



# Proactive Cleaning to Minimize the Transmission of Emerging Viral Pathogens (including Coronavirus)

This is a general guideline for the proactive cleaning and disinfecting of surfaces to minimize the transmission of emergent viral pathogens including coronavirus disease 2019 (abbreviated “COVID-19”). This guide may be superseded by federal, state and local regulations. It is recommended before commencing any work that you contact your pollution insurance and workers compensation insurance provider to confirm coverage for emerging pathogen type work.

## About Coronavirus

According to the U.S. Centers for Disease Control (CDC), coronaviruses (CoV) are a large family of viruses that cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV). A novel coronavirus (nCoV) is a new strain that has not been previously identified in humans. CDC is responding to an outbreak of respiratory disease caused by a novel (new) coronavirus that was first detected in Wuhan City, Hubei Province, China and which has now (as of this publication) been detected in 60 locations internationally, including cases in the United States. The virus has been named “SARS-CoV-2” and the disease it causes has been named “coronavirus disease 2019” (abbreviated “COVID-19”).<sup>i</sup> The CDC has setup a [Coronavirus Disease 2019 \(COVID-19\) Situation Summary](#) page to provide updated information as it becomes available, in addition to updated guidance.

The CDC has also provided information about how the virus potentially spreads. This is important knowledge for those creating cleanup plans for individual buildings and facilities. According to the CDC, their current understanding about how COVID-19 spreads is largely based on what is known about similar coronaviruses. COVID-19 is a new disease and there is more to learn about how it spreads, the severity of illness it causes, and to what extent it may spread in the United States. The virus is thought to spread mainly from person-to-person. This could be between people who are in close contact with one another (within about 6 feet) or through respiratory droplets produced when an infected person coughs or sneezes. These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs. It may be possible that a person can get COVID-19 by touching a surface or object that has the virus on it and then touching their own mouth, nose, or possibly their eyes, but this is not thought to be the main way the virus spreads.<sup>ii</sup>

## Scope of Cleanup Protocol

This proactive cleanup protocol involves a customer that is requesting facility or structure cleaning and disinfection and the customer states that there is NO active known threat of SARS-CoV-2 contamination or exposure. This would be a proactive cleaning action driven from current, active events. In this scenario, the facility can be cleaned using the general guidelines provided within this document. Please

note that these are general guidelines only. Building and spaces greatly differ. Each location will require individual planning.

The scope of work will be created and agreed upon by the customer and the SERVPRO franchise to ensure a set of agreeable expectations. The customer needs to acknowledge that cleaning and disinfecting will only apply to the current state of the structure and contents. This should be documented with the [Request for Proactive Cleaning to Minimize the Transmission of Emerging Viral Pathogens \(including Coronavirus\)](#) form. The structure would not be protected from future SARS-CoV-2 contamination if an infected person was to enter and occupy the building.

## Exclusions to Cleanup Protocol

Beyond the scope of this cleanup protocol is a situation involving a Person Under Investigation (PUI). A PUI includes someone who is involved in a quarantine situation or has come in contact with someone who has been in a quarantine situation. Also, beyond the scope of this cleanup protocol is a situation involving a confirmed positive case of SARS-CoV-2. In both these situations, it is advised to not perform any work without contacting the proper governmental agency (CDC, Health Department, etc.). In these situations, the protocol/scope needs to be provided by the presiding governmental agency. Do not perform this work without that oversight in place.

## Cleanup Scope of Work and Planning

The CDC encourages cleaning of high touch surfaces such as counters, tabletops, doorknobs, bathroom fixtures, toilets, phones, keyboards, tablets, and tables at a minimum.<sup>iii</sup> These same surfaces are mentioned in the CDCs guidance for commercial spaces as well.<sup>iv</sup>

Cleaning removes the soil and dirt that harbors the infectious agents, while disinfecting kills the remaining environmental pathogens.<sup>v</sup> Cleaning is a necessary first step in disinfecting a surface. Both cleaning and disinfecting must be a part of your scope of work and plan.

Surfaces to consider for cleaning and/or disinfecting based on porosity would include but are not limited to:

### **Kitchen/Food Areas**

- tables and chairs
- countertops
- cabinets and pulls
- doorknobs
- floors-hard surfaces/wood
- mats
- food contact surfaces
- light switches
- paper towel/napkin dispensers
- push doors

### **Bathrooms**

- bathroom stalls
- countertops
- cabinets/vanities and pulls
- doorknobs
- floors-hard surfaces/wood
- handrails
- light switches
- paper towel/napkin dispenser
- sink hardware
- sinks
- soap dispensers

### **Classrooms**

- book covers and binders
- carpets
- chairs
- computer equipment
- countertops
- doorknobs
- floors- hard surfaces/wood
- small hard surface items
- light switches
- mats

### **Offices**

- carpets
- chairs
- telephones
- computer equipment
- countertops
- doorknobs
- floors- hard surfaces/wood
- light switches
- rugs
- shared office equipment
- tabletops/desktops
- water fountains

- salt and pepper shakers
- sink hardware
- soap dispensers
- tabletops

- toilets
- diaper changing station

- paper towel/napkin dispensers
- rugs
- sink hardware
- sinks
- soap dispensers tabletops/desktops

#### **Retail Space**

- shelving
- racking
- displays
- mannequins
- packaged inventory
- carpets
- fitting room stalls
- chairs
- telephones
- computer equipment and registers
- sales counters
- doorknobs
- floors- hard surfaces/wood
- light switches
- rugs
- tables
- water fountains

#### **Hallways**

- carpets
- diaper-changing pads
- diaper-changing tables
- doorknobs
- floors- hard surfaces/wood
- handrails
- light switches
- playground equipment
- rugs
- water fountains

#### **Other**

- Fitness equipment
- Lamps
- Storage bins
- Shelves and racking
- Lockers
- Stair handrails
- Elevator cars

Some items may need to be pretested to determine if cleaning and disinfecting is possible without causing damage. Be cautious of valuable pieces of art; some cleaning processes could cause damage to these items.

## Personal Protective Equipment (PPE)

Personal protective equipment (PPE) should be selected and used to maintain worker health and safety. Due to potential respiratory exposure to particulates, at a minimum a N-95 respirator (such as product [#7003](#)) should be worn by all cleanup personnel. Additionally, all cleanup personnel should wear nitrile gloves (such as product [#7052](#), [#7055](#), or [#7054G](#)) and goggles (such as product [#7004](#)).

Donning procedures should be established and adhered to throughout the cleaning and disinfecting process. Cleanup personnel should don PPE prior to engaging in cleaning and disinfecting surfaces, and/or manipulating contents.

During the cleaning and disinfecting process, cleanup personnel should keep their PPE on while working in the space. Cleanup personnel should avoid touching their face while working to limit dermal exposure.

Doffing procedures should be established and adhered to throughout the cleaning and disinfecting process. When removing PPE and other soiled materials, do not allow the outer surfaces of PPE and other soiled material to contact bare skin. Wash hands with soap and water for at least 20 seconds after exiting the workspace.

## Cleanup Procedures

These procedures focus on the critical role cleaning plays in preventing the transmission of viruses. Cleanup procedures may vary depending on the environment, but the general guideline includes [1] cleaning of porous and non-porous surfaces, [2] disinfecting of non-porous surfaces, [3] cleaning and disinfecting of equipment, tools, and/or supplies used for cleanup process, and [4] disposal of waste.

### 1. Cleaning of Porous and Non-porous Surfaces

The CDC describes cleaning as removing germs, dirt, and impurities from surfaces or objects. Cleaning works by using a 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.<sup>vi</sup>

Some materials cannot be cleaned with detergent and water without being damaged. For this reason, paper and paper products are not able to be cleaned and/or disinfected. Cleaning methods typically used on water sensitive materials such as vacuuming or dry sponging would not be capable of removing enough soil and residue to be effective.

Porous materials like carpet, area rugs, upholstered items, and draperies that are not water sensitive, can be wet cleaned using a Hot Water Extraction or Deluxe Preconditioner and Rinse method. Refer to SERVPRO's [EZ Production Guidelines](#) for detailed guidelines on how to perform these two textile cleaning methods (page 62 and 66). Carpets can also be sanitized with [ServprOXIDE™ \(product #100\)](#) following label directions, if needed.

Non-porous materials like hard surface floors, cabinets, countertops, doorknobs, and plumbing fixtures can be wet cleaned using a variety of SERVPRO hard surface cleaners (general purpose cleaners) and cleaning methods. Refer to SERVPRO's [EZ Production Guidelines](#) for detailed guidelines on wet cleaning hard surfaces (page 16), wet cleaning finished wood surfaces (page 19), cleaning resilient flooring (page 23), cleaning non-resilient flooring (page 28), and wet cleaning non-porous wall surfaces (page 14).

### 2. Disinfecting of Non-porous Surfaces

The CDC describes disinfecting as killing 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.<sup>vii</sup>

Not all surfaces can be disinfected. Because of the porosity of some materials, disinfection is not possible. This includes carpet, area rugs, upholstered items, and draperies.

Non-porous materials like hard surface floors, cabinets, countertops, doorknobs, and plumbing fixtures can be disinfected using a variety of disinfectants within the SERVPRO product line. Refer to SERVPRO's [EZ Production Guidelines](#) for detailed guidelines on disinfecting nonporous surfaces (page 46).

Currently there are no disinfectants that have been tested specifically for this particular emerging viral pathogen. The CDC recommends usage of a labeled Hospital Grade disinfectant with claims against viruses similar to SARS-CoV-2.

[ServprOXIDE™ \(product #100\)](#) is a hospital-grade disinfectant that has demonstrated effectiveness against viruses similar to SARS-CoV-2 on hard, non-porous surfaces. Per the CDC, this product can be used against SARS-CoV-2 when used in accordance with the directions for use against Norovirus Feline Calicivirus and Canine Parvovirus, Strain Cornell-780916, ATCC VR-2016 on hard, non-porous surfaces. In addition, ServprOXIDE™ currently has EPA-approved claims for Feline coronavirus (Strain WSU 79-1683, ATCC VR 989) and Canine coronavirus (Strain 1-71, ATCC VR-809). As with all emerging-type pathogens, proper PPE use is of the utmost importance.

ServprOXIDE™ should be used in accordance with label directions.

These disinfectants are normally applied using a spray bottle, pump-up sprayer, electric sprayer, or ULV Mister and must dwell on the surface for 10 minutes. Once again, follow label directions for the specific disinfectant being used.

The CDC encourages the use of disinfecting wipes on electronic items that are touched often, such as phones and computers. Pay close attention to the directions for using disinfecting wipes. It may be necessary to use more than one wipe to keep the surface wet for the stated length of contact time. Make sure that the electronics can withstand the use of liquids for cleaning and disinfecting.<sup>viii</sup> Consider [Benefect Botanical Disinfectant Wipes \(product #173\)](#) for this purpose.

### 3. [Cleaning and Disinfecting of Equipment, Tools, and/or Supplies Used for Cleanup Process](#)

Any equipment, tools, and/or supplies used for the cleanup process must be cleaned and disinfected using the cleaning methods described in step 1 and 2. This is to ensure that potential contamination is not moved to other parts of the structure.

### 4. [Disposal of Waste](#)

All used gloves and disposable respirators should be bagged within the work area. As of the date of this publication, waste can be disposed within your franchise dumpster. Cleaning towels should be bagged separately and taken back to the franchise location for laundering.

## Recommendations for Property Owners

Beyond the cleaning performed by the provider, property owners must understand that persons infected with the SARS-CoV-2 virus and/or COVID-19 that enter their property will potentially infect others and deposit the virus on surfaces.

According to the CDC, the virus is thought to spread mainly from person-to-person. This could be between people who are in close contact with one another (within about 6 feet) or through respiratory droplets produced when an infected person coughs or sneezes. These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs. It may be possible that a person can get COVID-19 by touching a surface or object that has the virus on it and then touching their own mouth, nose, or possibly their eyes, but this is not thought to be the main way the virus spreads.<sup>ix</sup>

The CDC has setup a webpage titled [Preventing COVID-19 Spread in Communities](#) which addresses homes, childcare and K-12 schools, colleges and universities, work environments, healthcare settings, and large community events and mass gatherings.

For business purposes, the CDC recommends routine environmental cleaning. This should include routinely cleaning all frequently touched surfaces in the workplace, such as workstations, countertops, and doorknobs; and provide disposable wipes so that commonly used surfaces (for example, doorknobs, keyboards, remote controls, desks) can be wiped down by employees before each use.<sup>x</sup> For structures that utilize an internal or external janitorial crews, it is recommended that they follow proper cleaning protocols established by the CDC.

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<sup>i</sup> <https://www.cdc.gov/coronavirus/2019-nCoV/summary.html>

<sup>ii</sup> <https://www.cdc.gov/coronavirus/2019-ncov/about/transmission.html>

<sup>iii</sup> [https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-prevent-spread.html?CDC\\_AA\\_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fguidance-prevent-spread.html](https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-prevent-spread.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fguidance-prevent-spread.html)

<sup>iv</sup> <https://www.cdc.gov/coronavirus/2019-ncov/specific-groups/guidance-business-response.html>

<sup>v</sup> <https://www.issa.com/infectionprevention>

<sup>vi</sup> <https://www.cdc.gov/flu/school/cleaning.htm>

<sup>vii</sup> <https://www.cdc.gov/flu/school/cleaning.htm>

<sup>viii</sup> <https://www.cdc.gov/flu/school/cleaning.htm>

<sup>ix</sup> <https://www.cdc.gov/coronavirus/2019-ncov/about/transmission.html>

<sup>x</sup> <https://www.cdc.gov/coronavirus/2019-ncov/specific-groups/guidance-business-response.html>