



INFECTION CONTROL: ESSENTIALS FOR YOUR PROGRAM

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Patients First. *Always.*

Infection Prevention and Control

- Implementation of evidence-based policies, procedures, and practices designed to prevent and control the spread of infections in healthcare settings
- It protects patients, healthcare workers, and visitors by breaking the chain of infection transmission through methods like hand hygiene, sterilization, and personal protective equipment (PPE)



CDC's Core Infection Prevention and Control Practices for Safe Healthcare Delivery in All Settings

Core Practices Include:

- Leadership Support
- Education and Training of HC Personnel
- Patient, Family, and Caregiver Education
- Performance Monitoring/Feedback (i.e., HH compliance, SSI rate)
- Standard Precautions
- Transmission-Based Precautions
- Temporary Invasive Medical Devices for Clinical Management
- Occupational Health

Leadership Support

- Leadership Support
 - Governing body is accountable for the implementation of infection prevention and control policies
 - Facility should assign a trained, qualified individual to head the IC program and give them the authority to be effective
 - Must ensure adequate time and resources are allocated to infection control tasks and mitigation of identified risks

Training of HC Personnel

- HC Personnel Education and Training
 - IC content should be job-specific
 - Administered upon hire, annually, and when new threats are identified
 - Develop processes to assess staff understanding & competency
 - Ensure written policies & procedures are available, current, and evidence-based from nationally recognized infection control guidelines

Patient & Caregiver Education

- Patient & Caregiver Education
 - Content should be specific to the patient's needs (e.g., wounds, drains)
 - Should be introduced as early as possible
 - Administered verbally and provided in written form
 - Increased understanding and compliance with instructions when video instruction is available for the patient to watch at home

Performance Monitoring/Feedback

- Monitor compliance with adopted infection prevention practices and infection control requirements
 - Hand Hygiene
 - Use of PPE
 - Prophylactic Antibiotic Timing
 - Sterile Processing
 - Hepatitis B Vaccinations
- Use standardized tools for monitoring compliance
- Provide prompt & regular feedback to staff and leadership
- Monitor the incidence of infection (surgical site infection)
 - Define the facility's process for identifying infections

CDC Core Practices - Standard Precautions

- Hand Hygiene
- Environmental Cleaning & Disinfection
- Injection & Medication Safety
- Appropriate PPE Usage for Tasks (determined by risk assessment)
- Minimizing Potential Exposures (e.g., covering coughs)
- Reprocessing Reusable Medical Devices Between Uses

Standard Precautions – Hand Hygiene

- Hand hygiene (HH) is the most important and basic technique to prevent and control the spread of infection
- Use alcohol-based hand rub (ABHR) or soap & water
- Indications:
 - Before touching a patient
 - Before performing an aseptic task or handling devices
 - Before moving from soiled area to clean area on a patient
 - After touching a patient's immediate environment
 - After contact with blood, body fluids, or contaminated surfaces
 - Immediately after glove removal
- Ensure ABHR is immediately available throughout the facility



Standard Precautions – Environmental Cleaning & Disinfection

- Require routine & targeted cleaning of environmental surfaces
 - Clean patient care areas & high-touch areas more frequently
 - Immediately clean and decontaminate blood, body fluid, or other potentially infectious material and have spill kits available
 - Dedicated processes for linen, sharps, and waste management
- Use EPA-registered low-level chemical disinfectants
 - Bactericidal, tuberculocidal, fungicidal, and virucidal properties
 - Approved for use on noncritical surfaces
 - Evaluate cost versus the contact time
- Follow the manufacturer's instructions for use
 - Dilution, contact time, storage conditions, expiration
- Staff should always wear gloves (and other PPE as appropriate)

Standard Precautions – Injection & Medication Safety

- Use a dedicated clean medication preparation area (not adjacent to a sink or water source)
- Follow aseptic technique during preparation & administration
- Disinfect access ports and medication vials before use
- Dedicate needle/syringe use to one patient only
- Always use a new needle/syringe when obtaining additional doses from a medication container

Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings (2007)

IV.H.1.	Use aseptic technique to avoid contamination of sterile injection equipment	IA
IV.H.2.	Do not administer medications from a syringe to multiple patients, even if the needle or cannula on the syringe is changed. Needles, cannulae and syringes are sterile, single-use items; they should not be reused for another patient nor to access a medication or solution that might be used for a subsequent patient	IA
IV.H.3.	Use fluid infusion and administration sets (i.e., intravenous bags, tubing and connectors) for one patient only and dispose appropriately after use. Consider a syringe or needle/cannula contaminated once it has been used to enter or connect to a patient's intravenous infusion bag or administration set	IB
IV.H.4.	Use single-dose vials for parenteral medications whenever possible	IA
IV.H.5.	Do not administer medications from single-dose vials or ampules to multiple patients or combine leftover contents for later use	IA
IV.H.6.	If multidose vials must be used, both the needle or cannula and syringe used to access the multidose vial must be sterile	IA
IV.H.7.	Do not keep multidose vials in the immediate patient treatment area and store in accordance with the manufacturer's recommendations; discard if sterility is compromised or questionable	IA
IV.H.8.	Do not use bags or bottles of intravenous solution as a common source of supply for multiple patients	IB

Safe Injection Practices – Single-Dose and Multi-Dose Vials

THE PROVIDER

DO YOU MULTI-DOSE?



A SINGLE-DOSE VIAL (SDV) is approved for use on a **SINGLE** patient for a **SINGLE** procedure or injection.



SDVs typically lack an antimicrobial preservative. Do not save leftover medication from these vials. Harmful bacteria can grow and infect a patient.

DISCARD after every use!

SIZE DOES NOT MATTER!



SDVs and MDVs can come in any shape and size. **Do not assume** that a vial is an SDV or MDV based on size or volume of medication. **ALWAYS check the label!**



A MULTIPLE-DOSE VIAL (MDV) is recognized by its FDA-approved label.

Although MDVs can be used for more than one patient when aseptic technique is followed, **ideally even MDVs are used for only one patient.**



MDVs typically contain an antimicrobial preservative to help limit the growth of bacteria. Preservatives have no effect on bloodborne viruses (i.e. hepatitis B, hepatitis C, HIV).



Discard MDVs when the beyond-use date has been reached, when doses are drawn in a patient treatment area, or any time the sterility of the vial is in question!

INJECTION SAFETY CHECKLIST

The following Injection Safety checklist items are a subset of items that can be found in the CDC *Infection Prevention Checklist for Outpatient Settings: Minimum Expectations for Safe Care*.

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. Assessment of adherence should be conducted by direct observation of healthcare personnel during the performance of their duties.

Injection Safety	Practice Performed?	If answer is No, document plan for remediation
Proper hand hygiene, using alcohol-based hand rub or soap and water, is performed prior to preparing and administering medications.	Yes No	
Injections are prepared using aseptic technique in a clean area free from contamination or contact with blood, body fluids, or contaminated equipment.	Yes No	
Needles and syringes are used for only one patient (this includes manufactured prefilled syringes and cartridge devices such as insulin pens).	Yes No	
The rubber septum on a medication vial is disinfected with alcohol prior to piercing.	Yes No	
Medication vials are entered with a new needle and a new syringe, even when obtaining additional doses for the same patient.	Yes No	
Single-dose or single-use medication vials, ampules, and bags or bottles of intravenous solution are used for only one patient.	Yes No	
Medication administration tubing and connectors are used for only one patient.	Yes No	
Multi-dose vials are dated by healthcare when they are first opened and discarded within 28 days unless the manufacturer specifies a different (shorter or longer) date for that opened vial. <small>Note: This is different from the expiration date printed on the vial.</small>	Yes No	
Multi-dose vials are dedicated to individual patients whenever possible.	Yes No	
Multi-dose vials to be used for more than one patient are kept in a centralized medication area and do not enter the immediate patient treatment area (e.g., operating room, patient room/cubicle). <small>Note: If multi-dose vials enter the immediate patient treatment area, they should be dedicated for single-patient use and discarded immediately after use.</small>	Yes No	

Standard Precautions – Appropriate PPE

- Facility should have a process to identify the appropriate personal protective equipment (PPE) for tasks assigned to healthcare staff
 - Gloves – when a potential exists for contact with blood, body fluids, potentially infectious materials, mucous membranes, non-intact skin, potentially contaminated skin or equipment
 - Gown – to protect skin or clothing from real or potential exposure
 - Protective Eyewear – to protect the mucous membranes of the eyes, nose, and mouth during tasks that may generate splashes or sprays
 - Remove/discard PPE upon completing task
 - Do not reuse gown/gloves for care of more than one patient
- Staff should be trained to select appropriate PPE and use correctly
- Ensure PPE is accessible

Standard Precautions – Minimizing Potential Exposures

- Use early detection and mitigation techniques to manage patients (and staff) who are potentially infectious
- Promote respiratory hygiene and cough etiquette to reduce the transmission of respiratory illnesses within the facility
- Prompt patients and guests with symptoms of respiratory infections to contain respiratory secretions and perform hand hygiene
- Provide tissues, masks, alcohol-based hand rub in the waiting room
- Display posted instructions regarding respiratory hygiene

Standard Precautions – Reprocessing Reusable Medical Devices

- Clean and reprocess (disinfect or sterilize) reusable medical equipment and devices in between patient use or when visibly soiled
 - Stretchers & OR Tables
 - Point-of-care Testing Devices
 - Monitoring Supplies (BP cuffs, oximeter probes, thermometers)
 - Surgical Instruments & Endoscopes
- Always follow the manufacturer's validated instructions for use (IFU)
 - IFUs should be readily available to the staff
 - Staff should be trained on reprocessing steps and the appropriate PPE for the task
 - Competency for reprocessing medical equipment should be validated
- Maintain separation between clean and soiled equipment to prevent cross-contamination

Transmission-Based Precautions

- Additional precautions for patients with documented (or suspected diagnoses) where contact with the patient, their body fluids, or their environment presents a substantial transmission risk despite adherence to Standard Precautions
- Adapt transmission-based precautions to the specific healthcare setting
- As soon as possible, implement transmission-based precautions based on the patient's clinical presentation and likely infection diagnoses (e.g., syndromes suggestive of transmissible infections such as diarrhea, meningitis, fever and rash, respiratory infection)
- Isolate the patient
- Notify accepting facility and transporting agency about need for transmission-based precautions

Temporary Invasive Medical Devices

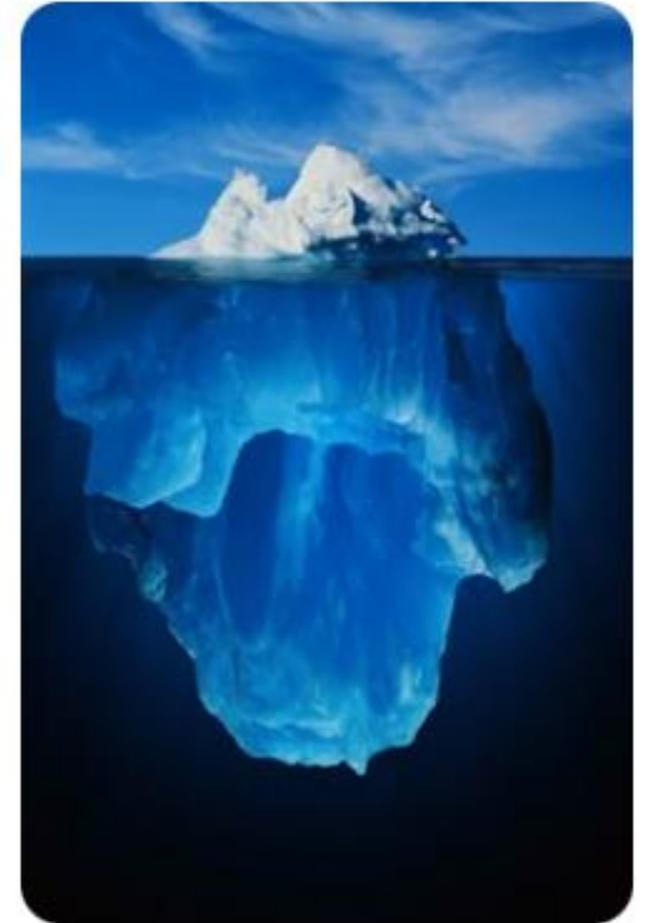
- During each healthcare encounter, assess the medical necessity of any invasive medical device (e.g., indwelling urinary catheter) to identify the earliest opportunity for safe removal
- Ensure that healthcare personnel adhere to recommended insertion and maintenance practices

Occupational Health

- Healthcare personnel should receive immunizations or have documented evidence of immunity against vaccine-preventable diseases
- Implement processes and sick leave policies to encourage personnel to stay home when they develop signs or symptoms of acute infectious illness
- Implement a system for personnel to report signs, symptoms, and diagnosed illnesses that may represent a risk to their patients and coworkers
- Adhere to federal and state standards and directives applicable to protecting healthcare workers against transmission of infectious agents
 - OSHA's Bloodborne Pathogens Standard
 - Personal Protective Equipment Standard
 - Respiratory Protection Standard
 - TB Compliance Directive

Infection Prevention and Control

- The Infection Control (IC) Core Practices represent a basic outline, which needs to be fully developed and customized to your practice setting
- QUAD A's upcoming infection control webinars include:
 - Performing an IC Risk Assessment
 - Sterilization: What are surveyors looking for?
 - Why Should an IFU Matter to You?
 - Infection Control Rounding for Sustained Compliance
 - Preventing Surgical Site Infections



RESOURCES

- CDC's Core Infection Prevention and Control Practices for Safe Healthcare Delivery in All Settings. <https://www.cdc.gov/infection-control/hcp/core-practices/index.html>
- CDC's Guideline for Disinfection and Sterilization in Healthcare Facilities, 2008 (updated June 2024). <https://www.cdc.gov/infection-control/media/pdfs/Guideline-Disinfection-H.pdf>
- CDC's 2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings. <https://www.cdc.gov/infection-control/hcp/isolation-precautions/index.html>

RESOURCES

- CDC's One and Only Campaign – Content on the use of Single-Dose and Multi-Dose Vials <https://stacks.cdc.gov/view/cdc/140849>



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