

# MN Schools K-12 Cleaning & Disinfecting Guidebook

## COVID-19/ Respiratory or Influenza Outbreak



### Respiratory or Influenza Outbreak School Facility Cleaning & Disinfecting Response - V5 5.20.2020

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**Under Review By:** Minnesota Department of Education and Minnesota Department of Health



## Sources:

- Centers for Disease Control & Prevention Interim Guidance for Administrators of US K-12 Schools and Child Care Programs
- American Industrial Hygiene Association Workplace Cleaning for COVID-19
- Minnesota Hospital Association Environmental Services Cleaning Guidebook
- Centers for Disease Control and Prevention Guidance Documents
- Minnesota Department of Health “Evaluation of Cleaners, Sanitizers and Disinfectants for Surfaces

## Table of Contents

### MN Schools K-12 Cleaning & Disinfecting Guidebook - COVID-19/ Respiratory or Influenza Outbreak

Introduction & Purpose.....	5
Basic Terminology .....	7
Community Transmission.....	7
Cleaning.....	7
Disinfecting.....	7
Efficacy (Disinfectant Chemical).....	7
Infection Control .....	7
Enhanced Cleaning and Disinfecting.....	7
Targeted Cleaning and Disinfecting .....	7
Bioload.....	7
Choosing an Appropriate Disinfectant Product .....	8
Health, safety and environmental impacts on applicators and occupants .....	8
Effectiveness (efficacy) of the product on the specific targeted organism.....	8
Impact of product on the facility .....	8
Key Considerations for Disinfectants .....	9
Part 1: Targeted Cleaning and Disinfecting (C&D).....	10
Targeted C&D should be implemented when: .....	10
Immediate action is required to coordinate confirmed/suspected case with local health officials: .....	10
Before Enhanced Cleaning and Disinfecting .....	11
Allowing targeted C&D areas and designated high-touch surfaces can be modified to fit individual facility requirements: .....	12
Bathroom Facilities .....	17
Cleaning Procedure Step 1.....	17
Disinfecting Procedure Step 2.....	17
High Touch surface examples: .....	17
Bus Transportation .....	18
Cleaning Procedure Step 1.....	18

Disinfecting Procedure Step 2 .....18  
High Touch surface examples: .....18  
HVAC System.....18  
Cleaning Procedure Step 1.....18  
Disinfecting Procedure Step 2.....18  
High touch surface examples:.....18  
Part 2: Enhanced Cleaning and Disinfecting (C&D) .....20  
Enhanced C&D should be implemented when:.....20  
Before Enhanced Cleaning and Disinfecting .....21  
The following targeted C&D areas and designated high-touch surfaces can be modified to  
fit individual facility requirements:.....22  
Appendix A .....31

## Introduction & Purpose

Health officials are currently taking steps to prevent the introduction and spread of COVID-19 into US communities. Schools play an important role in this effort. Through collaboration and coordination with local health departments, schools should take steps to disseminate information about the disease and its potential transmission within their school community. Schools should prepare to take steps to prevent the spread of COVID-19 among their students and staff should local health officials identify such a need.

Schools should continue to collaborate, share information, and review plans with local health officials to help protect the whole school community, including those with special health needs. School plans should be designed to complement other community mitigation strategies to protect high risk populations and the healthcare system and minimize disruption to teaching and learning and protect students and staff from social stigma and discrimination. Plans should build on everyday practices (e.g., encouraging hand hygiene, monitoring absenteeism, communicating routinely) that include strategies for before, during, and after a possible outbreak.

Schools, working together with local health departments, have an important role in slowing the spread of diseases to help ensure students have safe and healthy learning environments. Schools serve students, staff, and visitors from throughout the community. All of these people may have close contact in the school setting, often sharing spaces, equipment, and supplies.

Information about COVID-19 in children is somewhat limited, but the information that is available suggests that children with confirmed COVID-19 generally had mild symptoms. Person-to-person spread from or to children, as among adults, is thought to occur mainly via respiratory droplets produced when an infected person coughs, sneezes, or talks. Recent studies indicate that people who are infected but do not have symptoms likely also play a role in the spread of COVID-19.

However, a small percentage of children have been reported to have more severe illness. Older adults and people who have serious underlying medical conditions are at highest risk of severe illness from COVID-19. Despite lower risk of serious illness among most children, children with COVID-19-like symptoms should avoid contact with others who might be at high risk for severe illness from COVID-19.

Schools should be prepared for COVID-19 outbreaks in their local communities and for individual exposure events to occur in their facilities, regardless of the level of community transmission, for example a case associated with recent travel to an area with sustained COVID-19 transmission.

The accompanying facility cleaning and disinfecting guidance apply to education facilities implementing infection control practices in response to a respiratory or influenza outbreak (i.e. current COVID-19 response needs) in order to provide the minimum facility risk for spread of infection while the district buildings are occupied.

A district's paramount concern should be for the safety of staff, students and visitors into the facility at all times and even more so during an outbreak response. This requires diligence in considering the safest disinfecting products and processes to minimize infection spread but with a strong focus on the residual health of the building occupants.

These documents are intended to serve as examples to be adopted into individual district/building practices and action plans and can be adapted as necessary to provide the best risk management.

There are several organizations involved in identifying best practices, guidelines, and expectations for safe management of infection risk in school and office facilities. The following list of organizations are referenced in this document and can provide valuable resources for development of your facility program:

- Centers for Disease Control and Prevention (CDC)
- Minnesota Department of Health (MDH)
- Minnesota Occupational Safety & Health (MNOSHA)
- Environmental Protection Agency (EPA)
- American Industrial Hygiene Association (AIHA)
- American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)

## **Basic Terminology**

### **Community Transmission**

When there is no clear source of origin of an infection in a new community. It happens when you can no longer identify who became infected after being exposed to someone who interacted with people from the originally infected communities.

### **Cleaning**

Removes germs, dirt, and impurities from surfaces or objects. Cleaning works by using soap (or detergent) and water to physically remove germs from surfaces. This process does not necessarily kill germs, but by removing them, it lowers their numbers and the risk of spreading infection.

### **Disinfecting**

Kills germs on surfaces or objects. Disinfecting works by using chemicals to kill germs on surfaces or objects. This process does not necessarily clean dirty surfaces or remove germs, but by killing germs on a surface after cleaning, it can further lower the risk of spreading infection.

### **Efficacy (Disinfectant Chemical)**

Performance of disinfectants when used on surfaces and effectiveness in inactivation or removal of microorganisms, such as bacteria, fungi (yeast and molds), bacterial spores, viruses and mycoplasma.

### **Infection Control**

Procedures or interventions used to prevent or stop the spread of infections in facility settings.

### **Enhanced Cleaning and Disinfecting**

Intensified cleaning and disinfecting efforts in response to the need to minimize the risk of infection spread in a facility due to a facility/community outbreak or immediate infection concern.

### **Targeted Cleaning and Disinfecting**

Thorough infection control cleaning and disinfecting targeted to facility areas impacted by a confirmed or suspected outbreak. Can also be utilized for other diagnosed respiratory outbreak scenarios and influenza outbreak concerns.

### **Bioload**

The microbiological load (i.e., number of viable organisms in or on the object or surface) or organic material on a surface or object prior to decontamination, or sterilization, also known as “bioburden.”

## Choosing an Appropriate Disinfectant Product

During a respiratory, influenza or infectious outbreak in communities and/or facilities, it becomes exceedingly important to utilize the appropriate disinfectant product(s). There are three primary focuses when deciding the correct disinfectant product to use for a district's cleaning and disinfecting program.

### Health, safety and environmental impacts on applicators and occupants

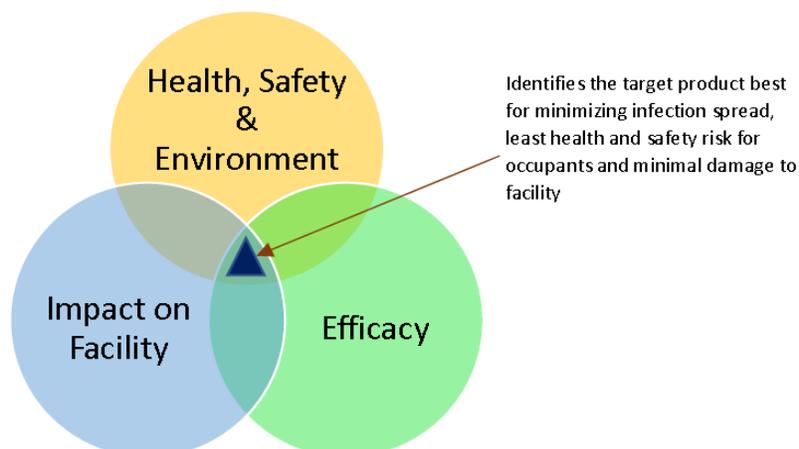
Safety for staff applying the disinfectant as well as occupant exposure to the disinfected spaces and health hazard concerns should remain a top priority when choosing a disinfectant. Choosing a product that minimizes the applicator's personal protective equipment (PPE) as well as providing the lowest chemical impact on the building occupants should be a facility priority. During enhanced cleaning and disinfecting, ongoing and extensive use of disinfectant chemicals can be expected, therefore maintaining the safest work conditions as well as minimizing chemical impact on the environment post-use is paramount.

### Effectiveness (efficacy) of the product on the specific targeted organism

Identify the disinfectant product from the EPA's approved list for the specific organism to be targeted. Choose the product that provides efficacy and contact time which fits the cleaning and disinfecting scenario for the facility.

### Impact of product on the facility

No chemical disinfectant is 100 percent compatible with all facility surfaces. To prevent damage, it is important to understanding the types of high-touch surface materials and the impact disinfectants may have on them over time.



Work with chemical providers and internal/external health and safety resources to evaluate and identify the safest and most effective EPA designated disinfectant for your facility.

## Key Considerations for Disinfectants

Disinfectants are regulated as pesticides by the EPA, and many disinfectants are toxic when swallowed. Disinfectants should typically not be applied on items used by children, especially any items that children might put in their mouths. Due to the nature of a respiratory or influenza outbreak, disinfectants are used to minimize risk of infection spread. Therefore, awareness of disinfectant impact on occupant health requires product application and use to be carefully monitored.

For disinfectants to work properly, the surface first needs to be cleaned. The amount of time the disinfectant is in contact with the surface is key to its effectiveness. Using the correct disinfectant is an important part of reducing the risk of exposure to COVID-19 or other respiratory and influenza viruses.

People carrying out routine cleaning and disinfecting tasks are at increased risk of being exposed to the virus and to any toxic effects of the cleaning and disinfecting chemicals. These individuals need to be trained, wear appropriate PPE for the task, and carefully follow manufacturers' instructions for concentration, dilution, application method and contact time. Individuals using disinfectant wipes on surfaces need to use gloves, when specified on the product label, allow the surface to remain wet for the required contact time, and wash hands after using.

## Part 1: Targeted Cleaning and Disinfecting (C&D)

### Targeted C&D should be implemented when:

- ✓ When an infected person has been in the building and/or
- ✓ Prior to Re-occupancy after outbreak shut down of building (May be limited concern with exposure to viable virus, however, occupant health and safety concerns can be addressed through a Targeted C&D prior to return to work/school)

### Immediate action is required to coordinate confirmed/suspected case with local health officials:

<https://www.health.state.mn.us/diseases/coronavirus/hcp/report.html>

- Establish a Targeted C&D Team: Must include a district representative. C &D can be conducted by district personnel or contracted vendor. If contracted vendor, verify cleaning and disinfecting procedures and target areas via documentation authorized by the district.
- Determine locations utilized by COVID-19 individual(s) and close off portions of the impacted building and restrict access by other building occupants. Post signage to partition off Targeted areas.
- Wait a minimum of 24 hours, and as long as possible, before entering space if feasible.
- Flush impacted area(s) with HVAC system in occupied mode to allow for outdoor air and air exchange flushing in the space to occur.

## Before Targeted Cleaning and Disinfecting

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Identify Targeted C&D team and ensure team has:

Proper PPE available for disinfecting use

Properly labeled cleaning and disinfecting products approved by EPA for COVID-19 (or targeted outbreak)

Identify, understand, and implement disinfectant product manufacturer specifications

Proper utensils and rags specific to Targeted C&D area

Calibrated chemical dilution equipment (if applicable)

Proper Employee Right to Know training for products and procedures used for Targeted C&D

Always perform hand hygiene before donning gloves and any protective equipment

Don appropriate PPE prior to entering space. Ensure staff trained in proper PPE donning and removal.

**Consult facility/area audit of high-touch surfaces for disinfecting focus**

### Safe Work Practices

- **Keep hands away from face and refrain from touching eyes, nose and mouth**
- **Work from clean to dirty areas in the space**
- **Limit the surfaces touched during the cleaning process**
- **Perform frequent hand hygiene and washing. For hand sanitizer, the CDC recommends using ABHR with greater than 60% ethanol or 70% isopropanol.**

**NOTE ABOUT BIOLOAD:**

If impacted facility area has not been previously cleaned under targeted or enhanced C&D processes, bioload may have accumulated on high-touched surfaces and will require more effort on cleaning steps. Inadequately cleaned surfaces potentially interfere with the efficacy of disinfectants.

Consider implementing 3<sup>rd</sup> party environmental testing\* to document the bioload on surfaces and the effectiveness of the cleaning and disinfecting process. This provides confidence in efforts to minimize infection spread.

\* AIHA Reference Document “Workplace Cleaning for COVID-19: Guidance Document”



**DO NOT WEAR DIRTY GLOVES OUTSIDE OF THE TARGET CLEANING & DISINFECTING AREA**

If you need to leave the area after starting the target C&D, remove gloves and perform hand hygiene. Put on clean gloves on to resume cleaning and disinfecting.

**Allowing targeted C&D areas and designated high-touch surfaces can be modified to fit individual facility requirements:**

**Classroom/Office/General Area Targeted Cleaning and Disinfecting**

<b>Classroom/Office/General Area</b>	<b>Cleaning Procedure Step 1</b>	<b>Disinfecting Procedure Step 2</b>
High Touch surface examples:		
<ul style="list-style-type: none"> <li>• Door handles/push spots</li> <li>• Locker handles (if shared lockers)</li> <li>• Light switches</li> <li>• Desks</li> <li>• Tables</li> <li>• Drawer/Cabinet Handles/Knobs</li> <li>• Chairs (hand grip locations)</li> </ul>	<p>Soap/detergent on all surfaces with manual scrubbing using textured rag to remove bioload.</p> <p>Change or fold cloth each surface and discard to prevent spread of bioload to surfaces.</p> <ul style="list-style-type: none"> <li>➤ No double dipping of cloths.</li> <li>➤ Wipe after scrubbing with clean rag/cloth</li> </ul>	<p>Hand or bottle spray each surface with EPA approved disinfectant</p> <ul style="list-style-type: none"> <li>➤ Allow proper contact time</li> <li>➤ Wipe with clean damp microfiber cloth to remove residual bioload and disinfectant residue</li> </ul>

<b>Classroom/Office/General Area</b>	<b>Cleaning Procedure Step 1</b>	<b>Disinfecting Procedure Step 2</b>
High Touch surface examples:		
<ul style="list-style-type: none"> <li>• Drinking/Sink Fixture</li> <li>• Counters/horizontal surfaces/risers</li> <li>• Walls (6' and down if child or special education area)</li> </ul>		
<b>Electronics</b> <ul style="list-style-type: none"> <li>• Computer/Keyboard/Mouse</li> <li>• Phone</li> <li>• TV/Devices</li> </ul>	Wipe all electronics and cables with appropriate detergent for electronics	Use EPA approved disinfectant that is safe for electronics <ul style="list-style-type: none"> <li>➤ Wipe with clean damp microfiber cloth to remove disinfectant residue</li> </ul>
<b>Carpet/Rugs</b> (Evaluate room use to determine if high touch point)	HEPA Vacuum  Hot water injection (140°F) with water only  Completely dry within 24-48 hours  ➤ Do not re-use water or equipment in adjacent areas without disinfecting equipment	Use EPA approved disinfectant for porous surfaces if concerns with cleaning process of hot water injection remain
<b>Porous Items</b>	Launder in warmest water setting possible and dry at highest temperature possible	None required
<b>Flooring</b> <ul style="list-style-type: none"> <li>• Tile</li> <li>• Wood</li> <li>• Ceramic</li> <li>• Laminate</li> </ul>	Use water and detergent with clean water and mop head.  ➤ Do not use mop head or dirty water in multiple areas and change frequently	Use EPA approved disinfectant that is safe for the flooring surface.  Damp-wipe with clean cloth/mop after contact time to

<b>Classroom/Office/General Area</b>	<b>Cleaning Procedure Step 1</b>	<b>Disinfecting Procedure Step 2</b>
High Touch surface examples:		
	<ul style="list-style-type: none"> <li>➤ No double dipping mop heads</li> </ul>	<p>remove residual bioload and detergent residue</p> <ul style="list-style-type: none"> <li>➤ Do not use mop head or dirty water in multiple areas and change frequently</li> </ul>
<ul style="list-style-type: none"> <li>• Elevator Buttons</li> <li>• Handrails</li> <li>• Main Entrance Door/Keypads</li> <li>• Vending Machine Buttons</li> </ul>	<p>Soap/detergent on all surfaces with manual scrubbing using textured rag to remove bioload.</p> <p>Change or fold cloth each surface and discard to prevent spread of bioload to surfaces.</p> <ul style="list-style-type: none"> <li>➤ No double dipping of cloths.</li> <li>➤ Wipe after scrubbing with clean rag/cloth</li> </ul>	<p>Hand or bottle spray each surface with EPA approved disinfectant</p> <ul style="list-style-type: none"> <li>➤ Allow proper contact time</li> <li>➤ Wipe with clean damp microfiber cloth to remove residual bioload and disinfectant residue</li> </ul>

### Art/Industrial Classrooms Targeted Cleaning and Disinfecting

<b>Art/Industrial Classrooms</b>	<b>Cleaning Procedure Step 1</b>	<b>Disinfecting Procedure Step 2</b>
High Touch surface examples:		
<ul style="list-style-type: none"> <li>• Door handles</li> <li>• Light switches</li> <li>• Tables/Counters/horizontal</li> <li>• Drawer/Cabinet Handles/Knobs</li> <li>• Chairs/Stools (hand grip locations)</li> <li>• Tools/Equipment</li> </ul>	<p>Soap/detergent on all surfaces with manual scrubbing using textured rag to remove bioload.</p> <p>Change or fold cloth each surface and discard to prevent spread of bioload to surfaces.</p> <ul style="list-style-type: none"> <li>➤ No double dipping of cloths.</li> </ul>	<p>Hand or bottle spray each surface with EPA approved disinfectant</p> <ul style="list-style-type: none"> <li>➤ Allow proper contact time</li> <li>➤ Wipe with clean damp microfiber cloth to remove residual bioload and disinfectant residue</li> </ul>

<b>Art/Industrial Classrooms</b>	<b>Cleaning Procedure Step 1</b>	<b>Disinfecting Procedure Step 2</b>
High Touch surface examples:		
	<ul style="list-style-type: none"> <li>➤ Wipe after scrubbing with clean rag/cloth</li> </ul>	
<b>Flooring</b> <ul style="list-style-type: none"> <li>• Tile</li> <li>• Wood</li> <li>• Concrete</li> </ul>	<p>Use water and detergent with clean water and mop head.</p> <ul style="list-style-type: none"> <li>➤ Do not use mop head or dirty water in multiple areas and change frequently</li> <li>➤ No double dipping mop heads</li> </ul>	<p>Use EPA approved disinfectant that is safe for the flooring surface.</p> <p>Damp-wipe with clean cloth/mop after contact time to remove residual bioload and detergent residue</p> <ul style="list-style-type: none"> <li>➤ Do not use mop head or dirty water in multiple areas and change frequently</li> </ul>

**Kitchen/Food Prep**

<b>Kitchen/Food Prep</b>	<b>Cleaning Procedure Step 1</b>	<b>Disinfecting Procedure Step 2</b>
<p>Ensure to maintain current HACCP Requirements. Food prep and eating surfaces require disinfectant to be rinsed after contact time.</p> <p>High Touch surface examples:</p>		
<ul style="list-style-type: none"> <li>• Door handles</li> <li>• Light switches</li> <li>• Desks</li> <li>• Tables</li> <li>• Drawer/Cabinet Handles/Knobs</li> <li>• Sink Fixture</li> </ul>	<p>Soap/detergent on all surfaces with manual scrubbing using textured rag to remove bioload.</p> <p>Change or fold cloth each surface and discard to prevent spread of bioload to surfaces.</p>	<p>Hand or bottle spray each surface with EPA food services approved disinfectant that is non-corrosive to metal</p> <ul style="list-style-type: none"> <li>➤ Allow proper contact time</li> <li>➤ Wipe with clean damp microfiber cloth to remove</li> </ul>

<b>Kitchen/Food Prep</b>	<b>Cleaning Procedure Step 1</b>	<b>Disinfecting Procedure Step 2</b>
<p>Ensure to maintain current HACCP Requirements. Food prep and eating surfaces require disinfectant to be rinsed after contact time.</p> <p>High Touch surface examples:</p>		
<ul style="list-style-type: none"> <li>• Counters</li> </ul>	<ul style="list-style-type: none"> <li>➤ No double dipping cloths.</li> <li>➤ Wipe after scrubbing with clean rag/cloth</li> </ul>	<p>residual bioload and disinfectant residue</p>
<p><b>Appliances</b></p> <ul style="list-style-type: none"> <li>• Ovens</li> <li>• Fryers</li> <li>• Mixers</li> </ul>	<p>Soap/detergent on all surfaces with manual scrubbing with textured rag to remove bioload.</p> <p>Change or fold cloth each surface and discard to prevent spread of bioload to surfaces.</p> <ul style="list-style-type: none"> <li>➤ No double dipping cloths.</li> <li>➤ Wipe after scrubbing with clean rag/cloth</li> </ul>	<p>Hand or bottle spray each surface with EPA food services approved disinfectant that is non-corrosive to metal</p> <ul style="list-style-type: none"> <li>➤ Allow proper contact time</li> <li>➤ Wipe with clean damp microfiber cloth to remove residual bioload and disinfectant residue</li> </ul>
<p><b>Utensils/Plates/Cups/Bowls/Trays</b></p>	<p>Wash with typical cleaners and detergents</p>	<p>None required</p>
<p><b>Flooring</b></p> <ul style="list-style-type: none"> <li>• Tile</li> <li>• Ceramic</li> </ul>	<p>Use water and detergent with clean water and mop head.</p> <ul style="list-style-type: none"> <li>➤ Do not use mop head or dirty water in multiple areas and change frequently</li> <li>➤ Do not double dip mop heads</li> </ul>	<p>Use EPA approved disinfectant that is approved for food preparation and the flooring surface.</p> <p>Damp-wipe with clean cloth/mop after contact time to remove residual bioload and detergent residue</p> <ul style="list-style-type: none"> <li>➤ Do not use mop head or dirty water in multiple areas and change frequently</li> </ul>

### Bathroom Facilities Targeted Cleaning and Disinfecting

Bathroom Facilities	Cleaning Procedure Step 1	Disinfecting Procedure Step 2
<p>High Touch surface examples:</p> <ul style="list-style-type: none"> <li>• Door handles/push spots</li> <li>• Light switches</li> <li>• Toilet including Flusher</li> <li>• Accessible grab bars</li> <li>• Sink Fixtures</li> <li>• Mirrors</li> <li>• Counters</li> <li>• Baby Changing Stations</li> <li>• Sanitary Disposal Containers</li> </ul>	<p>Soap/detergent on all surfaces with manual scrubbing using textured rag to remove bioload.</p> <p>Change or fold cloth each surface and discard to prevent spread of bioload to surfaces.</p> <ul style="list-style-type: none"> <li>➤ No double dipping cloths.</li> <li>➤ Wipe after scrubbing with clean rag/cloth</li> <li>➤ Use different cloths than other building areas</li> </ul> <p>Mirrors: glass cleaner and paper towel clean. Dispose towel.</p>	<p>Utilize EPA approved disinfectant</p> <ul style="list-style-type: none"> <li>➤ Allow proper contact time</li> <li>➤ Wipe with clean damp microfiber cloth to remove residual bioload and disinfectant residue</li> </ul>
<p><b>Flooring</b></p> <ul style="list-style-type: none"> <li>• Tile</li> <li>• Ceramic</li> </ul>	<p>Use water and detergent with clean water and mop head.</p> <ul style="list-style-type: none"> <li>➤ Do not use mop head or dirty water in multiple areas and change frequently</li> <li>➤ Do not double dip mop heads</li> </ul>	<p>Use EPA approved disinfectant that is approved for food preparation and the flooring surface.</p> <p>Damp-wipe with clean cloth/mop after contact time to remove residual bioload and detergent residue</p> <ul style="list-style-type: none"> <li>➤ Do not use mop head or dirty water in multiple areas and change frequently</li> </ul>

### Bus Transportation Targeted Cleaning and Disinfecting

Bus Transportation	Cleaning Procedure Step 1	Disinfecting Procedure Step 2
High Touch surface examples:		
<ul style="list-style-type: none"> <li>• Door handles</li> <li>• Handrails</li> <li>• Seats/Seat Backs</li> <li>• Windows</li> <li>• Window Latches</li> <li>• Door Trigger</li> <li>• Shifter</li> <li>• Steering Wheel</li> <li>• Windshield/Windows (inside)</li> </ul>	<p>Soap/detergent on all surfaces with manual scrubbing using textured rag or disposable towel to remove bioload.</p> <p>Change or fold cloth each surface and discard to prevent spread of bioload to surfaces.</p> <ul style="list-style-type: none"> <li>➤ No double dipping of cloths.</li> <li>➤ Wipe after scrubbing with clean rag/cloth</li> </ul> <p>Windows: Glass cleaner used on window interiors with paper towel.</p>	<p>Hand or bottle spray each surface with EPA approved disinfectant</p> <ul style="list-style-type: none"> <li>➤ Allow proper contact time</li> </ul> <p>Wipe with clean damp microfiber cloth to remove residual bioload and disinfectant residue</p>

### HVAC System Targeted Cleaning and Disinfecting

HVAC System	Cleaning Procedure Step 1	Disinfecting Procedure Step 2
High touch surface examples:		
<ul style="list-style-type: none"> <li>• Ductwork Supply/Return</li> <li>• Fan Housing</li> <li>• Outdoor Air Intake</li> <li>• Filter</li> <li>• Bathroom Exhaust</li> <li>• Kitchen Exhaust</li> </ul>	<p>No COVID-19 specific *requirement</p> <ul style="list-style-type: none"> <li>➤ Ensure maintenance filter changes</li> <li>➤ If system is dusty/dirty due to general use, should be considered for cleaning to provide quality IAQ and air exchanges</li> </ul>	<ul style="list-style-type: none"> <li>➤ None Required</li> </ul>

	<b>Bathroom Exhaust:</b> consider cleaning and disinfecting if lavatory used by COVID-19 Case.	
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\* Currently ASHRAE, AIHA and CDC do not make recommendations for HVAC system cleaning or disinfecting due to limited evidence that SARS-CoV-2 is migrating into the ventilation systems in a typical office/school facility design.

## Part 2: Enhanced Cleaning and Disinfecting (C&D)

### Enhanced C&D should be implemented when:

- ✓ When CDC and/or Local Health Official implements an outbreak “preparedness phase” or minimal to substantial community transmission.
- ✓ District administration and/or School Nurse identifies a localized outbreak concern within a facility population. This would also require district coordination with Local Department of Health.
  
- Establish an Enhanced C&D Team: Must include a district representative. C &D can be district personnel or contracted vendor. If contracted vendor, verify cleaning and disinfecting procedures and enhanced C&D areas via documentation authorized by the district.
- Verify audited high touch surface locations in each building/zone to efficiently disinfect proper surfaces and provide accurate timeline for enhanced C&D process.
- Maintain HVAC system in occupied mode to continually allow for outdoor air and air exchange flushing in the occupied space(s) throughout the enhanced C&D and occupancy timeline.
- Enhanced C&D frequency should be assessed based on the usage patterns, occupancy locations in the facility. **Typical enhanced C&D occurs 2-3 times per day in high traffic areas.**

## Before Enhanced Cleaning and Disinfecting

Identify Enhanced C&D team and ensure team has:

Proper PPE available for disinfecting use

Properly labeled cleaning and disinfecting products approved by EPA for COVID-19 (or targeted outbreak)

Identify, understand, and implement disinfectant product manufacturer specifications

Proper utensils and rags specific to Enhanced C&D area

Calibrated chemical dilution equipment (if applicable)

Proper Employee Right to Know training for products and procedures used for Enhanced C&D

Always perform hand hygiene before donning gloves and any protective equipment

Don appropriate PPE prior to entering space. Ensure staff trained in proper PPE donning and removal.

**Consult facility/area audit of high-touch surfaces for disinfecting focus**

### Safe Work Practices

- **Keep hands away from face and refrain from touching eyes, nose and mouth**
- **Work from clean to dirty areas in the space**
- **Limit the surfaces touched during the cleaning process**
- **Perform frequent hand hygiene and washing. For hand sanitizer, the CDC recommends using ABHR with greater than 60% ethanol or 70% isopropanol.**

Immediately AFTER Leaving Any Targeted Cleaning & Disinfecting Area

properly remove gloves and perform hand hygiene

**NOTE ABOUT BIOLOAD:** If impacted facility area has not been previously cleaned under targeted or enhanced C&D processes, bioload may have accumulated on high-touched surfaces and will require more effort on cleaning steps. Inadequately cleaned surfaces potentially interfere with the efficacy of disinfectants.

Consider implementing 3<sup>rd</sup> party environmental testing\* to document the bioload on surfaces and the effectiveness of the cleaning and disinfecting process. This provides confidence in efforts to minimize infection spread.

\* AIHA Reference Document “*Workplace Cleaning for COVID-19: Guidance Document*”



**DO NOT WEAR DIRTY GLOVES OUTSIDE OF THE TARGET CLEANING & DISINFECTING AREA**

If you need to leave the area after starting the target C&D, remove gloves and perform hand hygiene. Put on clean gloves on to resume cleaning and disinfecting.

**The following targeted C&D areas and designated high-touch surfaces can be modified to fit individual facility requirements:**

**Classroom/Office/General Area Enhanced Cleaning and Disinfecting**

<b>Classroom/Office/General Area</b>	<b>Cleaning Procedure Step 1</b>	<b>Disinfecting Procedure Step 2</b>
High Touch surface examples:		
<ul style="list-style-type: none"> <li>• Door handles/push spots</li> <li>• Locker handles (if shared lockers)</li> <li>• Light switches</li> <li>• Desks</li> <li>• Tables</li> <li>• Drawer/Cabinet Handles/Knobs</li> <li>• Chairs (hand grip locations)</li> <li>• Drinking/Sink Fixture</li> </ul>	<p>Soap/detergent on all surfaces with manual scrubbing using textured rag to remove bioload.</p> <p>Change or fold cloth each surface and discard to prevent spread of bioload to surfaces.</p> <ul style="list-style-type: none"> <li>➤ No double dipping of cloths.</li> <li>➤ Wipe after scrubbing with clean rag/cloth</li> </ul>	<p>Hand or bottle spray each surface with EPA approved disinfectant</p> <ul style="list-style-type: none"> <li>➤ Allow proper contact time</li> <li>➤ Wipe with clean damp microfiber cloth to remove residual bioload and disinfectant residue</li> </ul>

<b>Classroom/Office/General Area</b>	<b>Cleaning Procedure Step 1</b>	<b>Disinfecting Procedure Step 2</b>
High Touch surface examples:		
<ul style="list-style-type: none"> <li>• Counters/horizontal surfaces/risers</li> <li>• Walls (6' and down if child or special education area)</li> </ul>	<p><b>2-3x per day</b></p>	
<p><b>Electronics</b></p> <ul style="list-style-type: none"> <li>• Computer/Keyboard/Mouse</li> <li>• Phone</li> <li>• TV/Devices</li> </ul>	<p>Consider providing disinfecting wipes and product for individuals to daily sanitize</p> <p><b>After each use</b></p>	<p>Use EPA approved disinfectant that is safe for electronics</p> <ul style="list-style-type: none"> <li>➤ Wipe with clean damp microfiber cloth to remove disinfectant residue</li> </ul>
<p><b>Carpet/Rugs</b></p> <p>(Evaluate room use to determine if high touch point)</p>	<p>HEPA Vacuum</p> <p>Typical cleaning as required unless small child or heavy floor use in room.</p> <ul style="list-style-type: none"> <li>➤ Consider limiting carpet or rugs to minimize porous surfaces</li> <li>➤ Consider mats for floor work that can be disinfected after use</li> </ul> <p><b>1x per day</b></p>	<p>None required</p>
<p><b>Porous Items</b></p>	<p>Consider limiting porous items in areas. If present and soiled:</p> <p>Launder in warmest water setting possible and dry at</p>	<p>None required</p>

<b>Classroom/Office/General Area</b>	<b>Cleaning Procedure Step 1</b>	<b>Disinfecting Procedure Step 2</b>
High Touch surface examples:		
	highest temperature possible  <b>As Needed</b>	
<b>Flooring</b> <ul style="list-style-type: none"> <li>• Tile</li> <li>• Wood</li> <li>• Ceramic</li> <li>• Laminate</li> </ul>	Use typical maintenance cleaning process and products (Not considered high touch surface)  <b>1x per day (no childcare)</b>  <b>2x per day (childcare area)</b>	None required
<ul style="list-style-type: none"> <li>• Elevator Buttons</li> <li>• Handrails</li> <li>• Main Entrance Door/Keypads</li> </ul>	Soap/detergent on all surfaces with manual scrubbing using textured rag to remove bioload.  Change or fold cloth each surface and discard to prevent spread of bioload to surfaces.  ➤ No double dipping of cloths. ➤ Wipe after scrubbing with clean rag/cloth  <b>2-3x per day</b>	Hand or bottle spray each surface with EPA approved disinfectant  ➤ Allow proper contact time ➤ Wipe with clean damp microfiber cloth to remove residual bioload and disinfectant residue
<b>Trash Removal</b>	Increased trash can re-lining	

<b>Classroom/Office/General Area</b>	<b>Cleaning Procedure Step 1</b>	<b>Disinfecting Procedure Step 2</b>
High Touch surface examples:		
	Handle plastic bags from the top	

**Art/Industrial Classrooms Enhanced Cleaning and Disinfecting**

<b>Art/Industrial Classrooms</b>	<b>Cleaning Procedure Step 1</b>	<b>Disinfecting Procedure Step 2</b>
High Touch surface examples:		
<ul style="list-style-type: none"> <li>• Door handles</li> <li>• Light switches</li> <li>• Tables/Counters/horizontal</li> <li>• Drawer/Cabinet Handles/Knobs</li> <li>• Chairs/Stools (hand grip locations)</li> <li>• Tools/Equipment</li> </ul>	<p>Soap/detergent on all surfaces with manual scrubbing using textured rag to remove bioload.</p> <p>Change or fold cloth each surface and discard to prevent spread of bioload to surfaces.</p> <ul style="list-style-type: none"> <li>➤ No double dipping of cloths.</li> <li>➤ Wipe after scrubbing with clean rag/cloth</li> </ul> <p><b>2-3x per day</b></p> <p><b>Tools/Equipment After Each Use</b></p>	<p>Hand or bottle spray each surface with EPA approved disinfectant</p> <ul style="list-style-type: none"> <li>➤ Allow proper contact time</li> <li>➤ Wipe with clean damp microfiber cloth to remove residual bioload and disinfectant residue</li> </ul>
<p><b>Flooring</b></p> <ul style="list-style-type: none"> <li>• Tile</li> <li>• Wood</li> <li>• Concrete</li> </ul>	<p>Use water and detergent with clean water and mop head.</p> <ul style="list-style-type: none"> <li>➤ Do not use mop head or dirty water in multiple areas and change frequently</li> </ul>	<p>Use EPA approved disinfectant that is safe for the flooring surface.</p> <p>Damp-wipe with clean cloth/mop after contact time to</p>

Art/Industrial Classrooms	Cleaning Procedure Step 1	Disinfecting Procedure Step 2
High Touch surface examples:		
	<ul style="list-style-type: none"> <li>➤ No double dipping mop heads</li> </ul> <p><b>1x per day</b></p>	<p>remove residual bioload and detergent residue</p> <ul style="list-style-type: none"> <li>➤ Do not use mop head or dirty water in multiple areas and change frequently</li> </ul>

**Kitchen/Food Prep Enhanced Cleaning and Disinfecting**

Kitchen/Food Prep	Cleaning Procedure Step 1	Disinfecting Procedure Step 2
<p>Ensure to maintain current HACCP Requirements. Food prep and eating surfaces require disinfectant to be rinsed after contact time.</p> <p>High Touch surface examples:</p>		
<ul style="list-style-type: none"> <li>• Door handles</li> <li>• Light switches</li> <li>• Desks</li> <li>• Tables</li> <li>• Drawer/Cabinet Handles/Knobs</li> <li>• Sink Fixture</li> <li>• Counters</li> </ul>	<p>Soap/detergent on all surfaces with manual scrubbing using textured rag to remove bioload.</p> <p>Change or fold cloth each surface and discard to prevent spread of bioload to surfaces.</p> <ul style="list-style-type: none"> <li>➤ No double dipping cloths.</li> <li>➤ Wipe after scrubbing with clean rag/cloth</li> </ul> <p><b>After each food prep session</b></p>	<p><b>Ensure to maintain current HACCP Requirements</b></p> <p>Hand or bottle spray each surface with EPA food prep approved disinfectant that is non-corrosive to metal</p> <ul style="list-style-type: none"> <li>➤ Allow proper contact time</li> <li>➤ Wipe with clean damp microfiber cloth to remove residual bioload and disinfectant residue</li> </ul>
<p><b>Appliances</b></p> <ul style="list-style-type: none"> <li>• Ovens</li> </ul>	<p>Soap/detergent on all surfaces with manual scrubbing with</p>	<p>Hand or bottle spray each surface with EPA food services</p>

<b>Kitchen/Food Prep</b>	<b>Cleaning Procedure Step 1</b>	<b>Disinfecting Procedure Step 2</b>
<p>Ensure to maintain current HACCP Requirements. Food prep and eating surfaces require disinfectant to be rinsed after contact time.</p> <p>High Touch surface examples:</p>		
<ul style="list-style-type: none"> <li>• Fryers</li> <li>• Mixers</li> </ul>	<p>textured rag to remove bioload.</p> <p>Change or fold cloth each surface and discard to prevent spread of bioload to surfaces.</p> <ul style="list-style-type: none"> <li>➤ No double dipping cloths.</li> <li>➤ Wipe after scrubbing with clean rag/cloth</li> </ul> <p><b>Daily after use</b></p>	<p>approved disinfectant that is non-corrosive to metal</p> <ul style="list-style-type: none"> <li>➤ Allow proper contact time</li> <li>➤ Wipe with clean damp microfiber cloth to remove residual bioload and disinfectant residue</li> </ul>
<p><b>Utensils/Plates/Cups/Bowls/Trays</b></p>	<p>Wash with typical cleaners and detergents</p> <p><b>Daily after use</b></p>	<p>None required</p>
<p><b>Flooring</b></p> <ul style="list-style-type: none"> <li>• Tile</li> <li>• Ceramic</li> </ul>	<p>Use water and detergent with clean water and mop head.</p> <ul style="list-style-type: none"> <li>➤ Do not use mop head or dirty water in multiple areas and change frequently</li> <li>➤ Do not double dip mop heads</li> </ul> <p><b>After each Food prep session</b></p>	<p>Use EPA approved disinfectant that is approved for food preparation and the flooring surface.</p> <p>Damp-wipe with clean cloth/mop after contact time to remove residual bioload and detergent residue</p> <ul style="list-style-type: none"> <li>➤ Do not use mop head or dirty water in multiple areas and change frequently</li> </ul>

### Bathroom Facilities Enhanced Cleaning and Disinfecting

Bathroom Facilities	Cleaning Procedure Step 1	Disinfecting Procedure Step 2
<p>High Touch surface examples:</p>		
<ul style="list-style-type: none"> <li>• Door handles/push spots</li> <li>• Light switches</li> <li>• Toilet including Flusher</li> <li>• Handicap bars</li> <li>• Sink Fixtures</li> <li>• Mirrors</li> <li>• Counters</li> </ul>	<p>Soap/detergent on all surfaces with manual scrubbing using textured rag to remove bioload.</p> <p>Change or fold cloth each surface and discard to prevent spread of bioload to surfaces.</p> <ul style="list-style-type: none"> <li>➤ No double dipping cloths.</li> <li>➤ Wipe after scrubbing with clean rag/cloth</li> <li>➤ Use different cloths than other building areas</li> </ul> <p>Mirrors: glass cleaner and paper towel clean. Dispose towel.</p> <p><b>2-3x per day when in use</b></p>	<p>Hand or bottle spray each surface with EPA food services approved disinfectant that is non-corrosive to metal</p> <ul style="list-style-type: none"> <li>➤ Allow proper contact time</li> <li>➤ Wipe with clean damp microfiber cloth to remove residual bioload and disinfectant residue</li> </ul>
<p><b>Flooring</b></p> <ul style="list-style-type: none"> <li>• Tile</li> <li>• Ceramic</li> </ul>	<p>Use water and detergent with clean water and mop head.</p> <ul style="list-style-type: none"> <li>➤ Do not use mop head or dirty water in multiple areas and change frequently</li> <li>➤ Do not double dip mop heads</li> </ul> <p><b>2-3x per day when in use</b></p>	<p>Use EPA approved disinfectant that is approved for food preparation and the flooring surface.</p> <p>Damp-wipe with clean cloth/mop after contact time to remove residual bioload and detergent residue</p> <ul style="list-style-type: none"> <li>➤ Do not use mop head or dirty water in multiple areas and change frequently</li> </ul>

**Bus Transportation Enhanced Cleaning and Disinfecting**

Bus Transportation	Cleaning Procedure Step 1	Disinfecting Procedure Step 2
High Touch surface examples:		
<ul style="list-style-type: none"> <li>• Door handles</li> <li>• Handrails</li> <li>• Seats/Seat Backs</li> <li>• Windows</li> <li>• Window Latches</li> <li>• Door Trigger</li> <li>• Shifter</li> <li>• Steering Wheel</li> <li>• Windshield/Windows (inside)</li> </ul>	<p>Soap/detergent on all surfaces with manual scrubbing using textured rag or disposable towel to remove bioload.</p> <p>Change or fold cloth each surface and discard to prevent spread of bioload to surfaces.</p> <ul style="list-style-type: none"> <li>➤ No double dipping of cloths.</li> <li>➤ Wipe after scrubbing with clean rag/cloth</li> </ul> <p>Windows: Glass cleaner used on window interiors with paper towel.</p> <p><b>2-4x daily or Post Transportation Event</b></p>	<p>Hand or bottle spray each surface with EPA approved disinfectant</p> <ul style="list-style-type: none"> <li>➤ Allow proper contact time</li> <li>➤ Wipe with clean damp microfiber cloth to remove residual bioload and disinfectant residue</li> </ul>

**HVAC System Enhanced Cleaning and Disinfecting**

HVAC System	Cleaning Procedure Step 1	Disinfecting Procedure Step 2
High Touch surface examples:		
<ul style="list-style-type: none"> <li>• Ductwork Supply/Return</li> <li>• Fan Housing</li> <li>• Outdoor Air Intake</li> <li>• Filter</li> <li>• Bathroom Exhaust</li> </ul>	<p>No COVID-19 specific requirement *</p> <ul style="list-style-type: none"> <li>➤ Ensure maintenance filter changes</li> <li>➤ If system is dusty/dirty due to general use, should be considered for cleaning to</li> </ul>	<ul style="list-style-type: none"> <li>➤ None Required</li> </ul>

HVAC System	Cleaning Procedure Step 1	Disinfecting Procedure Step 2
High Touch surface examples:		
<ul style="list-style-type: none"> <li>Kitchen Exhaust</li> </ul>	<p>provide quality IAQ and air exchanges</p> <p><b>Filter changes 3-4xper year Annual inspection for unit cleanliness</b></p>	

\* Currently ASHRAE, AIHA and CDC do not make recommendations for HVAC system cleaning or disinfecting due to limited evidence that SARS-CoV-2 is migrating into the ventilation systems in a typical office/school facility design.

Immediately AFTER Leaving Any Enhanced Cleaning & Disinfecting Area  
properly remove gloves and perform hand hygiene

## Appendix A

[Facility High Touch Surface Audit Template.xlsx](#)