

Healthcare Associated Infections Antimicrobial Resistance Program

Environmental Services Toolkit



Introduction and background

West Virginia Bureau for Public Health's Healthcare Associated Infections Antimicrobial Resistance Program is dedicated to protecting patients and healthcare personnel by promoting safety and quality. Preventing healthcare associated infections (HAIs) and reducing antimicrobial resistance (AR) are top priorities. HAIs are infections that people acquire while they are receiving treatment for medical or surgical conditions in a healthcare setting and can be acquired anywhere healthcare is delivered. HAIs have been a recognized public health threat for many years associated with morbidity, mortality, and increased healthcare costs, yet many are preventable. Environmental contamination is often a factor in the transmission of HAIs and has been associated with outbreaks of multidrug-resistant organisms (MDROs) including methicillin-resistant *Staphylococcus aureus* (MRSA), vancomycin-resistant enterococci (VRE), *Clostridioides difficile* (*C. diff*), and *Acinetobacter baumannii*. Therefore, environmental cleaning is an essential component for infection prevention and control and must be incorporated and executed within the infrastructure of the IPC program. This, along with training, monitoring, audit and feedback, and the support of leadership are crucial to combating healthcare associated infections and improving overall patient safety.

(CDC HAI www.cdc.gov/healthcare-associated-infections/about/index.html)

Competency

The competence of the Environmental Service Department (EVS) in a healthcare facility is crucial to the success of their Infection Prevention and Control Program (IPCP). Although everyone should contribute to maintaining a clean environment, it is the role of the EVS employee to provide an overall safe and sanitary care setting. This can be accomplished by ensuring that the EVS staff and other employees are competent to perform the related IPC interventions appropriate to their position and remain up to date on policies and procedures. The Centers for Disease Control and Prevention (CDC) recommends that education and training be conducted at the time of hire and then at least annually. It is also important to provide education and training when implementing new processes, new equipment or when any procedural gaps are identified. Once the education and training are completed, a competency assessment should be conducted to test the knowledge and observe the ability of the employee to proficiently perform the skills. While direct observation is preferred, if it is not an option then other methods should be incorporated to demonstrate that an employee is competent to perform the job responsibilities.

Must know Terms

Cleaning: the physical removal of foreign material (e.g., dust, soil) and organic material (e.g., blood, secretions, excretions, microorganisms). Cleaning physically removes rather than kills microorganisms. It is accomplished with water, detergents, and mechanical action.

Contact time: The time that a disinfectant must be in contact with a surface or device to ensure that appropriate disinfection has occurred. For most disinfectants, the surface should remain wet for the required contact time.

Disinfection: A thermal or chemical process for inactivating (i.e., kill) microorganisms on inanimate objects.

Hazardous waste: Waste that is dangerous or potentially harmful to health or the environment. Hazardous waste can be liquids, solids, gases or sludges. They can be discarded commercial products, like cleaning fluids or pesticides, or the byproducts of manufacturing processes.

High-level disinfection: Kills all microorganisms, except for small numbers of bacterial spores.

High-touch surfaces: Surfaces, often in patient care areas, that are frequently touched by healthcare workers and patients (e.g., bed rails, overbed table, IV pole, call light, TV remote control, phone, doorknobs, medication carts).

Low-level disinfection: Inactivates most vegetative bacteria, some fungi, and some viruses in a practical contact time, but does not kill more hardy viruses (e.g. non-enveloped), bacterial genus (e.g. mycobacteria), or bacterial spores.

Low-touch surfaces: Surfaces that are minimally touched by healthcare workers and patients (e.g., walls, ceilings, floors).

Personal protective equipment (PPE): Devices or clothing designed to protect against workplace hazards. Hazards in the workplace may be electrical, chemical, physical or biological. Personal protective equipment includes safety glasses, goggles, face shields, gloves, protective clothing and respirators.

Routine cleaning: The regular cleaning (and disinfection, when indicated) when the room is occupied to remove organic material, reduce microbial contamination, and provide a visually clean environment. Emphasis is on surfaces within the patient zone.

Safety data sheet (SDS): A document by the supplier or manufacturer of a chemical product that contains information on the product's potential hazards (health, fire, reactivity, and environmental) and how to work safely with it. It also contains information on the use, storage, handling, and emergency procedures.

Standard Precautions: Are used for all patient care. Based on a risk assessment and make use of common-sense practices and personal protective and other equipment that protects healthcare providers from infection and prevent the spread of infection from patient to patient.

Transmission-Based Precautions: Are used in addition to Standard Precautions for patients with known or suspected infections. There are three categories:

- **Contact:** Intended to prevent the transmission of infectious agents, including epidemiologically important microorganisms, that are spread by direct or indirect contact with the patient or the patient's environment.
- **Droplet:** Intended to prevent transmission of pathogens spread through close respiratory or mucous membrane contact with respiratory secretions.
- **Airborne:** Intended to prevent transmission of infectious agents that remain infectious over long distances when suspended in the air (e.g., rubeola virus [measles], varicella virus [chickenpox], M. tuberculosis, and possibly SARS-CoV).
- **Terminal (discharge) cleaning:** Cleaning and disinfection after the patient is discharged or transferred. Includes the removal of organic material and significant reduction and elimination of microbial contamination.

Project Firstline³

Project Firstline was developed by the CDC in October of 2020 as a working collaborative to help fill educational gaps in healthcare systems on Infection Control and Prevention. Project Firstline is an easily accessible online learning platform that supports education for all healthcare workers. There are a variety of educational resources including videos, interactive scenarios, toolkits and webinars to help meet the learning needs of all healthcare professionals.

Risks and Environment Reservoirs–Education¹³

The healthcare environment is considered a reservoir or place where germs live. Common healthcare environment reservoirs include water and wet surfaces, dry surfaces, dirt and dust, and devices. Transmission can occur when appropriate infection prevention and control practices, such as cleaning and disinfection, are not followed. This infection prevention and control practice is part of standard precautions and is one way we can stop the spread of germs. Staff understanding of environmental reservoirs facilitates the importance of their role within the healthcare team. CDC's Project Firstline provides free educational materials on recognizing risks related to reservoirs. Environmental Services Managers can use these materials to form their own training programs.

Cleaning VS Disinfection¹⁵

Environmental Staff performing environmental surface cleaning should know and understand the difference between cleaning and disinfection. Both are important in eliminating germs and the spread of infection.

Cleaning removes visible dust, debris, and spills. Cleaning will eliminate some germs by wiping them away in debris or material but usually does not involve certain disinfectants and contact times.

Disinfecting kills germs on surfaces. A disinfectant specifically for eliminating specified germs are sprayed on surfaces and required contact time per manufacturer's directions are observed.

Transmission Based Precautions ^{1,2}

Transmission Based Precautions are the next step after Standard Precautions in the prevention of healthcare associated infections or HAI. All healthcare encounters should include Standard Precautions, regardless of the setting or patient. Transmission Based Precautions are exactly what they sound like - precautions to be taken based on how a disease or condition is transmitted or passed on to another person. It is important to remember that Transmission Based Precautions are in addition to Standard Precautions **AND** that more than one type of Transmission Based Precaution may be needed, based on the person's condition or disease. It is also important to remember that all needed personal protective equipment, or PPE should be donned or put on before or at the entry to the room and be doffed or removed before exiting the room for Contact and Droplet Precautions. There are specific instructions for Airborne Precautions that will be discussed in the Airborne section and in the PPE Donning and Doffing section. Hand Hygiene is required before **ALL** donning and doffing of PPE.

- **Contact** - Contact precautions are used when the mode of transmission is contact with the person or objects in their immediate environment, these objects are called fomites. Contact precautions require a protective gown and gloves to be worn when in contact with the patient or their environment. These items should be worn upon entry into the room, regardless of if contact is expected or not. Some common examples of reasons for contact precautions include Methicillin Resistant Staphylococcus Aureus or MRSA, Vancomycin Resistant Enterococcus or VRE, diarrheal illnesses, wounds, and Respiratory Syncytial Virus or RSV.
- **Enhanced Barrier** - Enhanced Barrier precautions are used in Long-Term Care Settings **Only**. These precautions require a protective gown and gloves to be worn in certain situations in the person's environment, specifically, high-contact care activities. While most of these circumstances involve direct care, it also includes changing linens. Some common examples of reasons for enhanced barrier precautions include persons known to be infected or colonized with a Multidrug Resistant Organism or MDRO or persons at increased risk for contracting an MDRO, such as those with a wound or an indwelling medical device.
- **Droplet** - Droplet precautions are used when the mode of transmission is through a droplet produced by coughing, sneezing, talking, or even singing. These droplets are heavier than air and a face mask and gloves are needed if within three (3) to six (6) feet of the person or their environment. Again, it is essential that these items are worn upon entry into the room, even if close contact is not anticipated. Some common examples of reasons for droplet precautions include Influenza or flu, Pertussis or whooping cough, or Neisseria Meningitidis.

- **Airborne** - Airborne precautions are used when the mode of transmission is through the air. What makes airborne conditions different from droplets is that airborne particles are smaller and lighter and travel further than droplets. These particles travel easily through the air for another person to breathe in and they can also contaminate surfaces greater distances away. Airborne precautions require a properly fitted and placed, the National Institute for Occupational Safety and Health (NIOSH) approved N-95 or higher-level respirator that is donned prior to entry to the room and doffed after exit (with the door closed). All other PPE (gown, gloves, face mask, eye protection) should be worn as needed depending on the anticipated contact or activity being performed. Some common examples of reasons for airborne precautions include tuberculosis or TB, Varicella Zoster or Chickenpox, Measles, and disseminated shingles.

PPE⁷

‘Donning’ means to put on and use PPE properly to achieve the intended protection and minimize the risk of exposure. ‘Doffing’ means removing PPE in a way that avoids self-contamination. The type of PPE used will vary based on the level of precautions required, such as standard, contact, droplet, or airborne infection isolation precautions.

Sequence for Donning PPE:

1. Perform hand hygiene before donning PPE
2. Gown
3. Mask or respirator
4. Goggles or face shield
5. Gloves

How to don a gown:

1. The torso from the neck to the knees and arms from the shoulders to the wrists should be completely covered.
2. The gown should go completely around the back and is able to tie without any gaps at the neck and waist.

PPE best practices:

- Keep gloved hands away from face.
- Avoid touching or adjusting PPE.
- Remove gloves if they are torn. Perform hand hygiene before donning new gloves.
- Remove PPE in appropriate areas:
 - At the doorway before leaving the patient room.
 - Remove the respirator outside of the room, after the door has been closed.

Safely remove PPE:

- Contaminated PPE areas are likely to have been in contact with body sites, materials, or surfaces with infectious organisms. Includes the outside and front of PPE.

- Clean PPE areas are not likely to have been in contact with an infectious organism including the inside and the outside back of PPE.

Sequence for Doffing (Removing) PP:

1. Remove gloves
2. Remove gown
3. Remove face shield/goggles
4. Remove mask or respirator

Perform hand hygiene between steps if hands become contaminated and immediately after removing all PPE.

Hand Hygiene ^{5,6}

Often, environmental workers (EVS) are not acknowledged as one of the first line of workers to help decrease the transmission of potentially infectious organisms. Because EVS workers are throughout all areas of healthcare, environmental contamination is always a possibility throughout their cleaning process. Proper hand hygiene limits environmental contamination and the spread of MRDO's, in turn protecting other personnel and patients. Unless hands are visibly soiled, or EVS has been in contact with certain pathogens, alcohol-based hand rub is preferred over soap and water.

Protect yourself and others by practicing proper hand hygiene:

- Use alcohol-based hand rub (ABHS), or soap and water.
- Clean hands before and after entering patient rooms and patient care areas.
- Clean hand after removal of gloves when moving from a soiled to a clean task.
- Clean hands after touching patient belongings or items in the patient care area.
- Clean hands after using the restroom.
- Clean hands before and after eating.
- Clean hands before going home.

When to wash with soap and water:

- When hands are visibly soiled.
- Before eating.
- After using the restroom.
- During the care of patients with suspected or confirmed infection during outbreaks of *C. difficile* and norovirus.

How to wash hands with soap and water:

1. **Wet** your hands with clean, running water (warm or cold), turn off the tap, and apply soap.
2. **Lather** your hands by rubbing them together with the soap. Lather the backs of your hands, between your fingers, and under your nails.
3. **Scrub** your hands **for at least 20 seconds**. Need a timer? Hum the "Happy Birthday" song

from beginning to end twice.

4. **Rinse** your hands well under clean, running water.
5. **Dry** your hands using a clean towel or an air dryer.

When to use ABHS:

The decision to use ABHS versus soap and water can be determined by several factors.

Unless hands are visibly soiled, ABHS is preferred over soap and water in most clinical situations because it:

- It is more effective at killing germs on hands than soap.
- It is easier to use when providing care, especially when moving from soiled to clean activities on the same patient or when moving between patients care of patients in shared rooms.
- Results in improved skin condition with less irritation and dryness than soap and water.
- Improves hand hygiene adherence.

How to use ABHS

1. Put the product on your hands and rub together. The effectiveness of the ABHS depends on the amount of sanitizer used. Use enough sanitizer products to cover all surfaces of your hands.
2. Cover all surfaces of your hands and continue to rub for at least 20 seconds until your hands feel dry.
3. Make sure to cover all surfaces including the thumbs, fingertips, and between fingers that are frequently missed.

Maintain Hand Skin Health:

ABHS is less irritating and drying to skin than soap and water. Use ABHS in most clinical situations.

- Lotion and creams can prevent and decrease skin dryness that happens from cleaning your hands:
 - Use hand lotions approved by your healthcare facility because they won't interfere with hand sanitizing products.
- When washing hands, use techniques to promote healthy hand skin, such as:
 - Avoiding hot water.
 - Patting rather than rubbing hands dry.
- Healthcare personnel with hand irritation should use cotton glove liners and follow guidance when:
 - Laundering.
 - Discarding.

Cleaning Products ¹⁰⁻¹¹

When facilities are deciding about which cleaning and disinfecting products to use at their facility a product selection process is recommended. Ideally, the facility's Infection Preventionist is involved in the selection process. Some examples of factors to consider includes:

- Spectrum of activity following guidance from EPA registered lists:
 - [Selected EPA-Registered Disinfectants](#).
- Ease of use.
- Compatibility with environmental surfaces.
- Safety.

Once a selection has been made on which cleaning and disinfecting products are to be used, the facility is encouraged to develop and maintain a master list of their approved environmental cleaning products and who supplies the product. CDC recommends minimizing products being used in facilities to ease cleaning processes, minimize staff training, and reduce the potential for errors in preparation and use.

CDC provides recommendations on common low and intermediate level disinfectants that can be used on environmental surfaces in healthcare settings that includes:

- Quaternary ammonium compounds
- Alcohol
- Chlorine releasing agents (bleach)
- Improved hydrogen peroxide

Staff who are using cleaning and disinfecting products should be educated on the products instructions for use. If staff use products that are not effective for a particular pathogen this could lead to continued transmission by direct and indirect contact. Staff should understand contact times for products and the kill list. This could lead to variations in their day-to-day routines if they must clean a room that is under transmission-based precautions.

In addition to environmental surface cleaning, facilities may have equipment that is considered reusable and need to be reprocessed. The facility should follow the instructions for use, according to the manufacturer's guidelines, for the reusable equipment to ensure the recommended cleaning and disinfecting product is being used. Staff performing reprocessing of reusable equipment should understand who is assigned to perform the reprocessing, how often to clean and disinfect the equipment, level of disinfection (low, intermediate, or high), personal protective equipment that is to be worn while cleaning and disinfecting, where to perform reprocessing, and how to keep clean and dirty separated.

Reading a Disinfectant Label ³

The Office of Safety and Health Administration (OSHA) aligned with the Globally Harmonized System (GHS) to regulate the Hazard Communication Standard (HCS) internationally. HCS mandates that all chemicals are universally labeled and are protected by law.

All chemical labels must contain the following:

- Active Ingredients
- Signal Word
- EPA Registration Number
- Directions for Use
- Contact Time
- Precautionary Statements
- First Aid
- Storage and Disposal

The infographic below was developed by CDC's Project Firstline that provides further information on reading a disinfectant label. This document is also included in the resource section of the toolkit.



It is also important to choose the appropriate antimicrobial product to ensure it is approved for the intended site or pest. The EPA maintains the following product lists:

- [*EPA's Registered Antimicrobial Products Effective as Sterilizers \[List A\]*](#)
- [*EPA's Registered Antimicrobial Products Effective Against Mycobacterium tuberculosis \(TB\) \[List B\]*](#)
- [*EPA's Registered Antimicrobial Products Effective Against Norovirus \(Feline calicivirus\) \[List G\]*](#)
- [*EPA's Registered Antimicrobial Products Effective Against Methicillin-resistant Staphylococcus aureus \(MRSA\) and/or Vancomycin Resistant Enterococcus faecalis or faecium \(VRE\) \[List H\]*](#)
- [*EPA's Registered Antimicrobial Products for Medical Waste Treatment \[List J\]*](#)
- [*EPA's Registered Antimicrobial Products Effective Against Clostridium difficile Spores \[List K\]*](#)
- [*EPA's Registered Antimicrobial Products Effective Against Ebola Virus \[List L\]*](#)
- [*EPA's Registered Antimicrobial Products Effective Against Avian Influenza \[List M\]*](#)
- [*Disinfectants for Use Against SARS-CoV-2 \[List N\]*](#)
- [*Disinfectants for Use Against Rabbit Hemorrhagic Disease Virus \(RHDV2\) \[List O\]*](#)
- [*EPA's Registered Antimicrobial Products Effective Against Candida auris \[List P\]*](#)
- [*Disinfectants for Emerging Viral Pathogens \(EVPs\) \[List Q\]*](#)
- [*EPA's Registered Antimicrobial Products Effective Against Bloodborne Pathogens \(HIV, Hepatitis B and Hepatitis C\) \[List S\]*](#)

For more detailed information regarding EPA -Registered disinfectants, please visit:
www.epa.gov/pesticide-registration/selected-epa-registered-disinfectants

Preparing Cleaning Products¹⁰⁻¹²

Cleaning and disinfecting products should be prepared according to the manufacturer's instructions. If prepared solutions are not prepared according to the manufacturer's instructions, they may not perform as expected. This could result in damage to surfaces or increase risks to staff and others. Facilities should ensure that standard operating procedures are available for the preparation, use, and disposal of environmental cleaning products.

Facilities may use containers to store prepared solutions. However, they should be clean, clearly labeled and have an expiration date based on the manufacturer's instructions for stability. Also, they should be clean and dried before refilling and new solutions should not be added to old solutions.

Supplies and Equipment Needed for EVS Cleaning and Cart Setup¹⁰

To perform environment cleaning procedures, supplies and equipment are needed to reduce risks. To simplify, it requires surface and floor cleaning supplies and equipment:

- Portable containers for storing environmental cleaning products
- Surface cleaning cloths preferably color coded
- Mops preferably microfiber
- Buckets
- Wet floor signs

All the above can be easily organized by using a cleaning cart. This is not an all-inclusive list and will vary by facility type.

When setting up your cleaning cart consider safety, convenience, and efficiency. To set up your cart you will need to review what your work assignment is for your shift. For instance, cleaning isolation rooms may determine what specific cleaning solutions you need or what PPE you are required to don prior to entering a room.

Do's:

- Clean EVS cart at the beginning and the end of your shift
- Only store items that are needed for your shift on the cart
- Cleaning containers and solutions should always be locked
- Clean and soiled items are to be separated (e.g., cleaning cloths or mop heads)

Don'ts:

- Never leave the cart unlocked when unattended
- Never store personal items on carts (e.g., food, drinks, or cosmetics)

Standard Cleaning Processes - Cleaning a Patient Room¹¹

Routine cleaning in EVS refers to the regular, systematic process of cleaning and disinfecting surfaces within a healthcare facility, focusing on high-touch areas and prioritizing the removal of dirt, dust, and potential pathogens, typically done daily or as per established cleaning schedules; key steps include: preparing cleaning supplies, wearing appropriate PPE, cleaning from clean to dirty areas, thoroughly wiping down frequently touched surfaces, proper disposal of waste, and following disinfection protocols when necessary; always adhering to facility-specific guidelines and infection control practices.

A **deep clean** in EVS involves a thorough cleaning process that goes beyond routine cleaning, including removing dirt, grime, and debris from all surfaces within a healthcare facility, with a particular focus on high-touch areas and thorough disinfection to prevent the spread of infection; key steps include: clearing clutter, pre-cleaning, damp wiping all contact surfaces, disinfecting with appropriate chemicals, cleaning hard-to-reach areas, and finally, checking for complete cleanliness; this process is often used when a room is vacant or between patient stays.

Terminal cleaning in EVS refers to a thorough cleaning process performed in a patient room or healthcare area after a patient is discharged, aiming to completely remove dirt, debris, and potential pathogens from all surfaces, including hard-to-reach areas, to minimize the risk of infection transmission; this typically involves removing all disposable items, cleaning and disinfecting all surfaces, floors, and equipment within the room, and disposing of soiled materials properly.

Special cleaning in EVS refers to a more thorough cleaning procedure than routine cleaning, often required for specific situations like isolation rooms, heavily soiled areas, or after a spill of bodily fluids, and typically involves additional steps like deep scrubbing, specialized disinfectants, and meticulous attention to detail to achieve a high level of sanitation; key steps include: pre-cleaning to remove debris, applying a dedicated cleaning solution based on the contaminant, thorough scrubbing, rinsing, disinfecting with a high-level disinfectant, and final inspection; always follow facility protocols and safety guidelines when performing special cleaning procedures.

Bloodborne Pathogens²

Bloodborne pathogens are microorganisms that can be present and carried in blood that can infect a host and cause disease in humans. Common pathogens include but are not limited to the following:

- Hepatitis B (HBV)
- Hepatitis C (HCV)
- Human Immunodeficiency Virus (HIV)

Occupational Safety and Health Administration (OSHA) provides Bloodborne Pathogen Standards that employers must do to protect employees that are at risk to bloodborne pathogens or other potentially infectious materials (OPIM). In general, the standard requires employers to do the following:

- Establish an exposure control plan
- Update the plan annually
- Implement universal precautions
- Identify and use engineering controls
- Identify and ensure the use of work practice controls
- Provide personal protective equipment (PPE)
- Make available hepatitis B vaccinations to all employees at risk
- Make available post exposure evaluation and follow-up
- Use labels and signs to communicate hazards
- Train employees and provide them with information

- Maintain medical and training records for employees

C-Diff ^{4,8}

Clostridioides difficile (*C. diff*) is a spore-forming, gram positive anaerobic bacillus that can produce toxins known as toxins A and B and can shed in feces; thus, the primary mode of transmission is the fecal-oral route. Surfaces including hands, devices, or materials (commodes, bathtubs, rectal thermometers) that become contaminated with feces can serve as a reservoir for *C. diff* spores. The *C. diff* spores have a protective coating allowing them to live for months and are resistant to alcohol and many other disinfectants. People may become infected if they touch contaminated items or surfaces then touch their mouth or mucous membranes. It is estimated that *C. diff* causes almost a half a million infections each year and about one in eleven people over age 65, diagnosed with a healthcare-associated *C. diff* infection, die within a month.

CDC has labeled *C. diff* as an urgent threat level pathogen. Environmental Services play an extremely important role in preventing the spread of *C. diff* by following the recommendations from the CDC.

Recommendations include:

- Develop and utilize environmental cleaning and disinfection education with an emphasis on *C. difficile*:
 - Provide education to all staff, with a more in-depth focus and training relevant to the staff's duties
- Develop and utilize daily and terminal cleaning protocols and checklists for patient-care areas and equipment
- Standardize cleaning practices by attempting to routinely assign the same staff members to targeted areas
- The Environmental Services Supervisor or designee should routinely, and as indicated review cleaning products in use or to implement with the following considerations:
 - The EPA provides "lists" of registered antimicrobial products that are effective against common pathogens:
 - Registered products to be used for *C. diff* are located under "List K"
 - Consider using 10% sodium hypochlorite (bleach) for disinfecting patient rooms and terminal cleaning
 - Effectiveness against targeted organisms
 - Expertise and training requirements needed to use
 - Compatibility with all affected device manufacturer's instructions
 - Effect on surfaces or devices after repeated exposure
 - Contact time is reasonable and achievable for the setting
 - Possible health risks to the patient, visitors and the staff
- A suspected or confirmed CDI patient's room should:
 - be cleaned and disinfected at least once a day to include the high touch areas and the bathroom

- be cleaned and disinfected after the cleaning of other patient rooms and or areas
- clean and disinfect all furniture and/or equipment, such as beds, portable scales, bedside tables, chairs, etc. that are removed from the room for any reason
- receive a thorough terminal cleaning and disinfection after the patient is transferred or discharged
- All departments and areas that may be contaminated by a patient with suspected or confirmed CDI should be cleaned and disinfected immediately after departure or as indicated, such as Physical Therapy, Emergency, Radiology Departments, etc.
- The cleaning solution(s) should be discarded, and cleaning equipment (cleaning cloth, mop, bucket, etc.) should be cleaned and disinfected per manufacturer's instructions:
 - Consider using disposable cleaning products such as wipes, mop heads, toilet brushes, etc.
- Routinely monitor and audit the effectiveness and compliance with the cleaning and disinfection protocols and practices:
 - Review the collected data to:
 - Validate the effectiveness of the cleaning and disinfection protocols
 - Disseminate the data to the appropriate leadership, staff members and other stakeholders:
 - identify issues
 - develop interventions to improve protocols or compliance, as indicate
 - Provide education and training, as necessary
- Continue to routinely monitor and audit the effectiveness and compliance with the cleaning and disinfection protocols and practices, accordingly

Linens⁹

An often-overlooked item in healthcare that has infection control and prevention implications is linen or laundry. The Occupational Safety and Health Administration (OSHA) defines contaminated laundry as “laundry which has been soiled with blood or other potentially infectious materials or may contain sharps.” Fomites, or inanimate objects such as towels, sheets, curtains, gowns, and other textiles, can serve as reservoirs for microorganisms that can be transferred to patients, providers, and the environment. This transference can result in hospital-acquired infections (HAIs) unless appropriate precautions are in place.

Prevention - Laundry workers should wear appropriate PPE while sorting soiled fabrics and textiles. Equipment used to launder linens should be used and maintained according to manufacturer's instructions. Otherwise, risk of microbial contamination of the system is present. Handling of contaminated linens should be done in a way that minimizes agitation and potential release of lint aerosols in areas where patient care occurs. Once collected, contaminated linens should be placed into bags or other appropriate containers, then securely tied or otherwise closed to prevent leakage. If using a chute to send bagged linens to another area, that chute should be maintained under negative air pressure to prevent the contents from falling out into

the chute. Further, microbial contaminants can become airborne and be propelled throughout the facility as they pass through chutes.

The laundering process must follow manufacturers' instructions regarding water temperature, use of chlorine bleach or other cleaning agents, and so on. After washing, cleaned and dried linens should be handled in such a way that the risk of contamination is minimized. Clean and/or sterile textiles should be kept separate from contaminated items. For example, carts containing clean linen should be covered and remain so except when items are being taken from the carts for use.

Storage of Equipment and Supplies ¹¹

Cleaning and disinfecting products should be stored in a manner that reduces the risk of contamination and degradation along with minimizing contact with personnel through skin contact or inhalation. Facilities should manage environmental cleaning products according to the Safety Data Sheet (SDS). Copies of SDS should be readily available where these products are stored and prepared.

CDC recommends having at least one designated area within the facility for preparation, storage, and reprocessing of reusable cleaning equipment and supplies. For larger facilities, consider having one area on every floor. Considerations for this area includes:

- Be well-ventilated and illuminated (lighting or window access)
- Be labeled with a biohazard sign on the door
- Have an appropriate water supply (hot and cold-water access, if feasible)
- Have a utility sink/floor drain for safe disposal of used solutions
- Be designed so that, whenever possible, buckets can be emptied into utility sink/floor drains without lifting them or creating splashes
- Have a dedicated handwashing sink, used only for handwashing
- Have access to an eyewash station
- Have appropriate PPE available
- Have enough space to keep reprocessing (dirty areas) separate from storage areas for cleaned equipment
- Be easily accessible in relation to the areas it serves (i.e., easily accessible throughout the facility)
- Be appropriately sized to the number of materials, equipment, and chemicals stored in the room/area
- Have printed copies of the SDS for all environmental cleaning products, manufacturer's instructions, and job aids for preparation of cleaning and disinfectant solutions
- Never contain personal clothing or grooming supplies, food, or beverages:
 - Have a separate area for cleaning staff to store these items
- Have safe chemical storage and access
- Have locks fitted to all doors to restrict access only to cleaning staff
- Be free from clutter
- Have washable surfaces (floors, walls, shelves)

To maintain the integrity of the supplies, equipment, and personal protective equipment (PPE) used for environmental services proper care and maintenance of these items is essential. Best practices for reprocessing reusable cleaning supplies and equipment includes:

- Send all reusable supplies and equipment (e.g., buckets, rubber gloves) for reprocessing:
 - Directly after use in a transmission-based precaution area
 - When soiled with blood or body fluids
- Thoroughly clean, disinfect, and rinse equipment such as buckets and containers whenever solution is replaced and daily. Store them upside down to allow complete drying
- Launder mop heads, floor cloths, and soiled cleaning cloths at least daily (e.g., at the end of the day) and allow them to fully dry before storage and reuse
- Reprocess all reusable supplies and equipment in a dedicated area that is not used for other purposes (i.e., reprocessing of cleaning equipment should never be conducted in handwashing sinks)
- Reprocess (e.g., launder) all reusable supplies and equipment according to manufacturer's instructions

Audit and Feedback for the Infection Preventionist ¹³⁻¹⁴

As part of the CDC Core Infection Prevention and Control Practices, it is recommended to “Identify and monitor adherence to infection prevention practices and infection control requirements”. When regular auditing is conducted, this can alert the Infection Preventionists to lapses in practice that require additional staff training. There is no recommended number of audits to be completed but should include infection control practices associated with common tasks being performed. Through direct observations, Infection Preventionists or their designees can conduct audits in recommended areas of Infection Prevention and Control practices. By using a standardized tool and setting aside time to conduct audits Infection Preventionist or their designees can achieve this core practice category. Below are recommended areas to audit with guidance on content to be assessed:

- **Cleaning and disinfection of environmental surfaces:** The Infection Preventionist or their designee is encouraged to assess and be familiar with, by direct observation, the process of cleaning and disinfecting. This includes how staff protect themselves from chemical exposure, where to access information about chemicals, how to use the product, which product to use which surfaces and equipment, contact times, kill lists, who is responsible for cleaning surfaces and reusable medical equipment, how to clean and disinfect rooms, how to dispose of chemicals, and high-touch surfaces.
- **Reprocessing reusable medical equipment:** The Infection Preventionist is encouraged to be familiar with the manufacturer’s guidelines for reprocessing of any reusable medical equipment in the facility. These guidelines will assist the Infection Preventionist in monitoring adherence to the manufacturer’s guidelines.

After an audit has been conducted, the Infection Preventionist is encouraged to review their findings for lapses in practice and decide the next steps. It is recommended to “Provide prompt, regular feedback on adherence and related outcomes to healthcare personnel and facility leadership”. Based on the findings the Infection Preventionist will need to decide if just in time training is needed at the time the lapse is observed or share the aggregated data by unit. The Infection Preventionist will need to decide if the lapses identified could lead to potential infection transmission. This will assist in how feedback is provided.

Monitoring and Feedback for the Environmental Services Manager¹³⁻¹⁴

Implementing a monitoring program allows facilities to better understand if environmental cleaning procedures are being followed according to the policies and procedures. The results from the monitoring program can lead to program improvement. CDC provides suggestions on methods facilities can use to assess cleaning practices and the level of cleanliness. Methods to assess cleaning practices include direct performance observations, visual assessment, and fluorescent markers. Methods to assess the level of cleanliness includes measuring the residual bioburden, i.e. adenosine triphosphate (ATP), and taking a bacteriological culture of the surface itself using a swab or contact agar plate method. CDC considers it best practice to routinely monitor at least weekly.

Training and Certification¹

Association for Health Care Environment

The Association for the HealthCare Environment (AHE) is a Professional Membership Group of the American Hospital Association. AHE is the organization of choice for professionals responsible for establishing and maintaining health care environments that are free of surface contamination and that support safety, service, and efficient and effective operations. AHE is the go-to resource for best-in-class tools, products, education and training that raise the standard of the health care environmental services field and shape the future workforce for over 2,300 professionals committed to pathogen-free, healing environments across all care settings. Membership is required and there are different levels of membership. Some of the resources AHE offers are certification programs, health care EVS job descriptions, and core competencies for health care EVS professionals.

Links To Training

Training: EVS and the Battle Against Infection

www.cdc.gov/infection-control/hcp/training/training-evs-and-the-battle-against-infection.html?CDC_AAref_Val=https://www.cdc.gov/infectioncontrol/training/evs-battle-infection.html

CDC Strive Environmental Cleaning 101

www.cdc.gov/infection-control/media/pdfs/strive-ec101-508.pdf?CDC_AAref_Val=https://www.cdc.gov/infectioncontrol/pdf/strive/EC101-508.pdf

CDC Strive Environmental Cleaning 102

www.cdc.gov/infection-control/media/pdfs/strive-ec102-508.pdf?CDC_AAref_Val=https://www.cdc.gov/infectioncontrol/pdf/strive/EC102-508.pdf

U.S. Department of Labor, Occupational Safety and Health Administration. Occupational Exposure to Bloodborne Pathogens: final rule (29 CFR 1910.1030). Federal Register 1991;56:64004–182.

Project Firstline: Episode 16: Cleaning? Disinfection? What is the Difference?

www.youtube.com/watch?v=dIuRI9OpjY&list=PLvrp9iOILTQZQGtDnSDGViKDdRtlc13VX&index=19

Project Firstline: Episode 20: Why Do Cleaning and Disinfection Matter in Healthcare?

www.youtube.com/watch?v=WpV_dsKQDMg&list=PLvrp9iOILTQZQGtDnSDGViKDdRtlc13VX&index=23

Project Firstline: Episode 22: Why Does Contact Time Matter for Disinfection?

www.youtube.com/watch?v=TCa7Gg1NUd4&list=PLvrp9iOILTQZQGtDnSDGViKDdRtlc13VX&index=25

CDC Project Firstline: Interactive Scenario: Where Germs Live in Healthcare

www.cdc.gov/project-firstline/hcp/training/Infographic.html

CDC Project Firstline: Training Toolkits: Recognizing Risks Using Reservoirs and Introduction to Reservoirs: Where Germs Live

www.cdc.gov/project-firstline/hcp/training/index.html

Resources and Tools

CDC: Healthcare-Associated Infections: Considerations for Reducing Risk: Surfaces in Healthcare Facilities

www.cdc.gov/healthcare-associated-infections/hcp/infection-control/?CDC_AAref_Val=https://www.cdc.gov/hai/prevent/environment/surfaces.html

CDC: Healthcare-Associated Infections: Environmental Cleaning in Global Healthcare Settings

www.cdc.gov/healthcare-associated-infections/hcp/cleaning-global/index.html

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

www.cdc.gov/infection-control/hcp/core-practices/

CDC: Infection Control: Environmental Infection Control Guidelines

www.cdc.gov/infection-control/hcp/environmental-control/index.html

CDC: Infection Control: Disinfection and Sterilization Guide

www.cdc.gov/infection-control/hcp/disinfection-and-sterilization/?CDC_AAref_Val=https://www.cdc.gov/infectioncontrol/guidelines/disinfection/index.html

CDC: Infection Control: Options for Evaluating Environmental Cleaning

www.cdc.gov/infection-control/php/evaluating-environmental-cleaning/index.html

CDC Project Firstline: How to Read a Disinfectant Label

www.cdc.gov/project-firstline/media/pdfs/howtoreadalabel-infographic-508.pdf?CDC_AAref_Val=https://www.cdc.gov/hai/pdfs/HowToReadALabel-Infographic-508.pdf

CDC Project Firstline: Germs can live in dirt and dust.

www.cdc.gov/project-firstline/media/pdfs/Healthcare-Germs-Environment-DirtAndDust-508.pdf

CDC Project Firstline: Germs can live on devices.

www.cdc.gov/project-firstline/media/pdfs/Healthcare-Germs-Environment-Devices-508.pdf

CDC Project Firstline: Germs can live on dry surfaces.

www.cdc.gov/project-firstline/media/pdfs/Healthcare-Germs-Environment-DrySurfaces-508.pdf

CDC Project Firstline: Germs live in water and on wet surfaces.

www.cdc.gov/project-firstline/media/pdfs/Healthcare-Germs-Environment-WaterAndWetSurfaces-508.pdf

CDC Project Firstline: Infection Control Training and Education

www.cdc.gov/project-firstline/index.html

Clean Hands: About Handwashing

www.cdc.gov/clean-hands/about/

EPA: Selected EPA-Registered Disinfectants

www.epa.gov/pesticide-registration/selected-epa-registered-disinfectants

Infection Control Assessment and Response Tool: Module 4 Environmental Services

www.cdc.gov/infection-control/media/pdfs/IPC-mod4-EVS-508.pdf

Infection Control Assessment and Response Tool: Observation Form Environmental Services

www.cdc.gov/infection-control/media/pdfs/icar-ipc-obs-form-evs-508.pdf

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www.osha.gov/bloodborne-pathogens
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www.cdc.gov/project-firstline/hcp/training/index.html
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www.cdc.gov/c-diff/index.html
5. Clean Hands. Centers for Disease Control and Prevention. 2016.
www.cdc.gov/clean-hands/hcp/clean-hands-count/index.html#cdc_listing_res-for-healthcare-workers
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www.cdc.gov/clean-hands/hcp/clinical-safety/index.html
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www.cdc.gov/niosh/learning/safetyculturehc/module-3/8.html
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www.cdc.gov/healthcare-associated-infections/hcp/cleaning-global/appendix-d.html
10. Healthcare-Associated Infections: Cleaning Programs. Centers for Disease Control and Prevention. 2024. Section 6, 2.5, 3.3
www.cdc.gov/healthcare-associated-infections/hcp/cleaning-global/supplies-and-equipment.html

11. Healthcare-Associated Infections: Cleaning Supplies and Equipment. Centers for Disease Control and Prevention. 2024
www.cdc.gov/healthcare-associated-infections/hcp/cleaning-global/supplies-and-equipment.html
12. Healthcare-Associated Infections: Environmental Cleaning Procedures. Centers for Disease Control and Prevention. 2024. Section 10, 4.8
www.cdc.gov/healthcare-associated-infections/hcp/cleaning-global/procedures.html#cdc_generic_section_10-4-8-methods-for-assessment-of-cleaning-and-cleanliness
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www.cdc.gov/infection-control/php/evaluating-environmental-cleaning/index.html
14. Infection Control in Health Care: An Overview. Centers for Disease Control and Prevention. 2024
www.cdc.gov/projectfirstline/about/?CDC_AAref_Val=https://www.cdc.gov/infectioncontrol/projectfirstline/healthcare/germs-environment.html
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16. Project Firstline: Environmental Cleaning Procedures. Centers for Disease Control and Prevention. 2024
www.cdc.gov/healthcare-associated-infections/hcp/cleaning-global/procedures.html

EVS Toolkit Resources

Audit Tools

Environmental Services Hand Hygiene Observation Toolkit

Observer: _____ Date: _____

Hand Hygiene Opportunity:	Observation #1:	Observation #2:	Observation #3:	Observation #4:	Comments
Before donning gloves and entering a patient room to clean	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
After collecting and bagging trash, gloves removed and HH performed	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
After handling contaminated equipment (mops, clothes, buckets, etc.)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
After cleaning a patient room/surroundings and gloves are removed	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
At room exit	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
After bagging soiled linen	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Before handling clean linen	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
After touching housekeeping cart	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
HH performed every time gloves are removed	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	

To calculate rate:

(A) Total Number of Yes responses: _____

(B) Total Number of Opportunities ('yes' + 'no'): _____

(A÷B) X100 = Percentage: _____

Cleaning Cart Observation Tool

Observer: _____ Date: _____

Cleaning Cart Considerations	Cart #1	Cart #2	Cart #3	Cart #4	Comments
Containers used to store prepared solutions are clean, labeled, and have an expiration date?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Is the cleaning cart visibly clean?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Is the cleaning cart stored in an appropriate area (outside patient room or designated EVS area)?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Are compartments that contain supplies and chemicals locked?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Is the cleaning cart stocked with necessary cleaning and disinfection supplies?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Is the cleaning cart free of personal items?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Is toilet brush stored in a manner that is separate from clean items (bottom of cart and enclosed)?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Does the cleaning cart contain cotton or microfiber mop heads?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Does the cleaning cart contain color-coded clothes?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	

To Calculate Rate:

(A) Total Number of answers Yes: _____

(B) Total Number of Opportunities (Yes + No): _____

(A/B) X100=Percentage_____%

Routine Cleaning Observation Tool

Observer: _____

Date: _____

Routine Cleaning	Observations	Comments
Did HCP perform hand hygiene?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Did HCP don clean gloves?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Did HCP thoroughly wet a new cleaning cloth in solution?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Did HCP fold the cleaning cloth?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Did HCP use general strategies to clean and disinfect surfaces?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Did HCP make sure the surface was wet to allow required contact time?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Did HCP regularly rotate cleaning cloth?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Did HCP dispose of cleaning cloth after it was no longer saturated with solution?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Did HCP clean and disinfect the toilet area?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Did HCP use wet floor signs?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Did HCP mop from cleaner to dirtier and clean top to bottom?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Did HCP mop in a systematic manner?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Did HCP change mop heads/floor cloths and solution as often as needed?	<input type="checkbox"/> Yes <input type="checkbox"/> No	

To Calculate Rate:

(A) Total Number of answers Yes: _____

(B) Total Number of Observations: _____

(A/B) X100=Percentage _____%

Environmental Cleaning Services Area Observation Tool

Observer: _____

Date: _____

EVS Cleaning Area	Observation	Comments
Is the area well-ventilated and illuminated (lighting or window access)?	Yes No	
Is the area labeled with a biohazard sign on the door?	Yes No	
Does the area have an appropriate water supply (hot and cold-water access, if feasible)?	Yes No	
Does the area have a utility sink/floor drain for safe disposal of used solutions?	Yes No	
Is there a process for buckets to be emptied into utility sink/floor drains without lifting them or creating splashes?	Yes No	
Does the area have a dedicated handwashing sink, used only for handwashing?	Yes No	
Does the area have access to an eyewash station?	Yes No	
Does the area have appropriate PPE available?	Yes No	
Does the area have enough space to keep reprocessing (dirty areas) separate from storage areas for cleaned equipment?	Yes No	
Can the area be easily accessible in relation to the areas it serves (i.e., easily accessible throughout the facility)?	Yes No	
Is the area appropriately sized to the amount of materials, equipment, and chemicals stored in the room/area?	Yes No	
Does the area have printed copies of the SDS for all environmental cleaning products, manufacturer's instructions, and job aids for preparation of cleaning and disinfectant solutions?	Yes No	
Is the area free of HCP personal clothing or grooming supplies, food or beverages?	Yes No	
Does the area have safe chemical storage and access?	Yes No	
Does the area have locks fitted to all doors to restrict access only to cleaning staff?	Yes No	
Is the area free from clutter?	Yes No	
Does the area have washable surfaces (floors, walls, shelves)?	Yes No	

To Calculate Rate:

(A) Total Number of answers Yes: _____

(B) Total Number of observations: _____

(A/B) X100=Percentage _____%

Environmental Services

Audit and Feedback Monthly Report



Month: _____

Year: _____

Report Date: _____

EVS Practices:	Adherence Rate (%):	Targeted Adherence Rate (%):	Comments
EVS Hand Hygiene			
Cleaning Cart Observations			
Cleaning and Disinfection of Environmental Surfaces			
Routine Cleaning Observations			
Wall-Mounted ABHS Audits			
EVS Storage/Janitor Areas			
Laundry Observations			

Areas for Concern/Improvement (Specific areas of low performance that need improvement):

Improvement Goals (Actionable steps to improve performance):

Reuseable Supplies and Equipment

Monthly Environmental Services Supervisor Report

Type of Supplies or Equipment:	In good condition:	Repair/Replace	Estimated Price
Portable Containers	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Surface Cleaning Cloths	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Mops/Brooms/Dusters/Toilet brush	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Buckets/Spray bottles	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Wet floor/caution signs	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Cleaning carts	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Automatic Dispensing System	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Date last Calibrated:			
Ventilation	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Hot and Cold-Water access	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Utility sink	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Floor drain	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Handwashing sink/supplies	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Eyewash station	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
PPE (reusable) - Impervious gowns & Puncture resistant gloves	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
SDS book	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Washable surfaces (cracks)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Washer	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Dryer	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Surface used to fold clean laundry	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Clean/Soiled Laundry Carts & Covers	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Other:	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Orientation/Competency Validation

(Insert Facility Name)
(Employee Name)



This is a template and is not all inclusive. Facilities should individualize according to internal policies.

Self-Assessment Key		Instruction Method			Validation Method		
0 - No Experience 1 - Limited competency/proficiency 2 - Acceptable competency/proficiency 3 - Competent/Proficient (has independently performed during the past year)	P - Protocol/Policy Procedure E - Education S - Self Learning Assignment CP - Clinical Practice D - Demonstration	O - Observation RT - Return Demonstration T - Test VR - Verbal Review C - Certificate					
Environmental Services Technician	Self - Assess	Instruction	Date	Validation Method	Date/Initials	Date/Initials	Date/initials
Infection Prevention							
Complete Training: CDC: EVS and the Battle Against Infection							
Articulate why the Environmental Service Department is an essential part of the Infection Prevention and Control							
Demonstrate ability to locate the facility's EVS policies and procedures.							
Demonstrate the ability to locate the facility's Infection Prevention and Control Program's policies and procedures.							
Demonstrate the ability to locate the facility's education and reference materials for EVS and IPC education.							
Review CDC Resources: CDC Project Firstline Website							
Guidelines for Environmental Infection Control in Health-Care Facilities (2003)							
Demonstrate understanding of KEY terms related to EVS and							
Demonstrate ability to communicate with key stakeholders regarding IPC issues.							
Complete Training: CDC PFL Session 1: What does it Mean to Recognize a Risk?							
Articulate what it means to recognize an infection prevention and control risk.							
Complete Training: CDC PFL Session 2: How Germs Make People Sick							

Describe how microorganisms can spread in the healthcare setting and cause infections.							
Complete Training:							
CDC PFL Session 3: Recognizing Risk Using Reservoirs: A							
Articulate how infection prevention and control interventions prevent or stop the spread of microorganisms.							
Identify an IPC risk and applies appropriate interventions to prevent or stop the spread of microorganisms.							
Hand Hygiene							
Complete Training:							
CDC: The 4 E's of an Effective Hand Hygiene Program							
Complete Training:							
CDC: Hand Hygiene & Other Standard precautions to Prevent healthcare-Associated Infections (2005)							
Complete Training:							
CDC: Clean Hands: C. diff							
Articulate the importance of Hand Hygiene in the healthcare setting.							
Verbalize why Alcohol-based Hand Sanitizer is the preferred method of Hand Hygiene in most clinical situations.							
Recognize situations when washing hands with soap and water is recommended, instead of using ABHS.							
Demonstrate proper hand washing with soap and water technique.							
Demonstrate proper hand hygiene using ABHS.							
Demonstrate correct hand hygiene practices at appropriate times during cleaning and disinfecting activities (donning and doffing PPE, contamination, etc.)							
Review CDC Resources:							
Fire safety and ABHS							
Verbalize the proper placement and storage of ABHS per the facility policy and procedure, regulatory guidance and CDC recommendations.							
Standard and Transmission-Based Precautions							
Review CDC Resources:							
Standard Precautions							
Review CDC Resources:							
Core Infection Prevention and Control Practices for Safe Healthcare Delivery in All Settings.							
Define Standard Precautions.							
Demonstrate adherence to the CDC's Core Infection Prevention and Control Practices.							

Review CDC Resources: _____ Transmission-Based Precautions							
Define Transmission-Based Precautions.							
Define Contact Precautions.							
Define Droplet Precautions.							
Define Airborne Precautions.							
Review CDC Resources: _____ Enhanced Barrier Precautions							
Define Enhanced Barrier Precautions (for nursing homes)							
Define Other Precautions as per facility policy (i.e., enteric, reverse or neutropenic, etc.)							
Review CDC Resources: _____ Contact Precaution Sign							
Droplet Precaution Sign							
Airborne Precautions							
Is able to appropriately identify different types of transmission-based precaution signage utilized by the facility per policy and procedure.							
Explain what information is on TBP signage.							
Explain procedure for removal of TBP signage from a room.							
Review CDC Resources: _____ Niosh Personal Protective Equipment (PPE): Protect the Worker with PPE							
Donning and Doffing PPE: Proper Wearing, Removal, and Disposal							
Articulate the importance of properly wearing and removing Personal Protective Equipment to prevent the spread of microorganisms.							
Identify storage locations and follows stocking procedure to ensure PPE is readily available.							
Identify high risk situations and utilizes PPE correctly.							
Demonstrate proper <i>donning</i> of PPE for each type of precaution utilized in the facility (i.e., contact, droplet,							
Demonstrate proper <i>doffing</i> of PPE for each type of precaution utilized in the facility (i.e., contact, droplet,							
Demonstrate proper disposal of PPE.							
Demonstrate proper cleaning, disinfection and storage of reusable PPE.							
Demonstrate proper cleaning and disinfection of reusable							

Demonstrate proper storage of reusable PPE.							
Employee Health							
Review CDC Resource:							
Infection Control in Healthcare Personnel: Epidemiology and Control of Selected Infections Transmitted Among Healthcare Personnel and Patients (2024)							
Is able to explain how employee health practices contribute to the facility's infection prevention and control program for both the employee and the patient/resident, visitors and							
Demonstrate accessing the facility's list of communicable disease and illness to report to employee health, direct supervisor, Infection Preventionist or designee as outlined in the facility's IPCP.							
Review CDC Resources:							
Niosh Bloodborne Pathogen Exposure							
Define Bloodborne Pathogen and Other Potentially Infectious Material.							
Define a Sharps Injury.							
Recognize job duties that increase risk to be exposed to bloodborne pathogens and OPIM.							
Identifies interventions to mitigate the risk of SHARPS Injuries from occurring.							
Demonstrate use of interventions to mitigate the risk of SHARPS Injuries from occurring.							
Review CDC Resources:							
Environmental services guidelines from the Guidelines for Environmental Infection Control in Health-Care Facilities							
Demonstrate proper procedure to clean blood and OPIM.							
Verbalize the procedure to follow for exposure to bloodborne pathogens and other potentially infectious materials and sharp injuries.							
Articulate the importance of reporting injury, exposure, signs, symptoms and/or diagnosis of contagious illness or disease to employee health, direct supervisor, Infection Preventionist or designee as outlined in the facility's IPCP and to adhere to work restrictions.							
Cleaning and Disinfection							
Review CDC Resources:							
Guidelines for Environmental Infection Control in Health-Care Facilities (2003)							
Environmental services guidelines from the Guidelines for Environmental Infection Control in Health-Care Facilities							

Verbalize the difference between cleaning and disinfecting.							
Identify 7 factors that are considered when choosing cleaning products to use.							
Identify the location of Safety Data Sheets.							
Demonstrate how to identify EPA-registered products for target organisms.							
Demonstrate the ability to read and understand a label for instructions on how to use products per manufacturer's instructions.							
Articulate the meaning of dwell/kill/wet time and identify the that time for each chemical in use by the facility.							
Demonstrate use of cleaning cloth, wipe or other equipment used to clean and disinfect surfaces to ensure dwell/kill/wet time of specific product is met.							
Demonstrate the proper use , dispenser operation, mixing instructions, labeling and storage and shelf life of chemicals per manufacturer's instructions and facility policy and							
Demonstrate the appropriate steps for cleaning and disinfecting surfaces in an area (clean to dirty, high to low,							
Demonstrate the appropriate steps for cleaning, disinfecting and removing equipment from the area it was contaminated (exam room, patient room, bathroom, etc.) back to the appropriate storage area							
Demonstrate routine/daily clean of a room <i>not on</i> transmission-based precautions (i.e., patient/resident room, exam room, and bathroom etc.).							
Demonstrate terminal/discharge cleaning and disinfection process of a room <i>not on</i> transmission-based precautions (i.e., patient/resident room, exam room, and bathroom, etc.).							
Demonstrate routine/daily cleaning and disinfection process of a room <i>on</i> transmission based precautions(i.e., patient/resident room, exam room, and bathroom, etc.).							
Demonstrate terminal/discharge cleaning and disinfection process of a room <i>on</i> transmission-based precautions (i.e., patient/resident room, exam room, and bathroom, etc.).							
Demonstrate routine/daily clean of a room contaminated with C. Diff. (i.e., patient/resident room, exam room, and bathroom etc.).							
Demonstrate terminal/discharge cleaning and disinfection process of a room contaminated with C. Diff. (i.e., patient/resident room, exam room, and bathroom, etc.).							

Demonstrate routine cleaning and disinfection process of other types of rooms/areas in the facility (i.e., operating room, offices, procedure room, emergency room, laboratory, pharmacy, waiting room, dining areas, storage room and dirty utility room, etc.)							
Demonstrate appropriate storage of cleaning cart when <i>in</i>							
Demonstrate setting up the EVS cart supplies to avoid cross contamination.							
Demonstrate cleaning, disinfecting and proper storage of reusable EVS tools after use.							
Demonstrate cleaning, disinfecting and proper storage of reusable EVS tools after use in a contaminated C. diff. room.							
Demonstrate cleaning the EVS cart at the end of shift, if contaminated or as needed.							
Demonstrate appropriate storage of cleaning cart when <i>not in</i> use.							
Demonstrate the process to remove equipment that can not be cleaned and disinfected properly due to surface or structure integrity.							
Linens Handling							
Review CDC Resources: Laundry and bedding guidelines from the Guidelines for Environmental Infection Control in Health-Care Facilities							
Describe how contaminated linen can spread microorganisms that can cause infection.							
Demonstrate properly handling of clean linen to not contaminate.							
Demonstrate properly transporting clean linen to not contaminate.							
Demonstrate properly storing clean linen to not contaminate.							
Demonstrate properly handling of soiled linen to not contaminate.							
Demonstrate properly transporting soiled linen to not contaminate.							
Demonstrate properly storing soiled linen to not contaminate.							
Verbalize process for discarding damaged or stained linen from redistribution.							
Demonstrate the use of proper PPE when handling and sorting soiled linen.							

Demonstrate cleaning and disinfection of linen carts used to transport clean and soiled linens.							
Verbalize the procedure to change privacy curtains.							
Waste Handling							
Review CDC Resource:							
Guidelines for Environmental Infection Control in Health-Care Facilities (2003). Section I. Regulated Medical Waste.							
Define biohazard waste.							
Verbalize understanding of the risk of contamination and transmission of microorganisms when handling all waste products.							
Demonstrate proper use of PPE when handling waste.							
Demonstrate proper waste collection procedure.							
Demonstrate proper waste transportation procedure.							
Demonstrate proper waste storage procedure.							
Demonstrate proper disposal of waste procedure.							
Demonstrate cleaning and disinfection of waste receptacles.							
EVS Audit and Feedback							
Review CDC Resources:							
Options for Evaluating Environmental Cleaning							
Explains the importance of conducting audits and observing EVS practices.							
Explains the importance of performing residual burden assessments in addition to observations.							
Perform an Audit of EVS practices through observations for adherence to practices.							
Perform a residual bioburden test.							
Report the findings to the EVS Supervisor, IP, or designee.							

CLEANING CART SET-UP

Cleaning carts and trolleys provide several benefits, such as the ability to carry and safely manage all the essential cleaning supplies and equipment and increased occupational safety for cleaning staff.

Color coded buckets for different environmental cleaning solutions (e.g., Disinfectants, Detergents)

Different colored clothes to allow color coding: prevents cross-contamination between areas, like from toilets to patient areas

Portable containers for environmental cleaning products should be clean, dry, appropriately sized, labeled and dated

Equip carts with a lockable compartment for containers of cleaning and disinfectant solutions

Separate clean and soiled items

Mop heads or floor cloths should be cotton or microfiber

While in use, never leave carts unattended or out of your sight

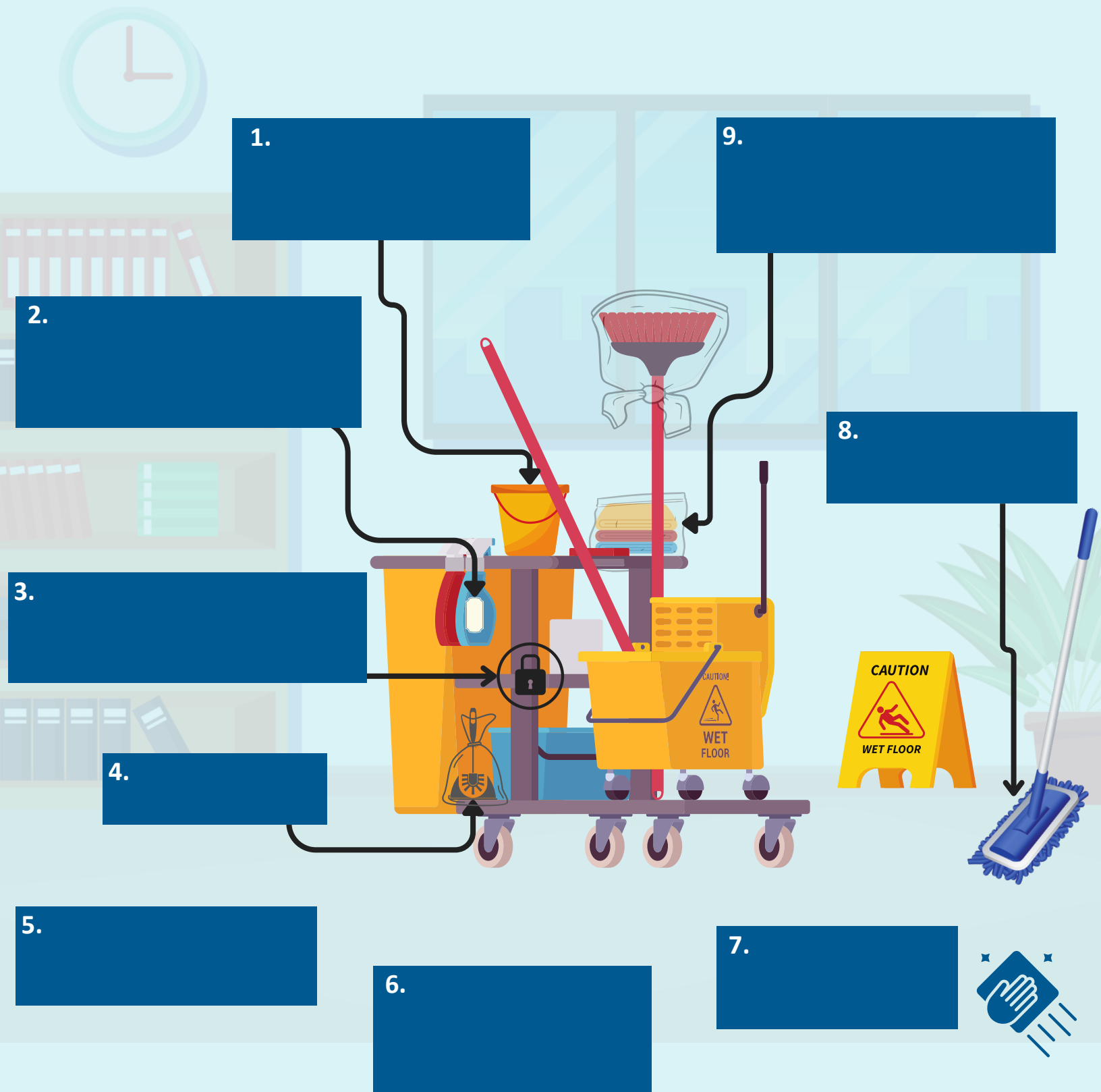
When not in use, store carts in a designated environmental cleaning services area

Thoroughly clean carts at the end of each day or shift



What's on a Cleaning Cart?

This is an ***example*** of how to set up a cleaning cart.



ANSWER KEY

MATCH THE LETTER OF THE STATEMENT BELOW WITH THE CORRESPONDING NUMBER ON THE FRONT OF THIS PAGE AS AN EXAMPLE OF HOW TO SET UP A CLEANING CART

- a. MOP HEADS OR FLOOR CLOTHS SHOULD BE COTTON OR MICROFIBER**
- b. EQUIP CARTS WITH LOCKABLE COMPARTMENT FOR CONTAINERS OF CLEANING AND DISINFECTANT SOLUTIONS**
- c. SEPARATE CLEAN AND SOILED ITEMS**
- d. COLOR-CODED BUCKETS FOR DIFFERENT ENVIRONMENTAL CLEANING SOLUTIONS (E.G., DISINFECTANTS, DETERGENTS)**
- e. WHEN NOT IN USE, STORE CARTS IN A DESIGNATED ENVIRONMENTAL CLEANING SERVICES AREA**
- f. DIFFERENT COLORED CLOTHS TO ALLOW COLOR-CODING: PREVENTING CROSS-CONTAMINATION BETWEEN AREAS, LIKE FROM TOILETS TO PATIENT AREAS**
- g. THOROUGHLY CLEAN CARTS AT THE END OF EACH DAY OR SHIFT**
- h. WHILE IN USE, NEVER LEAVE CARTS UNATTENDED OR OUT OF YOUR SIGHT**
- i. PORTABLE CONTAINERS FOR ENVIRONMENTAL CLEANING PRODUCTS SHOULD BE CLEAN, DRY, APPROPRIATELY-SIZED, LABELED, AND DATED**

Cleaning Cart Don'ts

Can you identify the incorrect Environmental Service practices?

Circle the incorrect practice and draw an arrow to the correct rationale

Containers used to store cleaning product should be clean, clearly labeled, and have an expiration date based on manufacturer's instructions

Laundered textiles should be packaged and transported in a manner that will ensure their cleanliness and protect them during transport

PPE used during cleaning and housekeeping procedures should be appropriate to the task

Only clean cloths should be used to access cleaning products stored in containers

Personal items, food, and beverages should not be stored on the cleaning cart



Clean and soiled items should be separated

Cleaning cart should be thoroughly cleaned at least once a day

Alcohol-based hand sanitizer should be readily accessible

How to Read a Disinfectant Label

Read the entire label.

The label is the law!

Note: Below is an **example** of information that can be found on a disinfectant label

Active Ingredients:

What are the main disinfecting chemicals?

EPA Registration Number:

U.S. laws require that all disinfectants be registered with EPA.

Directions for Use (Instructions for Use):

Where should the disinfectant be used?

What germs does the disinfectant kill?

What types of surfaces can the disinfectant be used on?

How do I properly use the disinfectant?

Contact Time:

How long does the surface have to stay wet with the disinfectant to kill germs?



ACTIVE INGREDIENTS:

Alkyl (60% C14, 30% C16, 5% C12, 5% C18)
Dimethyl Benzyl Ammonium Chloride10.0%
OTHER INGREDIENTS:90.0%
TOTAL:100.0%

EPA REG NO. 55555-55-55555

CAUTION

Directions for Use

INSTRUCTIONS FOR USE:

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

For Disinfection of Healthcare Organisms:

Staphylococcus aureus,
Pseudomonas aeruginosa.

To Disinfect Hard, Nonporous Surfaces:

Pre-wash surface.
Mop or wipe with disinfectant solution.
Allow solution to stay wet on surface for at least 10 minutes.
Rinse well and air dry.



EXP MM-DD-YYYY

5 55555 55555 5

PRECAUTIONARY STATEMENTS:

Hazardous to humans and domestic animals. Wear gloves and eye protection.

CAUSES MODERATE EYE IRRITATION. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling. Avoid contact with foods.

FIRST AID: IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. **IF ON SKIN OR CLOTHING:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes.

POISON CONTROL: Call a Poison Control Center (1-866-366-5048) or doctor for treatment advice.

STORAGE AND DISPOSAL: Store this product in a cool, dry area away from direct sunlight and heat. When not in use keep center cap of lid closed to prevent moisture loss. Nonrefillable container. Do not reuse or refill this container.

Signal Words (Caution, Warning, Danger):

How risky is this disinfectant if it is swallowed, inhaled, or absorbed through the skin?

Precautionary Statements:

How do I use this disinfectant safely? Do I need PPE?

First Aid:

What should I do if I get the disinfectant in my eyes or mouth, on my skin, or if I breathe it in?

Storage & Disposal:

How should the disinfectant be stored? How should I dispose of expired disinfectant? What should I do with the container?



U.S. Department of
Health and Human Services
Centers for Disease
Control and Prevention



PROJECT
FIRST LINE

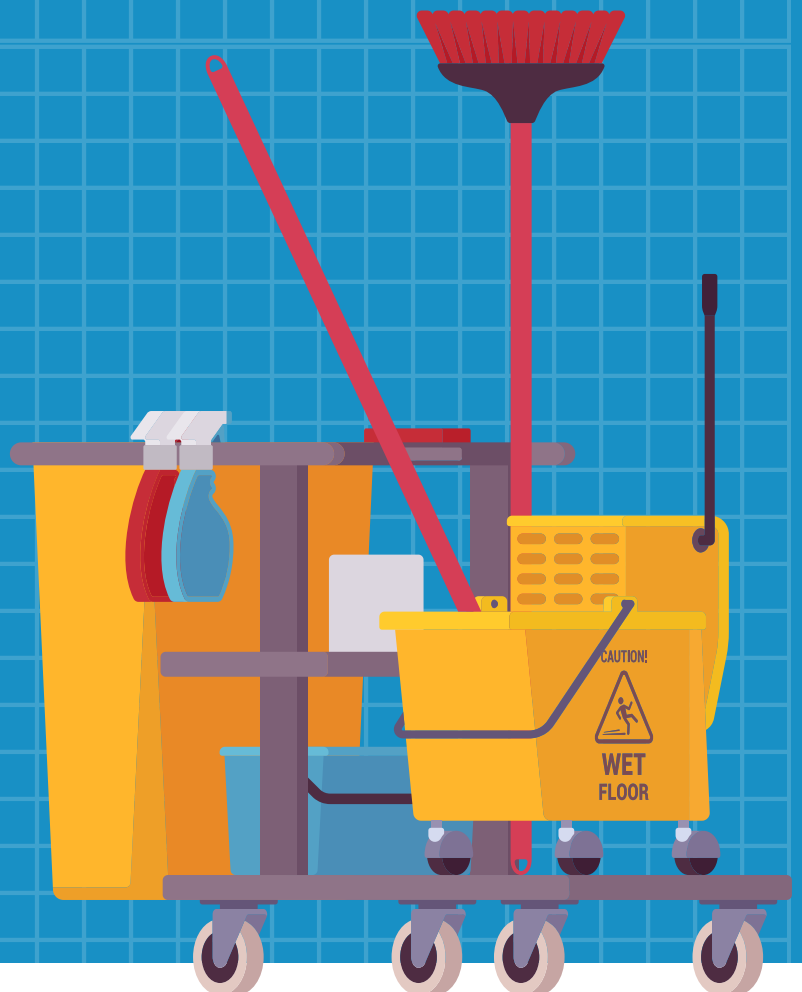
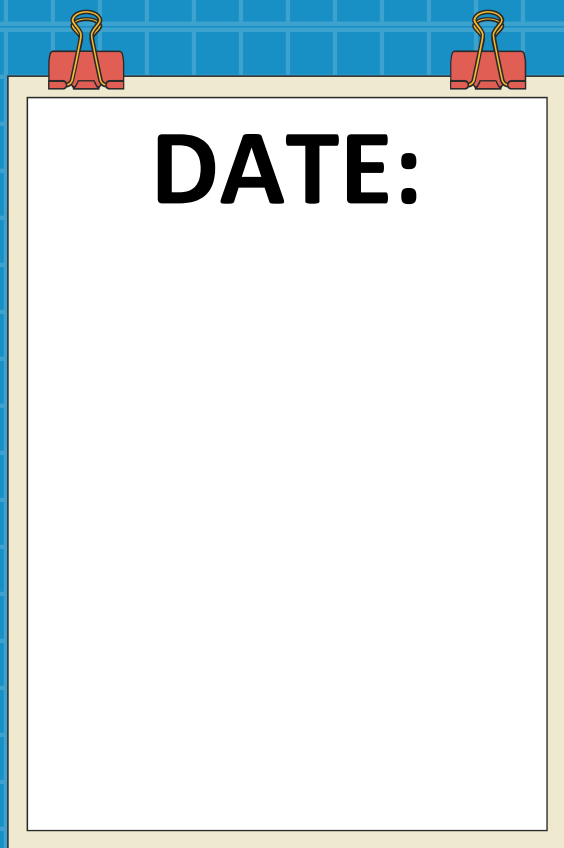


United States
Environmental Protection
Agency

WWW.CDC.GOV/PROJECTFIRSTLINE

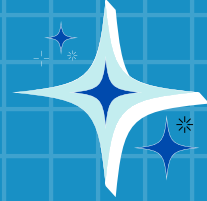
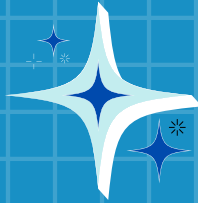
Signs

DEEP CLEANING SCHEDULED





DEEP CLEANING IN PROGRESS





TERMINAL CLEANING IN PROGRESS

