

# ENVIRONMENTAL CLEANING & DISINFECTION

For Frontline Staff

July 20, 2023

# AGENDA

- Cleaning and Disinfection: What is the Difference?
- Why Cleaning and Disinfection Matter
- What is Contact Time?
- Cleaning and Disinfection: How To's
- Reflection



# POLL

- A. Cleaning is killing germs. Disinfecting is removing dirt and some germs.
- B. Disinfecting is a type of cleaning (cleaning with chemicals).
- C. Cleaning is a type of disinfecting (disinfecting with soap or detergent).
- D. Disinfecting is killing germs. Cleaning is removing dirt and some germs.

# **CLEANING AND DISINFECTION: WHAT IS THE DIFFERENCE?**

## INSIDE INFECTION CONTROL

# CLEANING? DISINFECTION? WHAT IS THE DIFFERENCE?

**EPISODE 16**



# DEFINITIONS



## **Cleaning**

Cleaning is a process that removes things like dust, dirt, grime, and other spills, smears, and everyday messes from surfaces, along with some germs.

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## **Disinfection**

Disinfection is a process that kills germs.

# WHAT IS CLEANING?

## An essential step before disinfection

- The removal of visible dust, dirt, grime, etc.
- Physically wiping and scrubbing surfaces
- Always follow manufacturer's instructions and facility policies

**\*\*Allows disinfectants to work**



# WHAT IS DISINFECTING?

## Removal of pathogens from a surface

- Different pathogens require:
  - Different contact times
  - Different disinfectants
- Always follow manufacturer's instructions and facility policies



# WHY CLEANING AND DISINFECTION MATTER

# PATIENTS MAY HAVE WEAKENED IMMUNE SYSTEMS

**In healthcare, we have patients who are ill and weak.**



## Why does that matter?

Germs are more likely to cause problems in these patients, because their immune defenses may not be the same as someone who is healthy and living at home.

# THE HEALTHCARE ENVIRONMENT SHOULD BE KEPT CLEAN

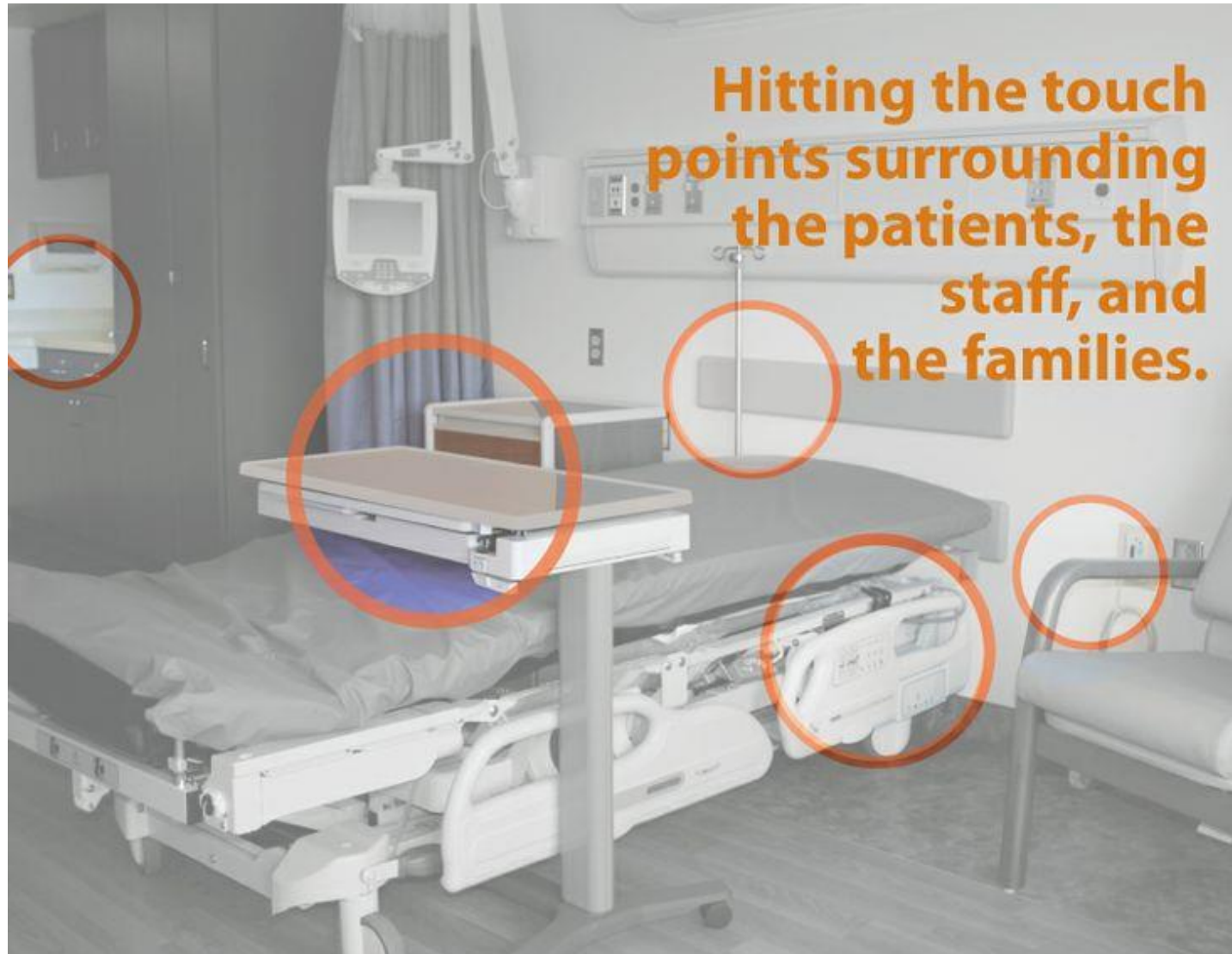
**It is important to keep the healthcare environment clean to stop germs from spreading.**



## Where and When?

- Patient rooms
- High-touch surfaces
  - Bed rails
  - Keyboards
  - Light switches
- Surfaces and objects that often have a lot of germs on them
  - Toilet seats
  - Shared medical equipment

# HIGH-TOUCH SURFACES



# WHO CLEANS WHAT?







## Who Cleans What and When?

*Template for healthcare facilities to ensure that all surfaces, devices, and equipment are properly cleaned at the right times by the right staff.  
Please modify this template as needed. Below are just some examples of various surfaces that should be covered!*

Facility name: \_\_\_\_\_ Unit: \_\_\_\_\_ Update date: \_\_\_\_\_ Approved by: \_\_\_\_\_

Area/Device/Equipment	EVS	Frequency	Nursing	Frequency	Other (Specify)	Frequency
Anesthesia equipment and controls						
Bathroom sink						
Bed rail/controls						
Bed table						
Bedside cabinet & other furniture						
Bladder scanner						
Blood pressure cuffs, sphygmomanometer						
Call box, button, and cords						
Computer keyboard						
Computer monitor, keyboard, mouse, cart						
Corridor railing						
Dispensers for towels, soap, sanitizer, etc.						
Door knob/handle, push plates (in/out of room)						
Feeding pumps, stands						
Glove box holders						
Infusion pumps and control						
ISO holder						
IV poles						
Light switch						

# MDRO ROOMS

Patient:	MON TUES WED THURS FRI SAT SUN	Room:	Phone:
I like to be called:	Care plan:		
Doctor:			
Charge nurse:			
Linen requests:	Pain medication last given:	Our goal is to have you discharged on:	
Housekeeping:	Pain level:		
Patient relations:	<div>0 1 2 3 4 5</div> <div>     </div>		

RN/PCT:

**Once per shift**

- Bed rails
- Bedside table
- Call light/remote
- IV poles/BP cuff
- Ventilator buttons
- Patient phone
- Computer keyboard/mouse

# CLEAN OR NOT?



# WHAT IS CONTACT TIME?

# DEFINITION

## Contact Time

Sometimes called “dwell time,” this is the amount of time a disinfectant needs to sit on a surface, without being wiped away or disturbed, to effectively kill germs.



Know  
Product

Is the product EPA -  
approved?

What pathogens  
does this work  
on?

Where can I use

What is the contact time?

## 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?

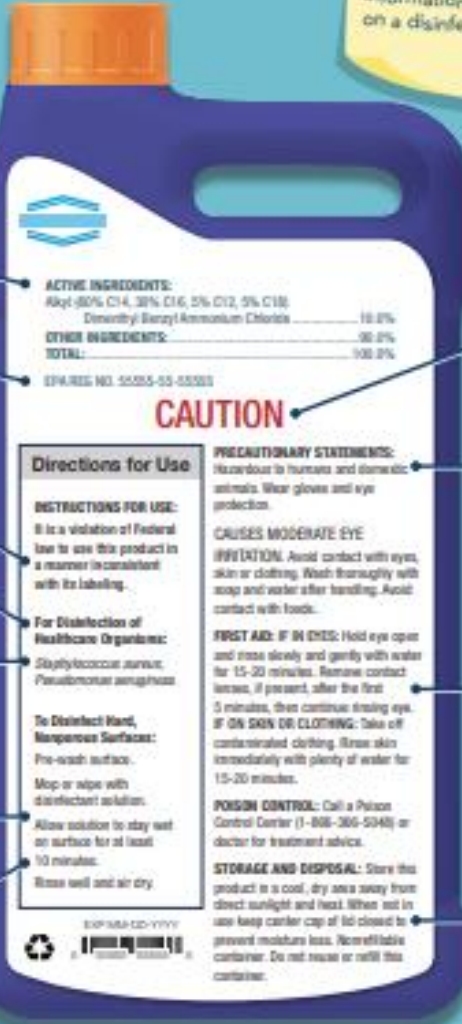
What germs does the disinfectant kill?

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?



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



[WWW.CDC.GOV/PROJECTFIRSTLINE](http://WWW.CDC.GOV/PROJECTFIRSTLINE)

# DOS AND DON'TS FOR DISINFECTION

## Dos

- **Do follow the listed contact time.** This ensures items are disinfected to keep germs from spreading.



## Don'ts

- **Don't rush** the process. Wait until contact time is complete before using objects or surfaces or before a new patient comes into a room.
- **Don't wipe** the surface to dry it faster.
- **Don't blow** on the surface to dry it faster.

# DISINFECTANT PRODUCTS EFFECTIVE FOR *C. AURIS*

## First choice:

- **List P: Antimicrobial Products Registered with EPA for Claims Against *Candida auris***

- <https://www.epa.gov/pesticide-registration/list-p-antimicrobial-products-registered-epa-claims-against-candida-auris>

## Second choice:

- **List K: EPA's Registered Antimicrobial Products Effective Against *C. difficile* Spores**

- <https://www.epa.gov/pesticide-registration/list-k-epas-registered-antimicrobial-products-effective-against-clostridium>

# **CLEANING AND DISINFECTION: HOW TO'S**

# WHAT WE DO, WHEN WE DO IT?

## Systematic Approach

### Clean-to-Dirty:

Start cleaning in the least contaminated area and progress to the most contaminated area to prevent cross-contamination

### Top-to-Bottom:

Start cleaning from the top (ceiling, walls, cabinets) to the bottom (counter tops, floors).



DOOR HANDLE



LIGHT SWITCH



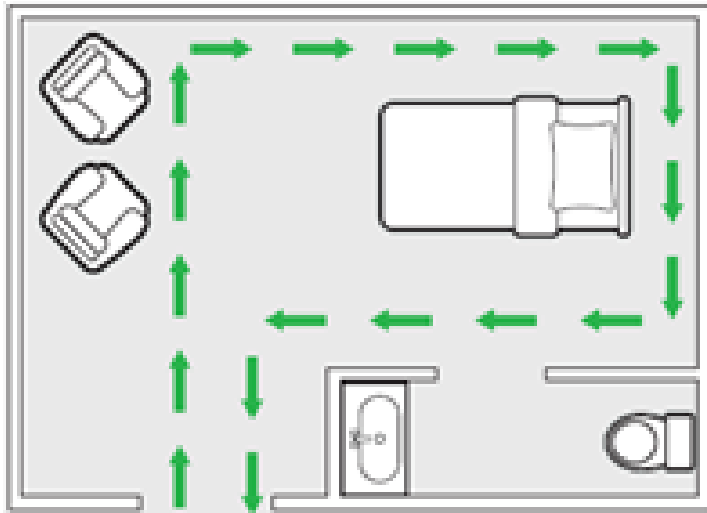
BEDPAN CLEANERS



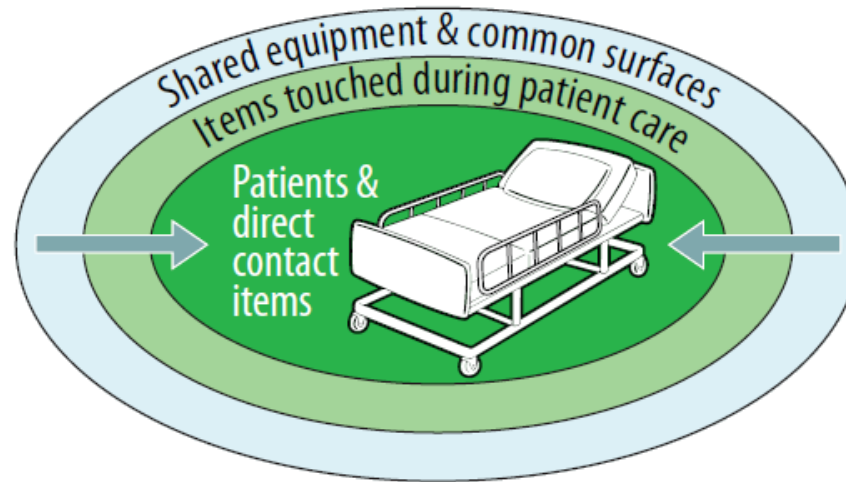
TOILET HANDHOLDS

# HOW TO PREVENT CROSS CONTAMINATION DURING THE CLEANING PROCESS

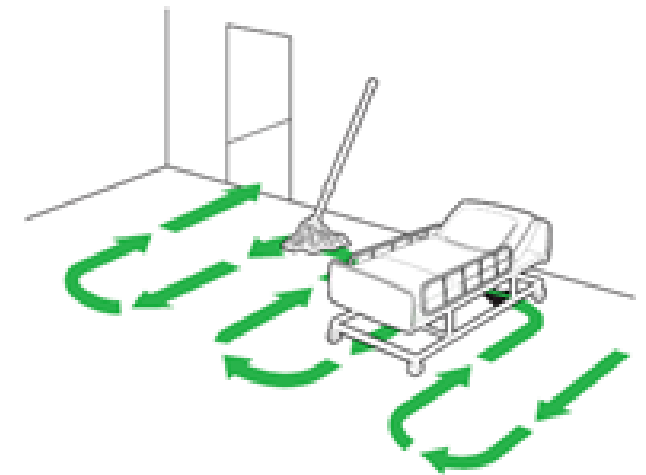
Cleaning steps should be systematic.



Cleaning process should proceed from cleanest to dirtiest spaces (and top to bottom).



Cleaning process should end at the door.



# DO YOU REGULARLY CLEAN/DISINFECT . . . .



**REFLECTION:**  
**WHAT DID YOU LEARN TODAY?**

# KEY TAKEAWAYS

- **Cleaning removes visible dirt**, dust, spills, smears, and grime, including organic material like blood, as well as some germs, from surfaces. It's important to clean before disinfecting because dirt and grime can make disinfectants not work as well.
- **Disinfecting kill germs** on surfaces or objects.
- It is important to **keep the healthcare environment clean to stop the spread of germs**.
- **Follow the instructions on the disinfectant label** – especially instructions for contact time.
- **SPECIFIC disinfectants** for **SPECIFIC pathogens**

# THOUGHTS & QUESTIONS



[Clean and Disinfect \(English\)](#)  
[Clean and Disinfect \(Arabic\)](#)

# RESOURCES AND FUTURE TRAINING SESSIONS

## Project Firstline Resources

Project Firstline on MDHHS: [Michigan.gov/ProjectFirstline](https://www.michigan.gov/ProjectFirstline)

Clean and Disinfect Training Tools:  
[Michigan.gov/ProjectFirstline](https://www.michigan.gov/ProjectFirstline)

Print Materials & Job Aids:  
<https://www.healthymichigan.com/default.aspx?p=viewcat&showpage=2>

To sign up for Infection Prevention e-mails, click here:  
[https://public.govdelivery.com/accounts/MIDHHS/subscribe/new?topic\\_id=MIDHHS\\_782](https://public.govdelivery.com/accounts/MIDHHS/subscribe/new?topic_id=MIDHHS_782)

## Other Resources

CDC's Environmental Cleaning Evaluation Tools:  
[https://www.cdc.gov/hai/prevent/prevention\\_tools.html#anchor\\_1561577385](https://www.cdc.gov/hai/prevent/prevention_tools.html#anchor_1561577385)

CDC's Reduce Risk from Surfaces:  
<https://www.cdc.gov/hai/prevent/environment/surfaces.html>

EPA's Six Steps for Safe & Effective Disinfectant Use:  
<https://www.epa.gov/sites/production/files/2020-04/documents/disinfectants-onepager.pdf>

EPA's List N Tool:  
<https://cfpub.epa.gov/giwiz/disinfectants/index.cfm>

About List N: Disinfectants for Coronavirus (COVID-19):  
<https://www.epa.gov/coronavirus/about-list-n-disinfectants-coronavirus-covid-19-0>

Selected EPA-Registered Disinfectants: <https://www.epa.gov/pesticide-registration/selected-epa-registered-disinfectants>

List N - Infographic Which disinfectants kill COVID-19?:  
[https://www.epa.gov/sites/production/files/2020-12/documents/list\\_n\\_how-to\\_infographic\\_final\\_0.pdf](https://www.epa.gov/sites/production/files/2020-12/documents/list_n_how-to_infographic_final_0.pdf)

[Survival, Persistence, and Isolation of the Emerging Multidrug-Resistant Pathogenic Yeast Candida auris on a Plastic Health Care Surface - PMC \(nih.gov\)](#)

# THANK YOU

- **Follow up Email**
  - Presentation Evaluation Link
  - Presentation Recording & Slides
- **Infection Prevention Trainings Resources –**  
[Michigan.gov/ProjectFirstline](https://Michigan.gov/ProjectFirstline)

**Contact us!**  
**(517) 335-8165**  
[MDHHS-SHARP@michigan.gov](mailto:MDHHS-SHARP@michigan.gov)