

# Food Industry Control and Protection Against COVID 19

Angel M Suarez  
EAS Independent Consultant  
August 2020

## **Preface**

The COVID 19 Pandemic has forced the food industry to alter some of its operations in order to maintain a safe environment for its employees and customers. While there's currently no evidence of the new coronavirus disease, COVID-19, being transmitted through food or food packaging, the food industry must continue to implement its Food Safety Management Systems (FSMS) based on the Hazard Analysis and Risk-Based Preventive Control (HARPC) principles to ensure management of food safety risks and prevent food contamination.

Additionally, good hygiene practices must consistently be applied and should include cleaning and sanitation, zoning of processing areas, segregation of employee traffic patterns, supplier control, food and packaging storage as well as finished food product distribution and transport.

The food industry as we have known it will probably never return to the previous "normal," particularly with the possibility of state and Federal agencies implementing new regulatory changes that will impact food codes, Good Manufacturing Practices (GMPs) and Preventive Controls based on the COVID 19 Pandemic.

Most of the food industry is already operating under Food Safety Managements Systems, HACCP and Preventive Controls and will thus need to ensure new interventions are reviewed with food safety and employee health in mind. Those food businesses that currently do not have a FSMS, HACCP and/or Preventive Control team established should designate a person responsible for considering whether food safety risks could arise from new COVID-19 based measures. Those responsible persons will consult with food safety authorities and other recognized experts for advice. Urgent attention must be given to ensure compliance with measures that protect food workers from contracting COVID-19 by strengthening food hygiene and sanitation practices.

EAS Consulting Group a member of the Certified family of companies, is a global leader in regulatory solutions for industries regulated by FDA, USDA, and other federal and state agencies. Our mission is to provide quality regulatory advice and service and to represent the best interests of our clients in an ethical, timely, and cost-efficient manner. This document includes some recommended considerations based on current food safety guidelines and current understanding of COVID-19 as of this writing. We are still learning about the transmission of this new coronavirus.

## **Risk-based approach**

Planning and preparedness are critical to reducing the impacts of COVID-19 in any food establishment and to sustain operations during the pandemic. It is important to maintain the integrity of the food safety control system and the food supply chain by prioritizing critically important services.

As a food processor you will need to determine the lead time to implement new measures in order to mitigate the possible impacts from COVID-19 on your operation. As a part of these measures, reviewing and updating your Food Safety Management Systems (FSMS) based on the Hazard Analysis and Risk-Based Preventive Control (HARPC) Plan should be a priority to

manage food safety risks and prevent food contamination. With many and changing demands because of COVID, it is important that the food industry continue to effectively implement all prerequisite programs that include employee facility and equipment hygiene practices such as cleaning and sanitation, zoning of processing areas, employee hygiene and fitness to work – all the basic conditions and activities necessary to maintain a hygienic and healthy food processing environment.

Food facilities that already have Food Safety Management System (FSMS), HACCP and/or Preventive Control teams established must include them in all discussions on COVID-19 measures to ensure that new interventions are reviewed with food safety in mind. The application of environmental sanitation principles, personal hygiene and established food safety practices will reduce the prospect that harmful pathogens will compromise the safety of the food supply.

A risk profile assessment of each food facility should be based on the nature of the operation, taking into account the type of food handled, processed and distributed; the methods of processing (cooked food, ready-to-eat products); scale of the operation, number of employees and possible at-risk employees groups making the products.

It should be determined whether a processing facility's operations are at a low, medium and/or high-risk, and also cross-reference that risk with the larger geographic area. Once risk has been established, follow appropriate government-recommended remediation steps and keep in mind risk stratification and remediation can shift at any time due to the amount of public health reporting and new understanding of the virus.

Table 1 outlines some possible remediations for each potential risk category that a facility can consider implementing. Risk characterization serves to define the risk while risk assessment tries to identify the magnitude of the risk, including uncertainty and variability of becoming exposed and infected with the COVID virus.

It is the food industry's responsibility to use information from the risk characterization and risk assessment to make a determination of where contamination could occur and implement risk management tools that span from farm to fork, evaluating the processes along the continuum from production of food ingredients through the supply chain to consumption of the food.

Facilities should review and update existing Standard Sanitation Operation Procedures (SSOP) and/or implement new ones which will apply to anyone who is actively processing and preparing the plant for production, including post-operational clean-up and pre-operational start-up, so that proper procedures and technique(s) to clean and sanitize frequently touched surfaces and equipment are used.

Standard Operations Procedures (SOP) should also be developed and used by an onsite operations team when determining the actual requirements and risks of a specific situation. The SOP must detail procedures to be used when (i) an employee calls in to inform the facility that they are being tested for COVID-19 or (ii) an employee calls in to either report testing positive for COVID-19 or reports having all of the typical symptoms of COVID-19. When management

receives such a report, identification of where the employee worked, who they were in close contact with and their traffic patterns throughout their typical day must be determined.

<b>Table 1 – Risks and Remediations Geographic Area</b>	
<b>Risk</b>	<b>Potential Remediation Actions</b>
<b>Low</b> also Known as Standard Prevention <ul style="list-style-type: none"> <li>No known outbreak in your geographic area</li> </ul>	Follow current procedures <ul style="list-style-type: none"> <li>Regularly revisit training to ensure compliance</li> <li>Enhance standard hygiene and sanitizing/disinfection practices</li> <li>Follow your food contact and non-food contact sanitation procedures</li> <li>Enhance procedures to respond to an outbreak in your facility, designed to break the chain of infection or illness social environments.</li> <li>Designate a response coordinator and assign team responsibilities</li> <li>Monitor federal, state, local, tribal and territorial COVID-19 information sites for up-to-date information on containment and mitigation strategies.</li> </ul>
<b>Medium</b> <ul style="list-style-type: none"> <li>The potential exists for an outbreak in your geographic area</li> </ul>	Follow current procedures <ul style="list-style-type: none"> <li>Educate employees on infection control, personal protective equipment (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>Enhance procedures to respond to an outbreak in your facility, designed to break the chain of infection or illness social environments.</li> <li>Designate a response coordinator and assign team responsibilities</li> <li>Increase frequency of standard employee hygiene and safety procedures</li> <li>Monitor federal, state, local, tribal and territorial COVID-19 information sites for up-to-date information on containment and mitigation strategies.</li> </ul>
<b>High Risk</b> <ul style="list-style-type: none"> <li>A declared outbreak in your facility or region is disrupting normal business</li> </ul>	<ul style="list-style-type: none"> <li>Enhance procedures to respond to an outbreak in your facility, designed to break the chain of infection or illness social environments.</li> <li>Designate a response coordinator and assign team responsibilities.</li> <li>Establish a flexible worksite and work hour policies. This may include shift reduction, staggering entry/exit of employee.</li> <li>Prepare for cross-training employee in some functions of the operations.</li> <li>Facilitate training for heightened procedures</li> <li>Implement a formal worker and workplace protection services for your organization. Strategize Employee protection through PPE and social distancing requirements applicable to all employees.</li> <li>Identify and prioritize suppliers of critical products</li> <li>Perform heightened procedures using approved cleaning and disinfection products and procedures</li> <li>Plan for deep cleaning prior to reopening after down time or quarantine</li> <li>Periodically assess ongoing preparedness activities to adjust objectives, effects, and actions based on changes in the business and greater economic and social environments</li> <li>Monitor federal, state, local, tribal and territorial COVID-19 information sites for up-to-date information on containment and mitigation strategies.</li> </ul>

## Challenges and Recommendations

Facility risk assessments may identify common characteristics among processing facilities and their workers that might increase the risk of transmitting COVID-19. Employee practices particularly when workers are in close proximity, such as sorting, culling, cutting, grading, weighing, conveying incidental to packing or re-packing) must employ PPEs and physical distancing to the extent possible.

Facility challenges may include structural and operational practices that make it difficult to maintain a 6-foot (2-meter) distance while working, including during breaks and while entering and exiting facilities. There may also be physical demands that create challenges for adherence to properly worn face covering recommendations. Additionally, the heightened cleaning and disinfection guidance recommendations in order to reduce COVID-19 transmission may slow down production. Table 2 presents the challenges to effective prevention and control as well as some potential changes that can be considered for implementation.

<b>Table 2 – Challenges to effective prevention and potential changes that can be considered at a facility</b>		
<b>Category</b>	<b>Challenges to effective prevention and control</b>	<b>Changes to consider</b>
Structural	Maintaining physical distancing during breaks and when employees enter and exit the facility	Adjust start and stop times of breaks and shifts Add outdoor breakrooms
	Maintaining physical distancing on production line	Install physical barriers between workers
	Excluding symptomatic workers	<ul style="list-style-type: none"> <li>Implement a screening process for workers and visitors entering a food processing facility</li> <li>Plan for effective isolation and rapid removal for workers who become ill at work</li> </ul>
Operational	Maintaining physical distancing on production line	Reduce rate of processing
	Adhering to face covering recommendations	Require universal face covering Ensure face coverings conform to CDC and/or government guidance Provide training on proper use of PPEs such as face masks, face shield (less effective than masks) and disposable gloves
	Adhering to heightened cleaning and disinfection guidelines (SSOP)	Assign additional staff to clean and sanitize “high touch” areas (e.g., handles, buttons,

		railings, doorknobs, keypads, etc.) more frequently Add hand washing stations and hand sanitizer dispensers at high traffic locations through the facility Implement touch-free time clocks Implement touch free doors activated by either kick plate or sensor
Sociocultural	Communicating through language and cultural barriers	Post messages, both via written notes and posters as well as on electronic screens accessible to all employees in languages spoken by the work force

## COVID-19 Recommendations for the Food Industry

The food industry must continue to follow national food safety regulations as well as recommended COVID-19-related measures, such as the FDA website Food Safety and the Coronavirus Disease 2019 (COVID-19) (<https://www.fda.gov/food/food-safety-during-emergencies/food-safety-and-coronavirus-disease-2019-covid-19>) to protect food as well as staff. Food industry operators must reinforce good hygienic practices and standard operating procedures.

Keeping all workers in the food production and supply chains healthy and safe is critical to avoid food shortages and to avoid contributing to the infection rate. In order to balance this with the need to maintain the safety and integrity of the food supply chain, food safety regulators are prioritizing critically important services during the ongoing COVID-19 pandemic.

The US Centers for Disease Control and Prevention (CDC), Food and Drug Administration (FDA), United Nations Food and Agricultural Organization (FAO) and World Health Organization (WHO) have developed recommendations on food safety, employee health and hygiene and food security measures in the light of the pandemic. In order to maintain access to safe food, it is key to reinforce the implementation of industry “best practices” as well as local, state, federal and internal recommendations to build and operate a sustainable COVID-19 risk reduction program.

In addition, the FDA and the Occupational Safety and Health Administration (OSHA) jointly developed a checklist for FDA-regulated human and animal food operations to use when assessing operations during the COVID-19 pandemic that can be used in conjunction with additional information from FDA and CDC.

Employers should continue to respond in a flexible way to varying levels of disease transmission in the community and be prepared to refine their response plans as needed. Create or update a COVID-19 response plan to prevent or slow the spread of COVID-19 and develop policies and procedures for prompt identification and isolation of sick people. The prompt identification and isolation of potentially infectious individuals is a critical step in protecting workers, customers, visitors, and others at a worksite.

As such, establish scientific and medical-based strategies for reducing transmission as well as maintaining a healthy work environment. This may include:

- Identifying and prioritizing job functions essential for continuous operation,
- Cross-training employees to perform critical job functions so the workplace can operate even if key employees are absent, and
- Matching job functions with other equally skilled and available workers who have not experienced an exposure to COVID-19.

It is also important to consider special accommodations (e.g., reassignment of duties to minimize contact with others) for employees who are members of a vulnerable population.

Actively encourage sick employees or those exposed to self-quarantine at home and immediately send any employee who becomes sick during the day home or to seek further care from a healthcare provider. Employees should not return to work until the criteria to discontinue home isolation are met and all typical COVID-19 infection symptoms per state and local health department and government requirements has ended, including consultation with healthcare providers.

## **Employee Protection**

Addressing all the potential personal hygiene trouble spots can be challenging, because the routes, or vectors of contamination are varied and complex. In any given food plant, there are a wide range of activities and movement that can result in the transfer of microorganisms, chemical adulterants or foreign objects from plant personnel to the food product. The transfer of contaminants can occur through a direct route, such as transfer from the body, skin, mouth, hands or hair to the product, or indirectly via their personal equipment, such as clothing, footwear, utensils and other tools used in their daily tasks. Everyone in the food production environment must understand that anything that travels through or is mobile in the facility is a potential source of contamination and must be tracked and controlled. Certainly, people are the biggest “contamination agents” in the plant and therefore a source of cross-contamination when moving from one processing area to another.

Provide an area with individual lockers where your employees can store their personal items, such as coats, wallets, umbrellas and face masks limit the clothing, shoes and other personal item from being carried home or vice versa.

The facility can explore whether they can establish policies and practices, such as flexible worksites (e.g., telecommuting) and flexible work hours (e.g., staggered shifts), to increase the physical distance among employees and between employees and others if state and local health authorities recommend the use of social distancing strategies.

Employee clothing should be hygienically designed to prevent foreign bodies from shedding directly (i.e., lint, buttons) or indirectly (i.e., outside pockets from which objects can fall out into product). Whenever possible, smocks should not have outside pockets. Many aprons, gloves and smocks used in food production should be designed to prevent microbial cross-contamination of the product from the employee.

Provide employees with Personal Protective Equipment (PPE) such as gloves, goggles, face shields, face masks, and respiratory protection, when appropriate. During an outbreak of an infectious disease, such as COVID-19, recommendations for PPE specific to occupations or job tasks may change depending on geographic location, updated risk exposure for workers, and information on PPE effectiveness in preventing the spread of COVID-19.

The firm should control the laundering of protective clothing to ensure the sanitary condition of the material. Laundering has to be controlled by the company in order to achieve a greater level of confidence that these items have been cleaned and sanitized adequately before being worn in an area where it may come into contact with your finished product.

Face shields can provide additional protection from both potential process-related splashes and potential person-to-person droplet spread but is not an effective replacement for a face mask. Face shields can help limit the spread of aerosolized droplets from a person's mouth or nose. If used, face shields should be cleaned and decontaminated after each shift, and when not in use they should be kept in a clean location at the work facility. If used, face shields should also wrap around the sides of the wearer's face and extend to below the chin.

## **Work Area Employee Separation**

Changes in production practices may be necessary in order to maintain appropriate distances among workers.

Sites can consider modifying the alignment of workstations, as well as the positioning of employees along production or assembly lines, if feasible, so that workers are at least 6 feet apart in all directions (e.g., side-to-side and when facing one another). Ideally, modifying the alignment of workstations so that workers do not face one another is also effective. Consider using floor markings and wall and door signs to remind workers to maintain their location at their station away from each other and practice social distancing on breaks.

Signs need to be read from a far distance (or use portable, electronic reader boards) so that visitors and workers are informed of social distancing practices. Place simple posters in all of the languages that are common in the worker population to encourage staying home when sick and to practice coughing and sneezing etiquette and proper hygiene practices. Consider placing these posters at the entrance to the workplace and in break areas, locker rooms, and other workplace areas where they are likely to be seen.

Sites can also consider implementing physical barriers, such as strip curtains, plexiglass or similar materials, or other impermeable dividers or partitions to separate manufacturing workers from each other, if feasible.

Facilities should consider consulting with a heating, ventilation, and air conditioning engineers to ensure adequate ventilation protections in work areas in order to minimize workers' potential exposures to airborne viral particles.

Remove or rearrange chairs and tables, or add partitions to tables, in break rooms, and other areas to increase worker separation. Identify alternative areas to accommodate overflow volumes such as training and conference rooms or using outside tents for break and lunch areas.

Have sufficient handwashing stations or hand sanitizers with at least 70% alcohol in multiple locations to encourage hand hygiene. If possible, consider installing hand washing station and/or sanitizer stations that are touch-free.

The following examples for employee's separation within the production area:

Figure 1 – Employees working side by side keeping a distance of 6 feet (2 meters) and no employee in front of them. Both employees wearing face masks, apron, and gloves during the process.

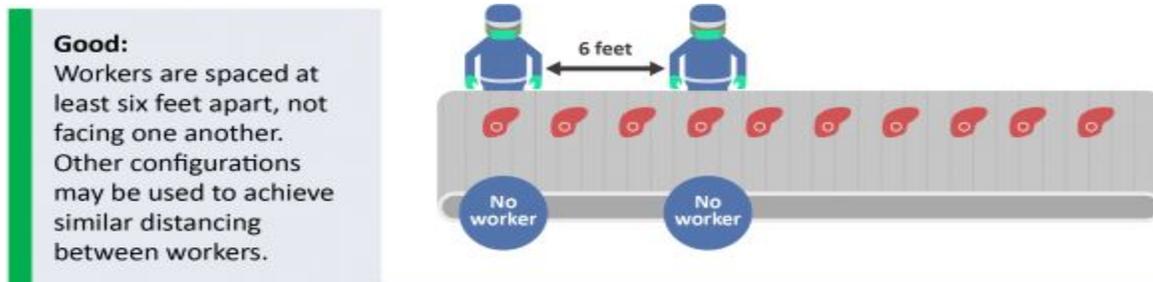


Figure 2 - Employees working side by side separated by a partition and no employee in front of them. Both employees wearing face masks, apron, and gloves during the process.

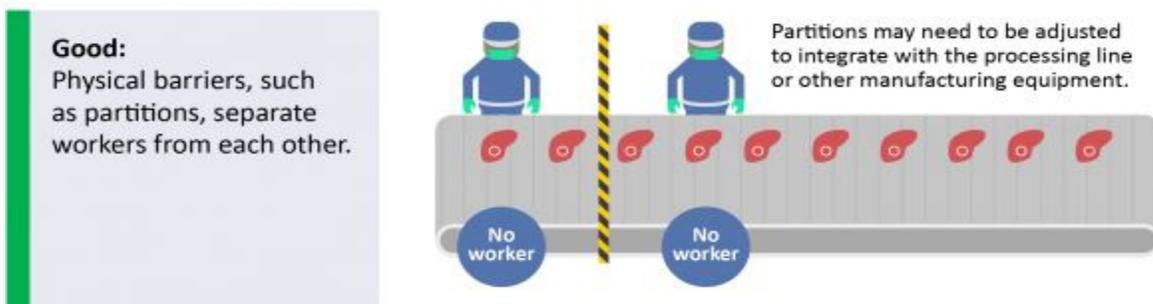
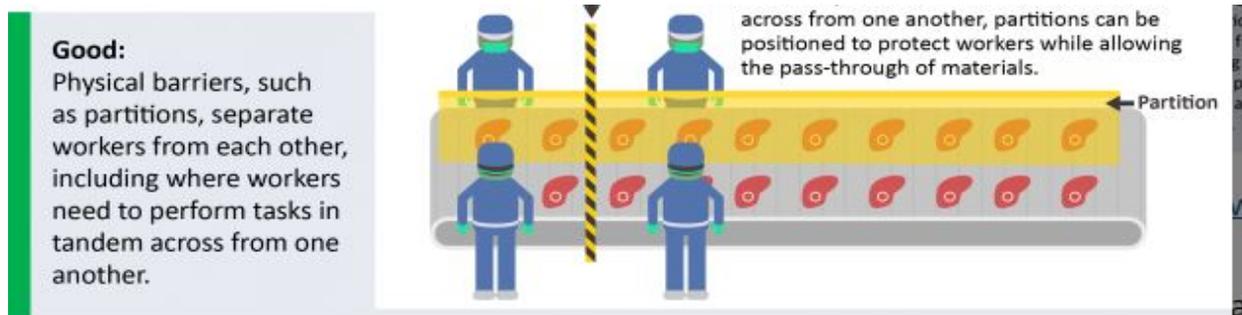


Figure 3 - Employees working across from each other separated by two partitions arranged on each side and in front. All employees wearing face masks, apron and gloves during the process.



## Cleaning and disinfecting

Reducing the risk of exposure to COVID-19 by cleaning and disinfection is an important part of maintaining employee safety.

The food processor should develop and implement Sanitation Standard Operation Procedures (SSOP) it is important to monitor the implementation of the plan and update the plan as necessary. This may include increasing the frequency of cleaning and sanitization in processing and non-processing areas. Adhere to operational SSOP, ensuring that those supervising staff and operations are vigilant in their oversight.

The SSOP must instruct employees performing cleaning and disinfection tasks to use additional PPE and use EPA-registered cleaning and disinfecting agents, paper towels, covered trash cans, soap and water and any other controls to protect them from chemical hazards posed by disinfectants. These instructions must include:

- 1) Washing their hands.
- 2) Wearing the PPE (disposable gloves, gown and face shields/goggles).
- 3) Remove or protect ALL packaging, exposed food items, utensils and equipment from area/surfaces being cleaned and disinfected.
- 4) Remove visible debris from all surfaces using soap and water, or applying a cleaning detergent, prior to disinfection to ensure the chemical detergent is applied according to the manufacturer's instructions.
- 5) Use only EPA-registered cleaning and disinfecting agents for cleaning high touch surfaces according to equipment manufacturer's recommendations for concentration, contact time, solution temperature, drying, etc.
- 6) Discard trash by moving interior trash cans to in designated external waste receptacle.
- 7) Clean and sanitize processing equipment per the firm SSOP prior to storage.
- 8) Store all chemicals and tools in a pre-designated and secure locations as per the directions found on their label or per the company's SOPs.
- 9) Discard PPE properly in designated receptacles
- 10) Wash hands immediately.
- 11) Document all cleaning and disinfection tasks performed in a checklist with the time, date and employee initials. (see Appendix 1 for a sample of a checklist)

Outdoor areas generally require normal routine cleaning and do not require disinfection. Therefore, the firm should maintain its normal cleaning and hygiene practices for outdoor areas.

Surfaces frequently touched by multiple people, such as door handles, desks, phones, light switches, faucets as well as computer keyboards and touchpads, should be cleaned and disinfected at least daily. More frequent cleaning and disinfection may be required based on level of use.

Consider identifying a backup disinfectant if your first choice is in short supply. Make sure there is an adequate supply of cleaning and disinfecting chemicals, gloves and appropriate personal protective equipment (PPE) based on employee numbers, daily operations and the size of the surface needing treatment.

Follow the existing Clean-In-Place (CIP) procedures for cleaning product contact surfaces such as process pipes, vessels and equipment, tanks, homogenizers, mixers, blenders and fillers, without disassembly.

For those pieces of equipment (clamps, fittings, scale buckets and other disassembled process components) that cannot be cleaned-in-place, use Cleaning-Out-of-Place (COP) or hand-cleaning procedures.

Human machine interfaces in the production area such as keyboards, buttons, tablets, monitors, touch screens; time-clocks, etc. require frequent cleaning and disinfection between users.

### **Cleaning and disinfection of company trucks**

At a minimum, clean and disinfect commonly touched surfaces for shared company vehicles should be routinely completed at the beginning and end of each shift. Doors and windows should remain open when cleaning the vehicle. When cleaning and disinfecting, individuals should wear disposable gloves compatible with the products being used as well as any other PPE required according to the clean and sanitizing chemical manufacturer's instructions. Use of a disposable gown is also recommended, if available.

The following are general guidelines for cleaning and disinfecting these vehicles.

- For hard non-porous surfaces within the interior of the vehicle such as seats, arm rests, door handles, seat belt buckles, light and air controls, doors and windows, and grab handles, clean with detergent or soap and water if the surfaces are visibly dirty, prior to disinfectant application.
- For soft or porous surfaces such as fabric seats, remove any visible contamination, if present, and clean with appropriate cleaners indicated for use on these surfaces.
- For frequently touched electronic surfaces, such as tablets or touch screens used in the vehicle, remove visible dirt, then disinfect following the manufacturer's instructions for all cleaning and disinfection products. If no manufacturer guidance is available, consider the use of alcohol-based wipes or sprays containing at least 70% alcohol to disinfect.

## Receiving and Shipping

While it's a legitimate concern, the good news is, according to the CDC and the Surgeon General, the likelihood of COVID-19 is being spread through contact with various surfaces, including food containers is low. The WHO stated, in part: "The likelihood of an infected person contaminating commercial goods is low and the risk of catching the virus that causes COVID-19 from a package that has been moved, traveled, and been exposed to different conditions and temperature is also low."

Receiving and delivery practices should be evaluated to minimize human to human contact. Although suppliers may currently pose a low risk, it is strongly encourage working with all suppliers, ensuring that they have strong food safety programs in place and are meeting all food safety and employee health specifications that have been established.

Drivers and other staff delivering to food premises should be equipped and trained to use personal protective equipment (PPE) and have alcohol-based hand sanitizer, a disinfectant, paper towels and a dedicated container for discarded paper towels and other material, supplied and readily available for use. Drivers should use a hand sanitizer and/or disposable gloves before touching delivery packages and containers to food premises staff. Disposable containers and packaging should be used to avoid the need for cleaning of any returned packaging materials. In the case of reusable containers, appropriate hygiene and sanitation protocols should be implemented.

The following are suggestions for those involved in activities required for the optimal functioning of the food and feed supply chains. Please ensure you follow current government advice where it is available.

- Employers could produce official letters on company paper certifying that the individual who holds the letter is deemed an "Essential Worker" in the agricultural and food/feed supply chain. This letter would be kept with that person at all times, including when travelling to/from their place of work. The letter should include contact details with the name and contact information for managers to ensure clear communication if the person is questioned by law enforcement, public health workers, customers or consumers.
- Coordinate with your purchasing department the pending receipt of mail, packages and food ingredients and packaging to be staggered throughout the day in order to make "social distancing" easier.
- Coordinate in-plant separate shipping areas and receiving areas if possible.
- Have separate personnel teams shipping and delivery teams
- Drivers and other staff delivering to food premises should not leave their vehicles during delivery unless necessary.
- Improve routing plans to reduce the number of deliveries, the number of routes and number of company vehicles needed
- Have a backup plan to serve routes should a driver become sick.
- Develop a plan to coordinate backhaul and product return strategies

## References:

- 1) **Naming the coronavirus disease (COVID-19) and the virus that causes it**, World Health Organization, Switzerland, February 11, 2020  
[https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/naming-the-coronavirus-disease-\(covid-2019\)-and-the-virus-that-causes-it](https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/naming-the-coronavirus-disease-(covid-2019)-and-the-virus-that-causes-it)
- 2) **Reducing animal-human transmission of emerging pathogens**, World Health Organization, Switzerland, March 26, 2020, <https://www.who.int/health-topics/coronavirus/who-recommendations-to-reduce-risk-of-transmission-of-emerging-pathogens-from-animals-to-humans-in-live-animal-markets>
- 3) **COVID-19 and Food Safety: Guidance for competent authorities responsible for national food safety control systems - Interim guidance**, World Health Organization and Food and Agriculture Organization of the United Nations, April 22, 2020 - <http://www.fao.org/3/ca8842en/CA8842EN.pdf>
- 4) **COVID-19 Among Workers in Meat and Poultry Processing Facilities** — 19 States, April 2020 CDC, Morbidity Mortality Weekly Report - May 8, 2020 / 69(18);557–561  
[https://www.cdc.gov/mmwr/volumes/69/wr/mm6918e3.htm?s\\_cid=mm6918e3\\_e&deliveryName=USCDC\\_921-DM27591#suggestedcitation](https://www.cdc.gov/mmwr/volumes/69/wr/mm6918e3.htm?s_cid=mm6918e3_e&deliveryName=USCDC_921-DM27591#suggestedcitation)
- 5) **COVID-19 Critical Infrastructure Sector Response Planning** – Center Disease Control and Prevention (CDC) National Center for Immunization and Respiratory Diseases (NCIRD), Division of Viral Diseases - May 6, 2020  
<https://www.cdc.gov/coronavirus/2019-ncov/community/critical-infrastructure-sectors.htm>
- 6) **Discontinuation of Isolation for Persons with COVID-19 Not in Healthcare Settings** Center Disease Control and Prevention (CDC), July 20, 2020  
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/disposition-in-home-patients.html>
- 7) **Employee Health and Food Safety Checklist for Human and Animal Food Operations During the COVID-19 Pandemic**, Food and Drug Administration (FDA) and the Occupational Safety and Health Administration (OSHA) , August 11, 2020, <https://www.fda.gov/media/141141/download>
- 8) **OSHA Guidance on Preparing Workplaces for COVID-19** - Office of Safety and Health Administration, Publication OSHA 3990-03 2020-  
<https://www.osha.gov/Publications/OSHA3990.pdf>
- 9) **OSHA Guidance Summary: Preparing Workplaces for COVID-19** - Office of Safety and Health Administration - Publication OSHA 3990-03 2020  
[https://success.ada.org/~media/CPS/Files/COVID/OSHA\\_Guidance\\_on\\_Preparing\\_Workplaces\\_for\\_COVID-19.pdf](https://success.ada.org/~/media/CPS/Files/COVID/OSHA_Guidance_on_Preparing_Workplaces_for_COVID-19.pdf)
- 10) **Advice on the use of masks in the context of COVID-19. Interim Guidance.** World Health Organization (WHO). April 6, 2020, [https://www.who.int/publications-detail/advice-on-the-use-of-masks-in-the-community-during-home-care-and-in-healthcare-settings-in-the-context-of-the-novel-coronavirus-\(2019-ncov\)-outbreak](https://www.who.int/publications-detail/advice-on-the-use-of-masks-in-the-community-during-home-care-and-in-healthcare-settings-in-the-context-of-the-novel-coronavirus-(2019-ncov)-outbreak)
- 11) **Advice on the use of masks in the context of COVID-19 . Interim Guidance.** World Health Organization (WHO). June 5, 2020 -  
[https://www.who.int/publications/i/item/advice-on-the-use-of-masks-in-the-community-during-home-care-and-in-healthcare-settings-in-the-context-of-the-novel-coronavirus-\(2019-ncov\)-outbreak](https://www.who.int/publications/i/item/advice-on-the-use-of-masks-in-the-community-during-home-care-and-in-healthcare-settings-in-the-context-of-the-novel-coronavirus-(2019-ncov)-outbreak)

- 12) **Manufacturing Workers and Employers, Interim Guidance from CDC and the Occupational Safety and Health Administration (OSHA)**, Center Disease Control and Prevention (CDC), <https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-manufacturing-workers-employers.html>
- 13) **Implementing Safety Practices for Critical Infrastructure Workers Who May Have Had Exposure to a Person with Suspected or Confirmed COVID-19**, Center Disease Control and Prevention (CDC), <https://www.cdc.gov/coronavirus/2019-ncov/community/critical-workers/implementing-safety-practices.html>
- 14) **Meat and Poultry Processing Workers and Employers - Interim Guidance from CDC and the Occupational Safety and Health Administration (OSHA)**, Center Disease Control and Prevention (CDC) <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/meat-poultry-processing-workers-employers.html>
- 15) **COVID-19 basics - Symptoms, spread and other essential information about the new coronavirus and COVID-19**, *Harvard Health Publishing, Harvard Medical School, Updated: May 20, 2020 Published: March, 2020*  
<https://www.health.harvard.edu/diseases-and-conditions/covid-19-basics>
- 16) **Preventing the spread of the coronavirus - Social distancing, hand washing, and other preventive measures**, *Harvard Health Publishing, Harvard Medical School, Updated: May 22, 2020 Published: March, 2020,*  
<https://www.health.harvard.edu/diseases-and-conditions/preventing-the-spread-of-the-coronavirus>
- 17) **Cleaning and Disinfection for Non-emergency Transport Vehicles** - Center Disease Control and Prevention (CDC) <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/disinfecting-transport-vehicles.html>
- 18) **COVID-19 and food safety: guidance for food businesses Interim Guidance** Food Agriculture Organization of the United Nations, April 7, 2020 - [https://apps.who.int/iris/bitstream/handle/10665/331705/WHO-2019-nCoV-Food\\_Safety-2020.1-eng.pdf?sequence=1&isAllowed=](https://apps.who.int/iris/bitstream/handle/10665/331705/WHO-2019-nCoV-Food_Safety-2020.1-eng.pdf?sequence=1&isAllowed=)
- 19) **Food safety in the time of COVID-19-** Food Agriculture Organization of the United Nations, April 14, 2020 - <http://www.fao.org/3/ca8623en/CA8623EN.pdf>
- 20) **Coronavirus guidance for combinable crop deliveries and collections = Agriculture and Horticulture Development Board (AHDB) Stoneleigh Park, Kenilworth, Warwickshire, CV8 2TL United Kingdom – 3/26/2020**  
<https://projectblue.blob.core.windows.net/media/Default/Market%20Intelligence/cereals-oilseeds/supply-demand/Guidance%20for%20Cereals%20and%20Oilseeds%20-%20Updated%2026th%20March%20FINAL-2.pdf>