step TB skin test can lower the chance that a boosted reaction from an old TB infection to be interpreted as a recent infection.
 - The second TB skin test is given one to three weeks after the first TB skin test is read.
 - **Administration** of the skin test can be done by a: RN, LPN, MA-Certified, Healthcare Provider (MD, DO, etc.), TB Community Health Worker, Pharmacist
 - **Reading** of the skin test can be done by a: RN*, LPN*, MA – certified*, Nursing Assistants – Certified and Registered*, Healthcare Provider*, TB community Worker*, Pharmacist*

*Determine mm size of induration only,

- **Interpretation** of the skin test can be done by a: RN**, LPN**, Healthcare Provider**
- When to avoid skin testing – Bacille Calmette-Guérin (BCG) is a vaccine that is given to infants and small children in countries where TB is common. This vaccine can cause a false positive TB skin test reaction. Use the blood test for TB screening instead.

Positive blood or skin test for TB

- Newly positive result for person confirmed to be at low risk
 - Symptom evaluation
 - Chest xray
 - Possible further work up due to the above evaluations
- Known prior positive TB test and a normal chest xray
 - Annual symptom monitoring
 - If becomes symptomatic or starts latent TB infection (LTBI) treatment – will need another chest xray
 - The local public health department will need to be notified immediately if TB disease is suspected
 - Workers with LTBI and no prior treatment should be offered and strongly encouraged to complete treatment with a recommended regimen.
 - Provide education about the signs and symptoms of TB disease to get an immediate evaluation

Post-exposure testing

- After a known exposure without adequate personal protection, a symptom evaluation and additional testing will need to be if indicated
- If their baseline TB testing is not available, a TST or IGRA will need to be done
- Monitor for symptoms
- Retest 8-10 weeks after last exposure, using the same type of testing if possible

Resources:

[CDC: Tuberculosis Screening, Testing, and Treatment of U.S. Health Care Personnel: Recommendations from the National Tuberculosis Controllers Association](#)

[WA State Department of Health: Who May Administer, Read, and Interpret a TST in WA \(PDF\)](#)

[WA State Department of Health: TB screening by Facility Type for Health Care Personnel \(PDF\)](#)

[LNI: Tuberculosis Control in Health-Care Settings, Directive 11.35 \(PDF\)](#)

[WA DOH: Facilities and Occupational Health: Guidelines for Healthcare Facilities, Home Health, and In-Home Care](#)

[WA Department of Health: Tuberculosis Program](#)

**“positive” or “negative”. An RN or LPN may not make a medical diagnosis but may create a plan of care and follow standing orders that outline the next steps after reading.

Onboarding Fit Test

If your PPE risk assessment determines a worker's job duties will expose them to a biological respiratory hazard, a respirator program will need to be in place.

Common biological respiratory hazards are:

- SARS- CoV-2 – COVID-19
- Morbillivirus – Measles
- Mycobacterium tuberculosis – Tuberculosis

The elements of the respirator program include:

- A written program – Provides information on how the program works, available to all employees
- Medical evaluation - To determine if they are able to be fit tested
- Fit testing – qualitative or quantitative (annually)
- Training on specific topics of respirator use (annually)
- Maintain records as indicated – Fit test record, training record, medical evaluation letter of recommendation
- Evaluate your program – quality improvement process to be sure your staff is protected

Visit the WA DOH Occupational Health Team website on [Respiratory Protection Program for Long-Term Care Facilities | Washington State Department of Health](#) for more information.

Resources:

- [WA State Department of Occupational Safety and Health: Safety Standard for Respirators, Chapter 296-842 WAC.](#)
- [OSHA - 1910.134 - Respiratory protection](#)

Onboarding Training

Health and safety training is usually required to be completed on the first day of employment and annually thereafter.

Resources

- [LNI: Bloodborne pathogens self-paced online training course](#)
- [WA DOH HAIAR Occupational Health: Respirator use resources](#)
- [LNI: Safe patient handling](#)

Chapter 3: Safe Injection Practices

Chapter Outline

- A. Glucometers
- B. Bloodborne Pathogens and Needlestick Prevention Tools
- C. Sharps Safety
- D. Waste streams
 - Sharps disposal
- E. Drug diversion
- F. Device associated infections
 - Tracking
- G. Surveillance and Disease Reporting
- H. Reportable conditions

Safe injection practices are every provider's responsibility. A safe injection does not harm the person, expose the provider to risks or result in hazardous waste for the community. Improper use and disposal of syringes, needles, and medications imposes risks on patients and healthcare providers.

Unsafe injection practices may result in serious consequences like:

- Transmission of bloodborne pathogens such as hepatitis C virus (HCV), hepatitis B virus (HBV), and human immunodeficiency virus (HIV).
- Outbreaks of bacterial or fungal infections.
- Patient notifications about possible outbreaks and exposures to bloodborne or other pathogens, which may include advice on follow-up testing (e.g., for HCV, HBV, and HIV).

Key Resources

- [CDC: Preventing Unsafe Injection Practices](#)
- [CDC: Considerations for Blood Glucose Monitoring and Insulin Administration](#)

Glucometers

[CDC: Considerations for Blood Glucose Monitoring and Insulin Administration](#)

- Never use fingerstick devices for more than one person.
- Assign blood glucose meters to a person unless the device is designed for use in professional settings and is cleaned and disinfected after every use.
- Never use insulin pens for more than one person.

Bloodborne Pathogens and Needlestick Prevention Tools

[OSHA: Bloodborne Pathogens - Evaluating and Controlling Exposure](#) This resource gives a good background and foundation for evaluating and preventing BBP exposures.

Sharps Safety

- [OSHA: Bloodborne Pathogens and Needlestick Prevention - Quick Reference Guide](#)
- [OSHA: Bloodborne Pathogens - Overview](#)

Waste Streams

- Sharps disposal: [CDC - Bloodborne Infectious Diseases - Stop Sticks : Sharps Disposal - NORA Workplace Safety and Health Topic](#)
- Be sure to know your local and state requirements, as they may vary by location.

Drug Diversion

It is a good idea to regularly talk with leadership and pharmacy to ensure infection prevention is included in any drug diversion investigations and can assist with recognizing potential harm. More resources can be found below.

- [CDC: Clinician Brief: Drug Diversion](#)
- [Council of State and Territorial Epidemiologists \(CSTE\): Drug Diversion Toolkit](#)
- Educational Resources: [CDC: Injection Safety Resources for Providers](#)

Device Associated Infections

- [CDC: CLABSI Basics | Central Line-associated Bloodstream Infections](#)
- [CDC: Bloodstream Infections Training](#)

Chapter 4: Surveillance and Disease Reporting

Chapter Outline

- A. Key Resources
- B. Additional Top Areas

This chapter addresses the role of the Outpatient Infection Preventionist in the surveillance and reporting of reportable conditions, also called notifiable conditions.

- Notifiable conditions are conditions that, when suspected and/or diagnosed, require health providers to report to state or local public health officials. These conditions are of public interest by reason of their contagiousness, severity, or frequency.
- This chapter is applicable to any Infection Preventionist or person working in the IP capacity and outlines the steps to report notifiable conditions to your local health jurisdiction (LHJ).
- As mentioned in the Occupational Health Chapter:
 - Teach staff how to appropriately identify clinical presentations (e.g. signs and symptoms) that may indicate additional PPE is appropriate when interacting with patients and/or their specimens.
 - Ensure that staff are educated on and monitored for communicable diseases, either by the Infection Preventionist or in collaboration with the person responsible for your occupational health program.

Key Resources

- [WA DOH: Local Health Jurisdictions and Tribal Directories](#)
 - Use the links included on this page to familiarize yourself with the applicable local health jurisdiction(s) and/or tribal government for your organization and the patients you see.
- [WA DOH: Local Health Jurisdiction Communicable Disease Reporting Lines \(PDF\)](#)
 - Use this link to call or fax the Communicable Disease teams of the appropriate local health jurisdiction for consultation or reporting.
 - Note that the phone number for after hours may be different than during business hours.
- [WA DOH: Notifiable Conditions and the Healthcare Provider \(PDF\)](#)
 - Use this to review what conditions are reportable to your LHJ and how quickly they should be reported.
 - This list is also beneficial for clinicians, who may not be familiar with reporting requirements for specific conditions.
- [WA DOH: List of Notifiable Conditions](#)
 - This resource has links to the individual disease conditions for most notifiable conditions in Washington state, and includes links to the disease pages for additional documents, tools, and resources related to communicable disease surveillance and response.

- [WA DOH: Provisional Reporting Notifications](#)
 - This page provides an up-to-date list of diseases and organisms that the State Health Officer asks for specimens to be submitted to Public Health Laboratories for confirmatory testing.
- Washington Administrative Code (WAC) [246-101](#)
 - This Washington Administrative Code outlines the responsibilities of healthcare entities for reporting to their local health jurisdiction.
 - Use this to familiarize yourself with all facets of reporting notifiable conditions in Washington state.
- The Public Health Laboratories [Lab Test Menu](#)
 - This menu provides the appropriate specimen, media, and storage and handling for specimens that will be submitted to Public Health Laboratories (PHL)
 - Use this list in conjunction with your Local Health Jurisdiction or Tribal Government partner when submitting specimens for testing by PHL.
 - This link can also be used to register for the Electronic Test Ordering and Reporting (ETOR) system, where clinicians can complete lab requisitions for specimens submitted to PHL.
- Washington State Department of Health's [Electronic Laboratory Reporting \(ELR\) resource page](#)
 - Electronic Laboratory Reporting (ELR) is the electronic transmission from laboratories to public health of laboratory reports that identify notifiable conditions. The Washington State Department of Health maintains an ELR system, which provides data to public health disease investigators across the state via the state surveillance system.
 - Use this as a resource to discuss electronic lab reporting with your lab provider or to enroll in ELR.

Additional Topic Areas

CDC's [Core Infection Prevention and Control Practices for Safe Healthcare Delivery in All Settings](#)

- Use this link to review the core practices of infection prevention and control and infection prevention resources
- North Carolina SPICE Program: [Competency for Novice IPs \(PDF\)](#)
 - Use this link to review practice items and resources that will help develop your competency in infection prevention and control
- CDC's [Infection Prevention Checklist for Outpatient Settings \(PDF\)](#)
 - An updated list of diseases reportable to the public health authority is readily available to all personnel.
 - Facility can demonstrate knowledge of and compliance with mandatory reporting requirements for notifiable diseases, healthcare associated infections (as appropriate), and for potential outbreaks.
 - Patients who have undergone procedures at the facility are educated regarding signs and symptoms of infection that may be associated with the procedure and instructed to notify the facility if such signs or symptoms occur.
- [APIC: Where Do I Find That \(PDF\)](#)

Chapter 5: Environment of Care

Chapter Outline

- A. Key Resources
- B. Additional Topic Areas
 - Routine Cleaning and Low-level disinfection
 - Healthcare Facilities Building Requirements
 - Water Management Program and Risk Assessments
 - Construction or Renovation Infection Control Risk Assessment
 - Linen
 - Waste Management
 - Pest Management

This chapter addresses the Environment of Care in an Outpatient Setting. You will use it to assess the physical clinical environment and supportive care areas to reduce the risk of infections associated with environmental sources (e.g., construction, water, air quality). This chapter is applicable to any facility caring for patients in a physical environment. If you need additional resource, look at [Guidelines for Environmental Infection Control in Health-Care Facilities](#) - The Centers for Disease Control and Prevention (CDC)

Key Resources

- [CDC: Environmental Infection Control In Healthcare Facilities \(2003\) \(PDF\)](#) - CDC
 - Use this resource to review environmental infection control guidelines and strategies for the prevention of environmental related infections.

Additional Topic Areas

Routine Cleaning and Low-level Disinfection

- E. Environmental Services (Page 86 of [CDC: Environmental Infection Control In Healthcare Facilities \(2003\) \(PDF\)](#); this section outlines Cleaning and Disinfecting Strategies for Environmental Surfaces in Patient-Care Areas.
- [CDC: Reduce Risk from Surfaces](#)
 - Use this resource to better understand the risk -*+++695*-of infections through contaminated surfaces and review the core components every healthcare facility should consider for ensuring appropriate environmental cleaning and disinfection.
- [EPA: Selected EPA-Registered Disinfectants](#)
 - Information on certain EPA-registered disinfectants, including links to lists of products registered against common pathogens like hepatitis, norovirus, *Candida auris*.
- [APIC: Environmental Services](#)
 - This page contains environmental infection prevention resources and education for both healthcare professionals and consumers.

- [California Department of Public Health: Who Cleans What \(.doc\)](#)
 - Use this customizable template to create a list of *who cleans what* in your facility. This can be used as an attachment to your cleaning/disinfection policy or as a reference for healthcare workers and environmental cleaning staff.

Healthcare Facilities Building Requirements

- [CDC: Environmental Infection Control In Healthcare Facilities \(2003\) \(PDF\)](#) - CDC
 - Includes recommendations on air-handling systems, construction, ventilation, engineering controls, and more.
- [Facility Guidelines Institute \(FGI\)](#) (subscription required)
 - Use this resource to review current guidelines for planning, designing, and constructing health care facilities.
- [CDC: Air, Appendix B, Guidelines for Environmental Infection Control in Health-Care Facilities \(2003\)](#)
 - Use this resource to understand the requirements for airborne contaminant removal and ventilation specifications for healthcare facilities (e.g., positive vs. negative pressure, air exchanges per hours)

Water Management Program and Risk Assessments

- [CDC: Reduce Risk from Water](#)
 - Use this resource to better understand the risk of infections through water sources and the purpose and foundation of a Water Management Program.
- [CDC: Water Infection Control Risk Assessment \(WICRA\) for Healthcare Settings \(PDF\)](#)
 - Use this resource to evaluate water sources, modes of transmission, patient susceptibility, patient exposure, and program preparedness.
- [CDC: Developing a Water Management Program to Reduce Legionella Growth & Spread in Buildings](#)
 - Use this resource to help you develop, implement, and evaluate a Legionella water management program for your facility.

Construction or Renovation Infection Control Risk Assessment

- [ASHE: ICRA 2.0™ Toolkit](#)
 - Use this risk assessment to identify the effects of the construction or renovation activities on air and water quality and define controls to reduce risk to the patient and the healthcare environment.
- C.II. Construction, Renovation, Remediation, Repair, and Demolition (pg 135)
 - A subsection of the CDC's [Environmental Infection Control In Healthcare Facilities \(2003\)](#); this section outlines guidelines proactive preventive measures during demolition, construction, and/or renovation projects.

Linen

- G. Recommendations—Laundry and Bedding (pg 153)
 - A subsection of the CDC's [Environmental Infection Control In Healthcare Facilities \(2003\) \(PDF\)](#); this section outlines guidelines for handling contaminated linens, the laundry process and more.
- [Joint Commission: Laundry Practices Infection Control Assessment Checklist \(PDF\)](#)
 - This checklist from The Joint Commission Big Book of Checklists includes questions to ask to assess the infection control risks in your laundry practices.

- [Healthcare Laundry Accreditation Council Standards](#)
 - The Accreditation Standards for Processing Reusable Textiles for use in Healthcare Facilities.

Waste Management

- I. I.I. I.II. Recommendations—Regulated Medical Waste A (pg 157), a subsection of the CDC's [Environmental Infection Control In Healthcare Facilities \(2003\) \(PDF\)](#); this section outlines categories of regulated medical waste, handling, transporting and storing of medical waste and more.
- [EPA: Medical Waste](#)
 - Overview of medical waste regulations

Pest Management

- [EPA: Integrated Pest Management Toolkit 2021 \(PDF\)](#)
 - Use this resource to evaluate and implement an Integrated Pest Management program in healthcare settings.

Chapter 6: Sterilization and High Level Disinfection

Chapter Outline

- A. Key Resources
- B. The Basics
 - Cleaning vs. Decontamination
 - Hierarchy of Disease Producing Agents
 - Factors Influencing Disinfection Effectiveness
 - Reprocessing Instruments
 - Inspection, Assembly and Packaging
 - Sterilization
 - High Level Disinfection
 - Quality Control

This chapter addresses sterilization and high-level disinfection in an Outpatient Setting. This chapter is most applicable to facilities who are performing outpatient surgical procedures including endoscopy, facilities performing minor procedures in office, and any facility where sterilization or high-level disinfection is required for their instruments/equipment.

Key Resources

[CDC: Disinfection & Sterilization Guidelines](#)

Use this resource as a high-level overview of Sterilization and Disinfection plus CDC guidelines and recommendations.

The Basics

Cleaning vs. Decontamination

- **Cleaning** is the removal of contamination from an item to the extent necessary for further processing or for intended use.
- **Decontamination** is the use of physical or chemical means to remove, inactivate, or destroy blood-borne pathogens on a surface or item to the point where they are no longer capable of transmitting infection and the item is rendered safe to handle with the ungloved hand.
- **Disinfection vs. Sterilization**
 - **Disinfection** is the process that kills pathogenic and other microorganisms by physical or chemical means. There are 3 levels of disinfection:
 - Low
 - Intermediate
 - High Level - HLD (High Level Disinfection)
 - **Sterilization** - Free from viable microorganisms
 - **SAL** - Sterility Assurance Level
 - [CDC: Spaulding Criteria](#)

Hierarchy of Disease Producing Agents

This pyramid shows the hierarchy of disease producing agents. The top of the pyramid indicates the pathogens that require the highest levels of sterilization/ disinfection, and the bottom is the lowest.

Prions – highest level of disinfection/sterilization required. They require EXTENDED sterilization times. Often disposable equipment/instruments should be first choice. Examples include Creutzfeldt-Jakob Disease.

Bacterial Spores- sterilization is required. Examples include the genre of bacillus and clostridium

Mycobacteria – require HLD. Examples include nontuberculous mycobacteria and the mycobacteria that causes leprosy.

Nonlipid and small viruses – require intermediate level disinfection. Examples include hydrophilic viruses and the rhinoviruses.

Fungi – intermediate level disinfection required.

Gram Positive and Negative bacteria and lipid or medium sized viruses – all require low level disinfection. Examples include vegetative fungi like candida, vegetative bacteria like pseudomonas, staphylococcus, and salmonella. Lipophilic viruses that require low level disinfection include the Herpes simplex virus, HIV, and HBV.

Factors Influencing Disinfection Effectiveness

[CDC: Factors Influencing Disinfection Effectiveness](#)

- **Types of devices being disinfected**
 - The more complex the item/device is the harder it will be to disinfect/sterilize.
- **Whether items can be disassembled**
 - An item that can be disassembled ensures you are able to manually clean each nook and cranny and helps ensure the disinfectant/sterilization method has contact with all surfaces. If an item can't be taken apart this is much harder to manage
- **Manufacturer's Recommendations**
 - May be too complex and involve more than your facility is capable of
- **Positioning of the device**
 - Positioning of instruments can ensure an item is effectively disinfected or sterilized. Over stuffing your pans and sterilizer plays a role in this too.
- **Process Quality Assurance Tests**
 - Assure that parameters were met/things were processed appropriately and should be done by the Central Sterile Processing Department (CSPD).
- **Shelf life and use**
 - How long something has been sitting on a the shelf/how many times it was moved/ the humidity and temperature in the area where it was stored all play a role in the integrity of the item.
- **Preparation required**
 - If an HLD requires certain mixing instructions or a certain formula to be followed those instructions need to be followed and testing needs to be done to ensure efficacy of the chemicals being used.
- **Reuse factors**
 - Following IFUs for the number of times something can be reused is important because disinfection/sterilization efforts may not work as effectively if something is past it's maximum number of uses.

Reprocessing Instruments

- **[STERIS: Reprocessing Instruments](#) - How they are cleaned and disinfected/sterilized**
 - Point of Use Cleaning
 - Moistening and removing biological/organic material at the time instruments become dirty.
 - Use of pre-treatment spray at the end of the procedure
- **Manual Decontamination**
 - Rinse and soak in detergent solutions as prescribed by the IFUs
 - Manual scrubbing by hand with special brushes
 - Brush/flush lumens
 - Rinse and prepare for mechanical cleaning.

- **Automated Cleaning**
 - Automated washer-disinfector
 - Similar to a dishwasher
 - Special racks/connections for various types of instruments, including laparoscopic, robotic, and lumens.
 - Use mechanical action as well as chemistry and heat to produce clean, *disinfected* instruments that can be safely handled.
 - ITEMS ARE SAFE TO HANDLE BUT NOT STERILE
- **Ultrasonic Cleaner**
 - Uses ultrasonic energy waves to remove biological/organic material from difficult to access areas (hinges, micro instruments)
 - May not be appropriate for all instruments/devices (scopes, mirrors)

Inspection, Assembly and Packaging

- **Inspect for cleanliness using:**
 - Magnification
 - Lighting
 - Borescope to examine the interiors of lumens.
 - ATP testing
 - Particular attention should be made to serrated surfaces, hinges/box locks, toothed instruments, lumens.
- **Test for Function**
 - Hinges and ratchets should move freely, and lock as designed.
 - Scissors should be tested on rubber strip.
 - Forceps should have aligned tips.
 - Rongeurs should be tested on several index cards.
- **Packaging**
 - Instruments that are terminally sterilized are placed into some kind of package before they go into a sterilizer.
 - Rigid container – a pan
 - Flat wrapped – Kim Guard, Blue Wrap
 - Peel Pouch
 - Packaging method must be compatible with both instruments/devices being processed as well as the processing method.
 - No cloth/cellulose (paper) in Sterrad
 - Weight limitations (trays should not exceed 25 lbs per AAMI Guidelines)
 - Multi-level trays, container within a container, etc.
 - Certain rigid containers not compatible with gravity sterilization methods

Sterilization

- **Terminal Sterilization – sterilized in a package, has a shelf life.**
 - Time Related
 - Event Related
- **Point of Use Sterilization**
 - No shelf life, needs to be delivered to the sterile field at the completion of the sterilization cycle
 - Immediate use Steam Sterilization (aka “flashing” or flash sterilization)
 - Liquid chemical sterilization (for things like endoscopes)
- **Steam Sterilization is the most common method. The 4 phases of steam sterilization include:**
 - Condition – introduction of steam and evacuation of air from the chamber
 - Sterilize- pressure allows the steam to reach the target temperature (250-275 degrees F) and maintain those temperatures for necessary sterilization time.
 - Exhaust – release steam and return chamber to atmospheric pressure.
 - Dry – allows residual moisture to be removed from load contents to prevent strike-through or wet packs. Load needs to cool to room temperature before handling.
 - You need to make sure ALL parameters for sterilization have been met prior to releasing the instruments for use on a patient.
- **Other methods of sterilization include:**
 - [CDC: Ethylene Oxide](#)
 - [CDC: Hydrogen Peroxide Plasma](#)
 - [CDC: Peracetic Acid](#)
 - [CDC: Radiation](#)

High Level Disinfection

- Mainly used for endoscopes
 - Resources:
 - [CDC: Reprocessing Flexible Endoscopes \(PDF\)](#)
 - [Society of Gastroenterology Nurses and Associates: Guidelines for use of HLDs \(PDF\).](#)
- Uses a liquid chemical process to kill all vegetative organisms.
- Does not kill spores.
- Must be very closely monitored.
- Meticulous pre-cleaning, rinsing, and drying of devices.
- Temperature of disinfectant
- Exposure time
- Thorough rinsing with purified water, drying, and storage of processed devices.
- Process may be manual or automated.

Quality Control

- **Tamper evident device** – container locks, tape, arrows
 - May be combined with a class 1 integrator
- **Internal Pack Control** – chemical indicators placed inside the tray to show parameters for sterilization have been met.
- **Chemical Indicators**
 - Chemical indicators (CIs), as defined by the Association for the Advancement of Medical Instrumentation (AAMI) and International Organization for Standardization (ISO), are devices used to monitor the presence or attainment of one or more of the parameters required for a satisfactory sterilization process or used in a specific test of sterilization equipment. Most common types of Chemical Indicators used in Healthcare are:
 - Type 1 – indicator tape
 - Type 2 – Bowie Dick Test
 - Type 5 – Integrators
- **Biological Monitoring**
 - Biological Tests are spores inside a test package that measure the lethality of a sterilization cycle
 - They should be run daily in each sterilizer (ideally they should be run with every load)
 - There is a control indicator (not run through the sterilizer) and the biological indicator (run through the sterilizer)
 - Both indicators are put in the incubator for a read out.
 - The results of the control should be positive and the results of the biologic should be negative.
 - Tracking should be done to ensure patient safety
 - [STERIS: Tracking Form Resource](#)
- **Load Control Information**
 - Load control stickers should be placed on any wrapped or peel packed item after it has been through the sterilizer.

For a sterilized load to be released for patient use the instruments must have:

- Sterilizer tests complete
- Parameters for sterilization must be met.
- Process indicator (tape) must pass.
- Tamper evident devices present.
- Lot control present and accurate.
- Packages cooled to room temperature if terminally sterilized.
- If implants, Biological Indicator MUST pass.

What to do if Parameters for Sterilization are NOT met:

- Parameters: Time, Temperature, Pressure, Concentration
- Reprocess the load in another sterilizer
- All items must be re-wrapped, with a new Type 5 Integrating Indicator
- Take the sterilizer out of service until the cause can be identified and corrected
- Usually something has gone wrong with the sterilizer and sometimes it is a plant failure

If you get a Positive Biological Indicator

- Need to recall back to the last negative biological indicator for that sterilizer
- Take the device out of service until the cause of the problem can be identified and corrected
- Potential causes:
 - Operator Error (wrong cycle, load configuration)
 - Mechanical failure within the sterilizer
 - Plant/Utilities Failures (Steam/Electricity Failure cause the sterilizer to abort mid-cycle).

Wet load/Wet pack

- May be inside the packages – can't tell until they are opened.
- Usually, a condensation issue
- Items moved before they have cooled to room temperature
- Improper configuration of tray
- Improper configuration of sterilizer load
- Excessively heavy tray
- Mixed metals and plastic
- Trays with moisture are considered contaminated – notify CSPD and replace the tray. CSPD needs lot control # in order to conduct a recall.

How do I know that my item is safe for the patient? Check for:

- Tears
- Holes
- Rupture of seals and closures
- Wetness inside the tray or dried water rings on wrap
- Crushed packages
- Residual soil/bioburden
- Foreign items in pack (hair, suture, bone, etc)

Control Storage conditions

- Microbial Contamination of the environment
- Air movement
- Traffic
- Location
- Temperature
- Humidity

Chapter 7: Antimicrobial Stewardship

Chapter Outline

- A. What is Antimicrobial Stewardship?
- B. Key Resources
 - Receive Training on Antimicrobial Stewardship Practices
 - Partner with a Pharmacist or a Physician Trained in Antimicrobial Stewardship (if Available)
 - Use the CDC's Checklists to Assess Current Clinic Stewardship Program Efforts
 - Promote Consistent Messaging with All Clinic Staff Members to Set Patient Expectations
 - Share MDRO Surveillance Data with Stewardship Leads
 - Request an Annual Antibiogram from Laboratory
 - Track and report *C. difficile* Cases to Appropriate Clinic Groups
 - Educate Patients, Families and Clinic Staff About Antimicrobial Stewardship Topics
 - Participate in Policy Development and Evaluation
 - References

What is Antimicrobial Stewardship?

Antimicrobials are medications that target microbes. These include antibiotics, antivirals, and antifungals. Antimicrobial stewardship (AS) is the effort to measure and improve antimicrobial prescribing by clinicians and use by patients.¹ The goal is to prescribe antimicrobials that align with evidence-based recommendations for diagnosis and management. This helps to improve patient outcomes and reduce the risk of antibiotic resistance. Antibiotics are the most frequent targets of antimicrobial stewardship programs.

The infection preventionist (IP) is a critical member of the stewardship team, as the most effective way of lowering unnecessary antibiotic usage is by working to ensure that infections do not happen to begin with.²

Chapter Introduction

This chapter will explain the role of the outpatient IP in AS. You will use this information to help your clinic to align with best practices set forth in [CDC's Core Elements of Outpatient Stewardship](#).

Key Resources

- [CDC's Core Elements of Outpatient Stewardship](#)
 - You will use this resource as a framework for clinic stewardship efforts.
- [CDC's Core Elements of Outpatient Antibiotic Stewardship Checklists](#)
 - You will use these to see how well your clinic's stewardship program meets best practices.

Role of the IP

IPs frequently support AS programs in both acute care and long-term care settings. Many strategies that have been recommended in these areas can also be performed in the outpatient setting. Some suggestions are listed below:

Receive Training on Antimicrobial Stewardship Practices

- The CDC offers training complete with continuing education credits for most professions. See links in the “Resources” section at the end of this chapter to access this training.

Partner With a Pharmacist or a Physician Trained in Antimicrobial Stewardship (if Available)

- These roles typically lead or co-lead AS programs. Clinics that are attached to a larger health care system may have access to this expertise on-site. For clinics that are not attached to a larger health care system, consider either telemedicine models or participation in quality improvement collaboratives.³ Additionally, WA DOH has an AS team composed of an infectious diseases pharmacist, an infectious diseases physician, and an epidemiologist. We can provide recommendations and resources to support your clinic’s antimicrobial stewardship program. Our team can be reached at ams@doh.wa.gov.

Use CDC’s Checklists to Assess Current Clinic Stewardship Program Efforts

- Share the results of your assessment with applicable clinic staff and leadership to raise awareness of gaps and to obtain support. The checklists are linked in the “Resources” section at the end of this chapter

Promote Consistent Messaging With All Clinic Staff Members to Set Patient Expectations¹

- Suggested topics include general appropriate antibiotic use, appropriate microbiological culture practices, and the difference between urinary tract infections and asymptomatic bacteriuria.

Share MDRO Surveillance Data With the Stewardship Leads⁴

- The [Core Elements of Outpatient Stewardship](#) recommend that clinics implement evidence-based diagnostic criteria and treatment recommendations based on local pathogen susceptibility information. The surveillance data provided to leads by the IP can provide critical guidance to clinicians as they determine appropriate treatment criteria.

Request an Annual Antibiogram From the Laboratory^{1,4}

- Microbiologic laboratories can produce antibiograms. IPs can request the antibiogram annually and promote it amongst clinic staff. Antibiograms should conform to standards set forth by the Clinical & Laboratory Standards Institute (CLSI). Make sure to request that the annual antibiogram be compliant with this standard (if possible).

Track and Report *C. difficile* Cases to Appropriate Clinic Groups

- *C. difficile* is an antibiotic outcome measure commonly tracked in acute care and nursing home settings.^{3,5} If a clinic is a part of a greater health care system, outpatient and acute care IPs can work together to audit cases that originated from outpatient centers. If it is not part of a greater health care system, the IP can track cases seen by the clinic and share those data with appropriate clinic groups.

Educate Patients, Families, and Clinic Staff About Antimicrobial Stewardship Topics

- Educational topics can include the role of antimicrobial stewardship, appropriate culture practices (e.g., urine and wound), proper indication for *C. difficile* testing, and the difference between urinary tract infections and asymptomatic bacteriuria.⁶ Some suggested patient education strategies include hanging up posters in waiting areas or clinic rooms, providing pamphlets in the waiting room, and printing out handouts for providers to give after applicable appointments.

Participate In Policy Development and Evaluation²

- This action ensures that the clinic's AS measures are in alignment with infection prevention and control program goals. It also ensures that the IP's valuable expertise is well-represented in program decision making and development.

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Chapter 8: Checklist and Tools

Chapter outline

- A. Workflows for general clinic procedures
- B. Staff education checklist
- C. Patient education checklist

This chapter provides links to different checklist and tools that can be used to assess different aspects of infection prevention. If you need additional resource, look at [CDC's Infection Prevention Checklist for Outpatient Settings Guide \(PDF\)](#).

Key Resources

[CDC: Infection Prevention Checklist for Outpatient Settings \(PDF\)](#)

- Use this resource to ensure that the facility has appropriate infection prevention policies and procedures in place and supplies to allow healthcare personnel to provide safe care.

[APIC: Observation Tools Library](#)

- Use this resource to find a number of different checklist and observations tools related to a number of different infection prevention related topics. Examples include:
 - Central Catheters, Urinary Catheters, Ventilators
 - Centralized Medication Areas, Vaccine Storage Areas
 - Hand Hygiene Supplies, PPE Supplies
 - Point of Care Testing, Visitor Areas, Waiting Room Areas

Additional Topic Areas

Infection Prevention Plan Checklist

- [Joint Commission: Infection Prevention and Control Plan Checklist \(PDF\)](#)
 - Use this checklist to assess your own Infection Prevention plan to ensure that it meets or surpasses expectations.

Environmental

- [Environmental Checklist \(Excel\)](#) - Washington State Hospital Association
 - This checklist can be used to assess daily and terminal cleaning.
- [CDC: Ambulatory Care Suite Observation Tool \(PDF\)](#)
 - A collection of observations tools, including hand hygiene, PPE, needlestick prevention & more to assess the environment in an ambulatory care suite.

- [CDC: Medication \(Preparation/Dispensing\) Areas Suite \(PDF\)](#) – CDC
 - A collection of observations tools to assess the environment in a medication area.
- [CDC: Environmental Checklist for Monitoring Terminal Cleaning \(PDF\)](#) - CDC
 - Used to assess and monitor cleaning compliance.
- [EPA: Integrated Pest Management Toolkit 2021 \(PDF\)](#) - EPA
 - Use this resource to evaluate and implement an Integrated Pest Management program in healthcare settings.
- [ASHE ICRA 2.0™ Toolkit](#)
 - Use this risk assessment to identify the effects of the construction or renovation activities on air and water quality and defines controls to reduce risk to the patient and the healthcare environment.

Linen

- [Joint Commission: Laundry Practices Infection Control Assessment Checklist \(PDF\)](#)
 - This checklist from The Joint Commission Big Book of Checklists includes questions to ask to assess the infection control risks in your laundry practices.
- [CDC: Needlestick Prevention and Care of Laundry \(PDF\)](#)
 - This checklist includes questions to ask to assess the risk of needle sticks and risks in your laundry practices.

Injections Safety and Drug Diversion

- [CDC: Safe Injection Practices Checklist \(PDF\)](#)
 - The checklist, which is appropriate for both inpatient and outpatient settings, should be used to systematically assess adherence of healthcare providers to safe injection practices.
- [North Carolina SPICE Program: Injection Safety Competency Assessment \(PDF\)](#)
 - Injection Safety Competency Point of Care Checklist
- [Coverys: Drug Diversion Risk Rounds Checklist \(PDF\)](#)
 - The link provided is from a released article explaining and developing Diversion Risk Rounds. Diversion Risk Rounds is a proactive means to ensure compliance and patient safety.

Chapter 9: Laboratory Coordination for Outpatient Infection Preventionists

Chapter outline

A. Key Resources

Coordinating with your clinic or health system laboratory is an important component of the outpatient IP's role. Below you will find links to assist you in effectively coordinating with your lab

Key Resources

- [APIC: Infection Preventionist's Guide to the Lab \(PDF\)](#)
 - Use this resource to increase your understanding of the lab, including chapters on storage and handling, microbiology, and other topics.
- As briefly discussed in the Communicable Disease Surveillance and Reporting section: The Public Health Laboratories [WA DOH: Lab Test Menu](#)
 - This menu provides the appropriate specimen, media, and storage and handling for specimens that will be submitted to Public Health Laboratories (PHL)
 - Use this list in conjunction with your Local Health Jurisdiction or Tribal Government partner when submitting specimens for testing by PHL. This link can also be used to register for the Electronic Test Ordering and Reporting (ETOR) system, where clinicians can complete lab requisitions for specimens submitted to PHL.
- [WA DOH: Electronic Laboratory Reporting \(ELR\)](#) resource page
 - Electronic Laboratory Reporting (ELR) is the electronic transmission from laboratories to public health of laboratory reports that identify notifiable conditions. The Washington State Department of Health maintains an ELR system, which provides data to public health disease investigators across the state via the state surveillance system.
 - Use this as a resource to discuss electronic lab reporting with your lab provider or to enroll in ELR.

Chapter 10: Partnership with Communities

Chapter Outline

- A. Chapter Introduction
- B. Key Resources
 - Know Your Local Contacts
 - Know Your Trusted Resources
 - Resources for Best Practices in Communication Science

Chapter Introduction

This chapter addresses partnerships with other groups and organizations. Community buy-in is an important part of infection control and prevention. IP programs should consider how to partner in the community to avoid potential outbreaks, to improve effectiveness during a public health emergency and as a general part of daily practice. IP programs should utilize trusted sources of information and use best practices in communication that are tailored to community-specific needs. Below is a list of resources to help your organization:

- Find resources to communicate evidence-based best practices and information to your patients and specific communities about diseases, treatment, prevalence, etc.
- Learn how to tailor your messaging to fit your population of interest
- Create ways to collaborate on local outreach activities, opportunities to participate in interdisciplinary workgroups and get help identifying local leadership.

This chapter is most applicable to IPs who work in any outpatient setting, program administrators, patient safety advocates, community healthcare workers.

Key Resources

Know Your Local Contacts

- [WA DOH: Washington State Local Health Jurisdictions List](#)
- [Washington Coalition of Accountable Communities of Health](#)
- [WA DOH: Emergency Preparedness Community Outreach Resources](#)
- [WA DOH: Public Health Associations](#)
- [WA Labor and Industries \(L&I\): Request Consultation](#)
- [WA Patient Safety \(qualityhealth.org\)](#)
 - WPSC is member-based program made up of 40+ organizations representing healthcare systems, associations, and advocacy groups across the state of Washington. They share information in a safe, neutral setting that allows you to comfortably learn, connect, and collaborate with a community of peers.

Know Your Trusted Resources

Trusted resources (national and international) that can provide information on diseases, treatments and other topics on infectious diseases.

- [Loyola University: List of International Health Organizations](#)
- [US News and World Report: Public Health Schools](#) that will have information on current research. A few select research centers are listed below.
 - [London School of Hygiene and Tropical Medicine](#)
 - [Johns Hopkins](#)
 - [University of Washington](#)
 - [University of North Carolina, Chapel Hill](#)

Scientific Organizations

- [International Society for Infectious Diseases \(ISID\)](#)
- [Infectious Diseases Society of America \(IDSA\)](#)
- [Coalition for Epidemic Preparedness Innovations \(CEPI\)](#)

Foundations

- [Bill and Melinda Gates Foundation](#)
- [Kaiser Family Foundation \(KFF\) U.S. Global Health Policy](#)

Other Resources

- [Gapminder](#) is an interactive tool based on scientific data
- [Association for Professionals in Infection Prevention and Epidemiology \(APIC\)](#)
- [PubMed](#)

Resources For Best Practices in Communication Science

- [CDC: Communication Strategies: Health Literacy](#)
- [Washington Association for Community Health: Supporting Vaccine Confidence](#). This training guides you through messaging, community outreach, and convening a media team. The focus is on vaccination, but the information can be applied to other programs.
- [Brown University Quick Guide to Science Communication \(PDF\)](#)
- [El Sol Neighborhood Educational Center, Effective Community Outreach Strategies](#)
- [Center for Parent Information & Resources, Outreach toolkit](#)

Appendix A: Resources for Specific Setting Types:

Oncology

- [CDC: Basic Infection Control and Prevention Plan for Outpatient Oncology Settings](#)
- [Preventing Infections In Cancer Patients My Pocket Guide \(PDF\)](#)

Wound Care

- [International Wound Infection Institute](#)
- [Wound Care Learning Network](#)

Dental

- [Association for Dental Safety \(Previously OSAP\)](#)
- [CDC: Best Practices in Dental Infection Prevention and Control](#)

Dialysis

- [CDC: Dialysis Safety](#)
- [American Society of Nephrology: Infection Prevention in the Dialysis Environment](#)

Surgical

- [CDC: Surgical Site Infection \(SSI\) Prevention Guideline](#)
- [APIC: Ambulatory Surgical Centers](#)

Endoscopy

- [Society of Gastroenterology Nurses and Associates: Infection Prevention Resources](#)
- [Multisociety guideline on reprocessing flexible GI endoscopes and accessories \(PDF\)](#)



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