Texas Hospital Association Foundation

NUGGETS OF KNOWLEDGE

Presented by Infection Control Consultants of New Mexico

ICCNM
Infection Control Consultants of New Mexico

Welcome

IC Nuggets of Knowledge Series are monthly one-hour learning sessions using a web-based format to share information, network, and opportunity to address questions and concerns with ICCNM Consultants

When: 1:00 to 2:00 pm

2nd Thursday of the month

If you have feedback on this learning opportunity or have suggestions for future learning opportunities, feel free to reach out to me at any time!

- ncostilla@tha.org

Introductions

- Infection Control Consultants of NM (ICCNM Consulting)
- New Mexico based consulting company
- Consultants are certified in Infection Control (CIC)
- Presenters for this series
  - Kerry Flint, PhD
  - Terri Kangas-Feller
  - Barbara Mooney

- www.iccnm.org

New Tech for EVS

EVS Evolution and Adjunct Processes

Objectives

- Discuss the impact the pandemic has had on EVS departments.
- Describe technologies deployed to support EVS departments.
- Discuss the role of the IP in product selection.

Place your answer in chat

- During the pandemic did your facility introduce new cleaning or disinfection technology or tools?
- If new tools and technology were introduced, how did you learn about it? Were you trained?
- What are some of the challenges that your EVS departments have experienced?

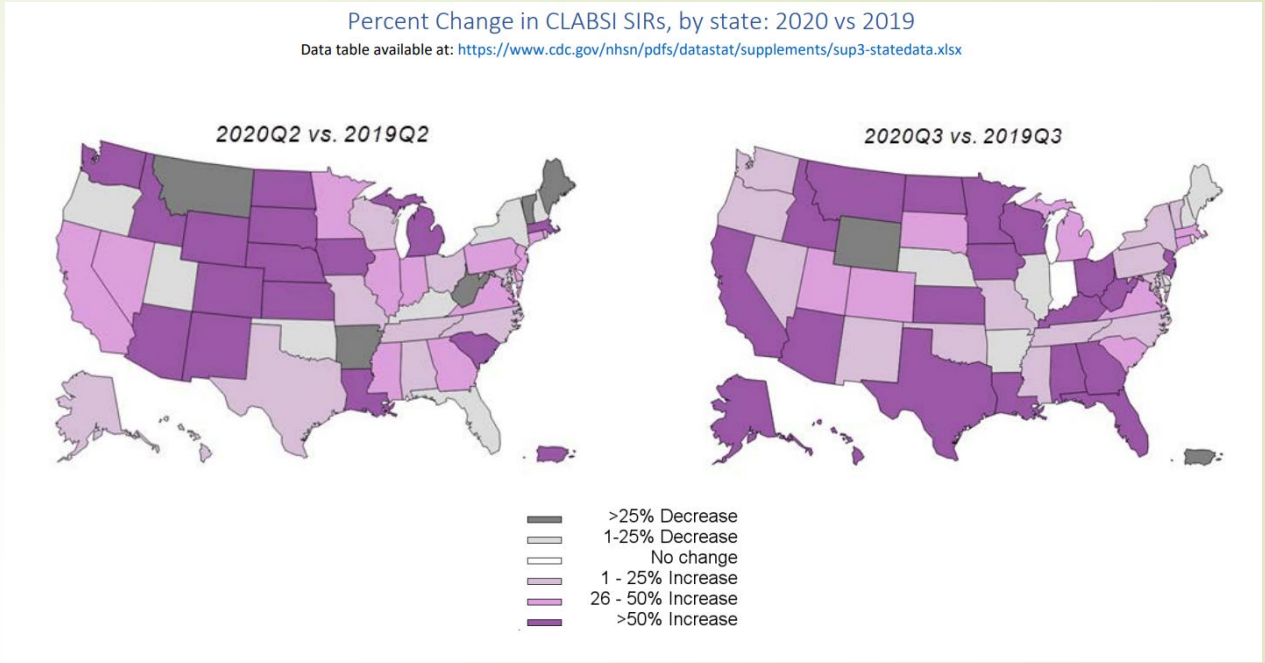
Changes

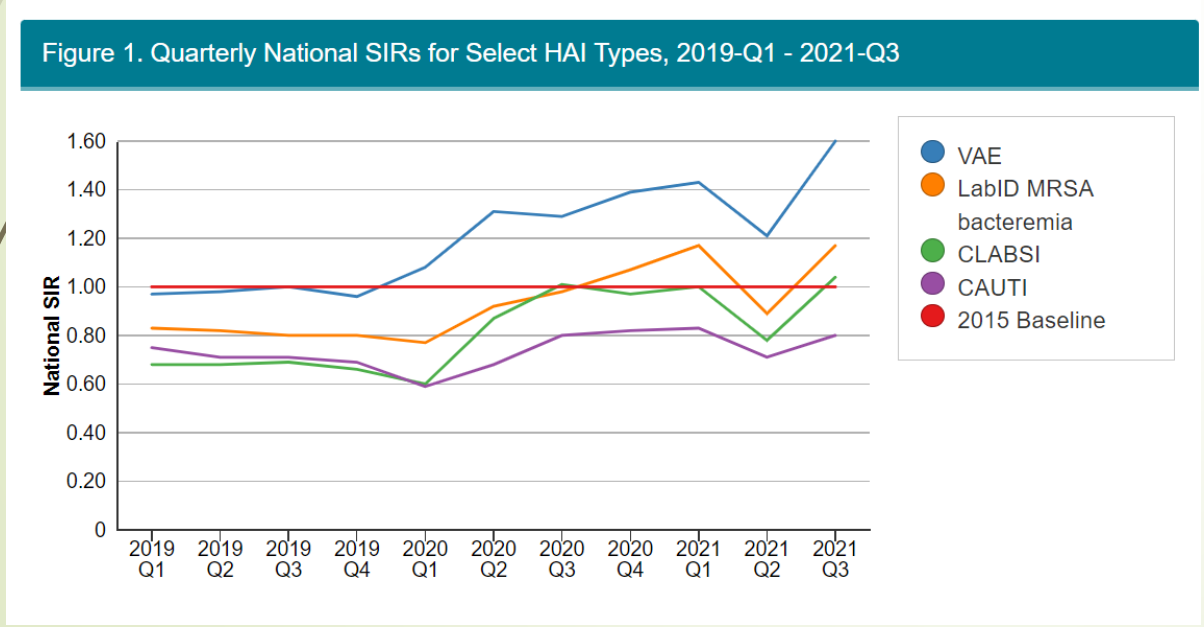
- Increased frequency of cleaning
- New chemicals
- New cleaning devices/tools
- Frequent PPE use
- Fear
- Substituting products
- Mixing chemicals
- More people involved in cleaning?
- Auditing of cleaning increased or decreased?
- Additional training?

How Cleaning and Disinfection Fail

- Cleaning was not performed before disinfection or sterilization
- Wrong product, wrong concentration
- Not cleaning often enough
- Thought it was cleaned previously, but it was not
- Wrong mop, rag, or cloth for the task or solution
- Contaminated product or contaminated cleaning devices
- Process or product not validated
- Expired products
- Products not stored appropriately lose efficacy (Trailers)
- Contamination after cleaning
- Human factors, missed areas
- Focused only on clinical areas
- Patient activities/procedures/behaviors
- Degraded or porous surfaces
- And **CONTACT TIME**

HAI Increased





PPE Reuse
Cleaning
Supplies
Frequency
Staffing

COVID-19 Impact on HAIs | HAI | CDC
https://www.cdc.gov/hai/data/portal/covid-impact-hai.html

Evidence Based Need For New Technology

- Multiple studies indicate only 50% of surfaces that should be cleaned are touched by EVS
- Variability by individual
  - Time spent
  - # wipes used
  - Level of cleanliness (verified by ATP)
- Varied surfaces (bedrails, plastics, textiles, metals)
- Staff turnover, shortages
- Binding of quaternary ammonium disinfectants
- Automated dispensing failures resulting in low concentrations
- Contamination of buckets
- MDRO resistance to disinfection

IP Tools and Practices to Emphasize

- Audits of the cleaning process
- Train ALL staff on basic disinfection
- Cleaning Grid- Who cleans what, when, with what, and how often
- Limiting products choices to those absolutely needed
- Vendor training
- Industry Training for EVS staff
- HEPA filtration on vacuums and extractors

EVS Training and Certifications

The American Society for Health Care Engineering

CDC EVS and the Battle Against Infection Online

American Hospital Association

Cleaning Grid

Facility X Cleaning Grid: Updated _____. (Example)

Area Department	Item	Product used to clean and/or disinfect/ Contact time	Responsible person for cleaning	Frequency of cleaning and disinfection	Method to identify if item is clean or soiled	Manufacturer's recommendations	Comments
Nursing	Medication Cart	Ecolab H202 Spray 45 seconds for COVID. ___ minutes for all other pathogens. Bleach for 10 minutes if C. diff is noted.	Medication Nurse	After each medication pass and as needed	Process		Ensure inside of drawers are cleaned at least weekly and as needed.
Showers	Shower Chairs	Hospital Grade Disinfectant. 5 minute contact time Bleach if C. diff case identified 10 minute contact time	Nurses aid	After each resident. Deep clean monthly	Bag chair after cleaned		Ensure water does not infiltrate seat of chair.
Cafeteria	Tables	Clean first with soap and water to remove debris. Quat. Ammonia food safe cleaner 10 minute contact time	Dietary Staff	Before and after meals and snacks	Process		Remove from service if table is cracked.
Clean Utility Room	Shelving	Hospital Grade Disinfectant. 5 minute	Housekeeping	Quarterly	Process		
	Floors	Virex 256 ___ minutes	Housekeeping	Twice per week	Process		Report broken floor tiles

- Assigns Responsibility
- Identifies items needing cleaning
- Frequency
- Products used
- Contact time
- Status of item

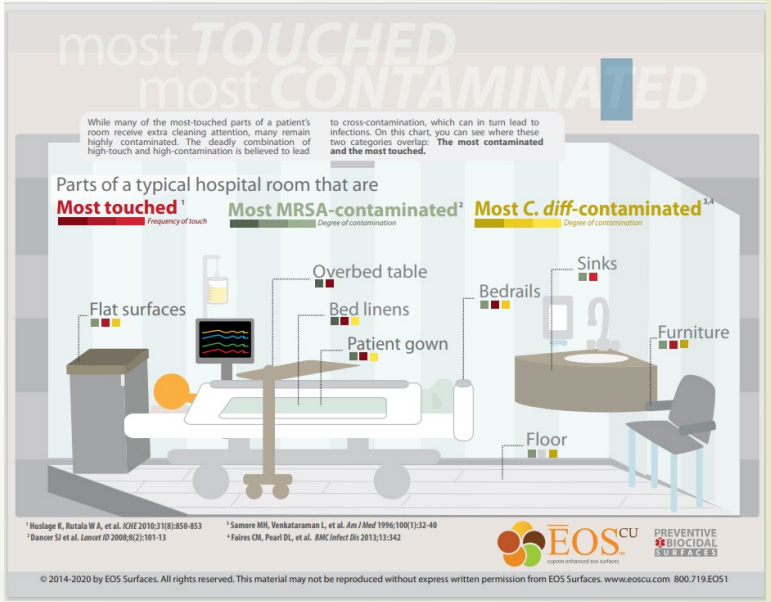
Practices To Retire

- Re-using a broom to sweep
- Rugs in specific areas
- Porous furnishings that are difficult to disinfect
- Dusting with a reusable duster
- Re-using mop water
  - Re-using mops in multiple rooms
- Bleach everything*

IP Role in EVS

- Evaluate EVS audits
  - Spot audits/checks
- Yearly review of processes and chemicals
- Train housekeeping staff about facility specifics, especially if contracted
- Cleaning & disinfection is not just for clinical areas
- Develop relationships with EVS staff.
  - 1/yr. training, new organisms
- Promote continuing education and professional certification for EVS staff to administration.

- What do you believe is the dirtiest or most contaminated area in your facility?



Most Touched and Most Contaminated Surfaces in a Hospital Room [Infographic] (eoscu.com)

Specialty Unit/Area Considerations

- Children's units
- Cancer units
- Psychiatric units
- OT/PT gyms/areas
- Kitchens
- Laundry
- Storage
- Med rooms and Pharmacy
- Dialysis
- Visitation rooms
- Chapels
- Surgery
- Office/conference
- Outdoor areas
- Facilities areas (roofs, boiler rooms)

- Efficacy
- Esthetics
- Odor
- Food surfaces
- Chemical residue
- Damage to infrastructure
- Damage to equipment

How should the cleaning differ in some of these areas?

Old Technologies

Here to stay, with new twists

Cleaning
Not to be Underestimated
Likely Will Not be Replaced

- Many new technologies focus on disinfection
- Cleaning of surfaces remains a critical step
- “active scrubbing” versus wipe as a swipe
- Water quality, hardness and pH
- Temperature

Environmental Cleaning in Resource-Limited Settings

Print

Best Practices for Environmental Cleaning in Healthcare Facilities: in RLS

Best Practices Translations

Version Français [PDF – 104 pages]

Versión en Español [PDF – 104 pages]

Versão Portuguesa [PDF – 104 pages]

Environmental Cleaning Best Practices

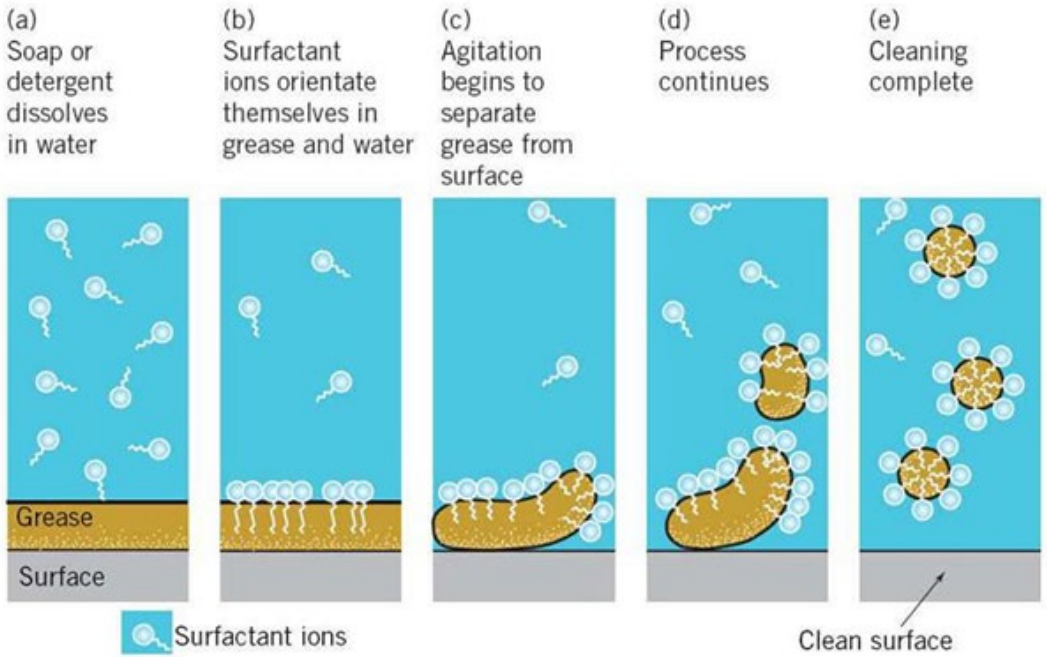
This document provides guidance on best practices for environmental cleaning procedures and programs in healthcare facilities in resource-limited settings. It was developed as a collaboration between the Centers for Disease Control and Prevention (CDC) and the Infection Control Africa Network (ICAN).

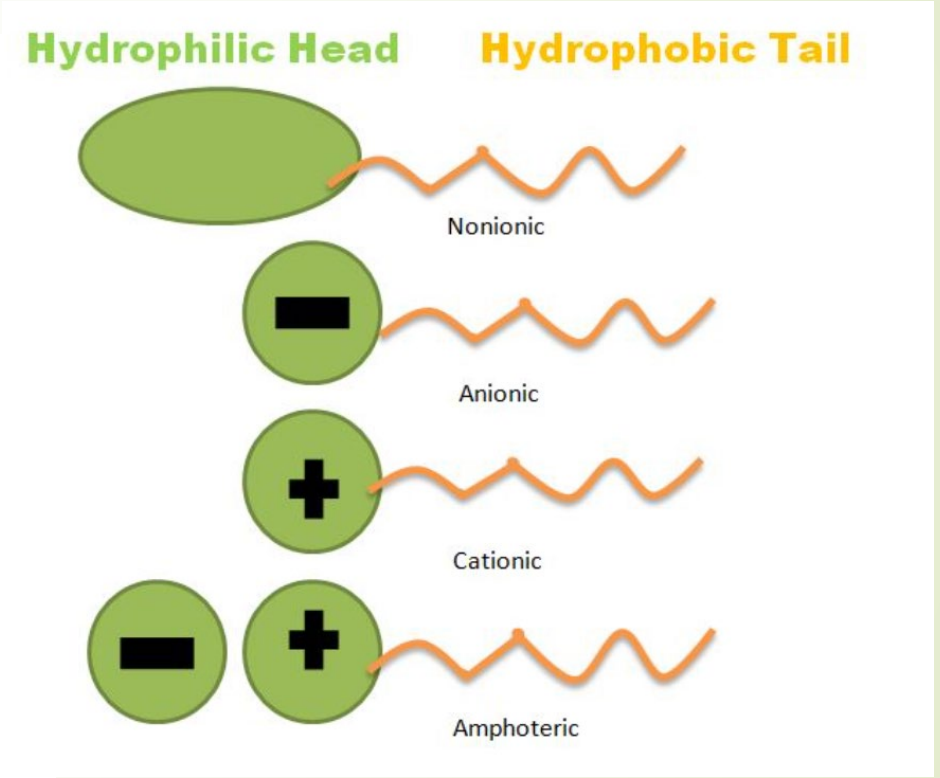
Implementation Toolkit

Environmental Cleaning Best Practices Sections

Environmental Cleaning Supplies and Equipment | Environmental Cleaning in RLS | HAI | CDC

Soaps, Detergents, Surfactants





Vacuums, Floor Washers and Extractors

- HEPA filtration
- Cleaning the bottom of the cleaning equipment
- Dry Times
- Cleaning wet tanks – mold
- Handing filter bags -containment
- Cordless floor equipment –

Cleaning Textile Considerations

Microfiber

- Vary in quality
- Different fiber materials
  - Some damaged by heat and chemicals
  - Some absorb the disinfecting properties (Quat)
- Laundering requirements
- Bleach may damage (or check MIFU)

Cotton

- Heavy
- Does not "grab" microbes as effectively
- Can be bleached regularly
- Lower cost

Disposable

- No cleaning required
- Not reusable
- "clean" at each start
- Cloths ability to grab microbes varies
- Some cloths spread contamination
- Environmental Impacts

Location and Organisms

- Isolation Rooms
- High Risk Units
- Different colors/textiles

New Technology To The Rescue

- New liquid disinfectants
- New application methods
- Self-disinfecting surfaces
- Light-activated photosensitizers
- No-touch automated technologies

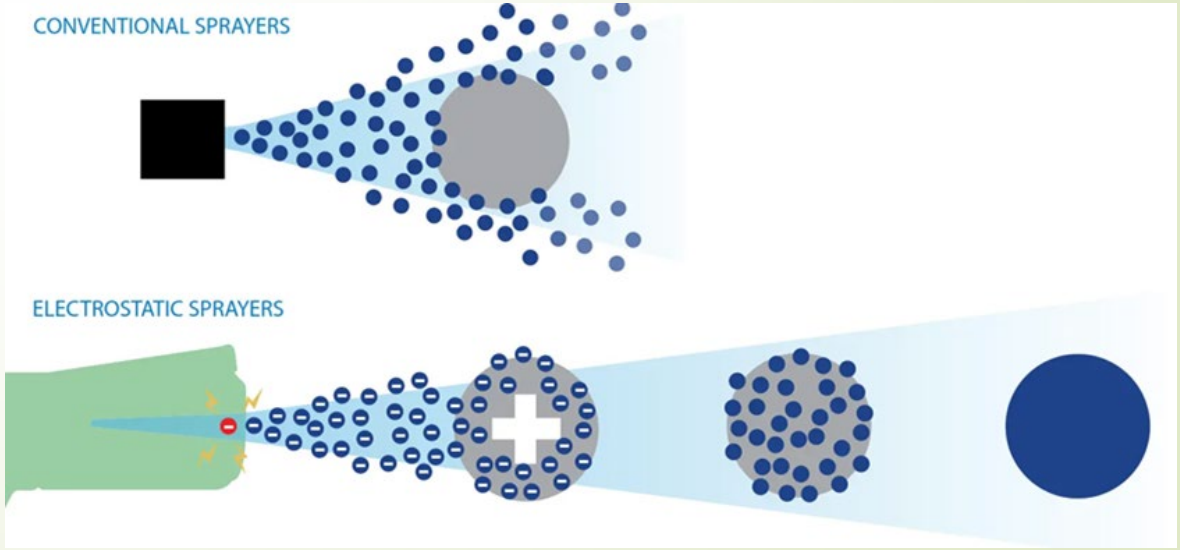
Liquid Disinfectants

Hypochlorous Acid in Water- not so new

- Hypochlorous acid HOCl
- Electrolyzed salt
- Not corrosive
- Has a shelf life
- Best when generated fresh (equipment needed)
- Food safe
- Longer contact times for some organisms
- PPE “not needed”
- Skin and wound care applications

Electrostatic Sprayer Theory

- Imparts an electrical charge to the droplets
- Improves deposition of the droplets, "increased coverage"
- Rapid coverage of contaminated surfaces



Electrostatic Spraying Concerns and Unknowns

- Neither recommended or not recommended by CDC
- PPE needed
- Not for all disinfectants
- Unoccupied rooms
- Food considerations
- OSHA training requirement
- Residue
- HVAC currents affect deposition
- Size of droplet
  - Small drops may not achieve contact time
- Electrostatic charge strength (wrap around ability)
- Aerosolized product as a respiratory irritant or health danger
- Disinfectant volatilized
- Disinfectant evaporation
- Incorrectly viewed as a replacement for cleaning and disinfection

No Touch Technology

No Touch Disinfection

UV

Fogs, vapor, Aerosols

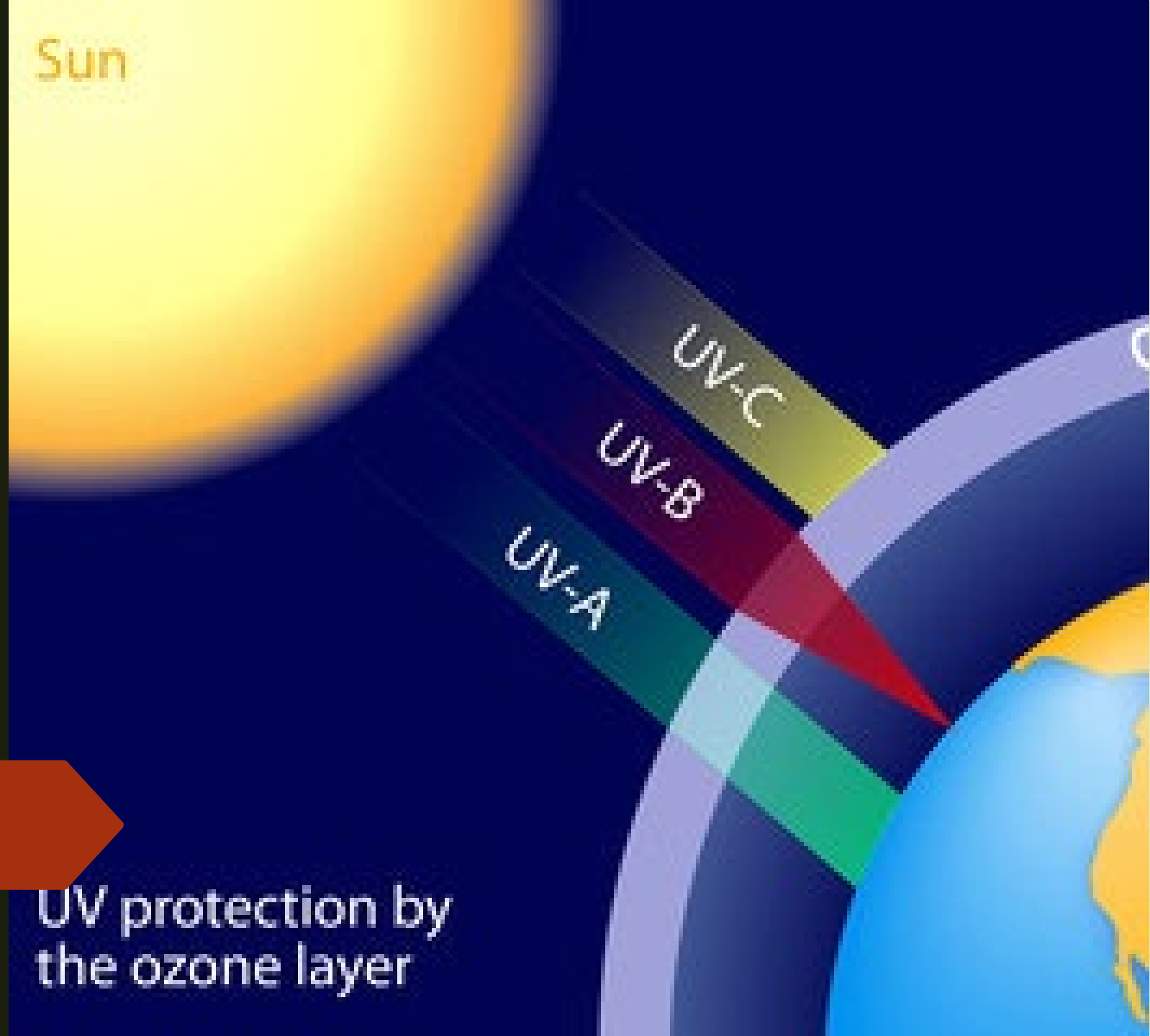
No Touch Technologies

- How many of you are seeing this used in your facility?
- Which types?

Place answer In chat, or come off mute

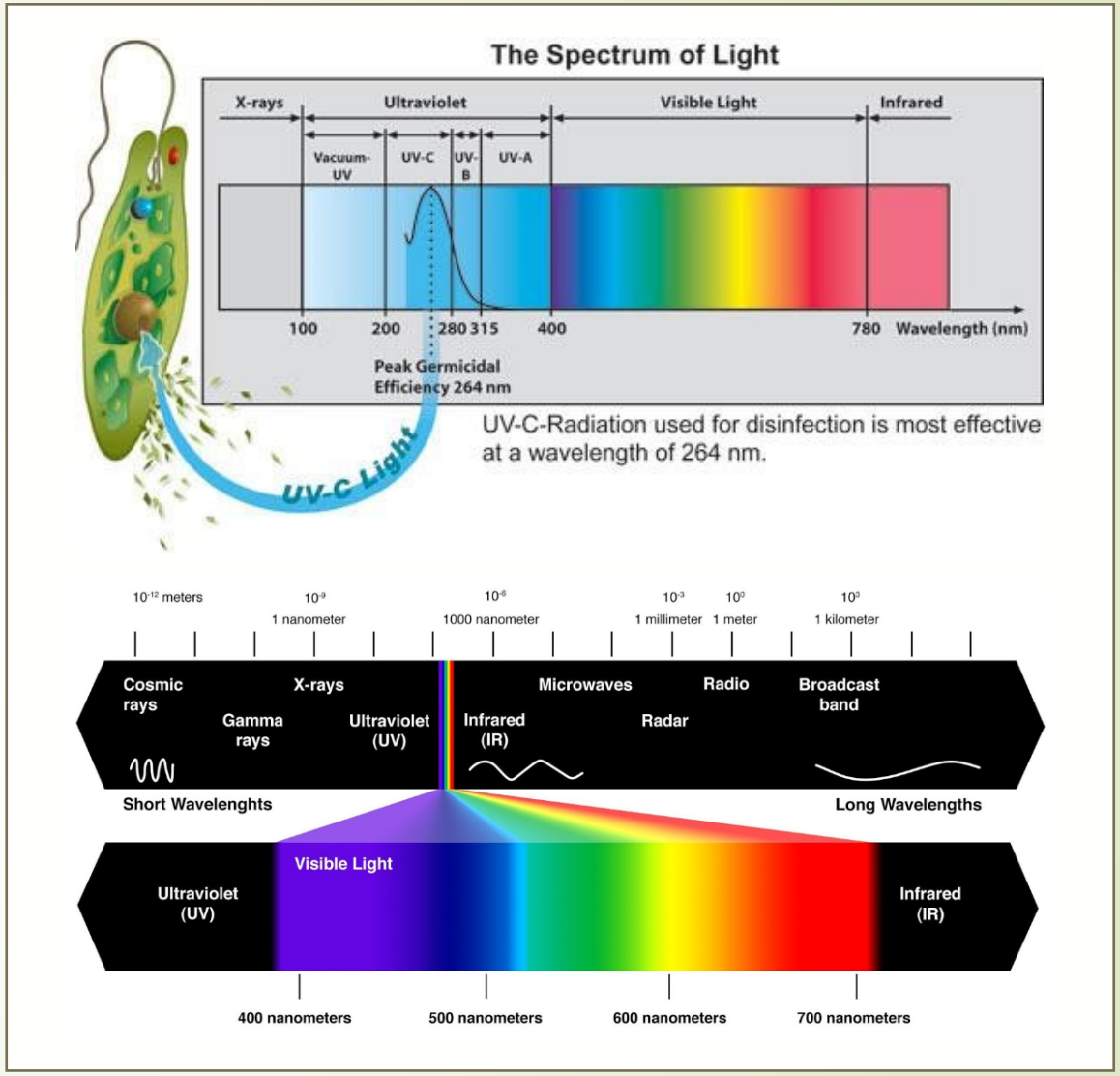
Ultraviolet Light

Short wavelength nonvisible light



Radiation 101

- UVA 315-400nm
  - Damages skin, penetrates atmosphere
- UVB 280-315 nm
  - Sunburn, breaks through the atmosphere when the sun is closer
- **UVC** 100-280nm
  - Does not normally enter earth's atmosphere
  - More intense than A or B
    - Old tanning beds, lasers, welding torches



Ultraviolet Germicidal Irradiation

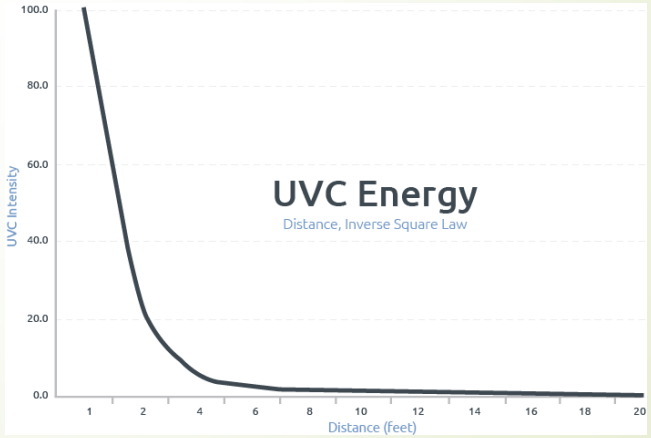
- UVGI
- UVC
- Disrupts the bonds of DNA, stops replication
- "Upper Room" UVGI
  - Useful in areas without adequate air exchange
  - 8.5 feet tall ceiling recommended
  - Areas where maintaining 6 feet is difficult
  - $2000 for 500 sq. ft.
  - Used since 1950s (TB)

UV Considerations

- Efficacy
  - Intensity
  - Distance
  - Time
  - Shadow areas
  - Bioburden
- Relative humidity, volumetric airflow and direction, and concentration of other airborne particulates
- Rooms unoccupied
- Manufacturers instructions
- Xenon Pulse

UV dose = UV intensity ÷ Exposure time

Intensity wanes as distance increases



The Science ▸ Daylight Medical | Innovative Healthcare Solutions

UV Concerns

- Photokeratitis
- Severe burns
- Mutations with UVC limited due to effectiveness
- Bulbs contain metals-Mercury
- Ozone production with some
- Degrades certain materials, plastic, textiles, polymers
- Electronic equipment, not a medical device

Chemical Systems

Gases, Vapors, Aerosols

No Touch Systems

- Hydrogen peroxide vapor
  - H2O2 and Ag
- Ozone
  - Reverts back to O2
  - Lung toxicity
  - Distance
- Chlorine dioxide
  - Safety concerns
  - Explosive
  - Less corrosive to stainless steel
  - Biproducts
- Quats
  - Contact time

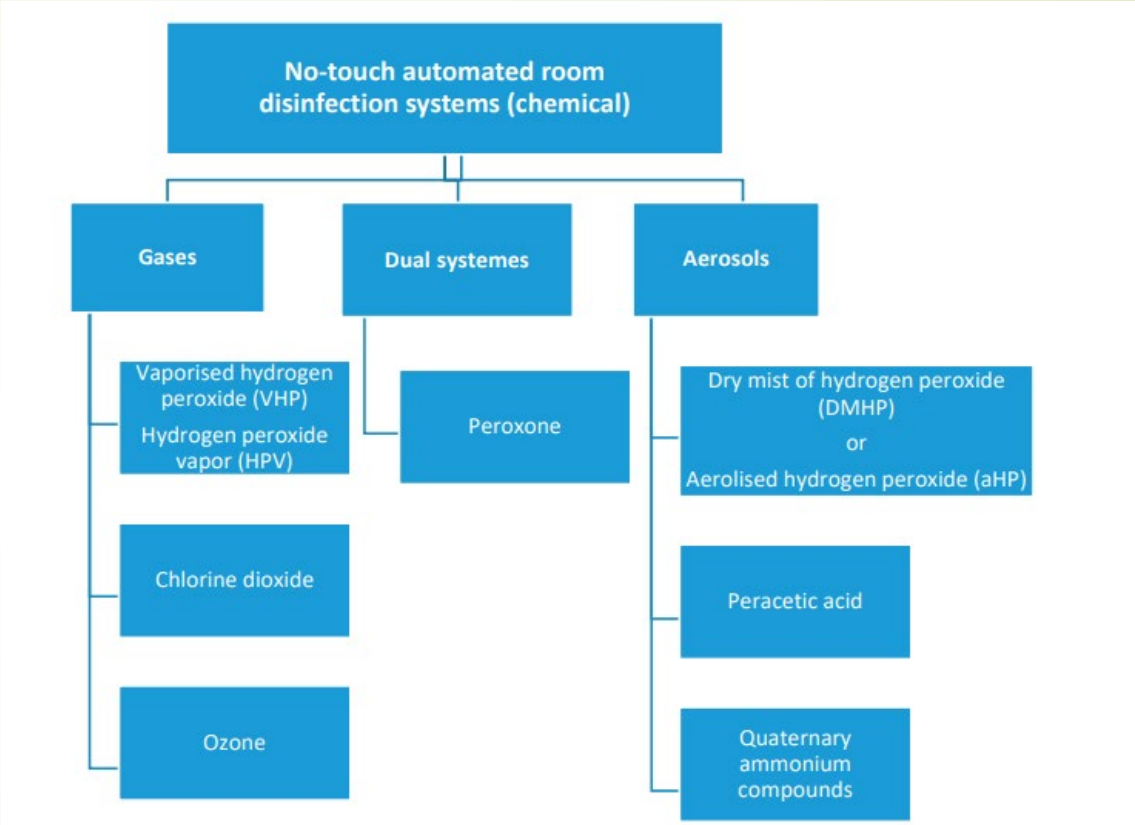


Figure 1. Chemical no-touch room disinfection systems.

Tarka, P., & Nitsch-Osuch, A. (2020).

Fogger

- Mister, device that uses a fan and a liquid solutions to create aerosols, or small droplets

Electrostatic Sprayer

- Applies an electrical charge to the aerosol, small droplet

Vaporizer

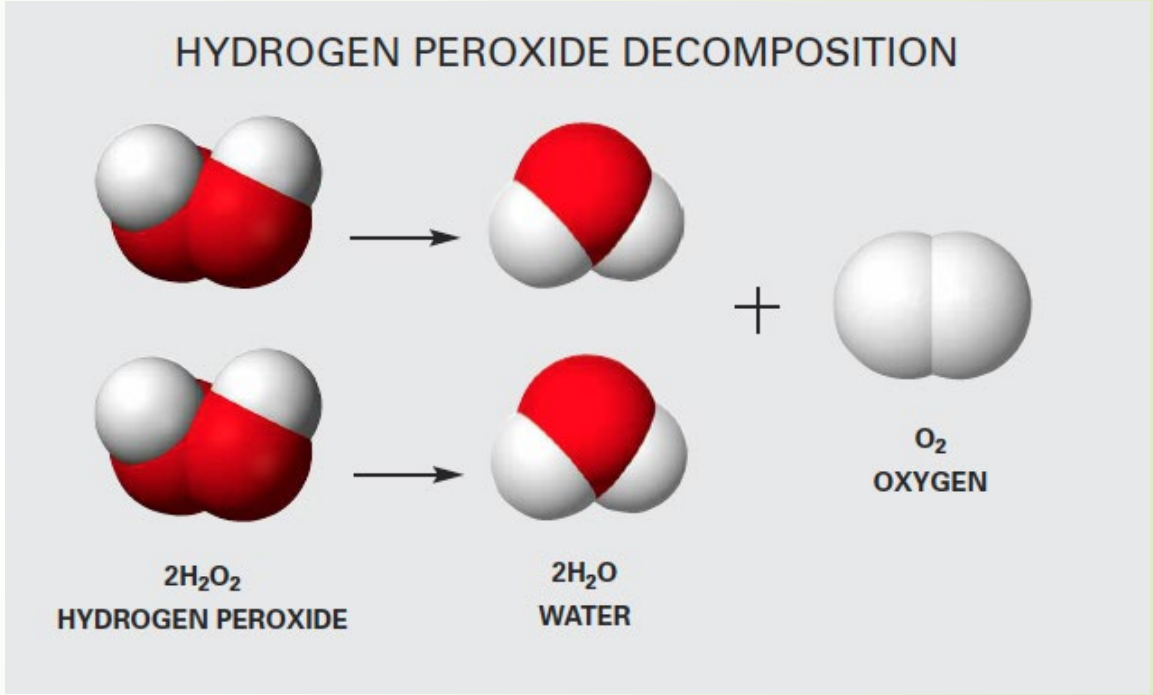
- Gaseous state of the chemical

Gas, Vapor, Aerosols, Fog, Fumigate

- Chemical exposure
- Shadow areas
- Surface might impact efficacy
- Pathogen susceptibility
- Water chemistry interferences(hard water, pH)
- Relative humidity
- Chemical stability or availability
- Robotic mapping
- Heavy
- Storage
- Training needed

Hydrogen Peroxide

- H2O2
- Oxidizer
- Breaks cell membrane
- Colorless
- Nearly odorless if diluted
- By products mainly water and oxygen
- 6m-3year shelf life for dilute H2O2
- Eye, nose and respiratory irritant
- Can not be in the room (Industrial vapor respirator) N95 is NOT effective
- Monitor vapor levels before re-entry
- 2-8 hours cycle time



Limitations & Benefits

Organisms' resistance to the actual chemical used

Evidence of reduced HAIs

Studies continue to validate benefits and investigate potential health concerns

TABLE 32.1 Classification of microorganism resistance and identification of microorganisms for which gaseous hydrogen peroxide efficacy has been demonstrated

Spaulding Classification		Efficacy Demonstrated With Gaseous Hydrogen Peroxide
	Prions	Scrapie 263K strain,15 bovine spongiform encephalopathy (BSE) 6PB1 strain15
More Resistant	Bacterial spores	*Bacillus anthracis*,16,17,18 *Bacillus atrophaeus* (formerly *Bacillus subtilis*),16,18,19,20,21,22 *Bacillus cereus*,19,20 *Bacillus circulans*,19 *Bacillus firmus*,21 *Bacillus megaterium*,21 *Bacillus pumilus*,20,21 *Bacillus thuringiensis*,18 *Clostridium botulinum*,23 *Clostridium difficile*,20,24,25,26 *Clostridium perfringens*,20 *Clostridium sporogenes*,22 *Clostridium tetani*,20 *Geobacillus stearothermophilus* (formerly *Bacillus stearothermophilus*)16,18,19,20,25,26,27,28
	Mycobacteria	*Mycobacterium avium*,29 *Mycobacterium bovis*,20 *Mycobacterium chelonae*,20 *Mycobacterium smegmatis*,22 *Mycobacterium terrae*,29 *Mycobacterium tuberculosis*,20,30,31 *Mycobacterium fortuitum*32
	Small nonenveloped viruses	*Caliciviridae* (feline calicivirus, *Murine norovirus*, vesicular exanthema of swine virus),33,34,35,36,37 *Flaviviridae* (hog cholera virus),34 *Paramyxoviridae* (Newcastle disease virus),34 *Parvoviridae* (mouse and porcine parvovirus),33,38 *Picornaviridae* (polio type 1, footand-mouth disease virus, swine vesicular virus),20,33,34 *Reoviridae* (bluetongue virus),34 *Rhabdoviridae* (vesicular stomatitis virus)34
	Gram-negative bacteria	*Acinetobacter baumannii*,25,26,28,39,40 *Acinetobacter calcoaceticus*,20 *Bacteroides fragilis*,20 *Brucella suis*,41,42 *Burkholderia cepacia*,26 *Burkholderia mallei*,43 *Burkholderia pseudomallei*,41 *Enterobacter cloacae*,40 *Escherichia coli*,20,22,26 *Francisella tularensis*,41,42 *Klebsiella pneumoniae* (*Legionella species*),22,26 *Moraxella osloensis*,20 *Pseudomonas aeruginosa*,20,21,26 *Pseudomonas cepacia*,20 *Salmonella choleraesuis*,22 *Serratia marcescens*,20,44 *Xanthomonas maltophilia*,20 *Yersinia pestis*41,42,45
	Fungi	*Alternaria species*,46 *Aspergillus brasiliensis* (formerly *Aspergillus niger*),20,46 *Blastomyces dermatitidis*,47 *Candida albicans*,20,46 *Candida parapsilosis*,20,46 *Coccidioides immitis*,47 *Histoplasma capsulatum*,46 *Penicillium species*,46 *Trichophyton mentagrophytes*19,20
	Large, nonenveloped viruses	*Adenoviridae* (adenovirus),33,35,48 *Parvoviridae* (parvovirus)38
Less Resistant	Gram-positive bacteria	*Deinococcus radiodurans*,20 *Enterococcus faecium*/*Enterococcus faecalis* (VRE),20,26,39,49,50 *Enterococcus hirae*,46 *Listeria monocytogenes*,20,22 *Staphylococcus aureus* (MRSA),20,26,28,39,51 *Staphylococcus epidermidis*,20,51 *Streptococcus pneumoniae*26
	Enveloped	*Orthomyxoviridae* (avian influenza virus, influenza A[H1N1]),34,35,52 *Herpesviridae* (pseudorabies virus),20,34 *Poxviridae*

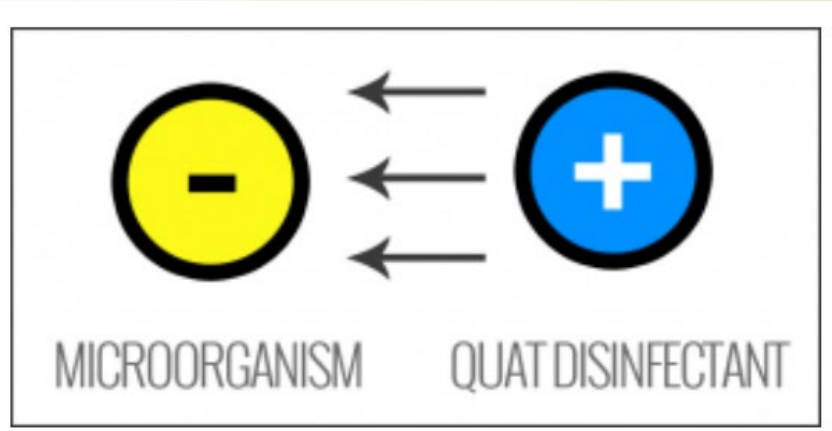
Disinfection and Sterilization With Hydrogen Peroxide | Basicmedical Key

Continuous Disinfection

Forever?

Continuous Disinfection

- Continuous Room Decontamination Technology
  - Visible Light LED 400-450nm that releases a reactive oxygen inside some microorganisms – hours to days
  - Dilute H2O2 or UV light in HVAC systems
- Continuously Active Disinfectants
  - Disinfectants that work over a longer period; polymer adsorbs quaternary ammoniums on surfaces
  - Residue
  - EPA approval?



Material or Surface Coatings

AMC technology	Mechanisms of action	Biocidal substance
Anti-adhesive	Reduced adhesion of microorganisms to surface	none (Privett et al. 2011)
Contact-active	Perforation and/or depolarisation of cellular membranes	Copper (Warnes et al. 2012) QACs (covalently bound) (Bieser and Tiller 2011)
Release of substances	Biocidal substances reach the microorganisms via diffusion	Silver (Varghese et al. 2013; Scuri et al. 2019) copper (Thukkaram et al. 2021) zinc (Pintaric et al. 2020) QACs (not covalently bound) (Druvari et al. 2016) zinc-pyrithione (Pittol et al. 2017) iodocarb (Zhang et al. 2020) bronopol (Wu et al. 2011) isothiazolinone (Peng et al. 2018) diuron (Fay et al. 2007)
Photocatalytic action	Different reactive oxygen species are generated by TiO_2 under UV exposure	Oxygen radicals, hydrogen peroxide (Nakano et al. 2013; Fisher et al. 2014; Li et al. 2018)
Photodynamic action	Gaseous singlet oxygen is generated by photosensitizer molecules under visible light exposure	Exclusively singlet oxygen (Eichner et al. 2020)

- Inhibit Growth of organisms
- Kills organisms
  - Depolarizes cell membrane (Cu+)
  - Biocide diffuses and kills cell (Silver)
  - Oxidization of coating UV activated (photocatalytic,) need the correct wavelength of light TiO2
    - Lack efficacy trials
  - Photodynamic actions- Don't result in resistant organisms
  - High Intensity Narrow Spectrum Light (HINS) LED
- Reduces adhesion to surfaces
  - Paints
  - Textiles
  - Sprays
- Heavy Metals
  - Copper/ Copper alloys – Naturally inhibit growth
  - Silver / Nanoparticles – most effective metal

Schneider-Brachert, W. (2022)

Where would continuous disinfection be most beneficial?

Table 1

Main inorganic and metal nanomaterial with antiviral activity

Nanomaterial	Virus Name	Contact Time	Proposed Applications
Copper			
Solid state	Influenza A	6 h	Replacing steel instruments with copper
Copper alloys	Murine norovirus	Dry: 5–120 min	Application of copper alloys in medical and environments settings
		Wet: within 2 h	
Cuprous oxide	Influenza A	30 min	Block new viral shapes and potential resistance to drugs to decrease transmission
Silver			
	HIV-1	20 min	Broad-spectrum antimicrobial surface coating in hospitals
Hybrid coating	Dengue virus	4 h	
	HSV	4 h	
(ionic)	Influenza	4 h	
Silver nitrate in solution	Feline calicivirus	75 days	In effective covering and contact surfaces
	Murine norovirus	75 days	
NM in solution or film	Murine norovirus	1 day	The technology offered here would provide the In adequate covering and contact surfaces
Zinc		2 h	The insertion of copper alloy surfaces to hinder pathogens
Rigid phase	Murine norovirus	90 min	Development as a local agent for inhibition of viral infection
Zinc oxide filopodia-like structures	Herpes simplex virus type 1 (HSV)	1 h	It developed as an antiviral agent to block the cleavage of viral protein precursors and prevent the maturation of viral RNA and capsid polypeptides
Ionic solution	Human rhinovirus		
TiO_2		4 h	Adhesion into high-touch settings to decrease the contamination from spreading
		8 h	
Solid-state coating	Influenza virus	20 min	Disinfection of high-touch surfaces such as light switches, bed rails, door handles and disruption of organic contaminants
	Feline calicivirus		
Ag-doped solid-state coating	Influenza A		
Additional inorganic antiviral substances		1 h	Recommended as an antiviral agent
Modified gold NMs	Virus-like particles (VLPs), replicating human norovirus,	30 min	Construction of a remedial anti-HIV system
Multivalent gold NMs with sulfate ligands	HIV	30 min	Usage as a microbicidal coverage
Silica NMs in coating			
	Influenza A/PR/8/34		

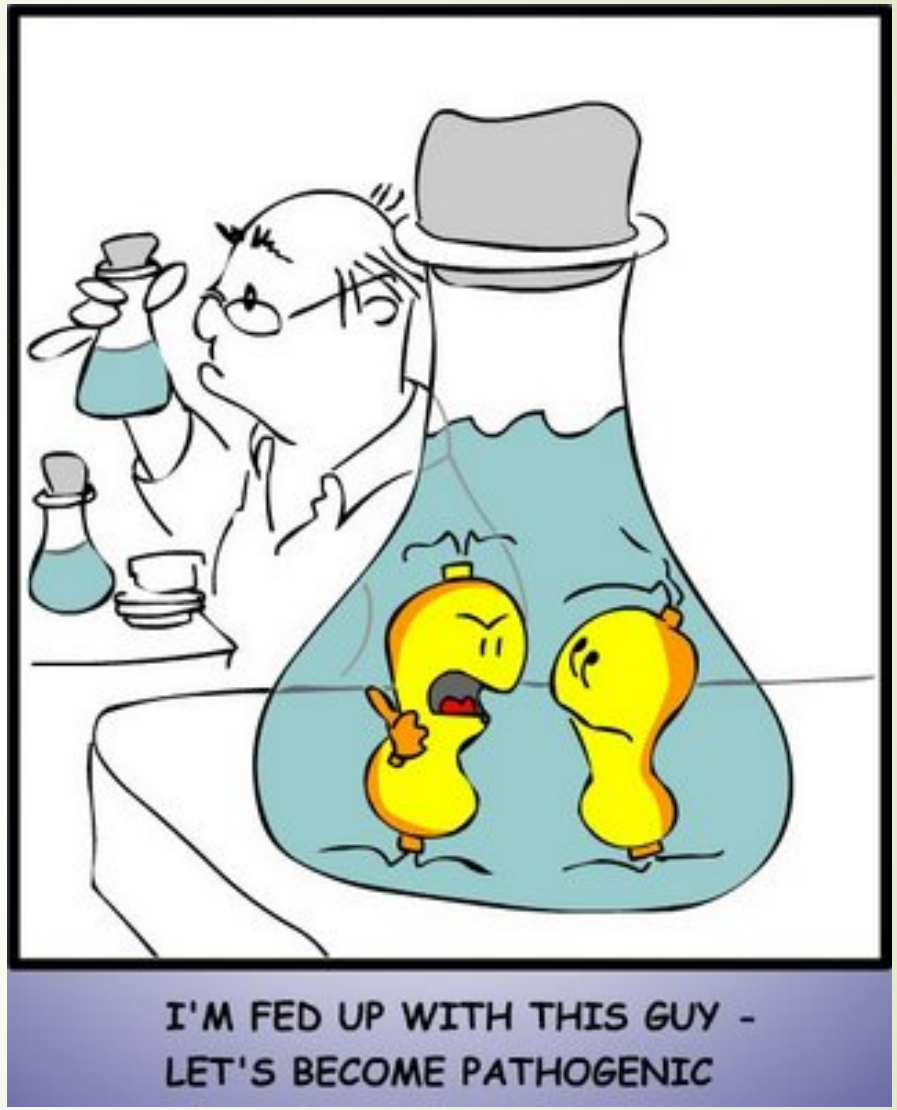
HIV human immunodeficiency virus, *TCID50* median tissue culture infectious dose

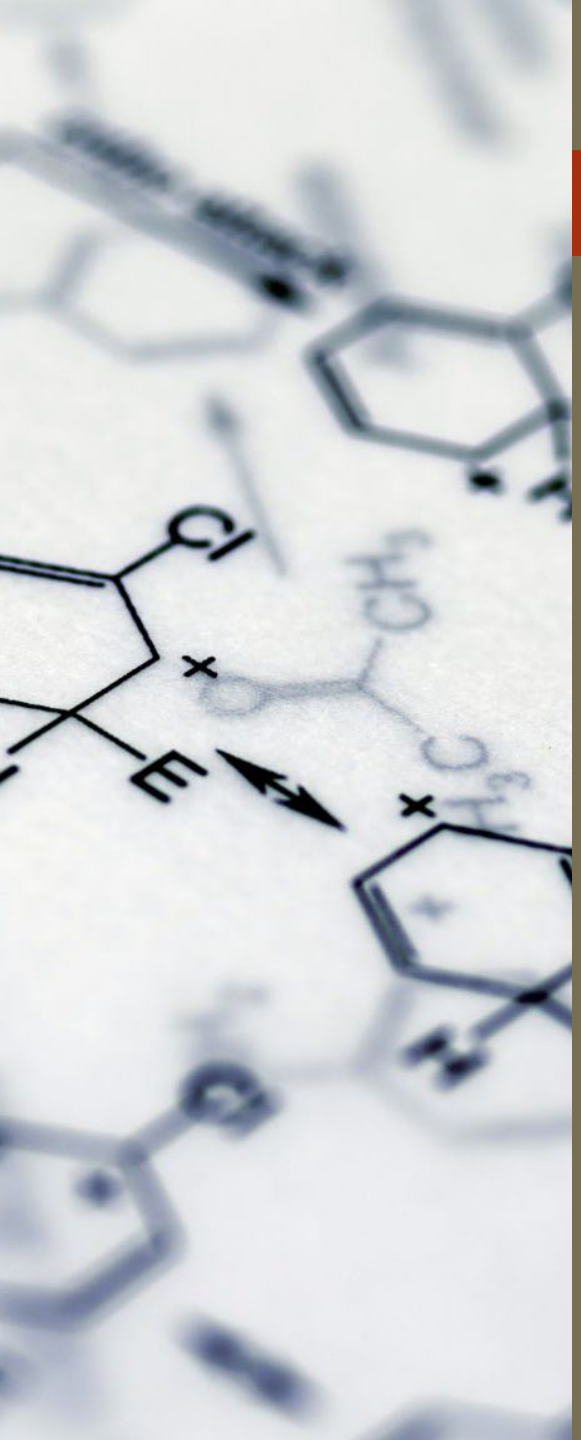
Jamshidinia, N., & Mohammadipanah, F. (2022)

Evidence

- Most studies in laboratories
- Multiple testing norms (ISO, ASTM, AATCC)

More studies needed to address benefits and potential concerns for many of the products





Dangers and Unknowns

- Metals- Environmental Toxins
  - Bioaccumulation – food chain
- Chemicals – Repeated human exposure
- Surface interactions and efficacy
  - So many surface types
- Antimicrobial resistance pressure
- Perception that cleaning is not needed
- Esthetics- residue

Cleaning& Disinfection Audits

Process Auditing

Direct Practice Observation	Covert, Individual performance, adherence to protocols, timely feedback
Swab Cultures	Cost, delayed results, isolate identification, outbreaks
Agar Slide Culture	Aerobic colony counts per cm, viable contamination, slow, outbreaks
Fluorescent Markers	Overt visibility, doesn't necessarily indicate contamination burden
ATP Bioluminescence	Organic ATP on surfaces, viable and nonviable, bleach interference- food industry for 30 years

Process Auditing cont.

- Baseline
- Sample Size 10% of rooms
- Random versus targeting auditing
- Rooms other than patient rooms
- Frequency

Thoroughness of Disinfection Cleaning Score (TDC)

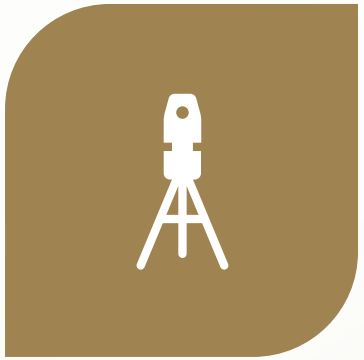
	High Touch I			High Touch II			High Touch III				Bathroom Surfaces							Euipment Surfaces				
	Bed rails	Tray table	IV pole	Call box / button	Telephone	Bedside table handle	Chair	Rm sink	Rm light switch	Rm inner doorknob	BR inner doorknob	BR light switch	BR handrails	BR sink	Toilet seat	Toilet flush handle	Toliet bedpan cleaner	IV pump control	Monitor controls	Monitor touch screen	Monitor cables	Ventilator panel
# of Surfaces Cleaned	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
# of Surfaces Evaluated	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Surfaces Cleaned	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Category: Total # of Surfaces Cleaned	0			0			0				0							0				
Category: Total # of Surfaces Evaluated	0			0			0				0							0				
tegory TDC Score: % of Surfaces Cleaned	#DIV/0!			#DIV/0!			#DIV/0!				#DIV/0!							#DIV/0!				

- **HT 1:** Bed rails, tray table, IV pole
- **HT 2:** Call box, Phone, bedside table handle
- **HT 3:** Chair, sink, light switch, doorknob
- **Bathroom:** doorknob, switch, handrail, sink, toilet seat, toilet cleaner
- **Equipment:** IV pump control, Monitor controls, touch screen, cables, ventilator panel

- **Cleaning practice varies between object type rather than unit**
- NHSN module available

New Products

HOW DO NEW CLEANING PRODUCTS AND EQUIPMENT GET INTO YOUR FACILITY?



IS THE PROCESS DIFFERENT FOR MRI EQUIPMENT VERSUS WHICH VACUUM CLEANERS?

IF YES, WHY?

WHAT NEEDS TO BE CONSIDERED IN YOUR FACILITY BEFORE NEW EQUIPMENT IS BROUGHT IN?

Who Decides

- Finance
- Regulatory
- Facilities (will it fit in the door, do we have the amps to run it?)
- IP
  - Efficacy
  - Evaluate the entire process from purchase to storage
- Safety
  - Staff use
  - Can it be left in the hallway or room
  - Employee Health / OSHA
- Supply Chain
  - Can we get the replacement parts and chemicals
  - Is it in the approved contract
  - Product standardization
- Department Supervisors
  - Will it interfere with any other process, program in the facility
- Front line staff
  - Ease of use and satisfaction
- Patient Satisfaction
  - Perceptions, fear, noise, fumes

APIC Product Review Committee Roles

- Team Lead
- Administrative rep
- Physician rep
- Facilitator
- Recorder

[7. Product Evaluation | Overview of Infection Prevention Programs | Table of Contents | APIC]

Table 7-1

Position	Roles
Team leader or chairperson	Actively participates in discussions and content of PEC meeting Leads team Develops and follows agenda Schedules meetings Communicates with team members between meetings
Administrative representative	Provides support and guidance on navigating political and administrative challenges Acts as liaison between PEC and other standing committees Keeps executive management team informed on PEC activities Champions PEC program
Physician representative(s)	Provides supporting information on clinical need and product relevance Champions PEC program to medical staff
Facilitator	Coordinates PEC logistics and activities Provides direction on team and project management Maintains PEC focus Manages team dynamics
Recorder/secretary	Documents discussions, ideas, actions, decisions Publishes PEC minutes Maintains PEC history Maintains and publishes log of financial impact of PEC decisions
Team members	May serve a dual capacity as project leaders, assembling task forces to work on specific PEC initiatives Represents the facility, not their department Provides clinical expertise and knowledge of literature, best practices, and patient care

Product Review Matters

Why are we looking at a new product

Is it needed?

Does is meet regulations, it is approved

How does it affect cost, for the facility and patient

How big is the training curve

Is a pilot possible, or trial needed

Are staff vested in the change

Did we ask them?

Is it in alignment with organizational mission

Is it sustainable - parts, Maint. Support

What Is the IP Role In Product Evaluation?

- Literature search
- Vendor discussions
- IFU, cleaning and disinfection process
- Monitoring Infection rates before and after change
- Regulatory requirements
- Evidence basis for the new technology related to infections
- Review practice guidelines

Summary

- Cleaning can't be replaced regardless of what disinfection mode is used.
- What level cleaning is needed in the facility is based patient risks, exposure risks and procedures
- One process of disinfection may not be enough in a facility
- Evaluate the need for new technology
- Cost/Benefit of adjunct processes

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Website: Nuggets of Knowledge

THANK YOU!!