

Cleaning, Disinfection, and Environmental Services (EVS)

Man Nguyen, BSN, RN, PHN, PCCN, CIC
Public Health Nurse
County of San Diego HAI Program



www.sdhai.org



phs.hai.hhsa@sdcounty.ca.gov



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Objectives

- Describe the role of the care environment in transmitting infections
- List components important to effective cleaning and disinfection
- Demonstrate use of adherence monitoring tools and feedback to ensure effectiveness of cleaning and disinfection



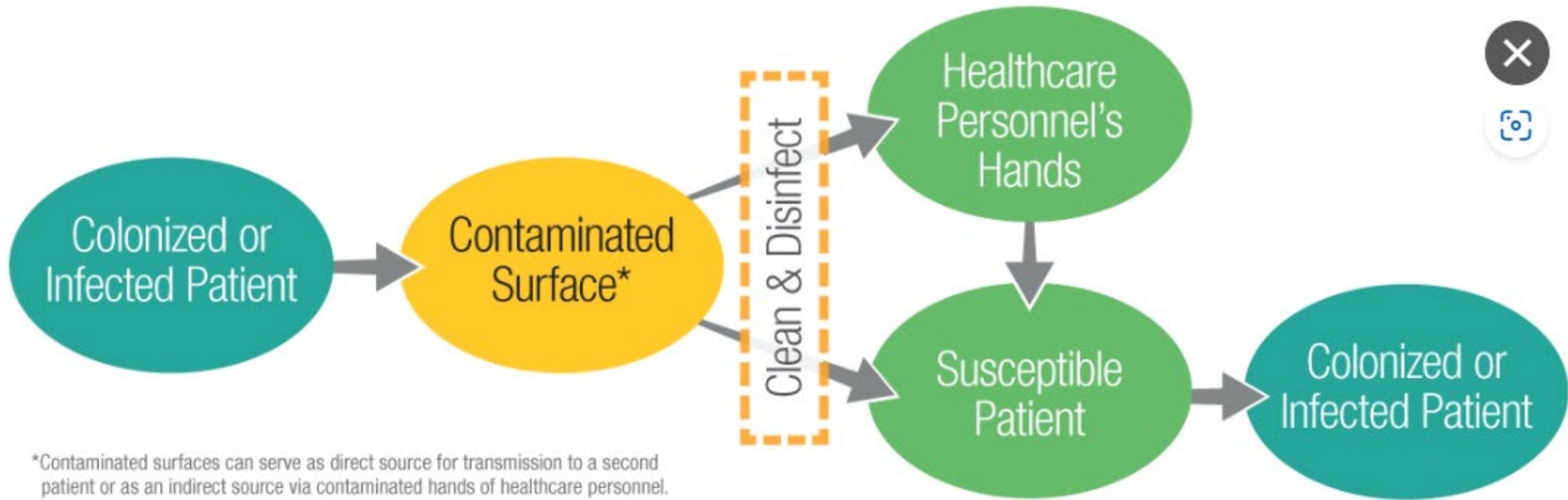
Role of Care Environment in Disease Transmission



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Contaminated Environmental Surface Leads to Resident Infection

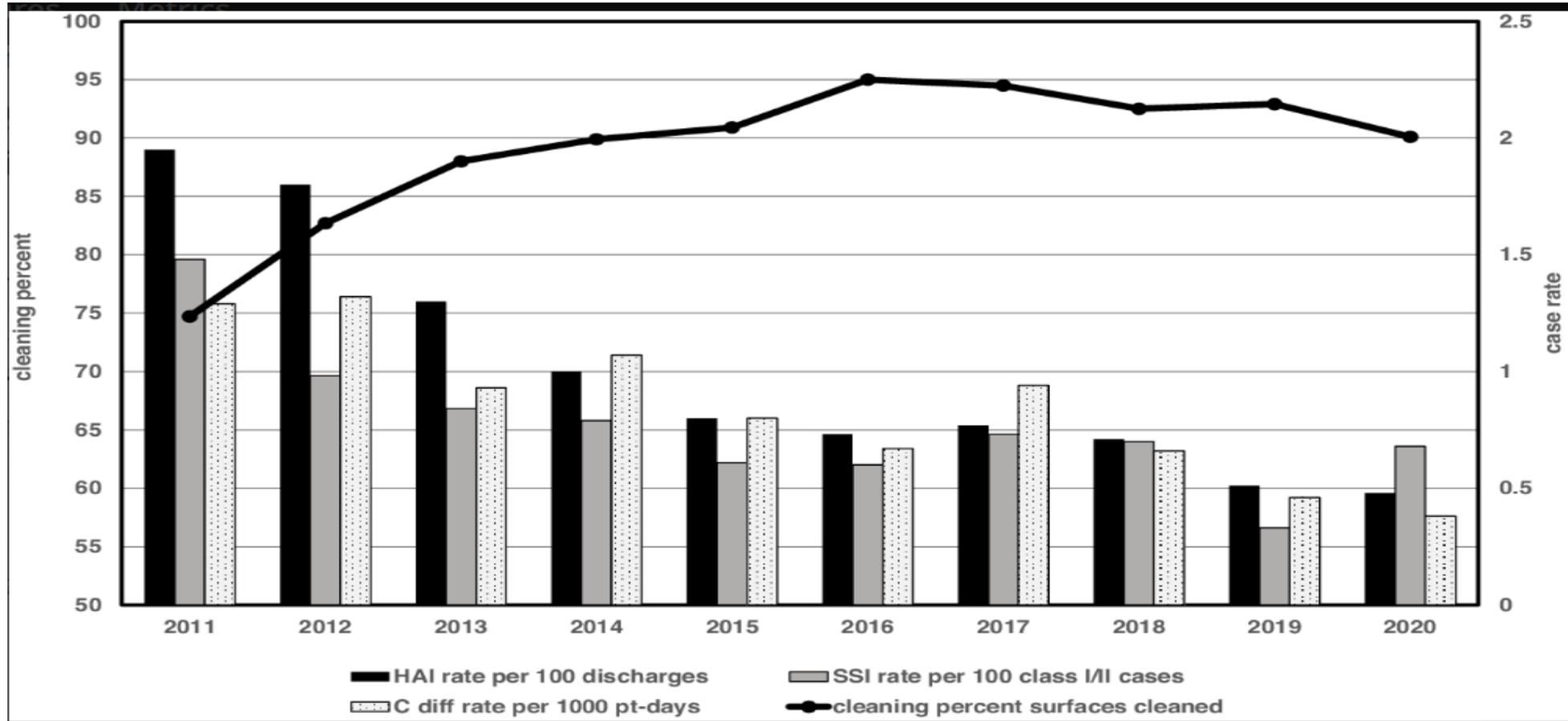
The Chain of Transmission



*Contaminated surfaces can serve as direct source for transmission to a second patient or as an indirect source via contaminated hands of healthcare personnel.

Improved Cleaning Reduced HAIs

The more complete the cleaning is, the lower healthcare-associated infections (HAIs)



<https://www.cambridge.org/core/publications/journals>



The Role of Environment in Disease Transmission

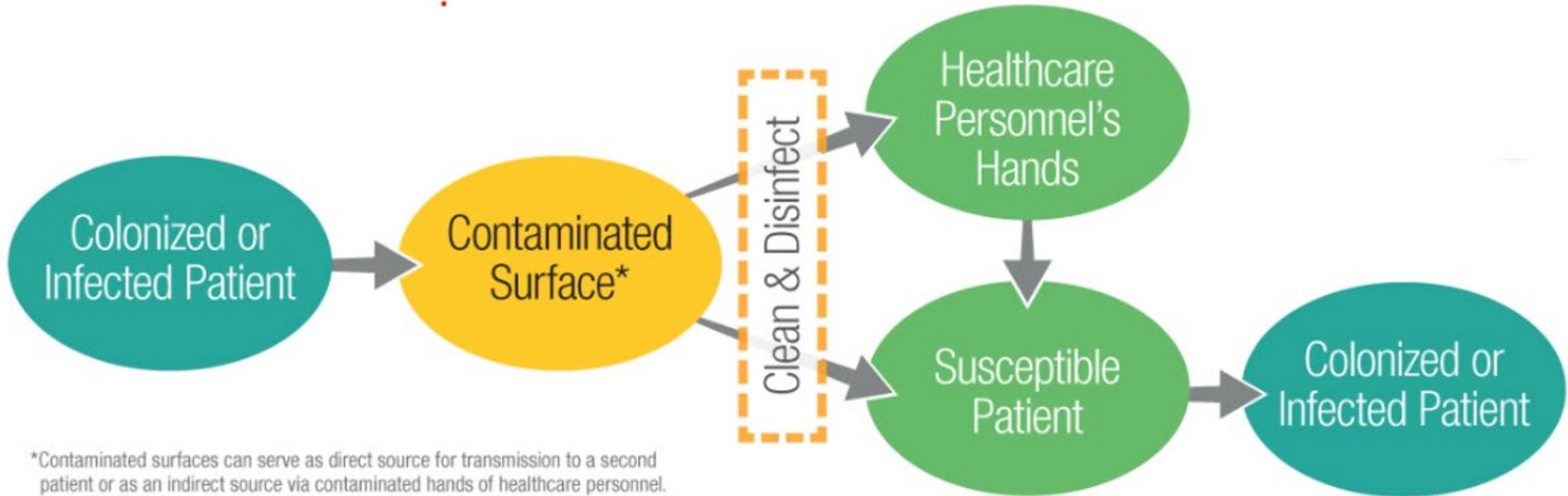
- Admitting to a room previously occupied by an infected resident is a significant risk factor for infection in newly admitted residents to that same room.
 - Example:
 - The risk is almost doubled for *Clostridioides difficile* infection (CDI)
 - The risk is even higher for MDROs, such as *Carbapenem resistant Acinetobacter baumannii*

https://www.idse.net/download/HAI_IDSE13_WM.pdf

<https://link.springer.com/article/10.1007/s11908-018-0620-2>



Breaking the Chain of Transmission



Pathogen Survival in the Environment

Factors influence duration of pathogen survival:

- Temperature
- Humidity
- Type of microbe

Examples:

- *C. diff* spores: Shed in high numbers, resistant to drying out and some disinfectants, and survive on surfaces for months to years
- MDROs: *Candida auris* (fungal pathogen), *Carbapenem-resistant Pseudomonas aeruginosa* (CRPA), etc.
 - Resistant to many antimicrobial medications, and survive on surfaces for a long time



<https://www.sandiegocounty.gov/content/sdc/hhsa/programs/phs/hai-program/ar.html>

<https://journals.asm.org/doi/10.1128/cmi.00021-17>



Reducing Environmental Bioburden

Bioburden = the number of organisms on an object or surface

How to reduce environmental bioburden:

- Perform hand hygiene
- Clean and disinfect high-touch surfaces at least daily – resident and non-resident areas
- Clean and disinfect shared equipment
- Ensure thorough cleaning and disinfection of all rooms
- Improve cleaning and disinfection of rooms after discharge of residents known to carry healthcare-associated pathogens



Hand Hygiene

- Emphasize the importance of hand hygiene for all staff, visitors, and residents in infection prevention
 - Hand hygiene protects not only the staff, but residents, other staff, and visitors as well
- Orient EVS staff thoroughly to infection control principles and practices, including hand hygiene prior to their work in a clinical area



PPE for Cleaning

- **Appropriate use of personal protective equipment (PPE) is critical**
 - Reduce contamination of the healthcare personnel (HCP) and the environment
- **Select correct PPE based on:**
 - Standard Precautions
 - Type of infection prevention precautions assigned to the resident
 - The chemicals to be used to clean the room
 - Refer to the Safety Data Sheet (SDS), directions sheet, and facility policy



Effective Cleaning Strategies



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Terminology

- **Cleaning:** removal of all visible and invisible soil and other foreign material
- **Disinfection:** destruction of nearly all microorganisms on a non-living surface
- **Sterile/Sterilization:** killing of all microorganisms
- **Instructions for use (IFU):** manufacturer's instructions for cleaning, disinfection, and sterilization of their equipment or product.
 - Check for the latest IFU versions
 - Use products listed in the IFU
 - Not following the IFU can cause irreparable damage and void the product warranty



Terminology

- **Wet, contact, or dwell time**
 - Time required for a disinfectant to remain wet on the surface to kill the organisms as claimed by the IFU
 - Follow IFU guidelines for appropriate contact time
 - Contact time varies for different organisms even it's the same product!



Detergents and Disinfectants

- **Detergent**
 - Cleaning agent
 - Contains surfactants or soap; lifts dirt off a surface
 - Does not kill microorganisms, can become easily contaminated
- **Disinfectant**
 - Inhibits growth or kills microorganisms



Know Your Disinfectant

Read the entire label

- Active ingredients
- Directions for use
- Contact time
- Cautions, warnings, danger
- Precautionary statements
- First aid if splash on skin, in eyes
- Storage and disposal

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?

Signal Words (Caution, Warning, Danger): How risky is this disinfectant if it is swallowed, inhaled, or absorbed through the skin?

Precautionary Statements: How do I use this disinfectant safely? Do I need PPE?

First Aid: What should I do if I get the disinfectant in my eyes or mouth, on my skin, or if I breathe it in?

Storage & Disposal: How should the disinfectant be stored? How should I dispose of expired disinfectant? What should I do with the container?

Label Content:

ACTIVE INGREDIENTS:
Alkyl (60% C14, 30% C16, 5% C12, 5% C18)10.0%
Dimethyl Benzyl Ammonium Chloride90.0%
OTHER INGREDIENTS:100.0%
TOTAL:100.0%

EPA REG NO. 55555-55-55555

CAUTION

Directions for Use

INSTRUCTIONS FOR USE:
It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

For Disinfection of Healthcare Organisms:
Staphylococcus aureus,
Pseudomonas aeruginosa.

To Disinfect Hard, Nonporous Surfaces:
Pre-wash surface.
Mop or wipe with disinfectant solution.
Allow solution to stay wet on surface for at least 10 minutes.
Rinse well and air dry.

PRECAUTIONARY STATEMENTS:
Hazardous to humans and domestic animals. Wear gloves and eye protection.

CAUSES MODERATE EYE IRRITATION. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling. Avoid contact with foods.

FIRST AID: IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes.

POISON CONTROL: Call a Poison Control Center (1-866-366-5048) or doctor for treatment advice.

STORAGE AND DISPOSAL: Store this product in a cool, dry area away from direct sunlight and heat. When not in use keep center cap of lid closed to prevent moisture loss. Nonrefillable container. Do not reuse or refill this container.

EXP MM-DD-YYYY
5 55555 55555 5

Logos: CDC, U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, PROJECT FIRSTLINE, EPA, Environmental Protection Agency, WWW.CDC.GOV/PROJECTFIRSTLINE



<https://www.cdc.gov/project-firstline/media/pdfs/HowToReadALabel-Infographic-508.pdf>



Healthcare Associated Infections Program

The EPA Label Claim

- The Environmental Protection Agency (EPA) label claim states if the product is
 - Virucidal
 - Bactericidal
 - Tuberculocidal
 - Fungicidal
 - Sporicidal
- The disinfectant label claim must include the IFU, including wet or contact time required to kill microorganisms.
- EPA Registration Number is required of a product to be considered as a disinfectant



The EPA Label Claim (Continue)

- EPA list P: effective against *Candida auris*
 - Use as a whole-house disinfectant
 - Contact time of 5 minutes or less
 - <https://www.epa.gov/pesticide-registration/epas-registered-antimicrobial-products-effective-against-candida-auris-list>



EPA's Registered Antimicrobial Products Effective Against *Candida auris* [List P]

On this page:

- [Disinfectant Products for Claims Against *Candida auris*](#)
- [Products on EPA's Registered Antimicrobial Products Effective Against *Candida auris* \[List P\]](#)
- [How to Use Products on this List Effectively](#)
- [How to Check if a Product is on EPA's Registered Antimicrobial Products Effective Against *Candida auris* \[List P\]](#)
- [Additional Information](#)

Disinfectant Products for Claims Against *Candida auris*

EPA has reviewed required laboratory testing data demonstrating that these products kill *Candida auris* (*C. auris*).

Products on EPA's Registered Antimicrobial Products Effective Against *Candida auris* [List P]

- [C. auris](#)  is an emerging fungus that may present serious health threat domestically and globally. It is a pathogen of concern due to (but not limited to): it is often multi-drug resistant; it is difficult to identify, and it has caused outbreaks in healthcare settings recently.



How to Check if a product is on EPA's Registered Antimicrobial Products Effective Against *Candida auris* [List P]

- Find the EPA registration number on the product label. Look for "EPA Reg. No." followed by two, as described on the [List Landing Page](#).
- Supplemental distributor products are not included in the lists. For example, if EPA Reg. No. 12345-12 is on the lists, you can buy EPA Reg. No. 12345-12-2567 and know you're getting an equivalent product.
- On the product list, search the registration number exactly as it appears on the label.
- Once you see the results on the product list, make sure to check that the product's label includes directions for use as a disinfectant product against *C. auris* under Use Directions for Sterilization.
 - Regardless of whether you are using a primary registration product or a supplemental distributor product, always check the label has the corresponding directions for use for the relevant pathogen.

Additional Information

- [Disinfectants List General Information](#)
- [CDC - Fungal Diseases - Candida auris Fact Sheet](#) 
- [Overview of Candida auris and Emerging Resistant Candida \(2020\)](#) 

Show entries

[Export to PDF](#)

[Export to CSV](#)

Search:

EPA's Registered Antimicrobial Products Effective Against *Candida auris* [List P]

Registration Number	Active Ingredient	Product Brand Name	Company	Contact Time (minutes)	Formulation Type	Surface Types	Use sites
10324-214	Hydrogen Peroxide and Paracetic Acid	Maguard 5626	Mason Chemical Company	2	Dilutable	Hard Nonporous (HN)	Hospital; Institutional; Residential
1677-226	Hydrogen Peroxide, Paracetic Acid and Octoanoic Acid	Virasept	Ecolab Inc.	4	Ready to Use	Hard Nonporous (HN)	Hospital; Institutional





comunicar el uso de lavado gástrico. Llame a un médico
de control de envenenamiento inmediatamente para obtener
sobre el tratamiento. Cuando llame a un centro de control de
to o a un médico, o intente obtener tratamiento, tenga a la
cose o la etiqueta del producto. Línea de Información de Clorox:
7220. **RIESGOS PARA EL MEDIO AMBIENTE:** Este producto es
ara los peces, invertebrados acuáticos, ostras y camarones.
FÍSICOS O QUÍMICOS: AGENTE OXIDANTE FUERTE: Mezcle
ente con agua de acuerdo con las instrucciones en la etiqueta.
ar este producto con productos químicos (como amoníaco o ácidos)
ateria orgánica (como
a o licor) de una manera
resente a las instrucciones
apetización en la etiqueta
podrán causar la emisión de
gas sulfuroso.

QUESTIONS OR COMMENTS? Please call 1-800-492-9125.
For more product ingredient information, visit
www.smartlabel.org. For SDS information, please visit
www.cloroxpro.com.
**Mfd. for Clorox Professional Products Company,
1221 Broadway, Oakland, CA 94612.**
© 2020 Made in USA of global components. CloroxPro is a
registered trademark of Clorox Professional Products Company.
Clorox is a registered trademark of The Clorox Company.
EPA Reg. No. 67619-32. EPA Est. No. 5813-CA-3 (A8), CA-6 (TPP),
GA-1 (A4), GA-2 (VG), MD-2 (E6), TX-1 (A5); 71681-GA-1 (JQ), IL-2
(24). Beginning of batch code indicates Est. No.
Patents: www.thecloroxcompany.com/patents 196575.1891B

Empty & Replace Cap



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Disposal: Materials should be disposed of immediately in accordance with local regulations for infectious materials disposal.

Special Instructions for Use Against HIV-1, HBV and HCV: This product kills HIV-1, HBV and HCV on pre-cleaned hard, nonporous surfaces/objects previously soiled with blood/body fluids in healthcare settings or other settings in which there is an expected likelihood of soiling of hard, nonporous surfaces/objects with blood or body fluids, and in which the surfaces/objects likely to be soiled with blood or body fluids can be associated with the potential for transmission of Human Immunodeficiency Virus (HIV-1) (associated with AIDS), Human Hepatitis B Virus (HBV) and Human Hepatitis C Virus (HCV).

Special Instructions for Using This Product to Clean and Decontaminate Against HIV-1, HBV and HCV on Surfaces/Objects Soiled with Blood/Body Fluids: Personal Protection: When handling items soiled with blood or body fluids, use disposable impervious gloves, gowns, masks and eye coverings.

Clean and Disinfect Procedure: Blood and other body fluids must be thoroughly cleaned from surfaces and other objects before applying this product. **Contact Time:** Allow surfaces to remain wet for 1 minute. For all other organisms, see directions for contact times. **Disposal of Infectious Materials:** Use disposable impervious gloves, gowns, masks and eye coverings. Blood and other body fluids must be decontaminated and disposed of according to local regulations for infectious waste disposal. This product is not to be used as a terminal sterilant/high level disinfectant on any surface or instrument that (1) is introduced directly into the human body, either into or in contact with the bloodstream, or normally sterile areas of the body, or (2) contacts intact mucous membranes, but which does not ordinarily penetrate the blood barrier or otherwise enter normally sterile areas of the body. This product may be used to pre-clean or decontaminate critical or semi-critical medical devices prior to sterilization or high level disinfection.

QUESTIONS OR COMMENTS? Call (800) 234-7700. For SDS information, please go to www.cloroxhealthcare.com. Para obtener más información acerca de los ingredientes del producto, visite www.smartlabel.org. Company: 1221 Broadway, Oakland, CA 94612. © 2021 Made in USA of global components. Clorox Healthcare Company. EPA Reg. No. 67619-12. EPA Est. No. 8251-OH-1 (Q6), WI-2 (KW), WI-3 (KV), 5813-GA-2 (V6), 666 Patents: www.thecloroxcompany.com/patents/.



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Game on!

Which one of the EPA list P chemicals listed below has the longest contact time for *Candida auris*?

1. **Oxivir Wipes** – EPA Reg. No. 70627-60
2. **DPI Sani-Cloth Bleach Wipes** – EPA Reg. No. 9480-8
3. **DS6835** – EPA Reg. No. 6836-442
4. **Avert Sporocidal Disinfectant Cleaner** – EPA Reg. No. 70627-72



Registration Number	Active Ingredient	Product Brand Name	Company	Contact Time (mins)	Formulation Type	Surface Types	Use Sites
70627-60	Hydrogen Peroxide	Oxivir Wipes	Diversey Inc.	5	Ready to Use/ Wipe	Hard Nonporous (HN)	Hospital; Institutional; Residential
9480-8	Sodium Hypochlorite	PDI Sani-Cloth Bleach Wipes	Professional Disposables International, Inc.	4	Ready to Use/Wipe	Hard Nonporous (HN)	Hospital; Institutional; Residential
6836-442	Hydrogen Peroxide	DS6835	Arxada, LLC	10	Ready to Use	Hard Nonporous (HN)	Hospital; Institutional
70627-72	Sodium Hypochlorite	Avert Sporocidal Disinfectant Cleaner	Diversey Inc.	1		Hard Nonporous (HN)	Hospital; Institutional



Another way to look at an EPA disinfectant

Microsoft Bing

epa reg. no 67619-12



U.S EPA Web Server

<https://iaspub.epa.gov> > apex > pesticides

[Labels for CPPC TSUNAMI \(67619-12\) - US EPA](#)

See EPA's PDF page to learn more. Provided below is the information for the Product/Registration number selected.

[EPA's Registered Antimicrobi...](#)

First, find the EPA registration number on the product label. Look for "EPA Reg. No." ...

[Details for CPPC TSUNAMI - ...](#)

EPA Registration Number: 67619-12

Company Name: CLOROX ...

[US EPA, Pesticide Product La...](#)

Product Name: "CPPC Tsunami" EPA

Registration Number: 67619-12 Received ...

[See results only from iaspub.epa.gov](#)

[EPA's Registered Antimicrobi...](#)

Find the EPA registration number on the product label. Look for "EPA Reg. No." ...

[UNITED STATES ENVIRONM...](#)

EPA Registration Number: 67619-

Application Date: June 12, 2020 Decision ...



U.S. Environmental Protection Agency

<https://www.epa.gov> > pesticide-registration > epas...

[FDA's Registered Antimicrobial Products Effective Against](#)



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Labels

Chemical

Alt. Br

Transfer History

Site

Pes

EPA Reg. No.	Product Name	Accepted Date
67619-12	CPPC TSUNAMI	June 21, 2024 (PDF)
67619-12	CPPC TSUNAMI	February 13, 2024 (PDF)
67619-12	CPPC TSUNAMI	January 31, 2022 (PDF)
67619-12	CPPC TSUNAMI	April 05, 2021 (PDF)
67619-12	CPPC TSUNAMI	September 03, 2020 (PDF)
67619-12	CPPC TSUNAMI	April 16, 2020 (PDF)
67619-12	CPPC TSUNAMI	February 14, 2018 (PDF)
67619-12	CPPC TSUNAMI	March 15, 2017 (PDF)
67619-12	CPPC TSUNAMI	September 07, 2016 (PDF)



OFFICE OF CHEMICAL SAFETY AND POLLUTION P

WASHINGTON, D.C. 20460

June 21, 2024

Hristina Wilkinson
gent
hlorox Professional Products Company
lectronic Transmittal: cwilkinson@srccconsultants.com

Subject: Notification per PRN 98-10 – Updating two marketing cl
Product Name: CPPC Tsunami
EPA Registration Number: **67619-2**
Received Date: 07/14/2023
Action Case Number: 00453639



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Organism Table

Bacteria	Strain and/or ATCC	Contact Time
Acinetobacter baumannii	[ATCC 15308]	30 sec[onds]
Bordetella pertussis	[ATCC 12743]	30 sec[onds]
Campylobacter jejuni	[ATCC 29428]	30 sec[onds]
Carbapenem-resistant Klebsiella pneumoniae [(CRKP)]	[ATCC BAA-1705]	30 sec[onds]
Community Associated Methicillin resistant Staphylococcus aureus [CA-MRSA]	[NARSA NRS123] [Genotype USA400]	30 sec[onds]
Community Associated Methicillin resistant Staphylococcus aureus [CA-MRSA]	[NARSA NRS384] [Genotype USA300]	30 sec[onds]

Klebsiella aerogenes <i>tested as Enterobacter</i>
Enterobacter cloacae
Enterococcus faecalis, vancomycin resistant
Enterococcus faecalis [(VRE)]
Enterococcus hirae
ESBL (Extended Spectrum Beta Lactamase) (ESBL producing E. coli)
ESBL (Extended Spectrum Beta Lactamase) (ESBL producing K. pneumoniae)
Escherichia coli O157:H7
Escherichia coli [(E. coli)]

Spore-forming Bacterium	Strain and/or ATCC	Contact Time
Clostridioides difficile [‡] -or- C. difficile [‡] -or- C. diff [‡] [(C. diff)] spores	[ATCC 43598]	3 min[utes]

Mycobacterium	Strain and/or ATCC	Contact Time
Mycobacterium bovis [(BCG)] (Tuberculosis -or- TB) (22.5°C -or- 72.5°F)		3 min[utes]
Mold, Mildew, Fungi	Strain and/or ATCC	Contact Time
Aspergillus brasiliensis [(mildew)]	[ATCC 16404]	5 min[utes]
Candida albicans	[ATCC 10231]	3 min[utes]
Candida auris [‡]	[CDC AR-0381]	3 min[utes]
Candida glabrata	[ATCC 32312]	3 min[utes]
Trichophyton interdigitale <i>tested as Trichophyton mentagrophytes</i> [(Athlete's Foot Fungus)]	[ATCC 9533]	3 min[utes]
Viruses Enveloped	Strain and/or ATCC	Contact Time
‡Avian Influenza A Virus	[ATCC VR-2072]	1 min[ute]
‡, ††HIV [Human Immunodeficiency Virus] [Type 1]	[Strain HTLV-IIIB]	30 sec[onds]



Don't Swap Out Disinfectants

- Skin disinfectants (like rubbing alcohol), should generally not be used to disinfect equipment or surfaces
 - UNLESS the manufacturer IFU state alcohol must be used
 - Can cause damage to equipment and is flammable
- Healthcare facilities should avoid disinfectants that lack EPA-approval and verified label claims
- Monitoring disinfectant products brought in the facility
 - Cart audit and staff education



The Role of Bleach in Environmental Disinfectant

Bleach comes in concentrated or ready to use forms:

- Ready to use bleach
 - Always follow IFU recommendations
- Concentrated bleach
 - Always follow IFU recommendations
 - Often dilutions is 1:10 dilution of 6% bleach for disinfection - 1 part bleach to 9 parts water
 - 10-minute contact time, expired in 24 hours



The Role of Bleach in Environmental Disinfectant - Continued

- **Bleach may not always be the best option:**
 - Alternatives to bleach are also available
 - Refer to EPA approved listing of *C. difficile* disinfectants – list K
 - <https://www.epa.gov/pesticide-registration/epas-registered-antimicrobial-products-effective-against-clostridioides>
- ***There are conditions that bleach could be preferred:***
 - *C. difficile* spores are difficult to kill, adhere to environmental surfaces and remain for extended periods
 - Norovirus



Understanding Cleaning Best Practices



Resident Room Cleaning Best Practices

- Develop a written step-by-step process
- Ensure **equipment and supplies are clean**
- Ensure **proper use of cleaning and disinfection products**
- Ensure proper **hand hygiene** and use of appropriate **PPE**
- Focus on **high touch surfaces**: bed rails, tray table, call light, etc.
 - See example list in [CDC Environmental Cleaning Toolkit](http://www.cdc.gov/hai/toolkits/Evaluating-Environmental-Cleaning.html) (www.cdc.gov/hai/toolkits/Evaluating-Environmental-Cleaning.html)

<https://www.cambridge.org/core/journals/infection-control-and-hospital-epidemiology/article/multisociety-guidance-for-infection-prevention-and-control-in-nursing-homes/88B28E99CD7FDB3668DDAE9C3D2184A0>



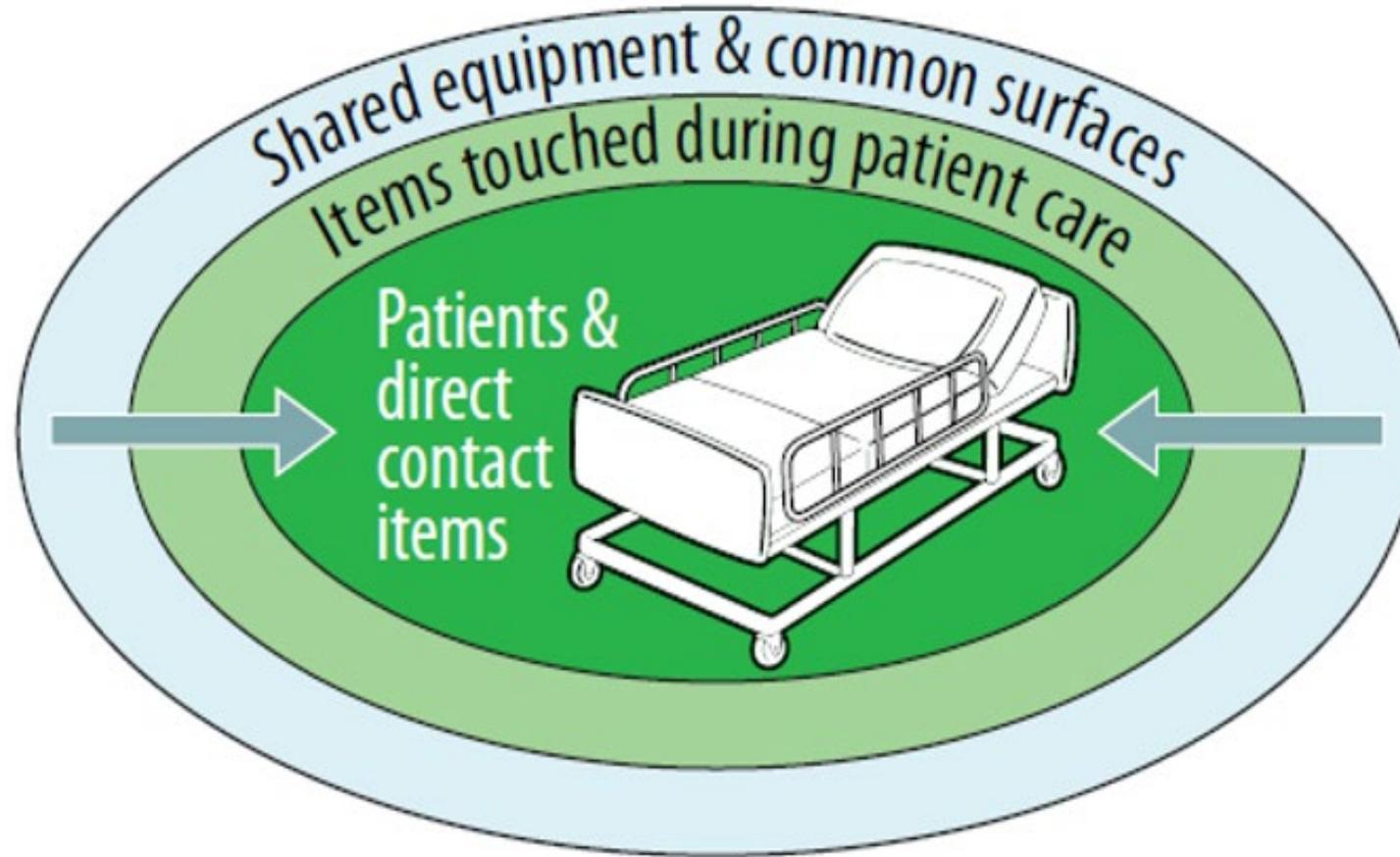
PPE for Cleaning

- Should EVS or housekeeping personnel wear gowns and gloves when cleaning and disinfecting rooms of resident on EBP?
 - Gowns and gloves should be worn by EVS personnel when they involve extensive contact with the resident or the resident's environment
 - Q. 27 - [Frequently Asked Questions \(FAQs\) about Enhanced Barrier Precautions in Nursing Homes | LTCFs | CDC](https://www.cdc.gov/long-term-care-facilities/hcp/prevent-mdro/faqs.html)

<https://www.cdc.gov/long-term-care-facilities/hcp/prevent-mdro/faqs.html>
<https://www.cdph.ca.gov/Programs/CHCQ/LCP/Pages/AFL-24-15.aspx>



Working from Clean to Dirty



Working from Clean to Dirty

Clean the bathroom last!



Resident Room Cleaning Best Practices (Continued)

- Treat each bedspace as a separate space
- Work from high to low, top to bottom
- Change cleaning cloths between areas of the room
- Use microfiber towels soaked in disinfectants
 - Avoid spraying chemicals
- Staff should be encouraged to communicate cleaning issues to their supervisors

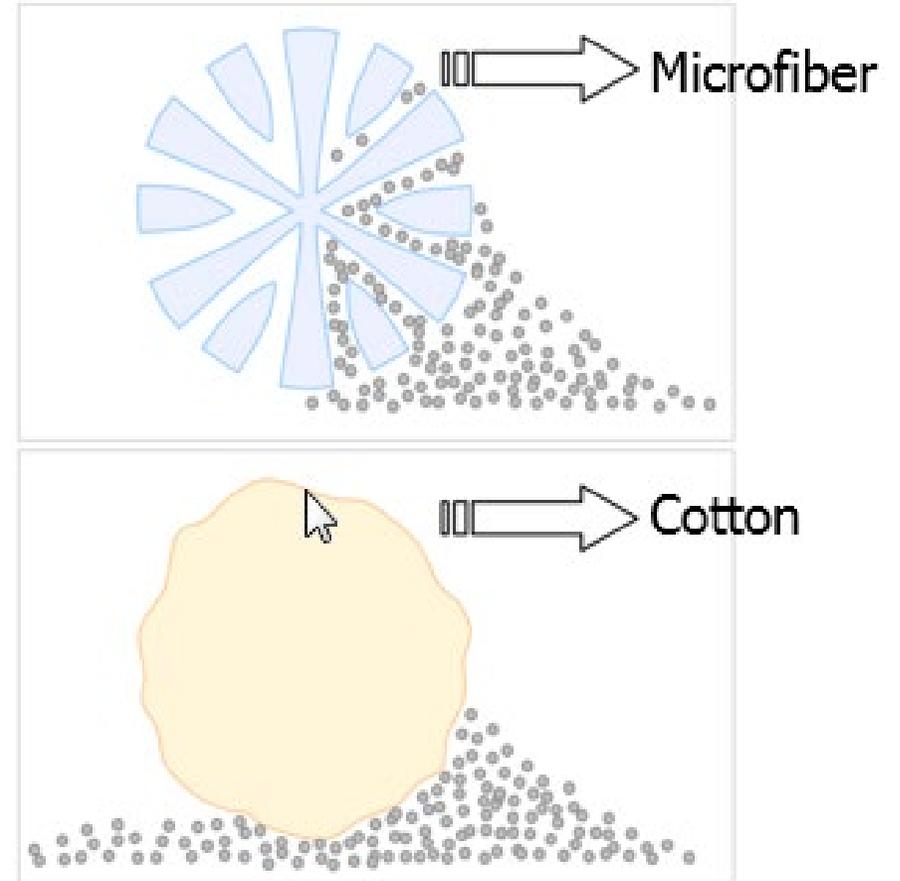
<https://www.cdc.gov/healthcare-associated-infections/hcp/cleaning-global/procedures.html>



Microfiber or Cotton

Microfiber

- Cleans 50% better than comparable cotton
 - Attracts dust
 - Lighter, easier to use
 - Designed for repeat usage
- Microfiber pad mop head is better than string mop head – better ergonomic, reduce time spend changing solution bucket
- Initially more expensive than cotton, but cleaned better, used less water and chemicals, and decreased labor costs.



Linen

- Laundry area: linen sorting process, access to sink with soap and water, and readily available PPE and alcohol-based hand sanitizer
- Standard laundry temperatures
 - Hot water: 160°F x 25 minutes, or
 - Cold water: 71-77°F with chlorine bleach rinse or equivalent detergent
- Laundry detergents are not required to have stated antimicrobial claims
 - Follow manufacturers instructions for use (IFU)

<https://stacks.cdc.gov/view/cdc/134940>
[https://govt.westlaw.com/calregs/Document/IB4B419A95B6111EC9451000D3A7C4BC3?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=\(sc.Default\)](https://govt.westlaw.com/calregs/Document/IB4B419A95B6111EC9451000D3A7C4BC3?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default))



Don't Forget the Bedside Curtains

- Pathogens can survive on polyester, cotton, wool, and other fabrics
- Privacy curtains are considered high-touch surfaces and can become rapidly contaminated especially when used in transmission-based precautions isolation rooms
- Hands can become contaminated after handling curtains
- Bedside and privacy curtains should be laundered monthly at minimum per the CDC and when soiled.

<https://www.cdc.gov/healthcare-associated-infections/hcp/cleaning-global/procedures.html>



Fabrics, Floors, and Carpets

- **Upholstery fabrics and upholstered chairs**
 - Difficult to clean and disinfect
 - Consider reupholstering with wipeable material such as vinyl
- **Non-carpeted floors**
 - Easier to clean than carpeted ones
- **Carpets**
 - Evidence linking carpets to HAI rates is limited
 - Vacuuming and steam cleaning temporarily reduces the number of organisms
 - Difficult to clean with blood/body fluid spills

<https://www.cdc.gov/infection-control/hcp/environmental-control/recommendations.html>



Effective Cleaning and Disinfection Programs - Policy



Considerations for Cleaning Policy

A healthcare facility's cleaning policy should include:

- The surfaces and equipment that can reasonably be expected to be contaminated by bacteria
 - High touch surfaces
- Responsibility and frequency for cleaning and disinfecting resident care equipment and surfaces



Cleaning Responsibility

- **All staff are responsible** for cleaning the environment
 - Environmental services staff
 - Nursing service staff – CNAs, LVNs, RNs
 - Ancillary staff: PT/OT/RT/Speech/dietary staff
 - Facilities/maintenance
- **All staff must be oriented** to proper cleaning methods
 - Safety is a must
 - Accidental slips, needlesticks, and exposure to chemicals are a few of many safety concerns associated with environmental cleaning

<https://ecampusontario.pressbooks.pub/introductiontoipcp/chapter/maintaining-a-healthy-workplace-environment/>



Assess Who Staff Thinks is Responsible



Healthcare-Associated Infections Program Environmental Cleaning and Disinfection – Responsibility Assessment

Who is responsible for cleaning:	Respondent #1 Title:	Respondent #2 Title:	Respondent #3 Title:
ABHR dispenser			
Bathroom			
Bedrail			
Blood pressure machine			
Call button			
Charting area			
Floor			
Floor, with large spill			



Cleaning Responsibility (continued)

- Put individual responsibilities into **policy**
- Assign responsibilities with **checklist**



Who Cleans What Check list



Healthcare-Associated Infections Program Environmental Cleaning and Disinfection – Who Cleans What?

Everyone is responsible for cleaning and disinfection of the healthcare environment. Keep an updated list of *who cleans what* in your policy. Customize the below template to correspond to your facility policy (e.g., add/delete roles in the top row, add/delete items in the left column). Mark the appropriate columns below with an “X” to designate responsibility, and denote frequency of cleaning (e.g., daily) or when to clean (e.g., before use). Revisit the list on a regular basis to ensure accuracy. Keep this list on cleaning carts, etc., for quick reference.

Date Last Verified:

Who is responsible for cleaning/disinfection of:	Housekeeping CNA	LVN	RN	RT	PT/OT	Other
ABHR dispenser						
Bathroom						
Bedrail						
Blood pressure machine						
Call button						
Charting area						
Feeding pump						
Floor						
Floor, with large spill						
Glucometer						
In-room computer/keyboard						
IV pole						
IV pump						
Light switch						
Medication cart						
Oxygen tank						
Patient bed scale						
Patient lift						
Patient linen						
Pill crusher						
PPE container						
Privacy curtains						
Reusable thermometer						
Room door handle/knob						
Room/toilet sink						
Side table						
Tray table						
TV remote						
Ventilator						
Ventilator alarm in hallway						
Vitals machine						
Wound care cart						



Teamwork

Leadership

EVS

IP



Cleaning Times

- Use the **actual staff workload** and the number of hours worked to calculate time available for tasks
 - Input from front line staff is essential
 - Consider room size, amount of equipment, furniture and clutter that need to be cleaned or cleaned around
- **Proper cleaning requires adequate time – CDPH recommends**
 - **Daily** cleaning can take **20-25 minutes** per room
 - **Terminal** cleaning can take **40-45** minutes per room
- IP can be an advocate to promote a fair workload for the EVS staff
 - Disseminate information to all involved staff/leadership

<https://www.infectioncontroltoday.com/view/room-turnover-times-trash-and-dash-approach-jeopardizes-patient-outcomes>



Monitoring Adherence to Infection Control Practices



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How to Know if a Resident Room is Clean

- **Visual observation**
 - Visually monitor the actual process
 - Use a standardized tool to monitor cleaning process for consistency
 - Step by step process as a checklist
 - Provide feedback to HCP
 - Inexpensive
 - Effective
- **Confirmed via technology**
 - Increasingly becoming the community standard
 - **Fluorescence:** environmentally stable marker is visible to UV light if still present after cleaning (“Glo-Germ”)
 - **Adenosine Triphosphate (ATP)** monitoring: measures residual organic matter left on a surface after cleaning



<https://pmc.ncbi.nlm.nih.gov/articles/PMC7126731/>



Methods (continued)

	Visual	Fluorescence
Training benefits	Immediate results about cleaning process	Immediate results with visual cues about cleaning process
Affordability	No monetary investment	Inexpensive materials



Adherence Monitoring

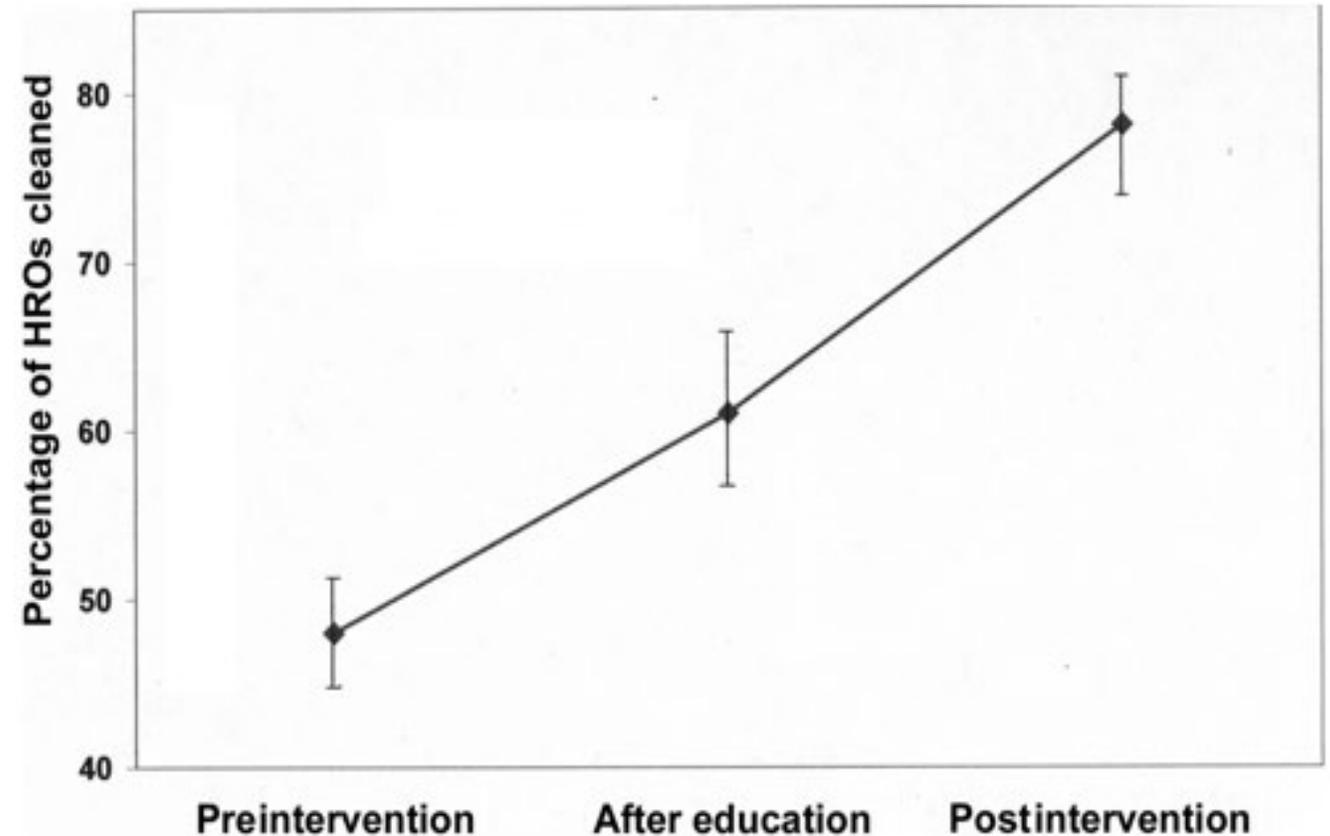
- Use a tool of facility's step by step process and CDPH Fluorescent Marker Adherence Monitoring tool
- Observe staff while cleaning and give feedback as appropriate
- Discuss findings with EVS department supervisors and leadership as appropriate
- Present at committees as appropriate
 - Quality, resident safety, regulatory
 - Infection control committee
 - Internal EVS department
- Share information gathered with staff helps to address infection control gaps and adherence



Monitoring and Feedback Improve Cleaning Performance

In a study of 36 hospitals, mean percentage of high-risk objects cleaned was

- 48% prior to intervention
- 78% after intervention



Adherence Monitoring Tool – Environmental Cleaning



Adherence Monitoring Tool – Environmental Cleaning



Healthcare-Associated Infections Program Adherence Monitoring
Environmental Cleaning and Disinfection

Assessment completed by:
 Date:
 Unit:

Regular monitoring with feedback of results to staff can maintain or improve adherence to environmental cleaning practices. Use this tool to identify gaps and opportunities for improvement. Monitoring may be performed in any type of patient care location.

Instructions: Observe at least two (2) different environmental services (EVS) staff members. Observe each practice and check a box if adherent (“Yes”) or not adherent (“No”). In the right column, record the total number of “Yes” responses for adherent practices observed and the total number of observations (“Yes” + “No”). Calculate adherence percentage in the last row.

Environmental Cleaning Practices	EVS Staff 1	EVS Staff 2	EVS Staff 3	Adherence by Task	
				# Yes	# Observed
ES1. Detergent/disinfectant solution is mixed and stored according to manufacturer’s instructions.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2	3
ES2. Solution remains in wet contact with surfaces according to manufacturer’s instructions.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2	3
ES3. Cleaning process avoids contamination of solutions and cleaning tools; a clean cloth is used in each patient area, and the cloth is changed when visibly soiled.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1	3
ES4. Standard cleaning protocol is followed to avoid cross-contamination (e.g. from top to bottom, patient room to bathroom, and clean to dirty)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1	3
ES5. Environmental Services staff use appropriate personal protective equipment (e.g. Gowns and gloves are used for patients/residents on contact precautions upon entry to the Contact precautions room.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3	3
ES6. Hand hygiene is performed throughout the cleaning process as needed, including before and after glove use.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	0	3
ES7. High-touch surfaces* are thoroughly cleaned and disinfected after each patient. Mark “Yes” if Fluorescent Marker Assessment Tool result is 100%; mark “No” if <100%.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	0	3
ES8. There are no visible tears or damage on environmental surfaces or equipment.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3	3
ES9. The room is clean, dust free, and uncluttered.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3	3
*Examples of high touch surfaces:					
Bed rail	Chair	Room light switch	TV remote	Bathroom door knob/handle	Bathroom sink
Tray table	In-room medical cart	IV pole (“grab area”)	Room inner door knob/handle	Bathroom handrail	Bathroom faucet
Side table	Room sink	Call button	In-room cabinet	Bathroom light switch	Toilet flush handle
Side table handle	Room sink faucet	PPE container	In-room computer/keyboard	Toilet seat	Toilet/bedpan cleaner
# of Correct Practice Observed (“# Yes”):	Total # Environmental Services Observations (“# Observed”):			Adherence	
<u>15</u>	<u>27</u>			<u>55%</u>	
	(Up to 27 Total)			(Total “# Yes” ÷ Total “# Observed” x 100)	
	If practice could not be observed (i.e. cell is blank), do not count in total # Observed.				

(15 ÷ 27) x 100



Adherence Monitoring Tool – Fluorescent Marker



Adherence Monitoring Tool – Fluorescent Marker



Healthcare-Associated Infections Program Adherence Monitoring Fluorescent Marker Assessment Tool

Time Period:

Facility Name:	
Facility ID:	
Assessment completed by:	
Date:	2/7/24

Regular monitoring with feedback of results to staff can maintain or improve adherence to environmental cleaning practices. Use this tool to identify gaps and opportunities for improvement. Monitoring may be performed in any type of patient care location. Use this tool in addition to the Environmental Cleaning and Disinfection adherence monitoring tool.

Instructions: Discreetly place fluorescent marker on multiple high touch surfaces/equipment to be cleaned. Use additional forms as needed.
Note: Apply small amount of fluorescent marker with Q-tip on the surfaces. Do not apply it to porous surfaces and the electrical outlets and switches.
 Check fluorescently marked high touch surfaces for each room below. After the room has been cleaned, use a black light to view marked areas. Circle "Yes" if the fluorescent marker was removed completely and "No" if any amount of fluorescent marker appears under the black light.

		Adherence by Task			
		# Yes	# Marked Areas		
Room #: 204 Bed #: A/B Unit: <input type="checkbox"/> Isolation Room Time marked with fluorescent marker (hh:mm am/pm): 9:46 am Time to return (hh:mm am/pm): 11:14 am					
<input checked="" type="checkbox"/> Room light switch: Y <input checked="" type="radio"/> N <input type="radio"/> <input checked="" type="checkbox"/> Room inner door knob/handle: Y <input checked="" type="radio"/> N <input type="radio"/> <input type="checkbox"/> PPE Container: Y <input type="radio"/> N <input type="radio"/> <input checked="" type="checkbox"/> In-room cabinet: Y <input checked="" type="radio"/> N <input type="radio"/> <input type="checkbox"/> In-room computer/keyboard: Y <input type="radio"/> N <input type="radio"/> <input checked="" type="checkbox"/> Telephone: Y <input checked="" type="radio"/> N <input type="radio"/>	<input type="checkbox"/> Room sink: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> Room sink faucet: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> Chair: Y <input type="radio"/> N <input type="radio"/> <input checked="" type="checkbox"/> Side table: Y <input checked="" type="radio"/> N <input type="radio"/> <input type="checkbox"/> Side table handle: Y <input type="radio"/> N <input type="radio"/> <input checked="" type="checkbox"/> Bed rail: Y <input checked="" type="radio"/> N <input type="radio"/>	<input checked="" type="checkbox"/> Tray table: Y <input checked="" type="radio"/> N <input type="radio"/> <input type="checkbox"/> Tray table handle: Y <input type="radio"/> N <input type="radio"/> <input checked="" type="checkbox"/> Call button/TV Remote: Y <input checked="" type="radio"/> N <input type="radio"/> <input type="checkbox"/> IV pole, not in use: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> Bathroom door knob/handle: Y <input type="radio"/> N <input type="radio"/> <input checked="" type="checkbox"/> Bathroom light switch: Y <input checked="" type="radio"/> N <input type="radio"/>	<input type="checkbox"/> Bathroom handrail: Y <input type="radio"/> N <input type="radio"/> <input checked="" type="checkbox"/> Bathroom sink: Y <input checked="" type="radio"/> N <input type="radio"/> <input checked="" type="checkbox"/> Bathroom faucet: Y <input checked="" type="radio"/> N <input type="radio"/> <input type="checkbox"/> Toilet seat: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> Toilet flush handle: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> Toilet / bedpan cleaner: Y <input type="radio"/> N <input type="radio"/>	1	14
<input type="checkbox"/> Feeding pump: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> IV pump face: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> IV pole, in use: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> Ventilator: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> Vitals machine: Y <input type="radio"/> N <input type="radio"/>					
<input type="checkbox"/> Pill crusher: Y <input type="radio"/> N <input type="radio"/> (hallway or patient room)					
In hallway (assess after patient use): <input type="checkbox"/> Medication cart: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> Wound care cart: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> Patient lift: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> Patient bed scale: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> Portable x-ray machine: Y <input type="radio"/> N <input type="radio"/>					
Room #: Bed #: Unit: <input type="checkbox"/> Isolation Room Time marked with fluorescent marker (hh:mm am/pm): Time to return (hh:mm am/pm):					
<input type="checkbox"/> Room light switch: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> Room inner door knob/handle: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> PPE Container: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> In-room cabinet: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> In-room computer/keyboard: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> Telephone: Y <input type="radio"/> N <input type="radio"/>	<input type="checkbox"/> Room sink: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> Room sink faucet: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> Chair: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> Side table: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> Side table handle: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> Bed rail: Y <input type="radio"/> N <input type="radio"/>	<input type="checkbox"/> Tray table: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> Tray table handle: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> Call button/TV Remote: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> IV pole, not in use: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> Bathroom door knob/handle: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> Bathroom light switch: Y <input type="radio"/> N <input type="radio"/>	<input type="checkbox"/> Bathroom handrail: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> Bathroom sink: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> Bathroom faucet: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> Toilet seat: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> Toilet flush handle: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> Toilet / bedpan cleaner: Y <input type="radio"/> N <input type="radio"/>		
<input type="checkbox"/> Feeding pump: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> IV pump face: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> IV pole, in use: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> Ventilator: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> Vitals machine: Y <input type="radio"/> N <input type="radio"/>					
<input type="checkbox"/> Pill crusher: Y <input type="radio"/> N <input type="radio"/> (hallway or patient room)					
In hallway (assess after patient use): <input type="checkbox"/> Medication cart: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> Wound care cart: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> Patient lift: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> Patient bed scale: Y <input type="radio"/> N <input type="radio"/> <input type="checkbox"/> Portable x-ray machine: Y <input type="radio"/> N <input type="radio"/>					
	# of Correct Practice Observed ("# Yes")	Total # Marked Areas	Adherence (Total "# Yes" ÷ "Total # Marked Areas" x 100)		
EVS	11	14	79		
Clinical Staff	0	0			
Hallway	0	0			
TOTAL	11	14	79		



https://www.cdph.ca.gov/Programs/CHCQ/HAI/CDPH%20Document%20Library/vSNF_AdherenceMonitoring_FluorescentMarker_Fillable.pdf



New Technologies: Whole-room Disinfection

- “Touchless” or non-manual techniques
- Different types:
 - Hydrogen peroxide fogging (dry mist or vapor)
 - Ultraviolet light (continuous emitting or pulsed xenon-UV)
 - Electrostatic sprayer
- Not enough studies to support their use

<https://pmc.ncbi.nlm.nih.gov/articles/PMC9595506/>



Caveats to Whole-room Disinfection Technologies

- Very expensive
- Cannot substitute for
 - Good physical cleaning practices
 - High level compliance to hand hygiene
 - Avoidance of cross-contamination
 - Staff education and competencies
- Require thorough manual cleaning before use
 - May add to room turnover time



CDPH HAI

HEALTHCARE-ASSOCIATED INFECTIONS (HAI) PROGRAM

Environmental Cleaning

Welcome to the California Department of Public Health (CDPH) Healthcare-Associated Infections (HAI) Program environmental cleaning in healthcare facilities web page. The purpose of this page is to answer questions and provide information on maintaining a clean and sanitary environment in healthcare facilities for patients, visitors and staff. Reducing bioburden in the environment decreases potential for transmission of harmful organisms. Information is presented as frequently asked questions (FAQ) with references and links to additional information. The initial content on this page will emphasize the importance of environmental cleaning for stopping the spread of *C. difficile* diarrheal infections (CDI).

Additional content will be added in the coming months. For questions, suggestions, or more information, please email HAIProgram@cdph.ca.gov.



Role of Environmental Surfaces in Disease Transmission



Effective Cleaning Strategies



Monitoring Cleaning



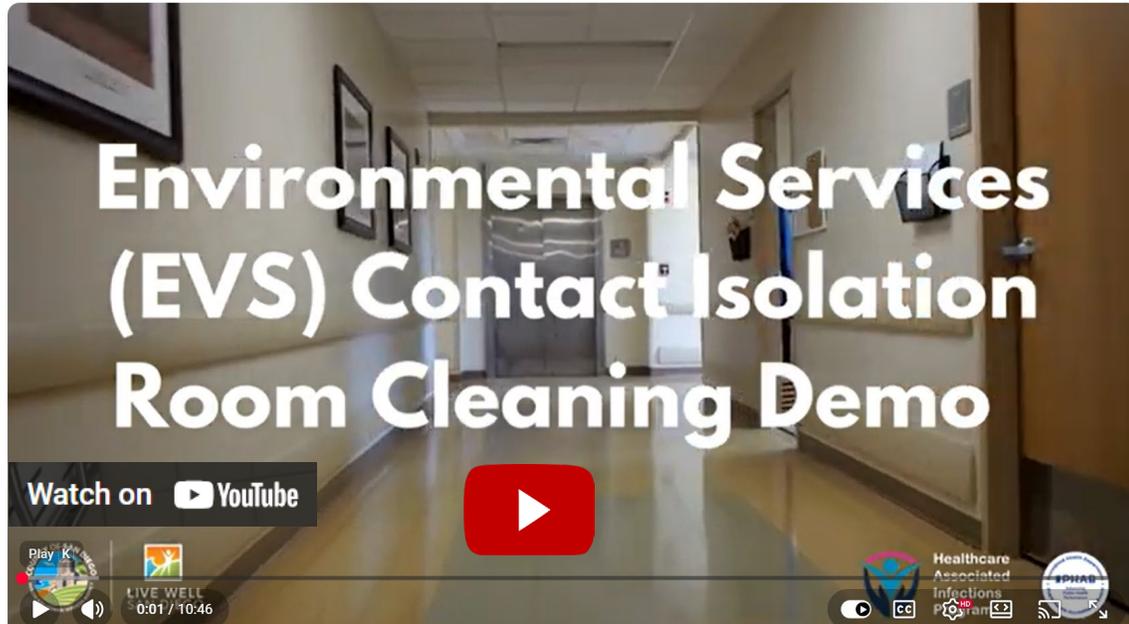
<https://www.cdph.ca.gov/programs/chcq/hai/pages/monitoringadherencetohcpracticesthatpreventinfection.aspx>

<https://www.cdc.gov/healthcare-associated-infections/hcp/cleaning-global/programs.html>



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San Diego County HAI



Environmental Services (EVS) Contact Isolation Room Cleaning Demo



Environmental Services (EVS) Cart Set-Up

<https://www.sandiegocounty.gov/content/sdc/hhsa/programs/phs/hai-program.html>



Reprocessing Reusable Medical Devices



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Spaulding Classification System

Category	Equipment Use	Disinfection Level
Critical	Enters sterile tissue – surgical instruments, vascular access devices, catheters, implants, ultrasound probes, etc.	Sterilization
Semi-critical	Contacts mucous membranes or non-intact skin – GI endoscopes, bronchoscopes, etc.	High-level disinfection
Non-critical	Contacts intact skin - blood pressure cuffs, stethoscopes, EKG monitors and leads, walkers, wheelchairs, bedpans, crutches, etc.	Low-level disinfection

<https://www.cdc.gov/infection-control/hcp/disinfection-sterilization/rational-approach.html>



Sterilization in a SNF

- Outside vendors such as dental, wound care, podiatry clinics, etc. often use sterile instruments. IP should be aware:
 - Sterile instruments stay in original wrap until used
 - **A new, wrapped instrument is used for every resident**
 - Podiatry instruments used on multiple residents can lead to spread of organisms, including MDROs
 - Used instruments are stored in a manner that prevents leaking and are stored separately from new/sterile supplies



Role of Infection Preventionist



Role of Infection Preventionist

Knowledge from IP point of view:

- Education and training of infection control practices in the facility.
- Recommendation of chemicals, supplies and tools used for disinfection and cleaning to reduce cross contamination.
- Disinfection processes that have IPC strategies embedded in them to reduce transmission of diseases in the facility.
- Education for adherence to precaution signs and appropriate use of PPE.
- Workflow of staff when cleaning rooms and facility spaces.



Summary

- A properly cleaned and disinfected care environment is essential to prevent or contain HAIs.
- EVS staff must be competent to ensure infection prevention practices are followed and resident safety is promoted.
- Adherence to policies and procedures for cleaning, disinfection, sterilization, and instrument handling, should be part of a facility's Infection Prevention Program
- Use a standardized tool to monitor environmental cleaning and device reprocessing



Resources

- **Environmental Protection Agency Guide to Registered Disinfectants (Pesticide Registration)** (<https://www.epa.gov/pesticide-registration/selected-epa-registered-disinfectants>)
- **CDC Guideline for Disinfection and Sterilization in Health Care Facilities (Disinfectants Cleaning, Sterilization)** (<https://www.cdc.gov/infectioncontrol/guidelines/disinfection/index.html>)
- **CDC Guidelines for Environmental Infection Control in Healthcare Facilities (Water, Air, Medical Waste, Pet Therapy, Construction)** (<https://www.cdc.gov/infectioncontrol/guidelines/environmental/index.html>)
- **CDC Tool kit: Developing a Water Management Program to Reduce Legionella Growth and Spread in Buildings** (<https://www.cdc.gov/legionella/downloads/toolkit.pdf>)
- **California Waste Management Act 2017** (<https://www.cdph.ca.gov/programs/ceh/drsem/cdph%20document%20library/emb/medicalwaste/medicalwastemanagementact.pdf>)
- **SHEA Expert Guidance - Multisociety guidance for infection prevention and control in nursing homes** (<https://www.cambridge.org/core/journals/infection-control-and-hospital-epidemiology/article/multisociety-guidance-for-infection-prevention-and-control-in-nursing-homes/88B28E99CD7FDB3668DDAE9C3D2184A0>)
- **CDPH HAI Monitoring Adherence to Health Care Practices that Prevent Infection -** (<https://www.cdph.ca.gov/programs/chcq/hai/pages/monitoringadherencetohcpracticesthatpreventinfection.aspx>)



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Questions?

For more information, contact the HAI Program at
phs.hai.hhsa@sdcounty.ca.gov

Thank you!



www.sdhai.org



phs.hai.hhsa@sdcounty.ca.gov



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