Clostridium difficile
Guide For Pathogen Transmission Prevention and Outbreak Response
**What is it?**

*Clostridium difficile* [klo-strid-ee-uhm dif-uh-seel] (C. difficile) is a spore-forming, Gram positive anaerobic bacillus that causes mild to severe diarrhea and intestinal infections like pseudomembranous colitis (inflammation of the colon). It is the most common cause of healthcare-associated diarrhea in hospitals and long term care facilities. *C. difficile* disease can range from mild diarrhea to life-threatening colitis.

Most cases of *C. difficile* occur in the elderly or in patients who have other illnesses or conditions requiring prolonged use of antibiotics. Some antibiotics can destroy a person’s normal bacteria found in the gut, causing *C. difficile* bacteria to grow. Once established, the *C. difficile* bacteria produce toxins that attack the lining of the intestine which can damage the bowel and cause diarrhea.

There are many different strains of *C. difficile*; however one strain, North American Pulsed Field type 1, known as NAP1, is more likely to cause serious illness as it is more resistant to antibiotics and can create up to 20 times more toxin than normal strains, causing more severe disease.

Severe *C. difficile* infections (CDI) can cause pseudomembranous colitis, toxic megacolon, perforations of the colon, sepsis, and may also lead to death.

However, CDI with onset outside the hospital may be more common than previously recognized. Recent studies have also shown increasing rates of community-associated *C. difficile* infection, which occurs among populations traditionally not considered high risk, such as children and people without a history of antibiotic use or recent hospitalization.

**C. difficile infections remain a problem in healthcare facilities with rates of CDI estimated at 11.5 per 1000.**

**CDI is associated with increased length of hospital stay, costs, morbidity, and mortality in adult and pediatric patients.**

**In the United States, *C. difficile* is responsible for an estimated 500,000 infections, 83,000 recurrent infections and 29,000 deaths and hospital costs for CDI management have been estimated to be $1.0 - $4.9 billion per year.**
**Symptoms**

The most common symptoms of mild to moderate *C. difficile* infection are:

- Watery diarrhea three or more times a day for two or more days.
- Mild abdominal cramping and tenderness.

However, some people can have *C. difficile* bacteria present in their bowel and not show symptoms. It is thought that these asymptomatic carriers may play a role in transmission.

In severe cases, people tend to become dehydrated and may need hospitalization. *C. difficile* causes the colon to become inflamed (colitis) and sometimes may form patches of raw tissue that can bleed or produce pus (pseudomembranous colitis). Signs and symptoms of severe infection include:

- Watery diarrhea 10 to 15 times a day
- Abdominal cramping and pain, which may be severe
- Fever
- Blood or pus in the stool
- Nausea
- Dehydration
- Loss of appetite
- Weight loss
- Swollen abdomen
- Kidney failure
- Increased white blood cell count

These symptoms usually signal colitis, a serious bowel infection. If the diarrhea stops after severe colitis, it does not necessarily mean you’re getting better. It could be a sign of bowel paralysis and a life-threatening condition called toxic megacolon. Most patients with toxic megacolon need surgery, and 32% to 50% of patients who undergo surgery for CDI die.
Complications of *C. difficile*

Complications of *C. difficile* infections include:

- **Dehydration.** Severe diarrhea can lead to a significant loss of fluids and electrolytes. This makes it difficult for a body to function normally and can cause blood pressure to drop to dangerously low levels.
- **Kidney failure.** In some cases, dehydration can occur so quickly that kidney function rapidly deteriorates (kidney failure).
- **Toxic megacolon.** In this condition, the colon becomes unable to expel gas and stool, causing it to become greatly distended (megacolon). Left untreated, the colon can rupture, causing bacteria from the colon to enter the abdominal cavity. A ruptured colon requires emergency surgery and may be fatal.
- **A hole in the large intestine (bowel perforation).** This is rare and results from extensive damage to the lining of the large intestine. A perforated bowel can spill bacteria from the intestine into the abdominal cavity, leading to a life-threatening infection (peritonitis).
- **Death.** Even mild to moderate CDI can quickly progress to a fatal disease if not treated promptly.
- **Relapse is common after CDI.** There’s an ongoing debate over whether this is a true relapse or reinfection. A recent study showed that among 615 CDI discharges, 30-Day readmissions were slightly more than twice (30.1%) more than non-CDI discharges (14.4%) of CDI readmission, and the average length of stay for CDI readmissions was 5-6 days longer than non-CDI readmissions.*

**Transmission - How it is spread**

People with *C. difficile* infection have millions of *C. difficile* spores in their feces. *C. difficile* bacteria are shed in feces and spread to food, surfaces and objects when people who are infected or providing care to those infected don’t wash their hands thoroughly after contamination. The bacteria produce spores that can persist in the environment for weeks or months. These spores carry the infection to others via the fecal-oral route.

Any surface, device, or material (e.g., commodes, bathing tubs, and electronic rectal thermometers) that becomes contaminated with feces may serve as a reservoir for the *C. difficile* spores. People can get infected if they touch surfaces contaminated with feces, and then touch their mouth or other mucous membranes. Healthcare workers can also spread the bacteria to their patients if their hands are contaminated.

For healthy people, *C. difficile* does not pose a health risk.

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*Chopra T, et al., Burden of Clostridium difficile infection on hospital readmissions and its potential impact under the Hospital Readmission Reduction Program, Am J Infect Control 2015;43:314-7*
**C. difficile Impact in Healthcare**

The majority of *C. difficile* cases occur in, or after exposure to, health care settings — including hospitals, nursing homes and long-term care facilities — where germs spread easily, antibiotic use is common and people are especially vulnerable to infection. Patient-to-patient transmission of *C. difficile* is thought to occur primarily through transient contamination of the hands of healthcare personnel with spores, but environmental surfaces, such as bedrails, bedside tables, toilets and sinks, and patient care equipment in rooms housing patients with CDI, such as stethoscopes and thermometers are also contaminated with *C. difficile*.

The routes of transmission for CDI are not fully understood at this point in time, but it is estimated that about half of these infections are community-acquired, and only 24% were acquired during hospitalization. While most types of HAIs are declining, *C. difficile*, remains at historically high levels and is linked to approximately 29,000 American deaths each year. *C. difficile* infections are estimated to cost $1.0 - $4.9 billion in extra health care costs annually.

The presence of *C. difficile* bacteria, together with a large number of patients receiving antibiotics in healthcare settings, can lead to increased risk of *C. difficile* outbreaks. In healthcare settings, *C. difficile* infections can be limited through careful use of antibiotics and strict adherence to infection prevention and control measures, including meticulous cleaning and disinfection practices.

According to the CDC, Hospitals following infection control recommendations lowered *C. difficile* infection rates by 20% in less than 2 years, with antibiotic stewardship having the largest impact in both endemic and outbreak settings.

The Society of Healthcare Epidemiology of America (SHEA) and the Infectious Disease Society of America (IDSA) recently published “Practice Recommendation”. Strategies to Prevent Clostridium difficile Infections in Acute Care Hospitals: 2014 Update.

http://www.jstor.org/stable/10.1086/676023

The CDC provides guidelines and tools to the healthcare community to help prevent *C. difficile* infections as well as provides resources to help the public safeguard their own health.

More information on *C. difficile* in Healthcare can be found at http://www.cdc.gov/HAI/organisms/cdiff/Cdiff_infect.html.
**Use antibiotics judiciously**

A major risk factor for hospitalized patients to acquire *C. difficile* is prior exposure to antimicrobials (antibiotics). Encouraging appropriate antimicrobial use has been associated with reductions in CDI incidence in both endemic and outbreak settings. Appropriate antimicrobial use includes both avoiding antimicrobial exposures if the patient does not have a condition for which antimicrobials are indicated (i.e., infections caused by viruses such as the common cold and influenza) and selecting antimicrobials associated with a lower risk of CDI when possible.

When antibiotics are prescribed, follow the doctor, pharmacist, or healthcare provider’s instructions and the directions on the label. Keep taking the antibiotics as prescribed to kill all of the *C. difficile* bacteria or other infection.

**Implement Contact Precautions**

- Immediately place all *C. difficile* patients on contact precautions.
- When possible, place patients in private rooms. If private rooms are not available, patients can be placed in rooms (cohorted) with other patients with *C. difficile* infection.
- Ensure that adequate supplies of personal protective equipment (gloves and gowns) and hand hygiene products are readily available.
- Provide educational materials for patients, family members and healthcare personnel that explain why contact precautions are necessary.
- Use gowns when entering patients’ rooms and during patient care. If your gloves or gown becomes contaminated or soiled, remove and perform hand hygiene, and replace with fresh PPE.
- Use gloves when entering patients’ rooms and during patient care. Since spores may be difficult to remove from hands, even with hand washing, glove use should be emphasized for preventing *C. difficile* transmission via the hands of healthcare personnel. Gloves should be changed immediately if visibly soiled or after touching or handling surfaces or equipment contaminated with feces or after moving from a dirty to clean intervention.
- It is recommended that you remove gown and gloves prior to exiting the room.
- Continue these precautions at least 48 hours after diarrhea ceases.

**Recommended infection control practices in long term care and home health settings are similar to those practices taken in traditional health-care settings.**
**Hand Hygiene**

- Perform meticulous hand hygiene before entering the room or having contact with a patient and after removing gloves or leaving the room. Provide educational materials for patients, family members, and healthcare personnel that explain why hand hygiene is important.

- As with any infectious disease, frequent hand hygiene is the most effective way of preventing the transmission of *C. difficile* infections. Hand washing with soap and water is important during *C. difficile* outbreaks and is one of the best defenses against further spread of the bacteria. Because alcohol does not kill *C. difficile* spores, use of soap and water is more efficacious than alcohol-based hand rubs. Data suggest that, even using soap and water, the removal of *C. difficile* spores is more challenging than the removal or inactivation of other common pathogens, so friction is important.

- If you do not have access to soap and water, frequent use of alcohol-based hand rubs is encouraged. Most healthcare facilities provide alcohol-based hand rubs at entrances. Be sure to use them, but be aware that they are less effective than washing with soap and water as they do not destroy *C. difficile* spores; however, no clinical study has demonstrated an increase in CDI with the use of these products or a decrease in CDI with soap and water.

**Hand Hygiene in Outbreak and Hyperendemic Settings**

- If your institution experiences an outbreak, consider using only soap and water for hand hygiene when caring for patients with *C. difficile* infection. When considering whether to promote hand washing over alcohol-based hand hygiene products after caring for a patient with CDI, one should also consider that contamination of hands is less common when gloves are worn for the patient encounter.

**Recommended infection control practices in long term care and home health settings are similar to those practices taken in traditional health-care settings.**
Environmental Cleaning and Disinfection – Daily Procedures

Clean and disinfect high touch surfaces in patient rooms, resident rooms, and public areas. Commonly touched surfaces (bedrails, door handles, light switches, elevator buttons, faucet handles, remotes, phones, etc.) should be disinfected regularly or when visibly soiled using an EPA/Health Canada registered disinfectant. Recent studies demonstrated that increasing the frequency of patient room cleaning and disinfection significantly impacted *Clostridium difficile* rates.

- Develop and implement protocols for cleaning and disinfection of equipment and the environment and ensure that these protocols are reviewed on a regular basis.
- Ensure adequate cleaning and disinfection of environmental surfaces and reusable devices, especially items likely to be contaminated with feces and surfaces that are touched frequently.
- Contaminated surfaces and equipment are potential reservoirs for transmission of *Clostridium difficile*. *Clostridium difficile* spores contaminate the patient’s environment and the equipment used to care for them.
- This includes the following:
  - Furnishings in the room, such as overbed tables, bedrails, furniture, sinks, floors, commodes, and toilets.
  - Patient care equipment that directly touches patients, such as thermometers, stethoscopes, and blood pressure cuffs.
  - Surfaces touched by healthcare workers and/or patients, such as doorknobs and intravenous infusion pumps.
  - *Clostridium difficile* may contaminate surfaces outside patient rooms, but the frequency of contamination and the number of spores are much lower than are typically present on surfaces inside CDI rooms.
  - Ensure patient care equipment (e.g., wall-mounted sphygmomanometers) and electronic equipment (e.g., computers) in the patient room are cleaned and disinfected.
  - Follow the manufacturer’s instructions for disinfection of endoscopes and other devices.
  - After use, disposable cleaning cloths should be discarded. Soiled reusable cleaning cloths should be placed with soiled linens for proper laundering.

Environmental Cleaning and Disinfection – Outbreak and Hyperendemic Settings

Daily disinfection of high-touch surfaces in CDI and MRSA rooms has been shown to reduce acquisition of the pathogens on healthcare providers’ hands after contact with surfaces and to decrease contamination of the hands of the providers caring for the patients.*

In Outbreak and Hyperendemic Settings:

- Assess the adequacy of cleaning and disinfection practices before changing to a new disinfectant. If cleaning and disinfection practices aren’t adequate, address this before changing products.
- Consider the use an EPA- or Health Canada-registered sporicidal disinfectant to clean and disinfect rooms contaminated with C. difficile or to disinfect the environment in outbreak and hyperendemic settings in conjunction with other infection control practice measures. Data are conflicting as to whether inactivation of spores is necessary to prevent C. difficile transmission, especially in an endemic setting. Use of sporicidal methods to clean the environment outside of outbreak settings has not consistently demonstrated a reduction in CDI. Address proper dilution of the disinfectant and adequacy of the cleaning technique to ensure that proper cleaning and disinfection is being conducted.
- Provide adequate resources and training for environmental services personnel to ensure proper cleaning of the room. Ensure that education is provided frequently and with the use of icons or native language to ensure higher compliance with cleaning and disinfection protocol.
  - When using sporicidals, it is important to avoid toxicity to patients and staff and damage to equipment and the environment. Sodium hypochlorite (bleach) can be corrosive and irritating to patients and healthcare personnel.
- Create unit-specific checklists and perform observations to monitor cleaning practice.
- On a routine basis, assess the compliance with cleaning and disinfection protocols and the adequacy of cleaning and disinfection. Consider implementing a cleaning validation system to ensure that high touch surfaces and equipment are being properly cleaned and disinfected. (http://www.cdc.gov/HAI/Toolkits/EvaluatingEnvironmentalCleaning.html).

Dedicated Equipment

- When possible, dedicate noncritical patient care items, such as blood pressure cuffs, stethoscopes, and thermometers, to a single patient with *C. difficile*. When this is not possible, ensure adequate cleaning and disinfection of shared items between patient uses.

- If dedicated equipment is not available, ensure that it is clear who is responsible for cleaning and disinfecting the equipment along with when and how it should be cleaned and disinfected. Ensure that manufacturers’ recommendations for contact time of disinfectants are followed.

- Consider discarding disposable patient-care items if these items are deemed hard or impossible to clean and disinfect and Laundering unused linens from patient rooms after *C. difficile* patients are discharged or transferred.

Patient Transfer

Consider limiting transfers to those for which the receiving facility is able to maintain Contact Precautions; otherwise, it may be prudent to postpone transfers until patients no longer require Contact Precautions. During outbreaks, medically suitable individuals recovering from *C. difficile* can be discharged to their place of residence.

Recommended infection control practices in long term care and home health settings are similar to those practices taken in traditional health-care settings.
**General**

No special precautions are required for linen; routine practices are sufficient and include the following:

- Collect all linens, including unused linen, from the patient room, and follow laundry protocol to ensure linens are properly cleaned.
- Soiled linen should be handled in the same way for all patients without regard to their infection status.
- Soiled linens should be handled as little as possible and with minimal agitation to minimize aerosolization of potentially contaminated material.
- Soiled linen should be placed in a no-touch receptacle at the point of use.
- Soiled linen should be sorted and rinsed outside of patient care areas.
- Heavily soiled linen should be rolled or folded to contain the heaviest soil in the center of the bundle. Solid fecal matter that can be removed using a gloved hand and toilet tissue should be placed into a bedpan or toilet for flushing.

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**Source:** CDC - Guideline for the Prevention and Control of Norovirus Gastroenteritis Outbreaks in Healthcare Settings
**Routine prevention: recent studies demonstrated that increasing the frequency of patient room cleaning and disinfection lowered *C. difficile* rates. For outbreaks situations, we recommend a sporicidal solution, as noted under the red headings.**

### Routine Prevention - Non-sporicidal (U.S.)

<table>
<thead>
<tr>
<th>Product</th>
<th>Oxivir® Tb RTU / Wipes</th>
<th>Virex® Tb</th>
<th>Virex® Plus</th>
<th>Oxivir® Five 16</th>
<th>Alpha-HP® Multi-Surface Disinfectant Cleaner</th>
<th>Virex® II 256</th>
<th>Expose® II 256</th>
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</thead>
<tbody>
<tr>
<td>Contact Time (min)</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>10</td>
<td>10</td>
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### Outbreak Management and Control (Sporicidal Products) - U.S.

<table>
<thead>
<tr>
<th>Product</th>
<th>Avert® RTU</th>
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<tbody>
<tr>
<td>Contact Time (min)</td>
<td>4</td>
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</table>

### Routine Prevention - Non-sporicidal - Canada

<table>
<thead>
<tr>
<th>Product</th>
<th>Oxivir® Tb RTU / Wipes</th>
<th>Oxivir® Plus (Concentrate)</th>
<th>Virex® AHPS (Concentrate, RTU &amp; Wipes)</th>
<th>Percept™ (Concentrate, RTU &amp; Wipes)</th>
<th>Virex® II 256</th>
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<tbody>
<tr>
<td>Contact Time (min)</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>10</td>
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### Outbreak Management and Control (Sporicidal Products)

<table>
<thead>
<tr>
<th>Product</th>
<th>Avert® RTU</th>
<th>Accel® Rescue RTU &amp; Wipes</th>
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<tbody>
<tr>
<td>Contact Time (min)</td>
<td>4</td>
<td>10</td>
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</table>
# Daily Patient Room Cleaning

<table>
<thead>
<tr>
<th>Steps</th>
<th>Elements</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
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</thead>
<tbody>
<tr>
<td>1: Prepare for Daily cleaning</td>
<td>Gather all needed supplies</td>
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<td></td>
<td>Perform hand hygiene</td>
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<td></td>
<td>Note Precautions signs, put on appropriate Personal Protective Equipment</td>
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<td></td>
<td>Put wet floor sign near room entrance</td>
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<tr>
<td>2: Interact</td>
<td>Greet patient, explain what you plan to do and gain permission to clean</td>
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<td>3: Remove</td>
<td>Empty waste receptacles</td>
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<td></td>
<td>Remove soiled linen</td>
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<td>4: Spot Clean</td>
<td>Dust surfaces as needed, using care not to disrupt the patient</td>
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<td></td>
<td>Spot clean visibly soiled walls and low touch surfaces as needed</td>
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<tr>
<td>5: Patient Care Area: Disinfect Patient Care Area including High Touch Surfaces (HTS) and room entrance</td>
<td>Room doorknob/door handle and push plates (inside and out)</td>
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<td></td>
<td>Room light switch</td>
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<td></td>
<td>Computer monitor, mouse, keyboard, and cart (if present)</td>
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<td></td>
<td>Bed rail/controls</td>
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<td>Call box/button and cords</td>
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<td>Overbed tray/table/drawer</td>
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<td>Medical equipment, IV pole (grab area), monitors/other equipment</td>
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<td>Bedside cabinet and other furniture</td>
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<td></td>
<td>Telephone</td>
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<td></td>
<td>Patient and visitor chairs</td>
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<td></td>
<td>Room sink (if present)</td>
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<td></td>
<td>Wall mounted hand soap/sanitizer dispensers (if present)</td>
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<td></td>
<td>Glove box and gown holders</td>
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<td></td>
<td>Spray Patient curtain grab area and any visibly soiled areas with Oxivir® Tb</td>
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<tr>
<td>6: Portable Commode</td>
<td>Spray and Wipe Portable commode (if present)</td>
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<td></td>
<td>Remove gloves, perform hand hygiene and re-glove</td>
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<tr>
<td>7: Bathroom: Disinfect the HTS in the restroom, doing the toilet last</td>
<td>Apply disinfectant to the toilet bowl and wall area behind toilet and allow the disinfectant to dwell while cleaning other surfaces</td>
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<tr>
<td></td>
<td>Bathroom doorknob/door handle</td>
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<td></td>
<td>Bathroom light switch</td>
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<td></td>
<td>Bathroom sink, faucet and faucet handles, mirror, vanity, and exposed plumbing</td>
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<td></td>
<td>Dispensers for towels, soap, sanitizer, etc.</td>
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<td></td>
<td>Shower/tub (if present)</td>
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<td></td>
<td>Hand rails near toilet</td>
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<td></td>
<td>Bathroom pull cord</td>
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<td></td>
<td>Wall area behind toilet, toilet base and floor near toilet</td>
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<td></td>
<td>Toilet flush handle</td>
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<td></td>
<td>Toilet bedpan cleaner</td>
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<td></td>
<td>Toilet seat and bowl</td>
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<td></td>
<td>Remove gloves, perform hand hygiene and re-glove</td>
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<td>8: Refill</td>
<td>Refill disposables (paper towels, hand soap/sanitizer, toilet tissue) and relive trash</td>
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<td>9: Inspect</td>
<td>Ensure room is properly cleaned and looks clean/presentable</td>
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<td></td>
<td>Furniture properly arranged</td>
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<td>Report anything that is not working properly</td>
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<tr>
<td>10: Clean Floor</td>
<td>Mop the floor in patient care area and bathroom, finishing at the room door</td>
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<tr>
<td>11: Interact</td>
<td>Thank the patient for allowing room to be cleaned and ask if there’s anything else you can do for them</td>
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# Clostridium difficile - Discharge Patient Room Cleaning Procedures

<table>
<thead>
<tr>
<th>Steps</th>
<th>Elements</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
</table>
| **1: Prepare for Daily cleaning** | Gather all needed supplies  
Perform hand hygiene  
Note Precautions signs; put on appropriate Personal Protective Equipment including impervious gloves and gown.  
Put wet floor sign near room entrance |     |    |     |
| **2: Remove** | Empty waste receptacles  
Remove soiled linen |     |    |     |
| **3: Spot Clean** | Dust surfaces as needed  
Spot clean visibly soiled walls and low touch surfaces as needed |     |    |     |
| **4: Patient Care Area: Disinfect the High Touch Surfaces (HTS) in the patient care area and room entrance** | Room door knob/handle and push plates (inside and out)  
Room light switch  
Computer monitor, mouse, keyboard, and cart (if present)  
Bed rail/controls  
Call box/button and cords  
Overbed tray/table/drawer  
Medical equipment, IV pole (grab area), monitors/other equipment  
Bedside cabinet and other furniture  
Telephone  
Patient and visitor chairs (both arms and seats)  
Room sink (if present)  
Wall mounted hand soap/sanitizer dispensers (if present)  
Glove box and gown holders  
Spray Patient Curtain grab area, and any visibly soiled areas with Oxivir® Tb |     |    |     |
| **5: Portable Commode** | Spray and wipe portable commode (if present)  
Remove gloves, perform hand hygiene, and re-glove |     |    |     |
| **6: Bathroom: Disinfect the HTS in the restroom, doing the toilet last** | Apply disinfectant to the toilet bowl and wall area behind toilet and allow the disinfectant to dwell while cleaning other surfaces  
Bathroom door knob/handle  
Bathroom light switch  
Bathroom sink, faucet and faucet handles, mirror, vanity, and exposed plumbing  
Dispensers for towels, soap, sanitizer, etc.  
Showertub (if present)  
Hand rails near toilet  
Bathroom pull cord  
Wall area behind toilet, toilet base and floor near toilet  
Toilet flush handle  
Toilet bedpan cleaner  
Toilet seat and bowl  
Remove gloves, perform hand hygiene and re-glove |     |    |     |
| **7: Remove** | Remove Trash, mops, soiled curtains, discard wipes/cloths, etc. |     |    |     |
| **8: Clean Floor** | Dust Mop and Wet Mop the floor in patient care area and bathroom, finish at the door; change mop heads after each room |     |    |     |
| **9: Replace / Refill** | Replace as needed: linens and curtains  
Hand sanitizer, paper towels, can liners, soap, etc. |     |    |     |
| **10: Inspect** | Ensure room is properly cleaned and looks clean/presentable  
Furniture properly arranged  
Report anything that is not working properly |     |    |     |
| **11: Other** | Change mop heads after each room, remove PPE before entering hallway, perform hand hygiene |     |    |     |
**Patient Room: Discharge Cleaning**

### Getting Started
1. Gather supplies.
2. Place waste sign at the nurses station.
3. Patient’s Personal belongings, if present, have nursing staff remove.
4. Remove all items and place in designated area; change patient’s privacy curtain per facility policy.
5. Clean and disinfect horizontal surfaces and hard surfaces.
6. Spot clean any soil from any touch surfaces such as rails.

### Clean and Disinfectant Patient Room Surfaces

#### Entry Areas
- 1. PRE holder
- 2. Soap/Sanitizer dispensers
- 3. Door knob

#### Patient Area
- 1. Gather supplies
- 2. Light switch
- 3. Soap/Sanitizer dispenser
- 4. Nanny server
- 5. Computer monitor, keyboard and chair
- 6. Patient bed privacy and handrails
- 7. Patient call bell
- 8. Patient Bed Rails and Connectors
- 9. Headboard, cords, and connectors
- 10. Patient privacy
- 11. Patient privacy curtain
- 12. Clean corners, correct, and only before cleaning
- 13. Telephone and over bed tray table
- 14. Remove drapes and conduct hand hygiene

#### Restroom Area
- 1. Soap/Sanitizer dispenser
- 2. Toilet grab handles
- 3. Walls, floor, and surrounding areas
- 4. Toilet brush handles
- 5. Light switch
- 6. Sink, faucets, and handles
- 7. Soap/Sanitizer dispenser
- 8. Shower area

#### Finishing Area
- 1. Toilet tissue and towel dispensers
- 2. Wipe hand hygiene
- 3. Make bed with flat linen
- 4. Remove cleaning equipment and excess liquid
- 5. Inspect your work
- 6. Mop floors
- 7. Remove gloves and conduct hand hygiene
**Resident Room: Daily Cleaning**

**Entry Areas**
- 1. PPE Holder
- 2. Soap/Sanitizer dispenser
- 3. Door knob

**Resident Area**
- 1. Light switch
- 2. Sharps containers
- 3. Table top
- 4. Chairs
- 5. Telephone
- 6. Overbed table
- 7. Cabinet/Drawer
- 8. Patient bed and bed rails
- 9. Bed control buttons
- 10. Headwall, cords and brackets

**Restroom Area**
- 1. Spray toilet area
- 2. Sink faucets and handles
- 3. Light switches
- 4. Sink faucets and handles
- 5. Wall area around toilet
- 6. Bath pan sprayer
- 7. Toilet seat and bowl
- 8. Clean commode, clean handwashing basin cleaning
- 9. Remove gloves and wash hands/hothands

**Finishing Area**
- 1. Change restroom paper and hand hygiene products
- 2. Make bed with clean linens
- 3. Restock hand hygiene dispense
- 4. Arange furniture
- 5. Inspect your work
- 6. Mop floors

**Getting Started**
- 1. Gather supplies, Ensure cart is loaded properly
- 2. Place wall floor sign at room entrance
- 3. Remove trash and infectious waste
- 4. Remove all loose material in patient’s room
- 5. Spot clean visible soil from low-touch surfaces

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**Resident Room: Discharge Cleaning**

**Entry Areas**
- **PPE Holder**
- **Soap/Sanitizer dispenser**
- **Door knob**

**Resident Area**
- **Light switch**
- **Sharps container**
- **Table top**
- **Chairs**
- **Telephone**
- **Excess lab, waste disposal and detergent**
- **Sweated table**
- **Call button/phone**
- **Patient bed and bed rails**
- **Bed control buttons**
- **Headboard, cords and brackets**

**Restroom Area**
- **Spray toilet seat**
- **Cork knobs**
- **Light switch**
- **Sink faucet and handles**
- **Soap/Sanitizer dispenser**
- **Shower area**
- **Toilet grab handles**
- **Wall area around toilet**
- **Bridgeway dispenser**
- **Toilet seat and bowl**
- **Clean commode, attach nursing before cleaning**
- **Remove gloves and conduct hand hygiene**

**Finishing Area**
- **Change restroom paper and hand hygiene products**
- **Make beds in clean linens**
- **Rearrange furniture**
- **Inspect work**
- **Map/rooms**

**Getting Started**
1. Gather supplies. Ensure cart is loaded properly.
2. Place wet/dry vacuum near exit.
3. Remove all linens and place in soiled linen liner.
4. Remove trash and infectious waste.
5. Patient Personal Belongings, if present have nursing staff remove any patient belongings or hazardous items.
7. Spot clean visible soil from low-touch surfaces.
8. Conduct hand hygiene, don gloves. Put on additional PPE as required (goggles).

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Help Prevent the Spread of *Clostridium difficile*

1. **Clean and Disinfect surfaces**
   a. Assess the adequacy of cleaning
   b. Ensure training and resources are available for staff
   c. Consider use of a sporicidal disinfectant to clean and disinfect surfaces in an outbreak / endemic situation
   d. Ensure the entire surface is wet the entire dwell time, and wipe vigorously to removing germs from surface

2. **Wash your hands thoroughly with soap and water**

   Hand sanitizers may not be as effective against *C. difficile* spores

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**Facts about *C. difficile***

*C. Difficile* is a bacteria that can cause mild to severe diarrhea and more severe intestinal diseases like inflammation of the colon. *C. difficile* is the most frequent cause of infectious diarrhea in hospitals and long-term care facilities in the United States and Canada.

Most *C. difficile* infections occur in patients who are taking certain antibiotics over a prolonged period of time. Some antibiotics can destroy a person’s normal bacteria found in the gut, causing *C. difficile* bacteria to grow and produce toxins, which can damage the bowel and cause diarrhea.

*C. difficile* is shed in feces and can produce spores that can persist in the environment for weeks or months. People can become infected if they touch contaminated surfaces or objects and then touch their eyes, nose or mouth. Contaminated hands also play a role in the transmission of *C. difficile*, so hand washing is critical.
Help Prevent the Spread of *Clostridium difficile*

1. **Clean and Disinfect surfaces**
   - a. Clean frequently touched surfaces with Oxivir® Tb Wipes
   - b. Ensure the entire surface is wet, and wipe vigorously to removing germs from surface
   - c. Let air dry naturally
   - d. Dispose of wipes – DO NOT FLUSH

2. **Wash your hands thoroughly with soap and water**
   
   Hand sanitizers may not be as effective against *C. difficile* spores

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