

Sample: Interim Standard Operating Procedure (SOP) for Cleaning and Disinfection of High Touch Surfaces on Farms during communicable disease outbreak of COVID-19

Purpose: To reduce worker exposure to COVID-19 at [Company]. This procedure has been informed by Centers for Disease Control (CDC)'s "Interim Guidance for Businesses and Employers to Plan and Respond to Coronavirus Disease 2019 (COVID-19)"¹. It is based on what is currently known about the coronavirus disease 2019 (COVID-19)².

Objective: Clean and disinfect frequently touched objects and surfaces in the workplace.

Scope: This SOP is intended as an interim worker safety procedure during the COVID-19 outbreak, in farm settings where no known COVID-19 carriers are working.

- This is NOT a food safety procedure for food-contact surfaces, as those have already been established and should remain in effect. This SOP is intended to be applied concurrently with established practices for workplace health, hygiene, and sanitation according to company IIPP and Food Safety programs.
- This SOP focuses on how to clean and disinfect surfaces that may be touched by any employee, including but not limited to harvest workers. It is especially directed towards those surfaces likely to be touched by multiple employees during the workday.
- This procedure does not address cleaning and disinfection of areas where persons suspected or confirmed to have COVID-19 have been present. In that case, please refer to CDC's Environmental Cleaning and Disinfection Recommendations³ for enhanced cleaning and disinfection protocols.

Definitions:

Cleaning refers to scrubbing with soap/detergent and water to remove dirt, including germs, from surfaces. By removing germs, cleaning decreases their number and therefore risk of spreading infection.

Disinfecting refers to the use of chemicals to kill or inactivate germs on surfaces. Disinfecting does not necessarily *clean* or *remove* germs from dirty surfaces. But, killing germs that remain on a surface after cleaning further reduces risk of spreading infection.

¹ <https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-business-response.html>

² <https://www.cdc.gov/coronavirus/2019-ncov/about/index.html>

³ <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/cleaning-disinfection.html>

High touch surfaces are non-porous surfaces that may be touched frequently by multiple employees at work. See list of possible items in Appendix A

Frequency: Cleaning/disinfection schedules should be established for high touch surfaces based on how frequently they may be handled by different employees. For some surfaces, existing cleaning schedules may be sufficient. Some surfaces may be feasible to clean/disinfect before each new user touches them, while other surfaces may only need to be cleaned/disinfected periodically.

For example:

- 1) Daily (i.e. name badge before harvest)
- 2) At scheduled intervals (i.e. before and/or after a rest or meal period)
- 3) At each use (i.e. before and/or after using the bathroom)
- 4) Between each user (i.e. scanning tools)

At a minimum, surfaces not covered in an IIPP or Food Safety Program, should be cleaned and disinfected at least once a day.

**NOTE: Farms are very diverse and should consider a range of mitigation measures to create a custom plan to fit the circumstances of the farm. Sanitation frequency is only one mitigation measure that should be evaluated in concert with other mitigation measures such as employee screening, social distancing, hand washing, crew size, and other measures as outlined in CDC Guidance for Businesses and employers.*

Responsibility: Assign specific personnel to specific cleaning and disinfection tasks, as best conforms to ranch operations, job duties, and training required. Keep in mind workers must be protected from exposure to hazardous chemicals used in these tasks. In these cases, depending on materials used, the Worker Protection Standard, PPE and Hazard Communication standards may also apply. ⁴ Always follow product label guidelines.

Equipment and Supplies:

For cleaning:

- **Detergent/soap diluted in a spray bottle, or Ready to Use (RTU) detergent product**
- **Scrubbing aid, appropriate to the item and the soil load.**
 - Single use paper towels may work for relatively clean, smooth surfaces.
 - Brushes or cloths may be used for more heavily soiled items, but

⁴ <https://www.dir.ca.gov/dosh/coronavirus/General-Industry.html>

these, in turn, should be cleaned and disinfected between uses.

- **Water for rinsing**

For disinfecting:

- **Disinfectant** - a variety of effective disinfectants may be used, please verify that they are suitable for the target surface and follow all manufacturer's directions for use. Effective disinfectants include:
 - Alcohol (Ethanol or Isopropyl) at 70% or greater concentration, in spray bottle or wipes
 - Household bleach (sodium hypochlorite), at no less than 500 PPM dilution in spray bottle.
 - See Appendix B for dilution formulas
 - Keep in mind: active chlorine degrades over time and in the presence of air, light, heat, and organic matter. It is best to mix smaller quantities daily, than to store large quantities that may lose their effectiveness over time.
 - Any RTU product on EPA's "List N: Disinfectants for Use Against SARS-CoV-2"⁵ in spray bottle or wipes
- **Disposable paper towels**, if needed
- **Concentration test strips** that can measure the appropriate range of the active disinfectant ingredient. (i.e. chlorine test strips up to 1000ppm)

Procedure:

1) Clean

- a. Use a detergent solution – either dilute detergent with water in a spray bottle or use an RTU detergent product according to manufacturer instructions.
- b. Spray or apply detergent solution on surface to be cleaned.
- c. Scrub surface vigorously so that visible suds cover entire surface.
- d. Rinse. Either wipe down with wet paper towel, or with clean running water, as appropriate. Water rinse is important to remove as much residue as possible (both dirt and detergent) before disinfecting.
- e. Dispose of any paper towels used, or clean and disinfect any re-usable cloths or brushes.

⁵ <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>

2) Disinfect

- a. Use a disinfection solution specified above and approved for use on specific surfaces.
- b. Spray or wipe disinfection solution to completely cover and wet surface.
- c. Ensure disinfectant remains wet on surface for as long as manufacturer recommends (see dwell or contact time on label), or if using alcohol or bleach solution, at least 1 minute⁶.

⁶ [https://www.journalofhospitalinfection.com/article/S0195-6701\(20\)30046-3/fulltext#sec3.3](https://www.journalofhospitalinfection.com/article/S0195-6701(20)30046-3/fulltext#sec3.3)

Appendix A: Surfaces for cleaning/disinfecting include, but may not be limited to:

Time/production tracking tools

- Employee badges
- Badges/probe boards
- Scanners, coders, wands
- Label/sticker guns
- Pens/Pencils

Handwash facilities

- Sink faucets/levers
- Soap dispenser levers
- Towel dispenser levers
- Trash can lids

Restrooms

- Door handles – inside and outside
- Interior locks
- Grab bars
- Trash or sanitary disposal lids
- Toilet seats/lids
- Toilet roll dispensers

Rest and break facilities

- Drinking water containers (outside, top, levers, cone or cup dispensers)
- Chairs
- Tables

Employee personal item storage areas

- Hooks, cubbies, bins or shelves where backpacks and lunch items are

stored

Shared vehicles

- Door handles
- Seat-belt buckles, tongues, buttons
- Steering wheel, gear shifter, hand brake, rearview mirror, radio
- Handles
- Seats

Ranch installations, buildings and offices

- Door and cabinet knobs, drawer pulls
- Locks and hasps
- Light and power switches
- Phones, radios, handsets, keypads...
- Kitchen– faucets, appliances, knobs, buttons, handles, doors
- Office furniture – tables, chairs, trash can lids
- Office equipment – copy machines, keyboards, paper cutters, staplers, pens, pencils
- Fuel pumps
- First aid kit

Appendix B: Guide for mixing bleach-based disinfectant for non-food contact surfaces during COVID-19 outbreak

The active ingredient in household bleach products is SODIUM HYPOCHLORITE. Many bleach products are available on the market in a range of concentrations. ALWAYS read the product label and ONLY use chlorine products that clearly display the sodium hypochlorite concentration [%]. ALWAYS follow product label instructions and use all indicated PPE. Only those employees trained to handle pesticides should mix and apply this solution. At 500 and 1000 PPM this solution may be corrosive to some metals and irritating to skin, eyes, and respiratory tissues. Only apply in a well-ventilated area and ensure that no employees touch items until disinfectant has dried.

1 fluid ounce of any concentration between 5.25% - 10% sodium hypochlorite (bleach) in 1 gallon of water will provide a solution between 500-1000 PPM. For detailed amounts, we table below.

Use the tables below to mix either a 500 or 1000 PPM solution for disinfecting NON-FOOD CONTACT SURFACES

Bleach	For metric measures		
% Sodium Hypochlorite initial concentration	Start with this much bleach...	... fill water to this volume.	For a diluted concentration of
5.25 %	50 ml	4000 ml or 4 liters	656 PPM
6 %	50 ml	4000 ml or 4 liters	750 PPM
8.25 %	40 ml	4000 ml or 4 liters	825 PPM
10%	40 ml	4000 ml or 4 liters	1000 PPM

Bleach	For standard measures		
% Sodium Hypochlorite initial concentration	Start with this much bleach...	... fill water to this volume.	For a diluted concentration of
5.25 %	2 fl. oz.	128 fl.oz. or 1 gallon	820 PPM
6 %	2 fl. oz.	128 fl.oz. or 1 gallon	939 PPM
8.25 %	1 fl. oz.	128 fl.oz. or 1 gallon	645 PPM
10%	1 fl. oz.	128 fl.oz. or 1 gallon	780 PPM

Bleach	For kitchen measures		
% Sodium Hypochlorite initial concentration	Start with this much bleach...	... fill water to this volume.	For a diluted concentration of
5.25 %	2 Tablespoons	128 fl.oz. or 1 gallon	820 PPM
6 %	2 Tablespoons	128 fl.oz. or 1 gallon	939 PPM
8.25 %	1 Tablespoon	128 fl.oz. or 1 gallon	645 PPM
10%	1 Tablespoon	128 fl.oz. or 1 gallon	780 PPM

Or, use this online dilution calculator to mix different starting concentrations or resulting volumes of disinfectant <http://www.foodsafe.ca/dilution-calculator.html>