Environmental Service Policy Considerations to Prevent the Spread of COVID-19 in Long-Term Care

This document can be used to develop an environmental service (EVS) policy to help contain the SARS-CoV-2 virus and prevent the spread of COVID-19 disease—a disease that has the potential to pose a significant public health threat to the residents and staff of a long-term care facility. Employers should remain alert regarding changing outbreak conditions within their local area, maintain open communication with local and state public health departments, assess personal protective equipment (PPE) and COVID-19 diagnostic testing availability, and implement transmission-based infection prevention measures accordingly.

This guidance will discuss disinfection practices and PPE requirements in long-term care, utilizing a red/yellow/green zone cohorting strategy based on infection exposure risks. To demonstrate a cohorting plan, an example is provided below whereby a red zone represents a COVID-19-positive and/or symptomatic unit; a yellow zone represents an isolation unit; and a green zone represents a unit for people who have not yet been tested but who are thought to be unexposed, who have tested negative, or who have been ill with COVID-19 and have recovered completely. Routine environmental service activities should always follow standard precautions.

Employers should determine and evaluate the risk to which their workers may be exposed. They should also select, implement, and ensure workers use controls to prevent exposure. Full PPE

<table>
<thead>
<tr>
<th>Zone description*</th>
<th>Yellow Zone</th>
<th>Green Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red Zone</td>
<td>Residents with a negative SARS-CoV-2 PCR test who remain asymptomatic but are within 14 days of possible exposure to COVID-19</td>
<td>Any resident in the facility who was not tested, who is thought to be unexposed, recovered, or tested negative to COVID-19</td>
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<td>Green Zone</td>
<td>Routine cleaning and housekeeping</td>
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</tbody>
</table>

Examples of environmental service tasks associated with zone descriptions**

- **Red Zone**: Cleaning visible blood, body fluids (including respiratory secretions, mucus, etc.), or other potentially infectious materials from people suspected of having or known to have COVID-19. Avoid tasks that could reaerosolize potentially infectious SARS-CoV-2 from environmental surfaces.

- **Yellow Zone**: Cleaning visible blood, body fluids (including respiratory secretions, mucus, etc.), or other potentially infectious materials from people suspected of having or known to have COVID-19.

- **Green Zone**: Routine cleaning and housekeeping.

PPE and infection prevention requirements for staff as indicated by policy

- **Red Zone**: Full PPE should be donned by environmental service staff and all foundational infection prevention and control measures followed. PPE use includes respirators (preferred), surgical masks (acceptable alternatives), face shields, gloves, and gowns.

- **Yellow Zone**: Full PPE should be donned by environmental service staff and all foundational infection prevention and control measures followed. PPE use includes respirators (preferred), surgical masks (acceptable alternatives), face shields, gloves, and gowns.

- **Green Zone**: If environment service staff are dedicatedly cohorted to zones, universal masking should be in practice, and all foundational infection prevention and control measures followed. Routine cleaning PPE use includes use of gowns, gloves, and surgical masks.

COVID-19, coronavirus disease; PCR, polymerase chain reaction; PPE, personal protective equipment; SARS-CoV-2, severe acute respiratory syndrome coronavirus 2.


** Based on Occupational Safety and Health Administration COVID-19: Control and Prevention: Environmental Services Workers and Employers guidance 2020

Note: When workers have occupational exposure to human blood, body fluids, or other potentially infectious materials, employers also must follow Occupational Safety and Health Administration’s (OSHA) Bloodborne Pathogens standard (29 CFR 1910.1030).
must be worn by any staff member assigned to clean in the COVID-positive (red) and potentially exposed (yellow) zones. In addition, any staff members assigned cleaning duties should be designated by zone as much as possible to minimize risk to exposed (yellow zone) and nonexposed (green zone) residents.

Dedicated medical equipment should be used when caring for residents with suspected (yellow zone) or confirmed SARS-CoV-2 infection (red zone). All nondedicated, nondisposable or reusable medical equipment and devices (e.g., blood glucose meters, wound care equipment, podiatry equipment, and dental equipment) used for routine resident care should be cleaned and disinfected/reprocessed according to manufacturer's instructions prior to use on another resident.

An EVS cleaning and disinfection policy to prevent the spread of COVID-19 in long-term care should include the policy definition, the purpose of the policy, staff responsible for following the policy, the policy and procedural content, guidelines, standards, and resources that support the policy, revision and effective policy dates, an authorized signature, and any additional pertinent information.

Policy definition for emergent EVS infection control practices for COVID-19:

- COVID-19 is a highly infectious respiratory disease caused by a highly infectious virus known as SARS-COV-2 discovered in China in December 2019 and then spread around the world, causing a public health crisis. The following emergent infection control prevention cleaning and disinfection practices for COVID-19 builds on the workplace practices described in the infection prevention and control policies. COVID-19 is transmitted chiefly by contact with infectious material (such as respiratory droplets) or with objects or surfaces contaminated by the causative virus, and is characterized especially by fever, cough, shortness of breath, and may progress to pneumonia and respiratory failure.

The purpose of the policy provides background to explain the rational for the policy:

- Environmental surfaces can be a source of SARS-CoV-2 pathogen in long-term care facilities. If environmental surfaces are not properly cleaned and disinfected, pathogens from the surface can be transmitted to residents and staff. Proper cleaning and disinfection of environmental surfaces is necessary to break the chain of infection.

Identify who is responsible for following the policy/procedure:

- In most facilities, EVS staff may be primarily responsible for cleaning and disinfection duties. However, other staff, including nursing or consultants, may be assigned or expected to perform unique or additional cleaning and disinfection duties. These additional staff should be identified in the policy.

- To contain Covid-19, nursing staff or other essential healthcare workers, who are necessary to provide resident care may also assume responsibility for cleaning and disinfection of high-touch surfaces in the yellow or red zones. EVS staff might only be asked to perform terminal cleaning responsibilities after a resident is no longer occupying the room.

- For external consultants (e.g., wound care nurses, dentists, and podiatrists) who provide services in the facility, the facility must verify these providers have adequate supplies and PPE, and adequate space needed to follow appropriate cleaning and disinfection procedures and to prevent transmission of infectious agents. No devices are to be shared on-site and all reprocessing is to be performed off-site.

Policy content considerations include the following:

- Inventory of all U.S. Environmental Protection Agency (EPA)-registered, List N hospital-grade disinfectant products that are appropriate for decontaminating SARS-CoV-2 on surfaces or objects.

- Products can be readily identified with the EPA registration number on the product label and cross compared to the products listed on the EPA-registered, List N products by using the EPA registration number search.

- Decisions about product selection should be made in consultation with EVS staff.

- Identify the staff reporting process when supplies are low.

- Identify directions for safe, effective use of the approved EPA-registered disinfectant.

- Make sure to include the contact time—the amount of time the surface should be visibly wet with the disinfectant to kill pathogens.

- Consider selected products and compatibility with different surfaces throughout the facility.

- Note the proper storage and maintenance of cleaning and disinfection products and equipment.

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Procedural content considerations include the following:

- Specify the frequency with which cleaning and disinfection of environmental surfaces in different locations or zones throughout the facility should be performed.

- Distinguish between routine cleaning and terminal cleaning.
  - Define routine cleaning as cleaning and disinfecting procedures for resident rooms and common areas.
  - Frequency of routine cleaning should be determined based on the use of space and potential risk of contamination (e.g., public or staff restrooms may be determined to be a high risk for contamination area and require more frequent cleaning throughout the day).

- Define terminal cleaning as a thorough cleaning and disinfection of a room to eliminate environmental contamination between resident occupancy and transfers.
  - To perform terminal cleaning of a room that was occupied by a resident with suspected or confirmed COVID-19, enter the room after a minimum of 30 minutes has passed to allow ventilation to clear any potential viruses in the air. Open outside doors and windows to help air circulation; optimize air-handling systems (ensuring appropriate directionality, filtration, exchange rate, proper installation, and up to date maintenance); and consider the addition of portable solutions (e.g., portable HEPA filtration units) to augment air quality in areas where permanent air-handling systems are not a feasible option.
  - Identify all cleaning and disinfecting checklists and tools used to guide staff.
  - Ensure that staff do not use cleaning procedures that could reaerosolize SARS-CoV-2 infectious particles, including avoiding practices such as dry sweeping or use of high-pressure streams of water or cleaning chemicals.
  - Identify high-touch surfaces in resident rooms and common areas. These are surfaces frequently touched by residents and staff that pose a high risk for pathogen transmission. Examples include handrails, doorknobs, light switches, call buttons, bedside tables, remote controls, and surfaces in the bathroom—particularly those around the toilet.
    - Consider placing nonporous covers on electronics, such as tablets, touch screens, keyboards, remote controls, vending and ATM machines, and follow manufacturer’s instruction for cleaning and disinfecting these items.
  - Establish workflow processes and steps for routine and terminal cleaning.

- Identify supplies necessary for cleaning and disinfection of environmental surfaces.
- Include instructions for how the disinfectant is prepared (e.g., any mixing or dilution requirements) and the appropriate contact time.
- Consider establishing a consistent process or pattern for cleaning and disinfecting surfaces in each room. Wipe surfaces in a manner to prevent recontamination.
- When cleaning and disinfecting surfaces in a resident room, a best practice is to work from the cleanest area to the most soiled area and from the top to the bottom. For example, the toilet would be considered the most soiled surface in the room and should therefore be cleaned and disinfected last.

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- Management of laundry, food service utensils, and medical waste should be performed in accordance with routine procedures.
- Specify PPE requirements for equipment/product use and to prevent pathogen transmission. For example, respirators, gloves, gowns, and eye protection are required for cleaning and disinfection in yellow (exposed) and red (COVID-19 positive) zones.
  - PPE should be removed upon leaving the room, immediately followed by performing hand hygiene.
  - Shoe covers are not recommended at this time for EVS staff.
  - EVS staff should avoid touching their faces to reduce the risk of self-contamination.
  - EVS staff should consider continuing to wear the same respirators or face masks throughout their entire work shift, rather than intermittently switching face mask coverings.
  - Centers for Disease Control (CDC) provides guidelines for optimizing supply of PPE during times of PPE shortages.
Additional policy considerations include:

- Validation of staff training and competency to perform the following procedures at the time of employment and/or within the past 12 months:
  - Proper cleaning and disinfection of surfaces according to CDC guidelines
  - Hand hygiene according to CDC guidelines
  - Donning and doffing of PPE according to CDC guidelines
  - Hazards of the cleaning chemicals used in the workplace in accordance with OSHA's Hazard Communication standard (29 CFR 1910.1200)
  - OSHA's standards on Bloodborne Pathogens (29 CFR 1910.1030)
  - OSHA's standards on PPE (29 CFR 1910.132)
    - If environmental services are performed by contract personnel, the facility should verify that training is provided by a contracting company.

- EVS staff should wear surgical masks at all times while they are in the long-term care facility, including in breakrooms or other spaces where they may encounter coworkers.

- EVS staff should remove their respirators or facemasks, perform hand hygiene, and put on their personal cloth face coverings when leaving the facility at the end of their shifts.

- The facility should have quality audits or inspections to verify that cleaning and disinfection is properly done. Record the quality audit used in the facility and the frequency of use. Quality audits include direct or indirect observation, residual bioburden (e.g. environmental cultures), and/or environmental marking tools (e.g. fluorescent markers) per CDC guidelines.

Identify guidelines, standards, and resources in the policy. Sources include evidence-based guidelines or national standards, such as CDC, EPA, and OSHA. These resources include, but are not limited to the following:


- CDC. Guidelines for Environmental Infection Control in Health-Care Facilities. 2019 Jul (updated).

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