



COVID-19 and HAI Updates and Q&A Webinars for Long-Term Care and Congregate Residential Settings

July 21st , 2023

Housekeeping

- All attendees in listen-only mode
- Submit questions via Q&A pod to **All Panelists**
- Slides and recording will be made available later
- For continuing education credit, complete evaluation survey upon end of webinar
 - Must be registered individually to receive credit

Agenda

- Upcoming Webinars
- Updated Assisted Living COVID-19 Guidance
- Healthcare Laundry
- Open Q & A

Upcoming Infection Prevention and Control Q&A

1:00 pm - 2:00 pm

Date	Infection Control Topic	Registration Link
Friday, August 4 th	Training, Audit, Feedback	https://illinois.webex.com/weblink/register/rb6431b64bf7a47cbb0ff408c415bba8f
Friday, August 18 th	Respiratory Protection	https://illinois.webex.com/weblink/register/r0f40c1aff7aad66e31b0c07bb567b898



State of Illinois
Illinois Department of Public Health

COVID-19

JB Pritzker, Governor

Sameer Vohra, MD, JD, MA, Director

Original Release Date: March 9, 2023

Updated: July 14, 2023

Updated Interim COVID-19 Guidelines for Assisted Living and other Higher Risk Community Congregate Living Settings following the end of the Public Health Emergency

Updates are shown in RED

Applicability

This guidance applies to Assisted Living Facilities as well as other Illinois non-skilled facilities, such as Supportive Living, Shared Housing Establishments, Sheltered Care, and Specialized Mental Health Rehabilitation Facilities (SMHRF), whose staff provide non-skilled personal care, similar to that provided by family members in the home. The Centers for Disease Control and Prevention (CDC) definition of Non-skilled Personal Care is provided below.

<https://dph.illinois.gov/covid19/community-guidance/long-term-care/guidelines-community-congregate-living-settings.html>

Infection Control Guidelines for Healthcare Laundry



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July 21, 2023



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Objectives:



Define what constitute a healthcare laundry.



Discuss the importance of having standards/guidelines/regulations for healthcare laundry.



Discuss the Infection Control Recommendations/Standards/ Regulations for the different laundry steps in the laundry process with current facility practices.



Healthcare Laundry

may include bed sheets and blankets, towels, personal clothing, patient/resident apparel, uniforms, scrub suit, gowns, and drapes for surgical procedure.

also include Environmental Services infection prevention textiles – rags, mops and duster.



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Importance of Having Standards/ Guidelines for Healthcare Laundry

“**Contaminated laundry** can be a source of infectious microorganisms such as bacteria, viruses, fungi, and parasites which can cause illness in susceptible patients/ residents and employees.

- defined by **OSHA** as laundry which has been soiled with blood or other potentially infectious materials (OPIM) or may contain sharps.
- Exposure to pathogens from contaminated laundry can occur either by **direct contact** or **exposure to contaminated lint**.



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US Outbreak of Healthcare-associated Infections (HAIs) related to Contaminated Laundry

Outbreak of healthcare-associated *Clostridioides difficile* in a Pennsylvania hospital.

January to March 2013- 3 cases

April to June 2013 – ↑11 cases

Laundry records review – 100 loads of mop pads were washed **without bleach**, machine accidentally was switched to the microfiber setting.

Poorly cleaned mop pads were reused spreading *Cdiff* spores.



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American Journal of Infection Control 42 (2014) 674-5



Contents lists available at ScienceDirect

American Journal of Infection Control

journal homepage: www.ajicjournal.org



Brief report

Hospital *Clostridium difficile* outbreak linked to laundry machine malfunction



Shelini Sooklal MD*, Ayesha Khan MD, Saman Kannangara MD

Department of Internal Medicine, Easton Hospital, Easton, PA

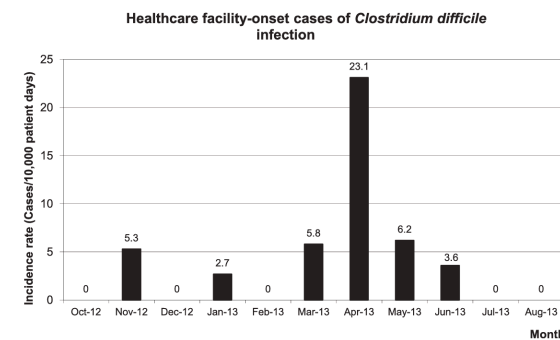


Fig 1. Health care facility-onset cases of *Clostridium difficile* infection.

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US Outbreak Related to Contaminated Laundry

Five children died at Children's Hospital of New Orleans in 2008 and 2009.

After coming in contact with a deadly fungus (*Rhizopus delemar*) that was transmitted through their linens.

Linens traced to an off-site launderer facility.

The Pediatric Infectious Disease Journal
An official publication of the European Society for Paediatric Infectious Diseases

Articles & Issues ▾ Online First Collections For Authors ▾ Journal Info ▾ Affiliated Societies ▾

ORIGINAL STUDIES

Mucormycosis Outbreak Associated With Hospital Linens

Duffy, Jonathan MD, MPH^{††}; Harris, Julie PhD, MPH[‡]; Gade, Lalitha M Pharm[‡]; Schulster, Lynne PhD[‡]; Newhouse, Emily MD, CM[§]; O'Connell, Heather PhD[‡]; Noble-Wang, Judith PhD[‡]; Rao, Carol ScD, MS[†]; Balajee, S. Arunmozhi PhD[‡]; Chiller, Tom MD, MPH[‡]

Author Information

The Pediatric Infectious Disease Journal 33(5):p 472-476, May 2014. | DOI: 10.1097/INF.0000000000000261

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US Outbreak Related to Contaminated Laundry

Heavy mold growth was found in the linens used at two University of Pittsburgh Medical Center hospitals where five mold-infection-related deaths among solid-organ transplant patients occurred in 2014.

tested linens from the contracted launderer, had “heavy fungal growth of *Mucor* and *Rhizopus*.”

☰ **CNN** health Life, But Better Fitness Food Sleep Mindfulness Relationships

Mold at two Pittsburgh hospitals linked to 5 deaths

By [Lauren Del Valle](#), CNN

Published 2:24 AM EST, Sat January 28, 2017



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Hygienically Clean Laundry

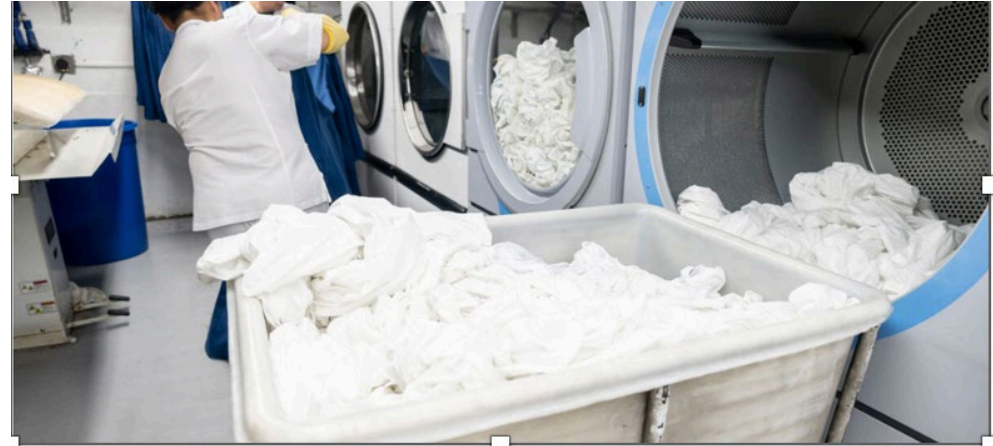
Fabrics, textiles, and clothing used in health-care settings are disinfected during laundering and generally rendered free of vegetative pathogens (i.e., hygienically clean), but they are **not sterile**.

Hygienically clean laundry carries negligible risk to health-care workers and patients/residents, provided that the clean textiles, fabric, and clothing are not inadvertently contaminated before use.



Laundry Services for Healthcare Facilities

- **in-house or onsite**
- **off site** - agreement that laundry will be hygienically clean and handled to prevent contamination



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Infection Control Recommendations/Standard for Laundry Facility and Equipment

- Laundry facility operation area should be a **dedicated space** large enough to process the volume of items with room to **physically separate the dirty or soiled area from the clean area**
- Maintain the **soiled/dirty area at negative pressure compared with the clean areas**
- Health care facility should obtain documentation that their ventilation system has been assessed by HVAC professional and meets standards for healthcare laundry facilities set forth by the Facility Guideline Institute (FGI) and ANSI/ASHRAE/ASHE standard at the time of facility construction.
- Dirty area with **warning signs stating the presence of contaminated items**
- Use and maintain laundry equipment according to **manufacturers' instruction.**



Infection Control Recommendations/Standard for Laundry Facility and Equipment (continuation)

- Ensure **hand washing stations** conveniently located in work areas
- Appropriate **PPE** including **gown, gloves, and eye and face protection** available for workers to wear when sorting contaminated laundry.
- Have wall surfaces, tabletops, and floor surfaces made of **durable materials and of smooth surfaces**
- **Sharp containers** in the soiled/dirty area



Hand Hygiene at Work |
Handwashing | CDC

[Visit](#)



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Infection Control Recommendations/Standard for Laundry Facility and Equipment (continuation)

- **Bright lighting** over the production floor
- **Clean floor space** and keeping sheets from dragging the floor
- **Eyewash station** is required by OSHA within 10 feet of the chemicals.
- **Not** contain any food, beverage or personal items



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Infection Control Guidelines for Routine Handling of Contaminated Laundry



- Handle contaminated laundry with minimum agitation
- Bag or contain contaminated laundry **at the point of use**
 - Do **not** sort, prerinse, or shake contaminated laundry
 - Use **leak resistant containment** if laundry is contaminated with blood or body substance.
- Soiled linen shall be singled bagged in approved linen bag. Double bagged **only** if the outside of the single bag is contaminated with fluids or solids.
- Soiled linen bags should be **no more than ½ -2/3 full**
- Identify bags or containers for contaminated laundry with **color coding or other alternative means of communication** as appropriate.
- HCP should never carry clean or dirty linens against their uniform or unclothed arms



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Infection Control Guidelines To Routine Handling of Contaminated Laundry (continuation)

- Ensure that laundry chutes are **properly designed, maintained,** and used in a manner to **minimize dispersion of aerosols** from contaminated laundry.
- Laundry chute should be maintained under **negative pressure.**
- The chute doors should be **locked when not in use and kept secured in closets behind locked doors.**
- Establish a facility policy to determine **when laundry should be sorted (before or after washing).**



Infection Control Guidelines for the Laundry Process

- Proper use of temperature, detergent, and laundry additives.
 - If hot-water cycles are used, wash with detergent in water $\geq 160\text{F}$ ($\geq 71\text{C}$) for ≥ 25 min.
 - Always use an approved laundry detergent.
 - Use of low temperature cycles rely heavily on the presence of chlorine or oxygen activated bleach additives to reduce the level of microbial contamination
- Damp items should **not** be left in the machine overnight



Infection Control Guidelines - Packaging, Transport, and Storage of Clean Laundry

- **Unwrapped linens** in carts or hampers in clean storage rooms should be **covered at all times**
- Stock items should be **rotated**
- Shelves in the storage **area** should be **2 inches from the wall**.
- Open racks that hold clean linens should have a **solid bottom liner** and **bottom shelf should be 8 inches from the floor**.
- Surfaces and floor of your clean storage room **need to be cleaned and disinfected regularly** using EPA registered hospital grade disinfectant.
- **Door** to the clean laundry storage room should be **closed at all times**.
- **Laundry carts** used to transport textiles **offsite** should be cleaned and disinfected with EPA disinfectant.
- Soiled laundry carts are held in areas designated for **soiled supplies**.
- Loading dock should be clean and free from litter or evidence of infestations by birds or vermin.



Guidelines for Handling Clean Linen in Units/Floors

Clean linen shall be stored **in enclosed closet or covered carts.**

All clean linen storage racks or carts **must be covered** with commercially available cover. **(covered with plastic or reusable cart covers)**

Clean linen shall be covered while being transported in dedicated carts.

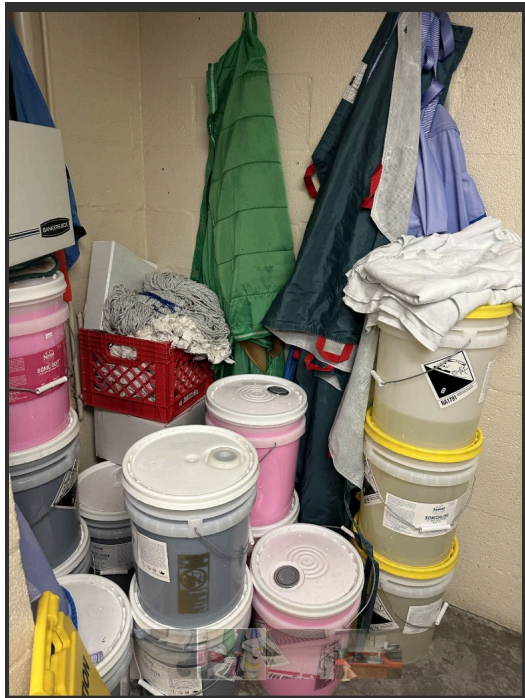
Clean linen supplies shall be spatially **separate** from soiled linen.

Storage of clean linen carts **must always be secured** in closets or rooms

Clean linen should **not** be stored in residents' rooms to minimize excess expenses.



Comply with the State of Illinois Regulations



ADMINISTRATIVE CODE

TITLE 77: PUBLIC HEALTH
CHAPTER I: DEPARTMENT OF PUBLIC HEALTH
SUBCHAPTER c: LONG-TERM CARE FACILITIES
PART 300 SKILLED NURSING AND INTERMEDIATE CARE FACILITIES CODE
SECTION 300.2230 LAUNDRY SERVICES

Section 300.2230 Laundry Services

- a) Every facility shall have an effective means of supplying an adequate amount of clean linen for operation, either through an in-house laundry or a contract with an outside service.
 - 1) An adequate supply of clean linen shall be defined as the three sets of sheets, draw sheets, and pillow cases required to provide for the residents' needs. Additional changes of linen may be required in consideration of the time involved for laundering and transporting soiled linens.
 - 2) If an in-house laundry service is provided then the following conditions shall exist:
 - A) The laundry area shall be maintained and operated in a clean, safe and sanitary manner. No part of the laundry shall be used as a smoking or dining area.
 - B) Written operating procedures shall be developed, posted and implemented which provide for the handling, transport and storage of clean and soiled linens.
 - C) Laundry personnel must be in good health and practice good personal grooming. Employees must thoroughly wash their hands and exposed portions of their arms with soap and warm water before starting work, during work as often as necessary to keep them clean and after smoking, eating, drinking, using the toilet and handling soiled linens.
 - D) Clean linen shall be protected from contamination during handling, transport and storage.
 - E) Soiled linen shall be handled, transported and stored in a manner that protects facility residents and personnel.
 - F) If supplies and equipment not directly connected with the operation of the laundry are stored in the laundry or its accessory storage and handling areas, they shall be protected from contamination by the soiled linens and shall not contribute to contamination of the clean linens.
- b) If an outside laundry service is used it shall comply with the requirements of in-house laundries and, in addition, shall provide for protection of clean linens during transport back to the facility.
- c) If the facility provides laundry service for residents' personal clothing it must be handled, transported and stored in a manner that will not allow contamination of clean linen or allow contamination by soiled linen. The facility shall assure that the personal clothing of each resident is returned to that individual resident after laundering.

(Source: Amended at 14 Ill. Reg. 14950, effective October 1, 1990)



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Healthcare Linen Contaminated or Saturated with Blood or Other Potentially Infectious Materials (OPIM)

- OSHA confirms that contaminated healthcare linen is NOT Red Bag waste
- Existing OSHA Regulations specify that any linen saturated with blood or other potentially infectious materials should be placed **in impermeable bags**, laundry personnel picks up the bagged contaminated linen, washes the linen, and delivers clean linen back .
- OSHA's definition of regulated waste **does not include contaminated linens** that will be laundered and reused. 29 CFR1910.10330(b). The word waste is defined as garbage or trash.
- Estimated that 25 percent of linen exits a facility as red bag waste
- When contaminated linen are disposed of as red bag waste, facilities unnecessarily spend resources or waste disposal fees and then incur costs to replace linen.



Healthcare Laundry Training of HCP



Facilities should develop processes to ensure that all hcp understand and are trained with the infection control including the infection control policies and procedures for healthcare laundry.



Staff are required to have training before they are allowed to perform laundry duties and at least annually as a refresher.



Additional training is provided if there are newly recognized lapses in adherence or if a new equipment or procedure is introduced



Microbiologic Sampling of Laundry

- Do not conduct routine microbiological sampling of clean textiles.
- Use microbiological sampling **during outbreak investigations**



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References:

- Design and Construction of Healthcare Laundry- https://cdn.ymaws.com/www.almnet.org/resource/resmgr/Certification/Contact_Hour_Articles/051_DesignHCLaundry.pdf
- Illinois Department of Public Health - Skilled and Intermediate Facilities Code for Laundry Service <https://www.ilga.gov/commission/jcar/admincode/077/077003000K22300R.html>
- CDC Healthcare-Associated Infections (HAIs) Appendix D – Linen and laundry Management <https://www.cdc.gov/hai/prevent/resource-limited/laundry.html>
- CDC Infection Control. Laundry and Bedding. Guidelines for Environmental Infection Control in Health-Care Facilities <https://www.cdc.gov/infectioncontrol/guidelines/environmental/background/laundry.html>
- CDC Guidelines for Environmental Infection Control in Healthcare Facilities. Recommendations- Laundry and Bedding - <https://www.cdc.gov/infectioncontrol/pdf/guidelines/environmental-guidelines-P.pdf>
- HLAC Accreditation Standards -<https://hlacnet.org/standards/>
- CDC Linen and laundry management. Best Practices for Environmental Cleaning in Global Healthcare Facilities with Limited Resources - <https://www.cdc.gov/hai/prevent/resource-limited/laundry.html>
- Linen Management - Developing Requirements for Covering, Storage and Transport. <https://www.jointcommission.org/standards/standard-faqs/hospital-and-hospital-clinics/>
- OSHA Confirms That Contaminated Healthcare Linen is Not Red Bag Waste - <https://www.infectioncontroltoday.com/view/osha-confirms-contaminated-healthcare-linen-not-red-bag-waste#>
- APIC Publication- Infection Prevention Guide To Long Term Care. Linen Storage and Distribution.
- Laundry Practices Infection Control Assessment Checklist - https://info.jcrinc.com/rs/494-MTZ-066/images/Laundry_Checklist31.pdf?ref=EMHAPWeekly&mkt_tok=eyJpIjoiWXPWbE9UYzROalJoWVRCaCIsInQiOiJ4UzVOQ3AxU1hCXC9CSzILbWFBdmM2c3BCc2R3Z1NNOFpORE5NNTZiSmc1dWNUG5rVFlqWUhKSFwvS0lzTUZvMkhMMkdSa2ZhrnZpTE82SzhWWhpUWEdJeHJRM3hjREJ1OW9zZlNrQkNXNjEwPSJ9
- Supplemental Material: Infection Control Assessment of Healthcare Facility Preparedness to Keep Healthcare Textiles Clean https://www.cdc.gov/fungal/outbreaks/files/infection-control-assessment-of-healthcare-facility-preparedness-to-keep-healthcare-textiles-clean_p.pdf



Thank
You



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Open Q&A

Submit questions via Q&A pod to **All Panelists**

Please do not resubmit a single question multiple times

Slides and recording will be made available after the session.

Reminders

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