

# Not Just for EVS: The Role of CNAs in Environmental Cleaning and Disinfection



**Project Firstline**  
Healthcare-Associated Infections Program  
Center for Health Care Quality  
California Department of Public Health



# Implicit Bias

- Describes how our unconscious attitudes or judgements can influence our thoughts, decisions, or actions
- Includes involuntary, unintentional perceptions made without awareness
- Occurs as our brains sort information and perceive data to understand our world
- Affects our decisions, contributing to societal disparities
  - Self awareness about implicit bias can promote healthcare diversity and equality
- Learn more about your own implicit bias at [Project Implicit](https://implicit.harvard.edu/implicit/) (implicit.harvard.edu/implicit/)



# INFECTION PREVENTION STARTS WITH YOU!



# Objectives

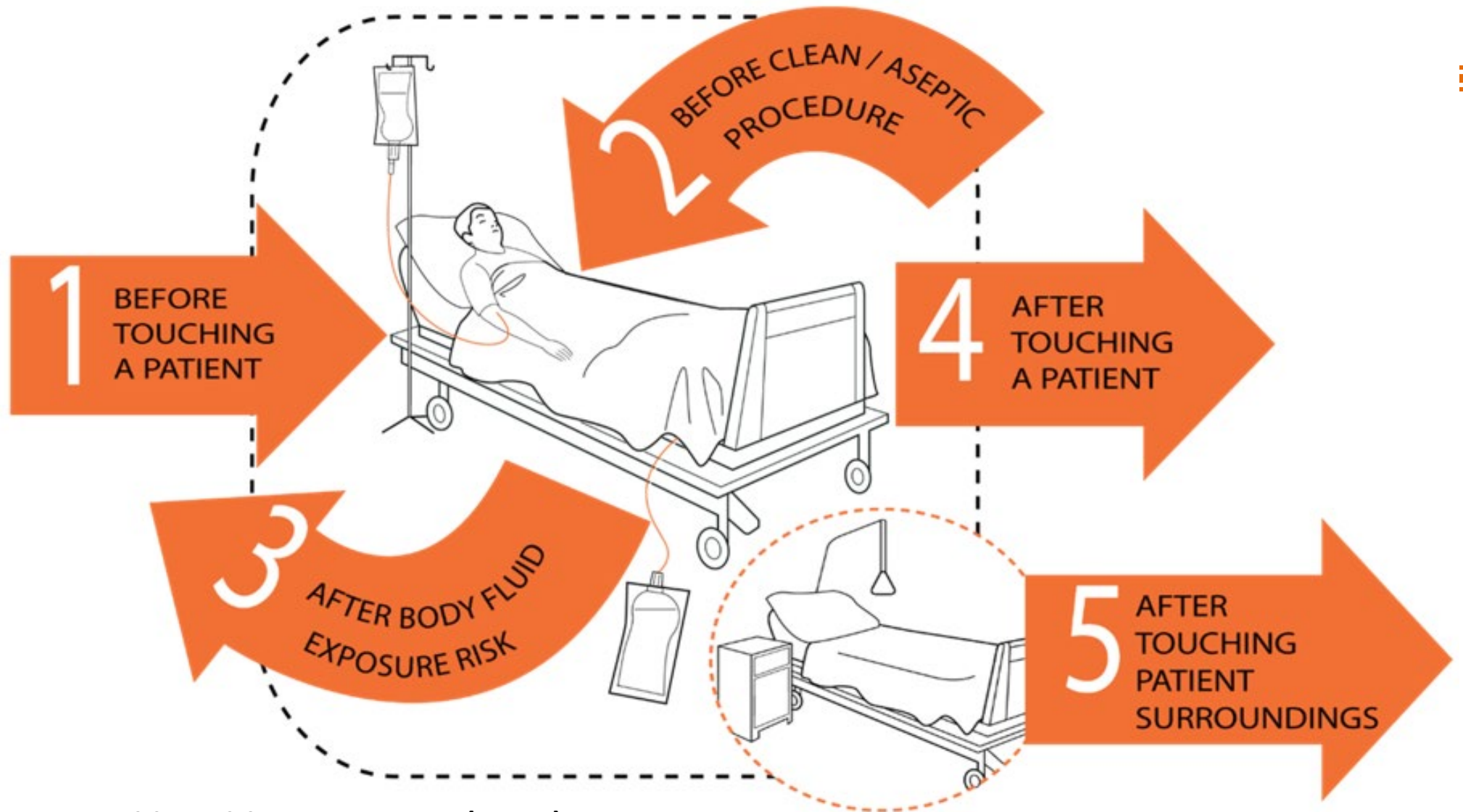
- Discuss the role of the environment and how environmental cleaning and disinfection prevents spread of germs
- Discuss how to read product labels for contact/wet times
- List steps on how to clean and disinfect high-touch areas
- Discuss strategies used to ensure effectiveness of cleaning and disinfection
- Describe proper personal protective equipment (PPE) for changing bed linens
- List ways to handle clean and soiled linen

# Keep All Residents Safe





# 5 Moments for Hand Hygiene





**I'M A CNA,  
HOW DOES ENVIRONMENTAL CLEANING AND  
DISINFECTION START WITH ME?**



# THE ROLE OF THE ENVIRONMENT IN GERM SPREAD





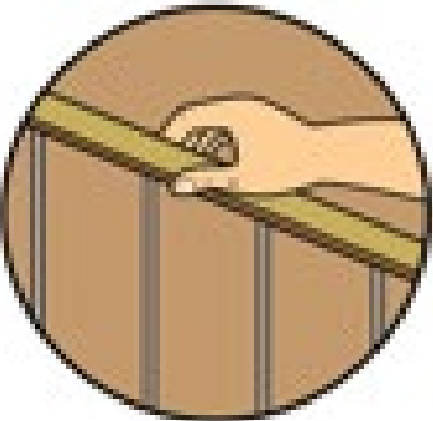
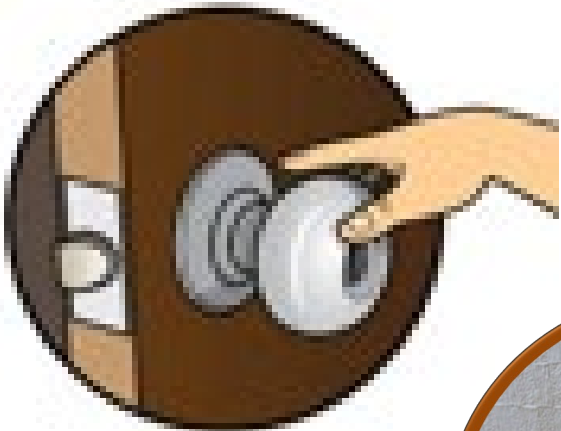
# How Do Contaminated Environmental Surfaces Lead to Resident Infection?

- The healthcare environment can be a source of germs spreading
- Some germs live on surfaces for hours, days, or even months
- When a resident, healthcare personnel, or visitor touches a surface, they might leave germs. Anyone who touches the same surface can pick up the germs.



# Reflection: High-Touch Surfaces

Can you identify any examples of contaminated surfaces in a resident room?



# Keeping Germs from Spreading



Resident A uses a cane



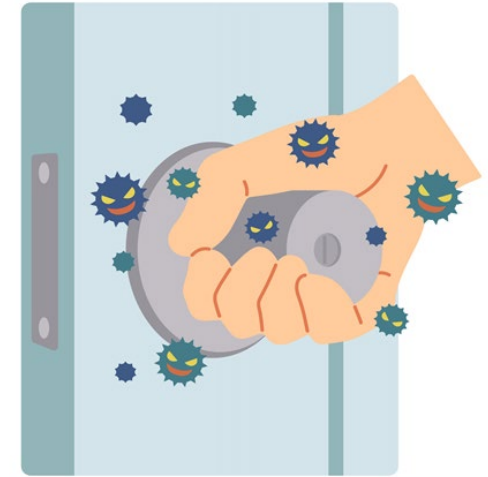
CNA assists Resident B with the same cane without proper cleaning and disinfection



Resident B picks up germs from the cane Resident A used

# Environmental Contamination

- Surface becomes contaminated by direct contact, droplets, or spray of body fluids
- Germs survive on the surface for months to years (like *C. difficile*)
- Surface is touched by a second person, who picks up germs
- Second person does not perform proper hand hygiene
- Person spreads the germs to a third person or other objects



# Reflection: How Do CNAs Play a Role in Environmental Cleaning?

- Observe
- Report
- Respond

This can mean that the CNA needs to clean certain high-touch surfaces before EVS staff arrive.





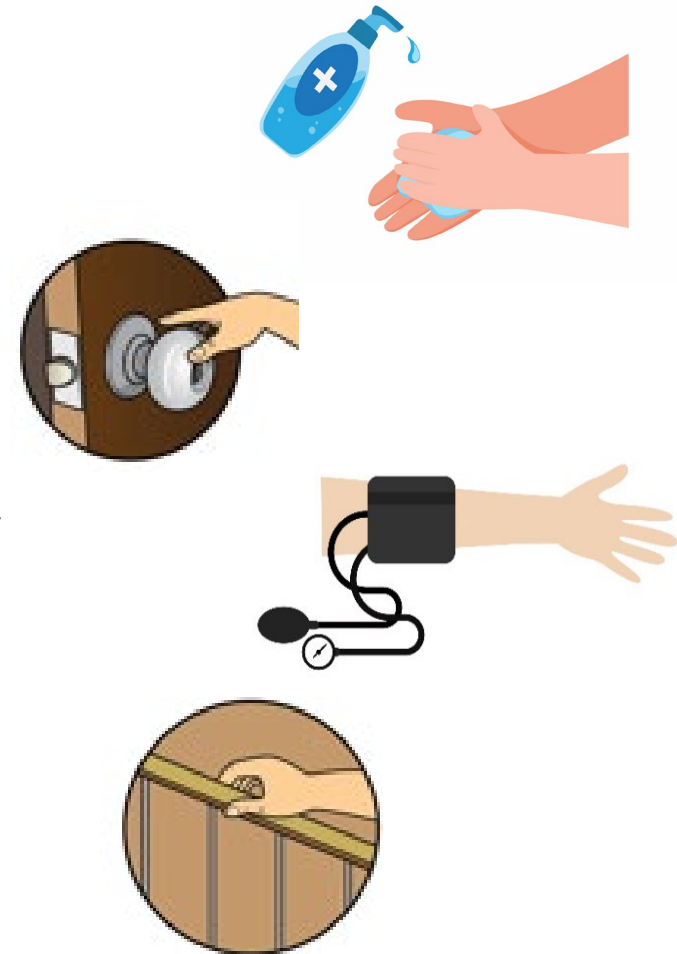
# Cleaning versus Disinfection

- **Cleaning** is the removal of visible soil (e.g., organic and inorganic material) from objects and surfaces
- **Disinfection** removes most germs present on surfaces that can cause infection or disease
- **If a disinfectant product label does not specify that it can be used for both cleaning and disinfection, then surfaces must be first cleaned in order to be disinfected**



# How to Reduce Environmental Bioburden

- **Bioburden** is the number of germs on an object or surface
  - Perform hand hygiene and wear appropriate PPE
  - Clean and disinfect all portable equipment after each use
  - Clean and disinfect high-touch surfaces at least daily
  - Ensure thorough cleaning and disinfection of all rooms after discharge and at the time of admission of new residents



# CLEANING SUPPLIES AND PROCESSES



# Disinfectants

- Inhibits growth or kills germs
- When using a disinfectant, follow manufacturer's instructions for:
  - Contact/wet time to kill germs
  - PPE to be used
  - Surfaces to use the product on



## Contact/Wet Times

- The time required for a disinfectant to kill germs on a *pre-cleaned* surface (clean surface or item first if the disinfectant does not specify it can be used for both cleaning and disinfection)
- The disinfectant must remain wet long enough to kill the germs on a surface
- Follow manufacturer's instructions for the contact/wet time to kill germs
- Always perform hand hygiene after cleaning a surface or using disinfectant products



# Knowledge Check

---

---

*What can you find on product labels?*

- A. Manufacturer's instructions for use
- B. What surfaces you can use the product on
- C. The contact/wet time to follow
- D. Which germ(s) the product kills
- E. All the above



# Knowledge Check

---

---

*What can you find on product labels?*

- A. Manufacture instructions for use
- B. What surfaces you can use the product on
- C. The contact/wet time to follow
- D. Which germ(s) the product kills
- E. **All the above**



# Environmental Protection Agency (EPA) Label

---

---

- What it will kill:
    - Viruses
    - Bacteria (e.g., TB)
    - Fungus
    - Spores (e.g., *C. difficile*)
  - Instructions for use
  - Contact/wet time to follow
  - Appropriate surfaces to be used on
- 
- 



## Read the Label!

- Not all products work the same
- Use EPA-approved disinfectants for healthcare and follow your facility policy
  - There is no way to know whether homemade products are effective for killing germs



# What to Wear: PPE Used in Cleaning

- Appropriate use of PPE is critical to prevent the spread of germs and is required for some cleaning and disinfection products
- Select PPE based on:
  - Chemicals to be used to clean the room
  - Type of infection prevention precautions assigned to the resident
- Refer to the Safety Data Sheet (SDS), manufacturer's instructions, and facility policy chemical usage and safety steps





**I'M A CNA,  
HOW SHOULD I CLEAN AND DISINFECT?**

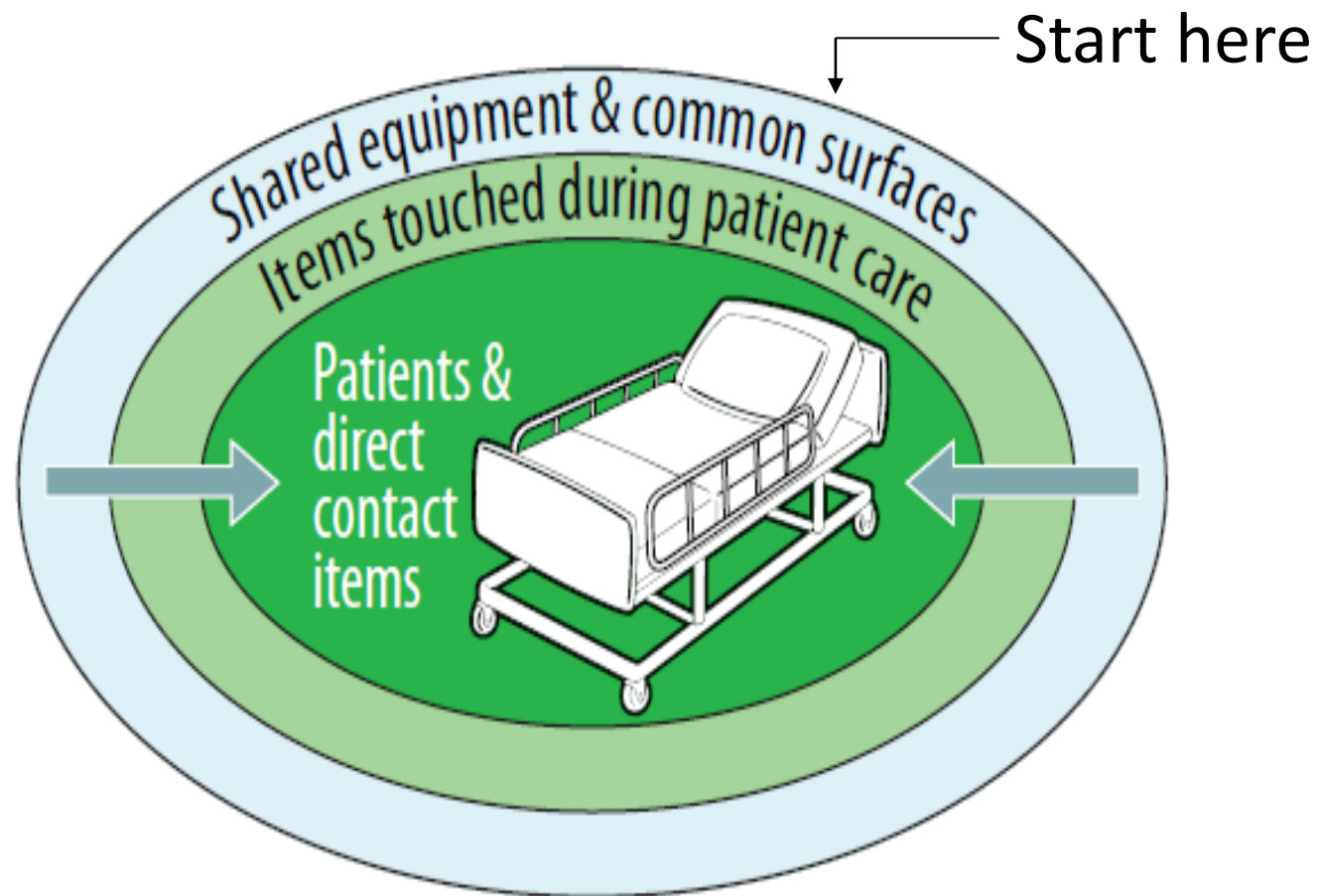


# Environmental Cleaning: Step- by-Step Process



## Proceed From Clean to Dirty

- It helps avoid spreading dirt and germs
- Always clean resident areas before resident bathroom
- During terminal cleaning, clean other surfaces before high-touch surfaces



# Healthcare Personnel Touch Many Surfaces



- Door handles
- Toilets
- Showers
- Between bedspaces
- Phones



- Bedrails
- Beds
- Chairs
- Bedside table
- Call lights

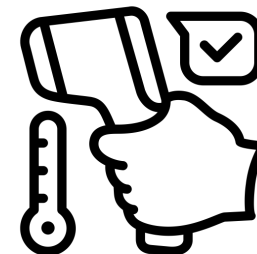
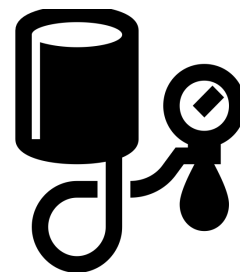


- Floors
- Light switches
- Sinks
- Clean supplies
- Remotes



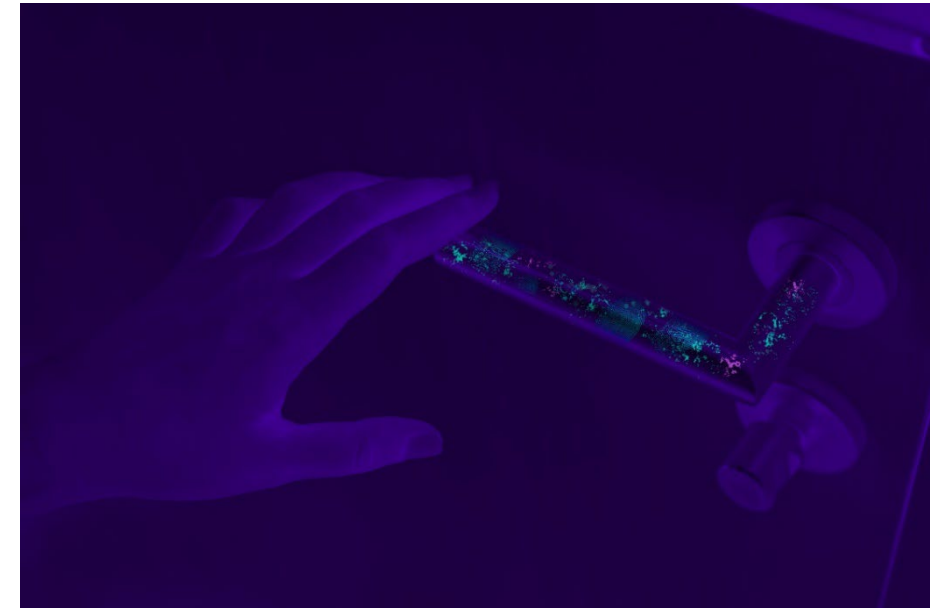
# Cleaning and Disinfecting Reusable Items

- Various equipment may be used for more than one resident. Clean and disinfect items between each resident.
- Follow the manufacturer's instructions
- Examples:
  - Walker
  - Wheelchair
  - Thermometer
  - Blood pressure cuff



# How Do You Know if a Resident's Room is Clean?

- Appears visually clean or finger-swipe clean
  - Fast and inexpensive, but lacks objectivity
- Confirmed via technology
  - The use of fluorescence is increasingly becoming the community standard
  - Environmentally stable marker is visible to UV light if still present after cleaning







**PREVENTING THE SPREAD OF  
INFECTIONS WHEN CHANGING LINENS &  
BEDMAKING**





# Choosing Appropriate PPE



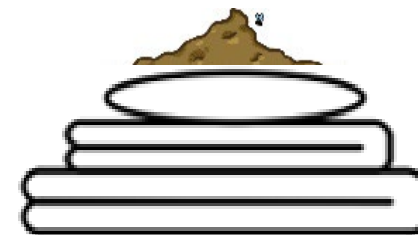
- Before changing linen, assess the situation/resident
  - Is the resident on isolation precautions? (e.g., contact, droplet)
  - Is there substantial soiling that poses a risk of splash or spray while changing linens?
- Gloves should always be worn when removing grossly soiled linen

## Examples of PPE when Changing Bed Linen

---

---

- **Changing bed linen for residents with *C. difficile*:**
  - Gown
  - Gloves
  - Perform hand hygiene with soap and water
- **Changing bed linen for residents with influenza:**
  - Gloves
  - Mask (if resident is in room or recently was)
  - Perform hand hygiene with alcohol-based hand rub or soap and water



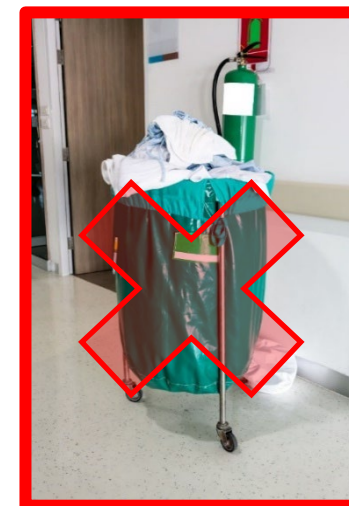
# What to Do with Soiled Linen

- When linen is soiled with solid waste, what steps should you follow?
  - Follow your facility's policy on the guidelines for removing soiled particles from linen
  - Minimize handling used linen and roll linen up when removing from the bed
  - Do not shake or hold it close to the body
  - Place in designated linen cart or bag



# Proper Transportation of Clean and Soiled Linen

- Clean linen may become contaminated with germs when not appropriately transported and stored
- Remember to:
  - Cover clean linen cart
  - Leave linen cart outside of the room
  - Clean and disinfect a surface before placing clean linen in resident's room if needed
  - Place soiled linen in a designated cart
  - Do not overfill soiled linen cart
  - Perform hand hygiene after handling soiled linen and before touching clean linen



# Highlights

- Contaminated surfaces can spread germs
- Thoroughly cleaning and disinfecting high-touch surfaces such as light switches, bedside tables, and door handles can prevent the spread of germs
- Clean from 'clean to dirty' and 'top to bottom' when cleaning a resident room
- Follow manufacturer's instructions for contact/wet times to kill germs
- Wear proper PPE for every resident interaction
- Never overfill a soiled linen cart
- Everyone has a role in environmental cleaning and disinfection!

# References

- 6 Steps for Safe & Effective Disinfectant Use | Environmental Protection Agency (EPA)  
([www.epa.gov/sites/default/files/2020-04/documents/disinfectants-onepager.pdf](http://www.epa.gov/sites/default/files/2020-04/documents/disinfectants-onepager.pdf))
- About Project Firstline | Centers for Disease Control and Prevention (CDC)  
([www.cdc.gov/infectioncontrol/projectfirstline/about.html](http://www.cdc.gov/infectioncontrol/projectfirstline/about.html))
- Background G. Laundry and Bedding: Guidelines for Environmental Infection Control in Health-Care Facilities (2003) | CDC  
([www.cdc.gov/infectioncontrol/guidelines/environmental/background/laundry.html](http://www.cdc.gov/infectioncontrol/guidelines/environmental/background/laundry.html))
- Cleaning: Guideline for Disinfection and Sterilization in Healthcare Facilities (2008) | CDC  
([www.cdc.gov/infectioncontrol/guidelines/disinfection/cleaning.html](http://www.cdc.gov/infectioncontrol/guidelines/disinfection/cleaning.html))
- EVS and the Battle Against Infection: a Graphic Novel | CDC  
([www.cdc.gov/infectioncontrol/training/evs-battle-infection.html](http://www.cdc.gov/infectioncontrol/training/evs-battle-infection.html))
- Inside Infection Control: Cleaning? Disinfection? What is the difference? | CDC  
([www.cdc.gov/infectioncontrol/projectfirstline/videos/Ep16-CLEANING-LoRes.mp4](http://www.cdc.gov/infectioncontrol/projectfirstline/videos/Ep16-CLEANING-LoRes.mp4))

# References

- [Inside Infection Control: Why Do Cleaning and Disinfection Matter in Healthcare? | CDC](http://www.cdc.gov/infectioncontrol/projectfirstline/videos/EP20-CandD-LowRes.mp4)  
([www.cdc.gov/infectioncontrol/projectfirstline/videos/EP20-CandD-LowRes.mp4](http://www.cdc.gov/infectioncontrol/projectfirstline/videos/EP20-CandD-LowRes.mp4))
- [Options for Evaluating Environmental Cleaning | CDC](http://www.cdc.gov/hai/toolkits/evaluating-environmental-cleaning.html)  
([www.cdc.gov/hai/toolkits/evaluating-environmental-cleaning.html](http://www.cdc.gov/hai/toolkits/evaluating-environmental-cleaning.html))
- [Recommendations for Disinfection and Sterilization in Healthcare Facilities | CDC](http://www.cdc.gov/infectioncontrol/guidelines/disinfection/recommendations.html)  
([www.cdc.gov/infectioncontrol/guidelines/disinfection/recommendations.html](http://www.cdc.gov/infectioncontrol/guidelines/disinfection/recommendations.html))
- [Reduce Risk from Surfaces | CDC](http://www.cdc.gov/hai/prevent/environment/surfaces.html)  
([www.cdc.gov/hai/prevent/environment/surfaces.html](http://www.cdc.gov/hai/prevent/environment/surfaces.html))





# QUESTIONS AND DISCUSSION



# Project Firstline Resources

Visit the [Project Firstline Website](http://www.cdph.ca.gov/Programs/CHCQ/HAI/Pages/ProjectFirstline.aspx)

([www.cdph.ca.gov/Programs/CHCQ/HAI/Pages/ProjectFirstline.aspx](http://www.cdph.ca.gov/Programs/CHCQ/HAI/Pages/ProjectFirstline.aspx))

Subscribe to *CNA Today* – A [Newsletter for CNA!](http://cdph-marketing.powerappsportals.com/HAI/HAI-Registration/)

([cdph-marketing.powerappsportals.com/HAI/HAI-Registration/](http://cdph-marketing.powerappsportals.com/HAI/HAI-Registration/))

Email the Project Firstline AskBox

[ProjectFirstline@cdph.ca.gov](mailto:ProjectFirstline@cdph.ca.gov)

Project Firstline is a national collaborative led by the U.S. Centers for Disease Control and Prevention (CDC) to provide infection control training and education to frontline healthcare workers and public health personnel. The California Department of Public Health Healthcare-Associated Infections (HAI) Program is proud to partner with Project Firstline, as supported through Strengthening HAI/AR Program Capacity (SHARP) funding. CDC is an agency within the Department of Health and Human Services (HHS). The contents of this presentation do not necessarily represent the policies of CDC or HHS and should not be considered an endorsement by the Federal Government.