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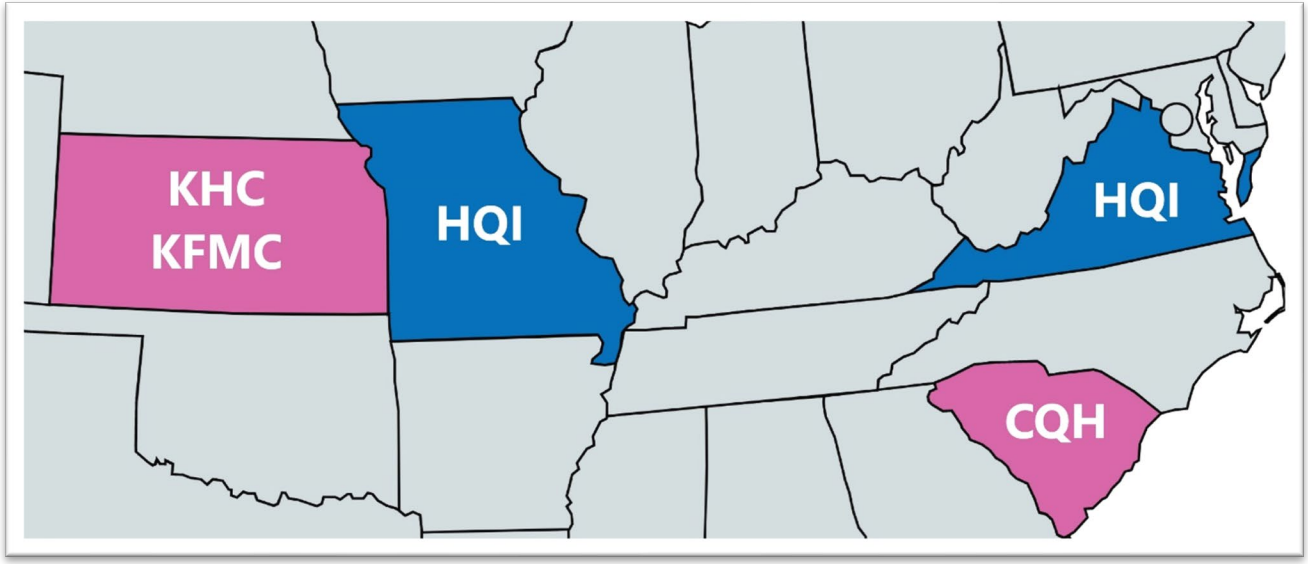

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Logistics – Zoom Meeting

To ask questions, click on the **Chat** icon.

Raise your hand if you want to verbally ask a question.

Resources from today's session will be posted in **Chat**.

You may adjust your audio by clicking the caret next to the **Mute** icon.

Today's Presenters

DeAnn Richards has worked in infection prevention and occupational health for more than 30 years. She is certified in infection control, long-term care infection control, healthcare quality, and patient safety. While she began her healthcare career in long-term care, DeAnn has worked in multiple settings. She has held WI chapter leader positions, is a past APIC membership engagement chair and is an APIC faculty member.

Julie Richards has worked in infection control since 2013. She has been an RN for more than 28 years and holds CIC certification and Fellow designation with APIC. She is a published author and has shared her expertise at local and national events. She has served on the Greater KC APIC Board for more than seven years, including as president in 2020. She has contributed to the National APIC Public Policy Committee and was awarded the APIC Leaders Award in 2019.

Infection Prevention and Control Office Hours

Environmental Services Effective Respiratory Pathogen Cleaning and Disinfection

Presented by: DeAnn Richards, RN, BSN, CIC, LTC-CIP, CPHQ, CPPS

October 23, 2024

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Objectives

- Ensure cleaning and disinfecting core elements are in place to prevent the transmission of respiratory pathogens
- Acknowledge the disinfectant's capabilities and limitations and the impact on the facility's success
- Ask questions of the subject matter experts to clarify individual and facility understanding of best practices

Polling Question

What rule should be followed when cleaning?

A. Top to bottom
B. A systematic, consistent method
C. Clean to dirty
D. All of these
E. None of these

Polling Question

Which item should be revised when determining the best disinfectant?

A. Pathogen wet, dwell, or contact time
B. Method of application (spray, damp cloth, one-step application)
C. Pathogen kill ability
D. All of these

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Association for Professionals in Infection Control and Epidemiology

Pathogen Survival on Environmental Surfaces

Organism	Length of Survival
Clostridioides difficile	> 5 months
Staphylococci	7 months
VRE	4 months
Acinetobacter baumannii	5 months
Norovirus	3 weeks
Escherichia coli	1.5 hours up to 16 months
Klebsiella spp.	2 hours up to > 30 months
SARS, HIV etc.	Days to weeks
Pseudomonas aeruginosa	6 hours to 16 months

COVID-19

- Four to nine days

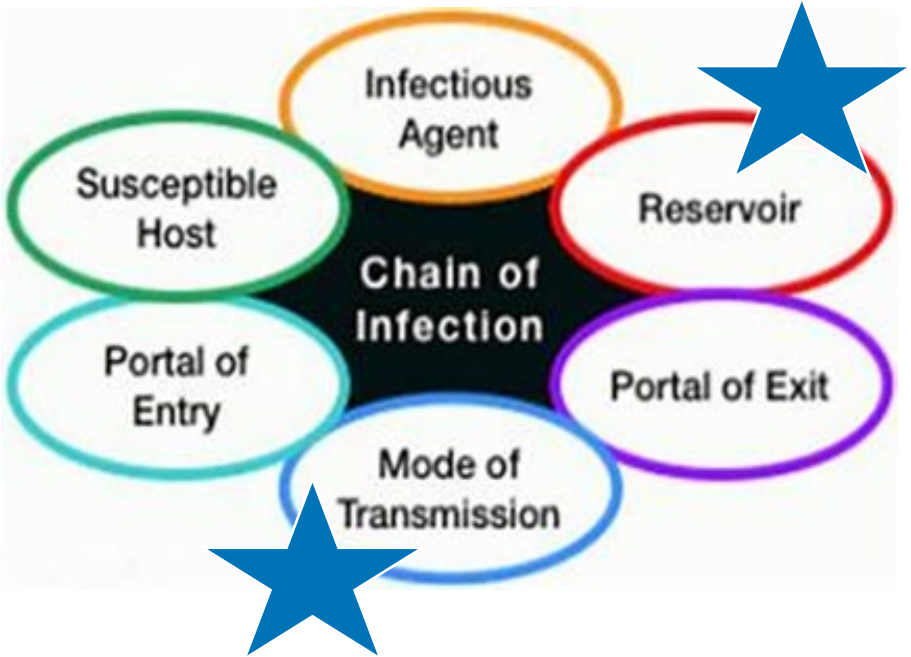
Influenza

- Hours to days

RSV

- Hours

Chain of Infection



- **Cleaning** physically removes
- **Disinfecting** involves a thermal or chemical process to inactivate
- **Sterilization** destroys or eliminates
- **Sanitizing** reduces to a safe level

OSHA and EPA Required Elements

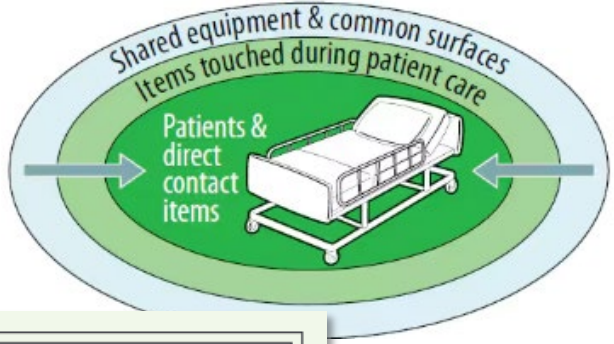
- Written schedules
- Methods
- Surfaces
- Degree of soilage
- EPA-registered hospital disinfectants
- Hazardous chemical inventory
- Safety Data Sheets
- Chemical education
- Personal Protective Equipment (PPE)

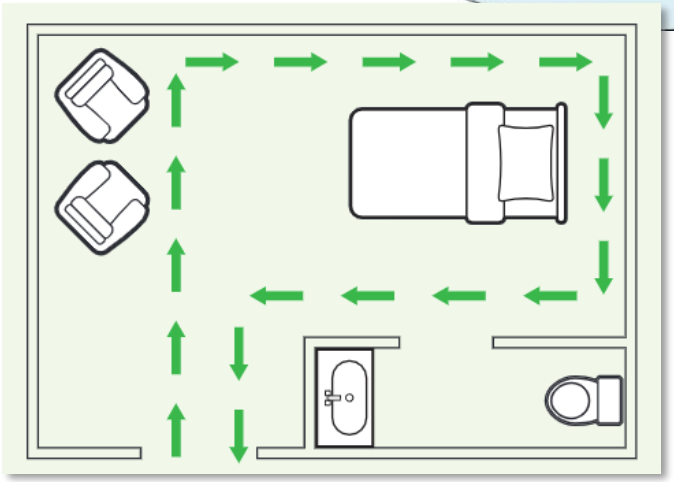
Important Considerations

- Use friction
- Organic matter (e.g., blood and body fluids) will inactivate disinfectants
- Established cleaning schedule
- Clean high-touch surfaces daily and more often as needed during outbreaks
- Per manufacturer instructions for use (IFU)
  - Single or multi-use
  - Type of disinfectant
  - Instructions for cleaning and disinfection
- Stored securely
- Application
- Mixing instructions

Environmental Services Practice

- Least soiled areas to the most soiled (clean to dirty)
- From high to low surfaces
- Systematic manner
- Report all broken items





Best Practice Elements

- Master list of approved cleaning products
- List of approved supplies and equipment
- List of PPE
- Master list of approved products
- Two-step process for C. difficile and spills of blood or bodily fluids

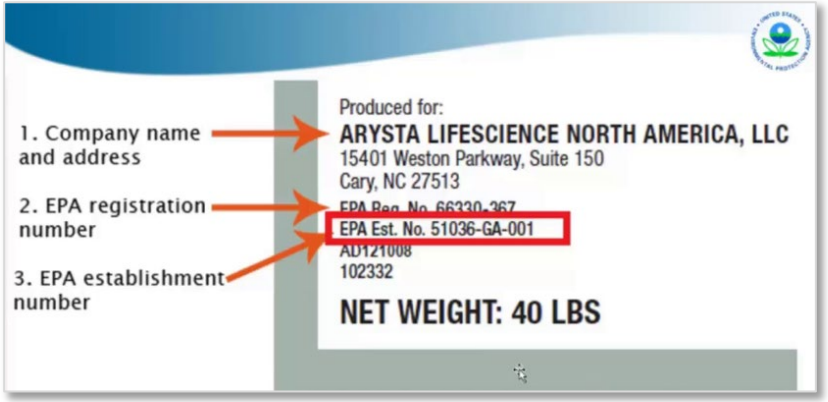
What's in Your Facility?

Collect cleaning agent names and EPA numbers:

- Cleaning cart(s)
- Dirty Utility room(s)
- Mixing closet(s) or station(s)
- Nursing station(s) and cart(s)
- Medication rooms
- Common spaces (e.g., community shower or spa, dining rooms)
- Purchasing

Why the EPA Number?

- Verify if approved
- Type of disinfectant
- Verify if hospital approved
- Verify what surfaces it can be applied to
- Verify what pathogens are killed
- Verify contact time
- What type and which PPE

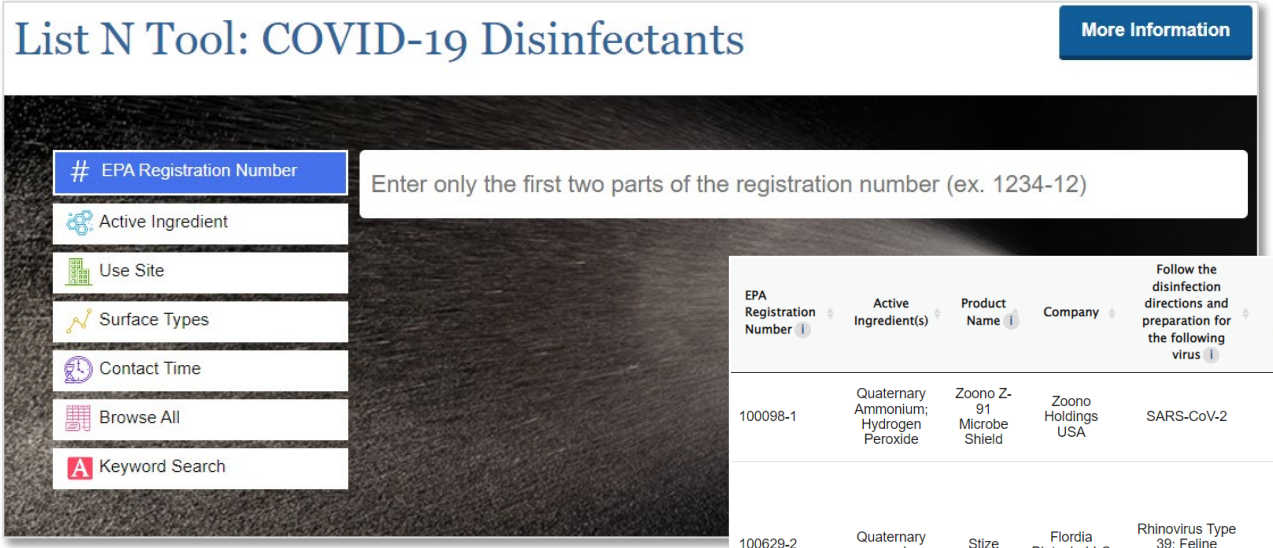


Only need the first two sets of numbers

EPA Claims

- **List A** – Sterilizers
- **List B** – *Mycobacterium tuberculosis*
- **List G** – Norovirus
- **List H** – MRSA /VRE
- **List J** – Medical Waste Treatment
- **List K** – *Clostridium difficile* (Spores)
- **List L** – Ebola
- **List M** – Avian Influenza
- **List N** – SARS-CoV-2/COVID
- **List O** – Rabbit Hemorrhagic Disease Virus
- **List P** – *Candida auris*
- **List Q** – Emerging Viral Pathogens
- **List S** – BBP

List N Tool: COVID-19 Disinfectants



EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Why is this product on List N?
100098-1	Quaternary Ammonium; Hydrogen Peroxide	Zoono Z-91 Microbe Shield	Zoono Holdings USA	SARS-CoV-2	1	Ready-to-use	Hard Nonporous (HN)	Hospital; Institutional, Residential	Tested against SARS-CoV-2 (COVID-19)
100629-2	Quaternary ammonium	Stize	Flordia Biotech, LLC	Rhinovirus Type 39; Feline calicivirus	10	Ready-to-use	Hard Nonporous (HN); Food Contact No Rinse (FCNR)	Healthcare; Institutional; Residential	Kills a harder-to-kill pathogen than SARS-CoV-2 (COVID-19); Emerging viral pathogen claim
100766-1	Citric acid	Dolphin Green	Italkem SRL Unipersonale	Human Coronavirus	10	Ready-to-use	Hard Nonporous (HN)	Institutional	Kills a human coronavirus similar SARS-CoV-2 (COVID-19)

Safety Data Sheet

- **Section 1** – Identification
- **Section 2** – Hazard(s) Identification
- **Section 3** – Composition or Information on Ingredients
- **Section 4** – First Aid Measures
- **Section 5** – Fire-Fighting Measures
- **Section 6** – Accident Release Measures
- **Section 7** – Handling and Storage
- **Section 8** – Exposure Control and Personal Protection
- **Section 9** – Physical and Chemical Properties
- **Section 10** – Stability and Reactivity
- **Section 11** – Toxicological Information

Directions for Use

- RTU or dilution rate
- Application
- Special directions

Review the Entire List and Information Collected

Considerations

- Ease of use
- Effectiveness
- Contact time
- Surface compatibility
- Safety
- Disinfectant type
- Acceptance
- Cost

Remove any products that are not:

- EPA approved
- Hospital approved

Resources

- 6 Steps for Safe & Effective Disinfectant Use | EPA
- Select EPA-Registered Disinfectants | EPA
- List N Tool: COVID-19 Disinfectants | EPA
- List P Tool: Candida auris Disinfectants | EPA
- List H Tool: Methicillin-resistant Staphylococcus aureus (MRSA) or Vancomycin-resistant Enterococcus faecalis/faecium (VRE) | EPA
- List K Tool: Clostridioides difficile (C. diff) Spores | EPA
- List S Tool: Bloodborne Pathogens: Human Immunodeficiency Virus (HIV), Hepatitis B and Hepatitis C | EPA
- Chlorine Disinfectant Solution Preparation | CDC

Resources Continued

- Brief Hazard Communication Standard: Labels and Pictograms | OSHA
- Brief Hazard Communication Standard: Safety Data Sheets | OSHA
- Best Practices for Environmental Cleaning in Healthcare Facilities: in Resource-Limited Settings | CDC
- Cleaning and Disinfection Strategies for Non-Critical Surfaces and Equipment Presentation | CDC
- Disinfection and Sterilization Guideline | CDC
- Environmental Cleaning Procedures | CDC
- Guidelines for Environmental Infection Control in Health-Care Facilities | CDC)
- Infection Control Assessment and Response (ICAR) Environmental Services (Includes Surfaces and Equipment) | CDC

Office Hours Q&A

To ask questions, click on the **Chat** icon.

Raise your hand if you would like to ask a question verbally.

Next Office Hours: October 30, 2024

Teamwork to Address Your Facility's Respiratory Virus Transmission Challenges

Registration link: https://apic.zoom.us/meeting/register/tZIqcu-uqzwqHdSItb7_idpbUHeU1benm_NW

Today's Office Hours Evaluation link:

https://apic.qualtrics.com/jfe/form/SV_eVQ1HskHMrSef8G

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FOR MORE INFORMATION

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