Smart Disinfection

A New Approach to Disinfecting to Help you Clean for Health

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Learning Objectives

- Review the concept of Cleaning for Health & why it's important
- Introduce Smart Disinfection & why it's needed
- Understand the How, When, and Where components of Smart Disinfection
- Recognize some ways to use Smart Disinfection and where you can get additional resources

What is Cleaning for Health?

1.

Use of cleaning and disinfecting **products**, **techniques**, and **best practices** to reduce the spread of germs and other unwanted matter within shared spaces

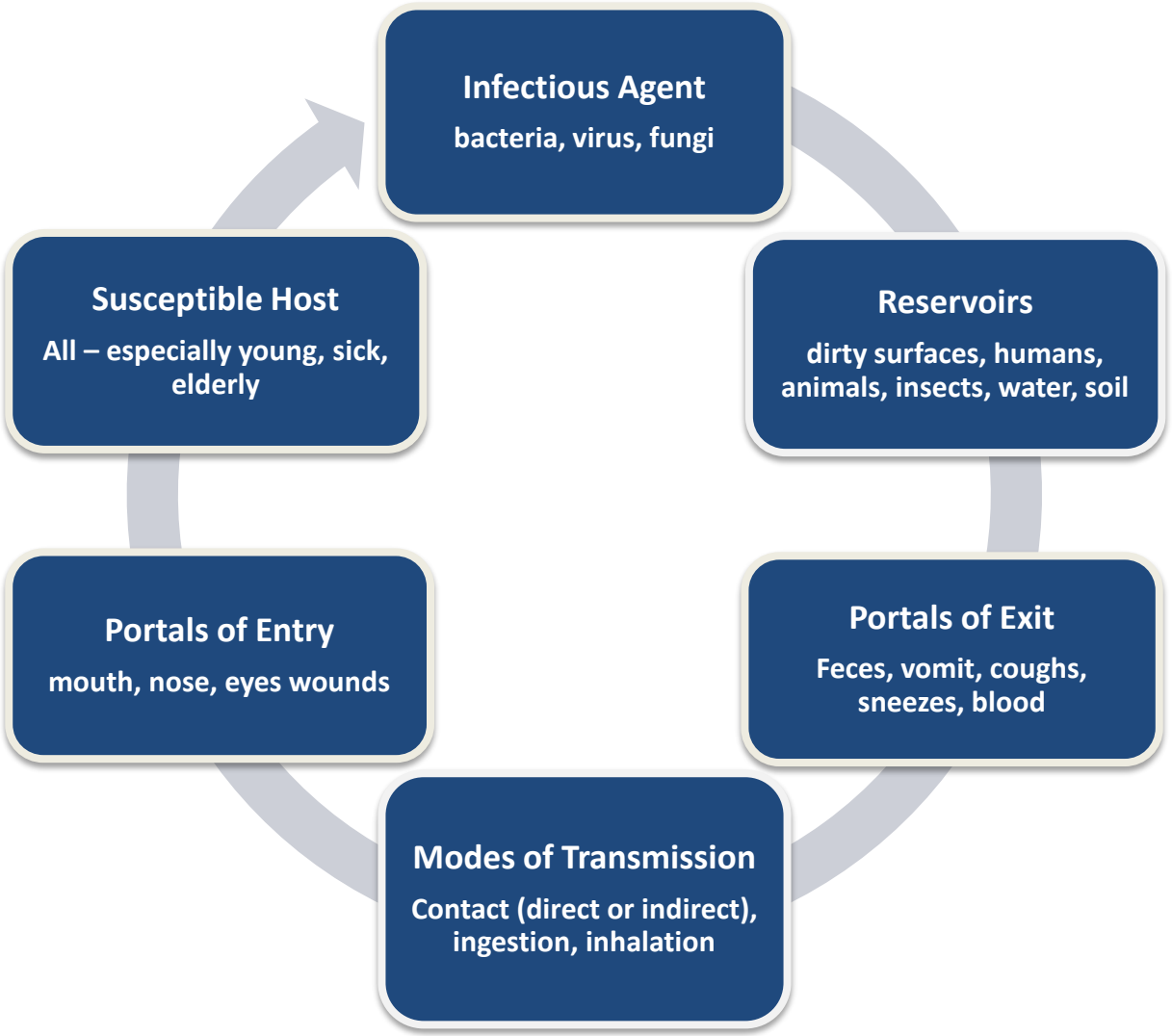
2.

Requires **more than** just a "surface clean"

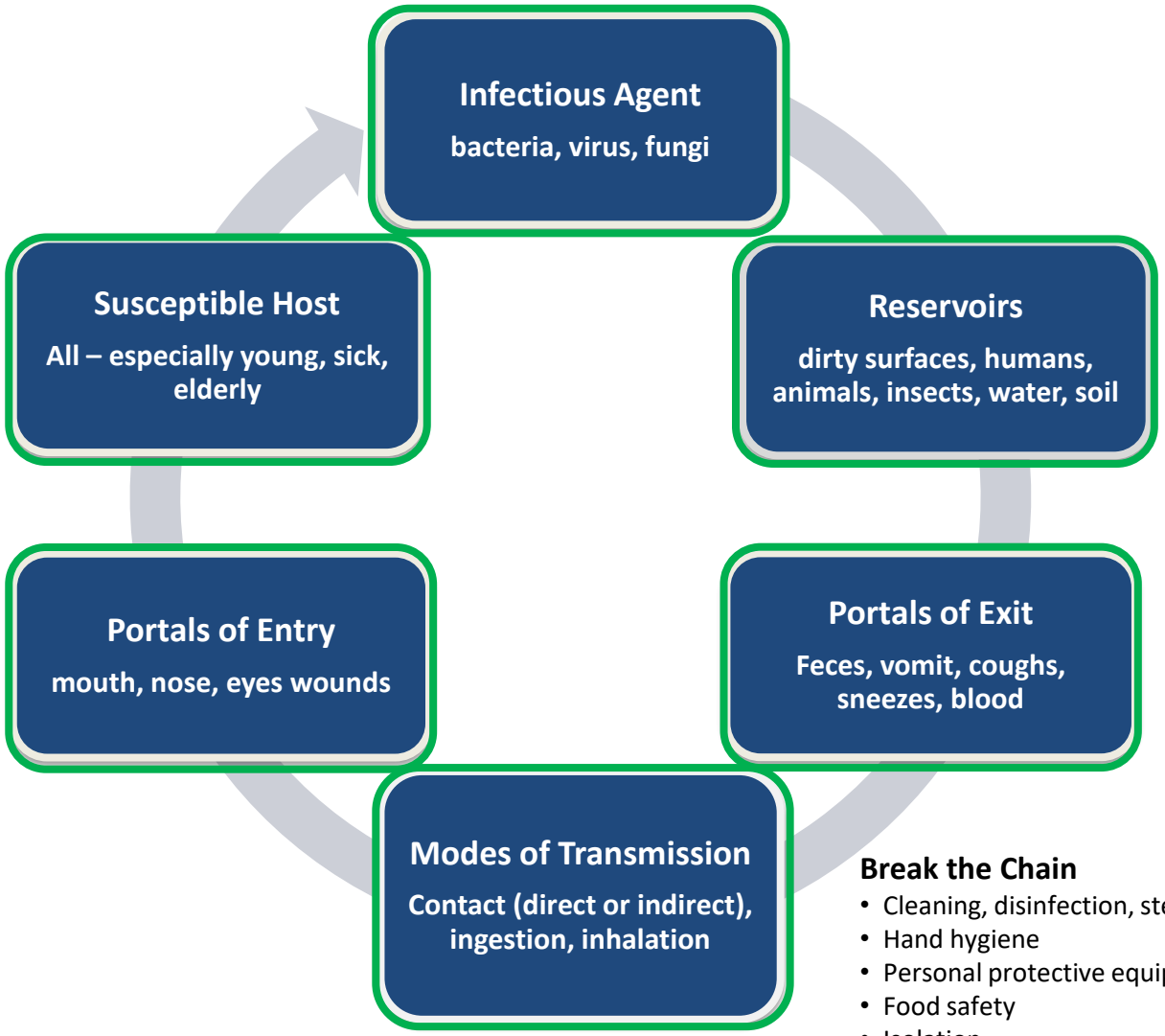
3.

Cleaned and disinfected surfaces make buildings safer places for building occupants, customers, and staff, including you!

Preventing the spread of germs is an essential part of Cleaning for Health



The Chain of Infection - MRSA



Break the Chain
- Cleaning, disinfection, sterilization
- Pest control
- Infection prevention policies

Break the Chain
- Hand hygiene
- Personal protective equipment
- Control of aerosol/splatter
- Respiratory etiquette
- Waste disposal

Break the Chain
- Cleaning, disinfection, sterilization
- Hand hygiene
- Personal protective equipment
- Food safety
- Isolation

Break the Chain
- Hand hygiene
- Personal protective equipment
- Personal hygiene
- First aid
- Removal of catheters/tubes

Cleaning for Health can help reduce the public health and economic burdens caused by infections

Infections	Public Health Burden	Economic Burden
Norovirus[1,2]	• 20 million cases • 400,000 ED visits • 56,000-71,000 hospitalizations	• 1.4 billion healthcare costs • $23.5 billion societal costs
Colds[3]	• 500 million cases • 122 million doctor visits • 6 million ED visits	• 70 million work days missed • 189 million school days missed • $40 billion total costs
Influenza[4,5,6]	• 9-45 million cases • 140,000 – 810,000 hospitalizations • 12,000 – 61,000 deaths	• 17 million work days missed • $11-$87 billion in total costs
Food-borne[7,8]	• 48 million cases • 128,000 are hospitalized • Thousands have long-term side effects	• *Salmonella* – $3.67 billion • *E.coli* - $271 million • 15 leading germs – $17 billion
COVID-19[9,10]	• > 33 million cases • > 2 million hospital admissions • > 600,000 deaths	• ~$16 trillion • Approximately 90% of the annual gross domestic product of the US

***Numbers are for US alone and per year**

What is Smart Disinfection?

Where, When and How we Clean for Health

Where

Prioritize disinfecting higher risk surfaces in higher risk areas (e.g. shared, commonly touched surfaces in areas where people gather, restrooms where exposure to contaminants are high)

When

Frequency varies by risk level

How

Incorporate surface disinfection best practices and technique

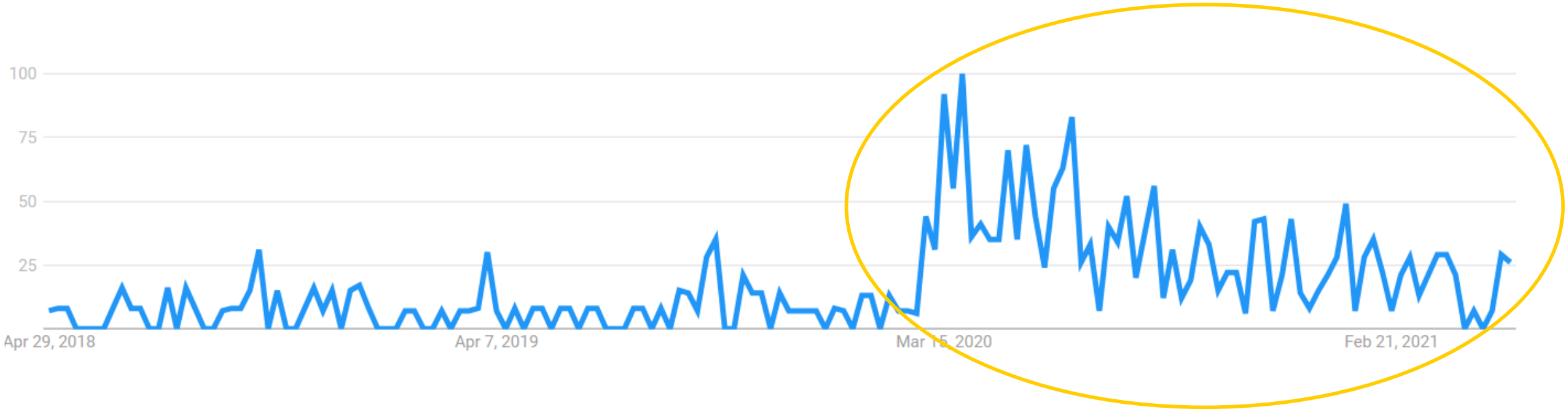
Use of proper tools to maximize effectiveness and efficiencies

Develop a process and ensure proper changes

How much time is needed to do the job well

Why is Smart Disinfection Needed?

Google trends search for “cleaning & disinfecting”

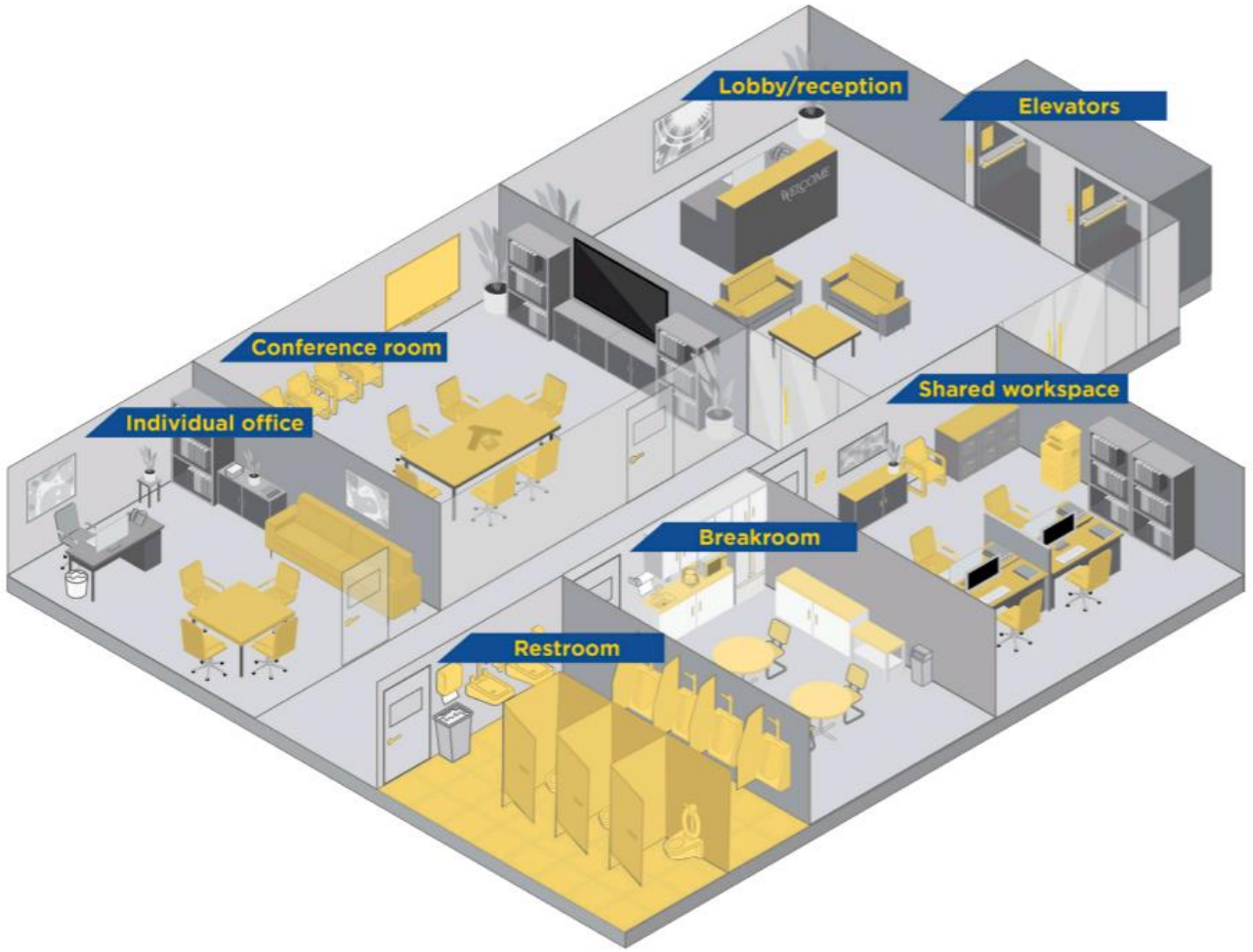


Interest in cleaning and disinfecting spiked during the pandemic, yet it is still misunderstood.[11,12]
A smarter approach is needed!

Smart Disinfection Details

Where, When and How we Disinfect when Cleaning for Health

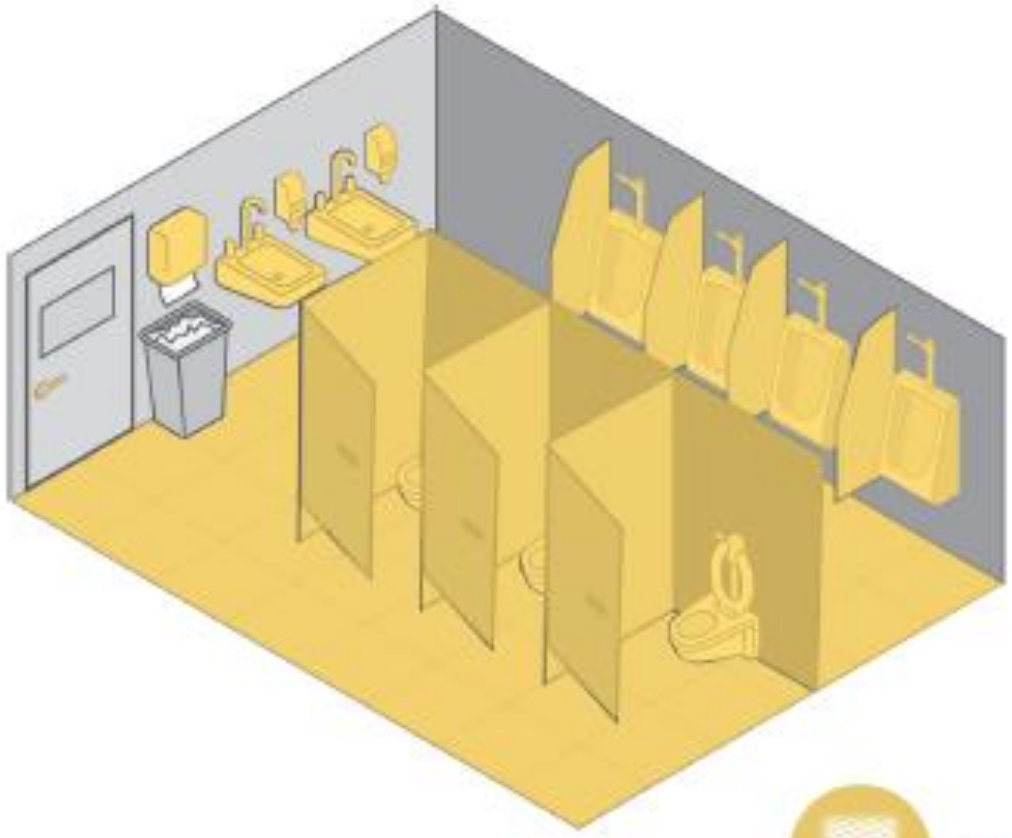
Smart Disinfection: Where



- Higher traffic
- Higher probability of contamination[13,14]
- Shared, commonly touched surfaces

Where: Prioritize Higher Risk Surfaces in Higher Risk Areas

Restrooms



- Toilets/Urinals (flush handles, seats, partition)
- Dispensers (push plates)
- All Handles/Crash Bars (door, cabinet, faucet)
- Switches
- Receptacles (fem. hygiene)
- Railings
- Floor*

Area Risk Assessment

Instructions

1. Profile the building & determine the areas to be assessed
2. Choose an area
3. Answer the questions and assign a risk level score
4. Total your risk scores for the area
5. Repeat for all areas to be assessed
6. List all area risk scores from highest risk to lowest risk
7. Prioritize disinfecting shared and commonly touched surfaces in areas with higher risk scores

	Questions to determine	Choices	Risk Score
1	**Probability of Contamination with Pathogens** How frequently are surfaces/objects exposed to blood, other body fluids such as vomit, urine, and mucous or mold?	Routinely	5
		Occasionally	3
		Hardly	1
2	**Vulnerability of Population to Infection** How susceptible are people occupying the space to infection?	Highly	3
		Slightly	1
3	**Potential for Exposure** Are there surfaces that are touched frequently by multiple people?	Yes	3
		No	1
4	**Traffic** Is the area high-traffic?	Yes	3
		No	1
5	**Hygiene Access & Practices** Are supplies to practice good hygiene readily available?	abundant	1
		scarce	2
	Actively promotes good hygiene practices	Yes	1
		No	2
	Does the area have good ventilation?	Yes	1
		No	2
	Total		

Area Risk Assessment

	Choices		Examples	Conference Room	RR#1
1. **Probability of Contamination with Pathogens** How frequently are surface/objects exposed to blood, other bodily fluids such as vomit, urine, and mucus or mold?	Routinely	5	Emergency rooms; restrooms		5
	Occasionally	3	Classrooms		
	Hardly	1	Conference Rooms	1	
2. **Vulnerability of Population to infection** How susceptible are people occupying the space to infection?	Highly	3	Very young, very old and people with certain medical conditions		
	Slightly	1	Relatively healthy people	1	1
3. **Potential Exposure** Are there surfaces that are touched frequently by multiple people?	Yes	3	Doorknobs, light switches, pencil sharpeners	3	3
	No	1	Ceilings, walls, shelves, individual desks	1	1
4. **Traffic** Is the area high-traffic?	Yes	3	Classrooms, airports, breakrooms	3	3
	No	1	Individual offices		
5. **Hygiene Access & Practices** Are supplies to practice good hygiene readily available?	Abundant	1	Disinfecting wipes, hand soap and hand sanitizers (min, 60% alcohol), and tissues near where people congregate	1	1
	Scarce	2	No/limited disinfecting wipes, hand soap and sanitizers (min, 60% alcohol), and tissues near where people congregate		
Actively promoted good hygiene practices	Yes	1	Signage on proper hand washing, cough etiquette, mask wearing etc. Placed in visible locations	1	1
	No	2	No/limited signage on proper hand washing, cough etiquette, mask wearing etc.		
Does the area have good ventilation?	Yes	1	Well-maintained HVAC system with high-efficiency filters; able to measure indoor air quality	1	
	No	2	Poor ventilation system; limited access to fresh air		2
Total				**12**	**16**

Smart Disinfection: When

Occupied/ Day Time

Restrooms:

<u>After higher-use periods:</u>
Clean and Disinfect shared, commonly touched surfaces **after all high-use periods** such as mid-morning and mid-afternoon

Non-Restroom:

<u>When illness levels rise:</u>
Clean and Disinfect shared, commonly touched surfaces **in between use** or **after high-use periods**

Unoccupied/ Night Time

<u>Restrooms:</u>

- After routine cleaning**, disinfect ALL restroom surfaces,** including floors, to reset for next day/shift

<u>Non-Restrooms:</u>

- After routine cleaning, **disinfect shared, commonly touched surfaces** to **reset** for next day/shift

Smart Disinfection: How

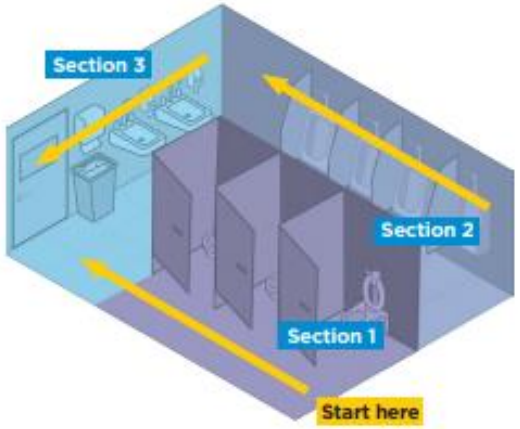
1. Cleaning & disinfecting best practices

2. Use proper tools to maximize effectiveness and efficiencies

3. Develop a process and train your staff

4. Calculate how much time is needed

1. Cleaning and Disinfecting Best Practices



Clean & disinfect **methodically** by dividing a space into sections and clean & disinfect **one section** at a time to not miss any surfaces.

Start from the **back of the room** and **work your way towards** the entrance to minimize cross contamination.

Clean & disinfect surfaces from **high areas** to **low areas**

Disinfect last after routine tidying-up, e.g., emptying trash, vacuuming, removing visible soil

1. Cleaning and Disinfecting Best Practices

Fold cloth or wipe 1–2 times so the **surface area** is close to the **hand size**. Use **clean side each time** you wipe a new surface.

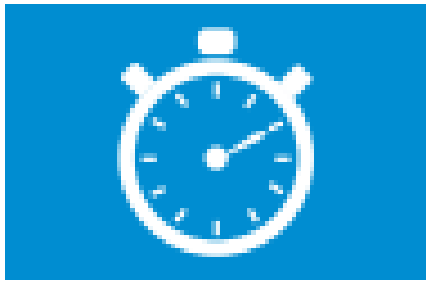
Clean & disinfect surfaces from **clean areas** to **dirty areas**

Clean & disinfect surfaces starting with the **edges** and wiping the **inside** in an **S-shaped** wiping pattern in a **single direction**.

1. Cleaning and Disinfecting Best Practices

Remove visible soil **before** applying a **disinfectant**.

Disinfect all **shared**, **commonly touched surfaces daily** and **all restroom surfaces** per **cleaning shift**.



Ensure **surfaces** remain **visibly wet** for the **contact time** specified on the **EPA-registered** product label

2. Best tools for the job

Electrostatic

- ✓ Thorough disinfection for when you can close off an area being treated
- ✓ Treats larger areas fast
- ✓ Superior surface coverage

Unoccupied / Nighttime

Manual

- ✓ Touch up disinfection for when building occupants are present in the area
- ✓ Treats smaller area with convenience
- ✓ Quick and easy to deploy

Occupied / Daytime

3. Develop written processes and train your staff

Why written processes are important

- Clear start and finish points lead to defined, repeatable, and adaptable results
- Establish daily expectations for staff, building occupants, and customers
- Consistently train staff and deliver predictable cleaning results

Process development recommendations

- ✓ Review current processes and incorporate Smart Disinfection principles
- ✓ Specify where and when, tools and supplies needed, and a step by step process from start to finish

Process Example

Unoccupied Restroom Cleaning and Disinfecting

When:
- Unoccupied (to reset for next day/shift)

Where:
- Restrooms are higher risk areas that should be prioritized

How:
- Keep it simple and easy to follow
- Visually show which surfaces need to be disinfected
- Spot clean visible soils before disinfecting
- Surfaces should remain wet for the contact time
- Disinfect as a last step to minimize cross contamination
- Use electrostatic sprayer to thoroughly disinfect surfaces and floors

4. Calculate how much time is needed

10,000 Sq ft Building

~55%

5,500 Cleanable Sq ft

~10%

550 Sq ft of Shared, Commonly Touched Surfaces

3125 sq ft/hr (spray & wipe)

25 minutes to Smart Disinfect!*

*add in other activities that need to be done throughout the day

Across 5 different areas (~3min walk time)

10 min

Additional Preventative Measures

Wash Hands before eating, after using the restroom and after touching high-touch surfaces

Avoid Touching your eyes, nose and mouth with unwashed hands

Cover Coughs/Sneezes with a tissue or elbow

Additional Preventative Measures

Make Disinfecting Wipes Accessible
to enable building occupants* to disinfect surfaces in between uses or after high use periods

Add Other Measures
specific to an illness and how it spreads

Stay Home When Sick

Putting it all together!

Cleaning for Health

WHY cleaning and disinfecting is important for public health

Smart Disinfection

WHERE, **WHEN** and **HOW** to disinfect that aligns to the level of risk in your facility and your available resources while maximizing effectiveness and efficiency

Ways to Use

- ✓ Incorporate Smart Disinfection into your own operation and adjust for maximum impact as needed
- ✓ Share results with your management and/or clients
- ✓ Check with your insurance provider to see if incorporating Smart Disinfection could lower your rates
- ✓ Use Smart Disinfection to justify additional service if needed

Smart Disinfection Resources

Tools you'll find…

- Cleaning for Health & Smart Disinfection Overview
- Breaking the Chain of Infection
- Surface Disinfection Best Practices
- Office Protocol Guide & Area Risk Assessment Tool
- K-12 Protocol Guide & Area Risk Assessment Tool
- Champions of Clean Toolkit
- Smart Disinfection Video

To access tools and information covered on this webinar, visit www.cloroxpro.com/resource-center/preparing-for-the-new-normal/

Thank you!

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