

CLEANING & SANITIZING DURING COVID – 19



Q&A PANELISTS



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ABOUT THIS GUIDANCE

Dated 04/22/20: SARS CoV-2 is an emerging pathogen and the situation is evolving. This guidance references Centers for Disease Control and Prevention (CDC) and World Health Organization (WHO) guidelines and is supplemented with Ecolab expertise. For the most up-to-date information, please refer to [CDC](#), [WHO](#) or your local health authority.

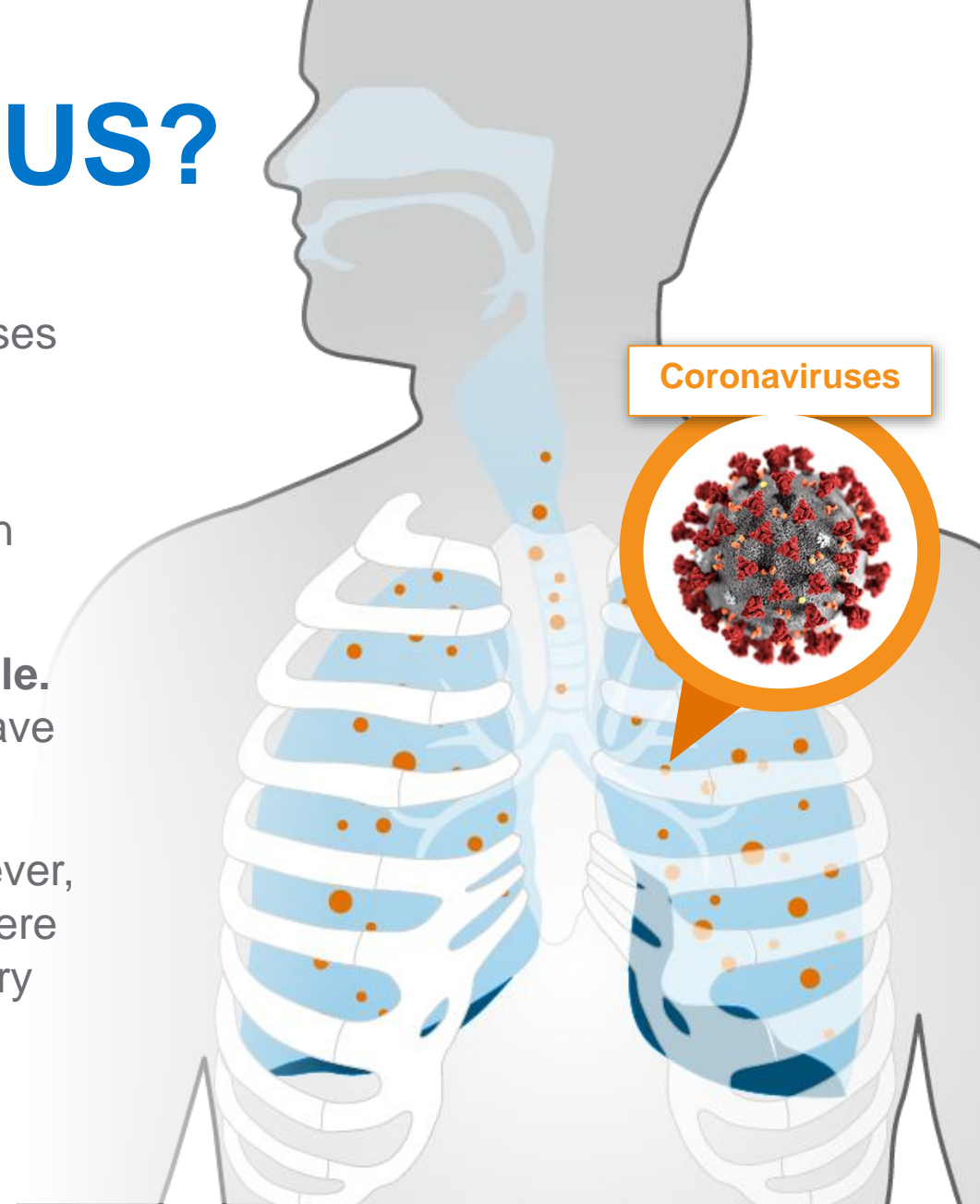
Contact your Ecolab representative for additional questions on products or procedures.

ADDITIONAL INFORMATION:

- CDC: Interim Guidance for Business and Employers
- CDC: Guidance for Cleaning and Disinfection
- CDC: Prevention in Communities, schools, healthcare settings and businesses
- FDA: Food Safety and the Coronavirus Disease 2019 (COVID-19)
- EFSA: Coronavirus: no evidence that food is a source or transmission route

WHAT IS A CORONAVIRUS?

- **Coronaviruses (CoV)** are a large family of viruses that cause illnesses 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.

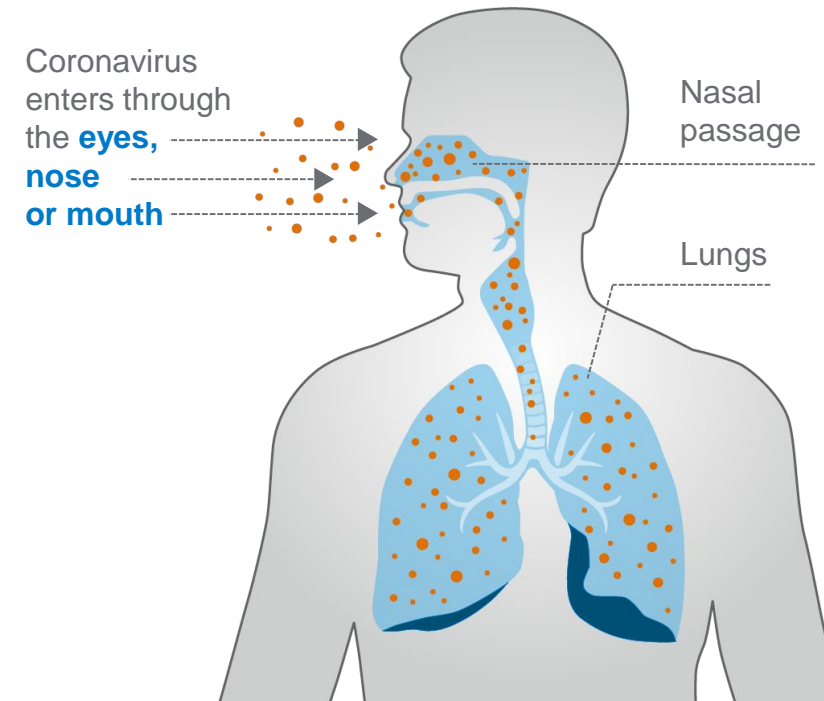


HOW DOES CORONAVIRUS SPREAD?

It depends on the particular coronavirus.

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

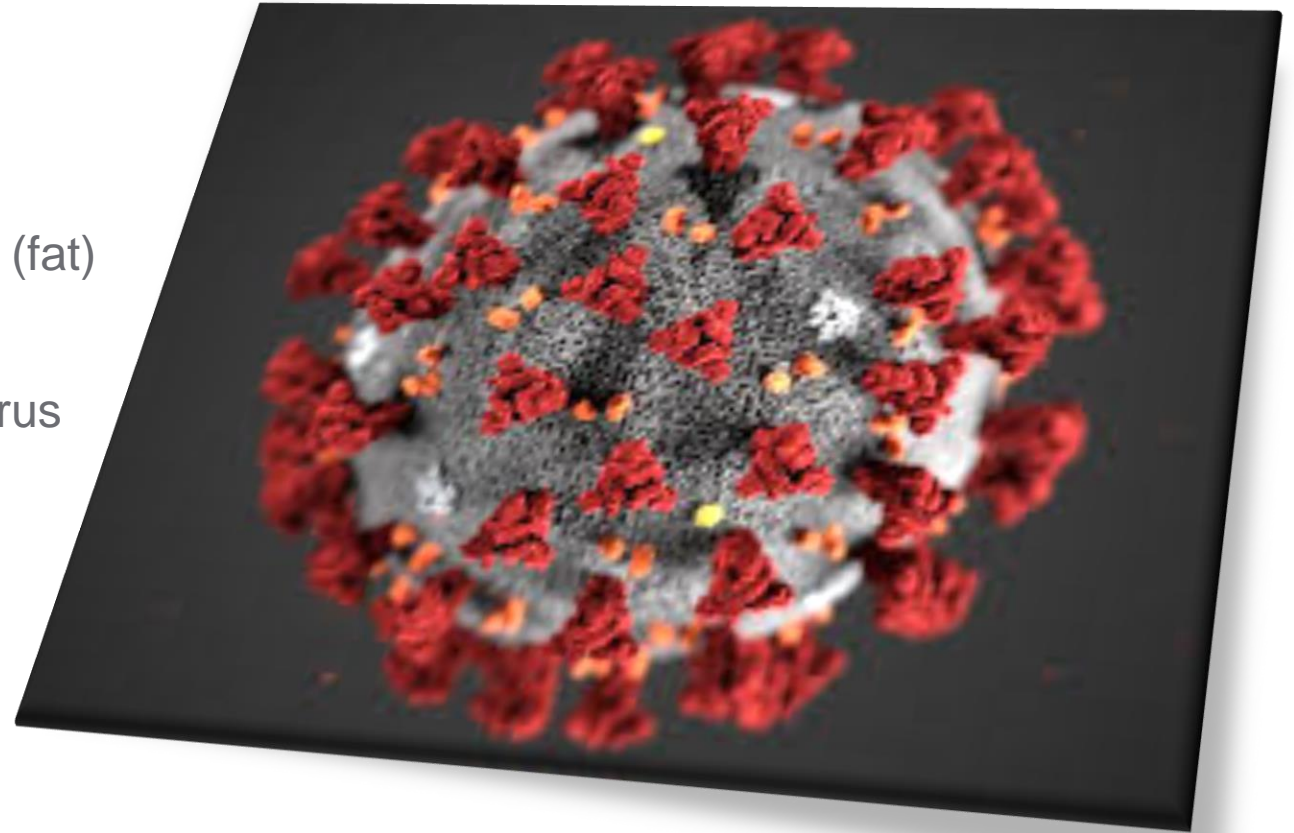
- **The air** by coughing and sneezing
- **Close personal contact**, such as touching or shaking hands
- **Touching** an object or surface with the virus on it, then touching your mouth, nose or eyes before washing your hands



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

SARS-COV-2 – THE BASICS:

- A virus is not a living organism
- Needs a host to replicate
- Respiratory
 - Cough
 - Surfaces
- Covered (enveloped) by a protective layer of lipid (fat)
- You must break it down to disable
- Once the lipid layer of the virus is disabled, the virus is no longer viable
- Not currently known to transmit via food (WHO)

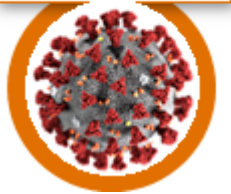


COVID-19 FOOD PLANT ANALYSIS

Stay Informed

The COVID-19 pandemic is constantly evolving, and food & beverage plants should look to local public health authorities for the most current guidance on plant operations and food safety.

Coronavirus



- Currently, no evidence suggests that COVID-19 is spread to humans through food.
- Recent regulatory agency guidance (March 2020) states that food contact surfaces do not require a disinfection step; however, disinfection steps may be applied based on individual facilities' risk assessment. If the customer risk assessment mandates a disinfection step, then use a product with an approved emerging viral pathogen or coronavirus claim per your local requirements or guidelines.
- Proper enhanced sanitation protocols should be followed to help prevent the spread of COVID-19 in plant settings.
- Be prepared for managing a potential plant shut down:
 - The **unpredictable environment** or **local authorities** could cause you to shut down
 - Widespread **exposure to COVID-19 within your plant** may necessitate shutting down

CONSULT YOUR ECOLAB REPRESENTATIVE FOR SUPPORT AND DETAILED GUIDANCE

SURFACE DETECTABILITY

How long can the virus that causes COVID-19 (SARS-CoV-2) live on surfaces? (virus viability)

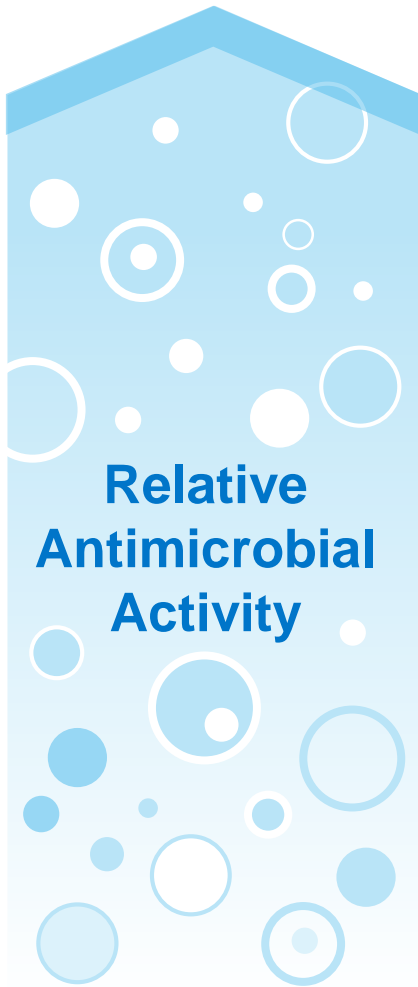
Capability of infection decreases over time

Detectable up to:

- 72-hours on plastics
- 48-hours on stainless-steel
- 24-hours on cardboard
- 4-hours on copper
- Detectable in the air for 3-hours




HARD SURFACE SANITIZERS: TERMS



DISINFECTANT

- Destroys/inactivates pathogenic and potentially pathogenic microorganisms on environmental surfaces/inanimate objects
- But not necessarily bacterial spores



SANITIZER

- Reduces bacterial population on environmental surfaces/inanimate objects by **significant numbers**
- E.g., kills min. 5 logs (99.999%)
- **Does not** disinfect or sterilize!

USA*: HOW TO KNOW IF DISINFECTANTS ARE APPROVED FOR USE AGAINST THE SARS-COV-2 VIRUS



Find the EPA Registration Number on the product label

ECOLAB®

Synergex™

Sanitizer - Disinfectant

ACTIVE INGREDIENTS:
Hydrogen Peroxide.....10.70%
Peroxyacetic Acid.....0.63%
Peroxyacetic Acid.....2.38%
OTHER INGREDIENTS:
TOTAL.....100.00%

KEEP OUT OF REACH OF CHILDREN

DANGER

FOR INDUSTRIAL USE
STRONG OXIDIZING AGENT
PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER-CORROSIVE: Causes irreversible eye damage and skin burns. May be fatal if absorbed through the skin. Harmful if swallowed. Do not get in eyes, on skin or on clothing. Wear protective eyewear (goggles, face shield, or safety glasses), protective clothing and rubber gloves. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco or using the toilet. Remove and wash contaminated clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. After the product has been diluted according to use directions Personal Protective equipment is not required.
PHYSICAL AND CHEMICAL HAZARDS: Strong oxidizing agent. Corrosive. Do not use in concentrated form. Mix only with water according to label instructions. Never bring concentrated contact with other sanitizers, cleaners or organic substances.

EPA Reg. No. 1677-250

See other label for directions for use.
770814/5301/0519

EPA Reg. No. 1677-250

Company Number

Product Number

FIRST AID

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything to an unconscious person.
IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.
FOR EMERGENCY MEDICAL INFORMATION, CALL TOLL-FREE 1-800-328-0000.
NOTICE: NOT FOR MEDICAL USE. CALL 1-800-328-0000.
NOTE TO PHYSICIAN: Probable mucous damage may contraindicate the use of gastric lavage.

STORAGE AND DISPOSAL

DO NOT CONTAMINATE WATER, FOOD OR FEED BY STORAGE OR DISPOSAL.
PESTICIDE STORAGE: Product must be kept cool and in a vented container to avoid any explosion hazard.
PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of acute pesticide waste is prohibited by Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative of the nearest EPA Regional Office for guidance.
CONTAINER HANDLING AND DISPOSAL: Non-refillable container. Do not reuse or refill this container. Triple rinse as follows: Empty remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and roll it back and forth several times. Empty the residue into application equipment or a mix tank or store residue for later use or disposal. Repeat procedure two more times. Then offer for recycling or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.



Antimicrobial

NET CONTENTS:
50 US GAL (189 L)
6301417



DO NOT STORE
IN DIRECT
SUNLIGHT

KEEP FROM
FREEZING



Verify your product is on this list:

<https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>

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 novel coronavirus that causes the disease 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 and sold under different brand names, but if they have the same EPA registration number, they are the same product.

- [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.

List N was last updated on March 26, 2020.

Show 25 entries Export to PDF

List N: Products with Emerging Viral Pathogens AND Human Coronavirus claims for use against

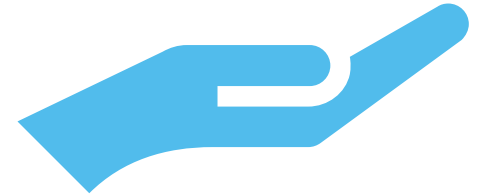
EPA Registration Number	Active Ingredient/s	Product Name	Company	Follow the disinfection directions and preparations for the following virus
84198-1	Hydrogen peroxide	Peroxy HDOX	Earth Laboratories Inc	Norovirus
45745-11	Hydrogen peroxide	HP202	Midlab	Rotavirus; Norovirus; Rhinovirus
65402-9	Peroxyacetic acid; Hydrogen Peroxide	VigorOx 15/10 Antimicrobial Agent	PeroxyChem LLC	Feline calicivirus
1043-87	Phenolic	Vesphene II se	Steris Corporation	Adenovirus
1043-91	Phenolic	LPH®	Steris Corporation	Adenovirus
1839-100	Quaternary ammonium	Veterinarian Type Disinfectant	Stepan Company	Feline calicivirus; norovirus
89833-3	Quaternary ammonium	D7 Part 1	Decon7 Systems LLC	Norovirus

POLL QUESTION

Submit your answer in the Poll



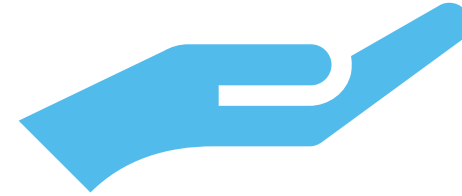
Can hand sanitizer and
surface sanitizer be used
interchangeably?
Yes or No



SANITIZERS: HARD SURFACES V. HANDS



- Hard surface sanitizers are approved for use on hard surfaces
- Typically regulated by separate regulatory agency (e.g., USA Environmental Protection Agency, EPA)
- Criteria and label claims based on efficacy of inactivating target microorganisms on hard surfaces
- Check for applicability for gloves

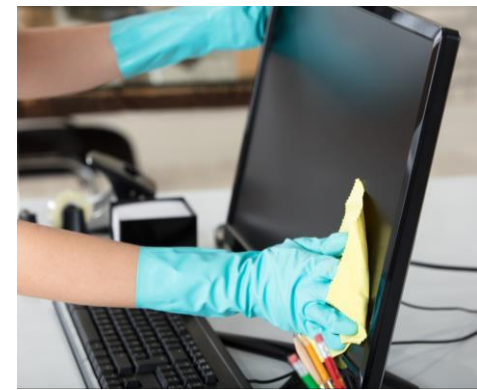


- Hand sanitizers directly contact skin
- Typically regulated by separate regulatory agency (e.g., USA Food & Drug Administration, FDA)
- Criteria for approval based on safety for application to human skin

CANNOT BE USED INTERCHANGEABLY! MUST FOLLOW LABEL INSTRUCTIONS!

STEPS TO HELP PROTECT YOURSELF AND YOUR EMPLOYEES

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.**



PROTECTION OF EMPLOYEES

- Hand Hygiene
- Social distancing
- What to do if you are sick
- High touch surfaces, include offices

What can we do to show that we are protecting our employees?

Poll Question:
Does your plant
require face shields or
face coverings on the
production floor?

HIGH TOUCH AREA DISINFECTION

NON-FOOD CONTACT

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

1 PRE-CLEAN

Pre-clean visibly soiled areas to be disinfected

2 DISINFECT

If risk mandates a disinfection step, then use a product with an approved emerging viral pathogen or coronavirus claim* per your local requirements or guidelines.

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.

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*When using a disinfectant to fight COVID-19, make sure you select a product that meets the emerging pathogen guidelines in your local region, and use it at the use concentration and contact time specified for viricidal disinfection.

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:

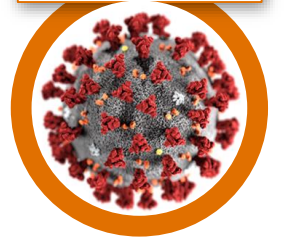
- 1 **Wash your hands** often and correctly.
 - The World Health Organization recommends performing hand hygiene with soap and water or alcohol-based hand sanitizer if soap and water are not available.
- 2 **Avoid touching** your eyes, nose or mouth with unwashed hands.
- 3 **Avoid close contact** with 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 directed by health care 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.



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.

Coronavirus



LEVEL	GREEN: Standard Prevention	YELLOW: Risk Reduction	RED: Remediation
DESCRIPTION	RISK PROFILE: No known outbreak in your geographic area	RISK PROFILE: The potential exists for an outbreak in your geographic area	RISK PROFILE: A publicly declared outbreak in your facility or region is disrupting normal business
ACTIONS	<ul style="list-style-type: none">Follow current proceduresRegularly revisit training to ensure complianceMaintain standard hygiene and sanitizing/disinfection practicesFollow your food contact and non-food contact sanitation procedures	<ul style="list-style-type: none">Educate employees on infection control, PPE use and communicate Infection Control ProceduresAssess your preparedness status and collaborate with vendor partners on response readinessEvaluate facility usage, lead times and stock shelf life and their impact on ordering suppliesIncrease frequency of standard procedures	<ul style="list-style-type: none">Enhance procedures to respond to an outbreak in your facility, designed to break the chain of infection or illnessFacilitate training for heightened proceduresPerform heightened procedures using approved productsPlan for deep cleaning and reopening procedures after down time or quarantine
Increase frequency of cleaning and disinfection of high-touch surfaces			

WELFARE AREA GUIDELINES

Lobbies, entrances, hallways, work spaces, etc.

STANDARD PROCEDURES

- Pick up debris and remove gum from floor with putty knife or blunt-edged tool.
- Empty and disinfect trash can and replace can liner.
- Clean and disinfect all hard surfaces including high-touch surfaces.
- Clean glass and windows.
- Refill 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).

REMEDIATION PROCEDURES

- Follow **STANDARD PROCEDURES** above.
- If a viricidal intervention disinfection is desired based on risk assessment, follow the local emerging viral pathogen guidelines and utilize an appropriate product for SARS CoV-2 disinfection*.
- Consider closing non-essential gathering areas such as offices or cafeteria to limit transmission.
- Consider providing alcohol-based hand sanitizers in public areas especially near high touch surfaces.



CONSIDERATIONS

- Provide Personal Protective Equipment (e.g., gloves, goggles/eye protection, masks) as directed by local regulatory authorities for employees and infected individuals.
- Increase cleaning and **disinfection** frequency of high touch surfaces in public areas.
- Provide hand sanitizer in high traffic areas.
- For offices, consider limiting non-essential visitors; restrict entry of symptomatic visitors or those who have been exposed.
- Discourage gatherings of people and encourage social distancing
- Follow all guidance as directed by public health authorities.

➤ High Touch Surface Examples

Door handles, push plates, door frames, hand railings, light switches, elevator buttons, tables and chairs, drinking fountains, coffee and beverage stations, cabinet handles, faucets, vending and ice machines, public information kiosk, telephone and keypad, desks, computer monitors

DON'T FORGET THE BASIC'S

CONDUCT A RISK ASSESSMENT

Increase frequency of cleaning and disinfection of high-touch surfaces based on risk profile



COORDINATE WITH LOCAL/ NATIONAL HEALTH OFFICIALS

to receive timely and accurate information on appropriate response in each location where operations reside



PROPERLY CLEAN AND DISINFECT ALL HARD SURFACES

Use an EPA registered hard surface disinfectant per label instructions.



PROPER EMPLOYEE HEALTH AND HYGIENE PRACTICES

Maintain proper PPE and hand hygiene protocols.



FOLLOW GOOD MANUFACTURING AND FOOD SAFETY PRACTICES

Review the required cGMPs and sanitation standard operating procedures for sanitizing practices.



TOP TIPS TO HELP PREVENT THE SPREAD OF COVID-19 IN YOUR FOOD AND BEVERAGE PLANTS AND FACILITIES

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MORE INFORMATION

- For more information, contact your Ecolab Representative
 - Visit ecolab.com/coronavirus
-
- World class training programs and tools
 - Webinars
 - On-site technical support



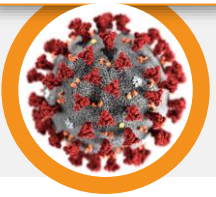
EMPLOYEE CHECKLIST

- ✓ Make sure your **workplace is clean and hygienic:**
 - Surfaces (e.g., desks and tables) and objects (e.g., telephones, keyboards) need to be wiped with disinfectant regularly.
- ✓ Promote **regular and thorough handwashing** by employees, contractors and visitors.
- ✓ **Limit your exposure** by staying at least six feet away from people who are coughing or sneezing.
 - Avoid handshaking and **wash your hands frequently.**
- ✓ If you develop even a mild cough or low-grade fever, **stay home and self-isolate.**
 - Avoid close contact with other people, including family members. Telephone your healthcare provider or the local public health department, giving them details of your recent travel and symptoms.
- ✓ **Do not come to work if you are ill.**
- ✓ **If you believe you have been exposed** to coronavirus, or if someone in your family has been ill/exposed to coronavirus, seek medical advice.
- ✓ Consider how you will **limit exposure to other family members,** and how you will handle childcare, school closings and other family responsibilities.

PRODUCTION AREAS

RED
Remediation

Coronavirus



ACTION: Respond to an outbreak in your facility to break the chain of infection or illness.

- Follow local public health recommendations related to business operations, isolation or closing
- Use remediation plan for high-touch locations and public spaces (e.g., public restrooms, locker rooms, public spaces)
- Follow enhanced (more frequent) cleaning and sanitizing procedures
- Disinfect food contact and/or adjacent surfaces if risk assessment mandates** additional disinfection steps (*see red text below*)
- Provide clear guidance for reporting illness and remediation procedures for new events
- Limit face-to-face contact between employees, customers and vendors
- Refuse entry to symptomatic employees, customers or vendors or other visitors

Production Area (General)	Production Area (Wet Cleaning Equipment**)	Production Area (Semi-Dry Cleaning Equipment**)	Production Area (Dry Cleaning Equipment**)
<ul style="list-style-type: none"> Increase cleaning and disinfection frequency, especially for touch points such as door handles, light switches, equipment buttons, control panels, etc. Increase hand hygiene practices Implement social distancing protocol between employees per local requirements Utilize appropriate PPE for cleaning and disinfecting 	<ol style="list-style-type: none"> <i>Disinfect using Ecolab COVID-19 product list following concentration and time requirements</i> <i>Rinse</i> Clean per current SSOPs Rinse <i>Disinfect using Ecolab COVID-19 product list following concentration and time requirements</i> <i>Rinse</i> Sanitize with a food contact sanitizer Rinse, as required* 	<ol style="list-style-type: none"> Dry clean – scrape, wipe, vacuum (with HEPA filter discharge on vacuum)*** <i>Disinfect – Spray surfaces with chemistry approved on Ecolab_FB_Coronavirus list, follow recommended concentration and time utilizing a spray bottle</i> <i>Rinse – Use hot water in spray bottles to mist surface, wipe with single-use towels</i> Clean – Clean per current SSOP wash step(s) Rinse – Use hot water in spray bottles to mist surface, wipe with single-use towels <i>Viricidal (Disinfect) Intervention – Spray surfaces with chemistry approved on Ecolab_FB_Coronavirus list, follow recommended concentration and time utilizing a spray bottle</i> <i>Rinse – Use hot water in spray bottles to mist surface, wipe with single-use towels</i> Inspect – ATP, micro swabs, etc. per current inspection protocol Sanitize with a food contact sanitizer per current SSOP Rinse, as required* 	<ol style="list-style-type: none"> Dry clean – scrape, wipe, vacuum (with HEPA filter discharge on vacuum)*** Wipe – Use single-use towels Clean – Clean per current SSOP wash step(s) Wipe – Use single-use towels <i>Disinfect – Spray surfaces with chemistry approved, follow recommended concentration and time per label for disinfection utilizing a spray bottle</i> <i>Wipe – Use single-use towels</i> Inspect – ATP, micro swabs, etc. per current inspection protocol Food Contact Sanitizing per current SSOP

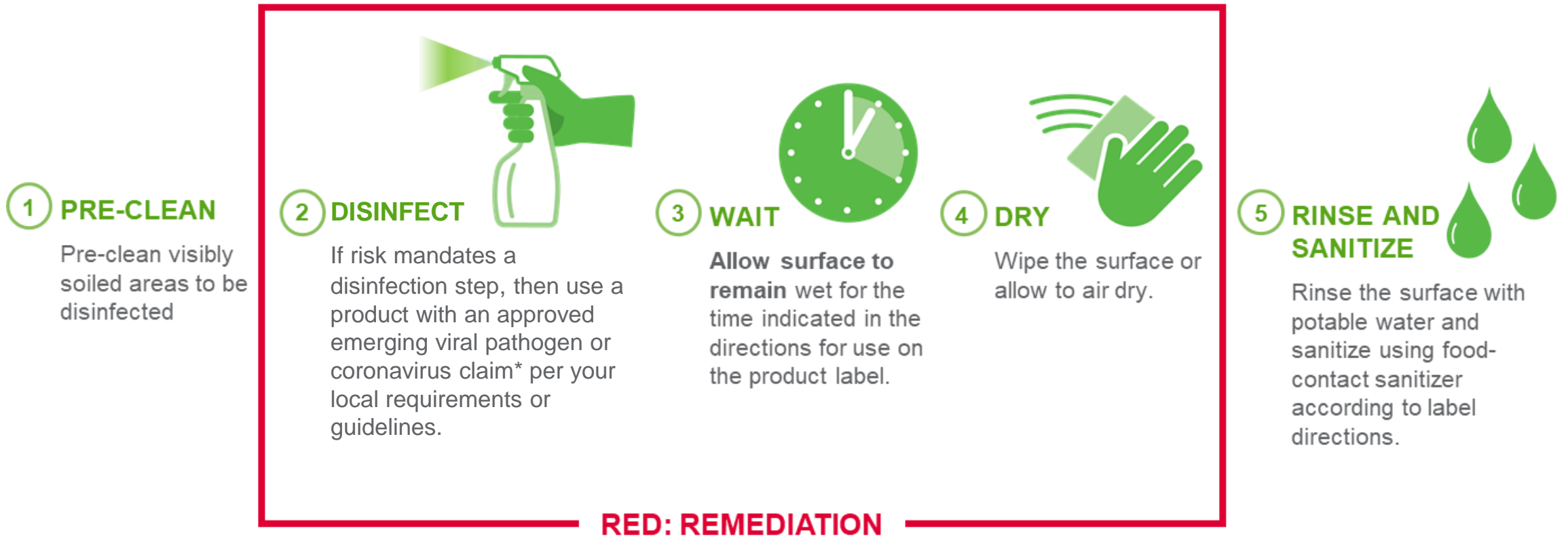
*As required by local regulations.

**Potentially affected per facility risk assessment.

***Compressed air not recommended as it could atomize microorganisms like viruses.

DISINFECTION: FOOD CONTACT

During RED REMEDIATION increase frequency as needed. Clean and sanitize hard surfaces and high-touch objects. Disinfection steps may be applied in a controlled manner based on risk.



COVID-19 POSITIVE/SYMPTOMATIC PERSON

AFFECTED EMPLOYEE MANAGEMENT

- Send home immediately, if at home don't permit they come into facility
 - Exclude from work as appropriate
 - Contact other relevant 3rd parties who may have been exposed
 - OSHA report if required
-
- If no COVID-19 test carried out, but show symptoms –
 - Exclude from work until free from fever greater than 100.4F and any other related symptoms for 3 days without use of fever/symptom reducing medications
 - AND at least 7 days passes since symptoms first appeared
 - Employee should notify supervisor
 - Encourage employee notification to local health department and healthcare provider
 - If COVID-19 positive test result –
 - No follow-up test required
 - Return to work after no fever (3 full days with no fever-reducing medicines), other symptoms have improved AND 7 d min have passed since symptoms have appeared

COVID-19 POSITIVE/SYMPTOMATIC PERSON

SITE AND PRODUCT MANAGEMENT

- Site Management
 - Clean and disinfect workspace (e.g., office)
 - Consider increasing frequency of cleaning & sanitation of production areas
 - If risk assessment mandates disinfection steps are necessary, implement accordingly
 - Clean and disinfect high touch points (e.g., doorknobs, touch screens, control panels, time clocks, tabletops, breakroom/cafeteria, handrails, handwashing stations, and restroom facilities)
 - Follow local regulatory guidance
 - Work with your vendors to facilitate shut-down/restart if required
- Product Management
 - No recall required (FDA, USDA, CFIA)
 - Sanitize contacted packaging if practical

ASYMPTOMATIC, POTENTIALLY EXPOSED

CDC INTERIM GUIDANCE, CRITICAL INFRASTRUCTURE PERSONNEL

- May be permitted to continue work following potential exposure to COVID-19
- Employers Must:
 - Pre-screen for temperature and symptoms prior to starting work
 - Regular self-monitoring (if show symptoms, remove from workplace so as not to infect others)
 - Wear a mask at all times for 14 days after last exposure (employer issued or employee supplied face covering if shortages)
 - Social distance (6 ft. as duties permit)
 - Routine disinfection and cleaning of workspaces (offices, bathrooms, common areas and shared electronic equipment routinely)

CLEANING & DISINFECTING

FACE COVERINGS

- Laundered and machine dried without damage or change to shape



<https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/diy-cloth-face-coverings.html>

FACE SHIELDS

- Adhere to recommended manufacturer instructions for cleaning and disinfection.
- When manufacturer instructions for cleaning and disinfection are unavailable, such as for single use disposable face shields, consider:
 1. While wearing gloves, carefully wipe the inside, followed by the outside of the face shield or goggles using a clean cloth saturated with neutral detergent solution or cleaner wipe.
 2. Carefully wipe the outside of the face shield or goggles using a wipe or clean cloth saturated with EPA-registered hospital disinfectant solution.
 3. Wipe the outside of face shield or goggles with clean water or alcohol to remove residue.
 4. Fully dry (air dry or use clean absorbent towels).
 5. Remove gloves and perform hand hygiene

ADDITIONAL RESOURCES

COVID-19 FOOD SAFETY RESOURCES

- Centers for Disease Control and Prevention
<https://www.cdc.gov/coronavirus/2019-nCoV/index.html>
- Food & Drug Administration (Food Industry Page)
<https://www.fda.gov/food/food-safety-during-emergencies/food-safety-and-coronavirus-disease-2019-covid-19>
- World Health Organization
<https://www.who.int/emergencies/diseases/novel-coronavirus-2019>
- Ecolab (multiple industries – food, healthcare, other environments)
<https://www.ecolab.com/pages/coronavirus>
- Institute for Food Safety at Cornell University
<https://instituteforfoodsafety.cornell.edu/coronavirus-covid-19/food-industry-resources/>
- North Carolina State Extension (consumer-facing material: food safety, take-out, grocery shopping)
<https://foodsafety.ces.ncsu.edu/covid-19-resources/>
- Food & Beverage Issue Alliance (recommended protocols)
<https://www.feedingus.org/>
- The Acheson Group (recommendations to food industry)
<https://www.achesongroup.com/covid-19>
- Fight BAC! Partnership for Food Safety Education Coronavirus Resource Page
<https://www.fightbac.org/coronavirus-resource-page/>



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