

# NOVEL CORONAVIRUS (COVID-19)

**Cleaning and Disinfecting Guidance  
for a Hotel Operating as a  
Field Hospital for COVID-19 Patients**



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# ABOUT THIS GUIDANCE

**Dated 4/10/20:** The novel coronavirus is an emerging pathogen and the situation is constantly evolving. This guidance references CDC and WHO guidelines and is supplemented with Ecolab expertise.

For the most up-to-date information, please refer to [Centers for Disease Control and Prevention \(CDC\)](#), [World Health Organization](#) or your local health authority.

This guidance is intended to help you and your staff shift operations from **hospitality to cleaning and disinfecting as a field hospital**. This involves additional focus on:

- Hospital-grade hand hygiene protocols
- Preparing rooms and public spaces
- Cleaning & disinfecting protocols for patient rooms during and after their stay
- Handling and processing of patient laundry vs guest laundry

Contact your Ecolab representative for additional questions on products or procedures

Additional information:

- [FEMA: ACE Hotel to Hospital](#)
- [CDC: Interim Guidance for Business and Employers](#)
- [CDC: Guidance for Cleaning and Disinfection](#)
- [CDC: Prevention in Communities, schools, healthcare settings and businesses](#)

# GENERAL INFECTION PREVENTION GUIDELINES

Preventative measures that may help prevent an outbreak of COVID-19 as well as other illnesses.

1

## MONITOR NEWS AND ADVICE FROM PUBLIC HEALTH AGENCIES

Follow local public health recommendations related to local infection activity and need for isolation and closing.

2

## IMPLEMENT GOOD INFECTION PREVENTION PRACTICES

Reinforce personal hygiene throughout your operation.

Provide hygiene materials such as tissues, hand soap and sanitizer.

Stock effective **disinfectant** products and follow protocols.

3

## COMMUNICATE WITH AND MONITOR EMPLOYEES

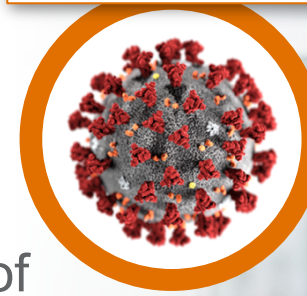
Educate and inform employees.

Closely monitor employee health.

Have symptomatic employees stay home.

# WHAT WE KNOW ABOUT CORONAVIRUS (COVID-19)

## Coronaviruses

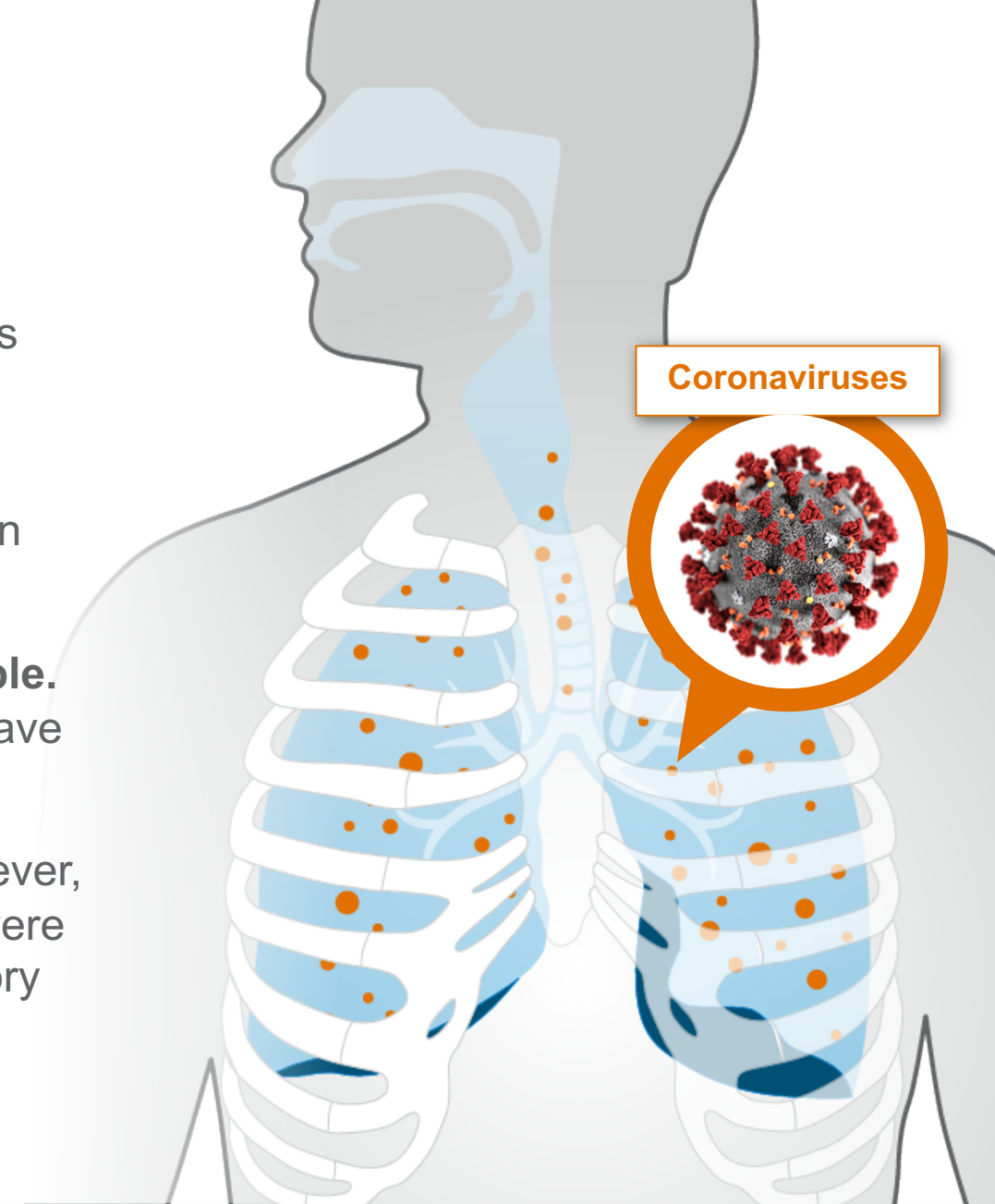


- **Coronavirus disease (COVID-19)** is a respiratory disease of international public health concern caused by a “novel coronavirus” not previously seen.
- The virus causes fever and respiratory symptoms.
- To date, the virus has infected greater than 1.4 million people, with thousands of reported deaths – and counting.
  - There may be more cases identified--access case counts here: [Global Map of Confirmed Cases](#)
- Public health authorities are actively investigating this outbreak and **the situation is evolving**.
  - Please follow local public health authority and World Health Organization guidance for the most up-to-date information.

Sources: (1) <http://jiangsu.sina.com.cn/news/s/2020-01-15/detail-iihnzhha2508664.shtml> (2) <http://wjw.wuhan.gov.cn/front/web/showDetail/2020011509040>  
(3) [http://news.youth.cn/jsxw/202001/t20200115\\_12170407.html](http://news.youth.cn/jsxw/202001/t20200115_12170407.html) (4) [https://www3.nhk.or.jp/nhkworld/en/news/20200116\\_46/](https://www3.nhk.or.jp/nhkworld/en/news/20200116_46/) (5)  
<http://wjw.wuhan.gov.cn/front/web/showDetail/2020011609057>  
(6) <http://wjw.wuhan.gov.cn/front/web/list2nd/no/710> (7) <http://wjw.wuhan.gov.cn/front/web/showDetail/2020011909074>

# WHAT IS A CORONAVIRUS?

- **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.
- **Coronaviruses are transmitted between animals and people.** Several known coronaviruses are circulating in animals that have not yet infected humans.
- **Common signs of infection** include respiratory symptoms, fever, cough, shortness of breath and trouble breathing. In more severe cases, infection can cause pneumonia, severe acute respiratory syndrome, kidney failure and even death.

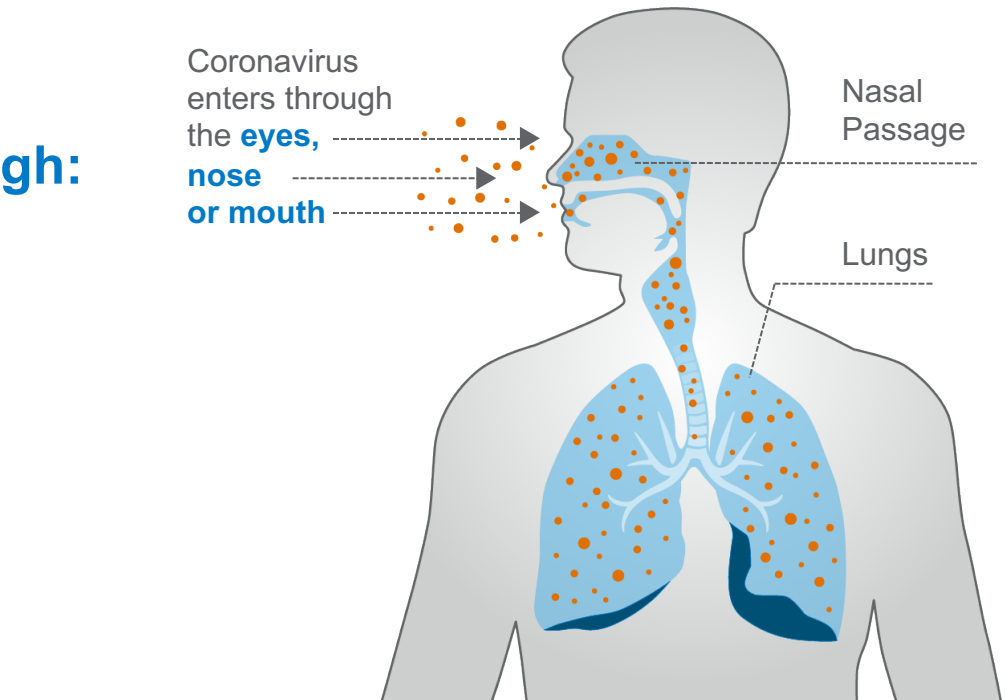


# HOW DOES CORONAVIRUS SPREAD?

It depends on the particular coronavirus.

Human coronaviruses **may spread by respiratory droplets from an infected person to others through:**

- **The air** by coughing and sneezing
- **Close personal contact**, such as touching or shaking hands
- **Touching** an object or surface with the virus on it, then touching your mouth, nose or eyes before washing your hands



Transmission from person to person is occurring **with COVID-19**. Surveillance continues.

# STEPS TO HELP PROTECT YOURSELF, YOUR EMPLOYEES, AND PATIENTS

Public health recommendations focus on **standard infection control practices, training and compliance.**



## Good News

Coronavirus is a small-enveloped virus. Enveloped viruses are the least resistant to **disinfection**, which means **disinfectants can be used to effectively kill coronavirus on surfaces.**



# HOW TO PROTECT YOURSELF

➤ There are currently no vaccines available to protect you against human coronavirus infection.

You may be able to **reduce your risk** of infection by doing the following:


- 1 **Wash your hands** often and correctly.
  - The World Health Organization recommends performing hand hygiene with soap and water or alcohol-based hand sanitizer if soap and water are not available.
- 2 **Avoid touching** your eyes, nose or mouth with unwashed hands.
- 3 **Avoid close contact** with people who are sick.
- 4 **Avoid areas where live animals are being sold or raised** in regions where excessive cases are being reported.
- 5 **Wear a mask** if advised by health care experts or local requirements.
- 6 **Seek medical advice immediately** if you have a fever or other symptoms after traveling. Tell the doctor where you have traveled.



Sources: (1) <https://www.cdc.gov/coronavirus/about/prevention.html> (2) <https://www.chp.gov.hk/sc/features/102465.html>  
(3) [https://www.who.int/ith/2020-0901\\_outbreak\\_of\\_Pneumonia\\_caused\\_by\\_a\\_new\\_coronavirus\\_in\\_C/en/](https://www.who.int/ith/2020-0901_outbreak_of_Pneumonia_caused_by_a_new_coronavirus_in_C/en/)


# HOW TO PROTECT OTHERS

If you have cold-like symptoms, you can **help protect others** by doing the following:




Wear a mask if advised by healthcare experts or local requirements.

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Stay home while sick.

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Avoid close contact.

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Wash your hands.

---




Cover your mouth and nose.

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Contact a doctor immediately.

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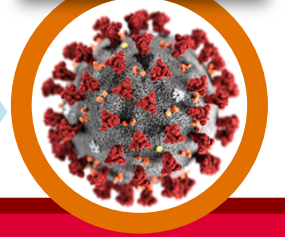
Clean and **disinfect**.

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# PROCEDURES BASED ON RISK PROFILE

Ecolab recommends that customers take the following steps based on the risk profile of their operations. This 3-tiered guidance is informed by public health reports and our understanding of the scientific characteristics of underlying causes. **Primary focus for cleaning and disinfection when housing PATIENTS will be in the RED – Remediation Risk Level**

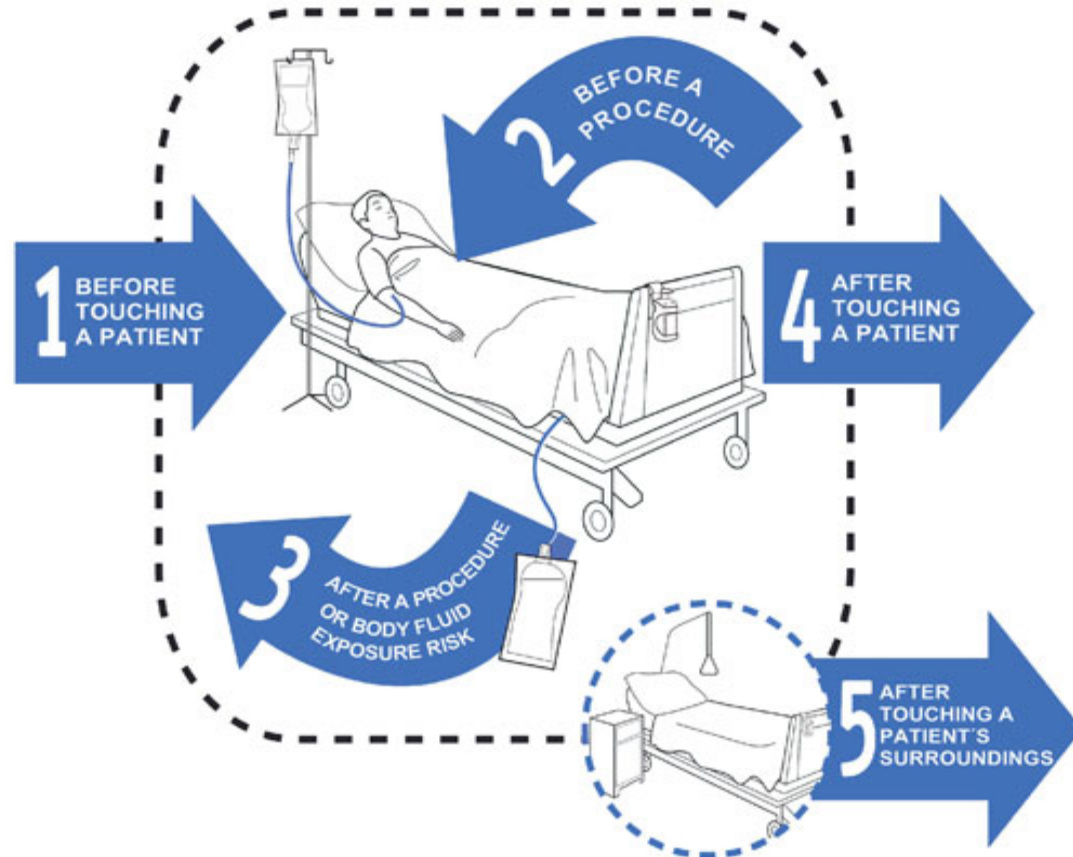
Coronavirus



LEVEL	GREEN: Standard Prevention	YELLOW: Risk Reduction	RED: Remediation
DESCRIPTION	<b>RISK PROFILE:</b> No known outbreak in your geographic area	<b>RISK PROFILE:</b> The potential exists for an outbreak in your geographic area	<b>RISK PROFILE:</b> A publicly declared outbreak in your facility or region
ACTIONS	<ul style="list-style-type: none"> <li>Follow current procedures</li> <li>Regularly revisit training to ensure compliance</li> <li>Maintain standard hygiene and cleaning and <b>disinfection</b> practices</li> </ul>	<ul style="list-style-type: none"> <li>Educate employees on infection control, PPE use and communicate Infection Control Procedures</li> <li>Assess your preparedness status and collaborate with vendor partners on response readiness</li> <li>Evaluate facility usage, lead times and stock shelf life and their impact on ordering supplies</li> <li>Increase frequency of standard procedures</li> </ul>	<ul style="list-style-type: none"> <li>Enhance procedures, designed to break the chain of infection or illness</li> <li>Facilitate training for heightened procedures</li> <li>Perform heightened procedures using approved products</li> <li>Plan for deep cleaning and reopening procedures after down time or quarantine</li> </ul>
Increase frequency of cleaning and disinfection of high-touch surfaces			

# HAND HYGIENE: PATIENT ROOM

Practice and follow the World Health Organization's **5 Moments of Hand Hygiene**.



Hand Hygiene includes either cleansing hands with an alcohol-based hand rub (ABHR) or with soap and water ... Wash hands with soap and water when visibly soiled. Use ABHR only if not visibly soiled

Source: WHO, Infection Prevention & Control During Health Care When Novel Coronavirus (nCoV) Infection is Suspected

# HAND HYGIENE – SOAP AND WATER

Practice and promote **proper hand hygiene**.



Wet hands and apply a generous amount of product to the palm of one hand.



Rub hands palm to palm to build lather.



Spread lather over the back of each hand with fingers interlaced



Rub palm to palm with fingers interlaced.



Grip the fingers on each hand and rub in a sideways back and forth movement.



Clasp each thumb in the opposite hand and rotate.



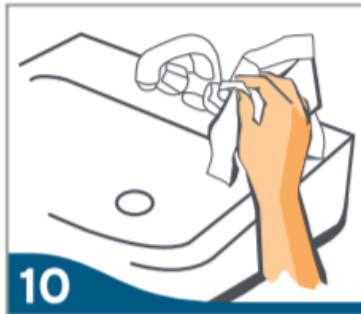
Press fingers into palm of each hand and rotate.



Rinse hands with water.



Dry hands thoroughly with a disposable towel.



Use towel to turn off tap.



Your hands are now clean.

**IF SOAP AND WATER ARE NOT AVAILABLE,**  
use an alcohol-based hand sanitizer



# HAND HYGIENE – HAND SANITIZER

Practice and promote **proper hand hygiene**.



Apply a generous amount of hand sanitizer to the palm of one hand, covering all surfaces.



Cover whole surface of hands, rubbing palm to palm.



Spread the sanitizer solution over the back of each hand including the wrists with fingers interlaced.



Rub palm to palm with fingers interlaced.



Grip the fingers on each hand and rub in a sideways back and forth movement.



Clasp each thumb in the opposite hand and rotate.



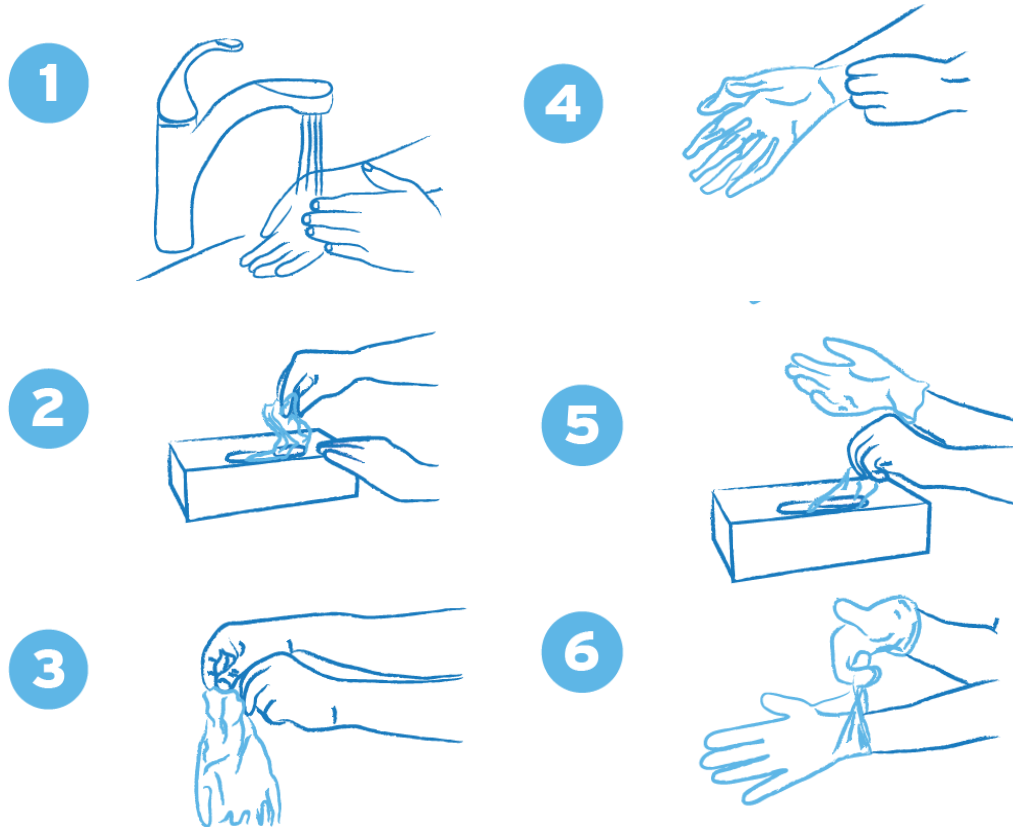
Press fingers into palm of each hand and rotate.



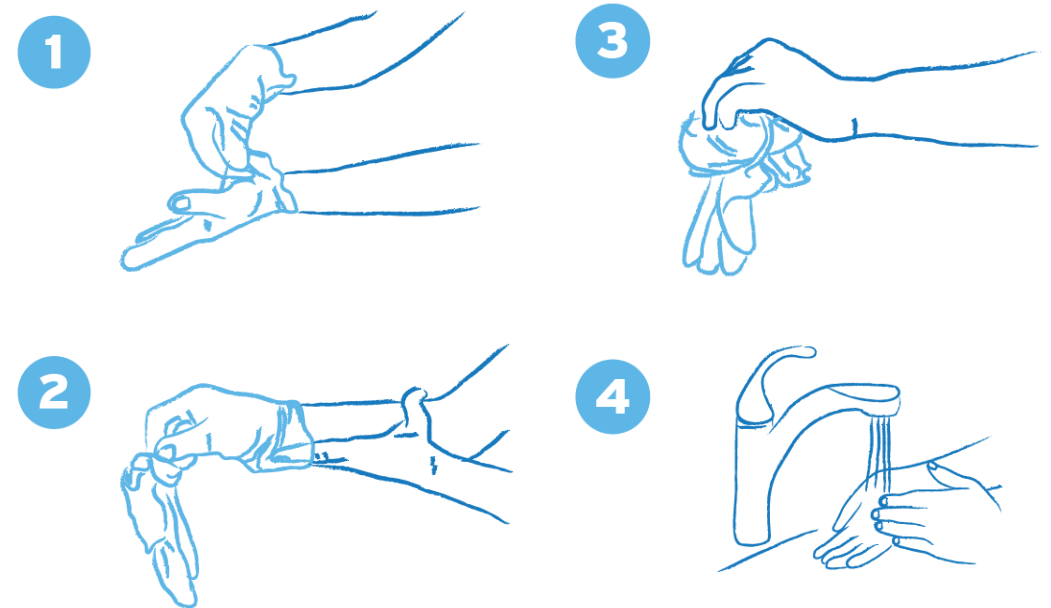
Once dry, your hands are sanitized.

# PROPER GLOVING TECHNIQUES

## How to **PUT ON** non-sterile gloves



## How to **REMOVE** non-sterile gloves



# DISINFECTION: NON-FOOD CONTACT HARD SURFACES

Clean and disinfect hard surfaces and **high-touch objects** with approved disinfectants.  
**Increase frequency as needed.**

- **CDC:** Use an EPA-registered, hospital disinfectant that has an emerging viral pathogens claim of efficacy.
- **EPA:** Confirm product EPA registration # is included on List N: Disinfectants for Use Against SARS-CoV-2.
- **AORN:** Reference the AORN Coronavirus Tool Kit for resources to support perioperative decision-making. Continue to focus on Recommended Best Cleaning Practices and focus on High Touchpoint Surfaces.

## 1 PRE-CLEAN

Pre-clean visibly soiled areas

## 2 DISINFECT

Use a disinfectant with an EPA-approved emerging viral pathogen or coronavirus claim. Refer to product label for complete directions for use.



## 3 WAIT

**Allow surface to remain** wet for the time indicated in the directions for use on the product label.



# DISINFECTION: FOOD CONTACT

**During RED REMEDIATION:** Clean and **disinfect** hard surfaces and high-touch objects with approved **disinfectants**. **Increase frequency as needed.**

1 **PRE-CLEAN**

Pre-clean visibly soiled areas

2 **DISINFECT**

For an emerging viral pathogen, use a disinfectant with an EPA-approved emerging viral pathogen or coronavirus claim. Refer to the product label for complete directions for use.



3 **WAIT**

Allow surface to remain wet for the time indicated in the directions for use on the product label.



4 **DRY**

Wipe the surface or allow to air dry.



5 **RINSE AND SANITIZE**

Rinse the surface with potable water and sanitize using food-contact sanitizer according to label directions.



**RED: REMEDIATION**

# HOW TO KNOW IF DISINFECTANTS ARE APPROVED FOR USE AGAINST NOVEL CORONAVIRUS

Find the EPA Registration Number on the product label

**EPA Reg. No. 6836-349-1677**

Base Registrant Company Number

Product Number

Sub-Registrant Company Number

Not all products have a three-part EPA Registration Number.  
Ecolab-owned registrations are only two-parts.

To verify your product is on the list of [EPA registered antimicrobial products for use against novel coronavirus](#), match the first two parts of the EPA Registration Number.

Note: Searching by product or company name will not yield full approved list.

**List N: Disinfectants for Use Against SARS-CoV-2**

List N includes products that meet EPA's criteria for use against SARS-CoV-2, the cause of COVID-19.

When purchasing a product, check if its EPA registration number is included on this list. If it is, you have a match and the product can be used against SARS-CoV-2. You can find this number on the product label - just look for the EPA Reg. No. These products may be marketed under different brand names, but if they have the same EPA registration number, they are the same product.

This list includes products with emerging viral pathogen claims and those with human coronavirus claims. If a product with an emerging viral pathogen claim is not available, use a product with a coronavirus claim. If the product is listed as "N" under the Emerging Viral Pathogens column, then it has a human coronavirus claim.

- [Frequently Asked Questions about List N: Disinfectants for Use Against SARS-CoV-2](#)
- [Emerging Viral Pathogen Claims for SARS-CoV-2: Submission Information for Registrants](#)

**Note:** Inclusion on this list does not constitute an endorsement by EPA. There may be additional disinfectants that meet the criteria for use against SARS-CoV-2. EPA will update this list with additional products as needed.

Show 123 items PDF

**List N: Products with Emerging Viral Pathogens AND Human Coronavirus claims for use against SARS-CoV-2**

EPA Registration Number	Active Ingredient/s	Product Name	Company	Follow the disinfection directions and preparation for the following virus
1677-256	Quaternary ammonium	FSC 35K	ECOLAB, INC.	Coronavirus
1677-251	Hydrogen Peroxide	PEROXIDE DISINFECTANT AND GLASS CLEANER RTU	Ecolab Inc/Kay Chemical Co.	Canine Parvovirus
1677-250	Hydrogen peroxide; peroxyoctanoic acid; peroxyacetic acid	Synergex	Ecolab Inc	Reovirus
1677-249	Isopropanol	KLERICIDE 70/30 IPA	Ecolab Inc	Rhinovirus

EPA list of registered antimicrobial products for use against novel coronavirus, the cause of COVID-19.

# MANUAL DILUTION INSTRUCTIONS: PEROXIDE MULTI SURFACE CLEANER AND DISINFECTANT

When on-site dispensing is unavailable

**CAUTION: PPE REQUIRED WHEN HANDLING CONCENTRATED PRODUCT**

A. Safety goggles/Face shield

B. Safety gloves

1



Receive materials needed for the sample kit:

- Oasis Part #6100693
- Spray Bottle
- Trigger Sprayer
- Spray bottle label
- Pump up sprayer

2



Adhere the spray bottle label to the bottle before adding product

3



Insert the pump up nozzle into the 2 gallon concentrated product

*Remember to use proper PPE when handling the concentrated solution*

4



Pump 1 fl oz of the concentrated product into the spray bottle (1 full pump = 1 oz dispensed, noted below)



5



Fill spray bottle with water up to 22 oz

6



Place trigger sprayer in spray bottle and tighten

PLEASE NOTE:

- A. Using 1 oz of concentrated Peroxide Multi Surface Cleaner and Disinfectant per spray bottle makes a solution of product at 6 oz/gallon dilution rate.
- B. To ensure efficacy of the disinfectant, please make diluted product solution on the day needed. Solution will maintain its efficacy for 7 days.

# PATIENT ROOM GUIDELINES

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## REMEDIATION PROCEDURES: PATIENT OCCUPIED ROOMS

- Avoid entering occupied rooms to clean and **disinfect** as much as possible, unless there is a need.
- Provide cleaning and **disinfection** materials to clinical professionals for high touchpoint and spot cleaning and **disinfection**.
- It is recommended to close off areas used by the Patients and wait as long as practical before beginning cleaning and **disinfection** to minimize potential for exposure to respiratory droplets. See CDC Guidance on air exchanges.

<https://www.cdc.gov/infectioncontrol/guidelines/environmental/appendix/air.html#tableb1>

Refer to product label for complete directions for use

CDC Isolation Precautions: <https://www.cdc.gov/infectioncontrol/guidelines/isolation/index.html>

## CONSIDERATIONS

- Remove non-essential items out of the rooms prior to patient occupying room
- Provide clinical professional chemicals to clean and **disinfect** occupied rooms
- Provide clean sheets in designated pick-up area upon request
- Place dirty linen in designated area. Consider providing dissolvable bags for dirty linen.
- Provide Personal Protective Equipment (e.g., gloves, gowns, masks) as directed by local and federal public health authorities for employees and infected individuals.
- Isolate patients and follow public health recommendations for infection control.
- Follow all guidance as directed by public health authorities.



## Specific high touchpoints

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Hard surface furniture & handles | <input type="checkbox"/> Alarm clock               | <input type="checkbox"/> Key cards - if applicable                 |
| <input type="checkbox"/> Door handles                     | <input type="checkbox"/> Safety latch and peephole | <input type="checkbox"/> Bed rails - if applicable                 |
| <input type="checkbox"/> Light switches                   | <input type="checkbox"/> Trash cans                | <input type="checkbox"/> Computer, keyboard, mouse - if applicable |
| <input type="checkbox"/> Nightstands                      | <input type="checkbox"/> Faucets                   | <input type="checkbox"/> Medical equipment - if applicable         |
| <input type="checkbox"/> Thermostat                       | <input type="checkbox"/> Sink                      | <input type="checkbox"/> IV pole – if applicable                   |
| <input type="checkbox"/> Telephones and keypads           | <input type="checkbox"/> Toilet                    |  |
| <input type="checkbox"/> Remote control                   | <input type="checkbox"/> Shower/tub                |  |
| <input type="checkbox"/> Television                       | <input type="checkbox"/> Toilet paper dispenser    |  |
|   | <input type="checkbox"/> Mirrors                   |  |

# PATIENT ROOM GUIDELINES

Page 2 of 2

## REMEDIATION PROCEDURES: CLEANING AND DISINFECTION BETWEEN PATIENTS

- Upon Patient checking out of the room, wait as long as practical before beginning cleaning and **disinfection** to minimize potential for exposure to respiratory droplets. See CDC Guidance on air exchanges.  
<https://www.cdc.gov/infectioncontrol/guidelines/environmental/appendix/air.html#tableb1>
- Put on clean PPE, visually inspect room and restock supplies.
- Use an appropriate EPA-registered product with an emerging viral pathogen or coronavirus claim. Carefully read and follow label directions.
- Begin cleaning and **disinfecting** the room starting at the furthest point of the room from the door
- Spray (and do not wipe) all restroom hard surfaces with multi-purpose **disinfectant** cleaner (toilet, urinals, sinks, countertops and fixtures) or bathroom **disinfectant** (shower/tub)
- Pick up debris and empty trash – clean and **disinfect** trash can; replace trash liner if needed
- Dust, clean and **disinfect** ALL hard surfaces in room with focus on high touchpoints.
- Return to bathroom after required **disinfectant** contact time to wipe/scrub and rinse hard surfaces starting with shower and ending with toilet. Refer to product label.

For isolation guidance see CDC's website: <https://www.cdc.gov/coronavirus/2019-ncov/community/home/cleaning-disinfection.html> or <https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html>

## CONSIDERATIONS

- Remove non-essential items out of the rooms prior to patient checking in
- Place dirty linen in designated area. Consider collecting dirty linen in dissolvable bags.
- Provide Personal Protective Equipment (e.g., gloves, gowns, masks) as directed by local and federal public health authorities for employees and infected individuals.
- Isolate patients and follow public health recommendations for infection control.
- Follow all guidance as directed by public health authorities.



## Specific high touchpoints

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Hard surface furniture & handles | <input type="checkbox"/> Alarm clock               | <input type="checkbox"/> Key cards - if applicable                 |
| <input type="checkbox"/> Door handles                     | <input type="checkbox"/> Safety latch and peephole | <input type="checkbox"/> Bed rails - if applicable                 |
| <input type="checkbox"/> Light switches                   | <input type="checkbox"/> Trash cans                | <input type="checkbox"/> Computer, keyboard, mouse - if applicable |
| <input type="checkbox"/> Nightstands                      | <input type="checkbox"/> Faucets                   | <input type="checkbox"/> Medical equipment - if applicable         |
| <input type="checkbox"/> Thermostat                       | <input type="checkbox"/> Sink                      | <input type="checkbox"/> IV pole – if applicable                   |
| <input type="checkbox"/> Telephones and keypads           | <input type="checkbox"/> Toilet                    |  |
| <input type="checkbox"/> Remote control                   | <input type="checkbox"/> Shower/tub                |  |
| <input type="checkbox"/> Television                       | <input type="checkbox"/> Toilet paper dispenser    |  |
|   | <input type="checkbox"/> Mirrors                   |  |

# PATIENT ROOM PROCEDURES

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## REMEDIATION PROCEDURES



1

Perform hand hygiene. Wear all necessary Personal Protective Equipment (e.g., gloves, gowns, masks) as directed by local and federal public health authorities for employees and infected individuals.



2

Pre-clean visibly soiled areas.



3

To disinfect, apply **disinfectant** per label, wipe non-porous surfaces making sure to wet thoroughly.

Make sure to focus on high-touch surfaces such as doorknobs, light switches, faucets, counter tops, tables, chair armrests, etc.



4

Allow the surfaces to remain wet for the time indicated in the directions for use on the product label. Allow surfaces to dry

## WHAT TOOLS DO YOU NEED?



Bottle of  
disinfectant &  
clean cloth



## Specific high touchpoints

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Hard surface furniture & handles | <input type="checkbox"/> Alarm clock               | <input type="checkbox"/> Key cards - if applicable                 |
| <input type="checkbox"/> Door handles                     | <input type="checkbox"/> Safety latch and peephole | <input type="checkbox"/> Bed rails - if applicable                 |
| <input type="checkbox"/> Light switches                   | <input type="checkbox"/> Trash cans                | <input type="checkbox"/> Computer, keyboard, mouse - if applicable |
| <input type="checkbox"/> Nightstands                      | <input type="checkbox"/> Faucets                   | <input type="checkbox"/> Medical equipment - if applicable         |
| <input type="checkbox"/> Thermostat                       | <input type="checkbox"/> Sink                      | <input type="checkbox"/> IV pole – if applicable                   |
| <input type="checkbox"/> Telephones and keypads           | <input type="checkbox"/> Toilet                    |  |
| <input type="checkbox"/> Remote control                   | <input type="checkbox"/> Shower/tub                |  |
| <input type="checkbox"/> Television                       | <input type="checkbox"/> Toilet paper dispenser    |  |
|   | <input type="checkbox"/> Mirrors                   |  |

# PATIENT RESTROOM PROCEDURES

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## REMEDIATION PROCEDURES



1

Perform hand hygiene. Wear all necessary Personal Protective Equipment (e.g., gloves, gowns, masks) as directed by local and federal public health authorities for employees and infected individuals.



2

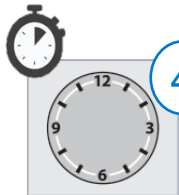
Pre-clean visibly soiled areas to be disinfected.



3

To disinfect, apply **disinfectant** per label, wipe non-porous surfaces making sure to wet thoroughly.

Make sure to focus on high-touch surfaces such as doorknobs, light switches, faucets, toilet handle, sink, etc.



4

Allow the surfaces to remain wet for the time indicated in the directions for use on the product label. Allow surfaces to dry

## WHAT TOOLS DO YOU NEED?



Bottle of disinfectant & clean cloth



## Specific high touchpoints

- ☐ Door & drawer handles
- ☐ Light switches
- ☐ Faucets
- ☐ Sink
- ☐ Toilet & flush handle
- ☐ Shower/tub
- ☐ Handrail – if applicable
- ☐ Toilet paper dispenser
- ☐ Mirror

# PUBLIC AREA GUIDELINES

Lobbies, entrances, hallways, fitness centers, pool areas, etc.

## REMEDIATION PROCEDURES

- Close off all non-essential public gathering areas such as bar, fitness center and pool to limit transmission, and remove unnecessary furniture
- Pick up debris and remove gum from floor with putty knife or blunt-edged tool.
- Empty and **disinfect** trash can and replace can liner.
- Increase frequency of hard surface **disinfection** using an appropriate EPA-registered product with an emerging viral pathogen or coronavirus claim. Refer to product label for directions for use.
- Clean and **disinfect** all hard surfaces including high-touch surfaces.
- Follow proper operation, maintenance, and **disinfection** (e.g., with chlorine and bromine) of pools and hot tubs.\*
- Clean glass and windows.
- Refill air freshener and hand sanitizer dispensers as needed; **disinfect** dispensers regularly.
- Vacuum soft-surfaced floors (carpet/rug/walk-off mat); sweep then mop hard-surfaced floors (tile/wood/LVT).
- Consider providing alcohol-based hand sanitizers in public areas especially near touchpoints.



## CONSIDERATIONS

- Provide Personal Protective Equipment (e.g., gloves, gowns, masks) as directed by local and federal public health authorities for employees and infected individuals.
- Provide hand sanitizer in high traffic areas.
- Consider increasing pool chemical testing and adjust as needed.
- Follow all guidance as directed by public health authorities.

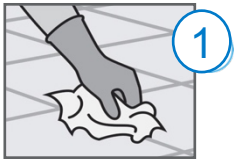
## Specific high touchpoints

- |   |   |
|---|---|
| <input type="checkbox"/> Door/drawer handles        | <input type="checkbox"/> Thresholds and hand railings |
| <input type="checkbox"/> Door push plates           | <input type="checkbox"/> Tables and chairs            |
| <input type="checkbox"/> Drinking fountains         | <input type="checkbox"/> Coffee and beverage stations |
| <input type="checkbox"/> Light switches             | <input type="checkbox"/> Vending and ice machines     |
| <input type="checkbox"/> Elevator buttons           | <input type="checkbox"/> Concierge                    |
| <input type="checkbox"/> Gym equipment and machines | <input type="checkbox"/> Trash cans                   |
| <input type="checkbox"/> Telephones and keypads     | <input type="checkbox"/> Key cards                    |

# PUBLIC AREA PROCEDURES

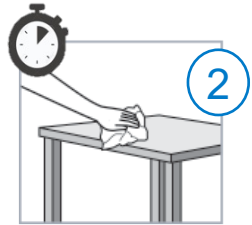
Lobbies, entrances, hallways, fitness centers, pool areas, etc.

## REMEDIATION PROCEDURES



Perform hand hygiene. Wear all necessary Personal Protective Equipment (e.g., gloves, gowns, masks) as directed by local and federal public health authorities for employees and infected individuals.

Place work area sign. Pick up debris from floor. Empty trash cans.



Clean and **disinfect** all hard surfaces including high touch points by applying **disinfectant** per label and wiping surface. **Allow** product to sit on the surface for the **time** specified by product label. Wipe down all surfaces using a microfiber cloth. For electronics, spray cloth and wipe surface.



Check and refill any hand sanitizer dispensers if needed. Sweep carpets and hard floors if needed. Replace trash can liners



## WHAT TOOLS DO YOU NEED?



Dustpan/Broom  
Work Area Sign



Bottle of disinfectant  
& clean cloth

## Specific high touchpoints

- ☐ Door/drawer handles
- ☐ Door push plates
- ☐ Drinking fountains
- ☐ Light switches
- ☐ Elevator buttons
- ☐ Gym equipment and machines
- ☐ Telephones and keypads
- ☐ Thresholds and hand railings
- ☐ Tables and chairs
- ☐ Coffee and beverage stations
- ☐ Vending and ice machines
- ☐ Concierge
- ☐ Trash cans
- ☐ Key cards



# POOL AND SPA GUIDELINES

Per CDC, there is no evidence that COVID-19 can be spread to humans using pools and hot tubs.

## POOL CLOSURES

- Take the following steps to restrict patient access:
  - Lock access doors to the pool area.
  - Post signage informing patients of the restriction.
  - Perform maintenance in off-peak hours to avoid patient confusion.
- Do NOT drain pools – in most cases it is safer and more cost effective to continue treating the water during a shut down period.
- Maintain pump performance and keep water circulating to prevent stagnation.
- Heater and chlorine set points may be lowered if desired (2 ppm).
- Follow proper operation, maintenance, and **disinfection** guidelines (e.g., with chlorine and bromine) – this helps prevent additional expenditures upon re-opening.

## SPAS / HOT TUBS:

- Small bodies of water can typically be drained in a safe manner – ensure the entire system, filters and lines are clear of water to prevent mold and biofilm build-up.
- If spas/hot tubs are not going to be drained, follow the pool closure treatment guidelines.



## CONSIDERATIONS

- CDC guidance suggests there is no evidence that COVID-19 can be spread to humans using pools and hot tubs. Proper operation, maintenance, and **disinfection** (e.g., with chlorine and bromine) of pools and hot tubs should remove or inactivate the virus that causes COVID-19.<sup>1</sup>
- If local authorities mandate pool closures or the facility elects to close the pool, avoid completely draining the pool.
- A pool closure typically refers to ingress, egress, use, and occupancy by members of the public. Consider restricting access to the pool area.

## Specific high touchpoints

- ☐ Door handles
- ☐ Push plates
- ☐ Thresholds and hand railings
- ☐ Tables and chairs
- ☐ Trash cans

# FOODSERVICE GUIDELINES

## Food Contact Surfaces

### REMEDIATION PROCEDURES

- Clear surfaces of objects, food debris and other items.
  - Clean and **disinfect** entire counter / food preparation surfaces using an EPA-registered product with an emerging viral pathogen or coronavirus claim frequently.
  - Rinse with clean potable water using a clean cloth and allow to air dry.
  - Sanitize surface with food contact sanitizer according to label directions for use.
- OR
- Follow standard operating procedures for washing items in the dishmachine
  - Follow your standard procedures to sanitize ware through low- and high- temperature dishmachines or a 3-compartment sink.



### CONSIDERATIONS

- Use disposable ware, if possible
- Provide Personal Protective Equipment (e.g., gloves, gowns, masks) as directed by local and federal public health authorities for employees and infected individuals.
- Reinforce all personal hygiene requirements, with special attention to hand hygiene. Refer to food code and hand hygiene procedures.
- Perform training, reinforcing cleaning, sanitizing, and **disinfection** procedures.
- Increase frequency of cleaning and **disinfection** of “high-touch” hard surfaces.
- Follow all guidance as directed by public health authorities, especially in regards to food handling via take-out or room-service.

### Specific high touchpoints

- |  |   |
|--|---|
| <input type="checkbox"/> Tables  | <input type="checkbox"/> Handles of all the equipment doors |
| <input type="checkbox"/> Ice machine/bucket and scoop  | <input type="checkbox"/> Operation push pads                |
| <input type="checkbox"/> Food prep tools and equipment (e.g., cutting boards, knives, mixing bowls), | <input type="checkbox"/> Highchairs                         |
| <input type="checkbox"/> Plates and flatware, glassware  | <input type="checkbox"/> Bar top and tools                  |
|  | <input type="checkbox"/> Door handles                       |

# FOODSERVICE PROCEDURES

## Back of the House/Kitchen – Food Contact Surfaces

### REMEDIATION PROCEDURES



1

Perform hand hygiene. Wear all necessary Personal Protective Equipment (e.g., gloves, gowns, masks) as directed by local and federal public health authorities for employees and infected individuals.

Clear counters / food preparation surfaces of all dishware, food debris and other items.



2

Using a spray bottle and clean cloth, clean and **disinfect** entire counter / food preparation surfaces using **disinfectant**. Allow product to sit on the surface for time specified by the product label.



3

**Rinse with clean potable water using a clean cloth and allow to air dry.**

Repeat Steps 2 and 3 for all surfaces in the back of house / kitchen area where food and drinks are prepared. Be certain to clean and **disinfect** all edges of counters / food preparation surfaces.



4

Use a **food-contact sanitizer** to sanitize counter / food preparation surfaces with either a clean cloth and pail application (damp, wrung-out cloth) or spray bottle application (spray surface, do not wipe dry). Allow to sit on surface for time specified by product label. Allow to air dry before returning to use.



### WHAT TOOLS DO YOU NEED?



Bottle of disinfectant & clean cloth



Bottle of “food-contact” sanitizer and clean cloth or bucket with clean cloth

### Specific high touchpoints - Food Contact:

- ☐ Tables
- ☐ Ice machine/bucket and scoop
- ☐ Food prep tools and equipment (e.g., cutting boards, knives, mixing bowls),
- ☐ Plates and flatware, glassware
- ☐ Handles of all the equipment doors and operation push pads
- ☐ Highchairs
- ☐ Bar top and tools

# FOODSERVICE GUIDELINES

## Non-Food Contact Surfaces

### REMEDIAL PROCEDURES

- Increase frequency of hard surface **disinfection** using an appropriate EPA-registered product with an emerging viral pathogen or coronavirus claim. Refer to product label for directions for use.
- Clean surfaces with a multi-purpose cleaner or manual detergent, then **disinfect** using an appropriate EPA-registered product with an emerging viral pathogen or coronavirus claim.
- To **disinfect** high touch points:
  - Pre-clean visibly soiled areas.
  - Spray **disinfectant** on surface making sure to wet thoroughly.
  - Allow the surfaces to remain wet for the time indicated in the directions for use on the product label.
  - Wipe the surfaces or allow to air dry.

Refer to product label for complete directions for use



### CONSIDERATIONS

- Provide Personal Protective Equipment (e.g., gloves, gowns, masks) as directed by local and federal public health authorities for employees and infected individuals.
- Reinforce all personal hygiene requirements, with special attention to hand hygiene. Refer to food code and hand hygiene procedures.
- Perform training, reinforcing cleaning, sanitizing, and **disinfection** procedures.
- Follow all guidance as directed by public health authorities, especially in regards to food handling via take-out or room-service.

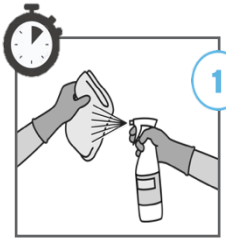
### Specific high touchpoints - Non-Food Contact:

- |  |  |
|--|--|
| <input type="checkbox"/> Door/drawer handles                           | <input type="checkbox"/> Dispenser handles/push plates           |
| <input type="checkbox"/> Equipment door push plates                    | <input type="checkbox"/> Towel dispenser handle at handwash sink |
| <input type="checkbox"/> Walk-in refrigerator/freezer plastic curtains | <input type="checkbox"/> Trash receptacle touch points           |
| <input type="checkbox"/> Light switches                                | <input type="checkbox"/> Cleaning tools/buckets                  |
| <input type="checkbox"/> Faucets/faucet handles                        | <input type="checkbox"/> Phone handset & keypad                  |
| <input type="checkbox"/> Cupboards                                     | <input type="checkbox"/> Computers                               |
|  | <input type="checkbox"/> Room service/delivery carts             |

# FOODSERVICE PROCEDURES

## Back of the House/Kitchen – Non-Food Contact Surfaces

### REMEDIATION PROCEDURES



1

Perform hand hygiene. Wear all necessary Personal Protective Equipment (e.g., gloves, gowns, masks) as directed by local and federal public health authorities for employees and infected individuals.

Using a **disinfectant** and clean cloth, clean and **disinfect** entire counter / food preparation surfaces. Allow product to sit on the surface for time specified by the product label.



2

Restock paper products and soap dispensers as needed. Clean / **disinfect** exterior of dispensers.



3

Empty trash cans. Clean and **disinfect** trash receptacle touch points allowing surface to sit on the surface for the time specified by product label. Replace trash can liners.



4

Place a work area sign before cleaning floors. Clean floors with mop using "figure 8" motion. Flip mop when first side is soiled. Rinse when both sides are soiled.



### WHAT TOOLS DO YOU NEED?



Dustpan/Broom  
Work Area Sign



Bottle of disinfectant  
& clean cloth

### Specific high touchpoints - Non-Food Contact:

- ☐ Door/drawer handles
- ☐ Equipment door push plates
- ☐ Walk-in refrigerator/freezer plastic curtains
- ☐ Light switches
- ☐ Faucets/faucet handles
- ☐ Cupboards
- ☐ Dispenser handles/push plates
- ☐ Towel dispenser handle at handwash sink
- ☐ Trash receptacle touch points
- ☐ Cleaning tools/buckets
- ☐ Phone handset & keypad
- ☐ Computers

# FOOD DELIVERY GUIDELINES

## REMEDIATION PROCEDURES

- Keep hot food hot and cold food cold, and minimize the length of time food is out of temperature control
- Keep equipment and cart clean.
- Wash hands with soap and warm water for 20 seconds before collecting food from the pick-up location.
- Place raw animal food, unpackaged produce, and ready-to-eat food items into separate delivery packages to prevent cross-contamination.
- Stay at home if you have a fever, runny nose, cough, sneezing or other respiratory symptoms, or if you believe you are sick
- Maintain a distance of 6 feet from others and food recipients.
- Clean and **disinfect** cart between each delivery using an appropriate EPA-registered product with an emerging viral pathogen or coronavirus claim. Refer to product label for directions for use.
- Process dishes and ware in ware in dishmachine or 3-compartment sink, following local health codes.

Refer to product label for complete directions for use

## CONSIDERATIONS

- According to the [FDA](#), currently there is no evidence of food or food packaging being associated with transmission of COVID-19.
- Provide Personal Protective Equipment (e.g., gloves, gowns, masks) as directed by local and federal public health authorities for employees and infected individuals.
- Use disposable ware, if possible
- Keep hand sanitizer on cart for use when handwash sink is unavailable.
- Keep cleaning product, **disinfectant**, and paper towels available on cart for cleaning and **disinfection** of carts and other “high-touch” surfaces.
- Increase frequency of cleaning and **disinfection** of “high-touch” hard surfaces.
- Consider offering a no-contact delivery option, which means orders will be left in designated area for delivery by clinical staff.
- Have clinical staff place used/dirty dishes outside their rooms or in designated collection area.
- Avoid touching your face with unwashed hands
- Follow all guidance as directed by public health authorities.

### Specific high touchpoints

- ☐ Cart handles and surfaces
- ☐ Handheld devices
- ☐ Door handles

# RESTROOM GUIDELINES

## REMEDIATION PROCEDURES

- Increase frequency of hard surface **disinfection** using an EPA-registered **disinfectant** with an emerging viral pathogen or coronavirus claim. Carefully read and follow label directions.
- Place wet floor sign at entrance.
- Evaluate restroom and remove debris from floors and counters.
- Clean and **disinfect** all bathroom hard surfaces with registered **disinfectant** — toilet, urinals, sinks, shower/tub, countertops and fixtures.
- Clean mirrors, glass and windows.
- Clean and **disinfect** all bathroom hard surfaces and high touch points after required **disinfectant** contact time. Refer to product label.
- Scrub toilet and urinals.
- Clean and **disinfect** floors and apply odor control product (as needed).
- Inspect for quality and remove floor sign when floor is dry
- Restock supplies and empty trash.

Refer to product label for complete directions for use



## CONSIDERATIONS

- Close all public/common area restrooms, if possible.
- Provide Personal Protective Equipment (e.g., gloves, gowns, masks) as directed by local and federal public health authorities for employees and infected individuals.
- Provide alcohol-based hand sanitizer outside of public restrooms.
- Ensure hand soap is properly stocked.
- Follow all guidance as directed by public health authorities.

## Specific high touchpoints

- |   |  |
|---|--|
| <input type="checkbox"/> Door handles                     | <input type="checkbox"/> Trash can                   |
| <input type="checkbox"/> Bathroom stalls (latch) fixtures | <input type="checkbox"/> Countertops                 |
| <input type="checkbox"/> Toilet and urinal handles        | <input type="checkbox"/> Feminine hygiene receptacle |
| <input type="checkbox"/> Towel and soap dispensers        | <input type="checkbox"/> Toilet paper dispensers     |
| <input type="checkbox"/> Hand dryers                      | <input type="checkbox"/> Other                       |
| <input type="checkbox"/> Baby changing station            |  |

# RESTROOM PROCEDURES

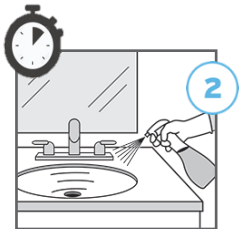
## REMEDIATION PROCEDURES



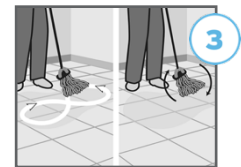
Perform hand hygiene. Wear all necessary Personal Protective Equipment (e.g., gloves, gowns, masks) as directed by local and federal public health authorities for employees and infected individuals. Place wet floor sign at entrance, Remove debris from floors and counters. Empty trash cans.



Pre-treat toilets and urinals (inside and outside), sinks, countertops, and fixtures. Clean mirrors, glass, and windows with **disinfectant** wiping down the surfaces. Allow product to sit on the surface for time specified by product label.



Apply **disinfectant** to high touchpoints per label. Wipe the surface to clean and **disinfect** sinks, countertops, fixtures, high touch point items, toilets and urinals last. Allow product to sit on the surface for time specified by product label.



Finish cleaning and **disinfecting** toilets and urinals. Clean floors with mop using "figure 8" motion. Flip mop when first side is soiled. Rinse when both sides are soiled. Replace trash can liner and restock supplies as needed including toilet paper, paper towels, hand soap, and/or air freshener cartridges.



Refer to product label for complete directions for use



## WHAT TOOLS DO YOU NEED?



Wet Floor Sign



Bottle of disinfectant & clean cloth



Toilet Brush



Mop and Mop Bucket

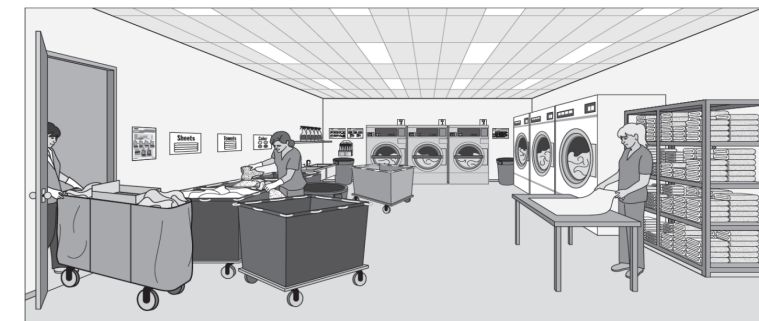
## Specific high touchpoints

- ☐ Door handles
- ☐ Bathroom stalls (latch) fixtures
- ☐ Toilet and urinal handles
- ☐ Towel and soap dispensers
- ☐ Hand dryers
- ☐ Baby changing station
- ☐ Trash can
- ☐ Countertops
- ☐ Feminine hygiene receptacle
- ☐ Toilet paper dispensers
- ☐ Other

# LAUNDRY GUIDELINES

## REMEDIATION PROCEDURES

- Use all appropriate clean personal protective equipment when handling laundry.
- Soiled linen handlers and sorters must be properly garbed. Rubber gloves over the latex gloves are desirable in healthcare settings to prevent or minimize injury due to sharps in the soiled linen mix; a hair net also is desirable
- Collect laundry with minimum agitation, do not shake or “hug” and avoid direct contact of the skin and clothes with the contaminated laundry
- Soiled linen should be placed into bags or carts for transport labeled “soiled/dirty linen”
- Machine Loading:
  - For towels: Fill wash wheel
  - For sheets: Leave 6”-10” of free space in wash wheel
- If dissolvable bags are being used:
  - Do not overfill the Iso bag, it holds 20 lbs., overfilling may cause the bag to tear
  - Do not overfill the washer with Iso bag, fill to normal levels (fill to sheet level). If machine is overfilled, bags may tear as they are inserted
- Contact Ecolab representative to help set up hospital linen cycle/formula
- Clean linen should be managed in a separate area from the dirty linen, should not come in contact with dirty linen, and should be labeled “clean linen”
- Clean linen must be properly covered during transport and storage
- Avoid clean laundry coming in contact with floors, walls or dirty carts
- Clean and **disinfect** carts and wash machine seal after each load
- Clean and **disinfect** all equipment, carts, tables and floors at the end of the day



## CONSIDERATIONS

- Provide Personal Protective Equipment (e.g., gloves, gowns, masks) as directed by local and federal public health authorities for employees and infected individuals.
- Do not use the same gloves when handling clean and dirty laundry
- Damp laundry should not be left in machines overnight
- Follow proper hand hygiene procedures before and after glove use
- Follow all guidance as directed by public health authorities

## Specific high touchpoints

- |   |  |
|---|--|
| <input type="checkbox"/> Laundry Carts              | <input type="checkbox"/> Washer controls and seals |
| <input type="checkbox"/> Door handles               | <input type="checkbox"/> Dryer controls            |
| <input type="checkbox"/> Folding tables and shelves | <input type="checkbox"/> Light switches            |

# EMPLOYEE GUIDELINES

- Reinforce personal hygiene and cough etiquette.
- Closely monitor employee health and have symptomatic employees stay home per company illness policy.
- Identify critical staff members and functions – develop a business continuity plan. Consider the ability for employees to work from home.
- Provide hygiene materials such as tissues, hand soap and sanitizer.
- Have employees **disinfect** all personal hard surfaces as referenced on the product label.
- Educate and inform all employees of pandemic status and proper infection control procedures.

## Make sure your **team knows**:



To **stay home if ill** per your company illness policy



To **contact you if**:

- They were exposed to someone **confirmed to have COVID-19**
- **They reside in a restricted area**



**How to limit exposure** by avoiding large gatherings and close contact with people who are coughing or sneezing.



**How to keep business operationally ready during shutdown or quarantine:**

- Make sure regular cleaning and **disinfection** continues to take place.



For more information contact  
your Ecolab Representative  
or visit **[ecolab.com/coronavirus](https://www.ecolab.com/coronavirus)**